

In Defense of Emotions

Somewhere in India, a blind river dolphin seeks her companion. Under the dark waters of the Ganges she will sleep next to him. She has never needed to see. These dolphins find everything they want and need by listening to echoes. Above them in the sky, two cranes from the east are flying back from China to their western breeding territory in Siberia. The cranes are a mile up in the sky, looking down with their golden eyes. What is in their hearts, or in the hearts of the dolphins? Wholly apart from us, their lives of turmoil and satisfaction are not beyond our imagination. When the dolphin rises out of the muddy waters, or the cranes stretch their necks in flight, we are filled with a sudden sense of familiarity, the recognition that we share an emotional heritage. They feel and we feel, no matter how difficult it is to know just what their feelings are.

After a promising start over 120 years ago, when Darwin explored the terrain in his book *The Expression of the Emotions in Man and Animals*, very few scientists have acknowledged, researched, or even speculated about animal emotions. So persistent are the forces that militate against even admitting the possibility of emotions in

the lives of animals that the topic seems disreputable, almost taboo. The scholarly literature on animals contains many observations, accounts, and anecdotes that suggest emotions the animals may be experiencing or expressing, or at least call for further research into this possibility. Yet little to none is forthcoming.

G. G. Rushby, a game warden doing "elephant control work" in Tanzania (then Tanganyika), saw three female elephants and a half-grown male in tall grass. Since his job was to keep the elephant population down, he shot the females—and slightly wounded the half-grown animal. To his dismay, he suddenly saw two elephant calves, who had been with the females but had been hidden in the grass. He moved toward them, shouting and waving his hat, hoping to drive them back to the larger herd, where other elephants would adopt them. The wounded elephant was dazed and helpless and did not know which way to turn. Instead of fleeing, the orphaned calves pressed themselves against him and supported him, and led him away from danger.

Terror, compassion, bravery—accounts like this, systematically developed, could provide evidence for a world of deep emotional experience on the part of animals, but there appears little place for them in scientific literature. Onetime incidents are dismissed as "anecdotes," yet there is no reason to ignore rare events. And when it is feasible to collect other instances or even to repeat rare events, this is seldom done, so scathing do scientists find the charge of "using anecdotal evidence." Discussing the ability of two symbol-using chimpanzees, Sherman and Austin, to improvise unusual and impressive combinations of symbols, primate researcher Sue Savage-Rumbaugh calls such spontaneous occurrences "arguably the most important sort of data we have," yet notes, "we have avoided describing these in our published reports."

Without question, anecdotes do present hurdles for scientists, including the inability to control the circumstances around the event, the frequent lack of documentation, and the impossibility of generating statistics from a single occurrence. But even when an event is meticulously recorded and takes place in a controlled situation, like the symbol combinations used by Sherman and Austin, the onetime nature of the event precludes its use in many scientists'

eyes. Experimental evidence is given almost exclusive credibility over personal experience to a degree that seems almost religious rather than logical.

Jane Goodall finds the scientific reluctance to accept anecdotal evidence a serious problem, one that colors all of science. "I've always collected anecdotes, because I think they're just terribly, terribly important—whereas most scientists scorn the anecdotal. 'Oh, that's merely anecdotal.' What is anecdotal? It's a careful description of an unusual event." She tells of a research assistant in a laboratory charged with logging the response of male rhesus monkeys to females, some of whom were being treated with hormones or had had their ovaries removed. "She told me . . . the most fascinating thing to her was that there was one old female that she observed in all these different states, ending with having her ovaries out, and whatever state she was in, she was the most popular. But she was *one* monkey, and that was ignored. There must be literally millions of observations like that that have never crept into the literature." Such observations would provide a rich and suggestive ground for analysis and further investigation, yet there are almost none. While it is possible and customary to describe such events without using words that connote emotion, such a lean description is not necessarily more accurate.

This book defines *emotions* as subjective experiences, as what people refer to when they say "I feel sad," or "I am happy," or "I am disappointed," or "I miss my children." An emotion is not distinguished from a feeling, a passion, a sentiment, or what scientists call "affect." *Mood* refers to a feeling that lasts for some protracted time. These words refer simply to inner feeling states, to something that is felt.

The Practical Impossibility of Ignoring Emotion

Most people who work closely with animals, such as animal trainers, take it as a matter of fact that animals have emotions. Accounts by those who work with elephants, for example, make it

clear that one ignores an elephant's "mood" at one's peril. The British philosopher Mary Midgley puts it well:

Obviously the mahouts may have many beliefs about the elephants which are false because they are "anthropomorphic"—that is, they misinterpret some outlying aspects of elephant behaviour by relying on a human pattern which is inappropriate. But if they were doing this about the basic everyday feelings—about whether their elephant is pleased, annoyed, frightened, excited, tired, sore, suspicious or angry—they would not only be out of business, they would often simply be dead.

Training an animal will meet with little success if the trainer has no insight into the animal's feelings. Some trainers say they work with certain animals better than others because they understand the feelings of that species or individual better. Circus trainer Gunther Gebel-Williams noted individual differences in the emotions of the tigers with whom he worked: "Not every tiger . . . can be trained to jump through a ring of fire. When I incorporated that trick into the tiger act I had to find several from among the twenty I was working with at the time who were not afraid of fire. That was no easy task, because most tigers will not go near flames."

The fear of committing anthropomorphism can handicap an animal trainer, says Mike Del Ross, training supervisor at Guide Dogs for the Blind in San Rafael, California: "The more you open yourself up to trying to read the dog, the more you concentrate and read the dog better."

Asked whether they would still want to work with dogs if dogs had no emotions, trainers were startled by the very idea. Kathy Finger replied, "Probably not, because I think reading emotions is part of dealing with dogs—loving them, respecting them." Del Ross exclaimed, "No way. What would there be if they didn't have emotions?"

Such empathy in the direct scientific observation of animals is controversial. But wondering what one would feel in the place of

an animal can be fruitful. Most scientists working with animals in the wild make inferences based on empathy, to make sense of their behavior, such as, "If I had just lost my closest companion, I, too, would not feel like eating for some time." Thinking about feelings has proven to be a valuable way of thinking about behavior.

The Emotions of Captivity—"That Doesn't Count"

Evidence of emotion in captive animals and pets is often discounted as irrelevant. Captive animals, the argument goes, are in unnatural situations, and what domesticated animals do is irrelevant to what animals are *really* like, as if they are not really animals. While genuinely domesticated animals *are* different from wild animals, *domestic* and *tame* do not mean the same thing. Domestic animals are animals that have been bred to live with humans—they have been changed genetically. Dogs, cats, and cows are domestic animals. Captive animals like elephants are not, since through the generations that people have trained elephants, they have almost invariably caught and tamed wild elephants, rather than *bred* elephants. Since the nature of elephants remains unchanged, observations on tame or captive elephants are in fact highly relevant to free-living elephants.

While domesticated animals and wild animals may not be the same, they still have much in common; information about one can be relevant to the other. As field biologist George Schaller has written, "A loving dog-owner can tell you more about animal awareness than some laboratory behaviorists." Biologist Lory Frame studied wild dogs in the Serengeti and made the intriguing observation that the dominant animals (the only ones in a pack who usually breed), seemed much less like domestic dogs. "Intuitively I seemed to understand Maya and Apache. And that, I realized, was because their subordinate behavior reminded me of domestic dogs. Not that my family's dog was the cringing sort—on the contrary, he bullied me when I was a child. But Maya's tail-wagging manner was reminiscent of the behavior people expect, and usually get, from their pet dogs. Dominant wild dogs, how-

ever, are something else. . . . I seldom saw one grin or wag his tail. Serious they seemed, and dangerous. If I met Sioux on foot I'd get up the nearest tree. With Maya I'd be more likely to pat her on the head and offer her a biscuit." What she knew from her experience with domesticated dogs helped inform her observations of wild dogs.

That captive and domestic animals are in "an unnatural situation" is simply not a valid reason to treat observations of them less seriously. Humans are in just as unnatural a situation. We did not evolve in the world in which we now live either, with its deferred rewards and strange demands (sitting in classrooms or punching time clocks). All the same, we do not dismiss our emotions as not existing or inauthentic simply because they don't take place in small groups of hunter-gatherers on an African savanna, where human life is thought to have begun. We are ourselves domesticated animals. We can be at a distance from our "origins" and still claim that our emotions are real and characteristic of our species. Why can't the same be true of animals? It is not natural for humans to be in prison. Yet if we are put in prison and feel emotions that we don't usually feel, no one doubts that they are real emotions. An animal in a zoo, or kept as a pet, may feel emotions that it would not otherwise have felt, but these are no less real.

To find out if her observations of captive dwarf mongooses told her anything accurate about mongooses in a natural state, Anne Rasa, author of *Mongoose Watch*, went to Kenya to study them in the bush for several years. She discovered that the behavior of captive mongoose groups in large enclosures closely followed that of wild ones with two exceptions. The wild mongooses had to spend much more time gathering food, and hence less time playing and socializing. Their lives were also strongly colored by the actions of other species. Eagles and snakes preyed on them, so they spent a significant time mobbing snakes to drive them away. They quarreled with the larger blacktip mongooses. They usually ignored lizards and ground squirrels, but occasionally tried to play with them. In other words, their emotional range was to some extent determined by the opportunities that presented themselves,

but curiosity and play were common to both captive mongooses and those in a natural state.

On the other hand, the conditions of captivity can certainly change the way animals behave. Female baboons kept together in a cage form a rigid hierarchy unlike anything seen in the species in the wild. The point is not that captivity never changes emotions and behavior, *only that both captive and wild animals appear to have feelings, and that the emotions of captive animals are as real as those of wild animals, and therefore equally worthy of study.*

Complexity of Emotion

Emotions seldom come pure, in isolation from other emotions. In people, anger and fear, fear and love, love and shame, shame and sorrow often converge in particular situations. Animals may also experience a mix of emotions. Perhaps a dolphin mother who carries her dead baby around with her for several days feels both love and sorrow. Hope Ryden describes a half-grown elk calf guarding the body of another calf killed by coyotes after the elk herd had moved on. For at least two days the calf straddled the body, aggressively chased coyotes away, and from time to time sniffed and nuzzled the face of the dead calf. Eventually (after coyotes had succeeded in partly eating the body) the calf moved on. The calf may have felt grief; it may have felt lonely for the rest of the herd; it may have felt anger at the coyotes; it may have feared the coyotes. Perhaps it felt love for the dead calf. That feelings may be complex and multifaceted or difficult to interpret does not mean they do not exist.

Animals do not all have the same emotions, any more than humans do. Just as the behavior of animal species differs, their feeling lives may differ as well. This is often overlooked when people argue from animal examples. "Geese mate for life," people declare. Or, "Robins kick their young out of the nest when they're old enough to be on their own." "The dog doesn't stay and help the bitch raise the puppies—that's just the way it is." This wrongly assumes that all animals are the same and therefore we can draw

the same conclusions about people. But while geese mate for life, grouse do not. The male grouse mates with as many females as he can and leaves them to raise the young on their own. The female Tasmanian native hen often mates with two males and the trio raises the young together. While robins fledge at an early age, condors stay with their parents for years. Male and female wolves raise their puppies together. These differences often produce a kind of sociobiology parlor game in which people try to prove points about human behavior by pointing to an animal species that exhibits the behavior they want to define as “natural” for humans. But animal species may also differ in the content of their emotions. Evidence that elephants feel compassion or sorrow does not mean that hippos feel compassion or that penguins feel sorrow. Perhaps they do, perhaps not.

Animals also differ from one another as individuals. Among elephants, for example, one may be timid and another bold. One may be prone to attacks of rage, another peaceable. One Victorian commented on working elephants in Rangoon, “There are willing workers and there are skulkers; there are gentle tempers, and there are others as dour as a door-nail. Some of them will drag a log two tons in weight without a groan; while others, who are equally powerful but less willing, will make a dreadful fuss over a stick that is, comparatively speaking, nothing.” Of a species he hunted, Theodore Roosevelt wrote: “[B]ears differ individually in courage and ferocity precisely as men do. . . . One grizzly can scarcely be bullied into resistance; the next may fight to the end, against any odds, without flinching, or even attack unprovoked. . . . Even old hunters—who indeed, as a class, are very narrow-minded and opinionated—often generalize just as rashly as beginners.”

Views of Animal Emotion; Lay and Scientific

Most ordinary people who have direct contact with animals freely concede the reality of animal emotions. Their belief arises from the evidence of their senses and logical deduction. A person who hears birds attacking a cat near their nest usually experiences

them as angry. When we see a squirrel flee from us, we think that it is afraid. We see a cat licking its kittens and feel it loves them. We see a bird throbbing with song and suppose it to be happy. Even those with only indirect experience of animals often recognize what they see to be an emotional state, a feeling, which they correlate to a similar human feeling. In this respect the layperson's description of animal life may be more accurate and is certainly richer than the standard behaviorist's description, which shows no effort to investigate animal emotions systematically or in depth.

Despite the lack of sustained scholarly work on animal emotions, there is today a greater interest in the realities of the lives of animals than ever before. Practitioners in a wide range of disciplines share an increasing awareness of the complexity of animal actions—cognitive, perceptual, and behavioral, individual and social—and correspondingly greater humility in the face of questions of animal capacities. Humans are no longer as prepared to pronounce upon what an animal can and cannot be and do. We are starting to be clear that we do not know and are only beginning to learn.

While the study of emotion is a respectable field, those who work in it are usually academic psychologists who confine their studies to human emotions. The standard reference work, *The Oxford Companion to Animal Behavior*, advises animal behaviorists that “[O]ne is well advised to study the behaviour, rather than attempting to get at any underlying emotion.” Why? They may be elusive or difficult to measure, but this does not mean animal feelings do not exist and are not important.

Human beings are not always aware of what they are feeling. Like animals, they may not be able to put their feelings into words. This does not mean they have no feelings. Sigmund Freud once speculated that a man could be in love with a woman for six years and not know it until many years later. Such a man, with all the goodwill in the world, could not have verbalized what he did not know. He had the feelings, but he did not know about them. It may sound like a paradox—paradoxical because when we think of a feeling, we think of something that we are consciously aware of feeling. As Freud put it in his 1915 article “The Unconscious”: “It is

surely of the essence of an emotion that we should be aware of it.” Yet it is beyond question that we can “have” feelings that we do not know about.

Psychiatric lexicons contain the term *alexithymia* for the condition of certain people who cannot describe or recognize emotions, who are able to define them “only in terms of somatic sensations or of behavioral reaction rather than relating them to accompanying thoughts.” Such people are handicapped by their inability to understand what feelings are. It is curious that the study of animal behavior should demand that its practitioners turn themselves into alexithymics.

Defining the Emotions

Psychological theorists speak of a set of fundamental human emotions that are universal, discrete, and which they consider innate. These fundamental emotions are like the primary colors and can give rise to many variations. One psychologist compiled a list of 154 emotion names, from abhorrence to worry. Theorists do not agree on which emotions are the basic ones. René Descartes said there were six basic emotions: love, hate, astonishment, desire, joy, and sorrow. Immanuel Kant found five: love, hope, modesty, joy, and sorrow. William James defined four: love, fear, grief, and rage. Behaviorist J. B. Watson postulated three basic emotions, X, Y, and Z, roughly equivalent to fear, anger, and love. Modern theorists like Robert Plutchik, Carroll Izard, and Silvan Tomkins found either six or eight basic emotions—but not the same ones. On most modern lists *love* is not included as an emotion. Many scientists prefer to call it a drive or a motivation, if they refer to it at all. All the emotions in these commonly used and accepted lists have been thought by some researchers to be observed among animals.

In addition to these, there are probably other emotions and variations within them that from time to time everybody, from whatever culture, feels. Compiling a full list can be hazardous,

however, as the Polish linguist Anna Wierzbicka points out when she observes that in some non-Western cultures, for example in Aboriginal Australia, a concept related but not identical to shame plays a social role evidently missing in our culture. The word describing this emotion can include the English concept of “shame,” “embarrassment,” “shyness” and “respect.” Yet it seems likely that the feeling itself would be recognizable at least approximately to somebody from another culture.

We should be wary of confining any emotion to only one part of the world. After all, it was not so long ago that ethnologists thought that there were some cultures (obviously inferior) where the full range of Western emotions could not be expressed, and thus were probably not experienced. It seemed then as pointless to inquire into compassion or aesthetic awe among certain hill tribes as it now appears to catalog aesthetic rapture among bears. One of the “great” anthropological texts of the beginning of this century was titled *Mental Function in Inferior Societies*, written by L. Lévy-Bruhl, who was professor at the Sorbonne. Such prejudice is slowly receding. The capacity to feel all emotions may be universal. Great literature suggests that certain feeling states are universal, or at least that the capacity to experience them crosses cultures, although different cultures and different individuals may describe them differently, or attach differing importance to subtleties of feeling. If feelings can cross cultures, it seems likely they can cross species.

This book discusses animal emotions following the order in which people find them plausible. Humans are most ready to consider the possibility of other animals having the emotion of fear. Love, sorrow, and joy are considered “nobler,” hence less likely to be granted to others, especially animals. Although many people are very ready to speak of anger in animals, some experienced animal trainers argue that animals do not feel this emotion. The sociobiological debate over altruism has resulted in a widespread denial of the possibility of compassion in animals. As for shame, a feeling for beauty, creativity, a sense of justice, and other even more elusive capacities: these are the least likely to be ascribed to animals.