

De Waal, Frans (2019). *Mama's Last Hug: Animal Emotions and What They Can Tell Us about Ourselves*. New York: WW Norton and Company.

De Waal begins his story by recounting the death of an aged chimpanzee known as Mama. Mama is visited by a biology professor, Jes Van Hooff, whom she had known for more than 40 years. Mama allows Jen to come into her cage. This is an extremely rare event. It is very dangerous to intrude on a chimpanzee's immediate territory. De Waal notes, "chimpanzees are so mercurial that the only humans who are safe in their presence are those who have raised them," and this did not apply to Jen. Additionally, when in the cage, Mama treated him very affectionately stroking his face and hugging him. Later Jen said that if Mama had been in her normal condition, he wouldn't have dared enter her space.

In his very first vignettes, De Waal illustrates his thesis that humans and chimpanzees share the same emotions. He wants us to understand the affinities we have with our ape ancestors as an antidote to notions of human exceptionalism, but then he immediately indexes how different chimpanzees are from us. Humans don't generally attack other humans who enter their space, and they are very tolerant of animal pets do so. De Waal mentions that he had had a similar relationship with Mama, but he never would have trespassed on her territory. It's hard to imagine humans with the relationship with other conspecifics or pets having the same fear and inhibition

When Europeans were first introduced to apes brought to England from Africa, the human observers often felt disgusted by their similarity to us. One wonders whether apes, when they first encountered humans, had a similar reaction. Did they find humans, "painfully and disagreeably" (17-18) apelike? Would our shared phylogenetic history, emotional development, and physiognomy have led them to feel disgusted by us?

De Waal's story raises several issues:

1. Are there any other chimps in the colony that Jes Van Hooff could visit in a similar way under conditions of death?
2. Do chimps have pets? Now in LA everybody seems to have at least one dog. Would this ever happened in a chimp colony where all the apes had been born and lived there?
3. De Waal notes that it is not clear whether Mama was aware of her imminent death.
4. De Waal says that people believe that animals have a sense of their own mortality. But he argues that this is ("human projection... Based on what we realize is coming (...)") (20-21). Is what De Waal saying about Mama and her emotional relationship with Jen also a projection, an imputation, an interpretation, and an assertion? Isn't De Waal advocating the careful observation of apes actually based on the projection of human qualities on the apes?

De Waal makes a strong argument for Mama's exceptionalism. He says:

"I had never sensed such wisdom and poise and any other species than my own" (22).

"Mama connected easily with everyone, both male and female, and had a support network like no other – she was a born diplomat" (23).

"Mama was not only a central figure in the colony but also took on the role of liaison with us humans... She showed enormous respect for the zoo director, for example" (24).

De Waal calls mama "an expert at mediation" (28) who could bring about reconciliations to chimp relationships that had been seriously torn. He sees mama as having triadic awareness; she could understand relationships outside those that she had with other chimps. She was aware of her relationship with Apes B and C and also of the relationship between B and C. This ability allowed her to bring harmony to the group by mediating strained relationships.

De Waal also talks about a relationship he had developed with another chimp, Kuif, who was unable to nurse and as a result her children had died. When she became pregnant again, De Waal taught her how to feed the baby with a bottle. The child then lived and thrived. He notes that afterwards the mother "showered me with the utmost affection whenever I showed my face... Wanting to hold both my hands, and whimpering in despair if I tried to leave. No other ape in the world did that" (26). Once again, Kuif's human-like behavior seems quite rare among apes.

Could it be that chimps who were raised in colonies in some way become partially domesticated so that they may be more like dogs than wolves, cats rather than tigers?

De Waal explains, "these experiences also explain my reference here to emotions ranging from grief and affection to gratitude and awe, because this is what I felt while dealing with them" (26).

De Waal characterizes the apes, particularly male chimpanzees, struggle for dominance among their peers. The struggle was transparent with no attempt to hide or mask the aggression. In the 1960s, DE was a member of a liberal student group who condemned such behavior from among their conspecifics. De Waal notes that at the same time these peace-loving radicals were jockeying for political dominance within the group and, like the apes, were attempting to steal "everybody's girlfriend while at the same time preaching the wonder of egalitarianism and tolerance." (27). Here we notice that UNLIKE the chimps, the humans were hypocritical.

De Waal maintains that issues of power and sex that are so important (among males especially) in chimpanzee colonies are also strongly manifest among human teenagers. "Among teens, there is nothing more obvious than the exploration of sex, testing of power, and seeking of structure [= hierarchy]". He criticizes psychologists for "focusing on self-esteem, body image, emotion regulation, and risk-taking, and so on" (31).

Is De Waal's stance essentially a form of reductionism: if human behavior is radically reduced to biology and social behavior, we come to look very much like the descendants of our ancestors. This is a very useful way to generate an understanding of human nature. Of course, our species separated from our ape ancestors about six million years ago, and now our differences are as important to our nature as our similarities to apes. Different scholars seem to focus more on one perspective or the other. Evolution brings about waves of emergence, eventually placing humans in an extensive symbolic world, the symbolosphere, and the tether to the physical and biological worlds of our ancestors becomes longer and thinner. It is only recently in human history that our evolutionary origins have become clearer, but now to understand ourselves, we need to know how we retain similarities to primates, but we must also recognize how different we have become (for better and for worse). De Waal's suggestion that the way male chimpanzees are attracted to female sexual swelling may be the root of human males' attraction to female breasts is an important and interesting speculation. It certainly has to be considered, but we have to be open to the possibility that it may be as different as the canoe is from a clipper ship, and we have to ask would we learn much from reverse engineering a clipper ship to get an understanding of a canoe?

De Waal opposes what he calls gratuitous anthropomorphism. He provides the following examples (48):

1. My dog is proud of the blue ribbon he won at the competition.
2. My cat was embarrassed when she missed the jump.
3. The gorilla, Koko, worries about climate change.
4. Chimpanzees have religion.
5. Captive dolphins love swimming with us as much as we do with them.

But there are types of attributions of human traits to animals that De Waal would accept, for example, speaking of chimps as having empathy, and in the orangutan alpha's vocal announcement of the troop's travel direction for the following day as an indication of their ability to plan ahead. (49-50). De Waal prefers the assumption of similarities between humans and other animals rather than the rejection of such similarities. He reasons that the brains of both human and nonhuman primates are structurally similar. And he would contrast anthropomorphism versus anthropodenial. He argues that "modern neuroscience makes it impossible to maintain a sharp human-animal dualism" (50).

De Waal distinguishes between empathy and sympathy. "Empathy seeks information about another and helps us understand their situation, whereas sympathy reflects actual concern about the other and a desire to improve their situation." (106). De Waal sees himself as an observer of primates and characterizes his professional activity as depending on empathy but not on sympathy. He sees empathy as necessary to identify with the animals he is observing in order to understand what they are feeling. "I consider empathy my bread and butter, as I have made many a discovery by getting under the skin of my subjects. This is not the same as sympathy of which I have plenty as well, but it is less spontaneous than empathy, more subject to calculation" (107). He sees sympathy as action-oriented and as based on empathy, but as more than empathy. It involves doing something in relation to those toward whom one is sympathetic.

He reports the case of a Polish nurse who rescued hundreds of Jewish children by getting them out of the Warsaw ghetto. "She did so not based on some lofty moral principle but out of natural empathy." (111). The nurse took action in relation to the children who would have suffered under Nazi occupation. It would appear then that empathy is also action oriented. It was not simply understanding the threat facing the children, it involved doing something about it. He says that empathy links " 'the emotional states of two individuals' " (117). He cites the psychologist, Martin Hoffman, "empathy has the unique property of 'transforming another person's misfortune into one's own feeling of distress' " (117). He provides another example of a rat helping another rat who was trapped, and he concludes that "this outcome fits far better with the idea of empathy-based helping, or sympathy" (118).

De Waal seems to believe that language is not particularly important in the study and understanding of emotions. He states, "the labeling of emotions is a rather meaningless exercise because emotions exist outside language.... Verbal labeling is not part of emotional communication. Language helps us discuss sentiments, but it doesn't play much of a role in how they are generated, expressed, or felt. Yet modern emotion research has placed language front and center" (123-124). He notes that in research designed to test subjects' recognition of emotions from facial expressions, Eckman's subjects were given a choice of emotion words to describe the face. But in recent research, it has been noted that subjects do much better under such conditions than when they're just shown the faces and asked to label them. It would appear then that language has an effect when it comes to limiting the number of alternatives among labels for possible facial expressions. This actually refers to research done by Lisa Feldman Barrett to test Eckman's hypothesis that facial recognition of basic emotions is universal. In Eckman's research, four choices for possible labels are provided, and when this is done, subjects tend to achieve very high agreement. But Barrett's research shows that when no

alternative labels for the emotions are provided, agreement is very low. It would appear language is doing something here (Barrett, 2017).

De Waal (2019, p. 126) also states "emotions clearly precede language in both evolution and human development, so language can't be all that important. It's tacked on. All it does is label internal states, but who says it helps us distinguish them?" But if different languages label emotions differently, they may be distinguishing them differently. What would we know about ape emotions if we had the words of all human languages available to interpret the emotional behavior of apes. We may find important emotional distinctions that are made by apes that aren't made by English speakers. It might contribute to the resolution of debates about what constitutes basic emotions and emotion universals. De Waal has argued for years that it is legitimate to use human emotion terms to describe primate behavior. But as Wierzbicka (2014) observes, the emotion lexicon for these descriptions is limited to English.

De Waal has great faith that careful observation of chimpanzees, for example, along with an understanding of their behavior, facial expression, and bodily carriage and movements that ape emotional states can be discerned. At the same time, he notes that in the process of identifying the emotional states of chimpanzees, "we are comparing not just faces and how we judge them but also the labels reattached to them. Since every language has its own emotional vocabulary, translation remains an issue" (54). He also argues that children who are blind and deaf learn to express the emotions of their conspecifics, but they could not do so by imitation and learning. Therefore, he believes there must be an important biological contribution to emotion expression.

De Waal argues that "the best way to understand animal emotions is just to watch spontaneous behavior, either in the wild or captivity" (57). He also gives several warnings, as mentioned above there are cultural influences on how emotions are labeled, and he also notes that the context in which the animal is expressing the emotion is extremely important, and isolating individual emotions is particularly difficult because he argues that "almost always when we express our emotions we are expressing a blend" (65).

De Waal argues for OBSERVATION. From careful, long-term observation, we can come to make interpretations about a behavior and then make comparisons with our own. Interpretation is an amazing aspect of animal life (Sherman, 2017), and it perhaps reaches a peak in humans. Science has had great success, particularly in the inorganic world and with physical entities in the biological world. Experimental procedures with well-defined independent and dependent variables and appropriate controls are seen as the way to true knowledge, facts. But sometimes experiments do not lend themselves to the study of behavior in animals and humans. De Waal's book is an excellent illustration of how investigations that employ careful observation can bring us insights through interpretation, imputation, conceptualization, and association. These forms of knowledge development are vital to human life. The knowledge they produce is always uncertain, but the human Umwelt it is always uncertain (Hustvedt, 2016).

References

Barrett, Lisa Feldman (2017). *How emotions are made: The secret life of the brain*. New York: Houghton Mifflin Harcourt.

Hustvedt, S. (2016). *A woman looking at men looking at women: Essays on art, sex, and the mind*. New York: Simon & Schuster.

Sherman, J. (2017). *Neither ghost nor machine: The emergence and nature of selves*. New York: Columbia University Press.