Do Animals Fall In Love

Since the birth of human civilization, love has been the permanent topic of our discussion. From hymns of ancient Greek to romantic films of modern times, from Shakespeare's Romeo and Juliet to Yuefu's Peacock Flying Southeast, from Virgil's "Love conquers all" to The Beatles' "All You Need Is Love", we humans have never stopped exploring the true meaning of love in all forms of art, no matter in which period of human civilization, no matter on which side of earth.

We once prided ourselves on love as a uniquely human emotion, cheering for it, shedding tears for it. However as we arrogant humans gradually realize that we are just one of thousands of animals, we start paying more attention to animal behaviors, and that's how we find emotions are not the patent of ours, LOVE included.

Evidence of love in animals

From an evolutionary point of view, it is unlikely that romantic love (or any emotion) first appeared in humans with no evolutionary precursors in animals. (Bekoff 2000) Indeed, there are common brain systems and homologous chemicals underlying love that are shared among humans and animals (Panksepp 1998). The presence of these neural pathways suggests that at least some other animals also experience our emotions.

More specific evidence has been found by many scientists. Heinrich (1999) is of the opinion that ravens fall in love. He writes (Heinrich 1999, p. 341): "Since ravens have long-term mates, I suspect that they fall in love like us, simply because some internal reward is required to maintain a long-term pair bond." Würsig (2000) has also described courtship in southern right whales off Peninsula Valdis, Argentina. While courting, Aphro (female) and Butch (male) continuously touched flippers, began a slow caressing motion with them, rolled towards each other, briefly locked both sets of flippers as in a hug, and then rolled back up, lying side-by-side. They then swam off, side-by-side, touching, surfacing, and diving in unison. Würsig followed Butch and Aphro for about an hour, during which they continued their tight travel. Würsig believes that Aphro and Butch became powerfully attracted to each other, and had at least a feeling of "after-glow" as they swam off. He asks, could this not be love?

We also can find it in the field of neuroscience. Like any other emotion, love is regulated by endocrine (内分泌的) factors. Several factors have been identified by scientists as playing a role in romantic love and attachment, including oxytocin, vasopressin, dopamine, etc. Research shows that the 'cuddle hormone' oxytocin is heightened in dogs when they are interacting with their owners, which increases bonding, and paired prairie voles stay together thanks to the 'desire' hormone dopamine, which is clearly an evidence of love in animals.

And one of the most interesting evidence may be the monogamy in animal world.

Monogamous animals

Monogamy is a form of mating where an individual has only one mate during a given breeding season or throughout its life. Many species of animals, from birds to primates, practice monogamy. The reasons for monogamy vary between species, but it is generally believed that monogamy can increase the chances of offspring survival, provide more care for young, and ensure the stability of the social group.

In some cases, monogamy can be a result of sexual selection, where one sex chooses its mate based on certain traits. For example, in many bird species, males with brighter plumage or more elaborate songs are preferred by females, leading to the formation of monogamous pairs.

One of the most notable examples of monogamous animals is the prairie vole. Prairie voles form lifelong bonds with their partners and show a range of behaviors associated with romantic love, including grooming, huddling, and protecting their partners. Studies have shown that oxytocin, a hormone associated with social bonding, is released in prairie voles during mating and huddling, suggesting that love plays a role in their monogamous behavior.

In terms of reproduction, Kvarnemo(2018) suggests that although sexual conflict is likely to be lower in mutual monogamy as compared to polygyny or polyandry, sexual selection can still play a significant role in determining mating outcomes in all three systems, affecting both sexes. However, under mutual monogamy, particularly in strict and long-lasting arrangements, the quality of mates may be more important for reproductive success than simply having multiple mates.

Conclusion

In conclusion, love is not unique to humans but is also present in the animal kingdom. Evidence of love can be found in various forms, such as courtship behaviors, neurochemical responses, and monogamous relationships. The study of animal love can help us better understand the evolution of social behavior and the potential significance of cross-species emotional connections. As we continue to explore the depths of love, we may find that it is not only a human emotion, but a universal force that unites all living beings.

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