Not long ago, I watched my dog Karma die slowly. First, she wouldn't eat. Then, she had trouble walking. She seemed very tired and her breathing got funny; she exhaled deeply and gasped shallow breaths. In the span of a few months, she transformed into a different dog. Then, all of the sudden she was gone. I ached deeply, and so did the rest of my family.

Why do we treat some animals as family members and eat other animals? How should we treat animals? I explored the morality of our relationships with animals, looking closely at: how we use animals as pets, how to create structures to build empathy, and challenging naturalistic fallacy discourse. I concluded that humans and animals are not altruistic...nothing is truly altruistic. How does this play out in mass animal slaughter? Is the meat industry justified in the sense that it provides nutrition? Before industrialization, how were animals slaughtered for food and were those practices more humane?

This video-sculpture demonstrates my own ritualized slaughter. I built a weapon, rules, and an animal. I chose to create a dog because I knew it would be hard to slaughter an animal I find myself personally connected to. The overall process was designed to be emotionally and physically taxing, something I won't easily forget. Through this performance, my intention is to imitate what it looks like to slaughter an animal, a process that is both intimate and meets one's needs for food. I am ultimately addressing the morals behind animal slaughter and our inextricable connection to certain animals.

Mya

**Animal Roots** 





I am addressing animal instincts in humans and why we are the way we are with relationship to animals. How do our animal roots impact our treatment of other people and animals? Do we still hold primitive qualities and what are our similarities to animals? Which influences human behavior more: morality or our animal instincts? I discuss the evidence and origins of morality in animals and humans, as well as emotions. I talk about how we are influenced by our evolutionary path and the similarities and differences between humans and animals. I also talk about religious and spiritual ties to animals, as far as symbolisms, rituals, and domestications.

## **INTRODUCTION**

In the second grade, when my first dog got hit by a car and died, I cried for forever. I didn't get over it until a while after everyone else in my family did. I sulked all day. I remember my teacher asking me if I was okay (as if it wasn't normal to be that upset for that long), I remember my mom telling me to "get over it." Again, about five or six months ago another one of my dogs died, and I was torn apart. I cried and cried and cried all day and some of the next, it felt so bad. I wanted to know what it was like for Karma, my dog, to die, I wanted to know how she was feeling, if she was okay, if she was happy or if she was sad or if she would miss us too. I put so much thought into it. I wanted to know if she had emotional feelings and if she cared for us and why I was so devastated by her dying. I wanted to know why my entire family took a day off of work/school because of it. Why were we all so sad, why is that a normal thing? How did this connection come to be so strong?

I was curious about what our connection to animals meant. I know we are animals, but I want to know how animalistic we are. Are humans special compared to animals? I seek to question our "special human qualities," and I wanted to know how truly different we are.

I want to understand why I feel the strong urges I feel and why I have automatic actions. I believe I place blame or allow myself to pass actions off in the name of animal instinct. This is called "naturalistic fallacy", the belief that what is natural is good. I do not wholeheartedly believe that *everything* that is natural is what is right or good. I haven't quite figured out how I stand with morals yet. I never know which side to be on. I often catch myself making excuses for what I do as well as what others do by categorizing their motives as "natural instinct". Are morals universal among animals, and are they natural? I cannot tell if I am a bad person in regards to my morals, or if this is how everyone else should be. I want to come to understand this with relationship to our connection to animals through this paper. What would it do to mankind, if we all paid a little more attention to our scientific reasoning in our actions and didn't try to smother it with morals every time? It could be bad, it could be good, it could feel better, it could feel worse. Would a disregard of morals cause calamity, or would it cause more relaxation and calm? I want to know if we, as humans, govern ourselves by free will, or if it is all animal instinct and we just don't recognize it as that. I want to know what really governs me.

Through research I ended up with three primary branches of this inquiry- morality and philosophy regarding animal instincts, our scientific similarities and ties (including domestication of animals, symbolism, and religious ties) to animals, and our scientific differences to animals through evolution.

# **ROOTS AND EVOLUTION**

So, why are we the way we are? How did we get here? What we started with was inarguably very animalistic, primitive beings. Most of our features are from these roots and evolved through natural selection. It started around six and a half to five million years ago, with a drought in Africa, which split the population of our primitive ancestors. According to "A Troublesome Inheritance," by Nicholas Wade, one group continued to live in the traditional woodlands habitat, and another group began to live outside of the trees, where there were new resources, as well as new predators. The fear of predators caused our ancestors to begin to walk on two feet, which is more efficient than using four limbs on the ground. Hands can now be used for gripping tools.

Before the group had split up, a female would mate with as many males as she could in order to diminish the possibility of her offspring being killed by one of the males. The male would be less likely to kill the offspring if there was a possibility that it was his blood. Once the group split up, monogamous pair bonding increased in popularity due to the need for more male guarding in a more dangerous environment. Also, weapons enforced monogamy in the sense that it was harder to defend more women, since more males with weapons would attack to try and get those women. Since two people were more often involved in the upbringing of a child, children were born earlier due to increased protection, which led to more brain growth inside the womb. Kinship (recognition of family members) evolved, which led to the evolution of attacking the other tribes (since females moved around a lot to different groups to prevent inbreeding, and the attackers often were related to those they were attacking, tribal warfare began to develop).

# DIFFERENCES

Through evolution, notable specialties developed for human kind, including the sclera. The sclera is the white of the eye. Among 633 primate species, humans are the only ones with visible eye whites. According to a article on TechTimes, this was developed to promote and allow cooperation by detecting feelings and intentions. Blushing is another unique feature that promotes social behavior. A study by Dutch psychologist Corine Dijk showed that blushing facilitates forgiveness. Another distinctive quality of humans is language. Language was developed with the purpose of facilitating use of tools, hunting and defense, and to keep and attract a mate. The level of social interaction, empathy/emotion, and collaboration among humans is at a level in which many believe we are advanced.

In an article by Richard F. Talfinger called "Social Basis of Human Behavior: Sex," it talks about the similarities and differences of human sex behavior compared to animals. Deep down, our instincts are still present; for example, male criteria for a mate lies in the health of the mate. If the potential mate has nice and healthy skin, hair, weight, etc., then she passes the test. In our culture, however, intelligence and other factors are valued. For women, instinctual criteria is more in depth due to the fact that she is looking for traits that will best benefit her offspring. Strength, health, fighting ability, intelligence, money, power, prestige, position, status and more affect a woman's choice on a mate. A combination of these qualities is looked for in order to result in the best genes for her offspring and ability for survival.

Another difference Talfinger brings up is the fact that human females do not go into heat and there is no set mating season or mating ground, unlike most other animals. Courtship rituals are very fluid and undefined. This stresses out males in fear of rejection and females for possibility of a lack of a mate.

We are successful due to our social nature and intelligence, and yes, we are dominant in the animal kingdom due to weapons and environmental manipulation. However, that's not to say that any other animal, for example, the racoon, chimpanzee, rat, or dolphin, does not have a chance of being at "human level." Darwin predicted that once the human race goes extinct, the next dominant creature will be evolved from the rat.

# **NEUROANATOMICAL STRUCTURES**

All mammals have similar neuroanatomical structures, including an amygdala, that are important for feelings. There are baboons known to experience anger, elephants that suffer PTSD, and otters/magpies/donkeys that grieve. Empathy is also shown in animals such as diana monkeys and chimps that help each other get food, and elephants that comfort other elephants in

distress. Rhesus monkeys refuse to accept food if another monkey is suffering, and mice have a stronger reaction to pain after seeing another mouse in pain. This is all due to the amygdala, which helps create empathy and feelings.

The lack of an amygdala causes lack of fear. According to study "The Human Amygdala and the Induction and Experience of Fear" by Justin Feinstein, Ralph Adolphs, Antonion Damasio, and Daniel Tranel (2011), a woman named SM suffers from partial lack of amygdala, and due to this, she experiences no fear. All of the other basic emotions are normal for her. A study on chimps with removed amygdalae were shown to lack fear regarding snakes, rather they played with the snakes. In another study, macaque monkeys were used to show effects of the amygdala. These monkeys have highly organized social groups which use complex forms of communication, including facial expressions. In macaque monkeys, a removed amygdala showed lack of fear towards inanimate objects and socializing. The function of this part of the brain was shown to serve as a "protective break on engagement of objects." Dangerous recklessness, rather than safe carefulness, was more prominent. If animals have feelings and empathy, and so do we, then are we really very different?

# ALTRUISM AND THE SELFISH GENE

Most humans are very convinced that we are special, we are different. We are more conscious and advanced, and we truly understand each other. We have *feelings*, you know? We are kind, and we are generous, we are here for the common good. We help each other out. Animals don't do that, they're not as advanced as us. They're not *like* us. We don't think that there could possibly be anything quite as great as us on Earth. I never quite agreed with these statements. So, is there evidence that animals act altruistically? Do humans act altruistically? Is any action by either animal or human truly and nakedly altruistic? Richard Dawkins in his book "The Selfish Gene" says "no" - altruism does not exist purely. He states that our natural motives are not to keep the species alive, rather the individual. We act to help ourselves and people most genetically similar to us stay alive in order to pass on "our" genes. Dawkins states that "selfish actions of genes lead to unselfish actions of organisms," which means that some of the things we do to keep ourselves alive "selfishly" end up being helpful for the group, appearing altruistic. For example, in human children, cooperation and active seek for a group identity, or a "we," are detected before these things are taught by a parent. This sharing of talents in order to reach a goal appears altruistic, but it is really so each individual can reach their own goal with more ease. Pooled talents and cooperation aid selfish goals, whether it be mating or learning or gaining resources.

Another argument is that humans are beginning to overcome genetic instincts and are exercising more and more free will. Some believe that if an organism becomes intelligent enough to understand its own interests, as distinct from those of its genes, there can be problems. In "The Selfish Gene," Dawkins talks about how he believes humanity is "gaining power over the selfish replicators by virtue of their intelligence." I believe that to a certain extent that we have free will, but it is motivated by animal instinct. For instance, getting a job and learning from your parents/coworkers how to perform that job could be considered a learned behavior/free will, but it is driven by the animal instinct of wanting to provide and care for yourself and your family. Mary Migdley opposes "the Selfish Gene," in her book "The Solitary Self: Darwin and the Selfish Gene," and believes that justification for selfishness as simply following "nature" will provide an excuse for behavior with bad consequences for future human society. I believe both arguments are simultaneously true. I think we do act selfishly, however, letting that become an

excuse can be taken too far and turn into chaos and disregard for morals completely. Still, are there not truly altruistic animals/human behaviors?

Altruism is said to exist purely in some species. In a study done by Frans de Waal, it was discovered that chimps act altruistically in some cases. In the 1960's while observing primate behavior, he found that after a fight, chimps often time kiss and hug to make up. They also practice reciprocity, in the sense that if one chimp grooms another in the morning, it is more likely that the chimp that groomed the other chimp will receive food shares from the chimp that got groomed. In the study, de Waal found that a very old chimp, who had a hard time walking and climbing due to arthritis, received help from other chimps in getting water and climbing trees.

Spindle cells were discovered to connect your "old brain" (brain stem, medulla, pons, reticular formation, thalamus, cerebellum, amygdala, hypothalamus, and hippocampus) to your "new brain" (cerebrum, frontal lobes and cortex), and they create empathy. Deep inside your cortex there is a part of the brain called the insular cortex, and this is where we become aware of subjective feelings. These special cells are almost exclusively present in this part of the brain. Spindle cells take information from this part of the brain and connect it to the analytical part of your brain, which allows you to conceptualize feelings. This conceptualizing of feelings creates empathy, which may in turn create altruistic acts/behaviors. Interconnected species, such as humpback whales, gorillas, elephants, dolphins, chimpanzees, and humans all have spindle cells.

#### ANIMAL RITUAL AND USE

We love our dogs, we care for our dogs, we cry for our dogs; we slaughter our pigs, we eat our pigs, we disregard our pigs. Why is it some animals we love, and some we stuff in slaughterhouses? Why do we not either, A. Treat all animals with respect and care and altruism, or B. Treat all animals with disregard to their "feelings" and our morals, because no creature is truly altruistic. Where do our morals play in here, and where do our animal instincts play in? Which does not belong: the cat on the couch, or the cow in the slaughterhouse? What about animal slaughter rituals, how does that play in? Is that altruistic, or displaying some sort of raw connection to our animal roots, or is it just to feel better about inflicting the death of a living being? What is the best solution in how to deal with animals?

While I do not believe that we are truly altruistic, I believe that there was a reason we slaughtered animals the way we did, back when it was still personal. Each auroch/cow, pig/hog, and goat was slaughtered for immediate needs, and each lived more natural lives free of antibiotics and close quarter slaughterhouses. Each animal was given more thought. I don't think we should stop killing animals for food, but I think we can more humanely kill these animals. This provides better nutrition for us, and better feelings towards our food.

Within different cultures, animal ritual is also different. Uses/domestications, rituals, and views on certain animals are very different around the world. An obvious example would be the high regard of cows in Hindu India, compared to the beef slaughterhouses and mass consumption of cow product in America. Jewish Kosher slaughter ritual, called *Shechita*, involves lack of use of tranquilizer in animal killing. It requires a specially trained person, a *Shochet*, to perform the killing. The animal is killed quickly by slitting its throat. Tradition says you are not allowed to cause pain to the animal, so it has to be a quick death. Similarly, Islamic tradition of *Halal* says that a trained slaughterer (must be Muslim) must kill the animal by severing its jugular vein, carotid artery, and windpipe quickly with a very sharp knife, so that the animal experiences the least amount of pain. More animals are permissible than in Jewish Kosher culture, however pork

is not allowed in either cultures. In Halal ritual, the animal and slaughterer must be facing Mecca, the animal cannot experience another animal's slaughter, the animal must be healthy and "willing to sacrifice itself to Allah," and the animal receives prayers (*shahada*), food and water before its slaughter.

Animals are picked for domestication based on how flexible their diet is, how fast they grow up, if they can breed in close captivity, if they are naturally pleasant and calm, and if they have a flexible social hierarchy. Among the different areas of the world, animals were picked on availability and what they provide. In Southwest Asia, dogs, sheep, goats and pigs were domesticated; in Central Asia, chickens and Bactrian camels were domesticated. Camels were used for carrying loads. In Arabia, the Arabian camel was bred for riding/racing. In China, water buffaloes, pigs, and dogs were domesticated. In Ukraine, Tarpan horses, the ancestors of modern horses, were domesticated. In Egypt, donkeys were used because they work hard with little water and vegetation; and in South America, llamas and alpacas were domesticated.

# CONCLUSION

Mankind has made great bounds, but we too often forget that we are animals. What we are is so heavily influenced by animals and we are more related than you think. Through research, I've learned a lot about our natural motives to our actions and the reasons we are the way we are in some aspects. I always struggled with morals when I thought of them because I believed strongly in my instinctual urges. I felt it was best to follow what my body was telling me. I still have always followed basic morals, like treating people the way you want to be treated. I learned about naturalistic fallacy, which helped me figure out my morals a little bit. I believe this helped me solidify and justify the aspect of my morals that say "what natural is good." I don't full heartedly live by naturalistic fallacy, but I believe in some aspects it is "right" for me. I learned a lot about selfishness and altruism. I now have the belief that nothing we do is truly altruistic. While there is some observation of altruism in nature, for example chimps helping older chimps get water and climb trees, I believe it is all for the greater good of the individual who is performing the "altruistic" action. I don't believe this is a bad thing.

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