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The Question of Ape Culture

What is culture? As defined by the textbook *Anthropology: The Human Challenge*, culture is, "a society's shared and socially transmitted ideas, values, and perceptions, which are used to make sense of experience and generate behavior and are reflected in that behavior," (Haviland 8). As applied to humans then, culture is expressed and measured in our abilities to learn, analyze, teach, individually evolve, and grow in intellect and preference. Human cultures, widely diverse and varying across the globe, are part of what make us unique and define us as a species. Interestingly, however, it is suggested that *Homo sapiens* are not entirely alone in this regard: research from primatologists and anthropologists alike suggests that several nonhuman primate species, particularly the great ape group consisting of bonobos, orangutans, gorillas, and chimpanzees, possess and transmit culture as well. Accepting this theory poses both problems and benefits: if apes possess culture, how is our relationship with them to change? Do they deserve human rights? Should our conservation practices shift accordingly? In a more positive light, the cultured ape can extend knowledge about human evolution, and even about human culture itself. My goal is to analyze research from professors, primatologists, and anthropologists supporting and opposing these questions and to evaluate this research through an anthropological lens with the intent of bringing nonhuman primate culture to light. With this in mind I will then

explain the immediate need to protect nonhuman primates as valuable resources and as our nearest evolutionary ancestors.

One aspect of culture, noted by Christopher Joyce in his article *Great Ape Culture*, is "the ability to invent seemingly arbitrary new behaviors and pass them along to others," (Joyce). Essentially, culture is evident in an individual when that individual creates something, such as a way of accomplishing a task, and then proceeds to teach that behavior to others in its population. This can encompass anything from time-saving solutions to the invention of tools. Such is the case as observed by primatologist Jane Goodall during her ethnographic fieldwork in Tanzania. Goodall came to observe a chimpanzee using stems of grass as tools to collect termites: "He was squatting beside the red earth mound of a termite nest and as I watched I saw him carefully push a long grass stem down into a hole in the mound. After a moment he withdrew it and picked [termites] from the end with his mouth… he was actually using a grass stem as a tool," (Goodall 52). Another example of chimpanzee tool use is found in West Africa, where the native chimps use rocks as anvils and hammers to crack open oil-palm nuts. They demonstrate this skill to juveniles who will then proceed to practice it until efficient (Haviland 92).

Chimpanzees are not the only species to demonstrate inventive ways of performing tasks. In the 1950s a macaque named Imo was challenged by her researchers: she was given a sweet potato that the researchers had covered in sand. The goal was to observe how she dealt with the inedible sand on her food. Imo solved her problem by washing the potato in a stream, and then proceeded to teach the solution to other members of her troupe (Haviland 92). These examples, among many others, prove that nonhuman primates are capable of individual invention, teaching, and reciprocation through learning, all of which are cultural criteria.

Another aspect of culture, as defined above, is a society's perception of everyday life. One can observe and compare these perceptions in variations between cultures. Such regional variations are also visible among nonhuman primate species. For instance Robert Sapolsky, in his article on animal culture, reports differences in the grooming practices between different groups of chimpanzees within the same population (221). All groups are performing the same task: they simply vary in the ways in which the task is performed. Further, Sapolsky describes two troupes of gorillas with equal access to the same types of food. The troupes were observed giving preference to particular foods, and both preferred foods that differed from the other (Sapolsky 220). Humans are the same way: we vary in preference from population to population. Consider the Costa Rican affinity for rice and beans compared to the American fondness of pizza and hamburgers. Differences such as these, among countless others, increase the unique enculturation we each possess. Variations identical in concept provide further proof of culture in nonhuman primates.

Communication is another observable trait of nonhuman primates that demonstrates their culture. Chimpanzees have been observed rapping their knuckles against the ground to gain attention from other members of their group (Sapolsky 221), and bonobos have been seen stomping on vegetation to designate specific areas for foraging or nest-building (Haviland 90). In ways such as these, nonhuman primates can be observed communicating certain ideas to one another. Among chimpanzees, there have even been specific dialects detected in their "pant-hoots" that differ from population to population (Vogel).

Further proof of culture through communication is seen in cases such as Kanzi, the bonobo housed at the Great Ape Trust of Iowa. Kanzi was taught to communicate through the use of lexigrams, symbols representing words. "With hundreds of lexigrams, Kanzi can

communicate thoughts and feelings he wishes to express. He also understands spoken language and can reply in a conversation with the lexigrams," (Haviland 91). What is so interesting about the research done with Kanzi is that, while the bonobo lacks the vocal apparatus to form speech, he is able to recognize symbols representing words and can manipulate the symbols to form coherent sentences expressing what he wants. Communication is a pivotal component to human cultures around the world: the ability to form and then relay ideas to others assists in assimilation processes, teaching, and learning from one another. Research showing primate communication is comparable to the many forms of human communication, adding further proof that nonhuman primates possess culture.

As evidenced above by primatologists and anthropologists alike, through invented and shared behaviors such as tool manufacture in chimpanzees and technique development in macaques, cultural criteria are met. In regional preferences and variations, distinct nonhuman primate cultures are evident. And in communication techniques, primates are shown to share and transmit ideas in ways such as knocking on the ground in chimp populations, manipulating vegetation to mark specific areas of the forest as seen among bonobos, and communication with humans through lexigrams as in the case of Kanzi. All of these examples, among countless others, authenticate the existence of nonhuman primate culture. With these in mind, I will now proceed to outline the problems that primate culture pose.

On a very basic level, the idea that nonhuman primates may possess culture seems to threaten people. Apes and humans share a similar genome as both species evolved from a common ancestor. If they are similar to humans in mannerism and individuality as well as lineage, how should the human relationship to apes change, if it should change at all? From personal experience with fundamentally religious Christian families, many people are reluctant

to admit that apes may possess humanlike qualities such as culture, and genome for that matter, because it contradicts the Christian belief of Creationism. If humans and primates share segments of a genome and primates possess and relay culture the way humans do, this is further proof for the theory of evolution, a theory in which fundamental Christians do not believe. A theory in which humans and "monkeys" share a common ancestor via evolution goes against the Christian Bible and God's Creationism, during which He created each animal on earth and gave them all to Adam to name and control. Hinging on this, the idea of a cultured ape sharing lineage with humans suggests that humans were not initially created to rule over all the animals of the earth, for Man himself evolved from an animal. The town in which I live is home to many religious families who believe in Creationism, many of whom are my friends. Upon posing the multi-level question of primate culture, based solely on their religious beliefs they are quick to discredit any mention of evolution and a shared common ancestor.

Turning a blind eye toward the cultured primate often goes hand in hand with conservation issues. Many communities living in close proximity to primate populations, out of necessity, ignore similarities between humans and primates in order to continue existing. These groups utilize primates for sources of food and other enterprises, including capturing primate infants and selling them as pets (Hill 1186), or selling gorilla body parts as souvenirs (Haviland 72). Regarding the bush meat trade, "estimates of income from market hunting indicate that it can generally provide households with an income that exceeds the national minimum wage in many countries," (as quoted by Hill 1185). With considerable economic gain waiting to be had, primate culture is either not understood or simply ignored. When bush meat, gorilla hand ashtrays, or baby chimpanzees are in demand with a handsome price attached, local human

communities may choose not to care about nonhuman primate culture, for doing so may compromise a hefty portion of their income.

Sparing nonhuman primates for the sake of their humanlike culture poses other problems for local communities. As quoted by Catherine Hill, "Primates are often agricultural pests and can pose considerable costs to cultivators living in their vicinity," (1186). Crop destruction wastes the time and effort of the cultivators, and puts their livelihoods at risk. Preventative measures such as ditch digging and electric fencing are often enacted, but primates, perhaps due to their unique cultural ability to learn and teach, find ways around these barriers (Hill 1186). For this reason, out of necessity they are often trapped or killed.

In addition to compromising the safety of their crops, primate conservation practices have set land aside for nonhuman primate groups on which indigenous human communities could be living and farming. These communities therefore lose access to land that they traditionally used for hunting, gathering, and timber extraction (Hill 1186). Further, with the human population increasing the world over, restricting access to land only serves to pack people closer together. When they cannot develop the surrounding forests due to conservation practices, these communities are denied land on which to live and cultivate crops. They are also prohibited from accessing land traditionally used for foraging and hunting, as well as a source for wood utilized for building. Evidently, conservation for the sake of nonhuman primate culture poses several resounding problems, particularly for local communities of people living in association with endangered primate species.

As detailed above, many find fault with accepting nonhuman primate culture, for reasons either religious or because doing so is paramount to survival. However the issue of nonhuman

primate culture is two-fold: for all the problems it poses, accepting the idea also presents benefits to humankind. I will now outline some of those benefits.

One benefit in accepting nonhuman primates as cultured species is that doing so provides humans with new, different means of studying humanity. There is a theory that as our early hominid ancestors came to communicate and tolerate one another, they were able to collaborate in tool-usage and mutually invent new ways to perform tasks (Vogel). This theory has been researched via observation of such social change in nonhuman primates today. As the greater apes share a common evolutionary ancestor with humans, studies such as this relay much information about how we as humans have evolved socially. Additionally, as stated by Catherine Hill, "Primates are also considered to have scientific value, stemming partly from their physical similarity to humans and their social and cognitive complexity," (1185). In essence, their biological similarities to humans provide scientists with opportunities to study evolution via physical change. And while much less ethical, these physical and cultural likenesses allow for biomedical research to be performed on nonhuman primates (Haviland 76). Particularly as human diseases like cancer become more prevalent, nonhuman primate testing becomes more and more helpful.

Clearly, accepting nonhuman primates as cultured animals creates problems and benefits that do not easily balance each other out. Regardless, where do we go from here? Primate species across the world are threatened with extinction in the near future due to human activity. Is it reasonable to enact conservation practices, or will doing so ultimately serve to harm human populations? Further, what can individuals do in this day and age to promote conservation and help endangered primate species? These questions will be outlined throughout the rest of this paper.

"Of the 633 primate species on the planet, 54 percent are classified as at least threatened by extinction by the International Union for Conservation of Nature (IUCN)," says Stephanie Pappas (Pappas). On the same note, Haviland says, "Nearly 50 percent of the known primate species and subspecies face extinction in the next decade" (71). With alarming statistics such as these, anthropologists and primatologists are fast losing valuable sources of research. As quoted by Gretchen Vogel, "If we want to understand how humans came to have the minds we have and the cultures we have, then we're only going to learn about that by looking for similar characteristics in our close relatives" (Vogel). Unfortunately, due to illegal poaching, bush meat hunting practices, the illegal primate trade, biomedical testing, and deforestation and habitat loss, anthropologists and primatologists are swiftly loosing time to study these animals and their individual cultures. This is infuriating, to say the least. Among several conservation attempts, conservation practices are being enacted at local levels via wildlife tourism. Wildlife tourism is, as its name implies, a way for tourists to visit wildlife habitats in a controlled way. This means that they can see wildlife in nature but not venture randomly into forest habitats, harming wild species. Wildlife tourism often includes the building of hotels and restaurants near wildlife habitats, improving the local economy by creating jobs and increasing cash flow. This in turn helps to protect primate species by creating means with which to protect habitats and offsetting demands normally fulfilled through hunting, logging, and land cultivation (Hill 1190). While wildlife tourism has its benefits it also has its drawbacks. For instance, allowing mass amounts of people to enter protected areas serves to acclimate wild animal species to humans. This then alters their instincts around people. Particularly for species that are regularly hunted, being acclimated to humans puts them in harm's way when they mistake a poacher as just another tourist. This just serves to defeat the conservation cause. Other conservation practices, such as

the creation of primate sanctuaries, have been enacted as well. While this creates protected areas of forest for primate species, it also takes away land from local communities, and discouraging poaching in such sanctuaries is often quite a challenge (Hill 1187). Primate extinction is further countered by breeding apes in captivity. Regarding this strategy, the authors of *Anthropology: The Human Challenge* say, "these colonies encourage psychological and physical well-being, as well as reproductive success… While such features contribute to the success of breeding colonies in captivity, ensuring the survival of our primate cousins in suitable natural habitats is a far greater challenge," (Haviland 73). While not living in a natural habitat, this last strategy at least serves to keep primate populations and cultures alive. Further, nations such as Spain are viewing nonhuman primate culture on a completely different level by giving the greater apes basic human rights such as life, liberty, and protection from torture (O'Carroll).

While conservation practices are fine in theory, they are not enough without the conscious participation of humans everywhere. It is of paramount importance for the global citizenry to enact lifestyle changes in order to help protect endangered primate species. One way to help in the conservation cause is to not buy products tested on animals. Animal testing fuels much of the illegal hunting trade: poachers capture live primates and sell them to laboratories. Often, however, these animals die in transit, or are so severely sick by the time they reach the labs that experiments cannot be performed on them. This aside, animal testing is rife with cruel practices, the outcomes of which are usually the deaths of the animals. By refusing to support companies that utilize animal testing, consumers will be helping to prevent animal cruelty and also the illegal capture and trade of endangered primate individuals. This in turn will ensure that there are primate individuals in the wild developing and adding to their distinct cultures. The preservation of these cultures will allow primatologists and anthropologists to continue to study

human evolution through nonhuman relations. Another option consumers have that will assist in primate conservation is recycling cell phones that they are no longer using. On this subject, Haviland says, "The mineral coltan that is found in cellular phones is mined primarily from gorilla habitats in the Democratic Republic of Congo. Recycling…will reduce the amount of new coltan needed," (72). With the mobile network constantly increasing, recycling used cellular phones will lessen the demand for coltan, which will in turn lessen the displacement and deaths of gorillas. While these are just two examples of what one can do to help preserve nonhuman primates and their cultures, they are examples significant to the consumerist population that is swiftly taking over the globe. Regardless, much more can and must be done to ensure the survival of nonhuman primates.

Cultures around the world are defined and made distinct by their individuals' ideas, values, opinions, preferences, and inventive ways of performing the everyday tasks required of living. While often applied to humans, the definition of culture is just as applicable to Man's nonhuman primate ancestors. These species demonstrate their cultures in numbers of ways: tool manufacture and usage, inventive ways of performing tasks, regional preferences, and even distinct dialects, among countless other examples. It is clear through research performed by primatologists and anthropologists that apes possess and pass on culture the way humans do, further proving their relation to humans and making them valuable assets in the study of human social and physical evolution. Horrifyingly, these primate species are swiftly being depleted due to human activity. Regardless of conservation policies and tactics being employed worldwide, illegal poaching and deforestation are claiming more and more nonhuman primates, and with them their unique cultures disappear. Even so, the issue of primate conservation is almost a paradox: often when conservation is enforced, native communities suffer loss of land and food

sources, jeopardizing their survival. This leaves the global community at a fork in the road, so to speak. Should primate conservation be enacted at the cost of human populations? Or should people be allowed to continue as they are, while primate populations, and with them distinct cultures, hang in the balance? Both options are at drastic odds: lives are affected with major consequences, no matter what option is ultimately chosen. However, with over 50% of the nonhuman primate population due to go extinct in the next decade, it is of the utmost importance that the global citizenry reevaluates its actions and works to promote balanced coexistence between human and ape species.