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**2009-02-02T11:57:02Z**
http://hdl.handle.net/10539/5996

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# Moral Agency in Chimpanzees

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**14 February 2008**

## Synopsis.

In their treatment of juveniles, chimpanzees show exceptional tolerance towards the behaviours of juvenile chimpanzees and go to great lengths to care for juvenile chimpanzees. This report will examine the behaviours shown by adult chimpanzees towards juvenile chimpanzees to see whether this behaviour indicates that chimpanzees have moral agency. The question of the report is "Does the treatment of juvenile chimpanzees indicate that chimpanzees have moral agency, understood as the ability to act in a virtuous manner, the possession of intellectual skills that allow an understanding of moral rules and the ability to accept responsibility for one's actions and to hold others accountable for their actions?" The report will attempt to defend an affirmative answer to this question.

## 1. Introduction.

The belief that only humans have the capacity to act morally seems to claim too much credit for humans and too little for other animals. We know that we share many talents, emotions and physical similarities with non-human animals and yet we define moral agency in ways that exclude non-human animals. When considering human behaviours, we forget how many of our own behaviours are grounded in evolution and

the survival instinct. When we consider animal behaviours, we attribute them only the basest of motivations.

Various philosophers stand on each side of this debate; there are those who hold that animals cannot be moral agents and those who find that there are distinct indications of moral behaviours and tendencies in animals. In order to shed some light on the debate, I will focus on the treatment of juvenile chimpanzees by adult chimpanzees and test whether this behaviour indicates that chimpanzees have moral agency within chimpanzee society. I will argue that moral agency is a combination of the ability to act in a virtuous manner, the possession of intellectual skills that allow an understanding of moral rules and the ability to accept responsibility for one's actions and to hold others accountable for their actions.

The challenge in the debate about moral agency for non-human animals is that there are no easy tests to identify understanding or being held responsible for action in the light of a complete lack of verbal communication between species. The only way to resolve this is to examine behaviours and make inferences about chimpanzee states of mind that seem reasonable.

Carl Sagan holds that there is evidence of morality in chimpanzees.[1] In his book *Shadows of Forgotten Ancestors* he summarizes the position of chimpanzees as follows:

> Chimpanzee society has an identifiable set of rules that most of its members live by: They submit to those of higher rank. Females defer to males. They cherish their parents. They care for their young. They have a kind of

[1] Carl Sagan and Anne Druyan, *Shadows of Forgotten Ancestors*, (New York: Ballantine Books, 1992), p. 315.

> patriotism, and defend the group against outsiders. They share food. They abhor incest. But they have, as far as it is known, no lawgivers. There are no stone tablets, no sacred books in which a code of conduct is laid out. Nevertheless, there is something like a code of ethics and morals operating among them – one that many human societies would find recognizable and, as far as it goes, congenial.

I will test the position of Carl Sagan through an examination of the treatment of juvenile chimpanzees by adult chimpanzees and what it means to be a moral agent.

## 2. The childhood of chimpanzees.

Chimpanzees are born very weak and defenseless. They remain totally dependent on their mothers for three years. During this stage they grow in confidence and are slowly introduced into the chimpanzee social structure. A baby orphaned under the age of three will die. After three years the youngster starts to take solid food and is fully weaned by the age of five. It is quite likely at this age that the mother will again conceive and a new baby will require the juvenile to become more independent and an adolescent. Typically a mother with two or three youngsters will form a nuclear family. Older sons will often return to spend time with their mothers.

From the age of about ten years old, the young males start socializing with the adult males and gradually join in male activities of hunting and patrolling the territory. Females remain with their mothers until they become sexually fertile at around thirteen years. At this age they will move off and join a neighboring group of chimpanzees.

Richard Estes in *Behaviour Guide to African Mammals* notes:

> All the evidence indicates that the extended childhood and adolescence of chimpanzees enables this species, like humans, to acquire the skills and social graces, through observation of role models and trail-and-error learning, which enable them to live and function in chimpanzee society.[2]

Chimpanzees have a long childhood. During this time their mothers and extended family help to teach them the social skills that they require to be functioning adult chimpanzees. While humans are able to raise chimpanzees, we are incapable of teaching them to behave like chimpanzees. In most cases human rearing of chimpanzees leads to socially inept adult chimpanzees.

## 3. The treatment of juvenile chimpanzees.

### 3.1 Tolerance.

It is widely reported that juvenile chimpanzees are given considerable latitude in behaviour. Dr Jane Goodall notes, "Normally small infants are shown almost unlimited tolerance from all other members of the community." [3] Juvenile chimpanzees are physically marked with a white tuft on their bottoms. At the age of four to five years this tuft disappears and it is at this point that juveniles start to be treated like adults. During the period that the tuft is apparent even unrelated animals will treat the youngster gently.

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[2] Richard Despard Estes, *The Behaviour Guide to African Mammals,* (Pretoria: Russell Friedman Books, 1997), p. 557.
[3] Jane Goodall, *In the Shadow of Man,* (London: Phoenix Giants, 1996), p.153.

> Adults are very tolerant of infants with these white hairs and the youngsters know it. Basically, they are allowed to get away with murder. For example, knowing that their mother is close at hand, they will often pick an argument with others much larger than themselves. However, there comes a time when these hairs have all but disappeared, and if they step out of line then, their transition into adulthood can be a rude awakening.[4]

Dr Frans de Waal describes the lengths to which juveniles sometimes interfere with the mating of adult chimpanzees and the extreme tolerance shown.[5] In one example one of the infants actually bites a male on the scrotum while he is mating with a female. Instead of a violent response the male rubs the sore spot and just looks at the youngster. de Waal also describes on many occasions how adult males will attack other males who interfere in their mating hence indicating the different treatment of adults and juveniles. Humans deem children incapable of determining right from wrong and do not hold them accountable for errant behaviours until they reach majority. The same may be true of chimpanzee society.

**3.2 Defense of juveniles.**

Chimpanzee males are protective towards females and young and will readily risk their own lives to protect them from attack or to rescue a youngster in trouble.[6] In

[4] Vince Smith, *Sophie's story,* (Croydon: Portrait books, 2003), p. 62.
[5] Frans de Waal, *Chimpanzee Politics: Power and Sex among Apes,* (Baltimore: The John Hopkins University Press, 1998), p. 158.
[6] Sagan and Druyan, *Shadows of Forgotten Ancestors*, p. 285.

1930 Henry Nissen observed chimpanzees in the wild in western Guinea. He had a hair-raising moment when a full-grown male charged straight at him. "When it was only a few yards away it stopped and picked up a juvenile chimpanzee and retreated fast. It was clear that the male had considered that the young one was in danger by being too close to a human and had run to save it."[7] He also observed mothers with their young. "During the first six months of life, the mother keeps her infant within two feet of her body, enclosing it in her arms if any danger threatens such as the approach of a hawk."[8]

Not only do individuals take direct care of juveniles, Nissen also observed how the whole group assists in the raising of youngsters particularly in finding food. Mothers with small youngsters are unable to move large distances and hence tend to stay in the same area. Males and females without infants are able to travel faster and cover a much greater range. The mobile group looks for food trees and once they find them they make a lot of noise signaling to the mothers where the food can be found. "This would save the mothers, who had to carry the infants, much time and energy."[9]

There is also a connection between the protection and support offered by a male and his rank within the group. The females within a group exert a significant influence over the status of males either in their roles as mothers or through lending their strength and support to an individual male. Males that do not care for and protect infants will not attract the support of females and may also be marginalized in sexual favours.[10]

In many cases the male or other adult lends support to the rearing or care of the juvenile. Goodall writes of a youngster, Goblin, trying to navigate his way over a large

[7] Vernon Reynolds, *The Apes*, (London: Cassel, 1967), p. 122.
[8] Ibid. p. 124.
[9] Ibid. p. 128.
[10] de Waal, *Chimpanzee Politics: Power and Sex among Apes,* p. 116.

tree stump. Half way up the stump he looses his grip and starts to fall. An adult male, David Greybeard, was sitting nearby and "quickly reached out and put his hand under the infant's elbow until he was safely up."[11]

### 3.3 Adoption of orphaned juveniles.

An important part of the treatment of juveniles is the adoption of orphaned youngsters by related and unrelated adult chimpanzees. A young chimpanzee that is orphaned once it is weaned but before it reaches adulthood is at huge risk. The young chimpanzee is unable to protect itself and needs an adult to help with decisions and finding food. Orphans from three to eight years old require adult assistance to stay alive. Even older chimpanzees will mourn and die from sorrow after the death of their mother. It is thus really important for an adult to take on the responsibility to care for a young chimpanzee whose mother has died.

Siblings are the first option to care for an orphaned chimpanzee. The bond is so strong that even chimpanzees as young as nine years old will try to look after an orphaned sibling. Family relationships are strong as older siblings spend significant time playing with a younger brother or sister. The mother will often spend time with her offspring in a small nuclear family away from the main group. It is logical to think that a sibling will assist raising a juvenile that shares its genetics in order to protect the gene pool. However, no emotional or biological motivations are present when an unrelated adult adopts an orphaned juvenile. Goodall records the following example, where a female, Miff, dies leaving a three year old son, Mel.[12]

[11] Goodall, *In the Shadow of Man*, p. 153.
[12] Jane Goodall, *Through a Window,* (London: Phoenix Giants, 1998), p. 170.

Mel was very weak and wandering around after various individuals and although all were tolerant, none showed special concern. I never expected to see Mel again.

But then I had a telegram *Mel adopted by Spindle*. I was amazed, for Spindle, then twelve year old son of old Sprout, was quite unrelated to Mel so far as we knew. Surely such a relationship couldn't last?

Spindle was a wonderful caregiver. He shared his night nest with Mel and he shared his food. He did his best to protect the infant, hurrying to retrieve him when the big males became socially aroused.

The researchers observed that Mel travelled with Spindle for a year before finally spending his time with Gigi, an unrelated, childless female. The role played by Spindle was critical. "There is little doubt that Mel survived because of the care he received from Spindle."[13] Gigi took on a second orphan and it became common to see the large childless female in the lead followed by the two small motherless orphans. "She provides the support they need in an often unfriendly world."[14]

It is common for zoos to use unrelated females to care for orphaned chimpanzees. Due to the ability to bottle-feed youngsters through bars or with a trained adult it is possible for a juvenile as young as one year old to be adopted and reintroduced back into the chimpanzee group.

[13] Ibid, p.171.
[14] Ibid, p.171.

### 3.4 Objection to humans raising chimpanzees.

An interesting behaviour manifests when humans intervene to raise a juvenile chimpanzee. Adult chimpanzees react badly and with aggression. Smith observed this behaviour when he noted that the chimpanzee group was very aggressive to him when he had Sophie, an abandoned baby chimpanzee, with him. "The chimps always act differently to visitors carrying children in comparison to when they carry cuddly toy apes or teddy bears, becoming aggressive and throwing sticks or stones at the latter."[15] de Waal witnessed similar behaviour.[16]

As former CEO of the Johannesburg Zoo, I know that the zoo has been raising a chimpanzee and that the same behaviours are apparent. The group of chimpanzees show extremely aggressive behaviours to the keeper when she is visible with the juvenile. They bang on the glass and attempt to assault the keeper. We initially thought that it would be useful to introduce the youngster to the chimpanzees through the glass but the extreme reaction from the group resulted in a change of plan.

Chimpanzees appear to object to a juvenile being in human care. It may be that the chimpanzees see a risk associated with the juvenile being with humans. The adults may perceive that the juvenile is in danger and they react with aggression to protect the youngster. If the roles were reversed, a human being raised by chimpanzees, there is no doubt that the humans would demand the child's immediate removal.

[15] Smith, *Sophie's story,* p. 84.
[16] de Waal, *Chimpanzee Politics: Power and Sex among Apes,* pp. 56-57.

### 3.5 The role of play in raising juvenile chimpanzees.

Play is an important part of the childhood of a young chimpanzee. Play focuses on the development of muscles and dexterity as well as learning the social norms and appropriate responses to various situations. Adults spend a considerable amount of time playing with young chimpanzees. While the mother and siblings dominate play sessions all the adults in a group will spend time playing with a youngster. As with other species play sessions have clearly defined rules of engagement. Bekoff has spent considerable time on the importance of play within wolves and dogs. He is of the opinion that observing social play in mammals will allow us to learn more about fairness and social morality.[17]

In chimpanzee communication a "play face" has been identified. The chimpanzee wishing to commence a play session uses the face to communicate that the engagement is not serious. During play the adults will engage in self-handicapping and role reversal. Self-handicapping is when the adult play fights and purposefully reigns in its strength. Role reversal will be seen where an adult lies on the ground in a submissive position allowing the youngster to dominate.

Goodall describes Gilka, a two-year-old female, who loved to play with other chimpanzees. She would swing her arms, stamp her feet and pirouette to get attention and be rewarded by the males she approached reaching out to tickle or pat her in a very tolerant way. Goodall described Gilka playing with a large male Rodolf, "he was lying on his side heaving with chimpanzee laughter as Gilka climbed on his large frame and

[17] Marc Bekoff, "Wild Justice and Fair Play: Cooperation, Forgiveness and Morality in Animals", *Biology and Philosophy 19* (2004): p. 513.

play-bit into his ticklish neck."[18] Goodall notes that two and three year olds tend to spend all their time playing with adults, other youngsters or even on their own. In play they learn about their social ranking, strength of peers, dexterity and feeding and locomotion skills.

de Waal records political maneuvers but during a time of relative peace he notes that the two former rivals were seen "playing with each other again" which was infectious and the whole group including females were "frolicking with play-faces."[19] He notes youngsters can be seen engaging in wrestling and tickling games. de Waal and Goodall note that the play-face is reinforced by the sound they call "laughing." This reinforces the nature of the engagement is fun and the parties are not serious.

While there are numerous anecdotal examples of adults and juvenile chimpanzees playing it is not clear that this has been widely studied and the consequences of not playing fair have not been documented with chimpanzees. Chimpanzees that are raised alone and not able to play with other chimpanzees exhibit poor social skills and are less likely to be able to mate with other chimpanzees.

Bekoff has documented the play rituals and behaviours of wolves and has come to the conclusion that playing fair is an important social bonding for wolves and that there are fitness consequences of not playing fair. Play is an important tool for teaching young animals and it is also a rich area of research into social morality within non-human animals. As much play is focused on fighting and displays it seems to be important to be able to distinguish the intent of the approaching animal. The fact that chimpanzees have a "play face" that is used to signal the intent to play indicates that

[18] Goodall, *In the Shadow of Man*, p. 155.
[19] de Waal, *Chimpanzee Politics: Power and Sex among Apes*, p. 111.

there must be some recognition of intention and a theory of mind. In addition Bekoff found that there are animals that use the play indicators for deception to get close to another animal but repeated unfair behaviour leads to the animal being chased from the play group.[20] Play session may be a time where we are able to observe that chimpanzees communicate intention and then generally act in accordance with that intention.

Having examined the behaviours associated with the raising of juvenile chimpanzees I will now examine the requirements for moral agency that should be used to test whether the above behaviours are evidence of moral agency.

## 4 Moral agency: The ability to be a moral being.

Moral agency is the ability to take moral decisions and to act in a morally responsible manner. The kinds of decisions and actions that are usually held to be matters of morality include lying, stealing and hurting people. We also hold that morality is concerned with our involvement in community activities, generosity to others in need and sexual behaviours. More recently morality is concerned with choices we make around food and the treatment of other animals. [21]

The challenge in the definition of moral agency is to clearly identify the entities that are able to make moral choices and act in a moral capacity. Within humans very young children and mentally disabled people are not considered as moral agents as they lack the capacity to make moral choices.

[20] Bekoff, "Wild Justice and Fair Play: Cooperation, Forgiveness and Morality in Animals", p. 513.
[21] Peter Singer, *The Ethics of What We Eat*, (Emmaus: Rodale, 2006), p. 3.

The concepts of moral agency, moral status and moral obligations are linked. Moral agents are beings that have moral obligations towards all other moral agents though not necessarily only moral agents. Moral agents are obliged to respect, at least, the rights of all other moral agents.[22] The obligations that moral agents hold to each other include acting with respect for one another's basic moral rights to life, liberty and freedom from pain.

All moral agents are held to hold full moral status but it is widely held that any entity that can feel pain should be accorded some moral status and thus be worthy of moral consideration. Animals are usually not accorded moral agency yet there is a strongly held view that they should be accorded moral consideration and should not be made to suffer needlessly.[23]

People often act in ways that are neither moral nor supported by their stated morality. People who act immorally are still considered moral agents as they have the capacity to make moral choices about their actions. Thus what makes a moral agent is not the choice that the entity makes but the very ability to make certain choices.

Based on what I will argue below, I believe that moral agency is a combination of:

- the ability to act in a virtuous manner,
- the possession of intellectual skills such as rational thought, intent and theories of mind that allow an understanding of moral rules, and
- the ability to accept responsibility for one's action and to hold others accountable for their actions.

[22] Mary Anne Warren, "Moral Status" in *A Companion to Applied Ethics*, p. 439.
[23] Peter Singer, *Animal Liberation*, (New York: Avon Books, 1990), pp. 7-9.

Definitions of moral agency rely on these factors to varying degrees. The factors are logically but not really distinct as they work in concert. It is important in the understanding of moral agency to identify whether any individual factor is sufficient to prove moral agency.

Some authors hold that any one of these capacities is sufficient for moral agency. Paul Shapiro holds that the ability to act in a virtuous manner is sufficient for moral agency.[24] He identifies that the Greek philosophers advocated the virtue-based approach to moral agency.[25] In particular the attributes or virtues that are important for moral agency would include altruism, fairness, caring and compassion. Shapiro shows that many animals display virtuous behaviours and he holds that they should be considered as moral agents. While virtue may be necessary for moral agency it is not clear to me that it is sufficient on its own. Virtuous behaviours are present in very young children who are not yet considered as fully functioning moral agents.[26] It is not just the ability to be virtuous that is important but the combination of the virtues and the context of the virtuous behaviour. Animals can be trained to behave in virtuous ways but need not show any decision-making or choice in behaving virtuously. For example a dog can be trained never to hurt a person and while this is a virtuous behaviour I don't think we would hold the dog to be acting as a moral agent.

The consideration of intellectual skills adds a further dimension to the moral agency definition. The skills that are considered important in the consideration of moral agency include aspects such as intent, reasoning, self-awareness and having a theory

[24]Paul Shapiro, "Moral Agency in Other Animals," *Theoretical Medicine and Bioethics* 27 (2006): pp.357 – 373.
[25]Shapiro, "Moral Agency in Other Animals," p. 358.
[26]Felix Warneken, Brian Hare, Alicia Melis, Daniel Hanus, Michael Tomasello, *Spontaneous Altruism by Chimpanzees and Young Children,* (Liepzig: PloS Biology, 2007).

of mind, which is the ability to be able to construct a belief of what another individual is thinking. In terms of moral agency it is important that the moral agent is able to understand her own role and her impact on others as she chooses a course of action. Without such understanding it is not possible to allocate responsibility thus self-awareness and reasoning are important.

In a case of rape there is a fine line between consensual sex and rape. The key issues will revolve around the intent of the woman to have sex and the how the manifestations of her intent allowed the perpetrator to create a theory of her mind. In defense perpetrators will hold that they believed that the woman was a willing partner. They hold a theory mind as to what the woman was thinking. The difference between rape and consensual sex is largely dependent on intent and correct allocation of a theory of mind.

While these intellectual skills are required to engage in consideration of morality they are not sufficient to show that entities are moral. It is possible to think of a ruthlessly smart and self-aware group that acts without any capacity for virtue. Thus a combination of intelligence and virtue are required to work in tandem.

Acting with intelligence and virtue may still be open to the criticism of not being sufficient for moral agency. If such actions are isolated and disjointed they would not indicate an understanding of moral choice but rather a chance happening, random act or conditioned routine. Moral agents act in accordance with a set of rules that can be seen to hold moral content. The repeated application of a moral action over a range of situations would indicate the existence and understanding of a rule that is accepted by moral agents within a social structure.

A further essential property of moral agency is the identification of consequences for the violation of moral rules. If there are no consequences either at an individual or group level it would be hard to think that any moral rule or decision is involved. Every day decisions and choices are made with intent and outcomes in mind but without any moral implications. The choice on where to eat or what to wear has little moral content. The clearest indication of moral content or aspects to a decision or choice is that there are consequences when a moral rule is violated. The violation of a moral rule will result in emotional reactions from oneself or others. These responses form the core of moral responsibility.

The concept of moral responsibility seems to be important in the definition of moral agency. At an individual level we look for guilt, remorse and restitution in the violation of moral rules and can discuss with people their acceptance of responsibility. When a moral rule is violated it may be necessary to compensate the victim and hence an ability to identify the violation and the individual that is disadvantaged is important. At a collective level we can look to the institutions of behaviour control, punishment and reward to see whether the society or group holds individuals responsible for their actions.

I thus propose that a moral agent will have the ability to act in a virtuous manner, possess intellectual skills that allow an understanding of moral rules and the ability to accept responsibility for one's actions and to hold others accountable for their actions.

An objection to this proposed definition is that moral agents need to have the ability to explain moral principles. The inclusion of the ability to explain moral principles is overly rigorous as even the majority of humans are unable to meet the requirement.

For example it is common to test an individual's understanding of other's rights through the posing of moral situations and having subjects explain their motivations for answers, due to a lack of language no animals are able to meet this requirement. Interestingly many human adults are equally unable to adequately explain moral principles.

The philosopher Phillipa Foot proposed a classical moral dilemma involving various scenarios of people on train lines. The purpose of the exercise was to test the distinction between killing and letting die and the relevance of acts of omission. Through a number of studies the answers and reasoning of various groups of people have been investigated.[27] Most adults will draw a distinction between causing a death and merely foreseeing a death, holding the former impermissible and the second permissible. Yet when asked to explain their decision very few are able to make the distinction or to defend their gut reaction that one is permissible and the other not. In a survey that included thousands of participants Marc Hauser found that 70% of respondents were unable to explain their moral position. He surmises "people tend to make moral judgments without being aware of the underlying moral principles."[28]

Hauser has shown that not all humans undertake moral reasoning before they make what appear to be moral judgments. Few people spend any time thinking of morality or have the competence to argue and deliberate on complex moral issues. While most people know the simple moral issues like it is wrong to kill, steal and practice incest there are many nuances and complex issues where the average person is ill equipped to debate morality. It seems that the demand for the ability to reason and

[27] Marc Hauser, *Moral Minds: How Nature Designed Our Universal Sense of Right and Wrong,* (New York: Harper Collins, 2006), p. 113.
[28] Ibid, p. 128.

verbalize moral theory is a construct that not even the majority of humans are able to meet and yet they are moral agents nonetheless.

For animals we cannot use verbal tests to examine comprehension of principles and thus we have to look at behaviours. If we use a parallel with the physical world chimpanzees have not shown any understanding of Newton's laws of attraction and yet they know about gravity and the effects off gravity. As highly arboreal and gymnastic animals they are able to judge jump distances and hence indicate a sophisticated understanding of trajectories and gravity. Failure to understand the impact of gravity will result in a fall from great height. Chimpanzees learn about gravity from play, watching others and even from making mistakes. It is clear that despite their inability to articulate the physics and laws of gravity chimpanzees do understand gravity.

Similarly while chimpanzees are not able to discuss moral principles they do seem to act according to a number of rules and social norms that amongst humans we would consider moral. They learn these rules by watching others, in play and in the hard knocks that they receive when they commit a social or moral mistake. By the time they reach sexual maturity chimpanzees have a good understanding of the social behaviours that are acceptable and those that are not.

It seems that what is essential to moral agency is not the ability to articulate moral principles but rather the ability to behave in a way that is consistent with an understanding and respect of moral rules. A moral agent will have the ability to act in a virtuous manner, intellectual skills, which allow an understanding of moral rules and the ability to accept responsibility for their action and to hold others accountable for their actions.

A second argument is specifically against moral agency in animals and holds that although animals meet the requirements of virtuous behaviour, intelligence and holding of themselves and others responsible, these are only met partially and are too simplistic to be regarded as evidence of full moral agency. It is the view of Hauser[29] and de Waal[30] that the parts of morality evidenced in animals are the precursors to morality and merely indicators of the evolution of morality. The authors present examples and anecdotes to support their evidence of the evolution of morality but do not present the examples in a cohesive way that would show moral agency when all aspects are combined. I believe that when one examines the choices, behaviours and abilities of animals within their society and with a clear moral objective in evidence, such as the care and raising of juveniles within chimpanzees, the extent of the abilities are more complex than previously conceded.

To fully understand the moral choices that individuals make requires a holistic approach. One needs to test whether there are grounds for a rule that we would hold to be moral, intent to abide with the rule and consequences of breaking the rule. In a complete framework of moral decisions and actions one may be able to see actual moral agency in animals rather than disjointed indicators of ability. Once it is hypothesized that a situation necessitates moral rules and that parties require capacity to ensure the operation of moral rules, then random acts of intelligence and virtuous behaviour become more than random; they become evidence of moral agency. Thus I hold that the three aspects of virtue, intelligence and responsibility act together in the

[29] Hauser, *Moral Minds: How Nature Designed Our Universal Sense of Right and Wrong.*
[30] Frans de Waal, *Primates and Philosophers: How Morality Evolved,* (Princeton: Princeton University Press, 2006).

definition of moral agency and when all are present in the application of moral decisions there is evidence of moral agency.

**5. The argument for moral agency in chimpanzees.**

Without access to language the only way to test for moral agency is to examine behaviours and make inferences about whether animals have the abilities to meet the requirements for moral agency. We can tell that animals intend certain things without access to language but we must surmise reasonably that certain intentions are virtuous, consistent with moral rules, and whether moral responsibility can be shown; only then can we determine if an animal is capable of being a moral agent.

The argument for moral agency in chimpanzees is as follows:

P1: A moral agent has the ability to act in a virtuous manner, possesses intellectual skills, which allow an understanding of moral rules and has the ability to accept responsibility for their own action and to hold others accountable for their actions.

P2: Chimpanzees behave in a way that indicates the ability to act in a virtuous manner.

P3: Chimpanzees act in a way that indicates that they possess intellectual skills, which allow an understanding of moral rules.

P4: Chimpanzees act in a way that indicates that they accept responsibility for their own actions and hold others accountable for their actions.

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C1: Therefore chimpanzees can be considered moral agents.

The argument will draw on the treatment of juveniles to support the premises. In order to make sense of the argument we need to put aside the mindset that strives to exclude all non-human animals from moral agency. The definition is fair, reasonable and sufficient to identify moral agents regardless of their species. The consequences are considerable as according moral agency will have implications on moral status and the treatment of moral agents.

In this research report I will articulate the argument, supporting the premises with anecdotes and references to literature. I will identify the major criticism to each premise and consider whether it is sound. I have explained and defended P1 above and will now examine how the treatment of juvenile chimpanzees supports P2, P3 and P4.

## 6. Chimpanzees behave in a way that indicates the ability to act in a virtuous manner.

In the absence of language, one has no choice but to infer understanding and intention from behaviours. Observation is difficult as we have only two ways both of which are flawed. Field observations of wild chimpanzees are difficult and as Goodall[31] found many interactions happen where observers cannot follow. Natural fear of humans also means that wild chimpanzees maintain a distance from human observers making it impossible to observe detailed interactions. It is easier and more practical to observe chimpanzees in captivity as was done by de Waal; however, captive groups are subject to extensive management interventions and artificial conditions that interfere with natural behaviours.

[31] Goodall, *In the Shadow of Man*.

The virtues that have been proposed as important for moral agency are altruism, fairness, caring and compassion.[32] In the treatment of juveniles there are many examples of adult chimpanzees acting in ways that are consistent with these virtues. Juvenile chimpanzees use their long childhood to learn the rules of societal interaction. In this time they need care and compassion as they are not yet fully socially adept and may commit social indiscretions that would result in extreme punishment amongst adults. They are also unskilled in finding food and making the decisions that are needed to survive in the jungles and rely on adult care.

The act of adoption by unrelated adults is an indication of altruistic behaviour in chimpanzees. The raising of a young chimpanzee comes at considerable cost to the adult. The adult is unable to move fast and becomes dependent on the rest of the group for protection and to find food. Effectively the adult will sacrifice his or her own competitive advantage to assist the youngster. There is no reciprocal obligation on the youngster and thus the adult acts selflessly without expectation of return in the long run.

Recall that within the dangerous environment in which they live, the loss of the mother is a death sentence for young chimpanzees. Under the age of eight years old a juvenile is incapable of looking after himself and die very soon after his mother dies. Most interesting is the record of completely unrelated adults assuming the responsibility to look after orphaned chimpanzees. In many cases not one but a number of adults share the responsibility until the youngster is able to fend for himself. Again the objection to this interpretation is that the chimpanzees are merely acting from the selfish, evolutionary instinct to promote their genes to future generations. However,

[32] Shapiro, "Moral Agency in Other Animals," p. 358.

there is no genetic or self-serving reason for unrelated adults to adopt an orphan and yet they do.

Chimpanzees behave in a selfless way in respect to the care and protection of juveniles. As we cannot debate their understanding we have to observe the actions. When humans are caring and act in the interest of others without expecting a reward we hold their actions to be virtuous. To attribute any other meaning for chimpanzees would be inconsistent.

In the search for food chimpanzees act an altruistic manner. You will recall how the mobile males and females without youngsters range widely looking for food. This group expends energy to find trees with fruit. Once a food source has been located the group calls to the mothers so that they can join the group at the source of food. There is no return to the group for sharing their source of food.[33]

An example of the virtue of fairness is demonstrated in an incident observed by de Waal. He observed two youngsters playing while their respective mothers watched. After a while the play deteriorated into a fight neither mother intervened but they woke a third female to mediate the dispute. It appeared that the two mothers understood that they would not be able to resolve the conflict fairly and called on the third female.[34]

Caring and compassion are important in a highly aggressive and social group like chimpanzees. During the early years youngsters are prone to make mistakes and behave in antisocial ways. Parents and society spend considerable effort on socializing youngsters and teaching them acceptable behaviours. In this period they require tolerance and patience as well as the care that adults provide in a hostile world.

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[33] Reynolds, *The Apes*, p.128.
[34] de Waal, *Chimpanzee Politics: Power and Sex among Apes,* pp.178 - 180.

de Waal records an incident that is unexpected in the tolerance shown by the adult. "When Fons sank he teeth into Nikkie's scrotum I expected Nikkie to turn on him in fury, but he did not do so. He rubbed the sore spot and looked at Fons, but he did not punish him."[35] At this moment Nikkie acts consciously. He does not act as an animal responding instinctually to pain; he acts with conscious restraint and tolerance towards a juvenile chimpanzee.

There are extensive examples in the writings of de Waal, Goodall and Smith on incidents where adults act according to the understanding that juveniles are unable to care for themselves, need assistance and are still socially inept. The literature is convincing that not only the mother but also all the chimpanzees in a group share this responsibility and will assist a youngster.

When chimpanzees act to protect or tolerate behaviours from youngsters they appear to be acting in a way that is considered and responsible. By far the majority of observations show that chimpanzees act with great care and tolerance in looking after juvenile chimpanzees. They will go to extraordinary lengths to ensure that the youngsters are protected. Their tolerance often seems to hold an air of thought and self-control. However the tolerance is not unconditional; a youngster that repeatedly pushes the boundary or refuses to learn will find himself the subject of a quick cuff or slap.

Objectors might claim that chimpanzees are not responding in a virtuous manner but rather to the evolutionary prerogative to raise offspring. While it is possible to attribute this behaviour to an evolutionary benefit this need not diminish its moral value. " We should not assume a human mother's love for her child has no moral value simply

[35] Ibid, p. 158.

because maternal love serves a biologically useful purpose."[36] It is possible for a behaviour that has a biological and self-interested origin also to be moral. In the case of adoption there is no evolutionary benefit in raising unrelated youngsters. In chimpanzees many adults assist with the raising of juveniles both directly and indirectly. Adult males are strong and short tempered so for them to be able to engage positively with youngsters they need to show tolerance and care. Many examples of such restrained and virtuous behaviour are apparent in the interaction between adult males and youngsters.

## 7. Chimpanzees act in a way that indicates that they possess intellectual skills, which allow an understanding of moral rules.

Moral agency is the ability to make moral decisions. It is thus important that the moral agent is able to understand a moral rule and choose to behave in accordance with such a rule. The intellectual skills that are important in the consideration of moral rules and behaviours would include aspects such as intent, reasoning, self-awareness and having a theory of mind.

The play behaviour described in section 3 is a good example of the intellectual skills that are displayed in chimpanzee interaction. Play requires a complex form of communication to signal intent and the purposeful restraint of an adult to make the play fair. In addition the development of play routines demonstrates the ability to understand a theory of mind. As an example, chimpanzee A approaches chimpanzee B. Chimpanzee A uses the "play face," mouth open in a wide grin, to signal that his intention is to play. Chimpanzee B sees the play face and can interpret that A wishes to

[36] Shapiro, "Moral Agency in Other Animals," p. 359.

play and can choose to engage in play or to retire. B has knowledge of the intent of A and hence has a theory of mind with respect to A. If B decides to play with A and A is a juvenile then B needs to consciously restrain his strength to play in a way that will not hurt A.

The requirement for moral agency is not just intellectual skills but their use in the application of moral rules. The moral rule with respect to the treatment of juveniles would obligate adults to protect and care for juvenile chimpanzees. This is a moral rule in that it requires the adults to rise above a pure selfish gene model and commit to the protection and safety of the juveniles. In terms of survival of genes the whole group benefits from the successful rearing of young but there are other factors at work within chimpanzee society. Juveniles have a long childhood where they test the patience and resolve of the adults. Without a moral rule in place it is conceivable that the social grouping would fall apart as the unrelated adults would kill or hurt the juveniles. In many other species the females raise their young away from males that cannot be trusted not to kill the offspring.

In order to be able to undertake the complex array of behaviours and treatments that support the long childhood of chimpanzees takes significant intent and intelligent consideration. The example given by Reynolds where the females with young remain at food sources while the males and unencumbered females search for new food sources indicates a level of planning and communication in pursuit of the goal of raising youngsters. Once the mobile group has found food they call to the females with young and the females move to join them.[37]

[37] Reynolds, *The Apes,* p. 128.

An objection might be that there is no intentionality involved in the rearing of juvenile chimpanzees. It is instinct at operation and not intentional behaviour with the goal of raising a young chimpanzee. I would refute this in that chimpanzees often act with intent towards an outcome or goal. In the area of play chimpanzees invite play through the demonstration of a play face and then act in accordance with that invitation. The sheer scale of time required for raising a young chimpanzee and the number of individual animals involved in the process of rearing a youngster indicates that, at a communal level, chimpanzees are acting with intent.

Animals that have the raising of young as an evolutionary advantage tend to have this occur very rapidly; antelopes are self sufficient with three months. This is important to antelopes as survival depends on producing a large number of offspring at the same time and having them mature as quickly as possible. Any youngster is easy prey and cannot afford to be weak and dependent for long. The longer a juvenile requires protection the greater the risk for the offspring and the greater cost for the adults charged with the care.

As discussed above chimpanzees have a very long juvenile period of four to five years. They have traded the economy of a quick development for the time required to learn complex social behaviours. We thus need to consider that some other motivators are important. The competitive advantage of a complex brain with higher intelligence manifests in the ability to use tools like stones or sticks in defense. In battles with baboons the chimpanzees often win through their superior use of tools.[38] However with the increased intelligence comes a longer developmental period where the juvenile is dependent on adult support.

[38] Goodall, *Through a Window,* p. 104.

The protection of juveniles is not an automatic or merely conditioned response. There is evidence of infanticide amongst chimpanzees. While rare it does occur and suggests that chimpanzees have the capacity to choose how to act. Smith records an incident where a young chimpanzee was attacked one night.[39] Goodall writes of a terrible time when two adult females turned into "baby killers".[40] We do not know whether these incidents are as a result of a personality defect or the result of some exceptional stress in the environment. We do know that it is rare and unusual. The introduction of a juvenile into a group is a slow process as the chimpanzees can choose to attack rather than to protect the youngster. They need time to get to know the juvenile before they will commit to his protection and care.

It is the ability to choose a moral action that creates the complexity of being a moral agent and chimpanzees have shown that their protection of juveniles is not an automatic response but a choice. Many of the behaviours required for the successful raising of young chimpanzees demonstrate a high level of intelligence used in pursuit of the goal of raising young.

**8. Chimpanzees act in a way that indicates that they accept responsibility for their own action and to hold others accountable for their actions.**

It is difficult to interpret understanding from behaviours and even more so to interpret any allocation of responsibility either to oneself or to others. In humans we look for indications of remorse and guilt in the attitude and behaviour of people who have acted immorally and pride or joy from those acting morally. Restitution and

[39] Smith, *Sophie's Story,* p. 111.
[40] Goodall, *Through a Window,* p. 64.

apologies are expected where there is a violation and the injured party may receive some form of compensation. In addition behaving in manner consistent with expectations is a positive indication of assumption of responsibility.

Through the observation of behaviour we can tell that chimpanzees intend certain things but we must interpret behaviours with care. In chimpanzees punishment is not institutionalized as it is within human society. There are no lawgivers or police. The cost of physically punishing another member of a group is high and can lead to injury thus a chimpanzee will resort to physical engagement only when there is no other alternative. Generally each chimpanzee knows its place in the dominance structure and will avoid conflict with a more dominant animal. When punishment does occur it takes the form of physical beating or withholding favours.

To date there is no documented chimpanzee equivalent of guilt or remorse. de Waal records chimpanzees making up to parties that they have disciplined or fought previously. Generally the making up takes the form of grooming or displays of submission, which is akin to making amends or paying restitution. de Waal records instances of food sharing or withholding of food following conflict situations.

A challenge with the lack of emotional language is that it is hard to test and explore the guilt and remorse that we would associate with the breaking of a taboo or the abuse of an individual's rights. Smith describes an incident where Sophie attacked a guest without provocation and immediately thereafter Sophie went to the room where she would be locked when she misbehaved. Effectively she knew that she had behaved wrongly and punished herself.[41] Research is needed to find both the display of guilt in chimpanzees and record evidence of its occurrence. People who work with

[41] Smith, *Sophie's Story*, p. 155.

chimpanzees talk of being able to see when an animal has done something wrong and talk of guilty appearance but this has not been documented in a scientific or rigorous way.

It is possible to observe emotional reactions in the event of a violation of rules that can be used to understand the acceptance or allocation of responsibility by chimpanzees. Moral rules can be split into precautionary rules and social contracts. Precautionary rules are created to protect individuals from danger, like “stay away from humans”. Social contracts allow members of the group to live together harmoniously, like “we will not interfere with each other's babies”.

Hauser identifies that a violation of precautionary rules evoke fear while violations of social contracts evoke anger.[42] By using this split and the reaction witnessed in the event of a violation we have a tool to evaluate the ability of chimpanzees to hold others accountable for their actions. Both fear and anger are well-documented emotions amongst chimpanzees and easily recognized. They indicate that the group understands the violation of a rule and the allocation of responsibility to the individual responsible for the violation.

de Waal observed an incident where one female kidnapped an infant. [43] The mother responded to the panicked cries of the juvenile and recovered her infant. She then attacked the much larger kidnapper. At this point the dominant male intervened on the side of the aggrieved mother and apparently punished the kidnapper. The incident was more remarkable in that the kidnapper was a favorite of the dominant male. The example plausibly shows that the dominant male respected and enforced the right of the

[42] Hauser, *Moral Minds: How Nature Designed Our Universal Sense of Right and Wrong,* p. 294.
[43] de Waal, *Chimpanzee Politics: Power and Sex among Apes,* p. 166.

mother to provide protection and care for her infant and the right of the infant to such protection.

In the kidnapping incident described above the female had violated a social norm and the reaction was one of anger by both the mother and the dominant male. The anger would seem to indicate that there is an ascription of responsibility to the party that violates the rule. Often an angry response will result in a form of punishment such as a beating.

The fact that chimpanzees respond with anger when humans raise young chimpanzees may indicate their belief that a social contract, their responsibility to raise young chimpanzees, has been violated. The right of the young to adult care appears to be a responsibility that chimpanzees do not approve of humans undertaking. The right of the juvenile creates a duty in the adults, a duty that they are not happy to see taken over by humans. It could also be that the chimpanzees are worried about how humans will treat the youngster and their reaction is more of fear once again a predicated emotion in the light of a violation of a precautionary rule. The anger that has been observed is directed towards the human holding the juvenile and gives the impression that the chimpanzees would punish the human if they were able.

The fear response may be an indication of acceptance of responsibility by an adult chimpanzee. In the Nissen[44] example the dominant male reacts with fear and retrieves the youngster that had strayed too close to humans. The violation by the juvenile was a violation of a precautionary rule and evoked fear. The dominant male accepted the responsibility to return the youngster to safety.

[44] Reynolds, *The Apes*, p. 128.

Through the observation of behaviours in the event of violations of rights we see that chimpanzees are not only able to choose how to act but also recognize when another has violated a rule. In the accounts the group punishes the individual that has violated the rule. It would seem that there is both recognition of the guilty party and consequences for the violation. If there were no understanding, no respect and no sense of responsibility there would be no reaction.

**9. Chimpanzees are thus moral agents.**

From the information presented it appears that chimpanzees' treatment of juveniles meets the requirements for moral agency as defined by the ability to act in a virtuous manner, possess intellectual skills, which allow an understanding of moral rules and the ability to accept responsibility for their own actions and to hold others accountable for their actions. It is true that chimpanzees meet these requirements in a more limited way than adult humans are capable of yet they seem to show capacity to be considered moral agents.

While there is a lot written on the treatment of animals and their basic rights most authors stop short of crediting non-human animals with moral behaviours or moral agency. Yet if we examine a number of the behaviours of chimpanzees we see behaviours that cannot be explained by a Cartesian application of animals as machines nor as a stimulus response. A more parsimonious explanation is that there are rules for the behaviour of chimpanzees; chimpanzees understand these rules and chimpanzees act with intent and consideration in situations where the rules apply.

This argument has only tested the treatment of juveniles against the criteria of moral agency; however there are other behaviours that have a distinctly moral air to them. It is widely recorded that incest is a taboo within chimpanzees. Sagan gives a very compelling argument of why all species find incest abhorrent and the consequences of excessive inbreeding on a group.[45] Generally nature works against inbreeding in the patterns of male dominance and access to sexual reproduction between generations. Chimpanzees are unique in that mothers and sons live together for their entire lives. Interestingly there has not been any record of mating between mothers and sons. Goodall[46] records one incident where a son requested sex with his mother and her response echoes the outrage that all moral agents would depict. The relationship between mother and son was changed showing the consequences of testing the moral taboo.

Other candidate moral behaviours include the rules of fair fighting between males and females, sharing of food, respect of dominant animals and many others. Once accepting the conclusion that chimpanzees are moral agents there is significant work to be done to understand the moral code that binds these moral beings.

By examining the treatment of juvenile chimpanzees a number of observations are possible regarding the ability of chimpanzees to be considered as moral agents. Chimpanzees are highly aggressive and social animals that have developed behaviours that are virtuous to ensure that the group remains cohesive. They are intelligent and appear to understand rules that have moral content. In the event of a violation of rules chimpanzees act with either fear or anger. They not only expect each other to act in

[45] Sagan and Druyan, *Shadows of Forgotten Ancestors*, p. 301.
[46] Goodall, *In the Shadow of Man*, p. 144.

accordance with the care of juveniles but actively take on the duties resulting from the needs of juveniles. Thus it is argued that the treatment of juvenile chimpanzees shows evidence of moral agency.

## 10. Conclusion

It may be time to reconsider our moral stance on non-human animals. There are grounds to support the notion that chimpanzees meet the requirements for moral agency within their society. Thus it may be necessary to consider whether they can be considered as potential bearers of moral rights. It would seem that the rights and the obligations would apply inside the society of chimpanzees. Our complete lack of common language and very different moral codes would result in parallel moral cultures.

Writers like de Waal, Shapiro and Hauser hold that on some evolutionary continuum we should concede that at the very least the great apes deserve to be accorded with some degree of moral agency. Bekoff goes further and holds that "When animals are studied in their own worlds they may indeed have their own form of genuine morality."[47] Sagan believes that chimpanzees are moral animals and that they display much moral behaviour.

The study of the treatment of juveniles indicates that chimpanzees may well be able to meet the conditions for moral agency. Once we concentrate our attention to the rest of the moral code for chimpanzees we may eventually see them for the complex and moral animals that they are.

It is not clear what impact this would have on our treatment of chimpanzees and the current philosophical stance on non-human animals. At the very least all moral

[47] Bekoff, "Wild Justice and Fair Play: Cooperation, Forgiveness and Morality in Animals," p. 520.

agents deserve some level of respect and freedom to practice their own culture in a way that does not harm others. This is very difficult with chimpanzees. We have for the last century destroyed their habitat and captured their young. We use them still today to test terminal illness, they are injected with the disease and the progression to death is observed. We test unsafe drugs on chimpanzees and accept no remorse for their suffering and death.

The only way that we can defend our treatment of these animals is to tell ourselves that they are not moral agents; that they are not even capable of thought or of feeling pain. This is so blatantly untrue that it should shame the people who hold these beliefs.

In a heart-wrenching tale, Jane Goodall tells how the 8-year-old Flint pined and wasted after the death of his mother.[48] Three weeks after her death he returned to the place that she died and lay down and died of sorrow. This is not an unfeeling machine but a small, intelligent, compassionate and deeply affectionate son who just could not live without his mother. "His whole world revolved around Flo, and with her gone, life was hollow and meaningless."

Perhaps philosophers and scientists are afraid of the social and scientific ramifications of according moral agency to animals. Humans have great difficulty in imagining radical social change and thus fought against the abolishment of slavery and apartheid. Robert Mitchell is adamant that apes do not have moral agency and yet he comments; "I am a little disturbed here with the parallels between the claims of ape's incapacities for moral action and the assumptions of learned eighteenth and nineteenth

[48] Goodall, *In the Shadow of Man*, p. 165.

century, white men that non-white and / or non-male persons were inferior and thus should not be given equal rights." [49]

The Great Ape Project does not ask for the impossible only that the community of equals should be extended to include all great apes.[50] The rights that they ask to extend to this community are simple, the right to life, the protection of individual liberty and the prohibition of torture. The application and ramification of these rights still needs to be assessed but certainly the right to life and the prohibition of torture seem like the small concessions that should be made for moral agents of other species.

Anyone who has spent significant time with the great apes is humbled and awed at the extent of their intelligence and emotional competence. It is time that humans open their minds to the possibility that we are not the only moral beings on the planet. Once we are open to this thought the debate should move away from trying to construct moral theories that exclude all other animals and concentrate on how we should be treating animal that can be considered as moral agents.

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