

LANGUAGE AND PERSONHOOD

Extracts from *The Case for the Personhood of Gorillas* by Francine Patterson & Wendy Gordon. In Paola Cavalieri & Peter Singer (eds.), *The Great Ape Project*, New York: St. Martin's Griffin, 1993, pp. 58-77.

We present this individual for your consideration: She communicates in sign language, using a vocabulary of over 1,000 words. She also understands spoken English, and often carries on 'bilingual' conversations, responding in sign to questions asked in English. She is learning the letters of the alphabet, and can read some printed words, including her own name. She has achieved scores between 85 and 95 on the Stanford-Binet Intelligence Test.

She demonstrates a clear self-awareness by engaging in self-directed behaviours in front of a mirror, such as making faces or examining her teeth, and by her appropriate use of self-descriptive language. She lies to avoid the consequences of her own misbehaviour, and anticipates others' responses to her actions. She engages in imaginary play, both alone and with others. She has produced paintings and drawings which are representational. She remembers and can talk about past events in her life. She understands and has used appropriately time-related words like 'before', 'after', 'later', and 'yesterday'.

She laughs at her own jokes and those of others. She cries when hurt or left alone, screams when frightened or angered. She talks about her feelings, using words like 'happy', 'sad', 'afraid', 'enjoy', 'eager', 'frustrate', 'mad' and, quite frequently, 'love'. She grieves for those she has lost—a favourite cat who has died, a friend who has gone away. She can talk about what happens when one dies, but she becomes fidgety and uncomfortable when asked to discuss her own death or the death of her companions. She displays a wonderful gentleness with kittens and other small animals. She has even expressed empathy for others seen only in pictures.

Does this individual have a claim to basic moral rights? It is hard to imagine any reasonable argument that would deny her these rights based on the description above. She is self-aware, intelligent, emotional, communicative, has memories and purposes of her own, and is certainly able to suffer deeply. There is no reason to change our assessment of her moral status if I add one more piece of information: namely that she is not a member of the human species. The person I have described - and she is nothing less than a person to those who are acquainted with her — is Koko, a twenty-year-old lowland gorilla.

For almost twenty years, Koko has been living and learning in a language environment that includes American Sign Language (ASL) and spoken English. Koko combines her working vocabulary of over 500 signs into statements averaging three to six signs in length. Her emitted vocabulary—those signs she has used correctly on one or more occasions—is about 1,000. Her receptive vocabulary in English is several times that number of words.

Koko is not alone in her linguistic accomplishments. Her multi-species 'family' includes Michael, an eighteen-year-old male gorilla. Although he was not introduced to sign language until the age of three and a half, he has used over 400 different signs. Both gorillas initiate the majority of their conversations with humans and combine their vocabularies in creative and original sign utterances to describe their environment, feelings, desires and even what may be their past histories. They also sign to themselves and to each other, using human language to supplement their own natural communicative gestures and vocalizations...

Many of those who would defend the traditional barrier between *Homo sapiens* and all other species cling to language as the primary difference between humans and other animals. As apes have threatened this last claim to human uniqueness, it has become more apparent that there is no clear agreement as to the definition of language. Many human beings—including all infants, severely

mentally impaired people and some educationally deprived deaf adults of normal intelligence—fail to meet the criteria for 'having language' according to any definition. The ability to use language may not be a valid test for determining whether an individual has rights. But the existence of even basic language skills does provide further evidence of a consciousness which deserves consideration...

Some of what they tell us can be anticipated: 'What do gorillas like to do most?' 'gorilla love eat good'. Or, 'What makes you happy?' 'gorilla tree'. 'What makes you angry?' 'work'. 'What do gorillas do when it's dark?' 'gorilla listen [pause], sleep'. Some responses, on the other hand, are quite unexpected: 'How did you sleep last night?' (expecting 'fine' 'bad' or some related response). 'floor blanket' (Koko sleeps on the floor with blankets). 'How do you like your blankets to feel?' 'hot koko-love'. 'What happened?' (after an earthquake). 'darn darn floor bad bite. trouble trouble'...

Our approach has been to give Koko and Michael vocabulary instruction but no direct teaching of any other language skill. Most of the signs were learned either through the moulding of the gorillas' hands into signs or through imitation. But Koko and Michael have both created signs and used the language in diverse ways not explicitly taught. In a very real sense, the study has involved the mapping of skills, rather than the teaching of skills. This mapping is being done through observations in relatively unstructured and uncontrolled situations and through rigorous tests. The best possible linguistic and cognitive performances are likely to be given in the informal setting, with support coming from tests.

The gorillas have taken the basic building block of conversation (signs) and, on their own, added new meaning through modulation, a grammatical process similar to inflection in spoken language. A change in pitch or loudness of the voice, or the addition (or substitution) of sounds, can alter the meaning of a spoken word. In sign language this is accomplished through changes in motion, hand location, hand configuration, facial expression and body posture. The sign bad, for instance, can be made to mean 'very bad' by enlarging the signing space, increasing the speed and tension of the hand, and exaggerating facial expression. Koko, like human signers, has exploited this feature of sign language to exaggerate a point, as when she signed thirsty from the top of her head to her stomach, instead of down her throat...

Another way Koko and Michael have created novel meanings for basic vocabulary signs is through an unusual coining process in which they employ signs whose spoken equivalents match or approximate the sounds of English words for which no signs have been modelled. For example, Koko uses a modulated knock sign to mean 'obnoxious'. This indicates that she knows:

1. That the sign knock is associated with the spoken word 'knock'.
2. That 'knock' sounds like the spoken word 'obnoxious'.
3. That the sign knock can therefore be applied semantically to mean something or someone obnoxious.

Other examples include the substitution of the sign tickle for 'ticket', skunk for 'chunk', and lip stink for 'lipstick'. When Michael was asked to 'say bellybutton', he first signed 'bellybutton' (pointing to it), then signed 'berry bottom'.

...The gorillas have applied such new descriptive terms to themselves as well as to novel objects. When angered, Koko has labelled herself a 'red mad gorilla'. Once, when she had been drinking water through a thick rubber straw from a pan on the floor after repeatedly asking her companion for drinks of juice which were not forthcoming, she referred to herself as a 'sad elephant'.

...Accidents and unexpected actions by others can also cause Koko to laugh. Chuckles were evoked, for instance, by a research assistant accidentally sitting down on a sandwich and by another playfully

pretending to feed sweets to a toy alligator. Developmental psychologists have found that the earliest form of humour in young children, incongruity-based humour, relies on similar principles of discrepancy applied to objects, actions and verbal statements.

Koko has also made verbal 'jokes'. On 30 October 1982, Barbara Hiller showed Koko a picture of a bird feeding her young.

K: that me [to the adult bird].

B: Is that really you?

K: koko good bird.

B: I thought you were a gorilla.

K: koko bird.

...

B: Can you fly?

K: good. [good can mean yes.]

B: Show me.

K: FAKE BIRD, CLOWN. [Koko laughs.]

B: You're teasing me. [Koko laughs.]

B: What are you really?

Koko laughs again, and after a minute signs

K: gorilla koko...

A. THE “CLEVER HANS” EFFECT

Clever Hans was a German horse that amazed European crowds by apparently stamping out the answers to math problems. Subsequent scientific trials proved that Hans was reacting to the subconscious body cues of his trainer and audience members rather than actually counting. Recognition of the “Clever Hans effect” led to “double blind” testing in psychology experiments.

To what extent is Koko the gorilla’s sign language success free of the “Clever Hans effect”?

B. PERSONHOOD AND INDIVIDUAL RIGHTS

The concept of personhood informs explorations of ethical issues like late-term abortion, animal rights, vegetarianism, euthanasia and the potential rise of artificial intelligence.

1. What defines personhood?
2. Are human infants and severely mentally impaired people persons?
3. Is Koko a person?
4. Is an intelligent alien life form a distant planet a person?
5. Is your pet dog a person?
6. Are the enemy in a bloody foreign war persons?
7. Is a fetus in the third trimester a person?
8. Is an older person suffering from severe *senile dementia*—who previously had been living a productive and fulfilling life—a person?
9. In the future, self-aware machines may be developed. Can we imagine making the case for personhood for a sentient silicon-based machine?
10. Are there any general rules or principles that can guide our thinking about moral status and individual rights?