

Did the Cat Really Say 'I Want to Be Alone'? Sorry, It Said Meow

By DONALD G. McNEIL Jr.

Published: September 7, 2004, in the Science Times section of the *New York Times*



Dr. Stephen Anderson says that animals might learn to memorize symbols or sounds, but that does not mean they are communicating.

One night, asking his wife about their dinner plans, Stephen R. Anderson, a Yale professor of linguistics and psychology, got the reply: "I want to go out."

The next night, he found the cat clawing the rug near the door. His wife calmed him down by translating: "She's saying, 'I want to go out.'"

So do we conclude, Dr. Anderson asks, that the cat can talk?

The answer, he argues, is no - although, as a human, he could say the same thing by shaking his head, rolling his eyes or even saying sarcastically, "Yeah, sure."

Dr. Anderson is the author of "Doctor Dolittle's Delusion," to be published by Yale University Press in November. The book is a linguistics-based argument that if kindly John Dolittle of Puddleby-on-the-Marsh was hearing voices, they weren't coming from Jip the dog or Gub-Gub the pig.

The idea that animals have all-but-human mental lives, emotions and powers of communication has become increasingly fashionable, after centuries in which such notions were considered absurd.

Since the 1970's, as animal behaviorists have trained apes to make requests by stringing gestures or ideograms together and acousticians have detected that both whales and elephants make subsonic calls, suspicions have arisen that animals have more to say than humans realized.

More recently, in June, German researchers reported in the journal *Science* that Rico, a border collie, could not only fetch 200 objects by name, but could learn the name of a new object by inference if it was in a group of other objects that he already knew.

Dr. Anderson, however, warns against considering any of these behaviors "language."

Rico is a clever dog, he says, but what he does "is well within the bounds of what we know animals can do."

Dogs in particular seem to have evolved to pick up clues from humans. Pointing at an object, for example, means nothing to an ape, a parrot or even a wolf, but a dog realizes that the item at a distance from the finger is what a human is naming.

Prodded by humans, Dr. Anderson argues, animals may learn to memorize symbols or sounds, and to think abstractly - for example, by linking "banana" to a button, even a button that has nothing curved or yellow on it. But those talents do not match the complexity of any spoken or deaf sign language. They are more like the limited vocabulary of commands transmitted by traffic lights or baseball coaches.

"Chimps do, after a lot of training, learn 200 or more signs," Dr. Anderson said in an interview from New Zealand, where he is teaching this year. "But they seem to top out after a few years. Kids' vocabularies just go on expanding."

Children also perceive that sounds can be joined to form words and concepts into sentences, he said. It is not clear that animals do.

He gave an example. If a human inserts coins in a candy machine and then presses B-1-2, he asked, is he really typing the thought "Machine, please give me M&M's"?

Similarly, if a well-trained ape touches a series of symbol keys - one for "machine," one for "give," one for "M&M's" - is it talking?

"You can teach pigeons to push a sequence of 6 or 7 buttons to get seeds," Dr. Anderson said, "but that's not language."

To linguists, languages are not lists of words, but frames governed by syntax, the art that gives different meanings to "The murderer believed Mary to be John's mother," "Mary believed John's mother to be the murderer" or "To be the murderer, Mary believed John's mother."

Dr. Anderson concedes that animals communicate, often in detail. Wagging bee dances indicate the direction and distance to a trove of pollen, and monkeys and squirrels have different alarm calls for different predators.

Animals can even fool each other with sounds. A shrike-tanager may give a false alarm call to scare other shrike-tanagers away from food it wants.

But birds cannot explain the trick, bees do not reminisce about last year's honey and apes do not ask their language teachers why they are captives.

The closest animals come to syntax, Dr. Anderson argues, is that some West African monkeys emit a low "boom" before an alarm call that - judging by the reaction of monkeys hearing it - lowers the threat level. That is, "boom-leopard" seems to mean "maybe a leopard around, but not close."

Dr. Emily Sue Savage-Rumbaugh, who has worked with apes for 25 years, strongly disagrees with Dr. Anderson. Some bonobos she works with at Georgia State University, she said, have been talked to by humans since birth and have watched their parents learn charts of symbols. By pointing to the

right ones, Kanzi, the best among the bonobos, can form sentences like "Sue chase Kanzi" and "Kanzi chase Sue," or can hear the English words "Get the tomato that is in the microwave" and fetch the correct tomato while ignoring others.

The apes can even indicate that they are happy or sad or in pain, Dr. Savage-Rumbaugh said, and can refer to the past by reminding researchers of rewards promised the day before.



After 30 years, Koko the gorilla has developed a vocabulary of 1,000 signs.

Francine Patterson, who has worked for nearly 30 years with Koko, whom she met when she was a student at Stanford and Koko was an infant gorilla in the San Francisco Zoo, said Koko could "in some respects, depending on what you are looking at, speak as well as a 5-year-old child."

Koko can modulate her vocabulary of 1,000 signs by raising her eyebrows to indicate questions, by signing at others to indicate agreement, and making other moves "that would be described as grammatical" by users of deaf sign languages, Dr. Patterson said.

Linguists have been accused of moving the bar on their definition of language ever higher, so that it can never be met. They will always deny that animals can talk, Dr. Savage-Rumbaugh argues, "because it doesn't fit comfortably in their view of the universe."

Dr. Anderson replies that he has "no desire to deny speech even to the cockroach," but doesn't think nonhumans have the potential.

Luckily, he only argues the point with humans. Given the literal nature of ape discourse, the wrong linguistic way to introduce his cat-vs.-spouse example, of course, would be to say, "Well, take my wife."