

Studying Chimps Gives 'Signs' of Human Language Development

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They surely are a social group. They make requests, answer questions, and comment about each other and their surroundings. As with any social group, they spend a great deal of time together and interact daily. Emotions, at times, can get heated, and fights have been known to erupt. During one such confrontation, a member tries to calm the fracas. Moja, one of the exceptional chimpanzees in this social group, uses American Sign Language to convince the others to “stop” and “hug.”

This is the level of communication discovered using video cameras by APS Charter Member Roger Fouts at the Chimpanzee and Human Communication Institute. The cameras have proven extremely useful, giving researchers a unique glimpse of an ASL-speaking chimpanzee community that operates independently from human influence.

By studying the ways chimpanzees acquire language, researchers gain insight into how human ancestors developed communication. Fouts shared these developments at a June seminar at the National Institute of Child Health and Human Development in Bethesda, Maryland.

Fouts is a Distinguished Research Professor at Central Washington University in Ellensburg, Washington, and is co-director of the university's Chimpanzee and Human Communication Institute. There Fouts works with Moja and four other chimpanzees: Washoe, Tatu, Dar and Loulis. He studies how they live and interact together in a social setting.

Using video cameras has improved the understanding of how chimpanzees tutor each other on ASL. Washoe, for example, has been seen demonstrating signs to the other chimpanzees. In one instance, Washoe showed Loulis a chair and signed “chair,” demonstrated significant understanding of human communication techniques. Fouts said that the video footage has helped to clarify areas of arousal and private speech. The chimps were found to increase their signing during times of high arousal, such as the aforementioned anecdote, in which Moja tried to break up the fight using peaceful signs. The chimps have also been seen signing to themselves, Fouts said.

Fouts and wife Deborah are co-directors of CHCI, which continually accomplishes milestones in language research. In fact, Washoe became the first chimpanzee to acquire a human language, ASL, and the Foutses have since successfully transmitted the language to other chimpanzees, who mimicked Washoe's signs and began communicating without human intervention.