

REFERENTIAL GESTURAL COMMUNICATION IN WILD CHIMPANZEES (PAN TROGLODYTES): SIGNALLERS AND RECEIVERS

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The meaning and function of signals from the receiver's perspective may be fundamentally different from that of the signaller's (Marler, 1961). So far, studies on vocal skills of primates provided evidence that listeners acquire information from signallers who do not, in the human sense, intend to provide it (Seyfarth & Cheney, 2003). Contrary, research on gestural abilities of human-reared or language-trained great apes showed that signallers use gestures in intentional and referential ways (Savage-Rumbaugh et al., 1986; Gardner et al., 1989). Recently, we (Pika & Mitani, 2006) described a distinct gesture, the directed scratch, used by chimpanzees in the wild to refer to a distinct spot on the body to be groomed by recipients. The present study aims to provide further insight on the meaning and function of these unique gestures by focusing on the perspectives of signallers and receivers. Analyses are based on a new set of behavioural observations collected during June and July 2008 at the Ngogo community, Kibale National Park, Uganda. We filmed ~100 grooming sessions between twenty adult male chimpanzees. The results reveal that chimpanzee signallers use these gestures in flexible, manifold ways to transfer an intended meaning, which is understood by chimpanzee recipients. "Answers" to these request however vary in relation to rank, age and strength of social bond between signallers and receivers. These results will be discussed with a special focus on recent theories of gesture acquisition, signal evolution, and cooperation.

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