

*Extended Abstract*

## **Human Communication and Cooperation from an Evolutionary Perspective**

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There is a strong connection between human communication and cooperation on a conceptual as well as in evolutionary history (2,5). Most animal species communicate with signals that evolved over time and are used in only very limited contexts with very little voluntary control over their production. Human communication on the other hand is very flexible but also inherently ambiguous. To resolve this ambiguity humans rely on their advanced socio-cognitive abilities as well as expectations about mutual cooperativeness (3,4). In a similar way, many animal species cooperate in very sophisticated ways but human forms of cooperation are unique in their scale and flexibility. In order to coordinate their behavior during cooperative activities, humans rely heavily on communication (1).

In my talk, I will present several comparative studies with great apes and human children to provide an empirical basis on which we can evaluate claims about human uniqueness and reconstruct the evolution of the abilities in question.

The results of these studies show that apes show an impressive flexibility in their abilities to communicate and cooperate with others. However, there seem to be several informative limitations. Great apes use communication mainly to achieve their own goals and do not interpret or produce communicative signals in a cooperative way. Furthermore, cooperative activities tend to break down in situations in which their maintenance depends on dividing the spoils of the activity equally or providing others with relevant information.

The strong connection between communication and cooperation in humans might be explained by a certain set of cognitive abilities, namely the ability to represent social interaction as joint activities with shared goals and intentions.

## References and Notes

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