

RECIPROCITY IN FOOD SHARING AMONG CHIMPANZEES AND BONOBOS

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Food sharing among adult primates typically occurs when one individual (owner) allows another (recipient) to take food and is often explained by reciprocal altruism. However, whether food is shared reciprocally depends on the degree of control owners can exert over food distribution which in turn is influenced by the dominance structure of the group. In a study on chimpanzees and bonobos we showed that only the more egalitarian chimpanzees shared reciprocally whereas sharing among the more despotic bonobos was better explained by harassment. The same pattern was found with grooming reciprocity in a larger sample. Furthermore, sharing was not contingent on services received just previously and we also found no evidence for reward or punishment after sharing, neither by 2nd nor 3rd parties. Hence, we understand reciprocal sharing as a reflection of long-term symmetrical relationships, rather than calculated short-term exchanges, made possible by the absence of despotism. We propose that only direct reciprocity occurs among apes while indirect reciprocity may be unique to humans. We discuss these findings in the light of other work on chimpanzees and bonobos.

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