Capuchin Monkeys Sharing Their Food at a Cost of Themselves

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Abstract : Although altruism is commonly observed in humans and is considered one of the most important factors in the survival of our species, its cognitive mechanisms and evolutionary roots are yet to be explained. This study is based on the previous findings that bonobos (Pan Paniscus) preferred to share a limited amount of food with others regardless of their relationships with the others. Findings such as this suggest that humans' propensity for altruistic food-sharing may be shared among apes and may have evolved much longer ago than previously considered. We thus adapted the previous experimental design using tufted capuchins (Cebus apella), New World monkeys separating from humans about 40 million years ago. In order to achieve this, 12 pairs of capuchins (consisting of a benefactors and a partner) were tested in a row of two adjacent cages separated by a swinging door locked by a key (Fig.1). We observed whether the monkeys in possession of food (the benefactors) would allow their partner to enter their cage by unlocking the door between them. Results showed that the monkeys clearly preferred to monopolize the food for themselves, even though they in a few cases unlocked the door after eating the preferred food. This suggests that this species, which has been shown to be sensitive to the others' welfare, would not actively share food at a cost of their own. Although further studies are needed, our results suggest the existence of significant differences in the evolutionary development of the pro social tendencies between bonobos and capuchin monkeys.

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