

THINKING ABOUT THINKING – CHIMPANZEES' UNDERSTANDING OF ANOTHER ONE'S KNOWLEDGE

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One aspect of a "theory of mind" is the understanding of what another one knows. In a series of two studies, we tested chimpanzees' understanding of different kinds of "knowledge". In the first study, a conspecific competitor could know one food location on a platform by inferring that food under a board was causing a slant but she could not infer another location where food in a hole was covered by a board lying flat. The subjects (N=6) knew about both food locations and when their competitor had chosen before them in a back and forth foraging game, they tended to avoid the slanted board on the assumption that the competitor had already chosen it (no such tendency was found in a nonsocial control). In the second study, two grapes were put into boxes with either a magnifying glass or a minimizing glass window. The subject had seen that both grapes were of equal size while the competitor could only perceive the apparent size difference and was therefore likely to choose the box with the bigger looking grape. If the subject understood the competitor's point of view, she should avoid that box afterwards. However, we found no differences between test and control conditions. In conclusion, the first study shows that chimpanzees can determine the inferences a conspecific is likely to make and then adjust their competitive strategies accordingly. However, the second study might show the limits of their understanding of another one's knowledge.

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