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Abstract

Humans are ultra-social: they spontaneously incorporate others' mental states into their action-planning (Kaminski et al.,2008), and altercentric: their behavior is influenced by others' perspectives, even perspectives irrelevant to their instrumental goal (Kampis & Southgate, 2020). Recent evidence suggests that similarly to human infants, non-human great apes anticipate others' actions based on their beliefs (Krupenye et al.,2016; Kano et al, 2019); raising the critical question whether altercentrism is uniquely human. In two experiments, we tested chimpanzees, bonobos, and orangutans in a manual search paradigm adapted from Mendes et al. (2008). These experiments replicated findings demonstrating apes' first-person object-tracking abilities. Experiment 1 found no evidence for altercentrism: apes' search behavior was not spontaneously modulated by another agent's beliefs (unlike 14-month-old human infants; Kampis & Kovács, 2020). Experiment 2 found tentative evidence that apes inferred a person's actions based on her beliefs, and adapted their own actions based on this information.