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DRAWING BEHAVIOUR IN CHIMPANZEES COMPARED WITH HUMAN DEVELOPMENT

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We directly compared the drawing behavior of chimpanzees with those in different ages of human children. Although chimpanzees have the ability of manipulating tools to draw, there is no clear evidence of representational drawing. Thus, two tasks were designed to explain the lack of representational drawing. The subjects were 6 chimpanzees and human children of 1-3 years of age. The first task investigated the motor skills by requiring subjects to draw simple shapes after showing the model drawing. While human children started to succeed in imitating the simplest figures at the age of 2 years onward, none of the chimpanzees imitated the figures. However, chimpanzees spontaneously moved their scribbles to mark on the models and sometimes traced them. Thus chimpanzees have the ability to finely control their manual movement in drawing. The second task investigated the underlying cognitive mechanism by requiring subjects to draw freely on face stimuli. We prepared an illustration of a chimpanzee face and deleted some facial parts to test whether the chimpanzees fill in the missing parts to complete. Most humans over 2.5 years started to fill in the missing parts for completion and some of them traced the facial outlines. Although chimpanzees sometimes marked on the existent parts and traced the outlines, they never completed the face by drawing the missing parts. Hence, the basic cognition and motor control required for drawing was well in chimpanzees' capability. There may be difference in the higher level cognition, such as imagining something on incomplete figures.

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