

**ACTION PLANNING IN TOOL-USE TASKS: THE IMPORTANCE OF THE ORDER OF EVENTS**

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Traditionally tool-using experiments on planning have consisted of presenting a problem (e.g., food out of reach) and offering several alternatives (e.g., tools) of which only one is suitable to solve the problem. This setup represents prospective planning (PP) since subjects know the nature of the problem before they are required to select between the alternatives available. Much less is known about how subjects perform when the task elements are reversed [retrospective planning (RP)]. In this setup, subjects are first shown the alternatives available and then they are hidden in different locations; after a time delay, the problem is presented. Unlike PP, subjects in RP do not know the type of problem that they will face and consequently, they cannot determine which of the alternatives available is correct during their initial presentation. Nine chimpanzees, four orangutans and three bonobos had to select a suitable tool to get an out-of-reach reward. We administered a PP and a RP version of the task with three different sets of tools (e.g. long vs short, flexible vs rigid and thin vs thick). Preliminary results show that subjects succeeded in both versions of the task and that their performance is better in the PP than in RP condition. Also there were no differences in performance across the various tool-sets.

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