

Jumping in Japanese: Converting linguistic instructions into physical performances

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Abstract: This study explores the difficulties in physically realizing linguistic instructions concerning the action of jumping. We carried out a questionnaire on the understandability and physical feasibility of various jumping actions in Japanese, and then conducted an experiment in which participants were asked to jump according to these instructions. After the physical performances the participants were asked to rate the easiness of the actions in a second questionnaire, and the results of the two questionnaires were compared. The results show that the understandability of the instructions and the participants' beliefs about the physical feasibility of the instructions were closely correlated. However, the results of the two questionnaires did not correlate. The results suggest that although participants believe they can convert jump instructions into physical performances if the instructions are easy to understand, there are some gaps between the understandability of the linguistic instructions and the physical realization of them.