The Interaction between Semantic Processing and Humor

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Linguistic ambiguity and semantic inference are commonly used as a technique to generate humor. The purpose of this study was to investigate the interaction between semantic processing and humor. Sixty undergraduate students participated in this study. The independent variables of semantic processing (ambiguity/bridge inference) and humor (funny/non-funny) were manipulated. Dependent variables were reaction times, comprehensibility, and funniness, respectively. Stimuli were presented using E-Prime 2.0 software. 240 stimuli were selected, including 60 stimuli for each of four different conditions: the ambiguous jokes, inference jokes, ambiguous sentences, and inference sentences. The interaction was no significant for funniness rating in behavioral research. The unexpected results revealed that inference joke was no significantly funnier than ambiguous joke, suggesting that readers did not spend a longer time for apprehending backward-inference jokes and then felt significantly higher funniness. However, the results of neural correlates indicated that the interaction was significant differences between semantic and humor effects. This more complete understanding of the interaction between semantic processing and humor will allow us to further specify the neural circuit of humor developed in our previous research (Chan et al., 2012, 2013).

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