

Temporal orientation and event types: An empirical study

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This study explores the factors determining the way people understand expressions of the TIME IS MOTION metaphor. By an experiment using “move the meeting forward two days”-type of sentences in Japanese, we demonstrate that event types can override spatial priming in interpreting front/back orientation of time.

Temporal orientation has been extensively investigated in the study of conceptual metaphor. One of the topics of interest has been the effect of spatial priming on how people construe the earlier/later relationship in terms of front/back directions. It has been demonstrated that the English sentence “Next Wednesday’s meeting has been moved forward two days” tends to be understood in a way that is consistent with spatial priming, that is, whether people imagine themselves moving forward or they imagine objects coming toward them (Boroditsky and Ramscar, 2002; Matlock, Ramscar, and Boroditsky, 2005). However, it has also been demonstrated that differences in lifestyle (e.g., students vs. administrators) can more strongly affect the ways people disambiguate between the EARLIER IS IN-FRONT interpretation and the LATER IS IN-FRONT interpretation. Compared with administrators, students tend more to think that the meeting has been postponed to Friday than to think it has been rescheduled earlier on Monday (Duffy and Feist, 2012). The present study builds upon these previous findings and addresses two further questions: (1) does difference in event types such as “favorable event” vs. “non-favorable event” affect how people understand ambiguous temporal sentences? (2) does the degree of ego-involvement affect it?

To answer these two research questions, we carried out an experiment with Japanese-speaking university students. The Japanese sentence “*kaigi-wa yotee-yori futsuka saki-ni okonaimasu*” (The meeting will be held two days IN-FRONT of the previously scheduled one) can be understood in two ways: the rescheduled meeting can be “two days earlier” or “two days later” than the previous schedule. We used this type of sentences, including either the word “*paatii*” (party) or the word “*kaigi*” (meeting), instantiating favorable event and non-favorable event respectively, and with or without explicitly indicating that participants themselves were joining the event. Participants were first presented with a photograph in which three basketball players were facing and coming toward them and were told to imagine the players were coming nearer and nearer. Then the participants read the sentence and answered the day of the rescheduled party or meeting. In total, 124 students participated. In analysis, we tested the two factors: ego-involvement (whether the participants imagined themselves as joining the event or not) and the types of events (a favorable event, party, or a non-favorable event, meeting).

The results showed that priming by spatial motion (basketball players coming toward the viewer) did not influence how participants interpreted temporal orientation, nor did ego-involvement. We found, instead, that the types of events did affect the construal of temporal orientation: “meeting,” that is non-favorable event, was more often understood as being postponed than “party,” more favorable event ($X^2(1)=10.260$, $p<.01$). These results suggest that affective factors may in some cases override spatial priming in interpreting space-time metaphors.

References

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