THE ROLE OF LINGUISTIC CUES IN CONSTRUCTING SUBJECTIVITY: EVIDENCE FROM VISUAL WORLD PARADIGM

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Keywords: situation model, subjectivity, connective, processing, visual world paradigm eye-tracking

Background. The processing of discourse involves not only parsing the linguistic input, but also constructing a mental representation, or situation model (Graesser, Millis, & Zwaan, 1997). In a situation model, language users keep track of all kinds of information of a story, such as temporal/spatial links among entities and causal relations between events, and also of the source of the information. Information can be presented objectively, as originating from the real world, or subjectively, as originating from someone’s mind (Finegan, 1995; Langacker, 1990). We investigated the processing of subjectivity in the context of causal coherence relations.

Causal relations can also be objective or subjective. In establishing a subjective relation, the intentional mind involved in the reasoning is the Subject of Consciousness (SoC; Pander Maat & Sanders, 2001). Linguistic cues may encode subjectivity in the sense that they indicate whether an SoC is involved. For instance, certain connectives are prototypical for subjective relations, while others are specific for objective ones. Some general connectives can be used in both ways. The current study reveals the roles of different linguistic cues in processing.

Method. We conducted a visual world paradigm eye-tracking experiment with EyeLink-1000. Participants listened to sentences while they were presented with two scenes: one depicting the event being described by the first clause in the auditory input, and the other depicting the SoC. The latter scene involved someone speaking, with a speech balloon in which the event was visible. Participants heard sentences connected by different connectives. We tested the effect of subjective and objective connectives in both Dutch and Chinese. In the Chinese experiment, we also included sentences with an underspecified connective, as a baseline condition. Modal verbs as another kind of subjectivity markers were added to the second clause of subjective relations to test effects of subjective connectives in the later stages of processing.

Results & Conclusion. There was a significant increase in the proportion of looks on the SoC after the Dutch subjective connective dus ‘so’ compared to the objective connective daardoor ‘as a result’. Similar looking patterns were observed for the Chinese subjective connective kejian ‘so’ and the objective connective yin’er ‘as a result’. The fixation patterns after the underspecified connective suoyi ‘so’ resembled that after the subjective connective kejian in Chinese, guiding people’s attention to the SoC more often compared to the objective connective yin’er. The results indicate a general tendency to identify the SoC in the situation model after a connective is introduced, except for when there is an objective connective which directs people’s attention away from the SoC. The processing of modal verbs in the subjective relations show that the subjectivity of kejian does affect the representation: modal verbs induced an increase in looks to the SoC only when the degree of subjectivity was underspecified at the connective. The experimental evidence reveals the process of tracking the source of information in situation models, which is instructed by linguistic cues.

References