

German demonstratives are sensitive to perspective-taking

German demonstrative pronouns (DPros) have been shown to avoid maximally prominent referents as their antecedent when prominence is rendered through topicality or agentivity. Hinterwimmer and Bosch (2016, 2017) propose that when the proposition denoted by a sentence containing a DPro is evaluated from the narrator's perspective even the topical referent becomes available as an antecedent of the DPro. We report an acceptability rating study and an eye-tracking study in the visual-world paradigm that test their proposal about the influence of perspective-taking on DPros' antecedent preference.

In expt.1 (n=85) we conducted an acceptability rating study with sentences as in (1). The first sentence, same across six conditions, established an individual referred to by a proper name as topic. The second sentence in *Narr-judg* conditions (a-b) clearly expressed an evaluation of the topical referent by the narrator, as indicated by the semantic content and a switch from past tense to present. In *Top-judg* conditions (c-d), the second sentence clearly expressed a thought of the topical referent in Free Indirect Discourse mode, as indicated by the semantic content, an interjection and a deictic expression that could only be interpreted with respect to the topical referent's perspective. Finally, the *Neut* conditions (e-f) were neutral continuations of the previous sentence. These three continuations types referred to the topic with either a personal pronoun (PPro) or a DPro giving rise to six conditions. Effectively, in *Narr-judg* conditions, 'Emil' is prominent in terms of topicality, while the narrator is prominent in terms of perspective-taking. In contrast, in *Top-judg* conditions, 'Emil' is prominent both in terms of topicality and perspective-taking, and in *Neut*, 'Emil' is prominent because in the absence of an overt perspective-taker, topicality is the only factor influencing prominence. The participants were asked to judge whether the story openings such as in (1) sound native or not. The rating showed significant interaction between the *Narr-judg* and *Neut* conditions, which was driven by two DPro conditions such that the DPro sentences from *Narr-judg* type were rated more acceptable than the DPro sentences from the *Neut* type. There was no interaction between the *Top-judg* and *Neut* conditions. The PPro sentences were rated equally in all three sentence types and higher than the DPro sentences.

Expt. 2 (n=48) was an eye-tracking study in the visual-world paradigm with discourses as in (2). Sentence 1 and 2 established a male individual as topic. In sentence 3, it was either referred to by a personal pronoun providing a neutral continuation, or by an epithet providing an evaluation of the topical referent from narrator's perspective. The discourse also introduced another human masculine referent and two non-human referents as distractors. The DPro, occurred in the complement clause of the third sentence. The display showed these four referents together with an unmentioned distractor object. Gaze frequencies showed that, after the onset of the DPro, when the topical referent was referred to by an epithet, it was significantly more preferred than when it was referred to by a personal pronoun.

We take the results from the two experiments as evidence that perspective-taking increases the prominence status of the narrator and hence even the topical referent becomes available as an antecedent of the DPro.

(1) Sentence 1: When Emil wanted to drive a nail into the wall, he hit his thumb.

Sentence 2: [a-b: *Narr-judg*] **He / DPro** really has no craftsmanship at all.

[c-d: *Top-judg*] Ouch, **He / DPro** didn't need that at all today.

[e-f: *Neut*] **He / DPro** called a friend first to ask for help.

(2) Sentences 1 and 2: Good news. The policeman has just parked the motorcycle and talks to the photographer.

Sentence 3: **He / the_nice_sergeant** has just told the photographer who is here because of the kangaroos that **DPro** has won the lottery.