
Event predictability affects production of anaphoric references

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Speakers take multiple considerations into account when they choose forms of reference (Clark & Wilkes-Gibbs, 1986). To refer to a previously mentioned entity, a speaker may choose several forms of reference, such as a definite noun phrase (NP) (1a), a pronoun (1b), or a conjoined verb phrase with no overt subject repetition (1c).

- (1) The yellow monster attacked the red monster and...
- (a) the yellow monster fell down.
 - (b) it fell down.
 - (c) fell down.

In this work, we ask whether speakers select a more informative expression when they describe surprising events following the maxim of quality (Grice, 1967). We investigate how the world knowledge, operationalized here as event predictability, affects the choice of utterances.

We used a free-production paradigm to test how speakers describe both familiar and surprising events. In line with our previous work (Stegemann-Philipps et al., 2021), we found that speakers were less likely to use a reduced expression for a surprising event when the same character acted as agent in both events ($\beta = 12.829$, $SE = 4.497$, $z = 2.853$, $p < 0.01$). Our current goal is to focus on the qualitative analysis of responses. We investigate what those rich and at times difficult to categorize answers reveal about the nature of reference production and what implications the differences in annotation procedures carry for the conclusions we reach. We discuss our findings in the context of the noisy channel hypothesis (Gibson et al., 2013).

References: • Clark, H.H & D. Wilkes-Gibbs. (1986). Referring as a collaborative process. *Cognition* 22(1), 1–39. • Gibson, E., Bergen, L. & S.T. Piantadosi. (2013). Rational integration of noisy evidence and prior semantic expectations in sentence interpretation. *Proceedings of the National Academy of Sciences* 110(20). 8051–8056. • Grice, H.P. (1967). 87. *Logic and conversation. Studies in the way of words*, 3-143. • Stegemann-Philipps, C., Butz M.V., Winkler, S. & A. Achimova. (2021). Speakers use more informative referring expressions to describe surprising events. In *Proceedings of the Annual Meeting of the Cognitive Science Society*, vol. 43, 2897–290.