
Negation meets modality. Anaphor resolution for propositions

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We explore how different kinds of modal verbs (root vs. epistemic) influence anaphoric reference to propositions introduced by negative sentences. Negative sentences introduce two propositional discourse referents: positive p and its negation $\neg p$ (Krifka 2013). In German, both propositions can be picked up by the pronoun *das* ‘that’. Which proposition is chosen depends on pragmatic properties of the sentence containing the anaphor, for instance whether it is in a contrastive or parallel discourse relation with the antecedent sentence (Claus et al. 2019).

We focus on cases where *das* or its omission (“topic drop”, Schäfer 2025) refers to modalized propositions under negation. The type of modal verb in the antecedent clause seems to influence whether p or $\neg p$ is preferentially picked up: with root modals (expressing ability/permission), reference to p intuitively is somewhat incoherent (1a) while with epistemic modals (expressing probability), reference to p is smoother (1b). Notice that the contrastive relation indicated by *but* forces the interpretation of $\neg p$.

- (1) a. A: Mary can_{root}not be in the pool (she totally hates swimming).
B: #But that’s what Peter claims. (that = p)
b. A: Mary can_{epistemic}not be in the pool (she has dancing class on Fridays).
B: But that’s what Peter claims. (that = p)

We report the results of two acceptability judgment experiments testing these intuitions for German. We compared *das* and topic drop in parallel and contrastive discourses like (2). We found that root modals do produce a bias toward $\neg p$, while epistemic modals tend to support reference to p . The latter difference only shows for topic drop and not for *das*, suggesting that topic drop may be more sensitive to subtler pragmatic constraints on anaphora than the pronoun is.

- (2) A: Paul kann den Marathon nicht laufen. B: {Das | Ø} meint Peter {auch | aber}
A: ‘Paul can’t run the marathon.’ B: ‘{But} {that | Ø}’s what Peter says {,too}’

The bias for $\neg p$ with root modals likely represents the default (Claus et al. 2019). The use of epistemics requires that the issue of [whether p] be prominent in discourse, which makes anaphoric uptake of p available. Furthermore, the speaker perspective inherent to epistemics further facilitates taking issue with the assertion in their scope (i.e. $\neg p$) by asserting their polar opposite (p).

References: • Claus, B., Frühauf F. & M. Krifka (2019). Interpreting polarity-ambiguous propositional anaphors with negative antecedents. *Proc. Sinn und Bedeutung* 23, 267–283.
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