

Severe Storm Warnings for Four-Story Homeowners Towards a Processing Model of Bracketing Paradoxes

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Bracketing Paradoxes

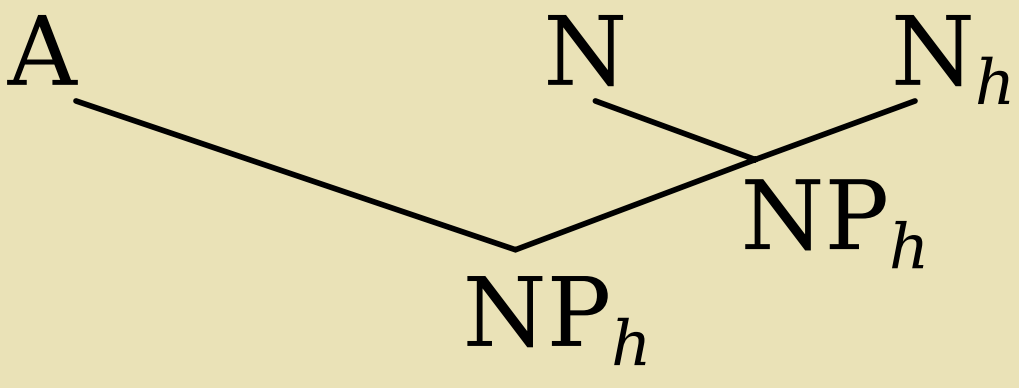
German compound nouns (*der Kirschbaum* ‘the cherry tree’) are common, productive, nearly unrestricted, may be structurally complex but are easy to interpret:

die Kirsch(e) ‘the cherry’ }
der Baum ‘the tree’ }

Adjective + nominal compound phrases can have two readings. The **canonical reading** is typical, grammatical, compositional (Frege 1892), and favored (1). The **bracketing paradox reading** is atypical, technically ungrammatical, possibly non-compositional, (Abramov 1992, Bergmann 1980), and attracts attention (2).

But some phrases are ambiguous or preferentially interpreted as a bracketing paradox (3)!

[[wedding.celebration]] **königliche** Hochzeitsfeier
[[[wedding].celebration] **königliche** Hochzeitsfeier



- (1) **Verrückter** Chemie**professor**
Crazy chemistry.professor
- (2) ?**Vierstöckiger** Haus**besitzer**
Four.story house.owner
- (3) **Schwere** Un**wetter**warnung
Severe storm.warning

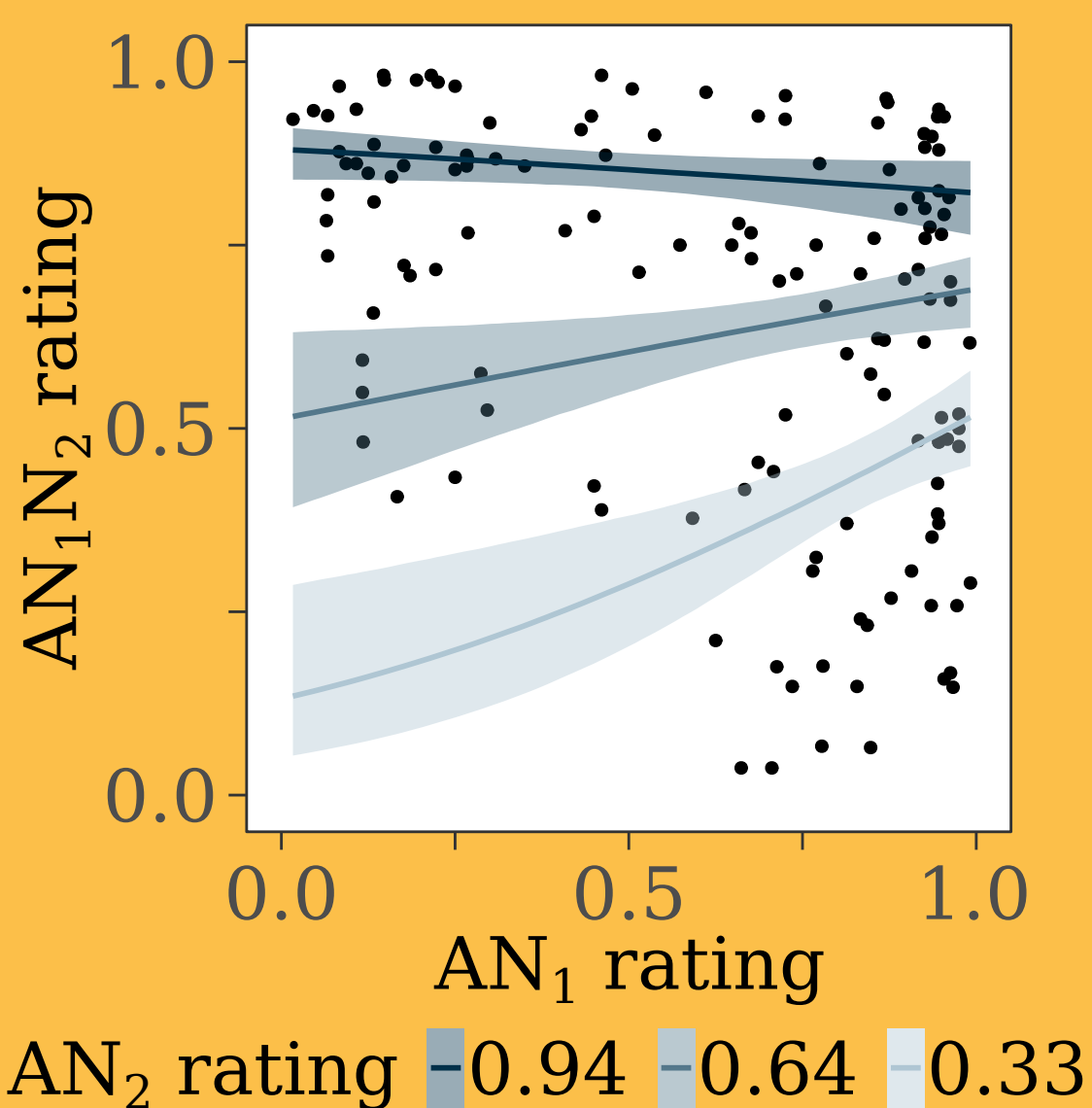
Why? Context, world knowledge, pragmatics, semantic adjective-noun compatibility, semantic transparency, morphosyntactic agreement, animacy, language economy, compound lexicalization, adjective type, ...

Experiment 1: Acceptability

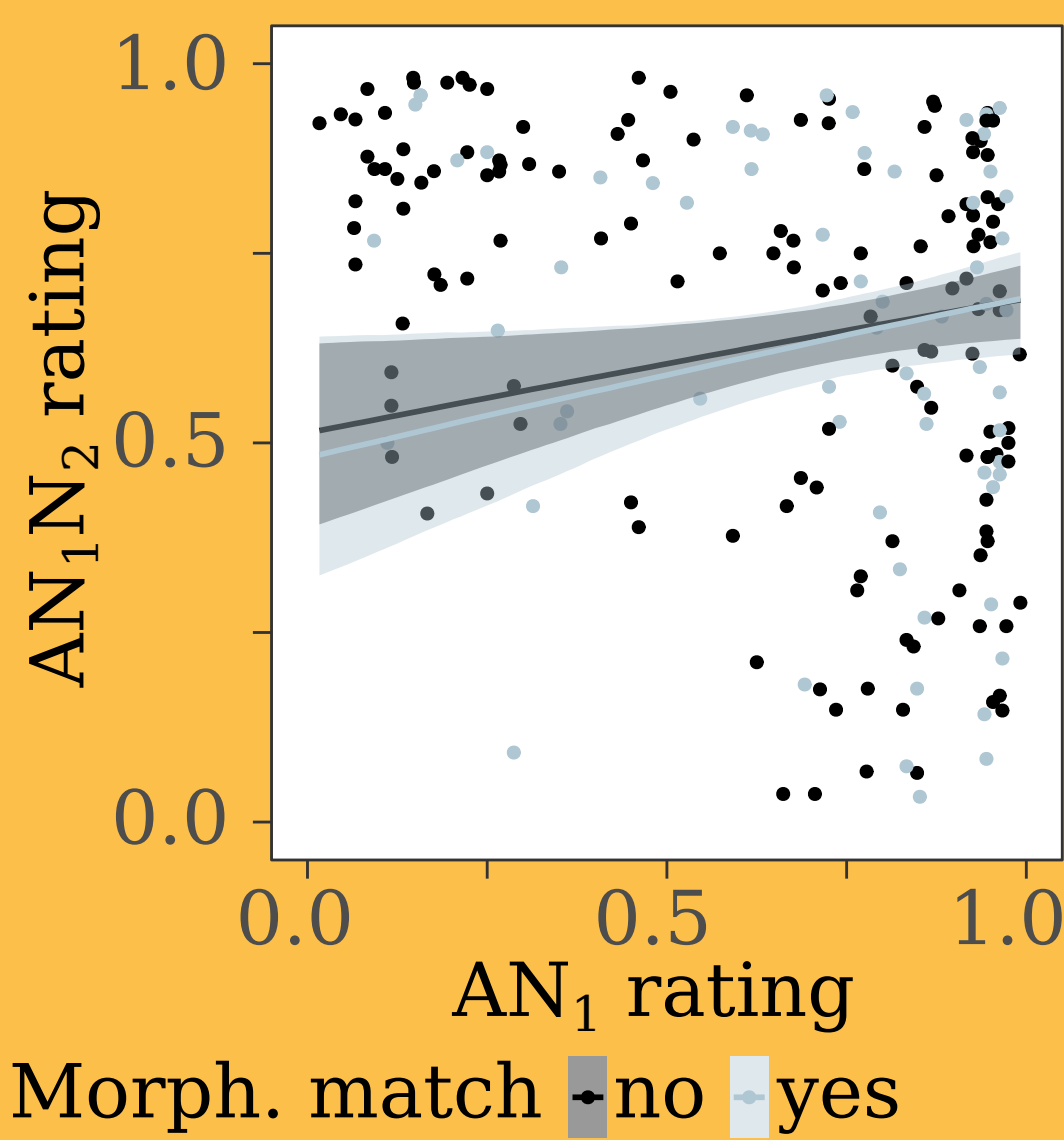
How do semantic and morphosyntactic match between the adjective and the nouns affect acceptability?

204 AN₁N₂ compounds, 1-5 scores for naturalness, comprehensibility, and style.

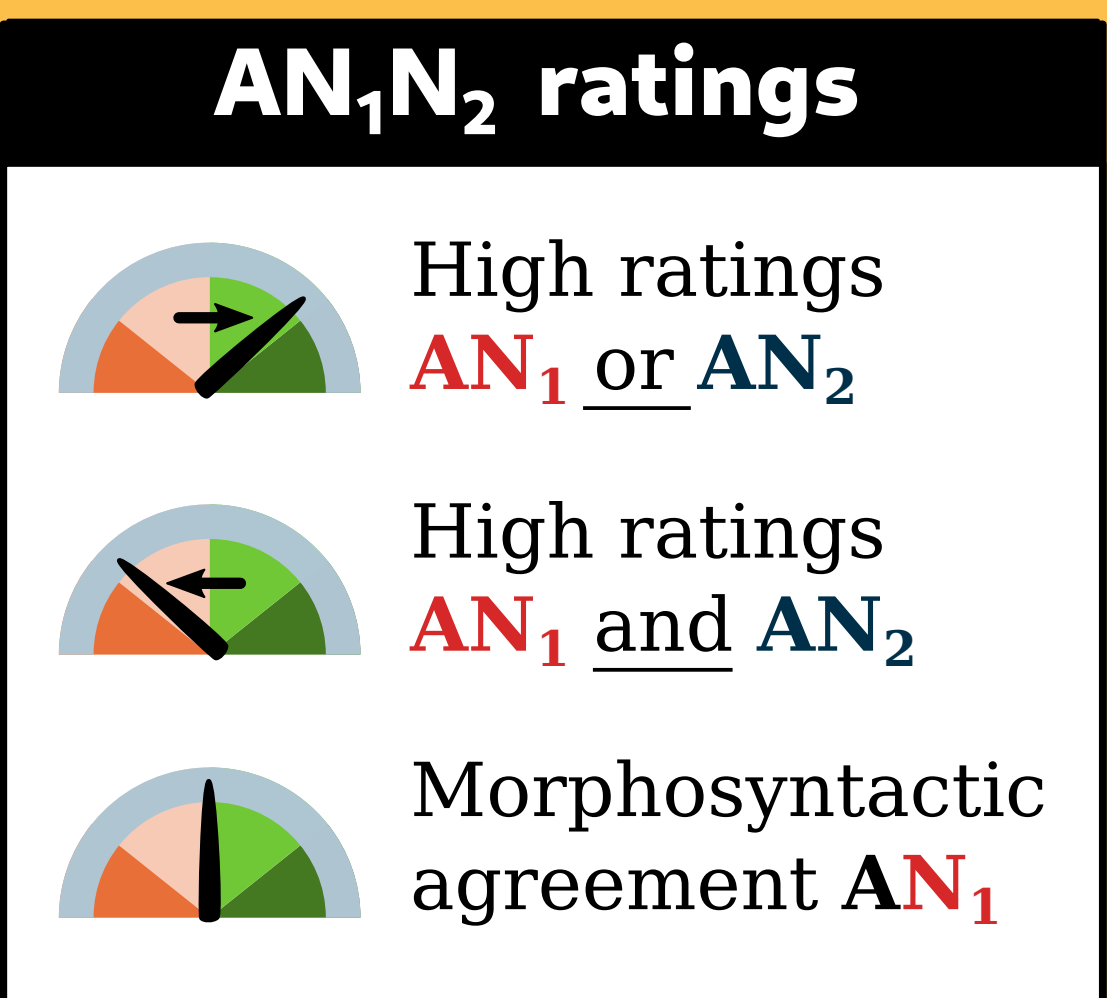
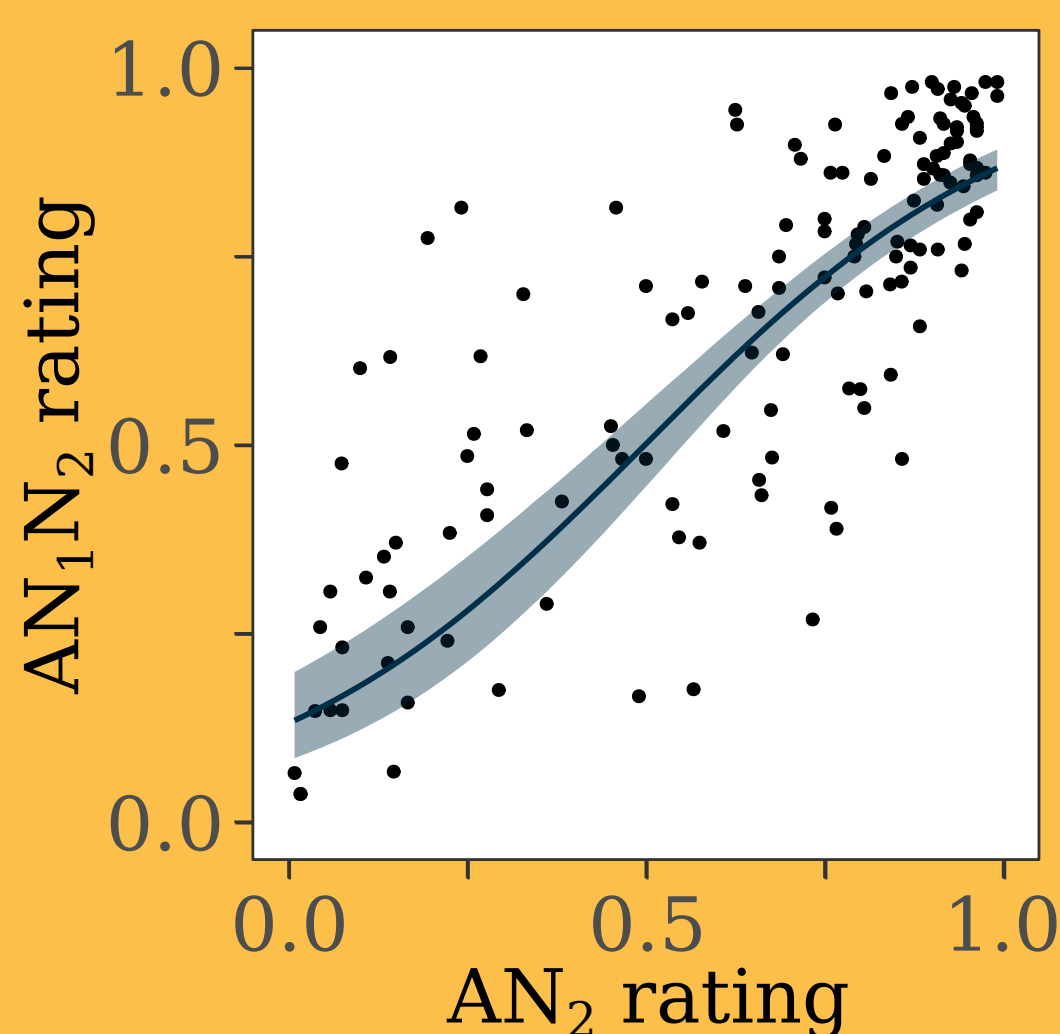
AN₁N₂ **Psychologische Beratungsstelle**
psychological counseling.center
AN₁ **Psychologische Stelle** ... center
AN₂ **Psychologische Beratung** ... counseling



AN₂ rating 0.94 0.64 0.33



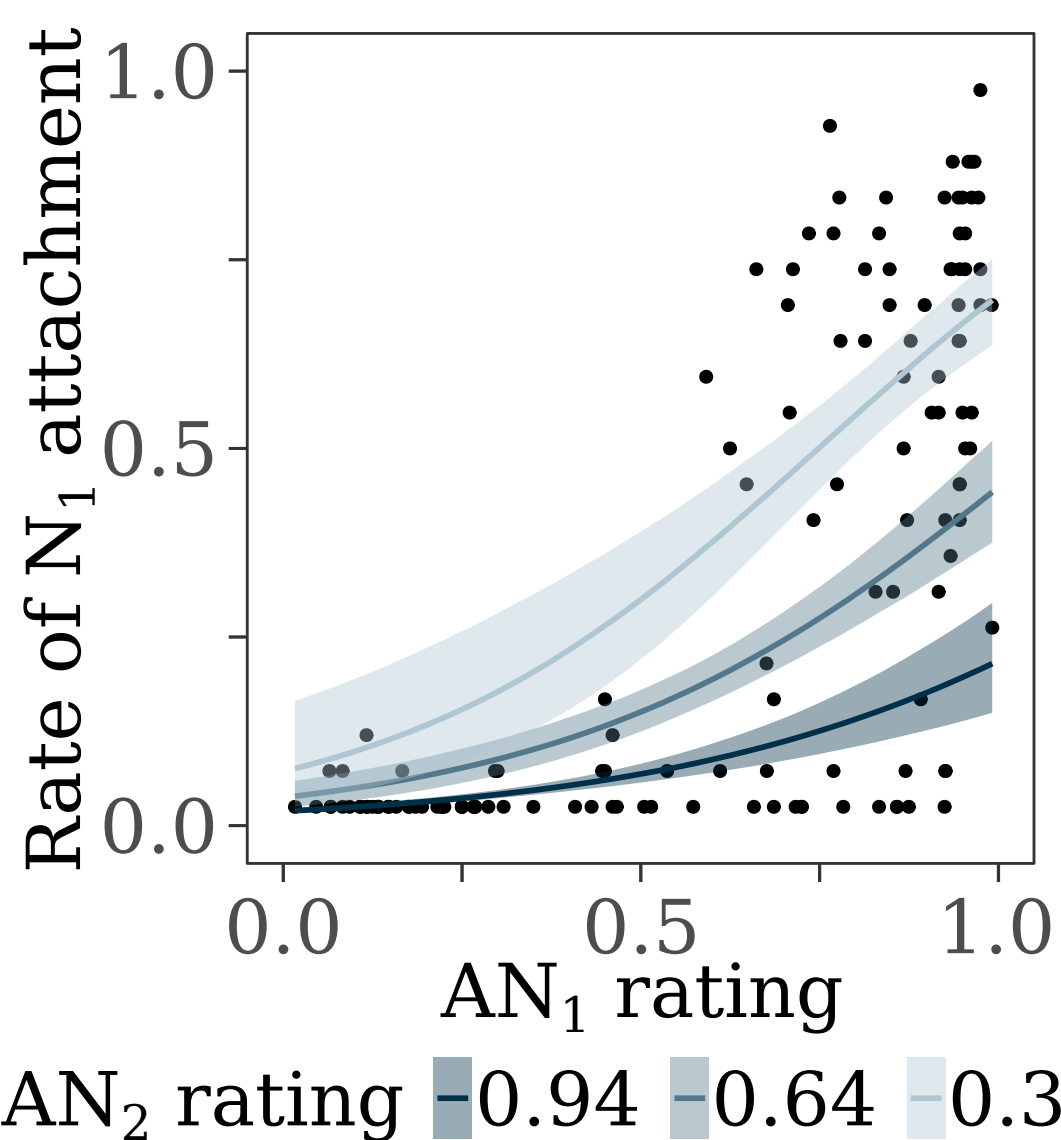
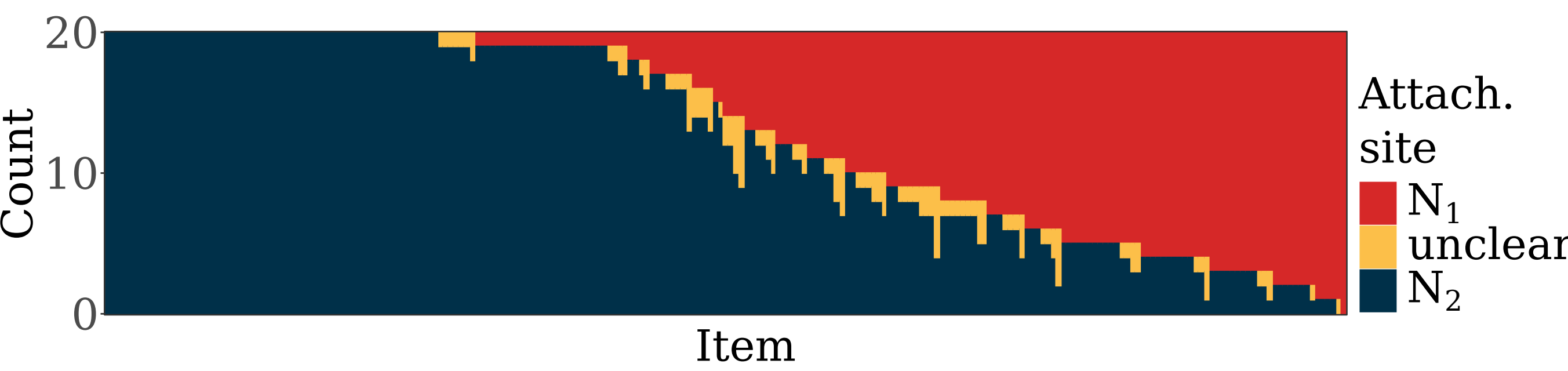
Morph. match no yes



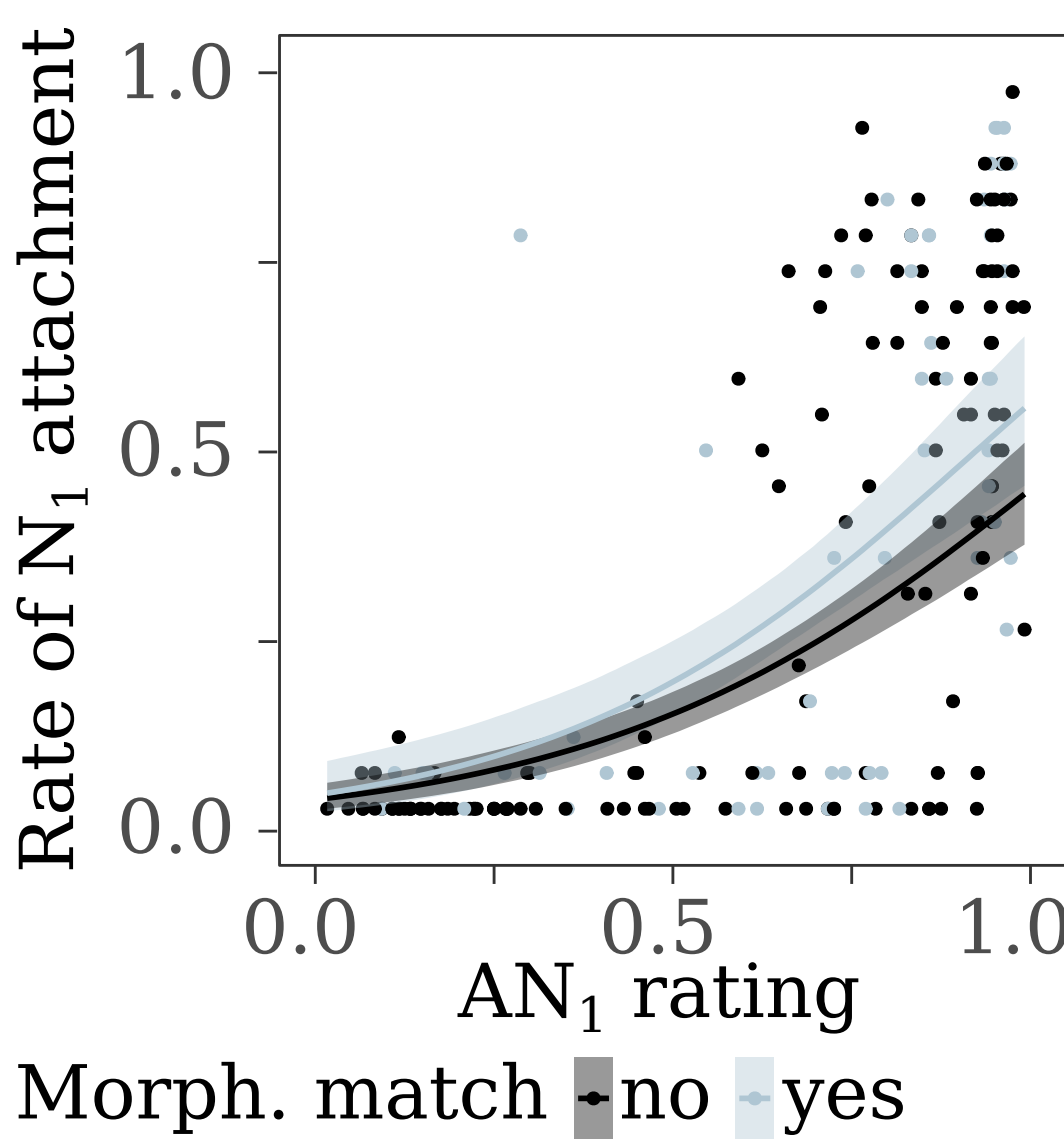
Experiment 2: Attachment

Which noun does the adjective modify relative to their semantic and morphosyntactic match?

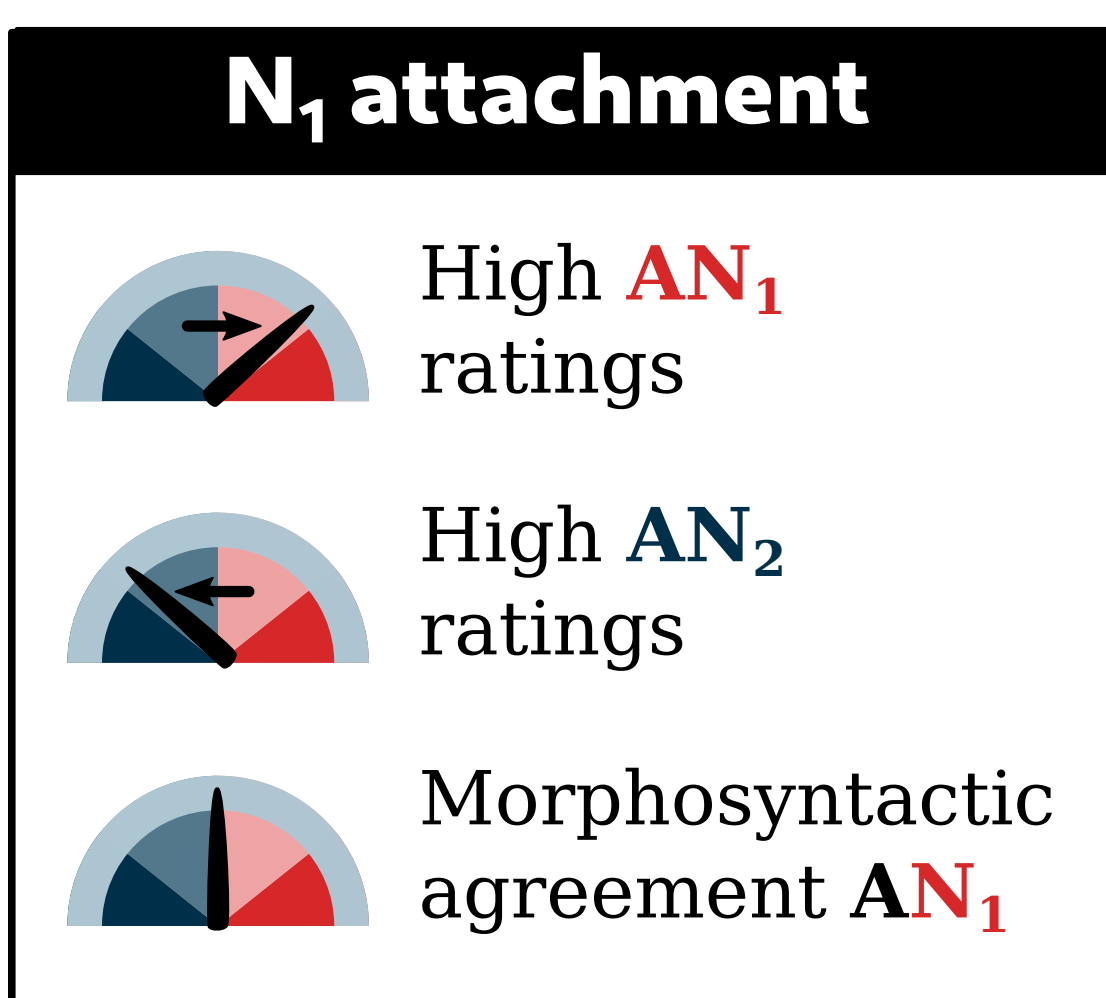
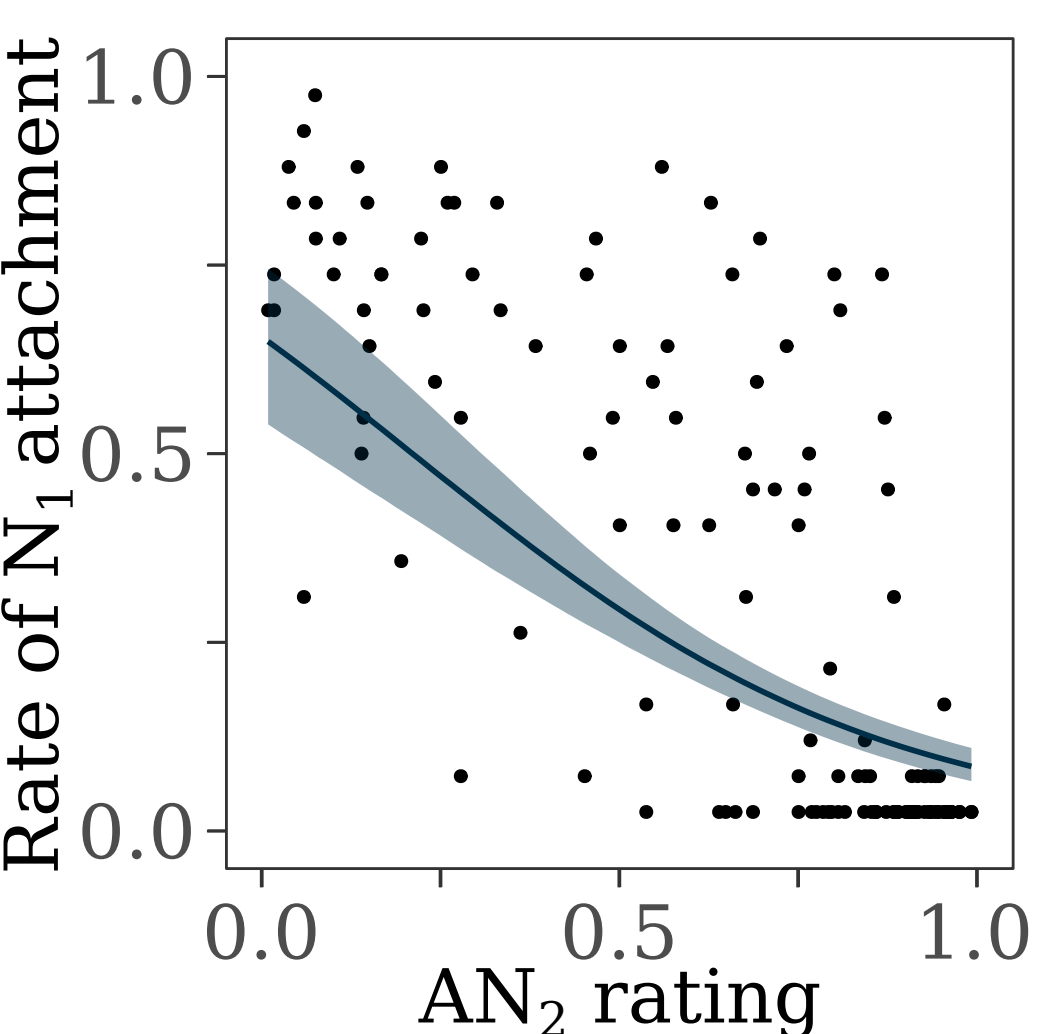
235 AN₁N₂ compounds, forced choice: N₁, N₂, unclear



AN₂ rating 0.94 0.64 0.33



Morph. match no yes



Summary and Conclusions

In German adjective+nominal compound phrases, the **1st noun plays an important role**. It can be the attachment site for the adjective if the (typically dominant) **2nd noun is unsuitable**. The nouns have a positive influence, but **may compete** for attachment. Acceptability ratings and attachments are determined largely by **semantic factors**. Strong semantic cues can **override grammatical constraints**.

Compositional processing can be suspended to fulfill communicative goals.

