Topicality and inverse negative scope in German

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In the German middle field, the negation *nicht* 'not' can take inverse scope over a topical singular indefinite, challenging two assumptions: that negation in German exhibits purely linear scope (Jacobs 1982), and that topics take wide scope (Endriss 2009). This is shown by the fact that *ein Boot nicht* 'a boat not' in (1-a) can be replaced by *kein Boot* 'no boat' (1-b) without changing the meaning. Unlike *kein Boot* in (1-b), the narrow-scope indefinite in (1-a) is a topic, as it can directly precede a sentence adverbial, which has been claimed to be the designated topic position in the German middle field (Frey 2004).

- (1) a. weil ein Boot (leider) nicht zur Verfügung stand. because a boat unfortunately not to availability stood
 - b. weil kein Boot (??leider) zur Verfügung stand. because no boat unfortunately to availability stood 'because a boat was unfortunately not available.'

We therefore hypothesize that the acceptability of *ein N nicht*-sentences depends on topicality. When the indefinite precedes the sentential adverb, sentences should be rated as more acceptable than when it follows the adverb. For *kein N*-sentences, we expect the opposite pattern. To test this, we conducted an acceptability judgment experiment with a 2×2 factorial within-subjects design: form of negation (ein-N-nicht vs. kein-N) and word order (NP-ADV vs. ADV-NP). This yielded four experimental conditions (2). Forty-nine native speakers of German rated 24 experimental and 48 filler sentences on a 7-point Likert scale.

(2) *Context sentences* (translated)

The State Secretary was late for the NATO summit. The press suspected that this was due to the fleet of aircraft.

It has now been reported that...

- a. ein-N-nicht_NP-ADV
 - ein funktionsfähiger Flieger leider nicht zur Verfügung stand.
 - a functioning plane unfortunately not to availability stood
 - '... a functioning aircraft was unfortunately not available.'
- b. ein-N-nicht_ADV-NP

leider <u>ein funktionsfähiger Flieger</u> nicht zur Verfügung stand. unfortunately a functioning plane not to availability stood

- c. *kein-N_NP-ADV*
 - <u>kein funktionsfähiger Flieger</u> **leider** zur Verfügung stand.
 - no functioning plane unfortunately to availability stood
- d. kein-N_ADV-NP

leider <u>kein funktionsfähiger Flieger</u> zur Verfügung stand. unfortunately no functioning plane to availability stood

A cumulative link mixed model reveals a significant effect of word order on the ratings ($\beta=-0.5272,\ SE=0.1181,\ z=-4.463,\ p=8.09e-06$), qualified by a strong interaction with form of negation ($\beta=-2.3519,\ SE=0.2186,\ z=-10.759,\ p<2e-16$). Whereas $ein\ N$ nicht-sentences received higher ratings when the NP precedes the adverb, $kein\ N$ -sentences showed a substantial drop in acceptability when $kein\ N$ precedes the adverb. Furthermore, the acceptability of $ein\ N$ nicht-sentences with $ein\ N$ precedeing the adverb was not significantly different from $kein\ N$ -sentences with $kein\ N$ following the adverb. This suggests that inverse negative scope is more acceptable when the indefinite is a topic and that inverse scope is preferred over linear scope in such cases.

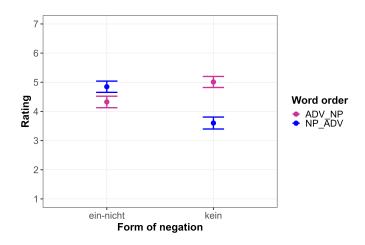


Figure 1: Acceptability judgment results