Hat Contour in Dutch
Form and Function

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Introduction: early/late fall hat contour

Hat contour: an intonation pattern which consists of a rise, a high plateau and a fall.
Büring: Contrastive topic and Disputability Implicature

Büring (1997/2003): German hat contours are used for contrastive topics, and contrastive topics come with disputability implicature.

**Disputability Implicature:**
A sentence carrying a hat contour comes with a implicature that at least one question of the topic-semantic value still has to be resolved. This unresolved question is known as the residual topic (Büring 1997/2003).

The residual topic for Answer 1B is 1A:

   B: Well, the WAITERS ate APPLES

*Question in TSV that still needs to be resolved:*
A: Yes, but what about the chefs What did the they eat?
The disputability implicature correctly predicts answer (2a) to be unacceptable, but also predicts (2b) to imply that there were additional open alternatives, contrary to fact.

Krifka (1999) and Ludwig (2006) note that hat contour is compatible with an answer resolving the last remaining element in topic-semantic value:

2. **Who had seen who? Had Isabel seen Willem-Jan?**
   a. #Nee, /WILLEM-JAN had \ISABEL gezien.
      ‘No, Willem-Jan had seen Isabel.’
   b. ! Ja, en /WILLEM-JAN had \ISABEL gezien.
      ‘Yes and Willem-Jan had seen Isabel.’

Ludwig (2006) argues instead that hat-contour requires true alternative (not open alternative)

Wagner (2008/2012) follows Ludwig in this, but in addition claims that this condition only holds when the hat-contour involves an early fall
## Predictions Acceptability Hat Contour

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<td>No alternatives, Early fall</td>
<td>Unacceptable</td>
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<tr>
<td>No Alternatives, Late fall</td>
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<td>Alternatives, Early fall</td>
<td>Unacceptable, Violates disputability</td>
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### Early Fall Hypothesis:

The hat contour with an early fall (HL*) conveys that a contextually alternative proposition is true besides the proposition expressed bearing the hat contour.
Experiment: Methodology

- Online acceptability judgment experiment, using jsPsych (de Leeuw, 2015)
- Ratings on a Likert scale from 1 to 8
  1 = completely unnatural
  8 = completely natural
- 2 contexts (alternatives, no alternatives)
- 2 different hat contour (early fall, late fall)
- 4 different conditions and 16 stimuli sets.
- Each participant was presented with 16 trials.
- The stimuli were presented in a Latin-square design.

4 Who had seen who? Had Isabel seen Willem-Jan?

a. Nee, /WILLEM-JAN had ISABEL gezien. ‘No, Willem-Jan had seen Isabel.’ No alternatives, early fall

a. Nee, /WILLEM-JAN had \ISABEL gezien. ‘No, Willem-Jan had seen Isabel.’ No alternatives, late fall

b. Ja, en /WILLEM-JAN had \ISABEL gezien. ‘Yes and Willem-Jan had seen Isabel.’ Alternatives, early fall

b. Ja, en /WILLEM-JAN had ISABEL\ gezien. ‘Yes and Willem-Jan had seen Isabel.’ Alternatives, late fall
Results

- 31 native Dutch speakers.
- 496 observations were obtained.
- Statistical analysis using CLMM

- The alternatives condition is significantly more acceptable with an early fall than the no alternatives ($z = 2.607$, SE = 0.3873, $p = 0.0105$)

- This difference was not significant for the late fall.
Discussion

- The early-fall hypothesis fares better than alternatives

- ... But does not to explain why the late fall is less acceptable in the alternatives condition than in the no alternatives condition (since it should not come with a presupposition)
  - But: This could be a case of maximize presupposition, where one has to use the early fall when its presupposition is met.

- ...and does not explain why the early fall is not completely unacceptable in the no-alternative conditions but relatively acceptable, in fact it is not significantly worse than the late fall (although there is a trend in this direction).
  - Perhaps our context manipulation was not entirely successful
References