

Investigating the Distribution of Clefts in Written and Spoken German: The Role of Prosody

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The relation between prosodic and referential structure (AG02)

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What is the purpose of using a cleft?

(1) It is YOU that I love.

- Why would you use (1) instead of (2)?

(2) I love you.

Why say “It is YOU that I love”?

- **Style**
- **Exhaustivity inference** e.g. Horn (1981), Büring and Križ (2013)
(3) I love nobody else than you.
- **Contrast** Destruel and Velleman (2014)
(4) It is YOU that I love, not Leonardo DiCaprio.



- **Prosodic prominence** DeVaugh-Geiss et al. (2015), Tönnis et al. (2016)

- 1 Background
 - Corpus Study (Tönnis et al. 2016)
- 2 Experiments
 - Rating Study
 - Follow-up
- 3 Conclusion & Outlook

Background

Corpus observation: Significantly more subject clefts than non-subject clefts in written German

- **Subject cleft**

(5) It is CHRIS *who_{nom}* meets Lena.

- **Non-subject cleft**

(6) It is LENA *whom_{acc}* Chris meets.

- Attested for many languages Carter-Thomas (2009), Roland et al. (2007), Skopeteas and Fanselow (2010)

Intuitive observation: Clefts are less frequent in spoken German than in written German

Clefts as Cues for Prosody

- If the context does not give sufficient cues for the prosody of a written sentence, **default prosody** is assumed by the reader.
- Clefts as a device to **shift default prosody**.

(7) Laura read a BOOK.

(8) It is LAURA who read a book.

- More options to mark prominence for non-subjects
⇒ **less non-subject clefts**
- In spoken German, any constituent can be marked by intonation in its base position. ⇒ **less clefts in spoken German**



Needs to be tested! So...

Experiments

Goal

- Test whether clefts function as intonation shifting devices
 - Compare acceptability of clefts and optimal unclefted versions (**OUVs**)
-
- OUV = Best unclefted version of an original cleft given its preceding and following context.
 - Acceptability judgment task
 - Stimuli: 24 German original clefts from corpus study (Tönnis et al. 2016) and their derived OUVs, presented in context
 - 1:3 target-filler ratio with respect to clefts
 - 48 participants

Intonation	Different	Identical
Structure		
Cleft	(9)	(11)
OUV	(10)	(12)

Simplified examples

- (9) It is Lena who met Chris.
- (10) Lena met Chris.
- (11) It is Nina whom I like.
- (12) I like Nina.

Bitte lesen Sie den GANZEN Abschnitt und bewerten Sie den fett gedruckten Satz im Kontext!

Andrea Fischer hat gründlich recherchiert. Sie hat Mut. Sie spricht Friedmann immer wieder auf sein moralisch fragwürdiges Geschäft mit den Prostituierten an. Der antwortet, er habe nicht gewusst, dass die Damen über den Frauenhandel in seine Hotelsuite kamen. Er blickt, über ihre Recherchen hinweg, direkt in Andrea Fischers Augen, aber nur, um den Blick mit seinem letzten Wort auch wieder deutlich von der Moderatorin abzuwenden. Bis hierhin, meine Liebe, und nicht weiter! **Friedman ist es, der das Rennen bestimmt.** Er sagt, er habe ein Lebenskrise gehabt. Er sagt, der Koks, Drogen, seien das Letzte. Er sagt, er ist nicht mehr der Alte. Er sagt, er wolle eine zweite Chance. Seine Sätze sind so was wie der Ellenbogen im Gedränge.

(nicht akzeptabel)



(vollkommen akzeptabel)

weiter

Original cleft

- (13) FRIEDMANN ist es, der das Rennen bestimmt.
FRIEDMANN is it, who the race determines.
'It is FRIEDMANN who runs the show.'

Pivot intonation:

- (14) FRIEDMANN bestimmt das Rennen.
'FRIEDMANN runs the show.'

OUV with **different** intonation:

- (15) Friedmann bestimmt das RENNEN.
'Friedmann runs the SHOW.'

Original Cleft

- (16) Es waren ÜBERGEORDNETE GRÜNDE, die den
It were HIGHER.ORDER REASONS, that the
Ausschlag zugunsten einer Zustimmung gaben.
decision in.favor.of an approval made.
'It was REASONS OF A HIGHER ORDER that turned the balance
in favor of an approval.'

OUV with identical intonation

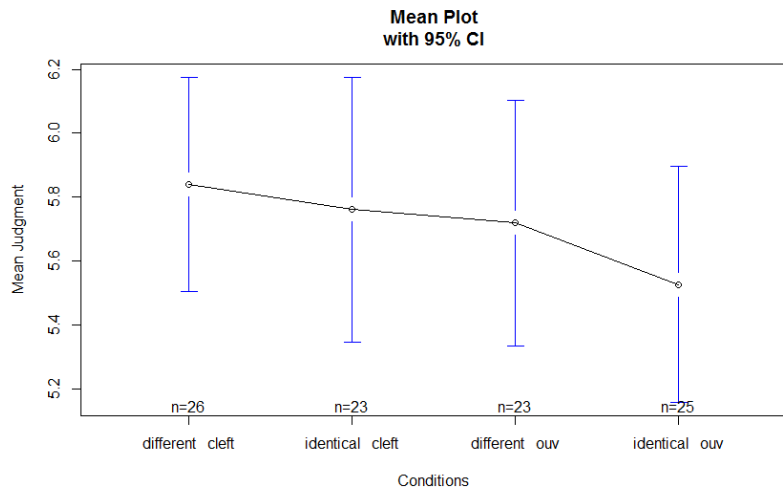
- (17) Den Ausschlag zugunsten einer Zustimmung gaben
The decision in.favor.of an approval made
ÜBERGEORDNETE GRÜNDE.
HIGHER.ORDER REASONS.
'REASONS OF A HIGHER ORDER turned the balance in favor of
an approval.'

If clefts were just used in order to shift intonation,

- different clefts should receive higher judgments than their OUVs
- identical clefts should receive lower judgments than their OUVs

Results

Results



No significant effect 😞

Follow-up: Exhaustivity

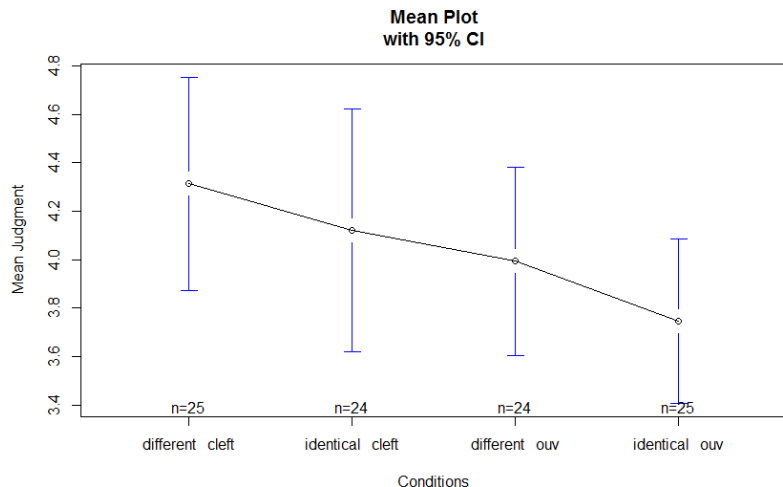
- Aim: test exhaustivity inference of clefts and OUVs
- Identical to rating study, except for task and no highlighting of target sentence
- New task:

Inwiefern wird folgende Aussage durch den Abschnitt verdeutlicht?
Niemand außer Friedmann bestimmt das Rennen.

'In how far does the paragraph clarify the following statement?
Nobody except Friedmann runs the show.'

- Scale from 'not clarified' to 'strongly clarified'

Results: Follow-up

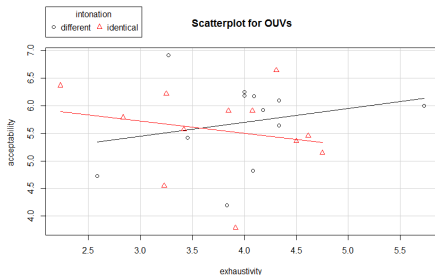
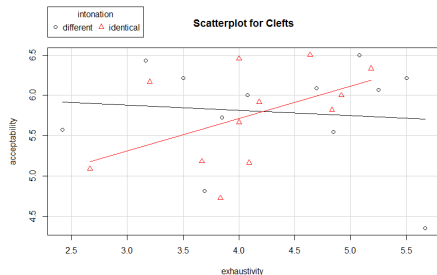


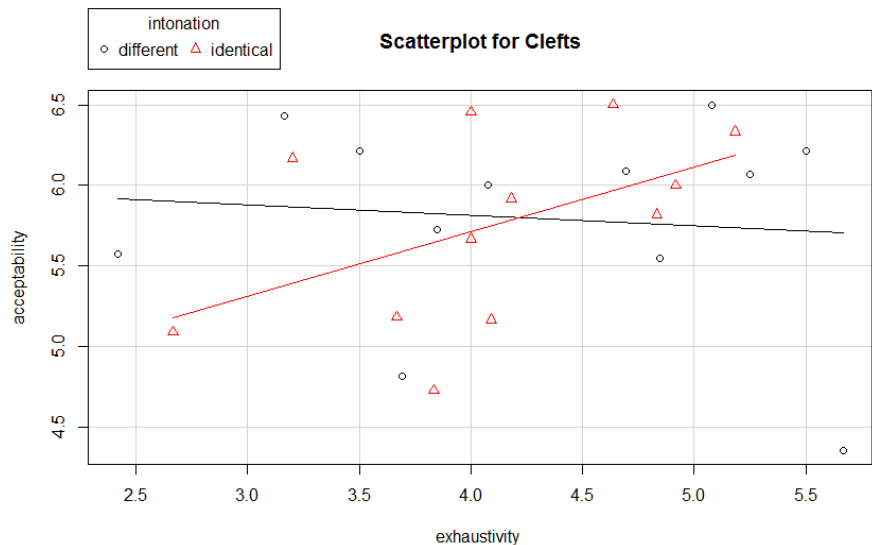
Significant difference in exhaustivity between clefts and OUVs (as expected)

Comparing experiment and follow-up

- Do exhaustivity judgments correlate with acceptability judgments?
- Compare the mean for each target for each of the conditions

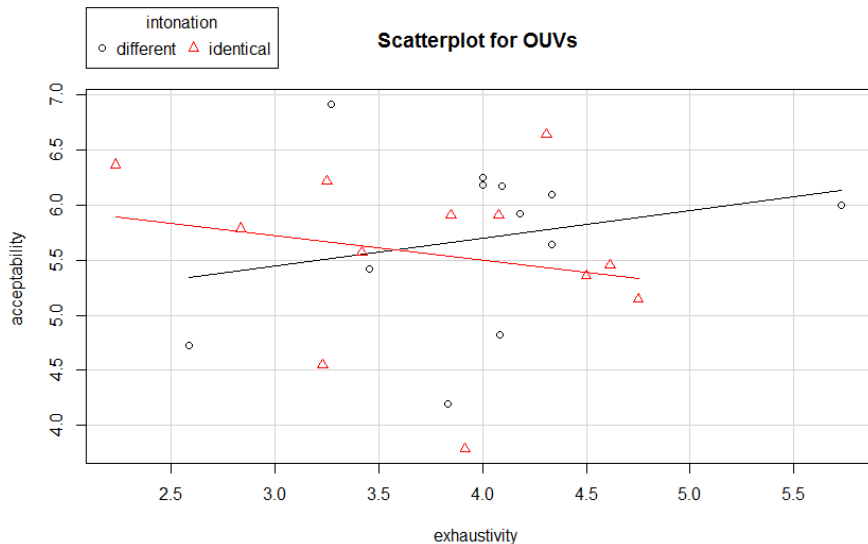
Scatterplots





○ no correlation

△ moderate positive correlation



weak, but not significant correlation

Conclusion & Outlook

- The results support that the function of clefts is at least two-fold:
 - express exhaustivity
 - disambiguate prosodic prominence
 - not always both at the same time
- Results support distribution of clefts in written and spoken German: in spoken German clefts are only used for expressing exhaustivity.
- More direct method necessary in order to measure processing effort of clefts and OUVs (e.g. eye-tracking)
- still to do: Compare the results to spoken German
 - test the same stimuli, but recorded
 - compare default and pivot intonation (if different)

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