

PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is a publisher's version.

For additional information about this publication click this link.

<https://hdl.handle.net/2066/225673>

Please be advised that this information was generated on 2021-03-03 and may be subject to change.

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/339916201>

Scope revisions at the pragmatics interface: Evidence from Dutch scrambling

Poster · March 2020

CITATIONS
0

READS
38

1 author:



[Gert-Jan Schoenmakers](#)
Radboud University

3 PUBLICATIONS 0 CITATIONS

SEE PROFILE

Scope revisions at the pragmatics interface: Evidence from Dutch scrambling

Gert-Jan Schoenmakers

CUNY Human Sentence Processing Conference 2020

A. Direct Object Scrambling

► Definite objects in Dutch can freely appear to the right or to the left of adverbs. This phenomenon is known as **scrambling**. (after Ross 1967)

- (1) a. Jan heeft toen **de kok** beledigd.
Jan has then the cook insulted
b. Jan heeft **de kok** toen beledigd.
Jan has the cook then insulted
'Jan insulted the cook then.'

► Scrambling over **focus sensitive adverbs** triggers an interpretation shift. The object is located within the focus domain (2a) or outside of it (2b).

- (2) a. Jan heeft zelfs **de kok** beledigd.
Jan has even the cook insulted
'As for the cook, Jan even insulted him.'
b. Jan heeft **de kok** zelfs beledigd.
Jan has the cook even insulted
'Jan even insulted the cook.'

Question: Are these objects interpretable in a position different from where they are phonetically realized?

B. Scrambling and discourse

- The literature assumes a strict **one-to-one mapping** between an object's surface position and its discourse status:
- Scrambling of definite objects "only applies if the argument is part of the presupposition [...] of the clause." (Broekhuis 2007; Broekhuis & Corver 2016)
- Discourse-old objects in unscrambled position are "highly disfavored" and "decidedly awkward". (Neeleman & Reinhart 1998; Neeleman & van de Koot 2008)

Assumptions: The unscrambled position is reserved for (new) foci.
The scrambled position is reserved for (old) topics.

- Can we find experimental evidence for these common assumptions?

C. Speeded acceptability judgment task

Design

- 80 participants (55 female, $M_{age} = 25.6$ years, $SD = 9.95$)
- 12 target items + 48 fillers
 - OBJECT POSITION (unscrambled vs. scrambled) (within-subjects)
 - ADVERB TYPE (focus sensitive vs. time-point) (between-subjects)
 - CONTINUATION TYPE (DP_{foc} vs. VP_{foc}) (within-subjects)

Procedure

1. Participants silently read sentences in auto-paced word-by-word fashion.
2. At the end of each sentence, participants judge its acceptability.
Is it likely that this sentence was produced by a native speaker of Dutch? (Y/N)
3. Reaction times are measured from sentence end until button press.

D. Stimulus items (= exs. 1-2 + continuation)

- Contrastive pairs are discourse-semantically parallel, i.e. match in scope. (Schwabe 2000; Umbach 2005)
- (3) Jan heeft **zelfs/toen de kok** beledigd, maar niet [DP_{foc} de ober].
Jan has even/then the cook insulted but not the waiter
- (4) Jan heeft **zelfs/toen de kok** beledigd, maar niet [VP_{foc} geslagen].
Jan has even/then the cook insulted but not punched
- (5) Jan heeft **de kok zelfs/toen** beledigd, maar niet [DP_{foc} de ober].
Jan has the cook even/then insulted but not the waiter
- (6) Jan heeft **de kok zelfs/toen** beledigd, maar niet [VP_{foc} geslagen].
Jan has the cook even/then insulted but not punched

Expectation: The surface mismatches in (4) and (5) are ill-formed.

E. Results

Acceptability ratings

	Scrambled		Unscrambled	
	DP_{foc}	VP_{foc}	DP_{foc}	VP_{foc}
Focus sensitive adverbs	87.0%	93.5%	95.5%	88.3%
Time-point adverbs	88.3%	97.1%	87.6%	94.1%

Table 1: Percentage of Y responses per condition

- All conditions receive high ratings, contra previous analyses!
- So what role does information structure play?

Reaction times

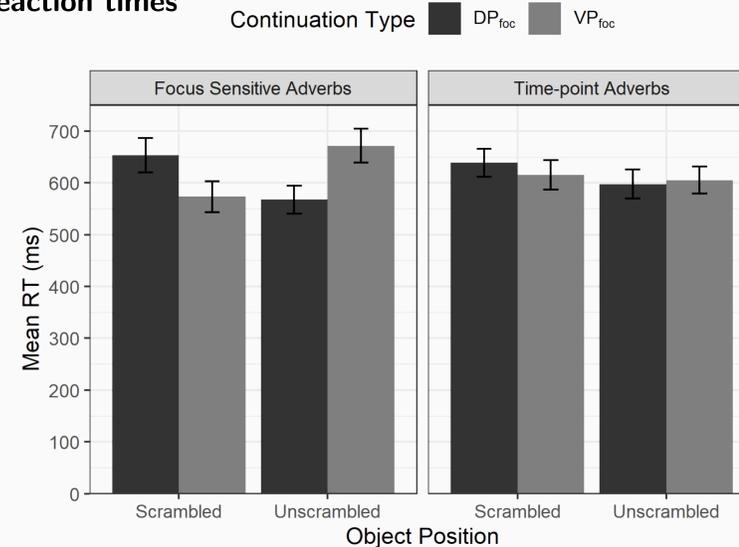


Figure 1: Mean reaction times per condition

OBJECT POSITION • CONTINUATION TYPE
($t = 3.53$; $p < .001$)

OBJECT POSITION • CONTINUATION TYPE • ADVERB TYPE
($t = 2.09$; $p < .05$)

- Surface structure guides pragmatic interpretation, but can be overruled.

F. Key experimental findings

- All four surface order–pragmatics combinations are acceptable.
- Surface matches were reacted to faster than surface mismatches, but only in items with a focus sensitive adverb. (cf. Schoenmakers & de Swart 2019)
- How can we account for these findings in a formal syntactic framework?

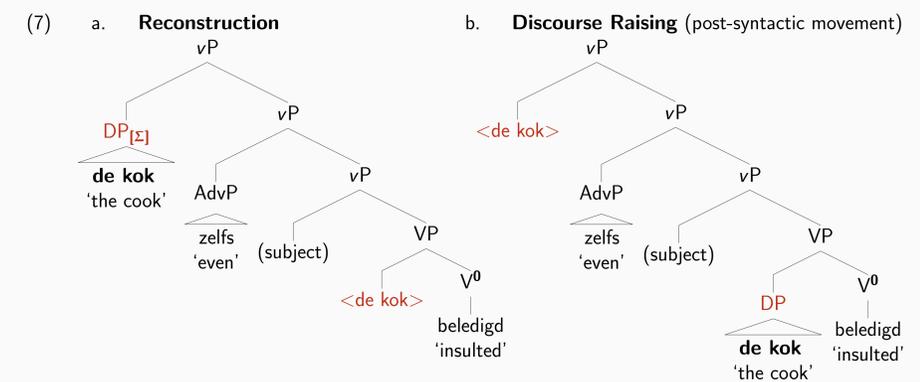
G. A new syntax of deriving focus structure

Assumptions

- Scrambling involves movement. (Broekhuis 2007; Schoenmakers & Bailyn 2020)
- Focus relations are uniquely represented at the pragmatics interface. (Vallduví 1992; Lambrecht 1994; Bailyn 1995, 2012; Zubizarreta 1998)

Analysis

- Familiar processes derive pragmatic relations (movement, reconstruction)
- Scrambling is an available process not driven by discourse considerations.
- Definite objects that enter the derivation are optionally assigned a **scrambling feature** [Σ].
 - **Objects with** [Σ] scramble to the outer specifier of vP . (cf. Chomsky 2001)
These elements are either interpreted at their landing site or at their base position, see (7a). (= reconstruction, cf. Fox 2000)
 - **Objects without** [Σ] remain in unscrambled position. These elements are either interpreted at their base position or undergo **Discourse Raising** (DR), see (7b). (as assumed for QR in Fox 2000)



- Both word orders have two possible pragmatic interpretation sites.
- The post-syntactic revision processes incur processing difficulty.

Conclusion

- Surface order does not necessarily reflect pragmatic relations.
- Existing approaches cannot account for such mismatches.
- Overt scrambling and covert Discourse Raising are both necessary.
 - Parallels between QR and pragmatic interpretation are to be expected.