I. Introduction

Hofmeister and Sag (2010) and Hofmeister (2008) found that the processing of filler-gap dependencies with an extracted wh-phrase in English is sensitive to the complexity of the wh-phrase (also cf. Frazier and Clifton, 2002).

- Reading times of the word after the extracted wh-phrase were longer after a which-phrase than after a bare wh-word.
- At the gap site, in contrast, RTs were shorter for 'which-gaps' than for bare 'wh-gaps'.

Suggested reasons: greater informativity of which-phrase, therefore – reduced likelihood of misanalysis (‘early gap filling’) so no continued reanalysis

- easier retrieval due to increased activation and resistance to interference

Our findings from German call the generality of these findings and their interpretation into question.

III. Materials

Context: ‘Nils will betray (the fact) that Jana has backed the beguiler who was on the run and is sufficiently well-known.’

Question: ‘Welchen hinreichend bekannten, in Ordnung begriffenen Betrüger wird Nils verraten, dass Jana gedeckt hat?’

Answers: ‘den flüchtigen Betrüger’ – ‘the fugitive beguiler’

Exp: 1: Self-Paced Reading

- Non-cumulative word-by-word presentation in a stationary window
- Task: reading + answer task
- 48 Participants saw 36 critical items and 110 unrelated fillers each
- 2 × 3 Design

Exp: 2: Acceptability Judgement

- Thermometer Judgment paradigm (Featherston, 2008) – Participants judged sentence pairs relative to two fixed anchor sentence pairs
- 36 Participants saw 36 critical items and 64 unrelated fillers each

II. Methods

IV. Results

Exp: 1: Residual Reading Times

- Main effect of SENTENCE TYPE: baseline faster than cnpc
- Main effect of FILLER TYPE: wh/which faster than bare/adj
- High overall answer accuracy (93%–95% per condition)

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Exp: 2: Acceptability Judgments

- Main effect of SENTENCE TYPE: baseline more acceptable than cnpc
- Interaction of SENTENCE TYPE and FILLER TYPE: baseline: bare+which=adj; cnpc: bare<adj

V. Discussion

Summary

Exp: 1: Retrieving a more complex wh-phrase is more, rather than less costly than retrieving a less complex wh-phrase – evidenced by the reading times for adj.

The disadvantage of a very complex wh-filler at the retrieval site might be due to the activation of more semantic features, which is indicated by the advantage of adj in the answer times (exclusion of answer alternatives).

Exp: 2: In ungrammatical island violations, increasing informativity of the wh-filler improves overall acceptability.

Interpretation

- Probably a trade-off: more complex structural information is more costly to process but more semantic information also helps to identify referents in a discourse.

Possible reasons for differences with other studies:

- Much greater syntactic complexity of the most informative condition (adj)
- Verb final sentence structure of German: retrieval region = sentence wrap up region

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Implications

- Higher processing effort pays off in terms of better success at interpretation.

- More research on languages with differing morpho-syntax is needed.

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