I. INTERFERENCE EFFECT IN REFLEXIVE PROCESSING

- In English, reflexive resolution in b. is slower than in a.:  
  a. The man who the girl saw hurt himself.,  
  b. The man, who the boy saw hurt himself.,

→ Gender-matching inaccessible antecedents (here: the boy) lead to interference effects, i.e. slower retrieval times of the antecedent at the reflexive in some experiments (e.g., Badecker & Straub, 2002; Cunnings & Felser, 2011; cf. Sturt, 2003; Dillon et al., 2013).

- It is not yet clear whether these interference effects are due to:
  1. ENCODING INTERFERENCE: Feature-sharing of the antecedent with other items in working memory leads to a decrease in the quality of its encoding.
  2. RETRIEVAL INTERFERENCE: The cues (e.g., gender) used for retrieval point to different items in memory.

III. RESEARCH QUESTION

Are interference effects in reflexives due to encoding interference or due to retrieval interference?

→ We investigated the German reflexive sich which is not gender marked and therefore, gender is not a plausible retrieval cue.

IV. DESIGN

We ran an SPR and an eyetracking reading study with German reflexives (see V) and manipulated the factor GENDER (shared versus different) of the accessible and inaccessible antecedent:

1. NO INTERFERENCE: Accessible and inaccessible antecedent have different gender (see materials 1a.).
2. INTERFERENCE: Accessible and inaccessible antecedent share their gender (see materials 1b.).

- 16 sets of items; 32 fillers
- Statistical analysis: Linear mixed effects modelling of log RTs.

VII. SELF-PACED READING (N=144)

We predicted that gender-overlap at the reflexive sich.

VIII. EYETRACKING (N=151)

Gaze duration at sich:  
No effect in gaze duration, total fixation time, regression-path duration, re-reading and first-pass regression probability.

→ No effect at the regions following on the reflexive.

IX. DISCUSSION

- The two experiments showed no interference effects due to overlapping gender in spite of high statistical power.
- There is no evidence that encoding interference plays a role in the processing of German reflexives.
- To the extent that the German results can be extended cross-linguistically, interference effects due to a gender-sharing inaccessible antecedent in a language like English would have to be attributed to retrieval interference rather than encoding interference.