

## Background

### Previous theoretical claims on Condition C reconstruction in English:

- ▶ *argument-adjunct asymmetry*: only R-expressions inside arguments trigger Condition C effects, R-expressions inside adjuncts don't (Freidin 1986, Lebeaux 1988, Fox 1999, Safir 1999)
- ▶ *predicate-argument asymmetries* (Huang 1993, Heycock 1995): predicates obligatorily reconstruct, arguments do not; Condition C effects decrease with increasing distance between R-expression/pronoun under embedding with arguments but not with predicates
- ▶ *movement-type asymmetry* (Munn 1994, Citko 2001, Sauerland 1998, 2003): relative clauses display weaker Condition C effects than wh-movement

### Previous empirical claims:

- ▶ *English*: Condition C effects under A'-movement questioned quite generally; experimental work (Adger et al. 2017, Bruening & Al Khalaf 2018): Condition C effects systematic only with adjectival predicates, but partially absent with nominal arguments; only weak argument-adjunct asymmetry.
- ▶ *German*: Principle C effects are robust in wh-movement/topicalization but weak/absent in relativization (Salzmann 2006, 2017)

### Our contribution: 1st experimental investigation of Condition C reconstruction in German A'-movement.

## Method and participants

Mary tells us how proud of Anna she is.

Can this sentence be interpreted such that...

...Mary is proud? (Q1)  Yes  No

...Anna is proud? (Q2)  Yes  No

- ▶ forced-choice task, inspired by Bruening and Al Khalaf (2018): provide two potential referents (in local/higher clause)
- ▶ innovation: we explicitly asked for each of the readings whether it is possible or not → optionality can be captured

- ▶ web-based questionnaires (SoSci Survey, Prolific)
- ▶ five experiments, 32/48/36/36/32 participants
- ▶ Latin Square Design
- ▶ 1:1 items-fillers ratio

## Design and stimuli

### Factors:

1. in situ vs. moved
2. DPs (arguments) vs. APs (predicates)
3. R-expression inside argument vs. R-expression inside adjunct (DP-arguments only)
4. distance between pronoun and R-expression (linear and structural)
5. wh-movement vs. relativization

Sample item set: (see handout for original German items)

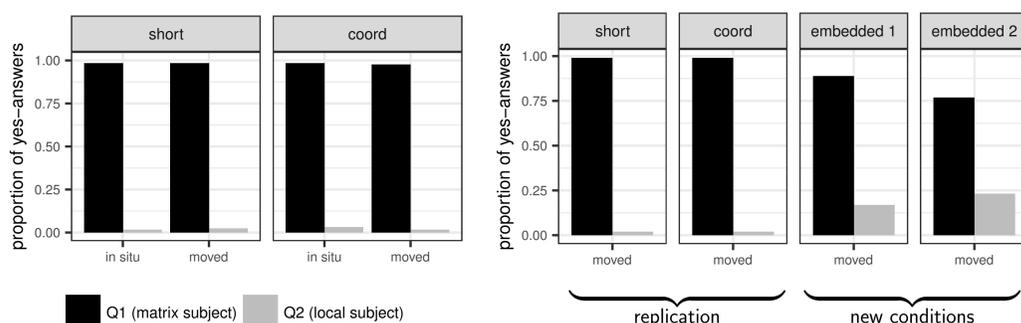
- (1) APs (predicates)
  - a. Mary tells (us) that she is very proud of Anna (and the teams). in situ
  - b. Mary tells (us) [ how proud of Anna (and the teams) ] she is \_\_. moved  
Principle C predicts: coreference between *she* and *Anna* impossible.
- (2) DPs – R-expression inside argument
  - a. Mary tells (us) that she saw a statue of Anna. in situ
  - b. Mary tells (us) [ which statue of Anna ] she saw \_\_. moved  
Principle C predicts: coreference between *she* and *Anna* impossible

### Additional factors:

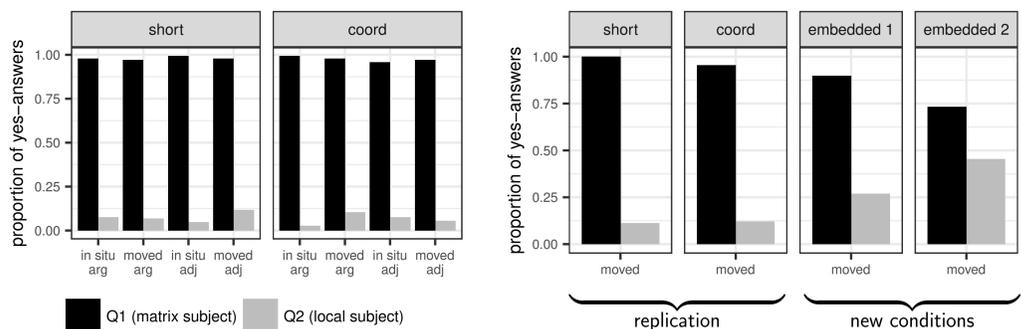
- (3) DPs – R-expression inside adjunct
  - a. Mary tells (us) that she saw a statue on the desk of Anna. in situ
  - b. Mary tells (us) [ which statue on the desk of Anna ] she saw \_\_. moved  
Late merger predicts: coreference between *she* and *Anna* is possible
- (4) structural distance – R-expression and pronoun clause-mates?
  - a. Mary tells (us) [ which statue of Anna ] she thinks that you saw \_\_. emb 1
  - b. Mary tells (us) [ which statue of Anna ] you think that she saw \_\_. emb 2  
Ellipsis predicts: R-expression in antecedent can correspond to pronoun in ellipsis site  
Vehicle Change approach (Safir 1999) predicts: Principle C effect vanishes with nouns & adjectives; 'embedding 2': Principle B effect arises with adjectives (not with nouns)
- (5) wh-movement vs. relativization:
  - a. Peter mentioned [ which statue of Robert ] he saw \_\_. wh-movement
  - b. Peter mentioned [ every statue of Robert ] which he saw \_\_. relativization

## Results and Discussion

### Wh-movement – adjectival predicates:



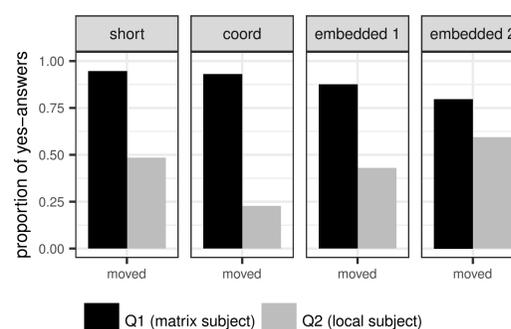
### Wh-movement – nouns:



### Main findings on wh-movement:

- ▶ reconstruction for Principle C is very robust, with both adjectival predicates and nouns
- ▶ no support for predicted argument-adjunct asymmetry.
- argues against a late-merger approach to adjuncts
- ▶ no significant effect of linear distance
- ▶ significant effect of embedding
- pattern goes against predictions of Vehicle Change approach

### Relativization:



### Findings on relativization:

- ▶ reconstruction less robust than in wh-movement

## Conclusions and outlook

### Summary: robust reconstruction for Principle C in wh-movement, less robust in relativization; no pred-arg-asymmetry; no arg-adj-asymmetry

- ▶ movement-type-asymmetry: argues for a full representation of the antecedent of wh-movement in the bottom position and for the Matching analysis (with optional deletion/vehicle change of the lower copy) of RCs → no full instance of the external head inside the RC
- ▶ no arg-adj-asymmetry: argues against late merger approaches to adjunction; no pred-arg-asymmetry: argues against a silent PRO/a trace of the subject in predicates
- ▶ embedding effect: suggests that non-syntactic factors play an important role as well
- ▶ more robust Condition C reconstruction than in recent experimental work on English → due to different methods, or differences between the languages?
- ▶ the results for long-distance relativization (marked strategy) are similar to those for prolepsis (unmarked strategy, part of the fillers) (Salzmann 2006, 2017)