

# Both thematic role and next-mention biases affect pronoun use in Dutch

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## Research question

**Do speakers take listeners' expectations into account when choosing to use a pronoun or not?**

- (1) *The mother gave a scolding to her daughter. Next ...*
- (2) *The daughter got a scolding from her mother. Next ...*

**Aim I:** to disentangle predictability effects on pronoun use from thematic-role effects (cf. Rosa & Arnold, 2017)

**Aim II:** to determine the role of these factors in the choice between demonstrative (e.g. *die*), full (e.g. *zij*) and reduced (e.g. *ze*) pronouns in Dutch

## Next-mention bias manipulations

Source-Goal (e.g. 'give') and Agent-Patient (e.g. 'call') verbs with an NP2 next-mention bias for an occasion/result coherence relation (Commandeur, 2010; Kehler & Rohde; Koornneef & Sanders, 2013)

### 1. Vary social status of the referents (cf. Garvey et al., 1974)

High-Low (HL), e.g. 'boss-assistant'  
Low-High (LH), e.g. 'assistant-boss'

#### Example

- HL *De bazin bekritiseerde de assistente. Vervolgens ...*  
 'The boss<sub>female</sub> criticized the assistant<sub>female</sub>. Next ...'  
 LH *De assistente bekritiseerde de bazin. Vervolgens ...*  
 'The assistant<sub>female</sub> criticized the boss<sub>female</sub>. Next ...'

**Expected bias**  
NP2 (default)

NP1

### 2. Vary adverb (cf. Cheng, 2016)

Neutral (NE), e.g. 'right away'  
Unintentionality (UN), e.g. 'by accident'  
First (FI)

#### Example

- NE *De boerin belde meteen de vroedvrouw. Vervolgens ...*  
 'The farmer's wife called the midwife right away. Next ...'  
 UN *De boerin belde per ongeluk de vroedvrouw. Vervolgens ...*  
 'The farmer's wife called the midwife by accident. Next ...'  
 FI *De boerin belde eerst de vroedvrouw. Vervolgens ...*  
 'The farmer's wife first called the midwife. Next ...'

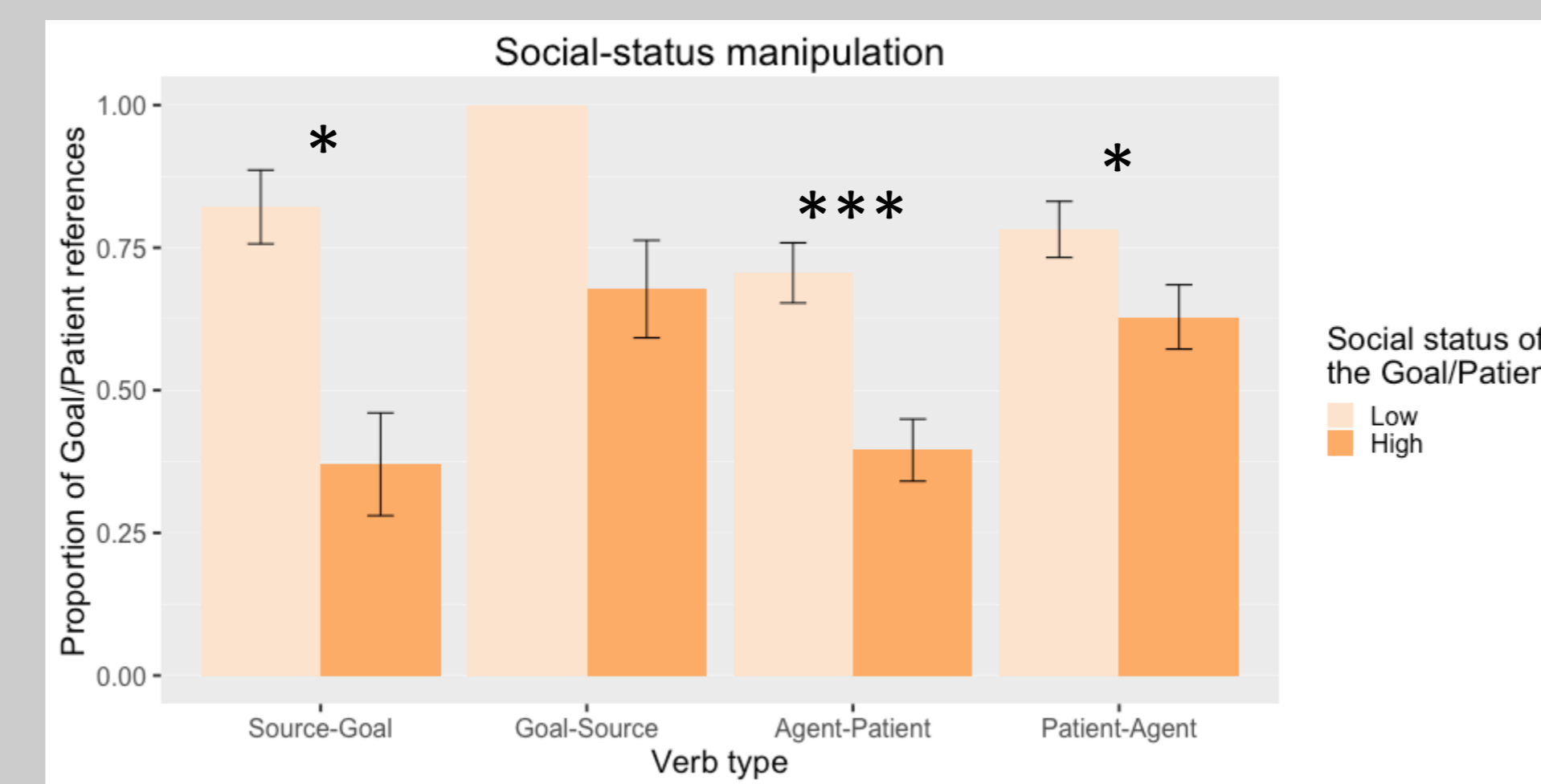
**Expected bias**  
NP2 (default)

NP1~NP2

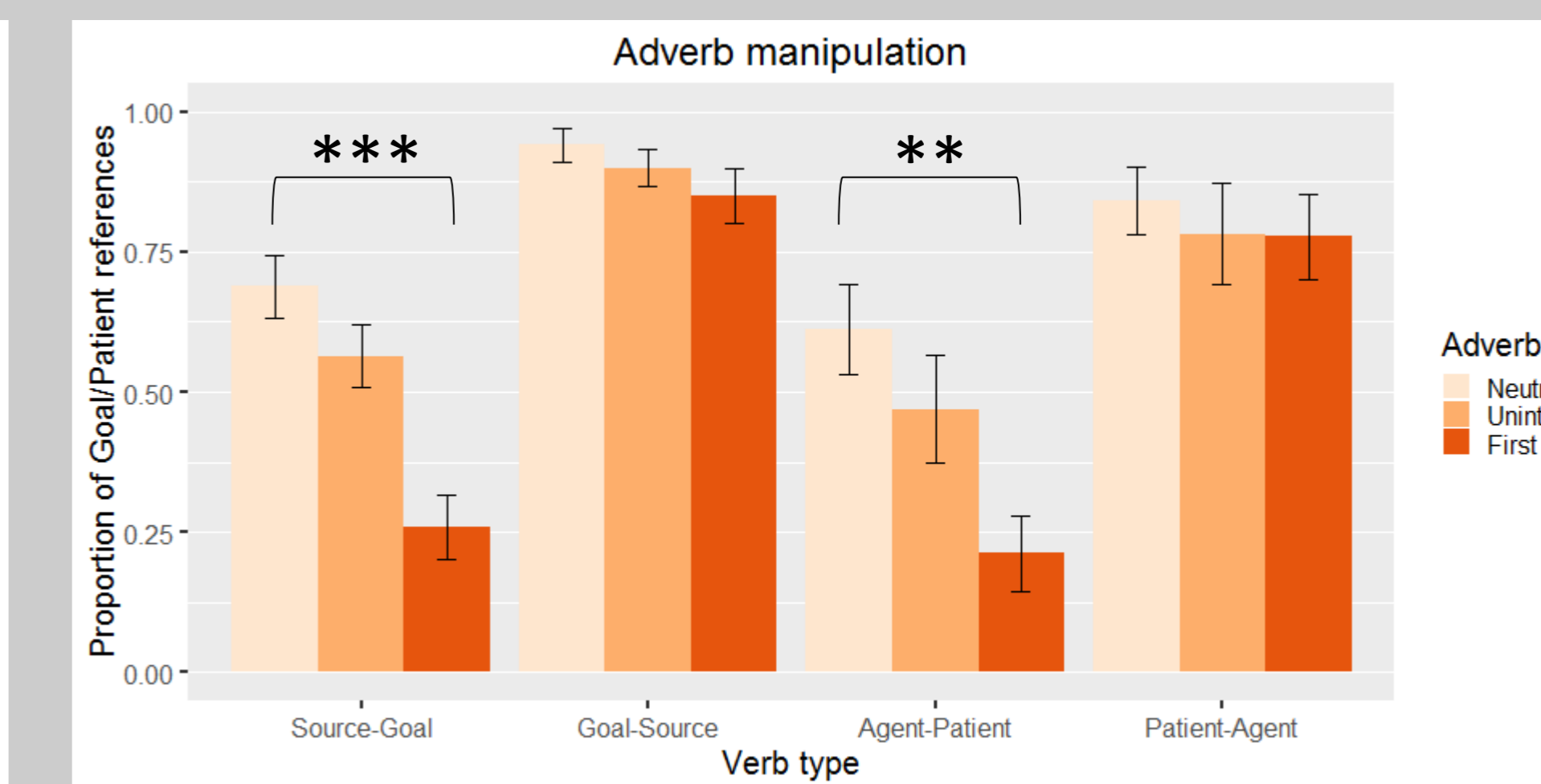
NP1

## Experiment 1: free written continuation task

Do the manipulations affect the next-mention bias? **Yes**



Main effect of social status

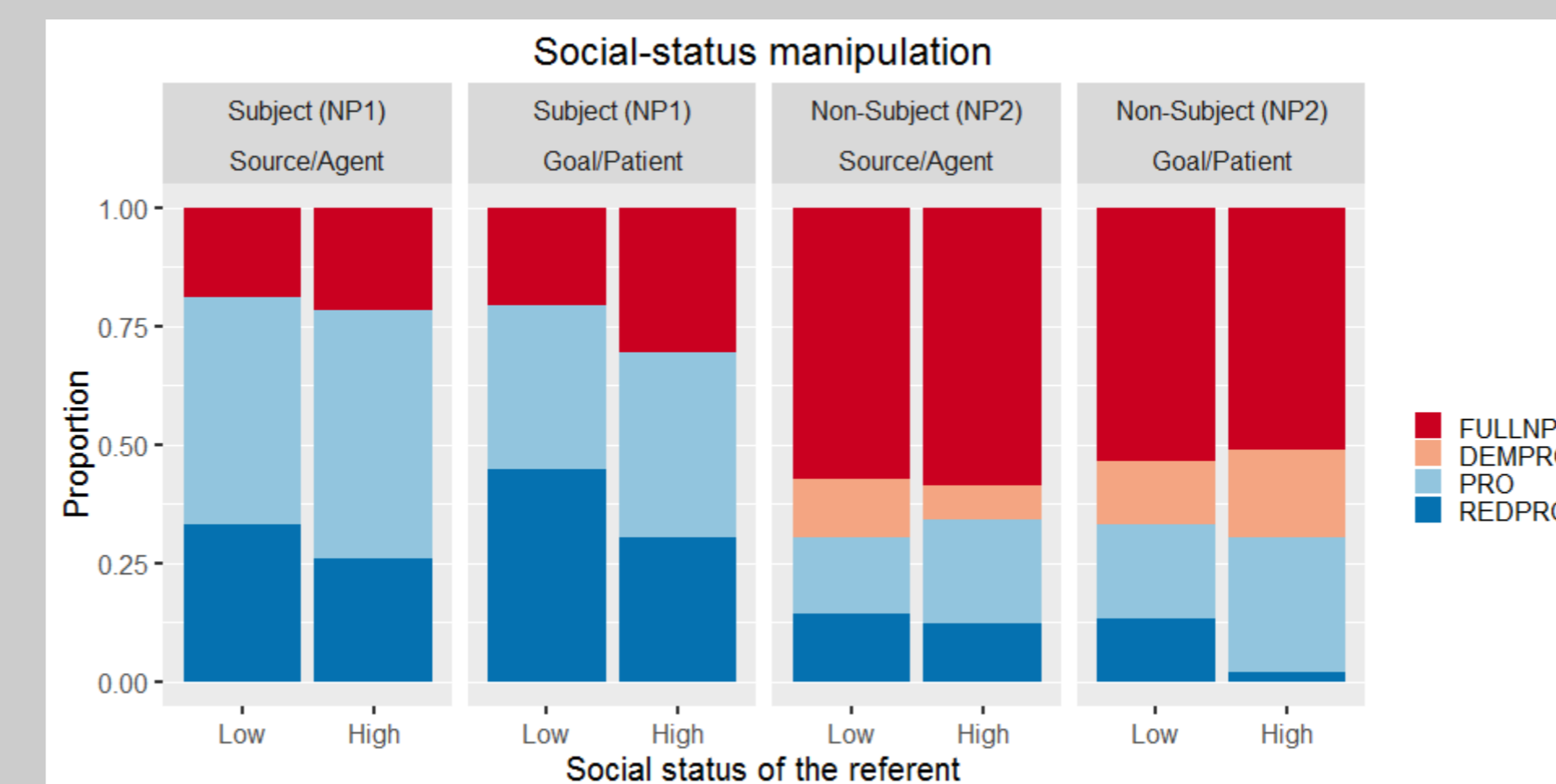


NEvsFI x Th-role order interaction

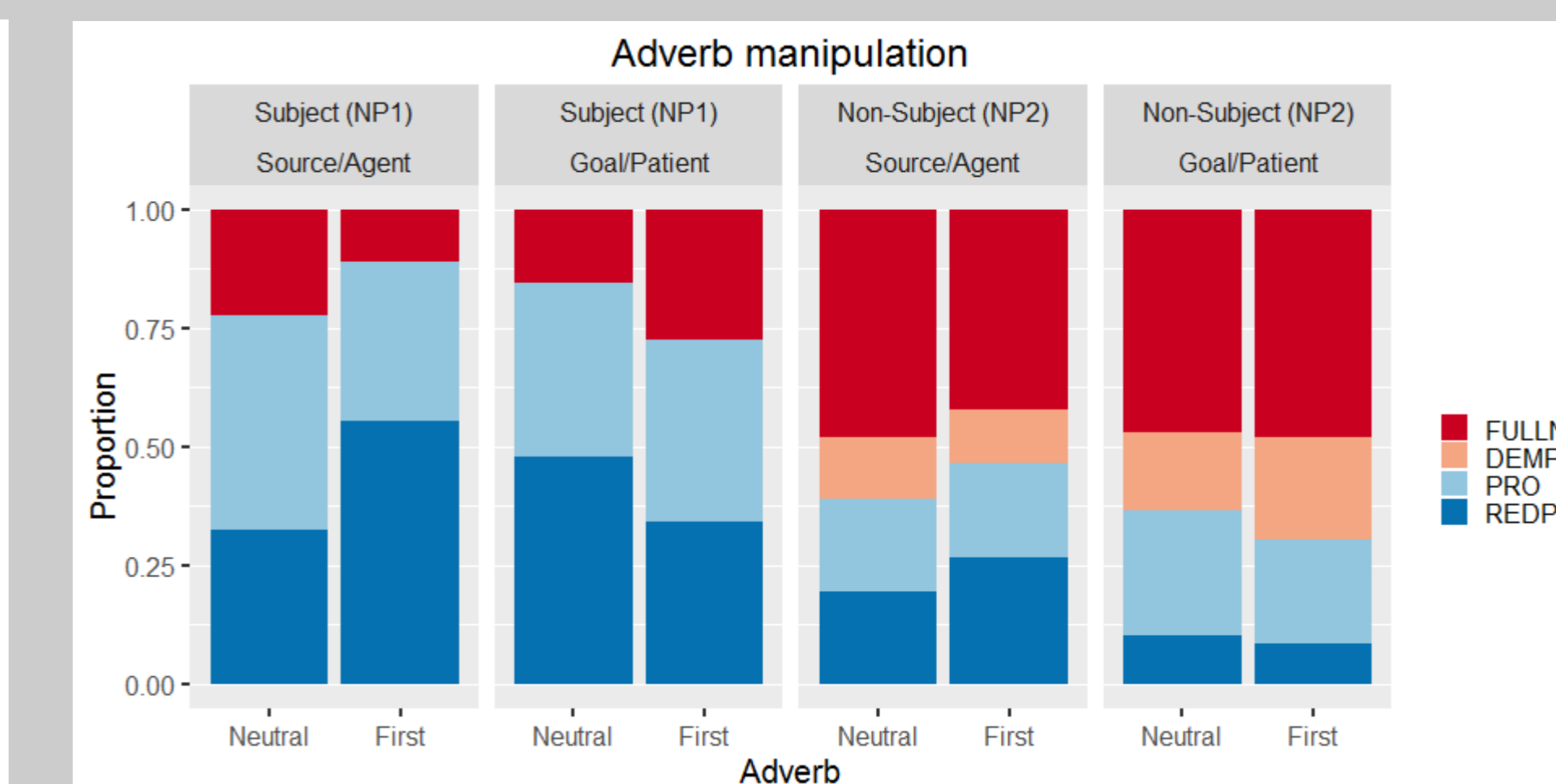
- 48 participants, 30 items (15 Source-Goal; 15 Agent-Patient)
- Include Goal-Source and (passive) Patient-Agent versions to control for grammatical function
- Logit Mixed Effects analysis
- 30.6% of data excluded, mainly due to not referring to either NP1 or NP2

## Experiment 2: refer to the underlined NP

Does the next-mention bias affect pronoun use? **Yes**



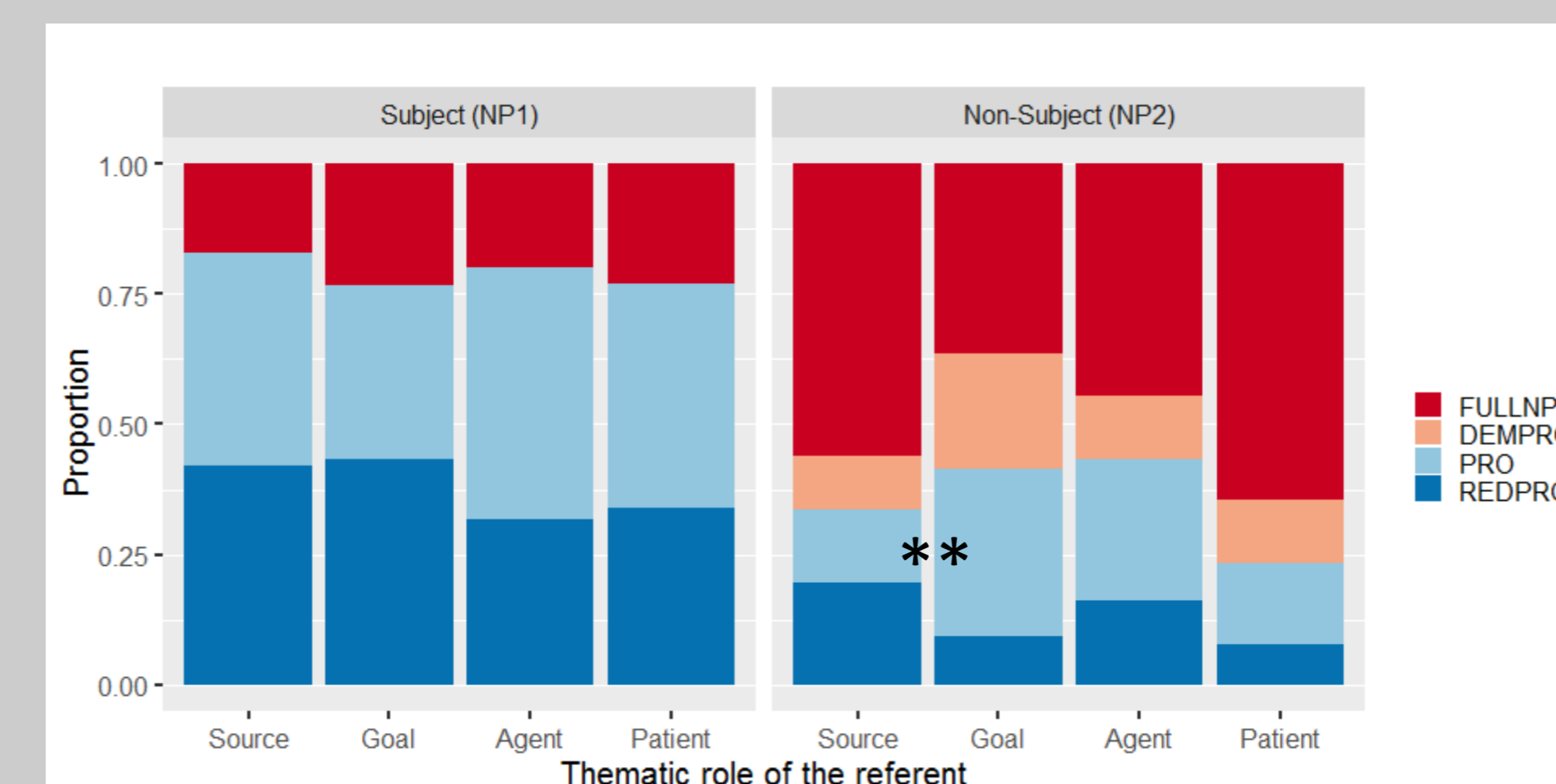
Main effect of social status on reduced pronouns



Adverb x Th-role interaction on personal pronouns

- 52 participants, 16 items selected from Exp. 1 (9 Source-Goal; 7 Agent-Patient)
- Unintentionality adverbs removed
- Logit Mixed Effects analysis
- 9.6% of data excluded

Can this explain the thematic-role effect? **No**



Th-role x Gram.f. interaction on reduced pronouns

## Discussion and Conclusion

- Next-mention bias affects pronoun use in Dutch: more personal pronouns for expected referents (adverb manipulation).
- Also more reduced vs. full pronouns for expected referents (social status manipulation).
- By contrast, thematic role seems to influence mainly 'strong' pronoun use: more demonstratives + full pronouns for Goal than Source referents.

**Thus, both thematic role and next-mention biases affect pronoun use in Dutch, but in different ways.**