

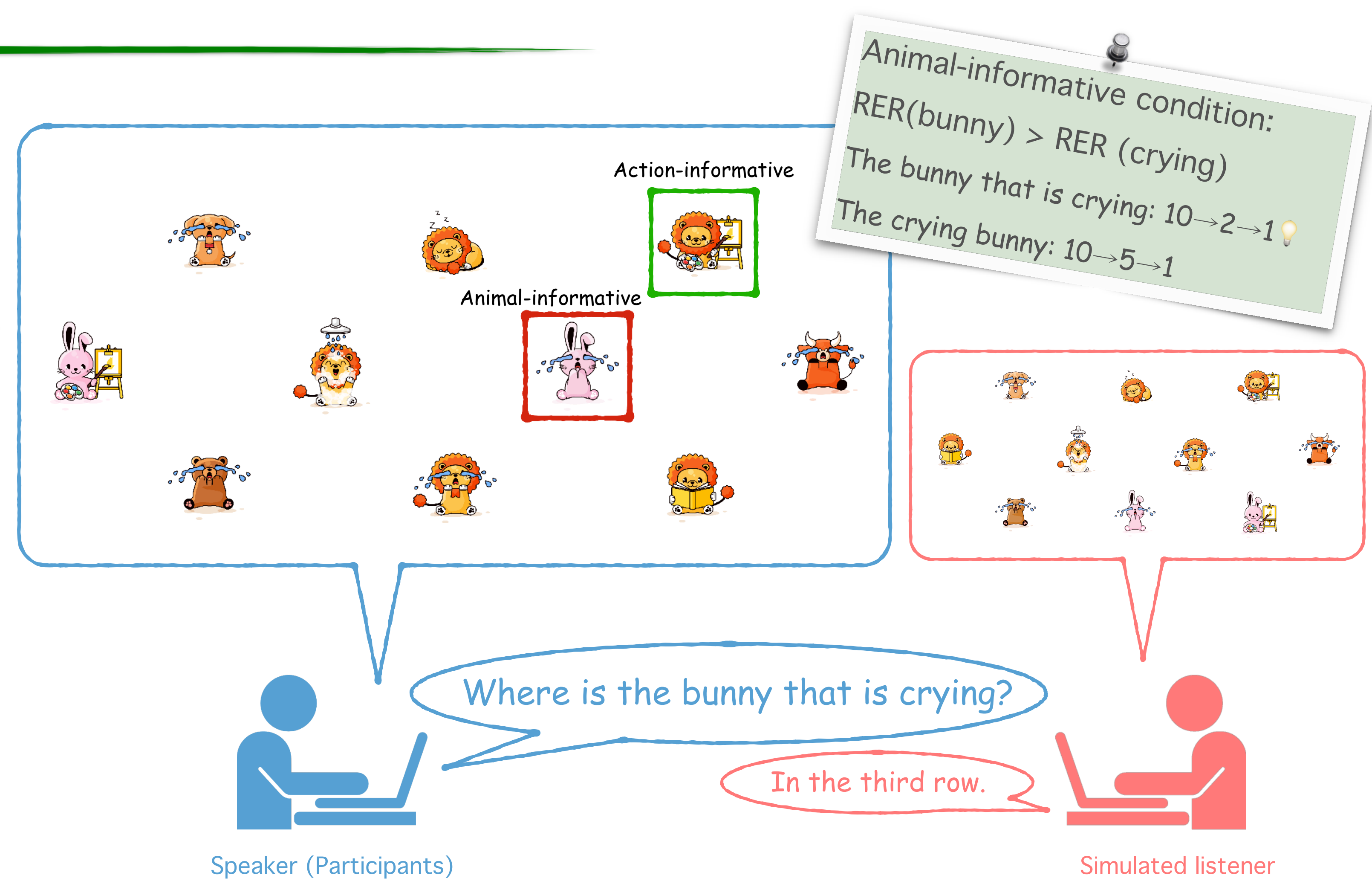
INTRODUCTION

What influences how we order information in our utterances?

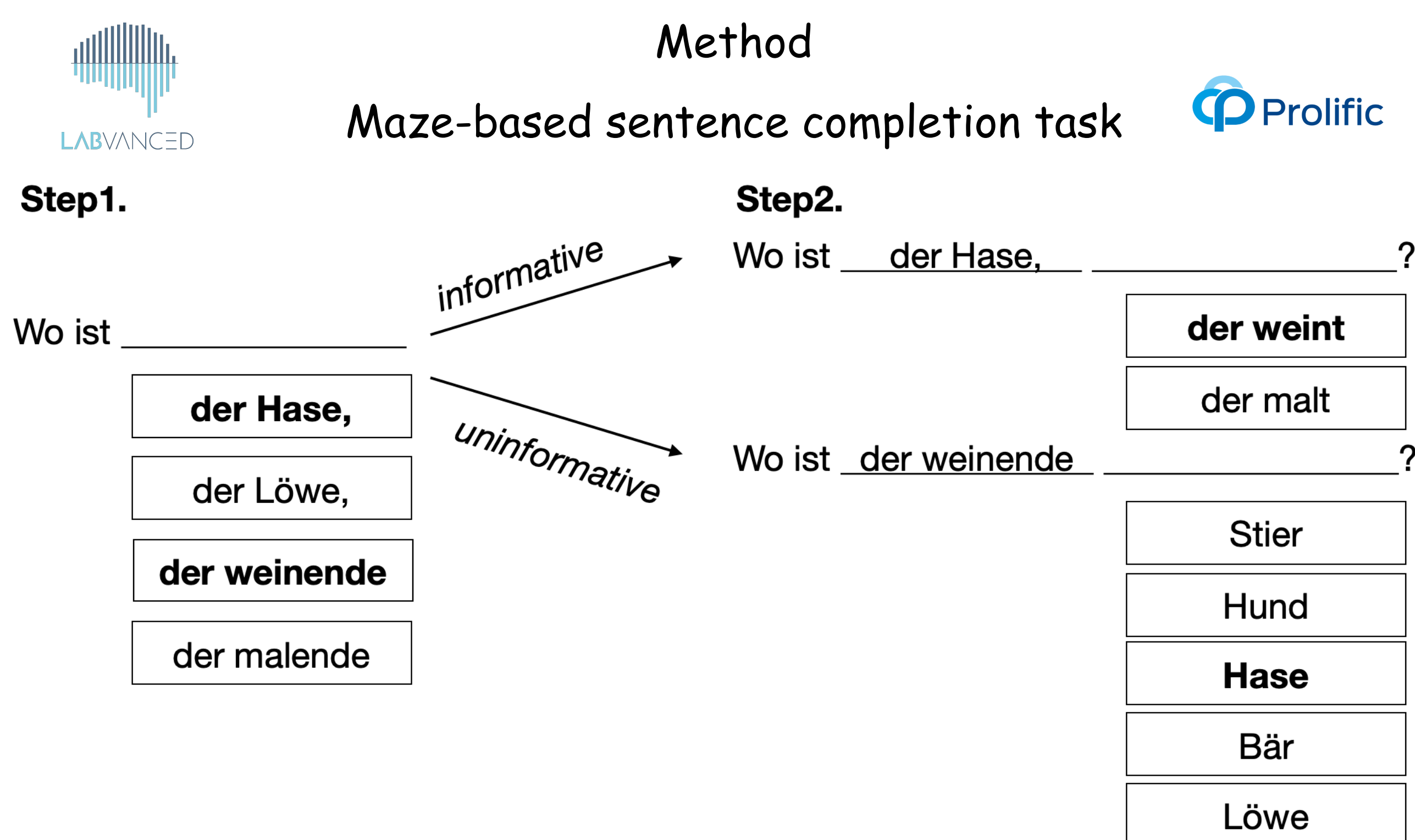
- ◆ Structural preferences [1]
- ◆ Referential informativity ~ Referential Entropy Reduction (RER)
 - Level of uncertainty reduced in identifying the intended referent [2]
 - Higher RER → smaller referential scope → more informative
- ◆ Other factors, e.g., visual salience, priming, etc. [3,4]

Does informativity modulate linearization preferences?

1. Does RER affect linearization at all?
2. If so, which ordering is preferred?
 - Maximal informativity hypothesis: high informative first [5,6,7]



EXPERIMENT 1 & 2



Online communication game

- ◆ Stimuli: animals performing actions (flexible ordering in German)
- ◆ Conditions: Animal-informative vs. Action-informative

Experiment 1: Speaker maze task

- ◆ 80 subjects, 24 critical trials + 24 fillers

Experiment 2: Listener task + Speaker maze task

- ◆ Perspective changing → more informative? [8]
- ◆ 160 subjects, 12 critical speaker trials + 12 fillers

RESULT

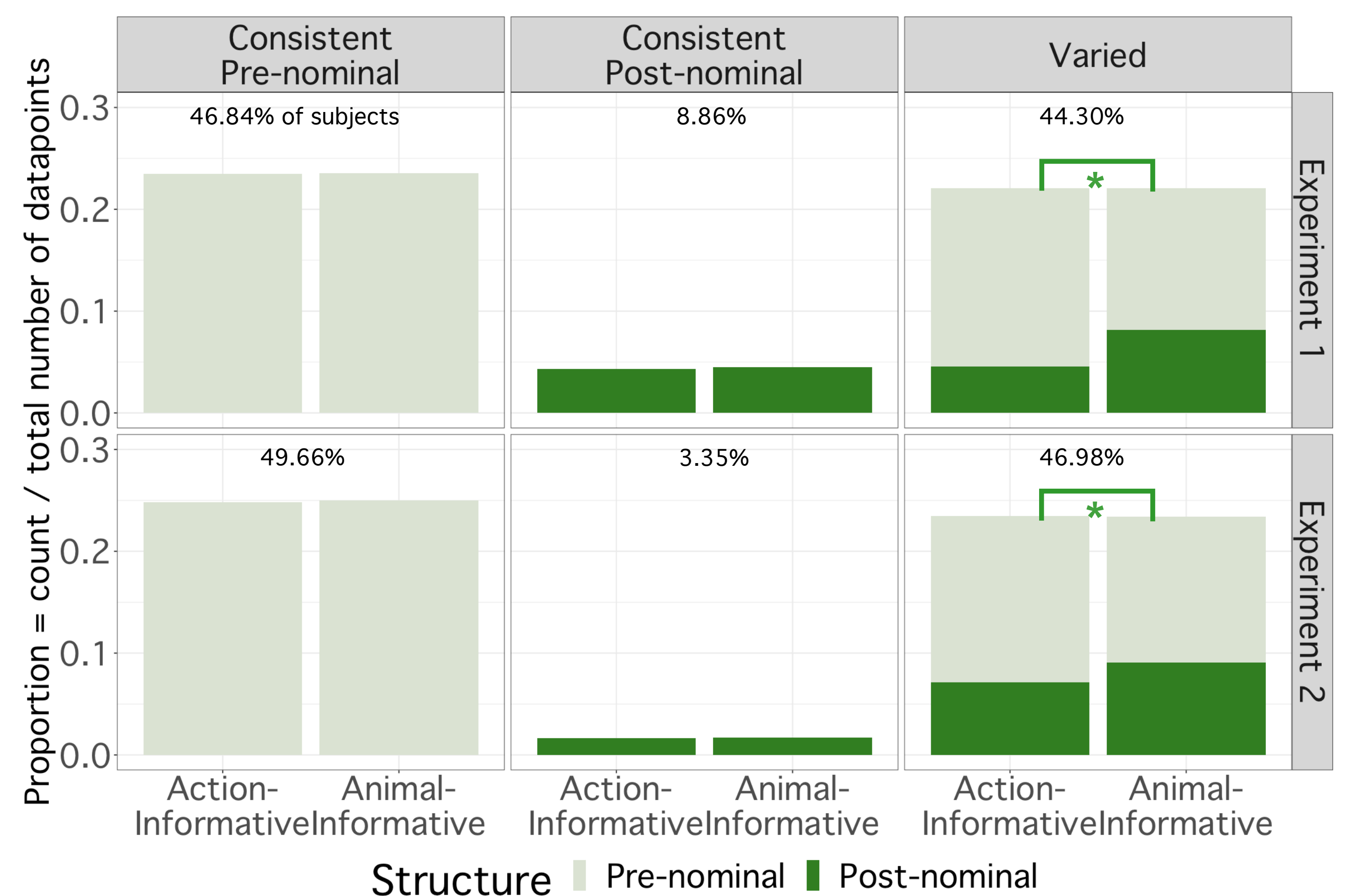
Three groups of subjects

- ◆ Consistent Pre-nominal
- ◆ Consistent Post-nominal
- ◆ Consistent Varied

Generalised linear mixed model:

Structure ~ Condition + (1+x | Subject) + (1+x | Item)

The listener task in Experiment2 did not enhance informative choices.



WHAT'S NEXT?

Ongoing studies:

- ◆ Participants and the simulated partner take turns
- ◆ In-lab experiments with a confederate
- ◆ Other syntactic structures:
 - e.g., coordination, DO/PO alternation

REFERENCES

1. Pechmann (1989) *Linguistics*
2. Tourtouri et al. (2019) *J Cult Cogn Sci*
3. Tarenskeen, Broersma & Geurts (2015) *Front Psychol*
4. Goudbeek & Krahmer (2012) *Top Cogn Sci*
5. Fukumura (2018) *J Mem Lang*
6. Rubio-Fernández (2016) *Front Psychol*
7. Frank & Goodman (2012) *Science*
8. Sikos et al. (2021) *Proc Annu Conf Cogn Sci Soc*

CONCLUSION

Does informativity modulate linearization preferences in reference production?

- ◆ No, many participants (~55%) used a fixed syntactic structure.
- ◆ Yes, the remaining participants (~45%) produced varied syntactic structures, reflecting a maximal informativity strategy: the more informative property is more likely to be encoded first.