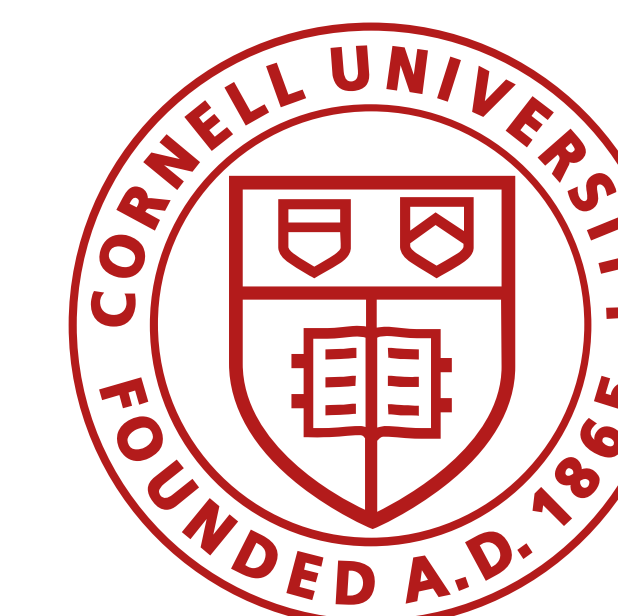


# Salient Phonological Information Modulates the Effect of Semantic Priming

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## INTRODUCTION

- Semantic priming can strongly influence expectations [1].
- Previous research is inconclusive regarding how phonological structure informs expectations of lexical items [2, 3, 4, 5, 6].
- We compare participant preferences and response times in phonological contexts (Exp 1) and their de-phonologized variants (Exp 2) to see the effects of phonological information in a semantic-priming paradigm.
- We focus on differences between intended targets (IT) and semantically-primed targets (AT).

## RESEARCH QUESTION

How does the presence of salient phonological information affect lexical expectations?

## REFERENCES

- [1] McNamara (2005).
- [2] Nieuwland et al. (2018). *ELife*.
- [3] Nieuwland (2019). *Neuroscience & Biobehavioral Reviews*.
- [4] Read et al. (2014). *Frontiers in psychology*.
- [5] Pickering & Garrod (2007). *Trends in cognitive science*.
- [6] Lupker & Williams (1989). *Journal of Experimental Psychology*.

## EXPERIMENT 1

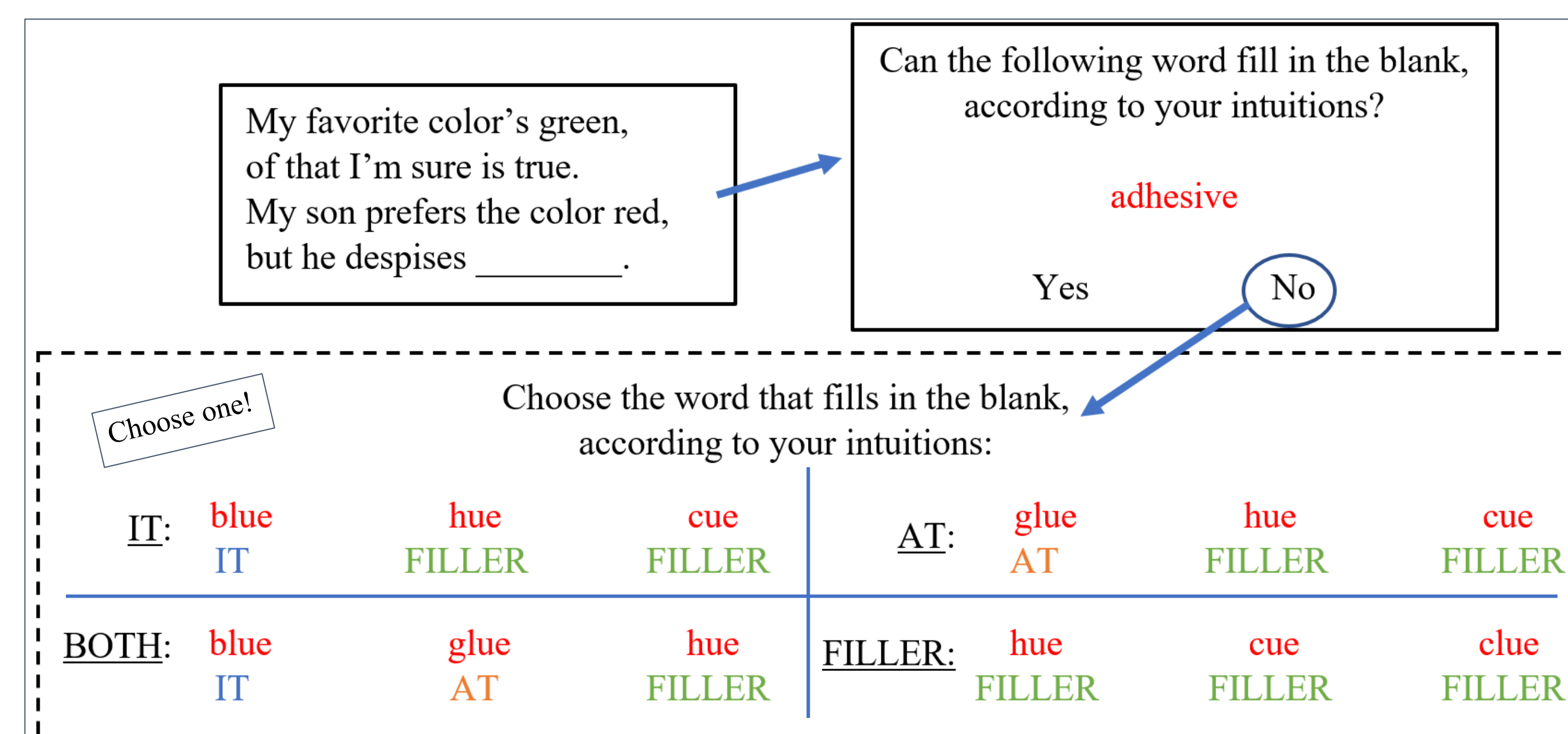


Figure 1a: Sample stimuli for Experiment 1 with all possible conditions shown; only one set of three words appears in actual experiment. Section within dashed lines appears if participant selects "No".

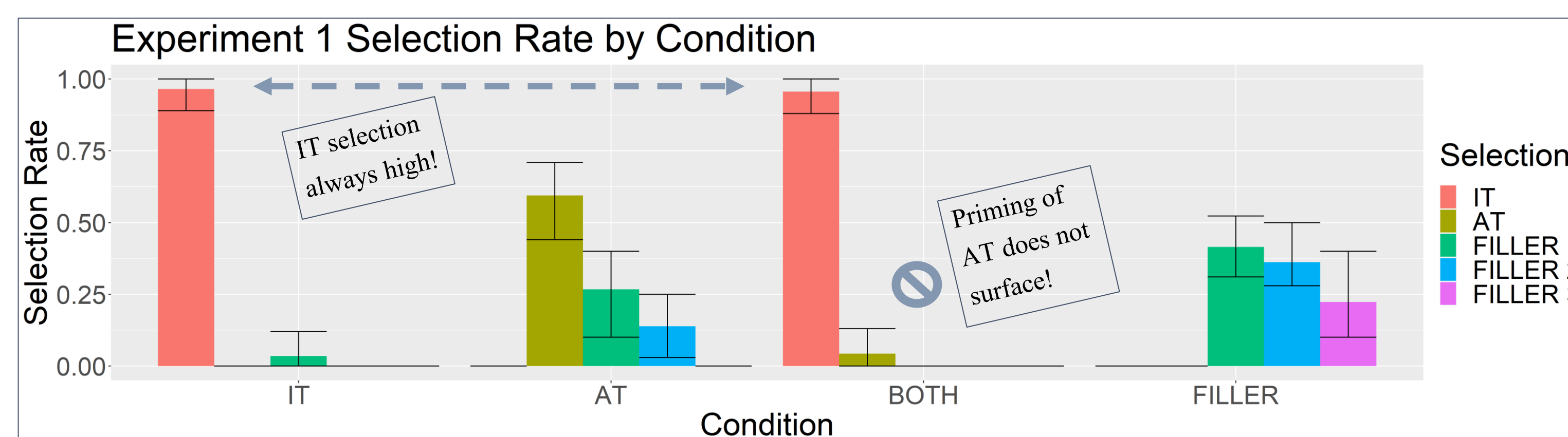


Figure 1b: Selection rates for targets by condition.

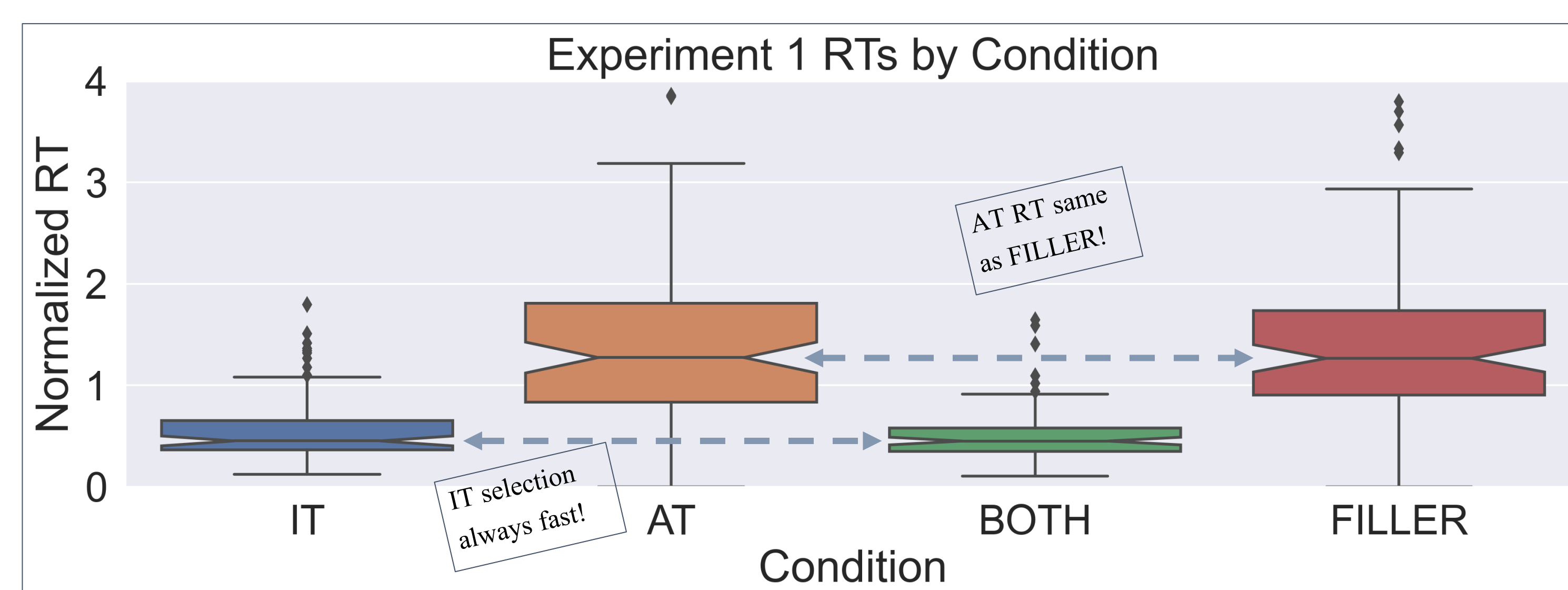


Figure 1c: Selection RTs for targets by condition. Notches indicate 95% confidence intervals.

## EXPERIMENT 2

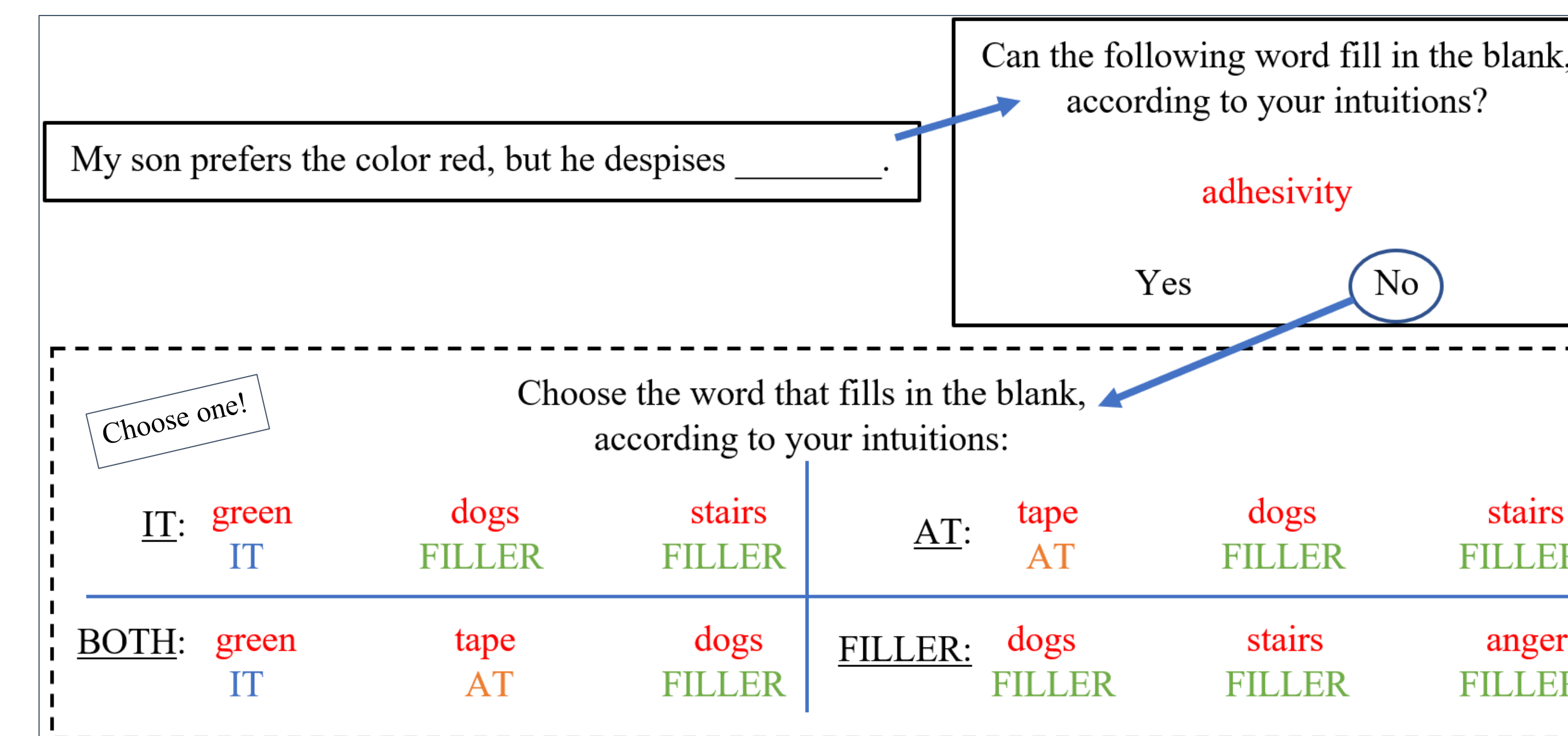


Figure 2a: Sample stimuli for Experiment 2 with all possible conditions shown; only one set of three words appears in actual experiment. Section within dashed lines appears if participant selects "No".

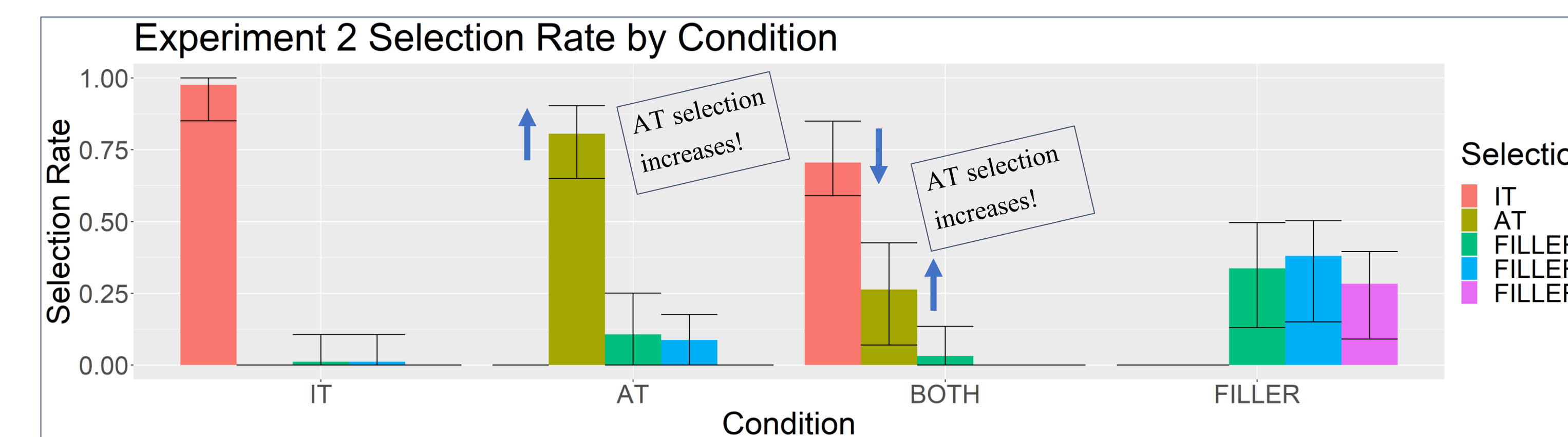


Figure 2b: Selection rates for targets by condition. Differences with Exp 1 indicated by arrows.

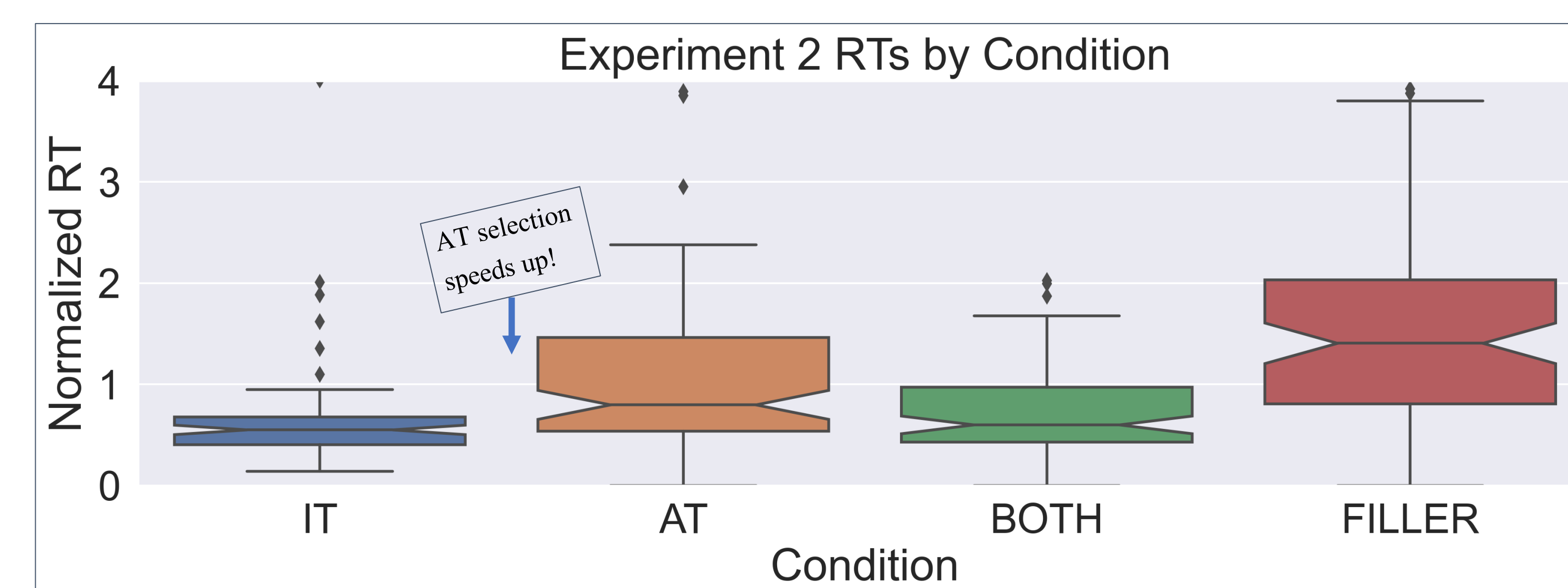


Figure 2c: Selection RTs for targets by condition. Notches indicate 95% confidence intervals.

## EXP 1 DISCUSSION

- 1) IT selected whenever it's present; some priming in AT condition.
- 2) IT targets selected the fastest; AT targets selected as slow as fillers.

## EXP 2 DISCUSSION

- 1) IT is selected less frequently; priming surfaces in AT and BOTH conditions.
- 2) IT targets selected the fastest; AT targets selected faster than random fillers.

## CONCLUSION

Salient phonological information can override semantic priming effects.