



Context rather than semantic priming drives the early availability of focus alternatives

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I. Introduction

To interpret focus, the discourse relevant alternative set must be inferred [1]

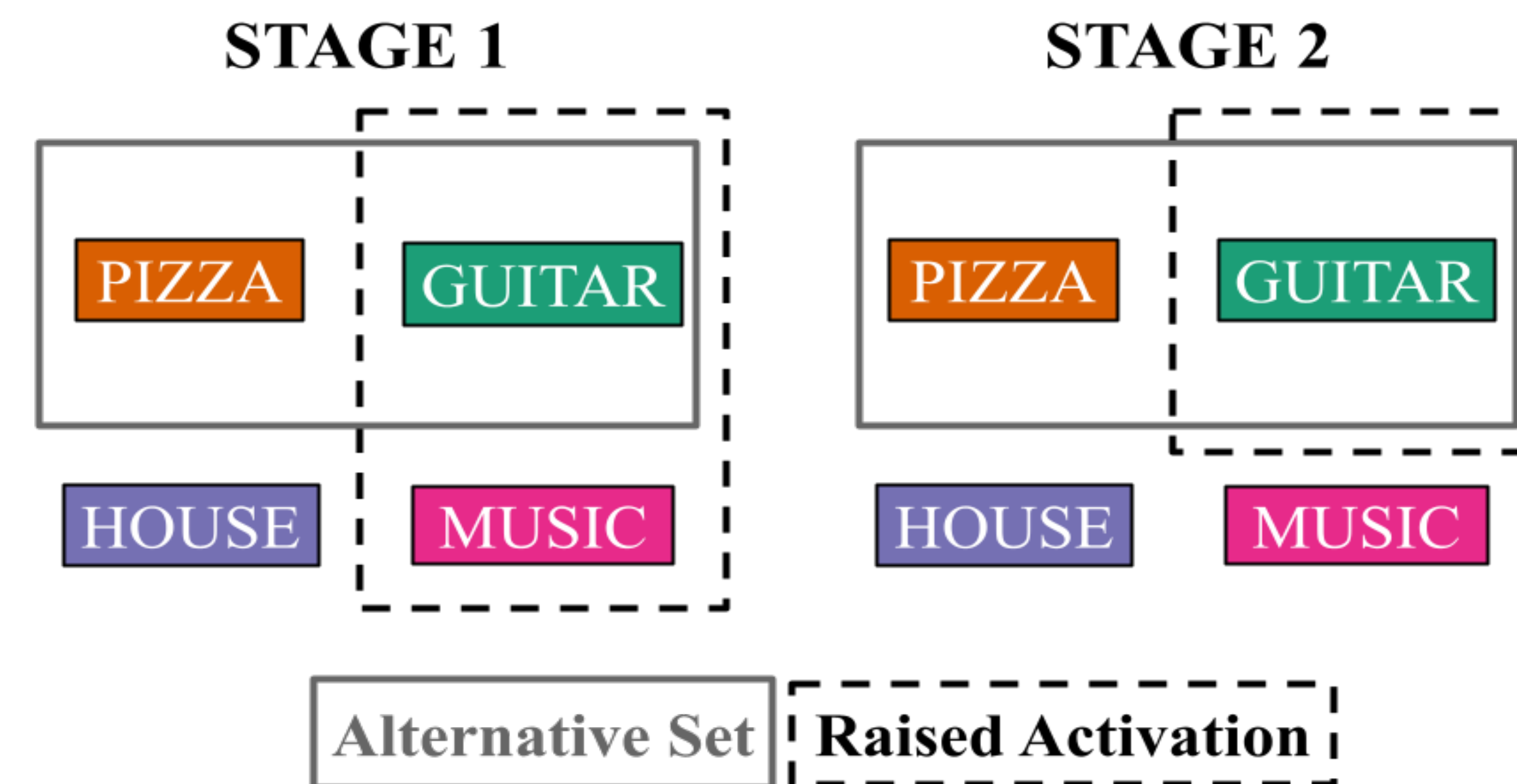
(1) [Jonah only brought the [violin]_F] ALTS = {guitar, trumpet, ...}

Two-Stage Model [2,3]

Discourse-*Insensitive* Semantic Priming ⇒ Discourse-*Sensitive* Alternative Selection

(2) I brought the guitar and the pizza
Jonah only brought the [violin]_F
ALTS = {guitar, pizza, ...}

Condition	Target
Associate Alternative	GUITAR
Non-Associate Alternative	PIZZA
Associate Non-Alternative	MUSIC
Control	HOUSE



Early availability of Non-Associate Alternative

↪ Incompatible with Two-Stage Model

↪ Observed in two prior studies (only/also) [4,5]

Immediate-Access Model [4,5]

Discourse-*Sensitive* Construction of Alternative Set

Two-Stage Model	Immediate-Access Model
PRIMING-DEPENDENT	PRIMING-INDEPENDENT
<i>Semantic priming from focus feeds selection</i>	<i>Semantic priming has no role in construction</i>
LATE-GENERATION	EARLY-GENERATION
<i>Time required to represent relevant alternatives</i>	<i>Relevant alternatives represented immediately</i>

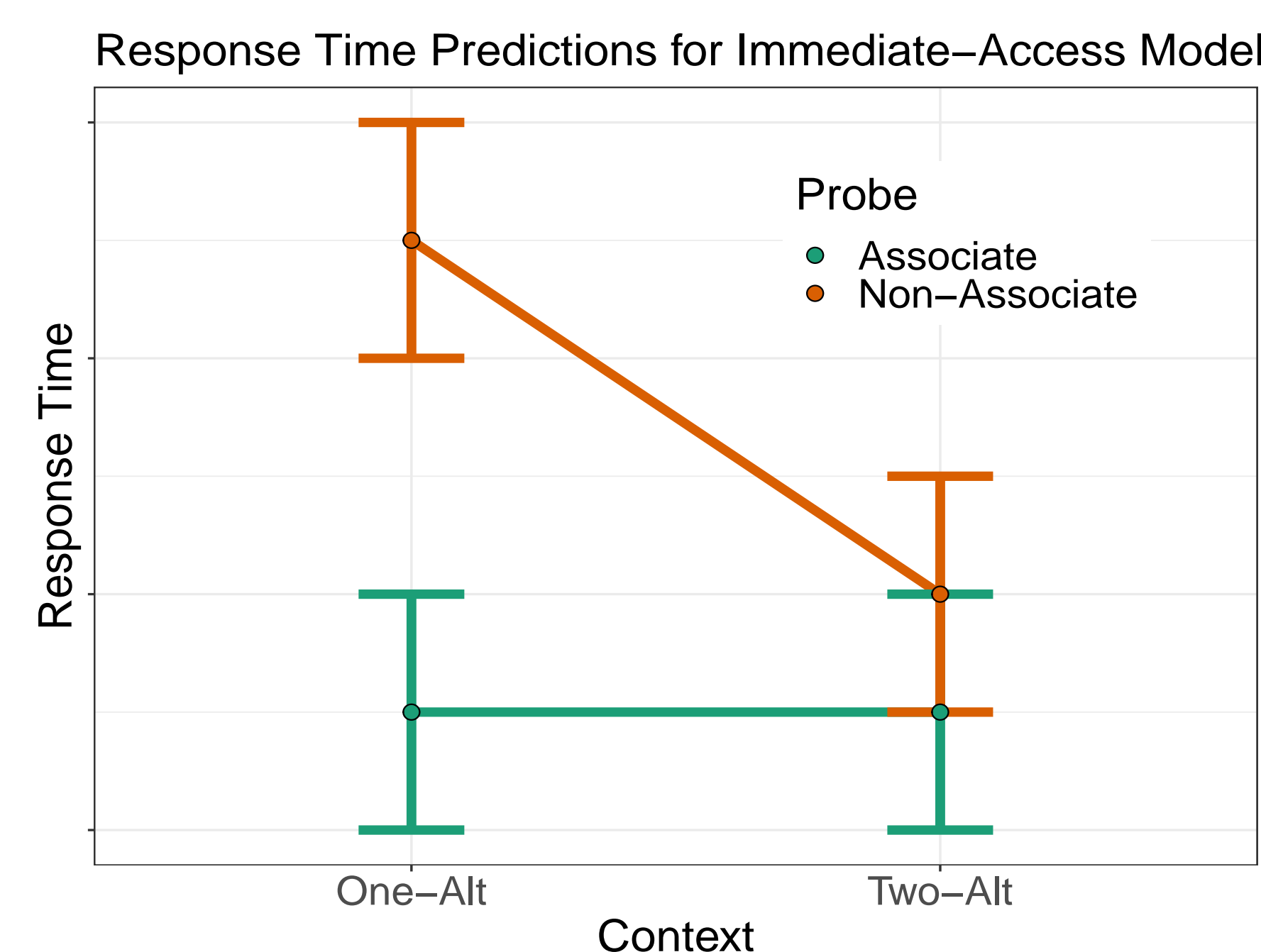
II. Research question and prediction

Question. Is context directly responsible for early availability?

How do Non-Associate alternatives become available early without semantic priming?

↪ Alternative set is constructed directly from discourse representations

Prediction. Slower response times to Non-Associate probe when it is mentioned, but not a contextually relevant alternative

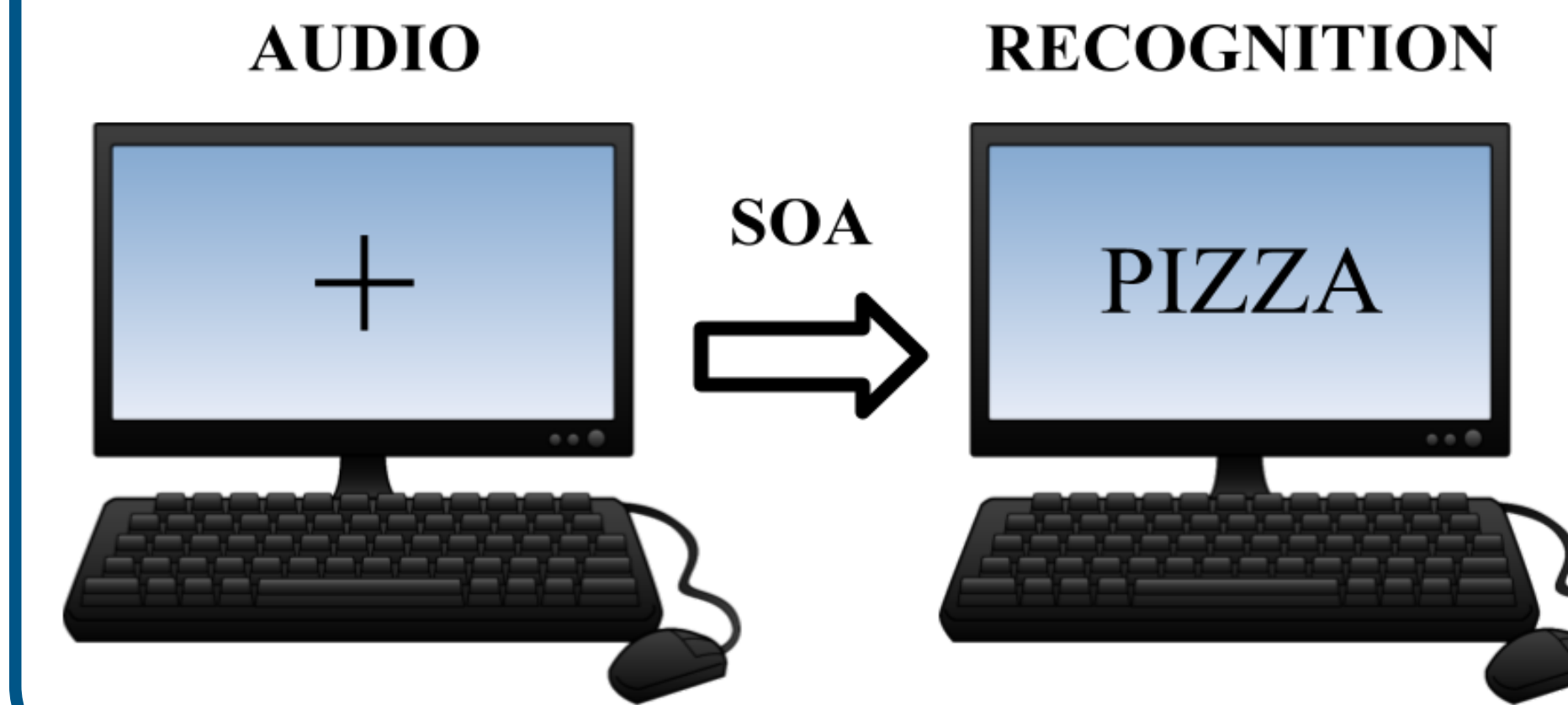


IV. Materials and method

30 sets of 2 probe words each controlled for length, freq, ON size, and LSA cosine-similarity to focus

Method.

- Cross-modal probe recognition (N=51; SOA=0ms)
- Online pilots replicated main findings
- Pilot data used as informative prior



CONTEXT (AUDIO)

One-Alt:

A. After eating leftover the **pizza**_{N-ALT}, Jonah brought the **guitar**_{ALT} to band practice at the new house

Two-Alt:

A. Jonah brought the **guitar**_{ALT} and the **pizza**_{ALT} to band practice at the new house

B. No, he only brought the [violin]_F

PROBE WORD (VISUAL)

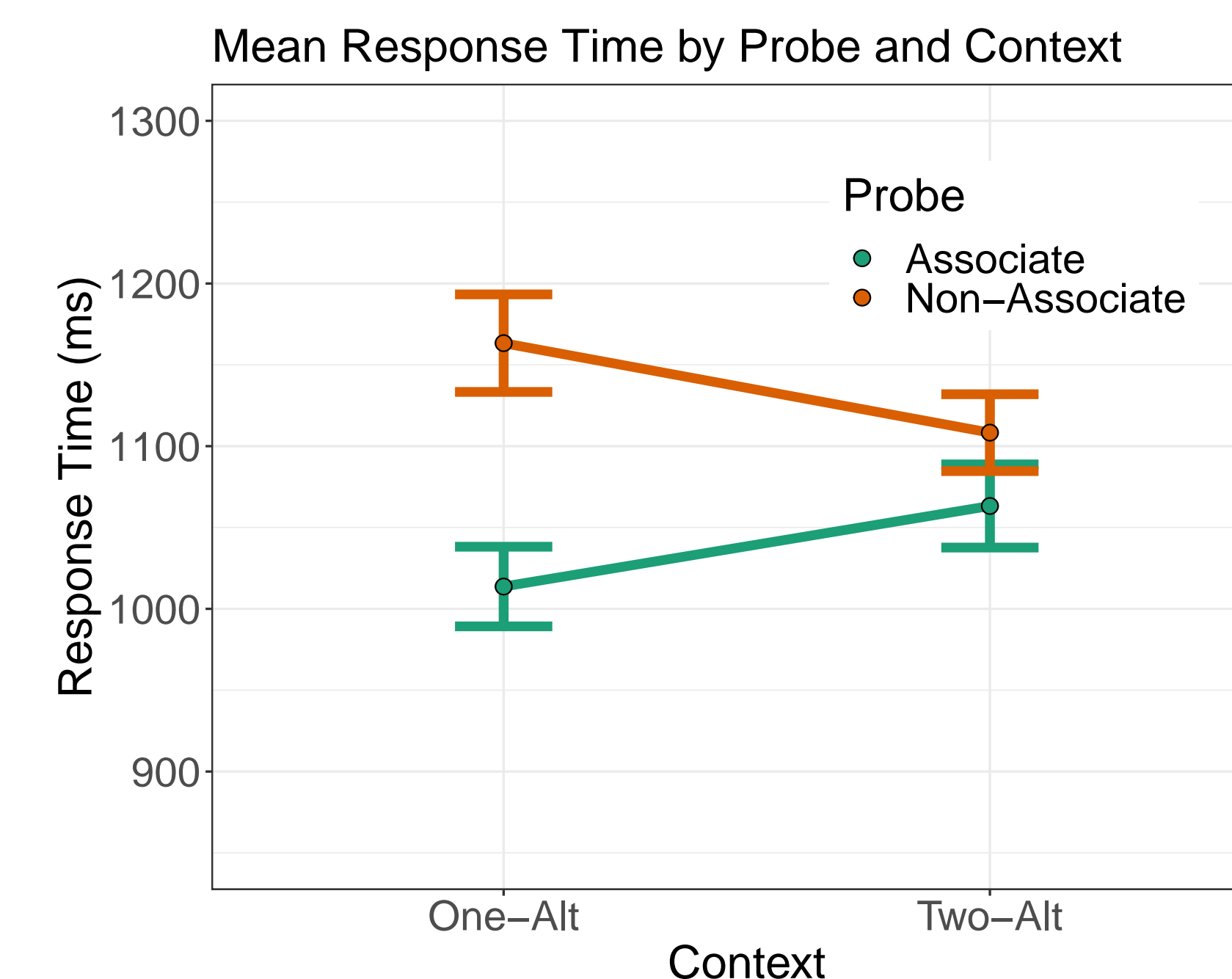
ASSOCIATE:

GUITAR

NON-ASSOCIATE:

PIZZA

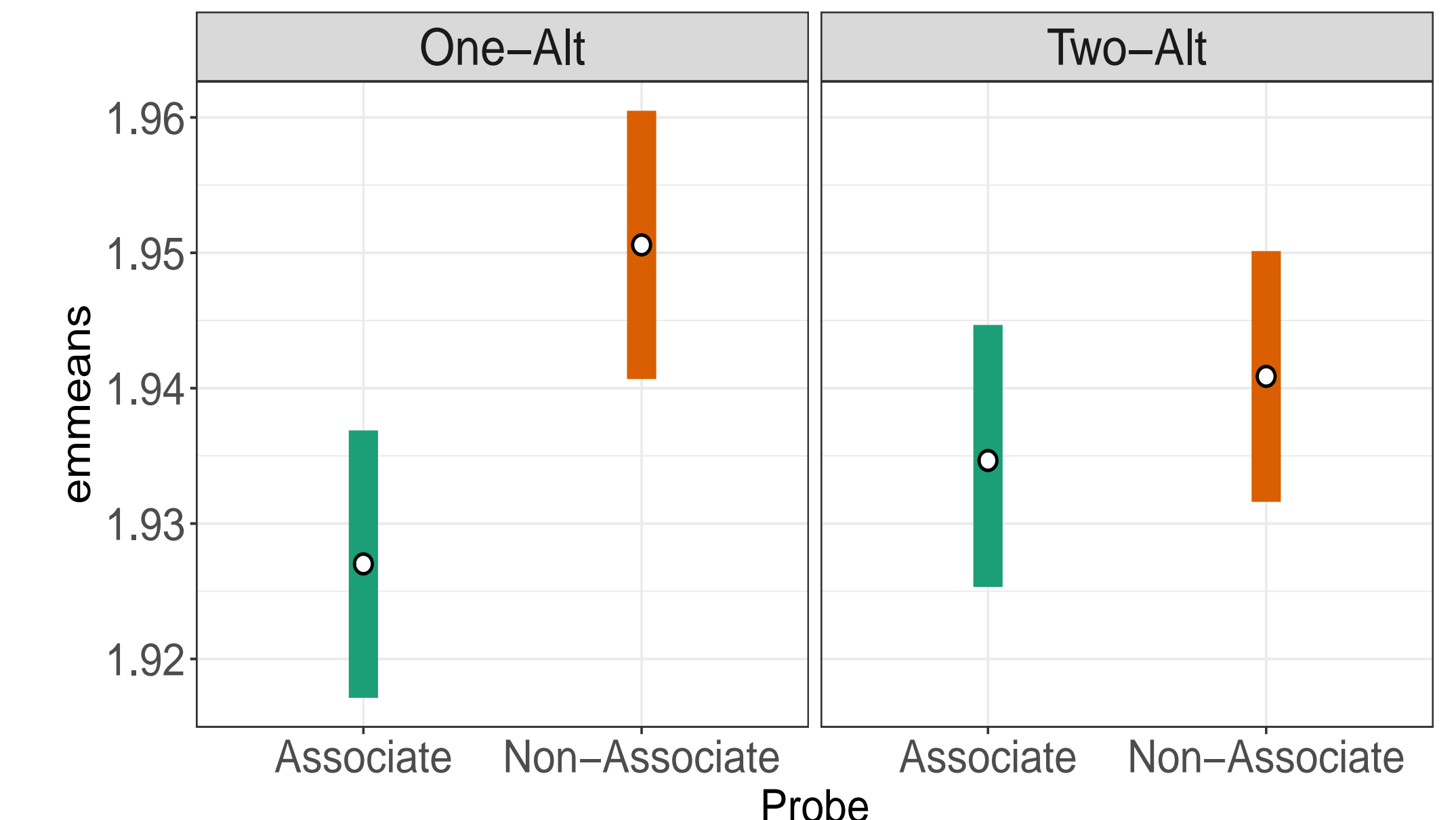
V. Results



Summary

- ✓ Advantage for Non-Associate in Two-Alt Context
- ✓ Penalty for Non-Associate in One-Alt Context
- ✓ Predicted context interaction effect

Estimated Marginal Means from Model



Model Effects (Log RTs)

Probe ($\beta=0.006$, CrI=[0.004, 0.009], BF>500)
Context ($\beta=0.001$, CrI=[-0.001, 0.002], BF=-0.671)
Interaction ($\beta=0.005$, CrI=[0.003, 0.006], BF>200)

VI. Conclusions, references, and acknowledgments

- ▶ Faster response times for alternatives than non-alternatives
- ▶ Response time advantage for Non-Associate probes is context dependent
- ▶ Early lexical activation reflects more than just semantic priming from focus
 - ▷ Reflects alternative status as mediated by context
 - ▷ Suggests that context is **directly responsible** for early availability
- ▶ Further evidence against **Priming-Dependence** and **Late-Generation**
 - ▷ Support for **Immediate-Access Model** over **Two-Stage Model**

[1] Rooth (1992). A Theory of Focus Interpretation. NLS. [2] Husband & Ferreira (2016). The role of selection in the comprehension of focus alternatives. LCN. [3] Gotzner & Spalek (2019). The life and times of focus alternatives: Tracing the activation of alternatives to a focused constituent in language comprehension. LLC. [4] Muxica & Harris (To Appear). Constructing alternatives. Palgrave. [5] Muxica & Harris (2024). Focus alternatives are available early: No influence from semantic priming or particle choice. HSP @ UMICHAA

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