

Sentential context impacts bilingual speech-in-speech recognition

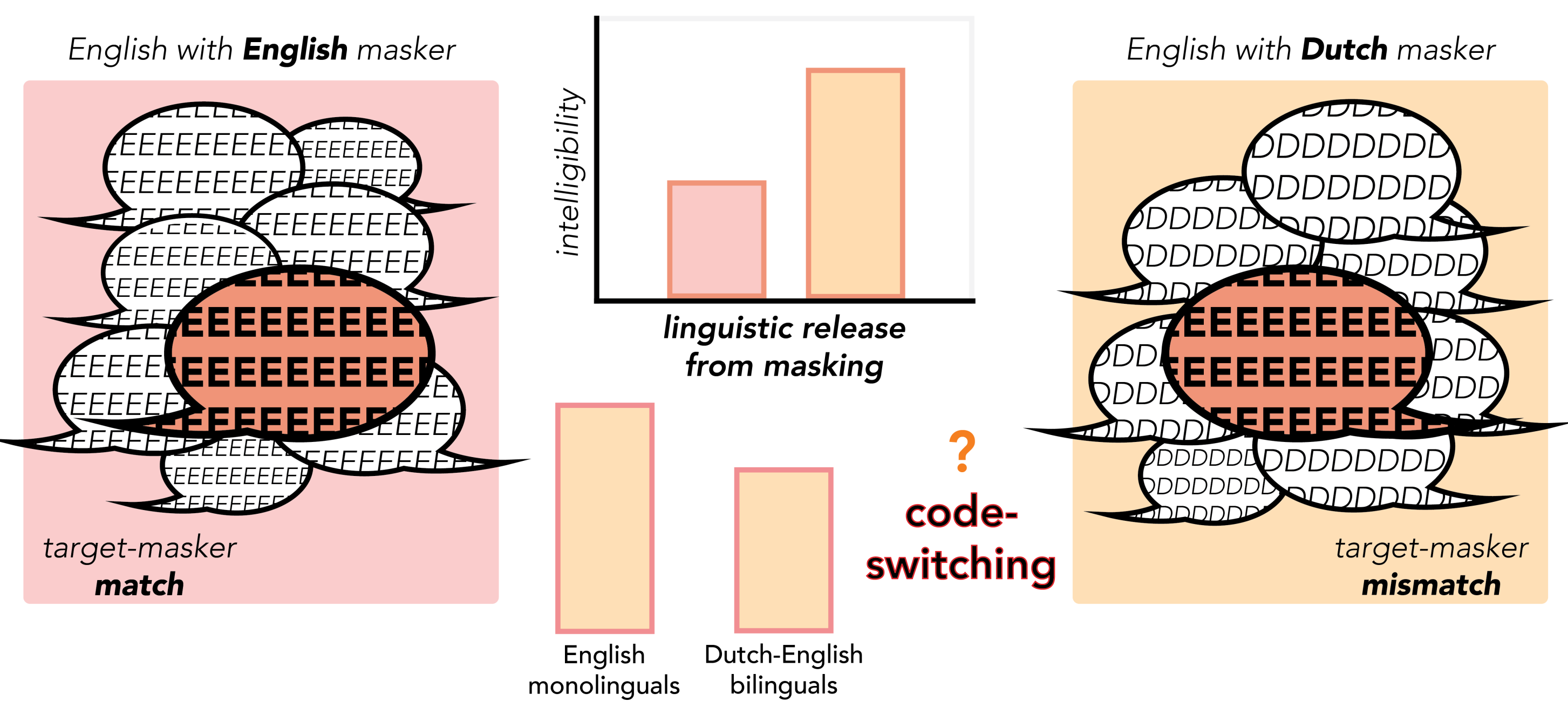
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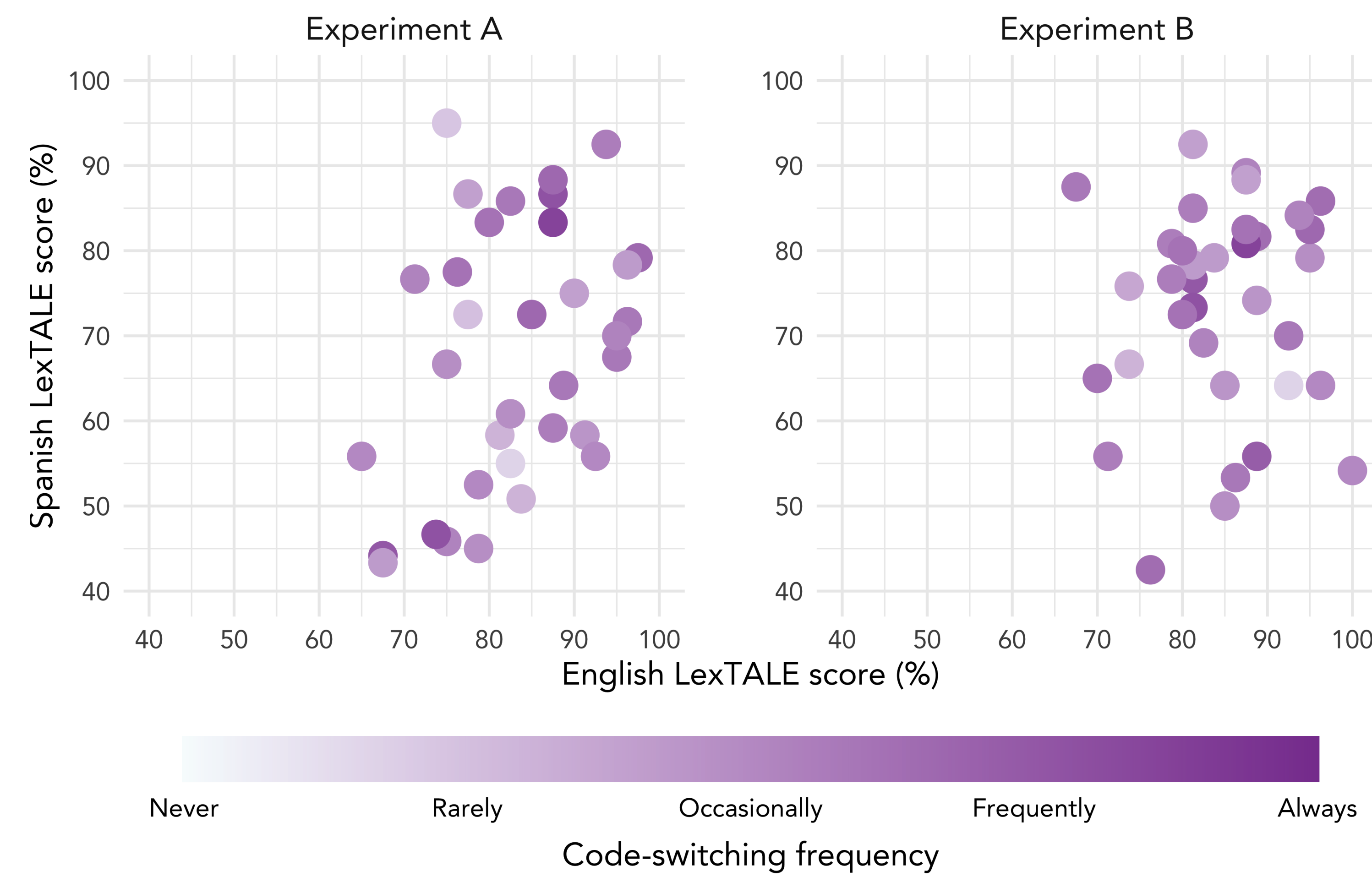
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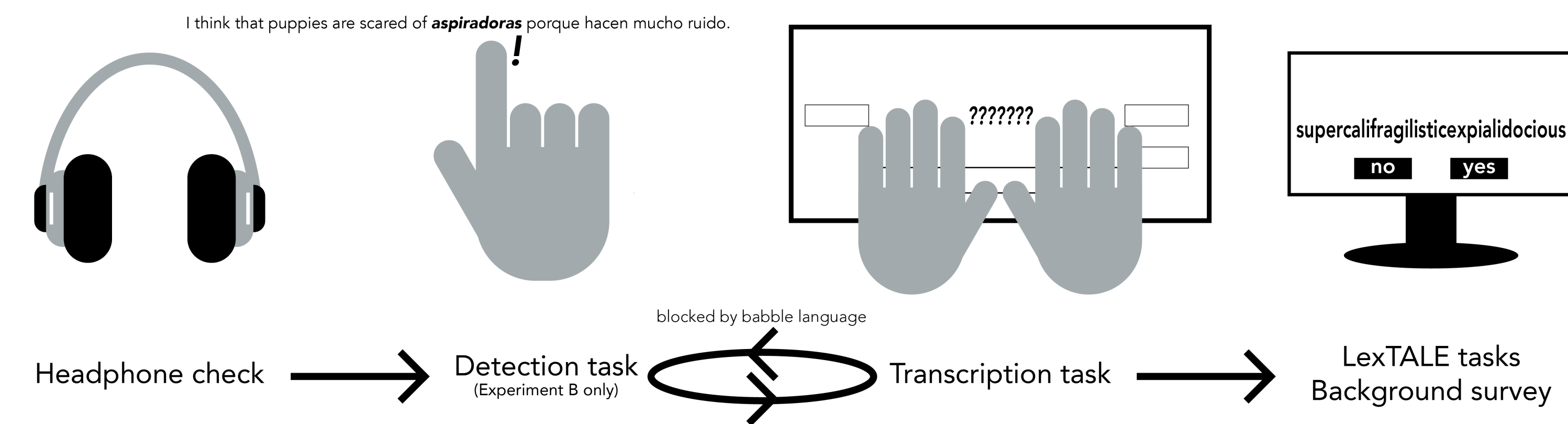
Research background



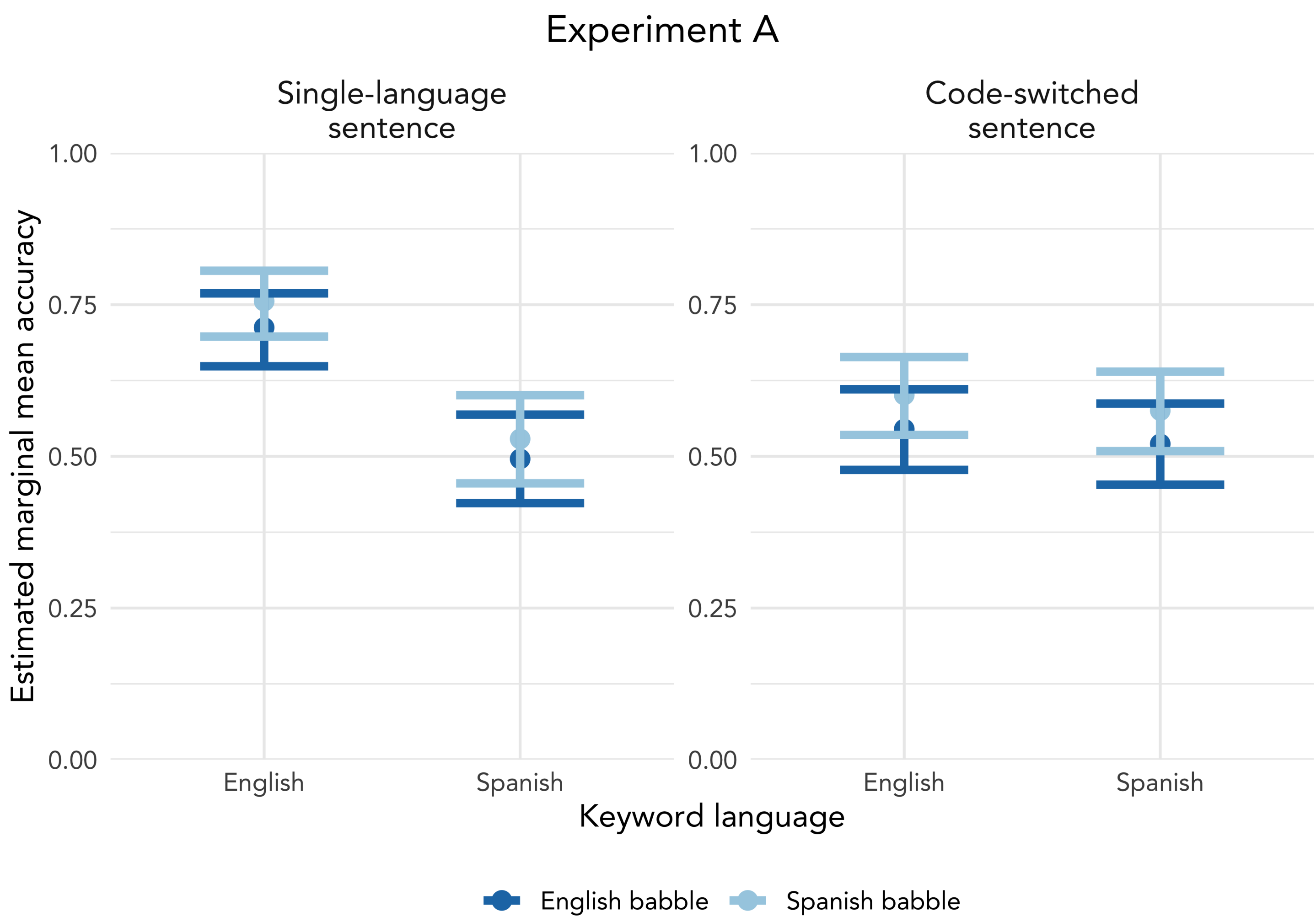
Participants



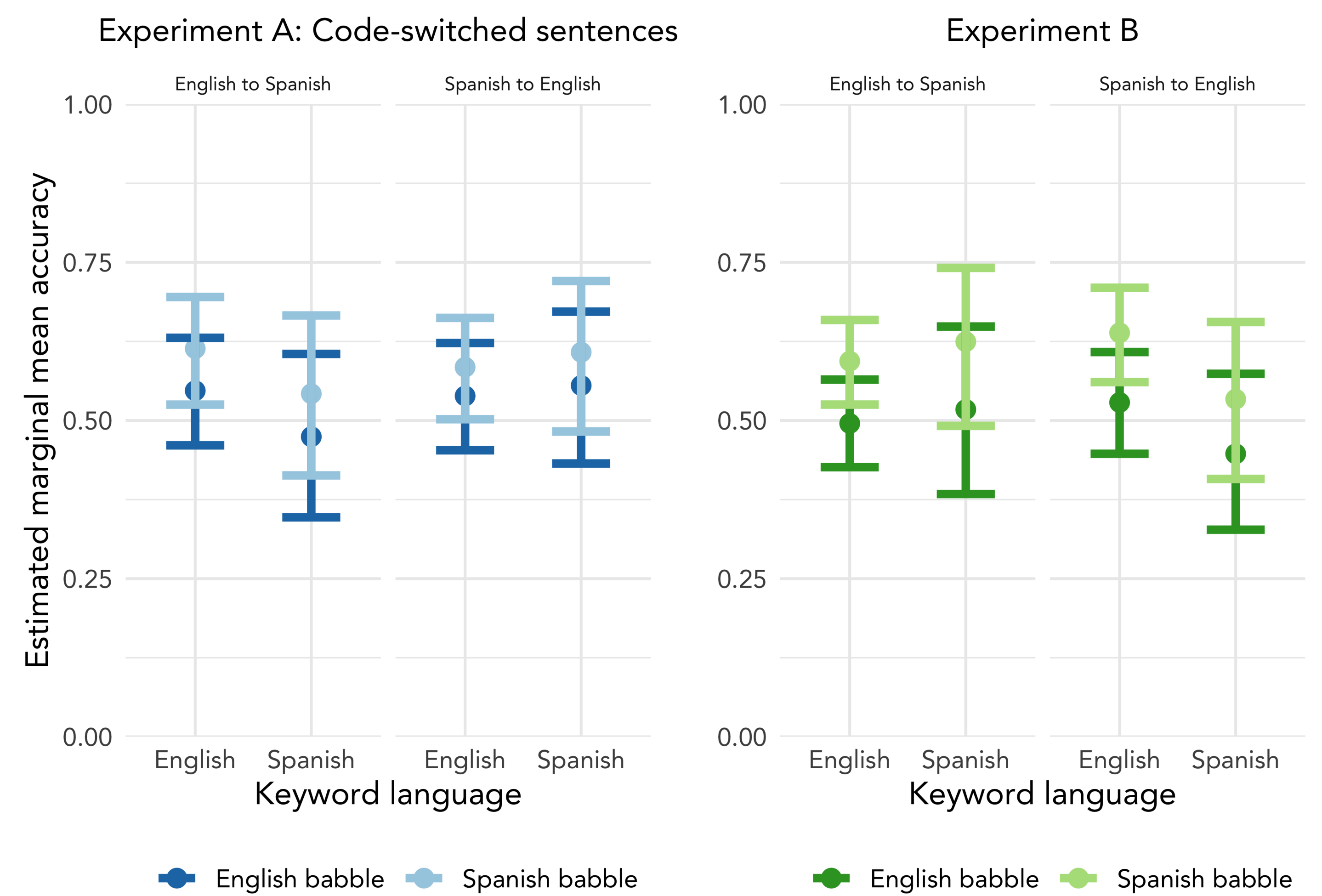
Procedure



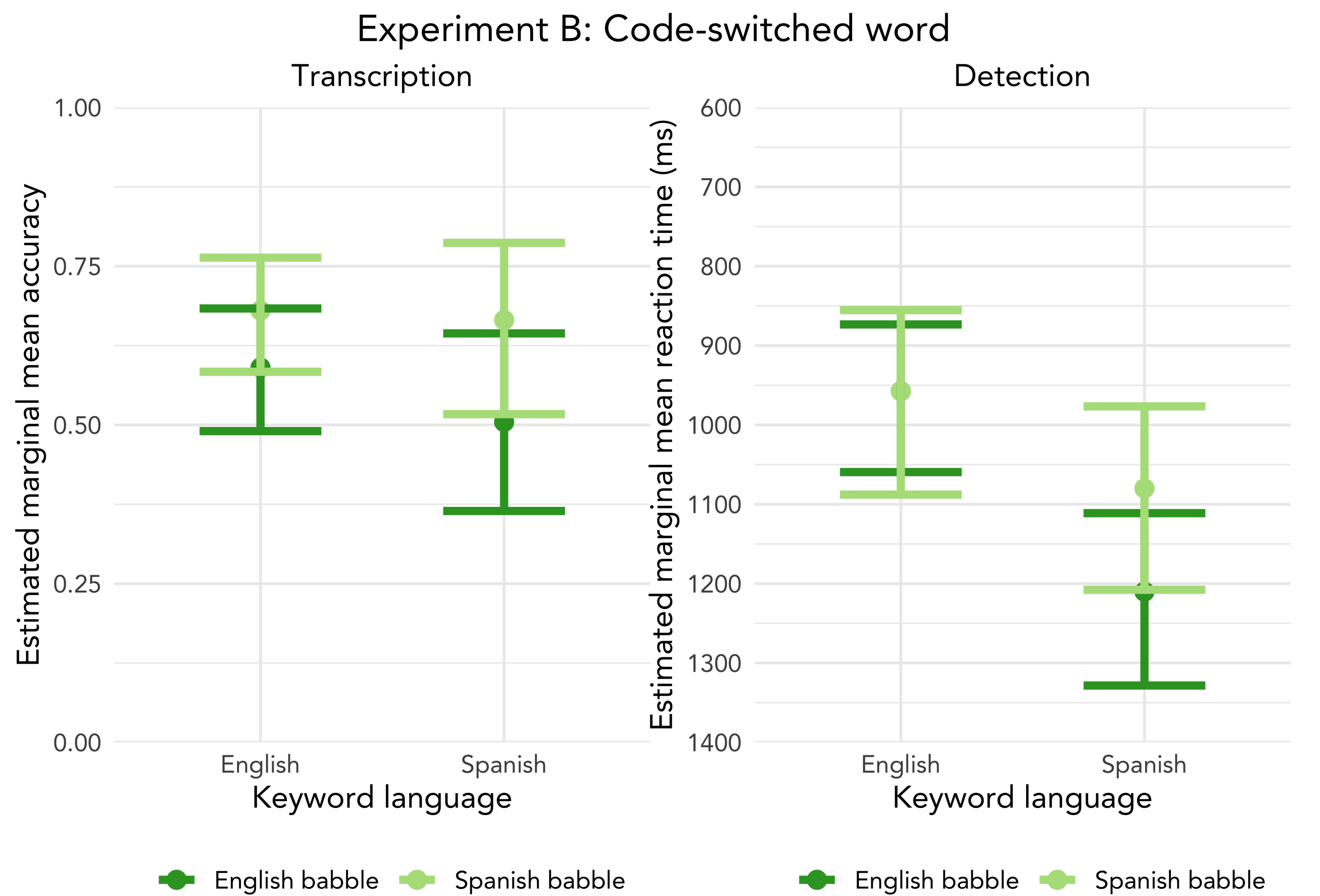
Accuracy benefit for English versus Spanish decreases by ~20% in code-switched versus single-language sentences



Removing single-language stimuli shifts transcription advantage from pre-switch to post-switch keywords



Code-switched Spanish words are more susceptible to masker language than code-switched English words



Stimulus examples

Experiment	Sentence type	English critical word	Spanish critical word
A	Single-language	I think that puppies are scared of vacuums because they are loud.	Creo que los cachorros tienen miedo de las aspiradoras porque hacen mucho ruido.
B	Code-switched	Creo que los cachorros tienen miedo de los vacuums because they are loud.	I think that puppies are scared of aspiradoras porque hacen mucho ruido.

Result summary

Experiment Analysis	Measure	Level	Context	Prediction	Observation
A	1	Sentence	Single-language versus Code-switch	Incongruent Target-Masker benefit attenuated by code-switching	Target-Context interaction with Masker main
B	2-3		Spanish-English versus English-Spanish code-switches	Incongruent Target-Masker benefit	Congruent Target-Masker benefit for Spanish
	4	Word			
	5				

References and acknowledgements

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