

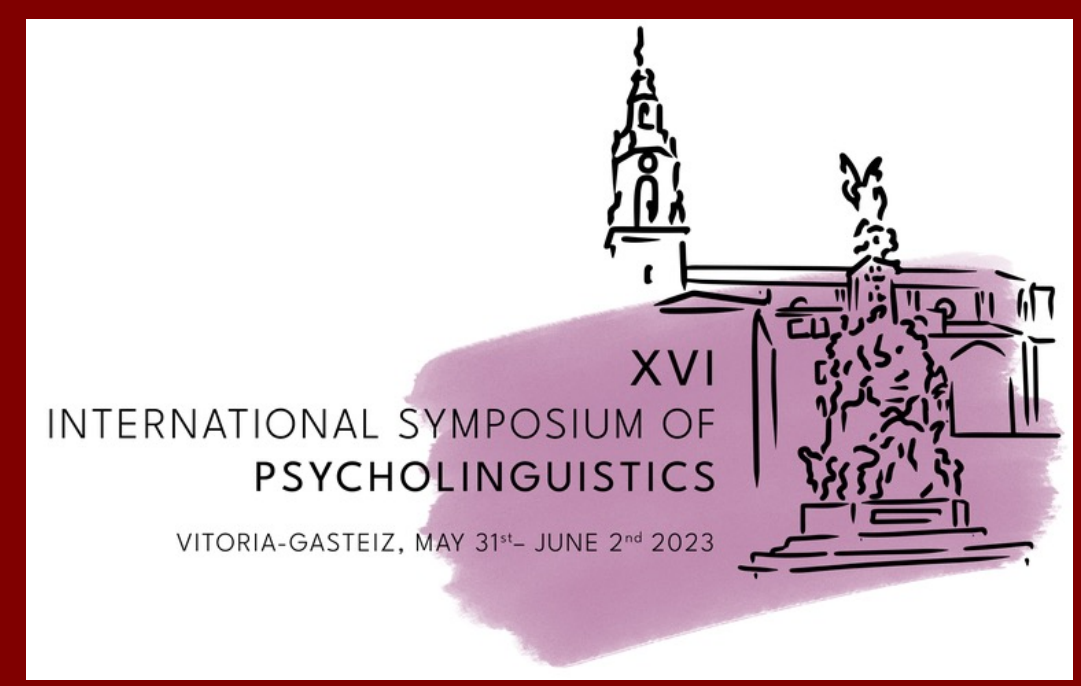
# Can accent trump the other-race effect?

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## Introduction

It is well documented a **negative bias in memory recognition when participants have to decide whether they have seen a person before that belongs to a different ethnic group** (Other-Race Effect; see [1]). At the same time, it has been suggested that **linguistic cues** (language or accent) are used as a **social cue in facial categorization** [2-4]. Recent evidence suggests that language and race interact in creating social categories [5, 6].

## Aims

We **aim** to explore whether the accent of the speaker (native-Spanish or foreign-Asian) influence the perception of other-race faces.  
Does a foreign accent allow other-race faces to be perceived as more foreign?  
**Does a native accent allow other-race faces to be perceived more like an own-race face?**

## Material & Method

### Participants:

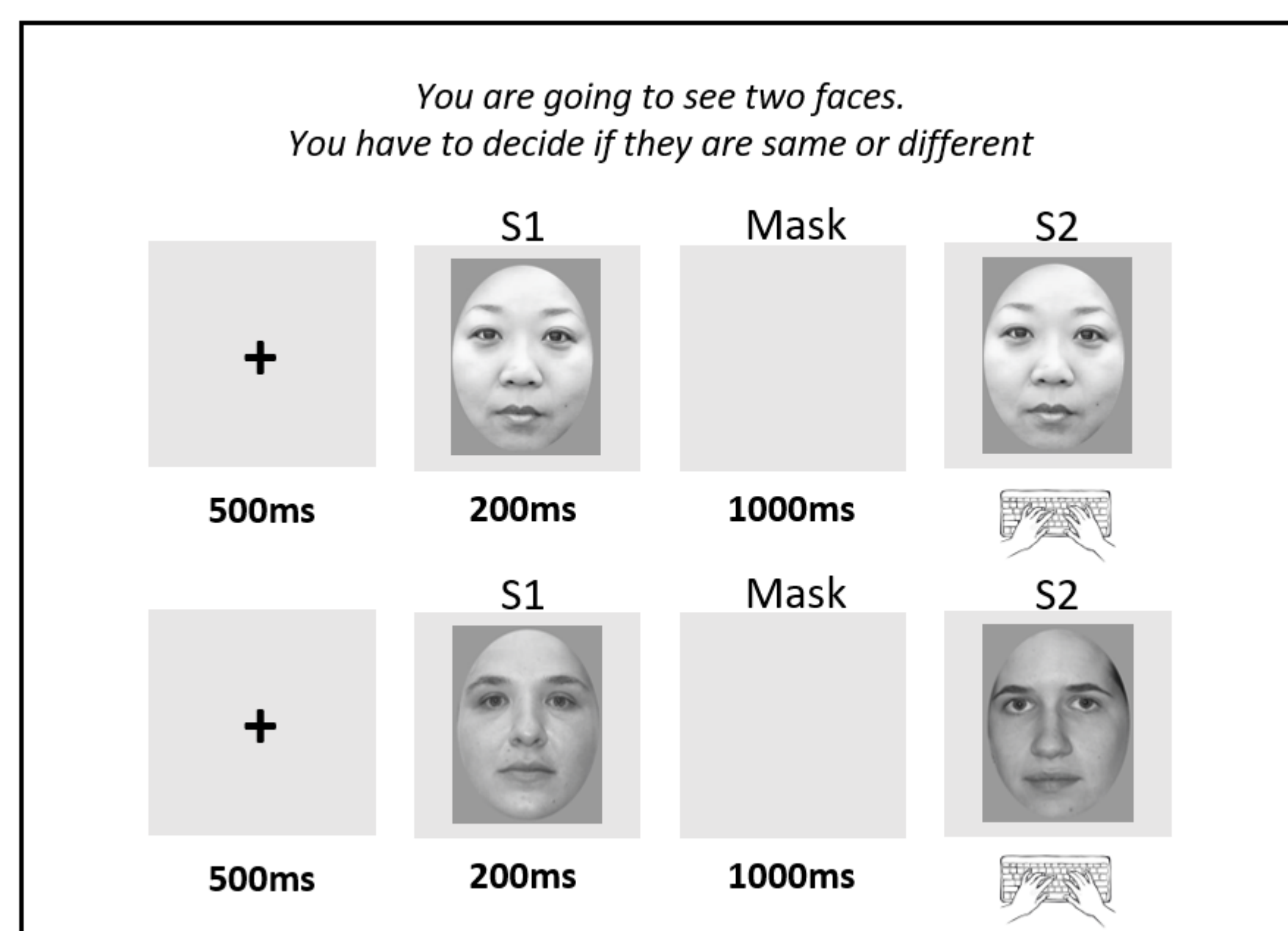
- Audio experiment. 54 Spanish native speakers (mean age= 20y; 38 females)
- Flag [control] experiment. 55 Spanish native speakers (mean age= 20y; 38 females)

### Stimuli:

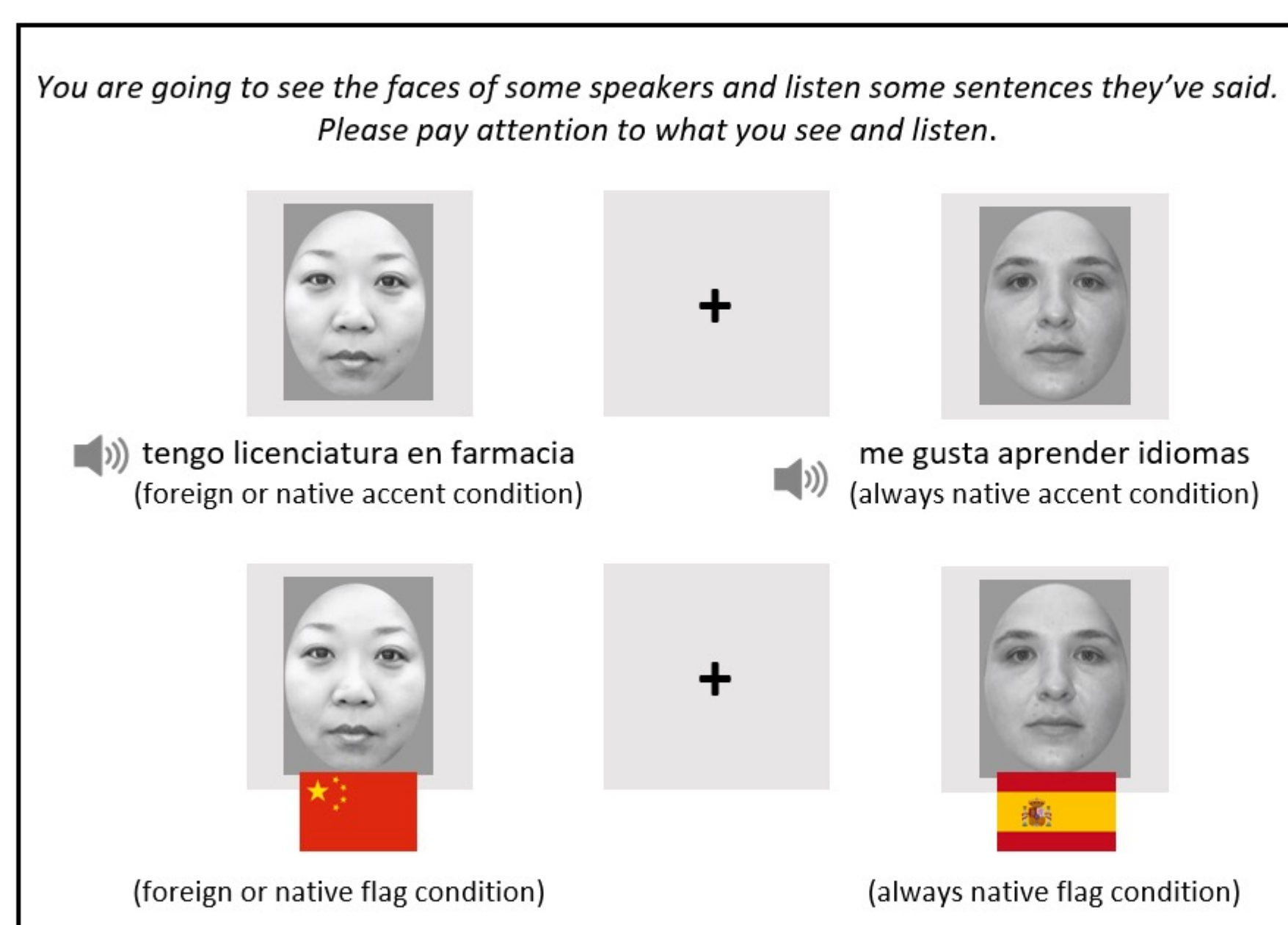
- 100 Asian and 50 Caucasian faces
- 60 foreign-accented Spanish and 40 native-accented Spanish sentences.

### Procedure:

#### 1) Priming Task



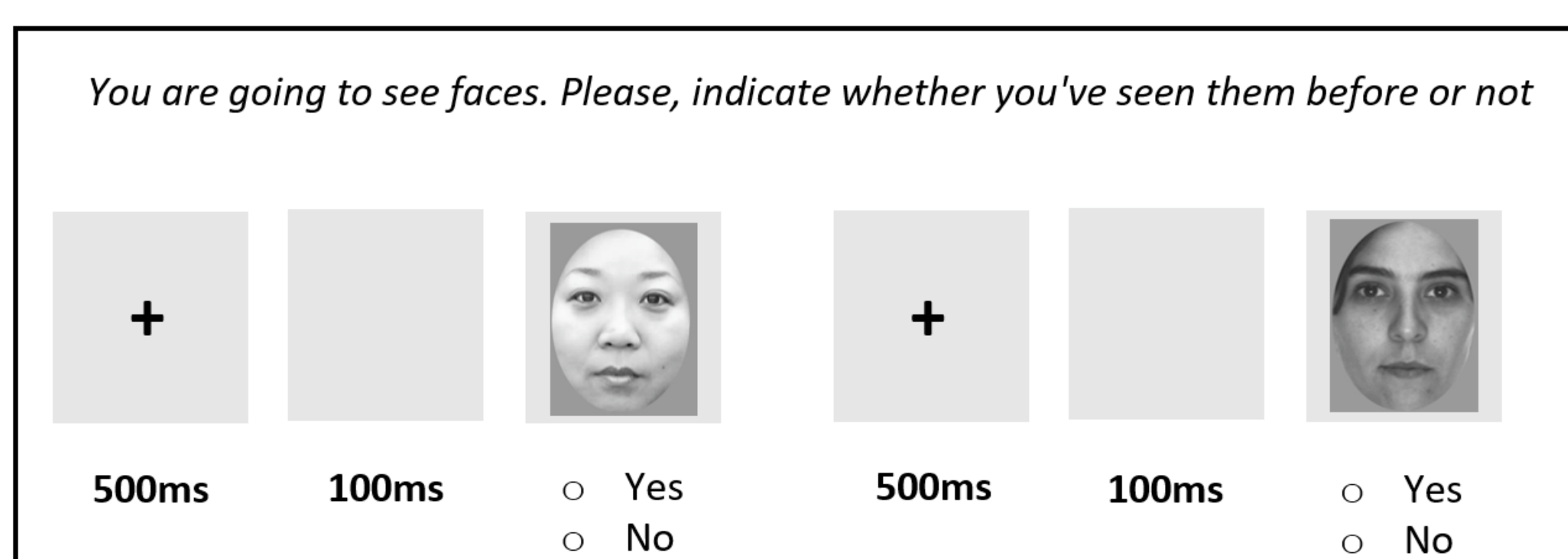
#### 2) Training session



#### 3) Post training Priming Task

Identical to the first Priming Task

#### 4) Recognition Test (Old / New Paradigm)



## Analysis

Reaction times (RTs) for the priming task and Accuracy for the recognition task were analyzed employing generalized linear mixed models (GzLMs).

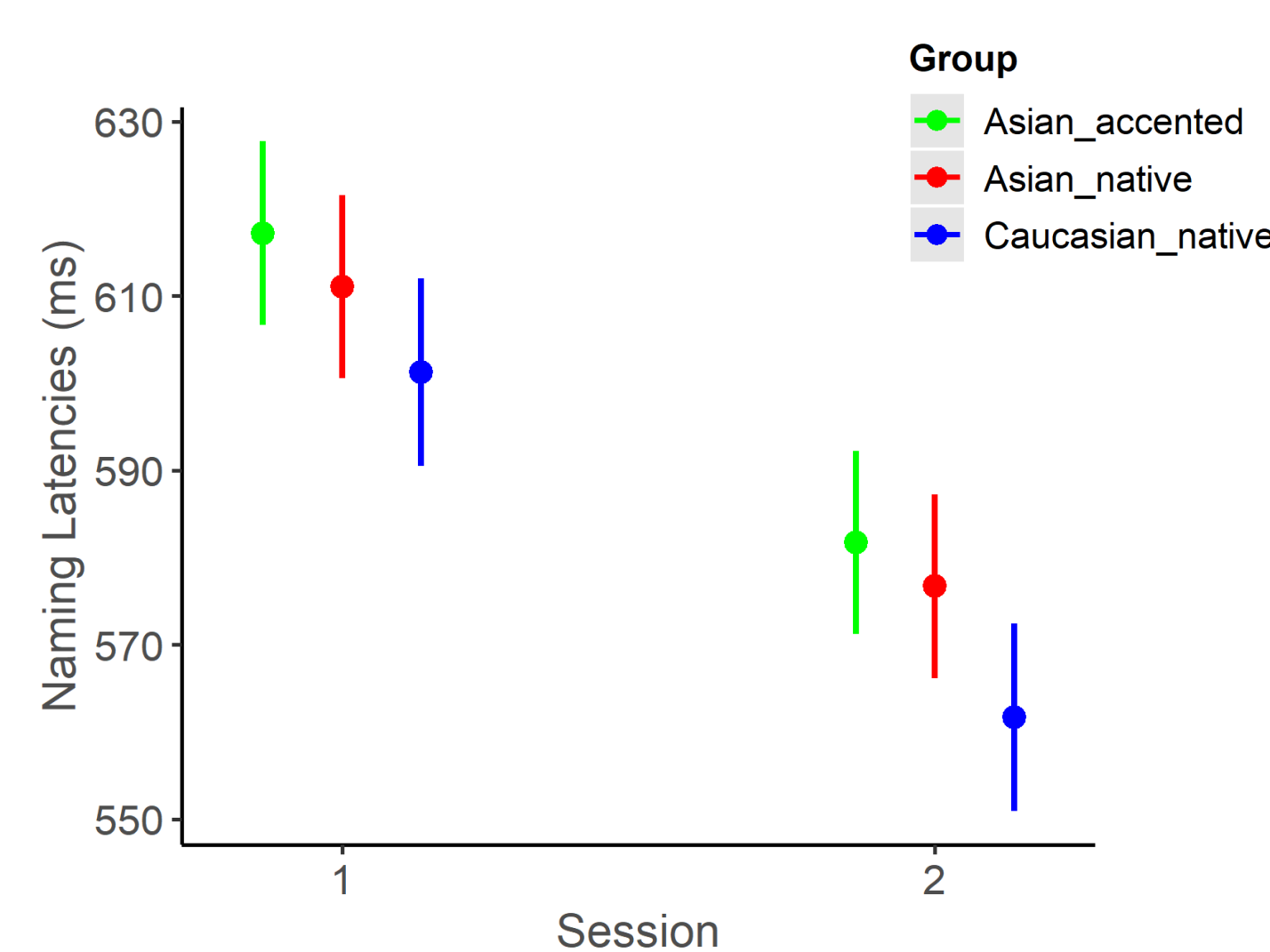
## Results

### Audio Experiment

#### Priming task

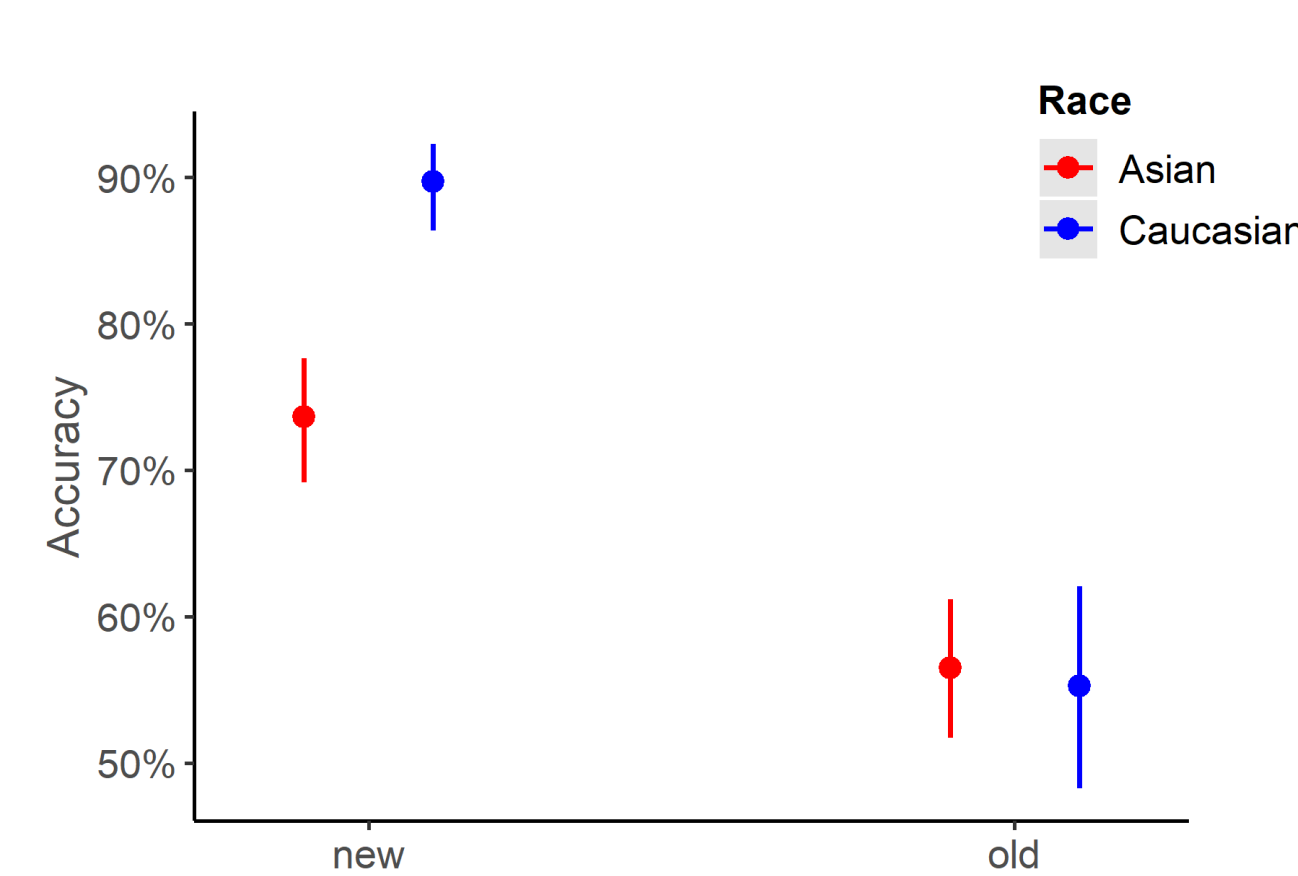
**Session:** Faster RTs for Session 1 than for Session 2 (Estimate = -35.50, SE = 4.72, z = -7.52)

**Race:** Faster RTs for Caucasian than for Asian faces (Estimate = -15.93, SE = 5.26, z = -3.03)

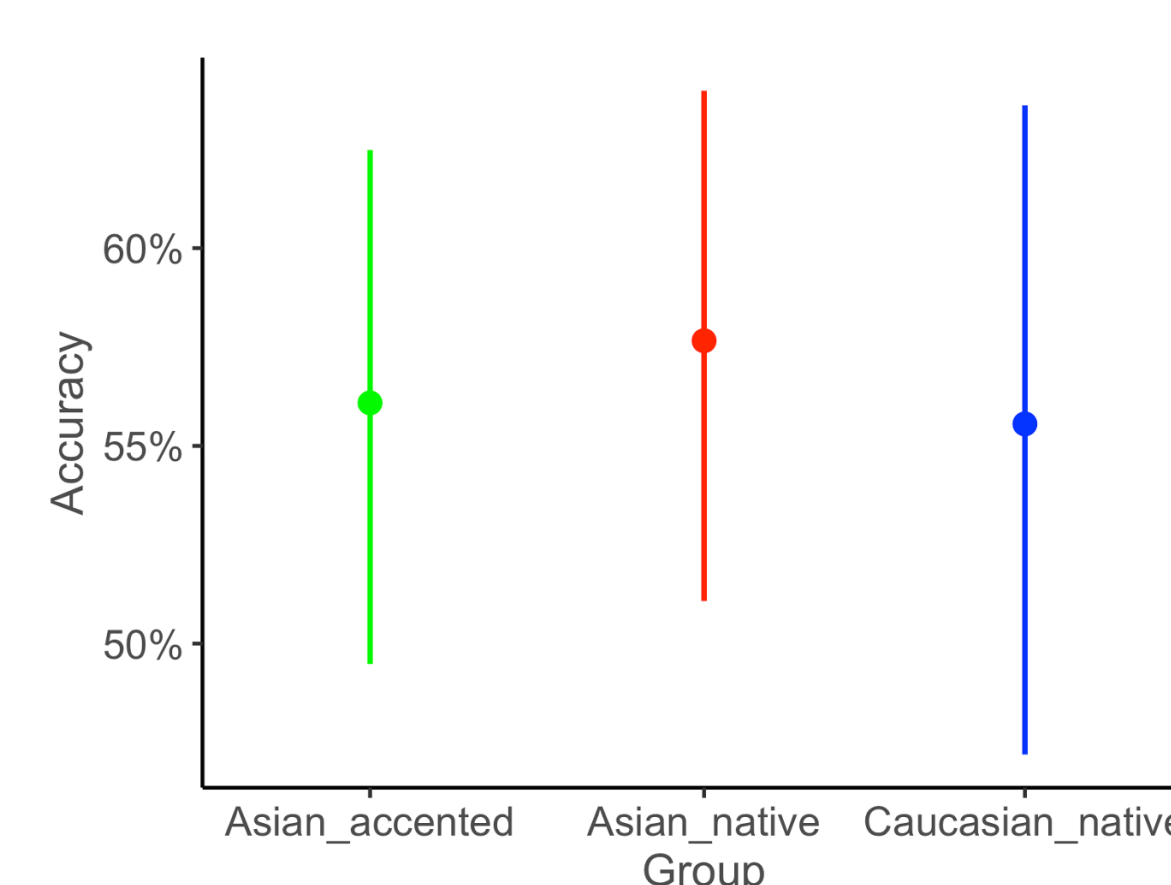


#### Recognition task

Better performance for Caucasian faces just in the New condition (Estimate = -1.19, SE = .24 z = -5.02)



#### Just for Old condition

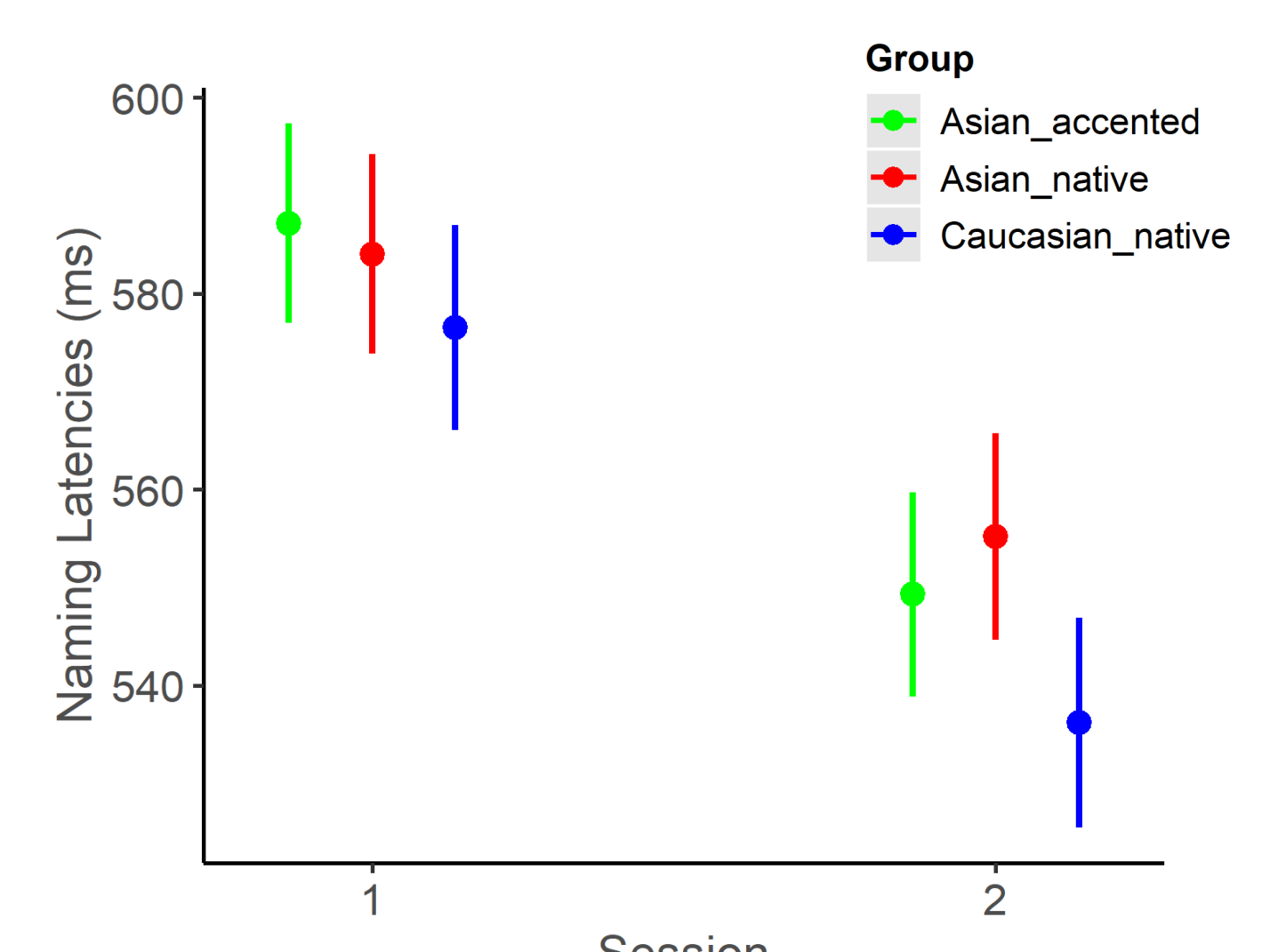


### Flag Experiment

#### Priming task

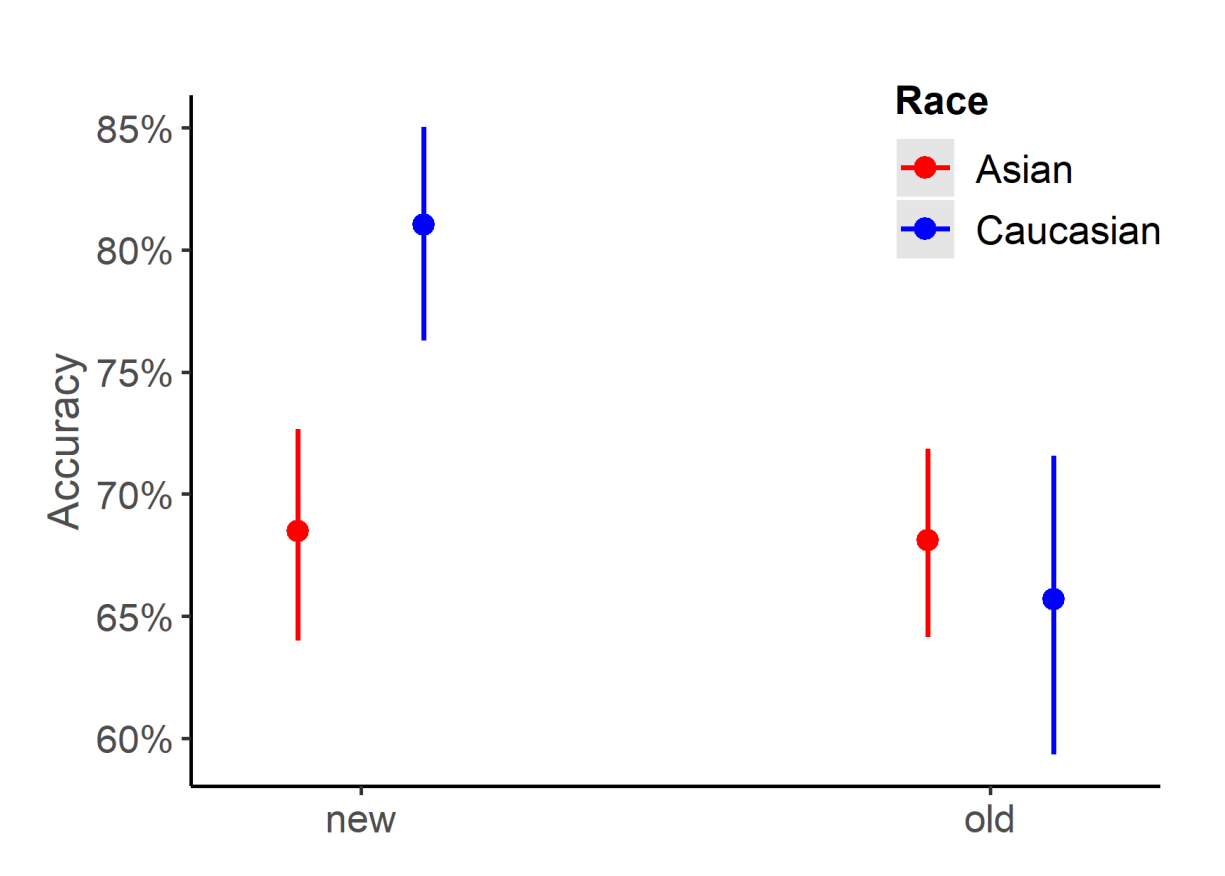
**Session:** Faster RTs for Session 1 than for Session 2 (Estimate = -37.89, SE = 4.24, z = -8.29)

**Race:** Faster RTs for Caucasian than for Asian faces (Estimate = -10.68, SE = 4.60, z = -2.32)

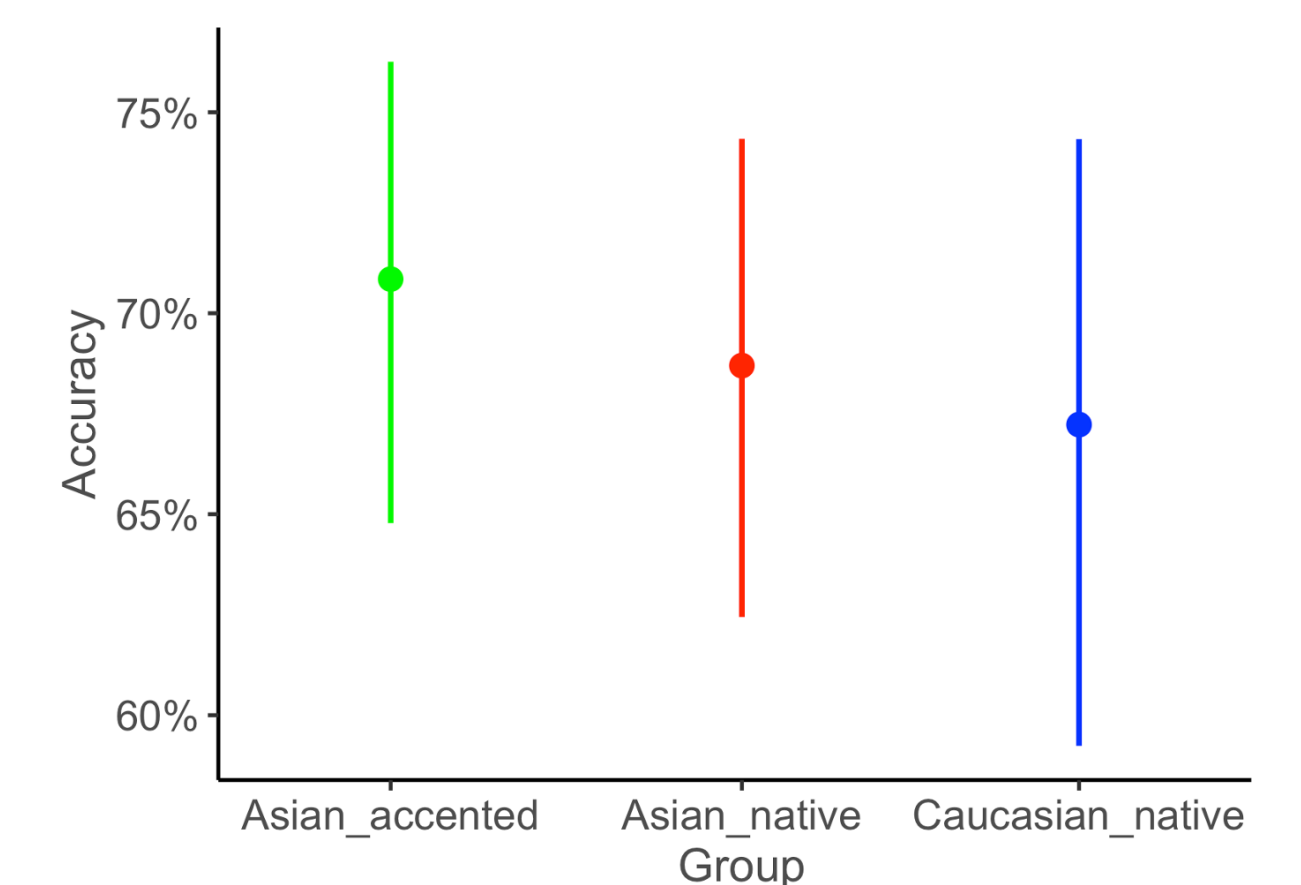


#### Recognition task

Better performance for Caucasian faces just in the New condition (Estimate = -.78, SE = .23, z = -3.40)



#### Just for Old condition



## Discussion

We reported **evidence for a general other-race effect (ORE) in both pre and post-training for both Audio and Flag experiments.**

The ORE was also reflected in the **higher recognition accuracy for the new Caucasian compared to the new Asian faces.**

## References

- (1) Meissner, C. A., & Brigham, J. C. (2001). Thirty years of investigating the own-race bias in memory for faces: A meta-analytic review. *Psychology, Public Policy, and Law*, 7(1), 3.
- (2) Champoux-Larsson, M. F., Ramström, F., Costa, A., & Baus, C. (2022). Social categorization based on language and facial recognition. *Journal of Language and Social Psychology*, 41(3), 331-349.
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- (4) Lorenzoni, A., Santesteban, M., Peressotti, F., Baus, C., & Navarrete, E. (2022). Language as a cue for social categorization in bilingual communities. *PloS one*, 17(11), e0276334.
- (5) Kim, J., & Davis, C. (2010). Knowing what to look for: Voice affects face race judgements. *Visual cognition*, 18(7), 1017-1033.
- (6) Kinzler, K. D., Shutts, K., DeJesus, J., & Spelke, E. S. (2009). Accent trumps race in guiding children's social preferences. *Social cognition*, 27(4), 623-634.

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