

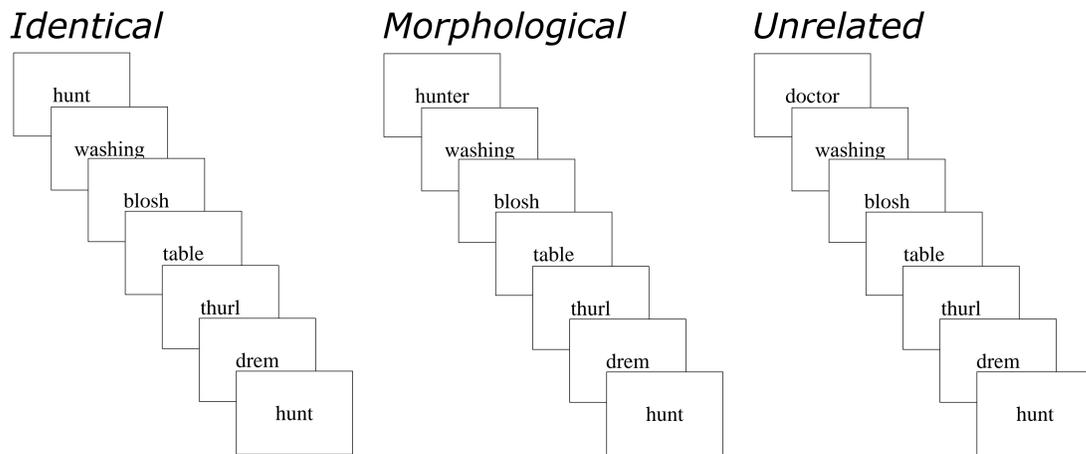
# Allotonic variants do not prime each other: evidence from long-lag priming

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## Background: Long-lag priming



- **Same form:** *hunter* ... *hunt*
- **Different forms:** *assumption* ... *assume*  
*sleep* ... *slept*  
*rai[d]er* ... *rai[r]er*  
*[kuzin]* ... *[kuzẽ]*

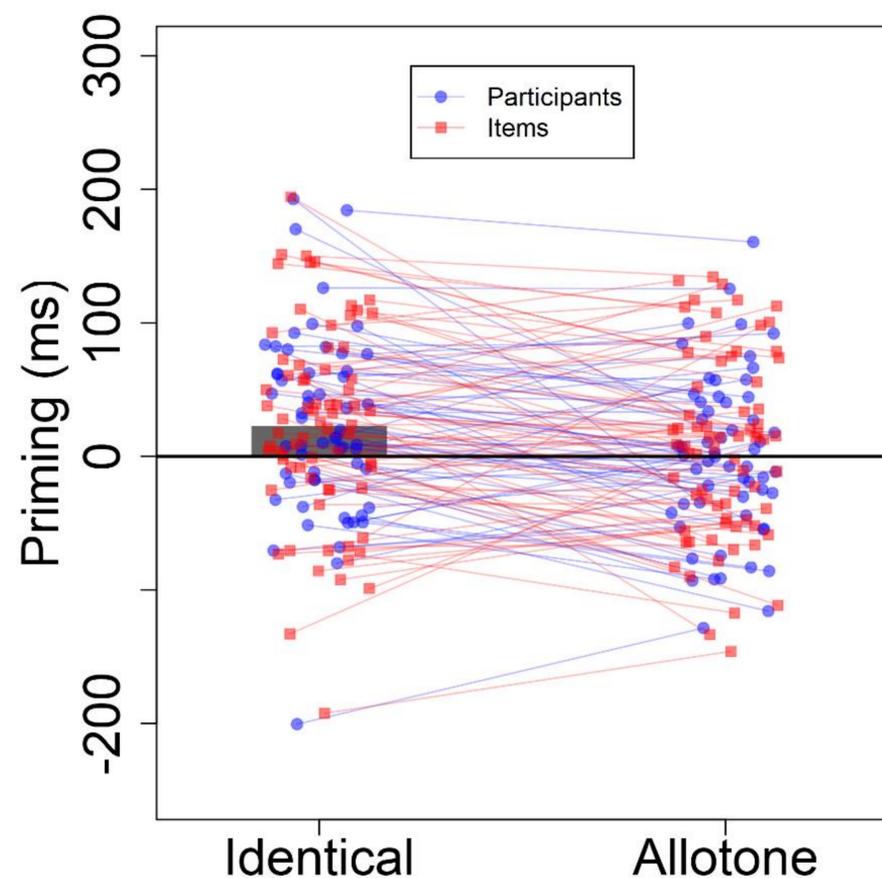
- Facilitation occurs when prime and target share a morpheme – even if its form is different

- But! Politzer-Ahles et al. (2023) failed to get priming in Mandarin when prime and target were different tonal variants of the same morpheme (e.g. *shui*<sup>3</sup> ... *shui*<sup>2</sup>)

## The present study

- Mandarin has many homophones – one syllable may correspond to many morphemes
  - *shi*<sup>3</sup>: 始 (*start*), 史 (*history*), 矢 (*arrow*), 驶 (*drive*), 使 (*envoy*), 屎 (*shit*)
- Might the previous study's failure to get priming be because participants hearing one syllable could not uniquely activate a corresponding morpheme?
- **The present study:** Tests Mandarin long-lag priming with written primes (to ensure that participants uniquely activate one morpheme when seeing the prime) and auditory targets
  - **Identical:** + (*shi*<sup>2</sup>) ... *shi*<sup>2</sup>
  - **Allotone:** 使 (*shi*<sup>3</sup>) ... *shi*<sup>2</sup>
  - **Unprimed:** ... *shi*<sup>2</sup>
- Predictions:
  - If homophony prevented priming in Politzer-Ahles et al. (2023), we should observe allotone priming in this study
  - If the lack of priming in Politzer-Ahles et al. (2023) is due to some other reason, then we should fail to observe allotone priming in this study as well

## Results (N=60)



- 22 ms identity priming (CI: [6, 28]) shows that the experiment worked, but there was no allotone priming (CI: [-17, 15])

## Discussion and conclusions

- The lack of allotone priming in Politzer-Ahles et al. (2023) was not due just to the presence of homophones in the primes; the present study also did not find allotone priming
- Other possible reasons why priming across morphological variants has not occurred in Mandarin long-lag priming studies?
  - Lack of licensing context (test in future study with disyllables)