



# Variation in the Production and Perception of Regional Putonghua in Ningbo, China

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## Background

Variationist sociolinguistics has benefitted from a combination of production and perception data (Drager, 2009; Labov, 1972; Walker, 2014), which not only offers a fuller picture of the variation in question, but also contributes to our theoretical understanding of, for example, the mechanism of indexicality (Campbell-Kibler, 2009, 2010).

- To understand language variation in contact variety(-ies) of Putonghua (standard Chinese) better by linking speakers' production and perception.
- To investigate how social meanings are conveyed for different features in the same variety.
- Production and perception data from young adult speakers of Ningbo Putonghua, Putonghua and Ningbonese/Wu in Eastern China.
- (non-standard) phonetic/phonological merger in Ningbo Putonghua.



## Production

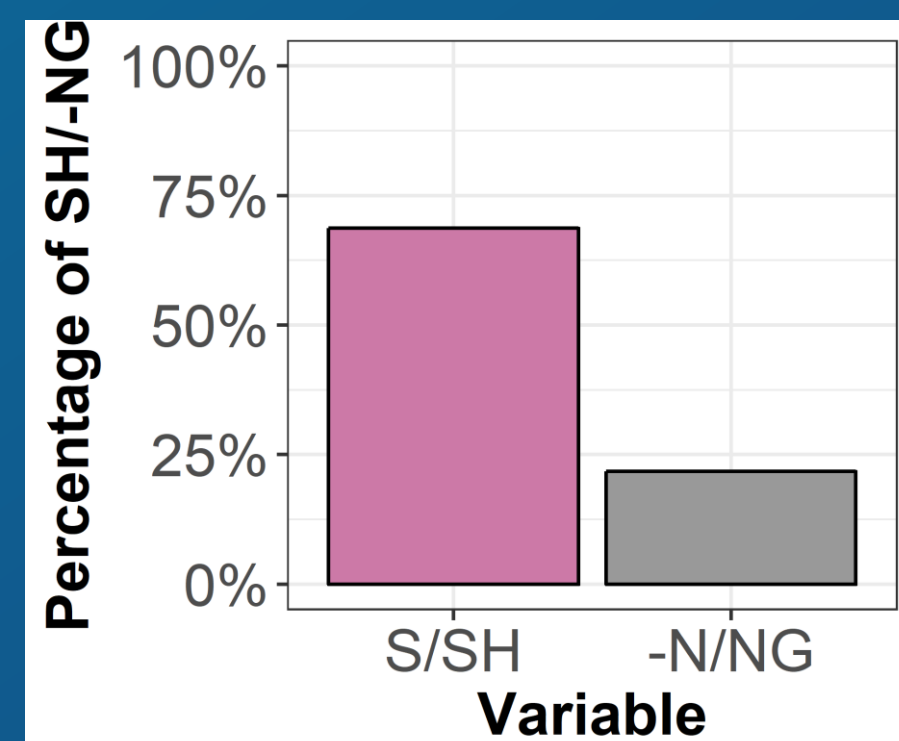
**Participants:** 44 university students in Ningbo (22 women & 20 men).  
**Data:** 44 Sociolinguistic interviews with all participants (~45 hours total)  
**Social factor:** gender  
**Variables:**

- (merger = local/'non-standard')
- dental-retroflex fricative/affricates /s/~/ʃ/, /ts/~/tʃ/ & /tsʰ/~/tʃʰ/ (S/SH)
- alveolar/velar nasal finals /n/~/ŋ/ (-N/NG).

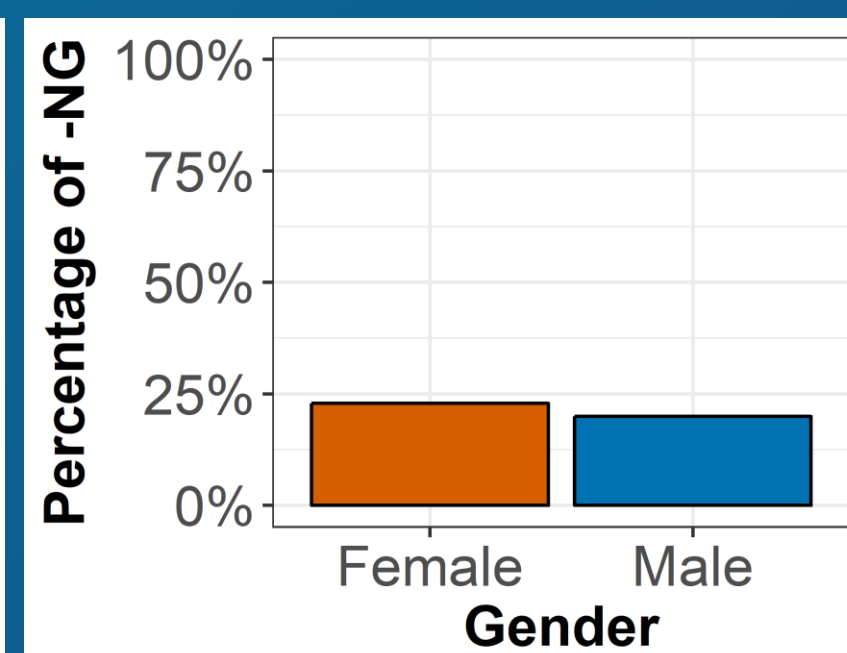
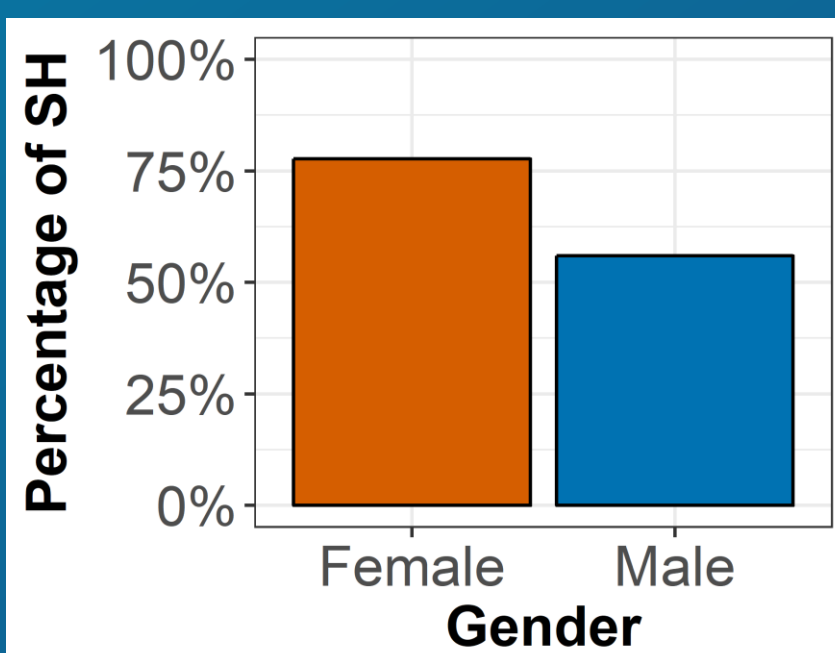
**Mixed-effect logistic regression:** [presence/absence of target variant ~ gender]

### Results

- 10 women & 8 men (2200 tokens)
- Overall, more (-N) than (S)
  - N/-NG merger > S/SH merger



Women use more -SH than men, while no significant gender differences for -N/-NG.



## Perception

**Participants:** 310 responses (80 from men, 167 from women, mean age: 22.6)

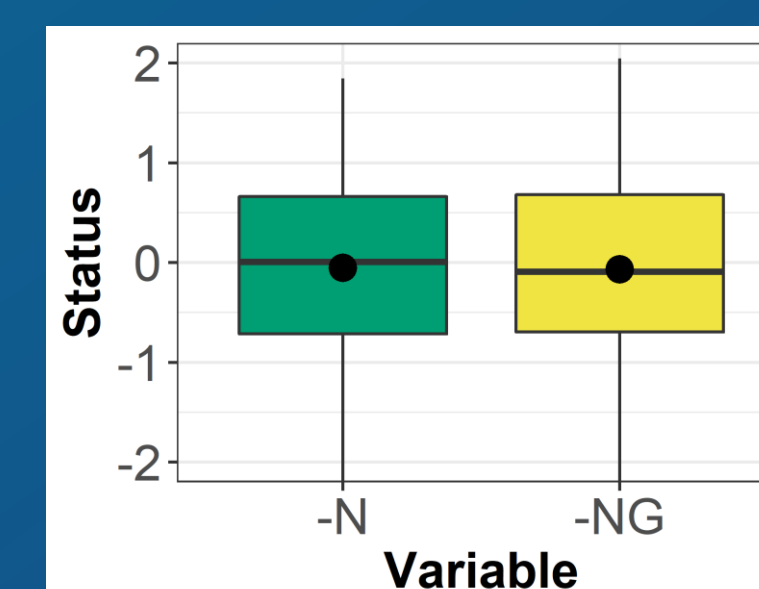
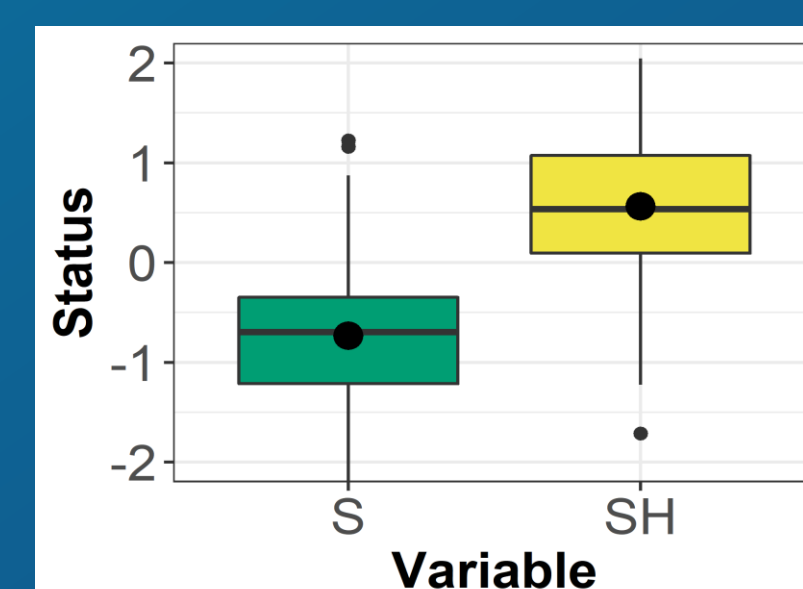
**Matched guise experiment:**

*Qishi/si wo jianguo zuotian zai gongjiaozhan/zan peng/pendaode nei jige*  
 actually I meet-PP yesterday at bus stop Bump-DE those several-CL  
*ren, zui nianqing/qinde neige ouer hui chou/couyan.*  
 person most young-DE that-CL occasionally can smoke-cigarette  
 'I have actually met those people we bumped into at the bus stop yesterday, the youngest one smokes occasionally.'

**Linear regression:** [rating ~ presence/absence of target variant]

### Results (Significant for S/SH)

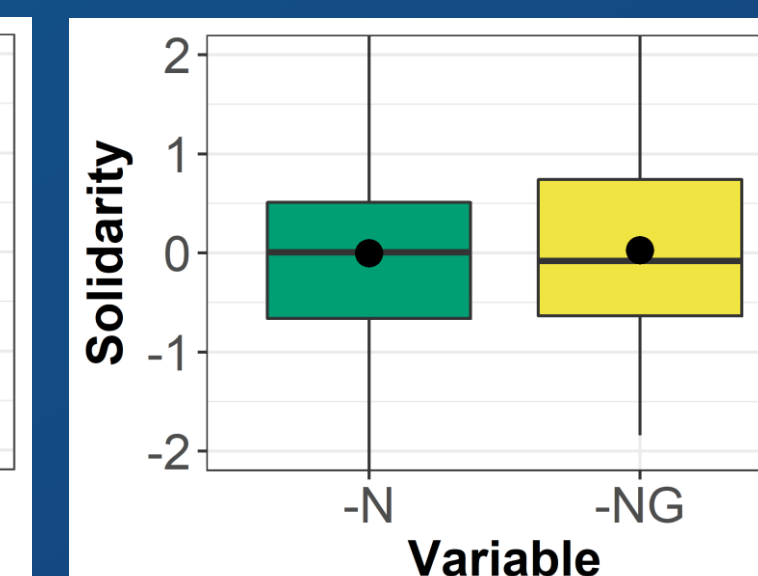
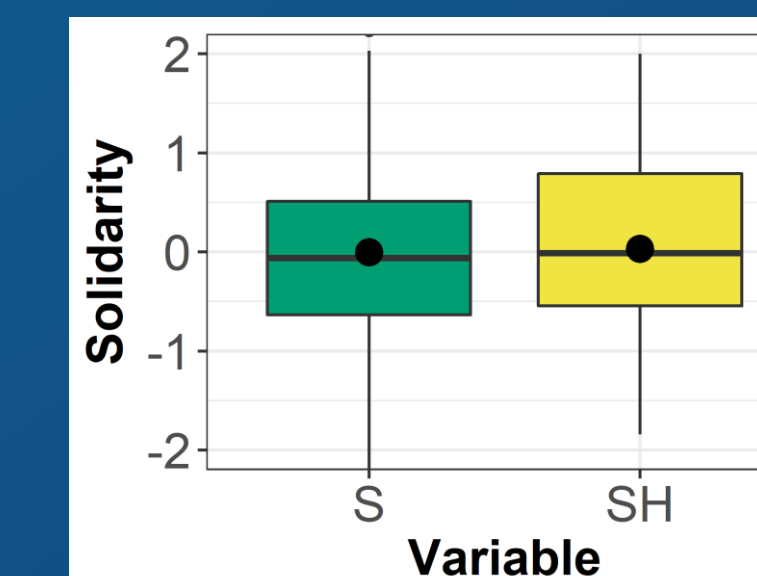
- Status:** (PCA) Standard + Educated + Leadership + Quality (*suzhi*)



- Formality**
- Occupation**

### Results (Non-Significant)

- Solidarity:** (PCA) Familiar + Gentle



- Femininity**
- Localness**

## Summary

- In perception, use of SH (retroflex variants) associated with higher status, greater formality, better occupations
  - SH = the 'standard' variant: more standard = more overt prestige
  - N/NG not associated with overt prestige
- Neither S/SH nor -N/NG linked to solidarity, femininity or localness
  - 'Standard' and local variants enjoy the same level of solidarity.
  - Surprising yet consistent with previous findings on regional Putonghua varieties (Chong & Tan, 2013; Zhang, 1990; Zhao, 2018).
  - Supralocal variable shared by many Southern varieties?
- Speakers, especially women avoid
  - less prestigious S variant for S/SH
  - Not the -N variant for -N/NG
  - Gaining social status while not penalised on solidarity dimension