

Towards an indexical account of English in Singapore: Sociophonetic variation and Singlish

Berkeley Phorum Talk

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Singlish

Indigenized variety of English used in Singapore

Influence from local languages, e.g., Cantonese, Hokkien, Malay, Tamil

“Relax lah. You just don’t fall down and kena jiaak can liao.”

→ e.g., consonant cluster simplification, word-final /t/ deletion, *kena*, *jiaak*

Singlish

In the sociolinguistic context of Singapore:

- English positioned as ethnically neutral (Wee 2002)
- Language of school, the workplace, and government
- Singlish in public discourse



English in Singapore

Multiple models of variation in English in Singapore

An indexical account of English in Singapore (Leimgruber 2012)

- Address issues with code-switching
- What features are used and what do they index?
 - Prosody

Use 'Singlish' to investigate variation in Singapore

- Singlish as an ideological construct in Singapore
- Minimize a priori assumptions about what Singlish is (or isn't)

Aims

Unclear boundaries between different named varieties of English in Singapore

→ Focus on the construct of 'Singlish' specifically

How is variable speech categorized as Singlish?

What prosodic features are associated with Singlish?

What social meanings are associated with Singlish?

Part 1: Speeded Forced-Choice Task

1. How is variable speech categorized as Singlish?

Speeded Forced-Choice Task

- Stimuli:

- 40 natural-speech audio clips from podcasts
- 5 male, 5 female talkers, 4 clips/talker
- 1.4 to 2.6 seconds long, one IP
- Controlled for semantic content
- Syntactically and lexically similar to Standard English



- Listeners:

- 132 participants
- 121 Chinese, 2 Malay, 6 Indian, 1 Other
- 67 Female, 62 Male, 2 Non-binary, 1 Prefer not to answer
- Born between 1956 to 2004

Speeded Forced-Choice Task



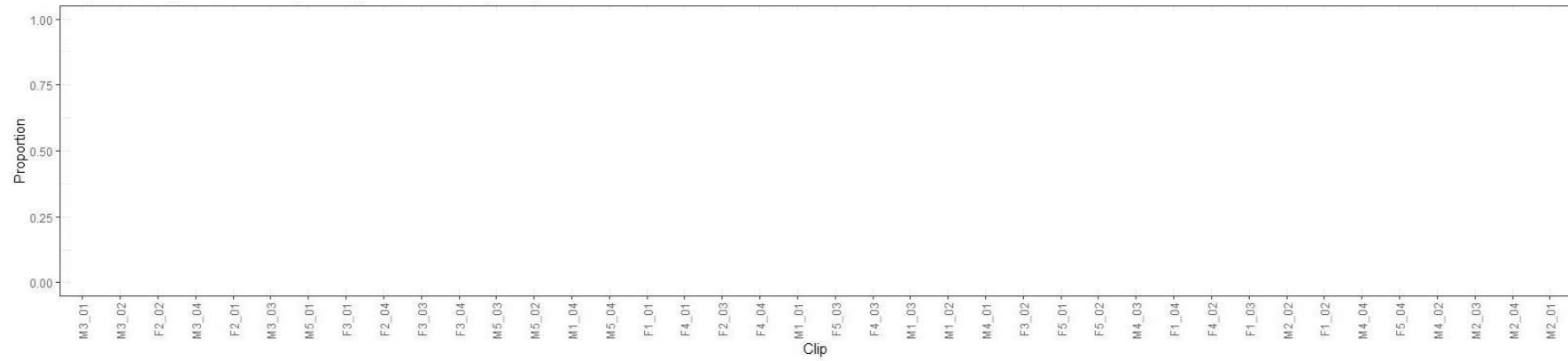
- 6 blocks of 20 trials each
- Randomization within each block

Follow-up Questionnaire

- Demographic background
- Language attitudes
- “List three attributes to describe the speakers who sounded more Singlish.”

Results

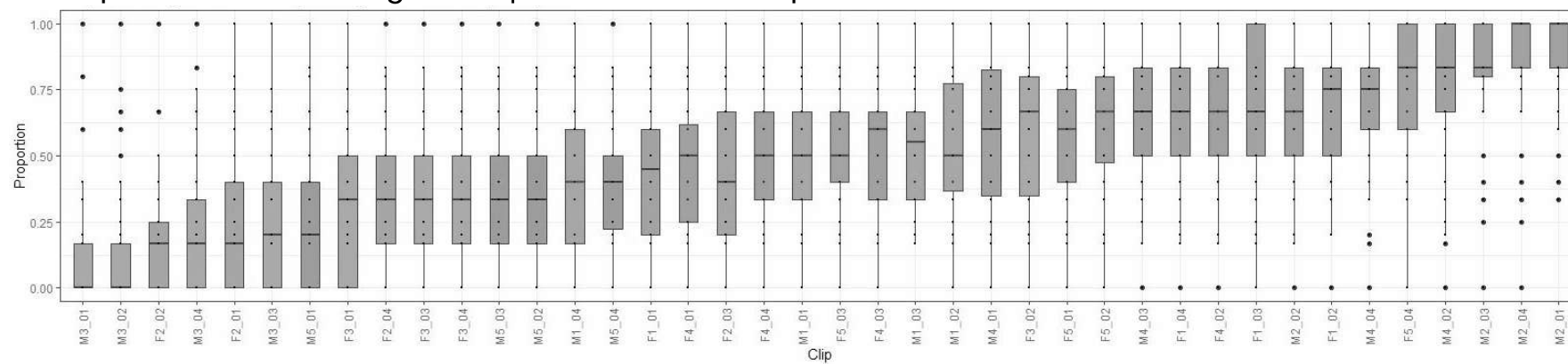
Proportion of More Singlish responses for each clip



Results

Gradient categorizations from least to most Singlish

Proportion of More Singlish responses for each clip



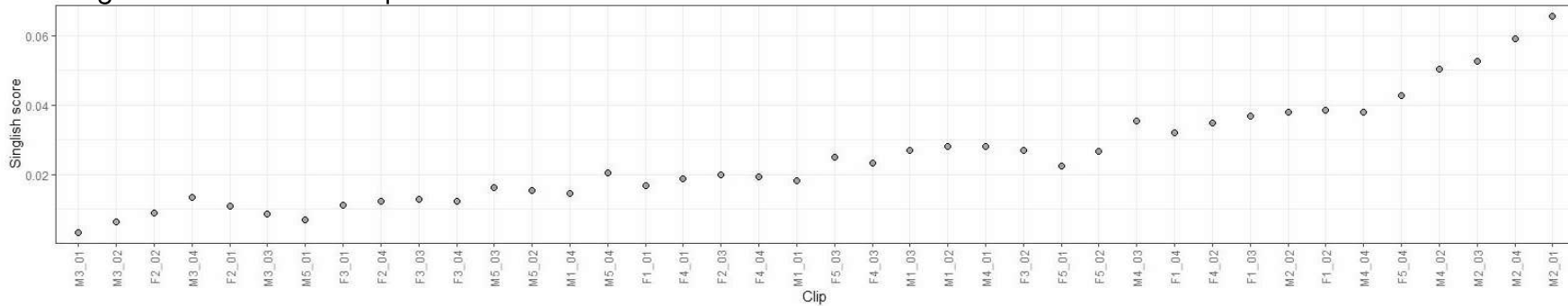
Results

Singlish score

= predicted probability of being chosen as the More Singlish clip

- Account for different matchups
- Proxy for Singlish-ness

Singlish score for each clip



Results

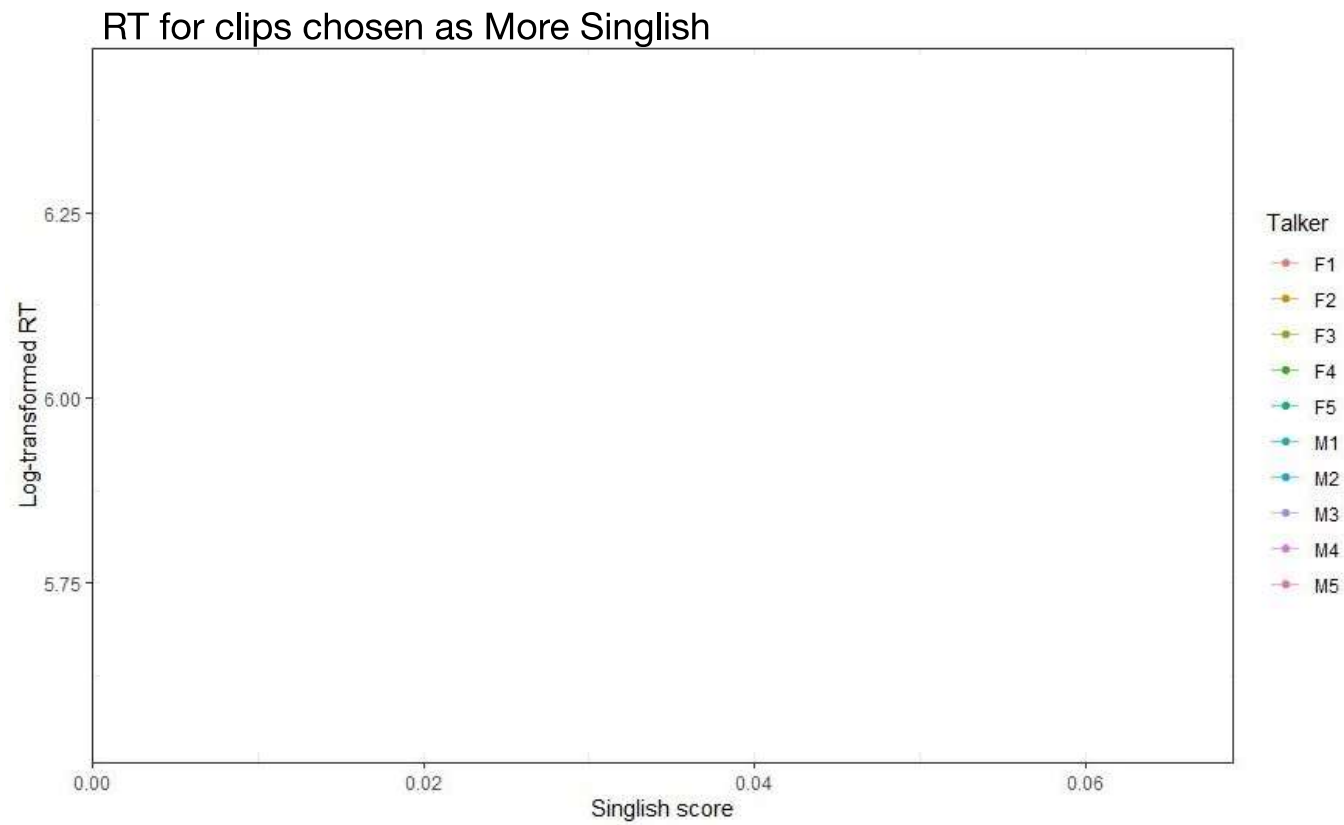
Reaction Time (RT)

- Activation of stored information about Singlish
- More or less typical examples of Singlish

Possible Outcomes

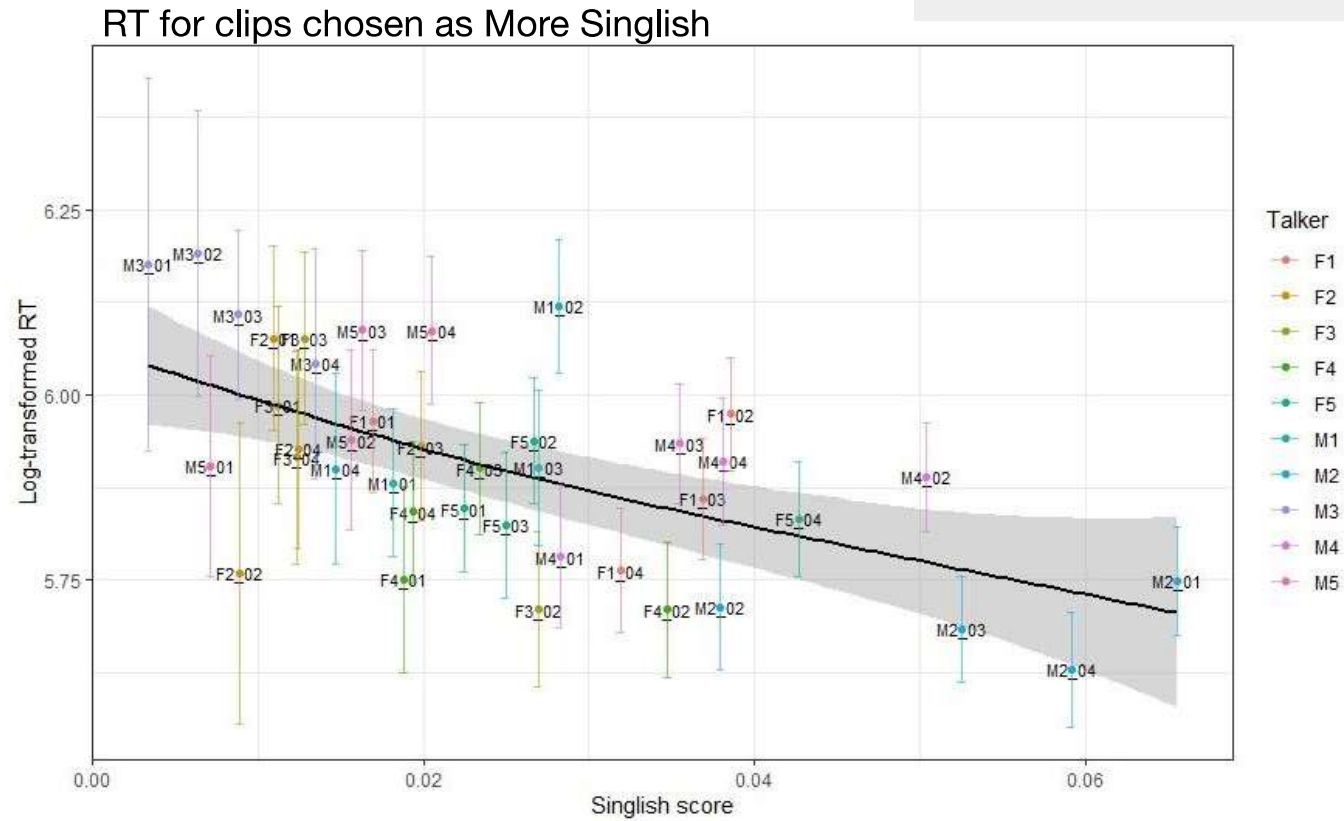
- Higher Singlish score → Faster RT
- Lower Singlish score → Slower RT

Results

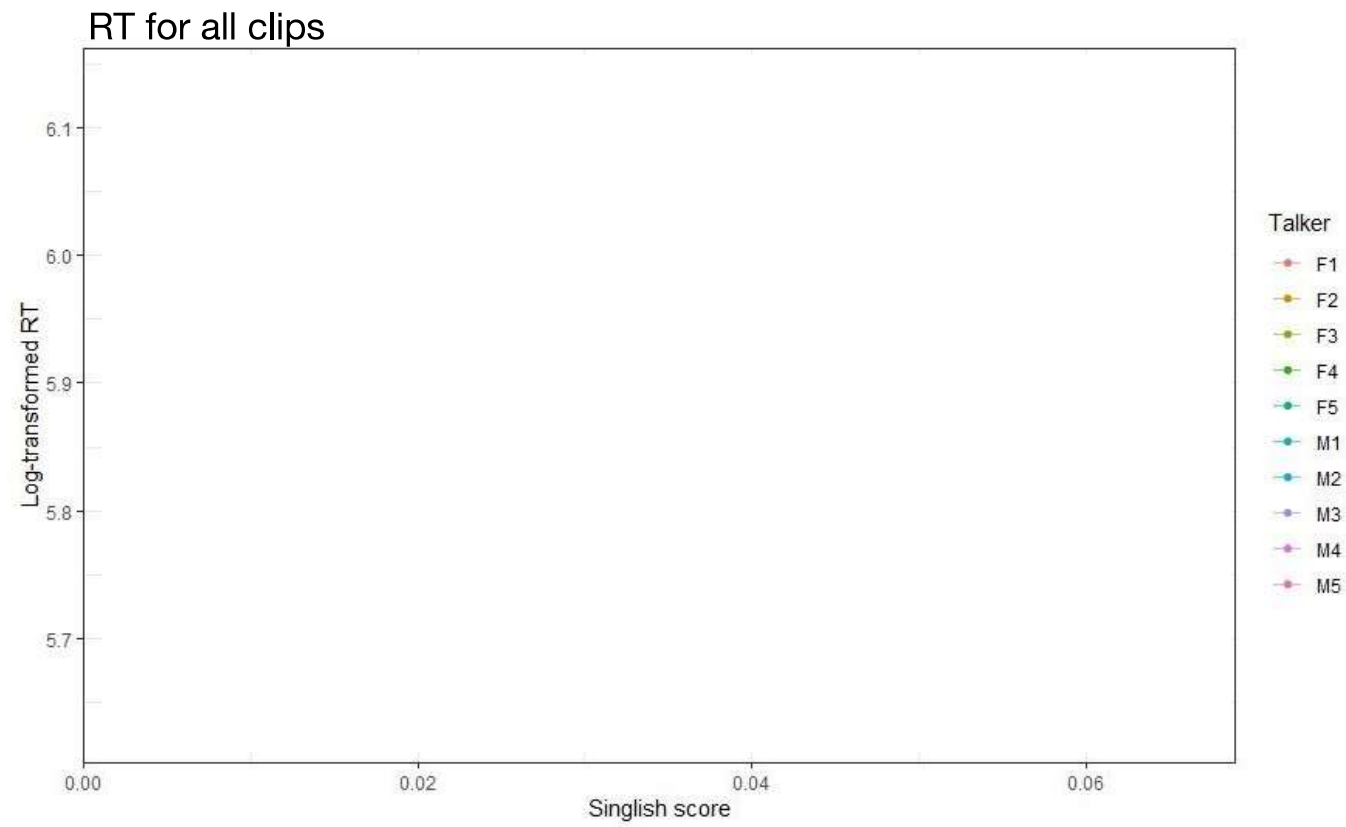


Results

Higher Singlish score, faster to be chosen as More Singlish

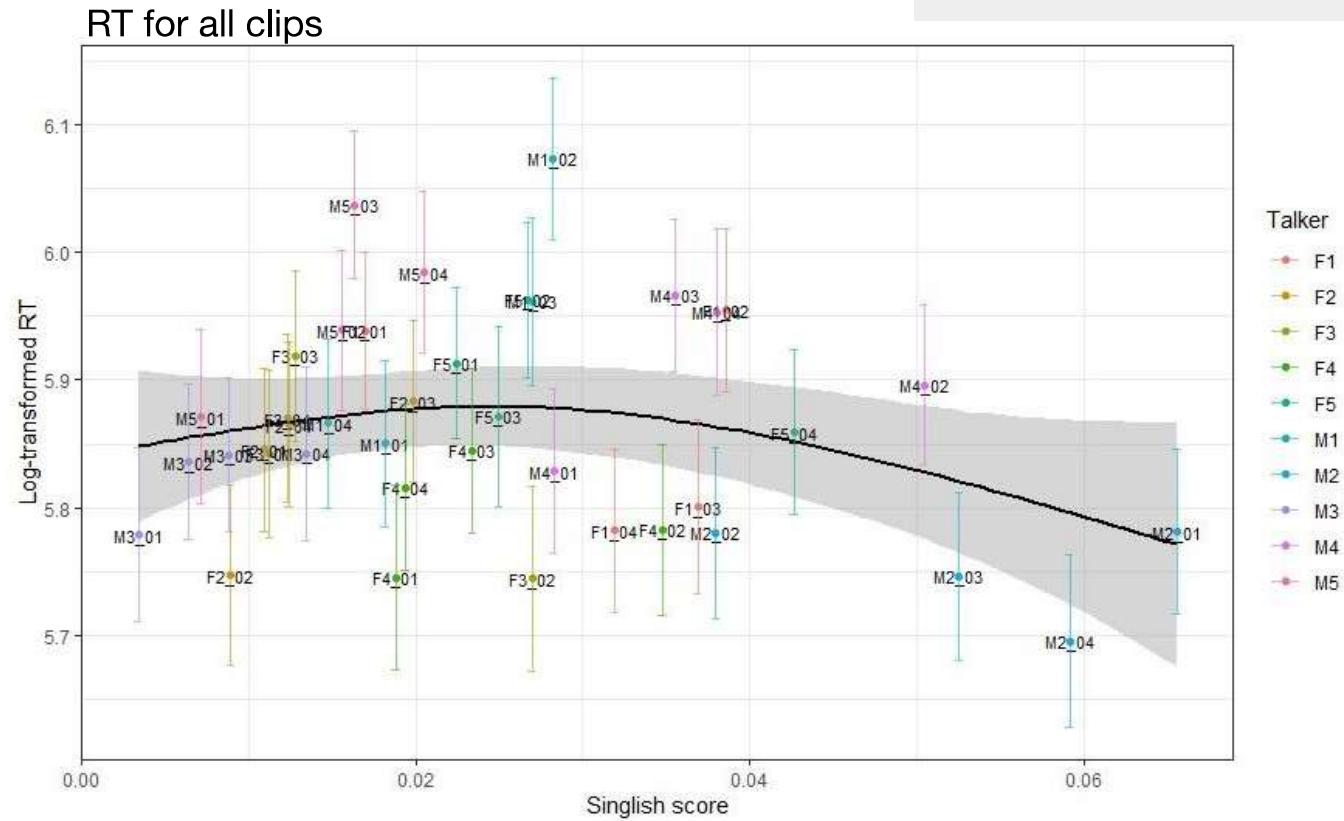


Results



Results

Higher and lower Singlish scores, faster to be chosen as More Singlish or not-More Singlish



Interim Summary

Categorization of Singlish was **gradient**, in terms of both response choice and response speed.

Part 2: Acoustic Analysis

2. What prosodic features are associated with Singlish?

Results

“List three attributes to describe the speakers that sounded more Singlish.”

→ *tune (rhythmic like in mandarin)*

→ *variety in intonation*

→ *monotonous*

→ *flat tone*

→ *speaking too fast*

→ *fast speaking*

Results

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Results

Following from participants' responses, we analyzed:

1. Pitch PVI
= comparisons of adjacent vowels' maximum semitones
2. Pitch variance
= standard deviation of mean semitone of each vowel
3. Durational PVI
= comparisons of adjacent vowels' durations
4. Articulation rate
= syllables per second

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= syllables per second

Results

Logistic mixed effects regression model

→ Dependent variable: Singlish (1/0)

→ Fixed effects: pitch PVI, pitch variance, durational PVI, articulation rate

→ Random effects: clip, participant, speaker

A clip was more likely to be chosen as 'More Singlish' if it had:

- higher pitch PVI ($p = .046$) → local pitch variability
- lower pitch variance ($p = .022$) → global pitch variability
- faster articulation rate ($p = .041$)

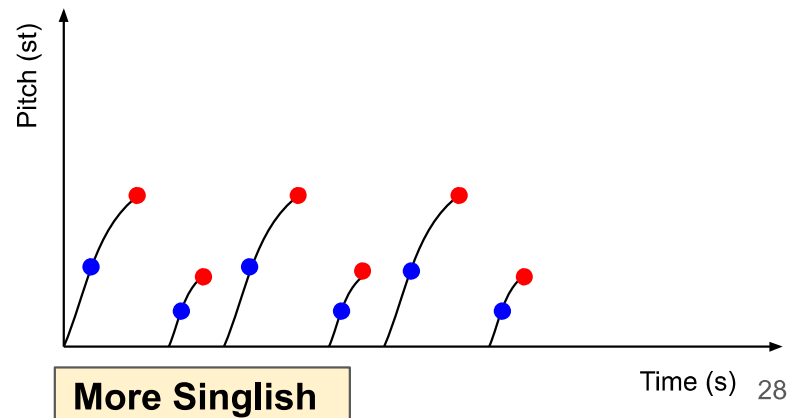
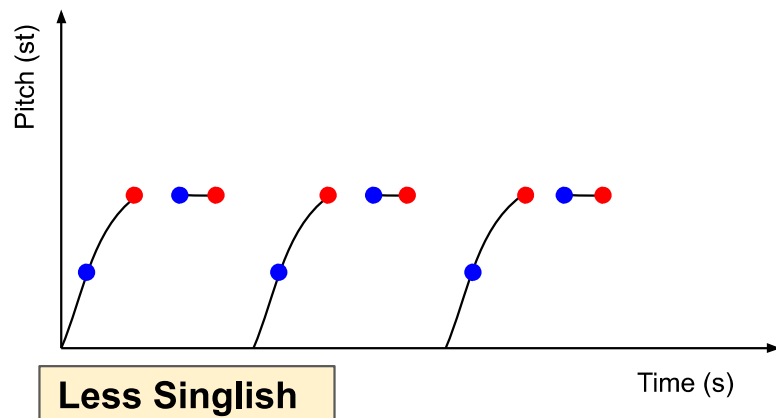
Discussion

Clips more likely to be chosen as More Singlish were associated with **more local pitch variability** but **less global pitch variability**

→ Ties into listeners' open-ended responses

Max: Greater difference between max pitch of adjacent vowels for More Singlish than Less Singlish

Mean: Smaller SD of mean pitch for More Singlish than Less Singlish



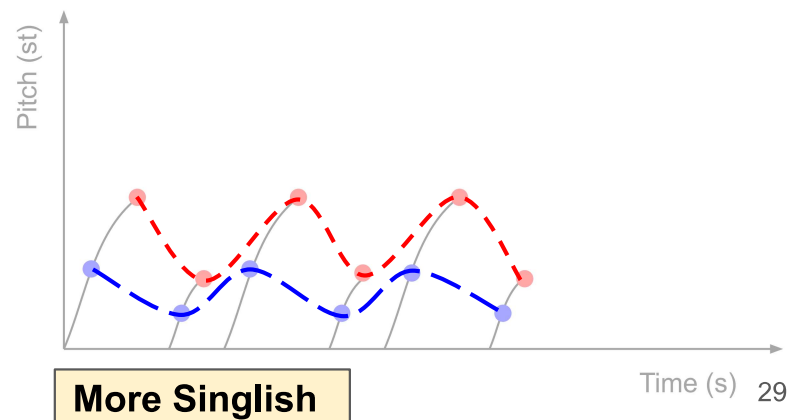
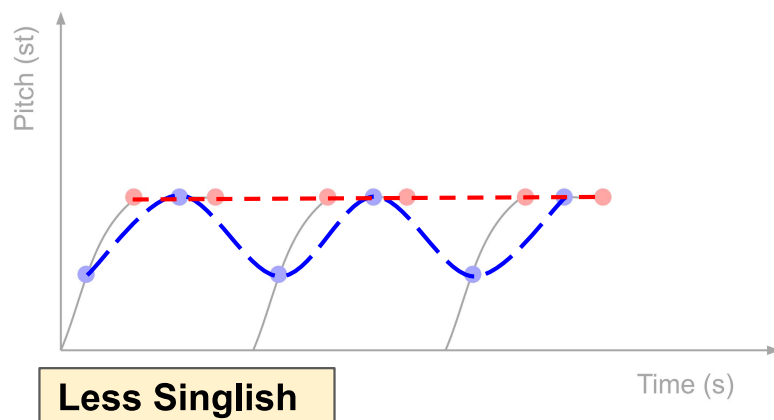
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Study 1 Summary

Speech was categorized as Singlish in a **gradient** way that leveraged prosodic features of **local pitch variability**, **global pitch variability**, and **articulation rate**.

Part 3: Attribute Rating Task

3. What social meanings are associated with Singlish?

Attribute Rating Task

Attribute Rating Task

- “The speaker is [X].”
- 7-point Likert scale
- 40 trials, 1 audio clip/trial; 50 participants

Six attributes from Task 1:

ROUGH, PROPER, CASUAL, EASYGOING,
HONEST, FAST-SPEAKING

Obtain **attribute ratings** for each clip

Press play to listen to the audio again.



Rate how much you agree or disagree with the following statements:

The speaker is EASYGOING.

Strongly Disagree Disagree Somewhat Disagree Neutral Somewhat Agree Agree Strongly Agree

The speaker is ROUGH.

Strongly Disagree Disagree Somewhat Disagree Neutral Somewhat Agree Agree Strongly Agree

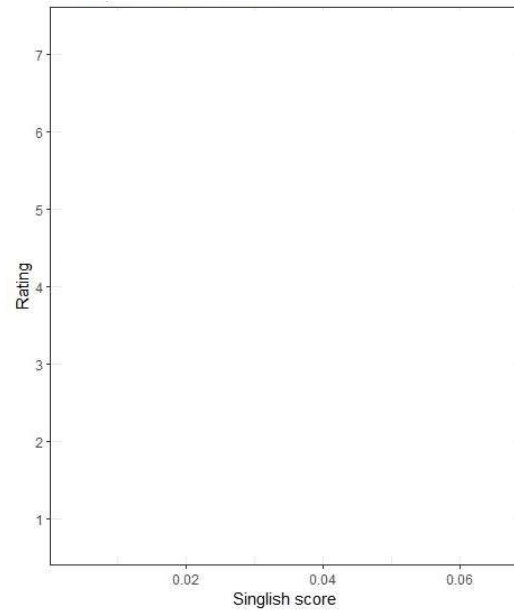
Results

Six Bayesian ordinal mixed effects regression models

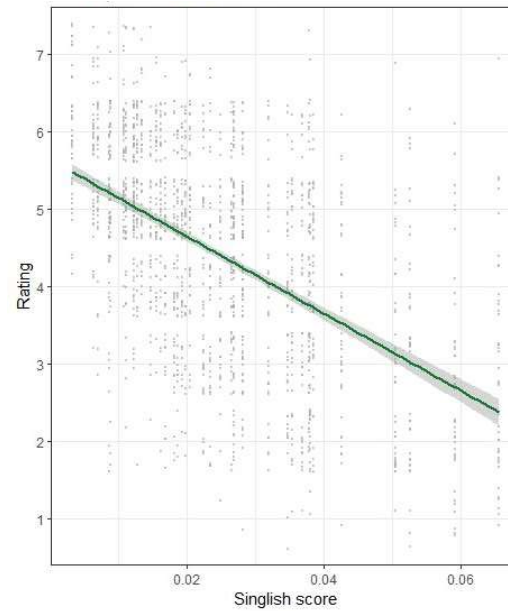
- Dependent variable: Attribute rating score
- Fixed effect: Singlish score
- Random effects: Clip, Speaker, By-participant random slope for Singlish score

Results

CASUAL



PROPER

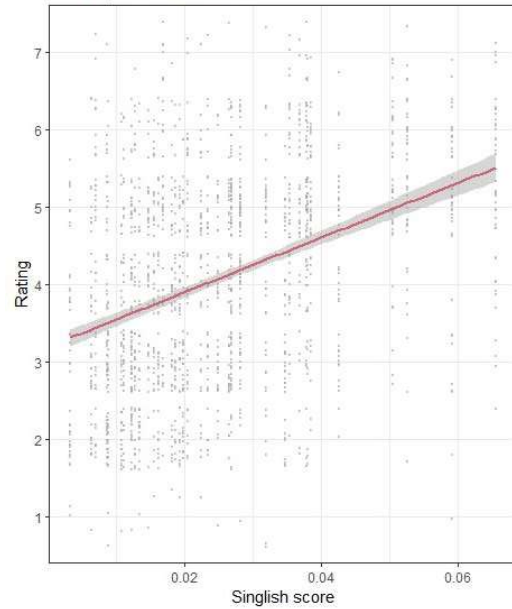


Clips with higher
Singlish score are:

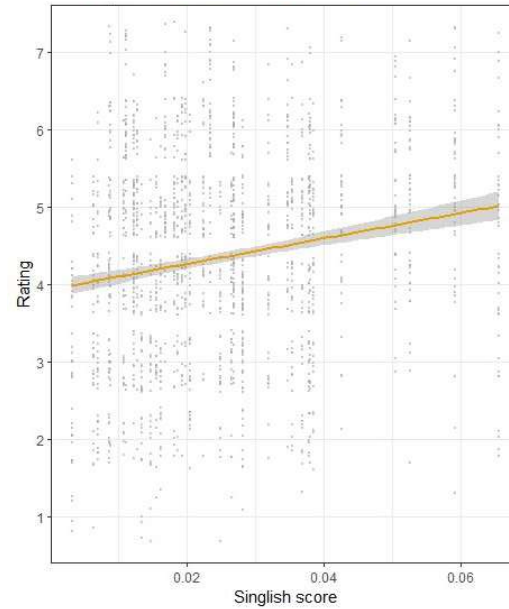
+ CASUAL
- PROPER

Results

ROUGH



FAST-SPEAKING



Clips with higher Singlish score are:

- + CASUAL
- PROPER
- + ROUGH
- + FAST-SPEAKING

Results

FAST-SPEAKING

→ From Task 1: Faster speech rate associated with Singlish

Online metalinguistic commentary

→ *The accent is fine. The speed though... Apparently we speak REALLY fast*

→ *Not sure if Singaporean realize it, but as a Malaysian, having worked there, everything was 'fast', walking, talking, picking up cargo, dropping off cargo*

Summary

Singlish is associated with attributes of **roughness**, **casualness**, and **properness**, and **fast-speaking**.

Discussion

Recall: An indexical account is concerned with features and what they index

From Part 1/2, we identified **prosodic features**:

- Local pitch variability
- Global pitch variability
- Articulation rate

From Part 3, we identified **social meanings**:

- ROUGH
- CASUAL
- PROPER
- FAST-SPEAKING

Discussion

Pitch variability over multiple temporal scales

→ Prosody as a melody that is overlaid on a stream of speech

Importance of centering the listener

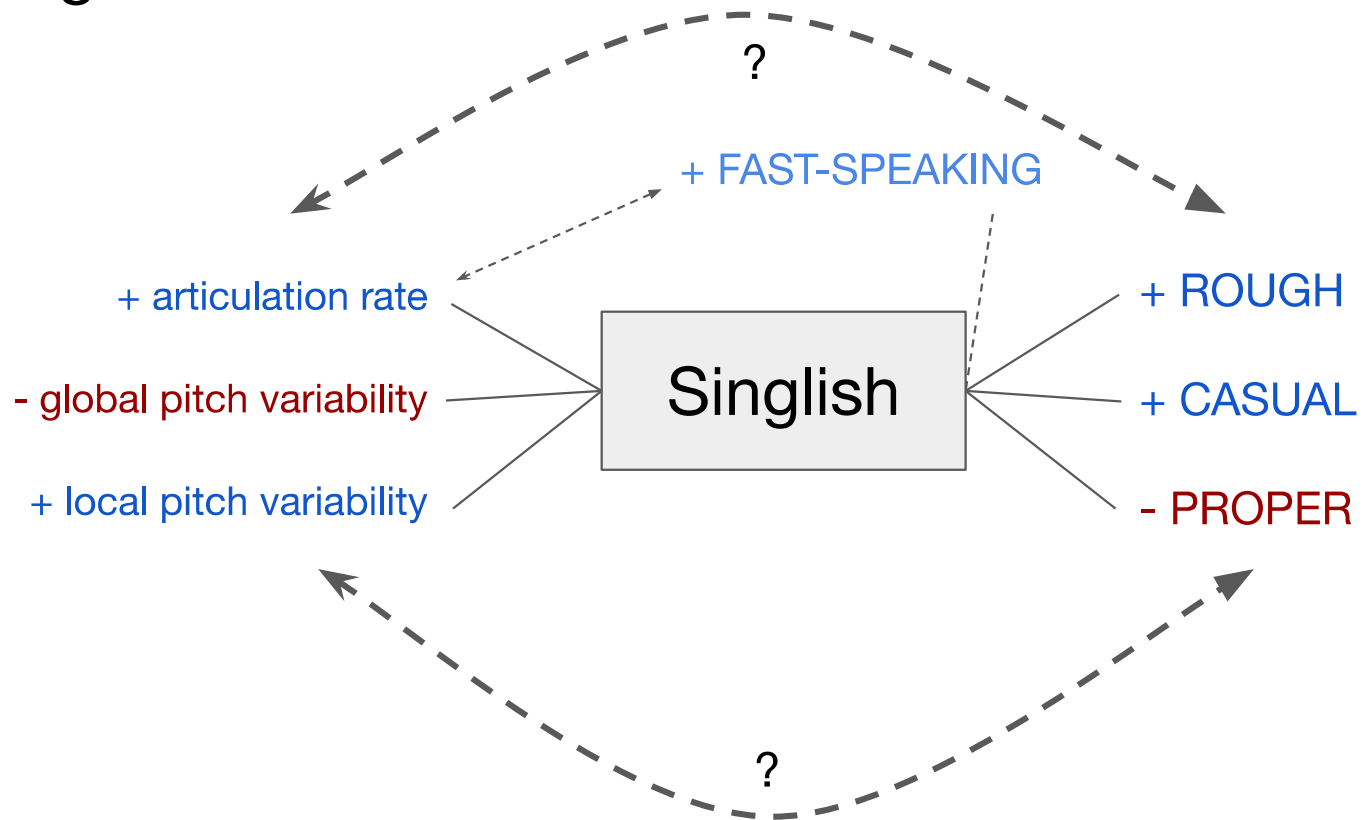
→ Probing listeners' percepts of 'Singlish' rather than assuming labels

Indexical account of variation

→ Using the percept of Singlish to understand linguistic features and what they might index

→ Utility and importance of focusing on language ideologies

A rough schema



Future Work

What happens if we control for articulation rate?

Can prosody alone be identifiably more Singlish? How does prosody interact with segmental variation?

What other prosodic features and social meanings are relevant for Singlish and for English in Singapore?

Thank you!

References

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