

Social perception of TH-stopping and postvocalic rhoticity in Malaysian English

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Abstract. This study employs the matched-guise technique to examine the social perception of *TH-stopping* and *postvocalic rhoticity* in Malaysian English. 110 Malaysian participants listened to audio stimuli containing the target sociophonetic variables and judged the speakers in terms of identity, status, solidarity, and nationality. Listener judgments of status were found to diverge from Standard British English, the prescribed standard. *TH-stopping* did not affect standardness ratings, and rhoticity was perceived as more formal than non-rhoticity. Moreover, *postvocalic rhoticity* displayed stronger implicit indexical association with identity and status than *TH-stopping* despite it receiving fewer overt metalinguistic commentaries. The findings demonstrate a discrepancy between linguistic ideal and linguistic behavior among Malaysian English speakers: the British standard may be held in high regard, but a local norm of pronunciation exists independent of it.

Keywords. Malaysian English; matched-guise test; perception; sociophonetics; World Englishes

1. Introduction. Malaysia is a Southeast Asian country with immense linguistic and cultural diversity. Typical of postcolonial societies, English is deeply embedded in the everyday lives of Malaysians, which gives rise to a distinct indigenized variety, Malaysian English (ME) (Schneider 2007). While most use it as a second language, a minority of individuals, particularly those from urban Chinese, Indian, and Eurasian background, speak it as their primary language (David 2000; Ting & Mahadhir 2009; David & Noor 1999; David et al. 2003). According to Kachru's (1985) *Concentric Circles Model of World Englishes*, Malaysia is said to be part of the "Outer Circle", postcolonial societies where English is not the sole dominant language but an inter-ethnic lingua franca in a multilingual setting. English speakers in the "Outer Circle" are found to wrestle between adherence to "native speaker" norms and acceptance of local linguistic forms. In Malaysia, the Ministry of Education prescribes the use of Standard British English in the public education system (Kementerian Pendidikan Malaysia 2016), but ME continues to be spoken outside the classroom despite the stigma (Pillai 2008), and some scholars even advocate for the codification of Standard ME (Pillai et al. 2012). "Outer Circle Englishes" such as ME therefore serve as excellent case studies to examine how discrepancy between linguistic ideal and linguistic behavior is manifested in the perception of sociophonetic variation.

This study employs the matched-guise paradigm to examine the social perception of two ME sociophonetic variables, *TH-stopping* and *postvocalic rhoticity*. Is standardness indexed through variation in these two variables? If so, are the "standard" variants the ones prescribed by Received Pronunciation? Apart from status and prestige, does variation in these two sociophonetic variables index solidarity and local identity? The setup of the experiment was modeled after the matched-guise paradigm (Campbell-Kibler 2007; Villarreal 2018), which was developed to examine how linguistic variables affect the perception of social characteristics in a controlled manner. In a matched-guise test, participants listen to a series of audio stimuli and provide their

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impression of the speakers. To remove the effect of confounding linguistic features in listener perception, the audio stimuli are digitally manipulated such that the only acoustic difference is the variable of interest. Listener perceptions of social characteristics are typically quantified by rating speakers on a series of traits through Likert-scale measures.

1.1. SOCIOPHONETIC VARIABLES. Word-initial (inter-)dental fricative /θ/ has two sociophonetic variants in ME: fricative [θ] and stop [t]. The latter is also known as *TH-stopping*. Yamaguchi & Pétursson (2012) found that TH-stopping was more frequent in spontaneous speech and sentence reading than in word list reading, suggesting that variation in word-initial /θ/ may index casualness and formality. Some Malaysian TESOL studies adopt a deficit model by framing the fricative variant [θ] as the “standard pronunciation” and the stop variant [t] as a “mispronunciation” (Hamzah et al. 2017; Enxhi et al. 2012; Fang 2022; Pudín et al. 2021). While not expressed directly, these studies seemed to assume the standardness of the fricative variant [θ] due to its status as the “native pronunciation”.

Postvocalic rhoticity refers to the variable realization of the historical /r/ in syllable codas. ME is traditionally described as non-rhotic due to the historical influence of Standard British English (Baskaran 2004), but empirical studies show that rhoticity is present among ME speakers with varying frequency (Phoon et al. 2013; Pillai 2015; Phoon & MacLagan 2009; Chan 2024). Compared to *TH-stopping*, the association between *postvocalic rhoticity* and standardness appears to be less straightforward. Given the prestige of Standard British English, we should expect non-rhoticity to be treated as the “standard” variant. Yet, studies such as Enxhi et al. (2012); Fang (2022) argue for the opposite by prescribing rhoticity as the “standard pronunciation”. Contrary to the popular assumption that rhoticity equals orientation towards American English (e.g., Phoon & MacLagan 2009), these studies do not seem to attribute their preference to any specific national varieties.

2. Methods.

Category	Item
Practice items:	(1) I bought some shoes from a mall.
	(2) All my friends love K-pop.
	(3) Should I talk to my mom again?
TH-stopping:	(4) Can you go through my questions one by one?
	(5) Police caught a thief last night.
Postvocalic rhoticity:	(6) Today I cannot come. I hurt my legs.
	(7) Just come here when you have time.

Table 1. Prompts for the matched-guise test. **Bold** indicates words with the target sociophonetic variable.

2.1. MATERIALS. As presented in Table 1, seven written prompts consisted of one to two short sentences were created for the experiment. The prompts were reviewed by multiple ME speakers and were confirmed to be neutral ME expressions. (1)-(3), which do not contain any target sociophonetic variables, belonged to the practice trial. They allowed listeners to familiarize themselves with the experimental workflow. (4)-(7), which contain the target sociophonetic variables, belonged to the experimental trial. They served to elicit listeners’ perception of sociophonetic

variation. (4)-(5) contain one token each of word-initial /θ/, which are in the words “through” and “thief”. (6)-(7) contain one token each of postvocalic /r/, which are in the words “hurt” and “here”.

	Gender	Age	Ethnicity
Speaker 1	Male	28	Eurasian
Speaker 2	Female	28	Indian
Speaker 3	Male	28	Chinese
Speaker 4	Female	26	Indian
Speaker 5	Female	29	Malay
Speaker 6	Male	35	Malay

Table 2. Demographic information of the speakers.

Three male and three female ME speakers were recruited to create the audio stimuli. Table 2 presents their demographic background. They were all Malaysians in their mid 20s to mid 30s. Speakers 2, 4, and 6 lived in the United Kingdom for several years before the age of 12¹, whereas speakers 1, 3, and 5 never lived abroad. Participants all spoke English regularly, and they were all able to produce the target sociophonetic variants. The recording sessions took place in April 2025 in Kuala Lumpur and Selangor. Speakers were presented the written prompts on a computer screen and were instructed to read them aloud multiple times. To approximate naturalistic speech, they were asked to imagine talking to a friend. For prompts (1)-(3), the speakers were simply asked to read them aloud using their natural accent, but for prompts (4)-(7), they were asked to alternate their pronunciation of the target sociophonetic variables. For (4)-(5), they had to produce the two variants of word-initial /θ/: stop [t] and fricative [θ]. For (6)-(7), they had to produce the two variants of postvocalic /r/: rhotic and non-rhotic. The speakers were recorded using a Sennheiser ME 2 omni-directional lavalier microphone at a 48 kHz sampling rate and a 32-bit sample depth.

The raw recordings were then processed in Praat where the target utterances (4)-(7) were extracted and digitally manipulated through splicing, a technique commonly employed in matched-guise studies (e.g., Campbell-Kibler 2007; Tamminga 2017; Davidson 2019). This procedure created audio stimuli that were identical except the target segments, word-initial /θ/ (stop guise vs. fricative guise) and postvocalic /r/ (rhotic guise vs. non-rhotic guise). Two guises were created for every target utterance produced by each speaker, which resulted in a total of 48 unique audio stimuli for the experimental trial (6 speakers × 4 prompts × 2 guises). Utterances (1)-(3) were also extracted from the raw recordings, but since they do not contain any of the target variables, splicing was not required. It resulted in a total of 18 unique audio stimuli for the practice trial (6 speakers × 3 prompts). All 66 audio clips were normalized for amplitude, and the ones created through splicing were pretested with 3 trained phoneticians to ascertain their naturalness.

2.2. PROCEDURE. The matched-guise experiment was constructed using Qualtrics. The experiment consisted of three components: (1) Headphone screening, (2) Practice trial, and (3) Experimental trial. To control for consistency in sound presentation, listeners first confirmed that they

¹ Ideally I would have excluded speakers who have spent substantial time abroad to minimize influence from other English varieties. However, due to difficulty in speaker recruitment, a compromise was made.

were using headphones in a quiet environment. A noise sample from Woods et al. (2017) was provided for the listeners to adjust the volume. Then, listeners underwent a headphone screening test developed by Woods et al. (2017). For each trial, three pure tones were played, and listeners were asked to select the quietest one. If they were using headphones, they should correctly identify the one 180 out of phase across the stereo channels as the quietest. Listeners must provide the correct response on at least 5 out of 6 trials in order to continue with the experiment. If they failed to do so, they would be asked to wear headphones and try again. Those who failed to pass the test for the second time were disqualified from the experiment.

Afterwards, listeners entered the practice trial in which they listened to three audio clips containing utterances (1)-(3) in ascending order produced by three different speakers. Six versions of the trial with different selections of speakers were created, i.e., Speakers 1, 2, and 3 in Version 1, Speakers 2, 3, and 4 in Version 2, and so forth. Listeners were randomly assigned one of the six versions. Listeners were told to listen to some short WhatsApp voice messages without receiving any information about the speakers. After listening to each clip once, they were asked to rate the speaker on nine semantic differential scales regarding **Identity**: 1. *Foreigner – Malaysian*, 2. *Not Malaysian Malay – Malaysian Malay*, 3. *Not Malaysian Chinese – Malaysian Chinese*, 4. *Not Malaysian Indian – Malaysian Indian*, **Status**: 5. *Bad pronunciation – Good pronunciation*, 6. *Casual – Formal*, 7. *Uneducated – Educated*, and **Solidarity**: 8. *Does not sound like me – Sounds like me*, 9. *Unfriendly – Friendly*. Scaled responses were recorded via continuous slider bars which positions were converted to integers between 0-100. Listeners were also asked to provide two open-ended comments, one on the speaker's nationality and one on any other observations. After familiarizing themselves with the questions, listeners entered the experimental trial. A within-subject design was employed in which every listener listened to all 48 clips. The order of presentation was pseudo-randomized such that neither the same speaker nor the same sentence was ever presented consecutively. The instruction and the questions in the experimental trial were identical to those in the practice trial.

Data collection took place online via Qualtrics from July to September 2025. A total of 110 listeners were recruited through the University of Malaya community. Prior to the experiment, all listeners completed a demographic questionnaire on Qualtrics providing information on age, gender, ethnicity, region, and language use. Participants were excluded from the experiment if they had speech or hearing impairments, were not born and raised in Malaysia, were not between the age of 18-30, had lived abroad, or failed the headphone screening test. Upon completion of the experiment, listeners received a RM20 (~US\$4.7) compensation in the form of digital currency via Touch 'n Go eWallet.

Figure 1 presents the demographic profile of the listeners. In terms of gender, 64 (58%) were female, 45 (41%) were male, and 1 was non-binary. In terms of ethnicity, 44 (40%) were Chinese, 41 (37%) were Malay, 17 (15%) were Indian, and 8 (7%) were mixed or Orang Asal (e.g., Bidayuh, Dusun). All listeners were between the age of 20 and 29 ($M = 22.9$, $SD = 2.38$). Figure 2 presents the regional background of the listeners. 29 (26%) were from the Northern region (Perlis, Kedah, Penang, Perak), 51 (46%) were from the Central region (Kuala Lumpur, Selangor), 14 (13%) were from the Southern region (Negeri Sembilan, Melaka, Johor), 14 (13%) were from the East Coast region (Pahang, Terengganu, Kelantan), and 9 (8%) were from East Malaysia (Sabah, Sarawak)². Figure 3 presents the languages spoken by the listeners. All 110 of them were

² Listeners who grew up in more than one region were included in multiple categories so the percentages do not sum

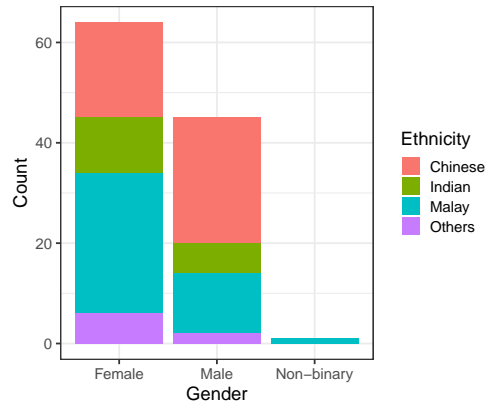


Figure 1. Distribution of listeners by gender and ethnicity.

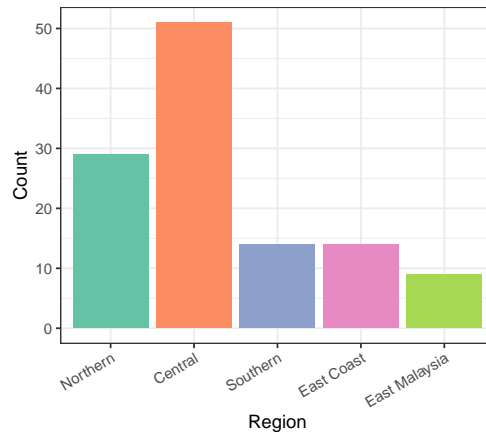


Figure 2. Regional distribution of listeners in the matched-guise test.

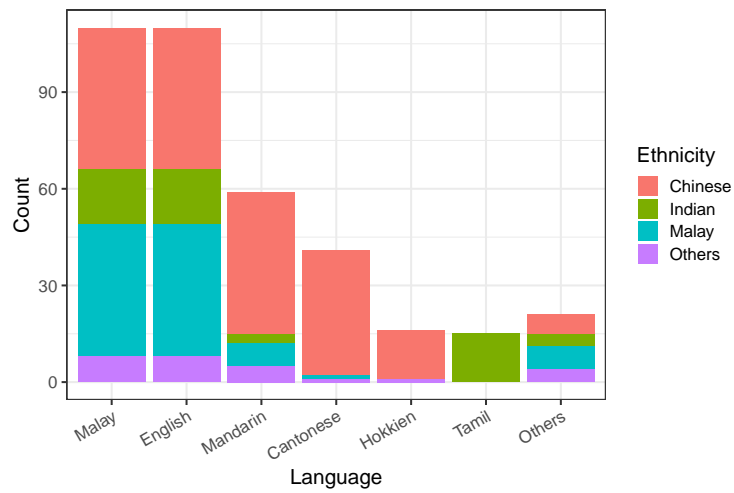


Figure 3. Languages spoken by listeners.

proficient in both Malay and English. Other than these two languages, 59 (54%) spoke Mandarin, 41 (37%) spoke Cantonese, 16 (15%) spoke Hokkien, 15 (14%) spoke Tamil, and 21 (19%) spoke other languages including Japanese, Korean, Arabic, Hindi, Thai, Hakka, among others.

2.3. ANALYSIS. An exploratory factor analysis (EFA; Fabrigar et al. 1999) was initially conducted to examine whether the nine semantic differential scales formed latent social variables. However, the data showed limited factorability (Kaiser-Meyer-Olkin value = 0.540), and the EFA model showed poor global fit (RMSEA index = 0.109). These results indicated that the scales did not reflect coherent latent constructs in the present data. Therefore, rather than aggregating ratings into factor scores, each semantic differential scale was analyzed separately using linear mixed-effects regression models implemented in the `lmerTest` package (Kuznetsova et al. 2017) in R. 18 models were fitted, corresponding to each combination of scale and sociophonetic variable. In all models, rating was the dependent variable, whereas guise and prompt were the fixed effects. Random intercepts were included for listener and item (i.e., each unique combination of speaker and prompt). The reference level of guise was fricative in models for TH-stopping and non-rhoticity in models for postvocalic rhoticity. To address the multiple comparisons problem resulted from repeated statistical tests performed on the same dataset (nine separate ratings on the same audio stimuli), the p-values of the model outputs were grouped by sociophonetic variable and adjusted using the Holm-Bonferroni method.

The optional nationality judgments were first coded by country. An initial review of the responses revealed that countries other than Singapore, the United Kingdom, and the United States were rarely mentioned, so all responses were grouped into nine geographic and linguistic categories, namely *Singapore*, *the United Kingdom*, *the United States*, *East Asia*, *South Asia*, *Southeast Asia*, *Europe*, *Anglophone countries*, and *others*. *Southeast Asia* excluded Singapore, *Europe* excluded the United Kingdom and Ireland, and *Anglophone countries* comprised Australia, Canada, Ireland, and New Zealand. *Others* included all remaining geographic regions (e.g., Africa, the Middle East, Latin America) as well as unknown origin. Each country named in a response was assigned to one of these categories, and each response was then coded using binary indicators (1 = mentioned, 0 = not mentioned) for all nine categories. For example, a response such as “Singapore and England” would be coded as 1 for *Singapore* and *the United Kingdom* but 0 for all remaining categories. Likewise, a response such as “India” would be coded as 1 for *South Asia* and 0 for all remaining categories. The answers were compared with the *Foreigner – Malaysian* scale ratings, and stimuli judged as more Malaysian than foreign (≥ 50 pts in the scale) were excluded. 18 binomial generalized linear mixed-effects models, which corresponded to each combination of nationality and sociophonetic variable, were fitted to examine whether the nine nationality categories were more frequently mentioned in one guise than the other. In all models, the dependent variable was the presence or absence of a given nationality category in a response. Fixed effects included guise, *Foreigner – Malaysian* scale ratings, and prompt. The reference level of guise was fricative in models for TH-stopping and non-rhoticity in models for postvocalic rhoticity. Random intercepts were included for listener and item. Item was dropped from some models due to overfitting.

The optional open-ended comments were manually reviewed and coded. The ones that explicitly referenced the target sociophonetic variables entered analysis. Recurring themes that emerged from the comments were identified through qualitative analysis.

to 100%.

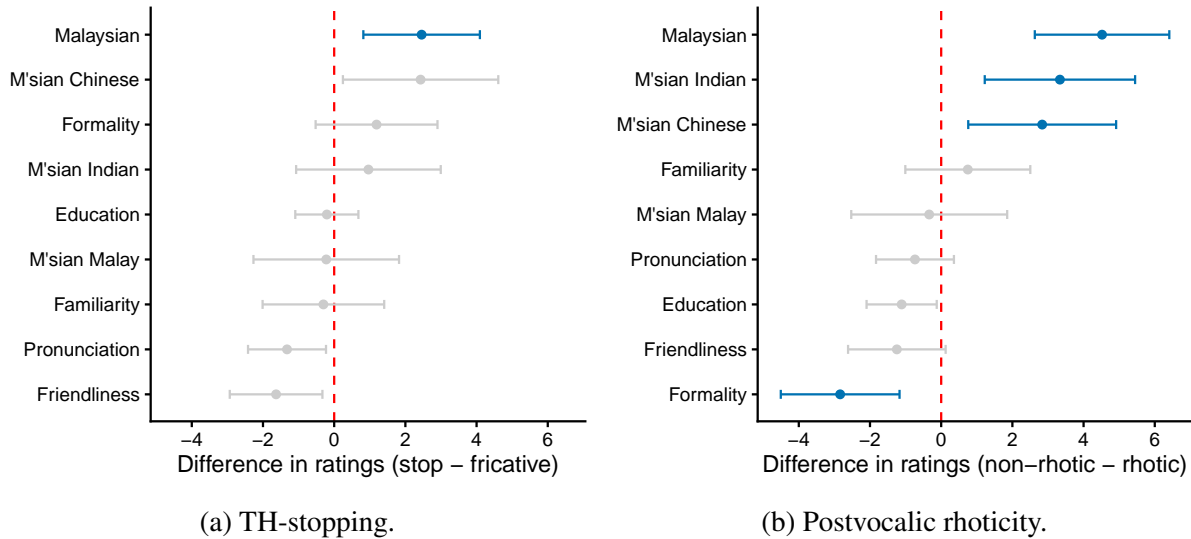


Figure 4. Predicted difference in ratings by guise across scales. Error bars indicate 95% confidence intervals. Blue bars represent scales with significant guise effect while gray bars represent scales without.

Scale	β	SE	t	df	p_{Holm}	95% CI
Malaysian	2.456	0.835	2.941	2518	.030	[0.819, 4.093]
M'sian Malay	-0.223	1.043	-0.213	2518	1.000	[-2.268, 1.822]
M'sian Chinese	2.427	1.113	2.180	2518	.176	[0.245, 4.609]
M'sian Indian	0.962	1.036	0.928	2517.998	1.000	[-1.069, 2.994]
Pronunciation	-1.325	0.559	-2.371	2518	.125	[-2.420, -0.230]
Familiarity	-0.303	0.871	-0.348	2518	1.000	[-2.011, 1.405]
Formality	1.190	0.873	1.363	2518	.865	[-0.521, 2.902]
Friendliness	-1.632	0.664	-2.457	2518	.112	[-2.933, -0.330]
Education	-0.206	0.452	-0.455	2518	1.000	[-1.093, 0.681]

Table 3. Predicted effect of the stop guise relative to the reference level (fricative guise) in the nine linear mixed-effects models for TH-stopping. Significant p-values are in **bold**.

3. Results. Figure 4a and Table 3 present the results of the nine linear mixed-effects regression models for TH-stopping. The stop guise was rated as significantly more Malaysian than the fricative guise ($\beta = 2.456$, $SE = 0.835$, $t(2518) = 2.941$, $p_{\text{Holm}} = .030$, 95% CI [0.819, 4.093]). However, no significant effect was found for the remaining scales including *Malaysian Malay*, *Malaysian Chinese*, *Malaysian Indian*, *Pronunciation*, *Formality*, *Education*, *Familiarity*, and *Friendliness*.

Figure 4b and Table 4 present the results of the nine linear mixed-effects regression models for postvocalic rhoticity. The non-rhotic guise was rated as significantly more Malaysian ($\beta = 4.519$, $SE = 0.964$, $t(2518) = 4.688$, $p_{\text{Holm}} < .001$, 95% CI [2.630, 6.408]), more Malaysian Indian ($\beta = 3.336$, $SE = 1.077$, $t(2518) = 3.096$, $p_{\text{Holm}} = .014$, 95% CI [1.224, 5.447]), more Malaysian Chinese ($\beta = 2.837$, $SE = 1.060$, $t(2518) = 2.677$, $p_{\text{Holm}} = .045$, 95% CI [0.760, 4.914]), and less formal ($\beta = -2.838$, $SE = 0.851$, $t(2518) = -3.335$, $p_{\text{Holm}} = .007$, 95% CI [-4.506, -1.170])

Scale	β	SE	t	df	p_{Holm}	95% CI
Malaysian	4.519	0.964	4.688	2518	< .001	[2.630, 6.408]
M'sian Malay	-0.336	1.117	-0.301	2518	.808	[-2.527, 1.854]
M'sian Chinese	2.837	1.060	2.677	2518	.045	[0.760, 4.914]
M'sian Indian	3.336	1.077	3.096	2518	.014	[1.224, 5.447]
Pronunciation	-0.736	0.558	-1.319	2518	.562	[-1.831, 0.358]
Familiarity	0.748	0.896	0.835	2518	.808	[-1.008, 2.503]
Formality	-2.838	0.851	-3.335	2518	.007	[-4.506, -1.170]
Friendliness	-1.245	0.699	-1.781	2518	.300	[-2.616, 0.125]
Education	-1.111	0.503	-2.208	2518	.137	[-2.096, -0.125]

Table 4. Predicted effect of the non-rhotic guise relative to the reference level (rhotic guise) in the nine linear mixed-effects models for postvocalic /r/. Significant p-values are in **bold**.

than the rhotic guise. However, no significant effect was found for the scales *Malaysian Malay*, *Pronunciation*, *Education*, *Familiarity*, and *Friendliness*.

TH-stopping	
Stop guise	Fricative guise
“typical Malaysian”	“uncommon in Malaysia”
“not western”	“native speaker”
“[Malaysian] Indian accent”	“Malaysian Indian”
“Malaysian Chinese”	“eloquent”
“good pronunciation”	“good pronunciation”
	“unclear”
Postvocalic rhoticity	
Non-rhotic guise	Rhotic guise
“localized tone”	“slurring”
“[Malaysian] Indian accent”	“L2 English speaker”

Table 5. Comments on the target sociophonetic variables by guise.

A total of 1096 general comments were received out of 5280 observations (48 stimuli \times 110 listeners). 550 of them were from tokens of TH-stopping, among which 20 (3.6%) explicitly referenced the sociophonetic variable. The remaining 546 of them were from tokens of postvocalic rhoticity, among which 2 (0.4%) explicitly referenced the sociophonetic variable. Table 5 presents a summary of the major themes identified from these 22 comments. In terms of TH-stopping, the stop guise was described as “Malaysian”/not western” and “Malaysian Chinese”, while the fricative guise was described as “uncommon in Malaysia”, “native”, “eloquent” and “unclear”. Descriptions that the two guises had in common were “Malaysian Indian” and ‘good pronunciation’. These comments are consistent with the semantic differential scale ratings reported in Figure 4a in which a significant guise effect was found for Malaysianness but not for ethnicity and status. The stop guise was judged as significantly more Malaysian than the fricative guise, but neither guise was judged as significantly more Malaysian Indian or “better” in pronunciation than the other. In terms of postvocalic rhoticity, the non-rhotic guise was described

as “localized tone” and “[Malaysian] Indian accent”, whereas the rhotic guise was described as “slurring” and “L2 English speaker”. These comments partially aligned with the semantic differential scale ratings reported in Figure 4b. While the non-rhotic guise was rated as significantly more Malaysian and Malaysian Indian than the rhotic guise, neither guise was rated as significantly “worse” in pronunciation than the other.

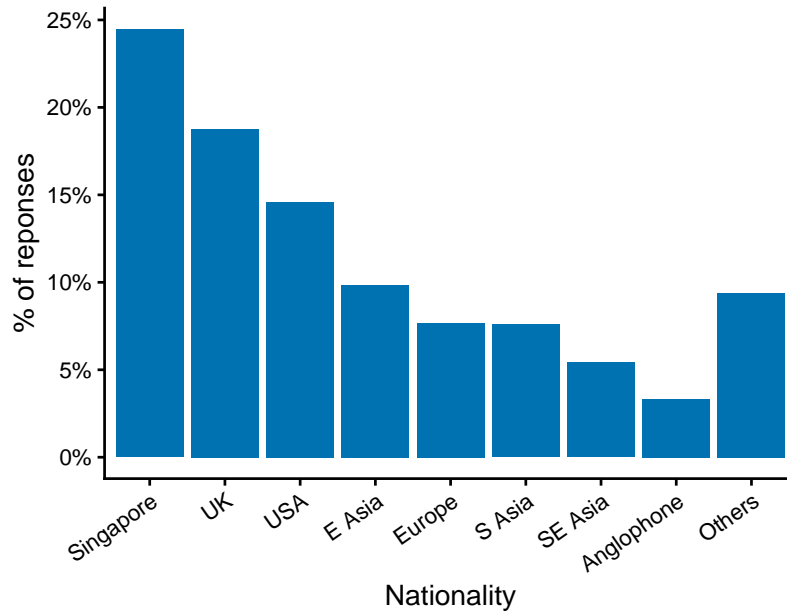


Figure 5. Overall count of perceived nationalities.

1055 out of 5280 observations were rated as more foreign than Malaysian in the *Foreigner – Malaysian* scale (< 50 pts), among which 781 (74%) received a nationality judgment. The response rate was similar across guises and sociophonetic variables, ranging from 243/345 (70%) and 196/273 (72%) for the rhotic and non-rhotic guises of postvocalic rhoticity to 149/195 (76%) and 193/242 (80%) for the stop and fricative guises of TH-stopping. Table 5 presents the distribution of perceived nationalities. The most frequently named nationality was *Singapore*, which featured in 24.5% of the responses ($n = 258$). It was followed by *the United Kingdom* and *the United States*, which featured in 18.8% ($n = 198$) and 14.6% ($n = 154$) of the responses respectively. *East Asia*, which included China, Japan, South Korea, etc. was mentioned in 9.9% of the responses ($n = 104$). *Europe*, which included France, Germany, etc. was mentioned in 7.7% of the responses ($n = 81$). *South Asia*, which included Bangladesh, India, Pakistan, etc. was mentioned in 7.6% of the responses ($n = 80$). *Southeast Asia*, which included Indonesia, the Philippines, Thailand, etc. was mentioned in 5.4% of the responses ($n = 57$). *Anglophone countries*, which included Australia, Canada, Ireland, and New Zealand was mentioned in 3.3% of the responses ($n = 35$). *Others*, which included Africa, the Middle East, Latin America, and unknown origin featured in 9.4% of the responses ($n = 99$).

Table 6 presents the predicted effect of the stop guise in nationality counts relative to the reference level (fricative guise) for TH-stopping. As shown in Table 6, there was no significant guise effect ($p > 0.05$) across any of the nationalities. In other words, speakers were not significantly more or less likely to be perceived as of any particular nationality when the realization of

Model	β	SE	z	p	95% CI
Singapore	-0.243	0.377	-0.645	.519	[-0.982, 0.496]
UK	-0.172	0.321	-0.536	.592	[-0.800, 0.457]
USA	-0.112	0.331	-0.338	.735	[-0.761, 0.537]
E Asia	0.127	0.432	0.293	.769	[-0.720, 0.974]
Europe	-0.439	0.441	-0.996	.319	[-1.303, 0.425]
S Asia	0.500	0.479	1.043	.297	[-0.439, 1.440]
SE Asia	-1.789	1.280	-1.398	.162	[-4.299, 0.720]
Anglophone	2.121	1.205	1.761	.078	[-0.240, 4.482]
Others	-0.602	0.487	-1.237	.216	[-1.556, 0.352]

Table 6. Predicted effect of the stop guise in nationality counts relative to the reference level (fricative guise) in the nine binomial generalized linear mixed-effects models for TH-stopping.

word-initial /θ/ was altered.

Model	β	SE	z	p	95% CI
Singapore	0.206	0.375	0.549	.583	[-0.530, 0.941]
UK	0.700	0.321	2.179	.029	[0.070, 1.330]
USA	-0.389	0.262	-1.483	.138	[-0.902, 0.125]
E Asia	0.407	0.439	0.928	.353	[-0.453, 1.267]
Europe	-0.127	0.393	-0.322	.748	[-0.898, 0.644]
S Asia	0.505	0.540	0.935	.350	[-0.553, 1.563]
SE Asia	-0.208	0.574	-0.363	.717	[-1.332, 0.916]
Anglophone	0.455	0.457	0.996	.319	[-0.441, 1.352]
Others	-0.336	0.350	-0.958	.338	[-1.022, 0.351]

Table 7. Predicted effect of the non-rhotic guise in nationality counts relative to the reference level (rhotic guise) in the nine binomial generalized linear mixed-effects models for postvocalic /r/. Significant p-values are in **bold**.

Table 7 presents the predicted effect of the non-rhotic guise in nationality counts relative to the reference level (rhotic guise) for postvocalic rhoticity. As shown in Table 6, there was a significant guise effect for *the United Kingdom*. Speakers were significantly more likely to be perceived as British in the non-rhotic guise as opposed to the rhotic guise ($\beta = 0.700$, $SE = 0.321$, $z = 2.179$, $p < .029$). However, there was no significant guise effect on the remaining eight nationality categories ($p > 0.05$). Speakers were not significantly more or less likely to be perceived as Singaporean, American, East Asian, European, etc. when the realization of postvocalic /r/ was altered.

4. Discussion.

4.1. INDEXICAL MEANINGS OF TH-STOPPING AND POSTVOCALIC RHOTICITY. The results of the matched-guise experiment indicate that *TH-stopping* and *postvocalic rhoticity* carry different indexical meanings in ME. TH-stopping seems to more overtly salient as evidenced by the metalinguistic commentary in both existing literature and the current study. Malaysian TESOL

studies (e.g., Hamzah et al. 2017; Enxhi et al. 2012; Fang 2022; Pudín et al. 2021) frame the stop variant as “mispronunciation” and the fricative variant as “correct pronunciation”, whereas listeners in the current study described the stop variant as “Malaysian” and the fricative variant as “foreign”. It aligns with the notion of *stereotype* as proposed by Labov (1972), a sociolinguistic variable above the level of awareness. Paradoxically, despite its overt salience, variation in word-initial /θ/ seems to carry a limited number of indexical meanings. Listener ratings of the *Foreigner – Malaysian* scale and metalinguistic commentaries both support that the stop variant indexes Malaysianness while the fricative variant indexes foreignness. Yet, these two variants do not seem to index status, solidarity, ethnicity, or specific foreign nationality. No statistical significance was found for the remaining eight semantic differential scales, indicating that neither variant was perceived as more formal, educated, “well-enunciated”, familiar, friendly, (Malaysian) Malay, Chinese or Indian than the other. This lack of consistent indexical meaning is also reflected in the open-ended comments in which both variants were described as “Malaysian Indian” and “good pronunciation”.

On the contrary, postvocalic rhoticity seems to be less overtly salient. Listeners in the current study almost never commented on the feature, with only two overt mentions out of 546 comments received. It suggests that ME speakers might be less consciously aware of its variation compared to that of TH-stopping, which aligns with the notion of *marker* in Labov (1972), a sociolinguistic variable that carries indexical values but below the level of awareness. Interestingly, despite the lack of overt awareness, postvocalic rhoticity seems to carry more implicit indexical meanings than TH-stopping does. As exemplified by the significant guise effect in the *Foreigner – Malaysian*, *Not Malaysian Indian – Malaysian Indian*, *Not Malaysian Chinese – Malaysian Chinese*, and *Casual – Formal* ratings, the non-rhotic variant may index Malaysianness, Indian and Chinese ethnicity, as well as casualness, whereas the rhotic variant may index foreignness and formality. The metalinguistic commentary partially aligned with the ratings as the non-rhotic variant was described as “local” and “Malaysian Indian”.

4.2. IS STANDARDNESS ASSOCIATED WITH FOREIGN NATIONALITIES?. Despite the overt prestige of Standard British English in Malaysian society, listeners in the current study did not seem to associate foreignness with status and standardness. Schneider (2007) placed Malaysia in Phase 3 (nativization) of his *Dynamic Model of the Evolution of Postcolonial Englishes*, meaning that external linguistic norms predominate despite the emergence of local English varieties. If that is indeed the case, we should observe a negative correlation between localness and standardness: the more Malaysian someone sounds, the less standard their speech should be. Listener ratings in the current study however fails to establish a correlation between these two social attributes. As demonstrated by the limited factorability of the dataset and the poor EFA model fit, the nationality scale *Foreigner – Malaysian* and the status scales *Bad pronunciation – Good pronunciation*, *Casual – Formal*, *Uneducated – Educated* did not form a coherent latent construct. It indicates that foreignness and standardness were not treated as the same underlying concept by ME listeners. Instead, they were independent social attributes that acted independently from one another.

On top of that, variation in TH-stopping and postvocalic rhoticity do not seem to index specific foreign nationalities in a consistent manner. Although the fricative variant of /θ/ is the prestige norm in the United Kingdom and the United States, listeners in the current study did not associate it with Britishness, Americanness, or any other nationalities. The only significant na-

tionality effect was the one on postvocalic rhoticity in which the non-rhotic variant was judged as more British than the rhotic one. Despite claims that rhoticity in ME is the result of American influence (e.g., Phoon & MacLagan 2009), listeners did not associate the rhotic variant with the United States or other nationalities.

The results demonstrate a discrepancy between the linguistic features of non-local national varieties and the perception of ME listeners. [θ] is realized as a fricative in Received Pronunciation, but listeners do not perceive the fricative variant as British. American English is predominantly rhotic, but listeners do not perceive rhoticity as American. A possible explanation for this pattern is a lack of indexical association between the target sociophonetic variables and nationality. While ME listeners recognized British and American English conceptually, word-initial /θ/ and postvocalic /r/ might not be part of their mental representation of these varieties.

4.3. DISCREPANCY BETWEEN PRESCRIBED STANDARD AND LISTENER PERCEPTION OF STANDARDNESS. Malaysian TESOL studies typically treat TH-stopping as “mispronunciation” but the fricative variant [θ] as the “correct pronunciation” (Hamzah et al. 2017; Enxhi et al. 2012; Fang 2022; Pudín et al. 2021). There is less explicit discussion on whether rhoticity or non-rhoticity should be considered the “standard”, but studies typically assume “British English”, a predominantly non-rhotic variety, to be the prescriptive standard in Malaysia (Jayapalan & Pillai 2011; Pillai 2015). However, the sociophonetic variants listeners perceived as “standard” differed from the ones prescribed by these TESOL studies. The three semantic differential scales on status: *Bad pronunciation – Good pronunciation*, *Casual – Formal*, and *Uneducated – Educated* represent social attributes commonly associated with “standardness”. For word-initial /θ/, no significant effect was found for any of the three scales, meaning that the alternation between fricative [θ] and stop [t] did not make the speakers sound more well-enunciated, formal, or educated. Metalinguistic commentaries provided by the listeners support this argument as both variants were explicitly described as indicators of “good pronunciation”. For postvocalic /r/, a significant effect was found for the *Casual – Formal* scale in which speakers were perceived as more formal using the rhotic variant as opposed to the non-rhotic variant. However, no significant effect was found for the other two scales, so speakers were not perceived as more well-enunciated or educated using one variant over the other.

The patterns observed suggest that the prescriptive standards proposed by Malaysian TESOL studies may not represent the attitudes of everyday ME speakers. Although the fricative variant [θ] is prescribed as “standard”, listeners in general do not seem to view it in such manner. Likewise, although the use of British English is endorsed in institutional settings (Jayapalan & Pillai 2011; Kementerian Pendidikan Malaysia 2016), listeners do not treat non-rhoticity, the variant prescribed by Received Pronunciation, to be more “standard” than rhoticity. On the contrary, rhoticity was associated with formality, whereas non-rhoticity was associated with casualness.

5. Conclusion. The linguistic ideals of English speakers in Outer Circle societies such as Malaysia should not be taken at face value. While non-local national varieties such as “British English” or “American English” may be regarded as standard, this sentiment may not extend to the actual linguistic features of these varieties. As demonstrated by listener ratings in the matched-guise test, a speech community may claim to follow Standard British English in principle without treating its phonological features as standard. It challenges our assumptions of what national varieties mean to everyday speakers in the Outer Circle. When someone talks about “British English”, are they conceptualizing the actual variety spoken in the United Kingdom, or rather a locally defined

imagination of prestige and status? Despite the Ministry of Education's official endorsement of Standard British English, Malaysians have in fact developed a local indexical field of standardness independent from the prestige norms in the United Kingdom, and it is reflected in the sociophonetic variation of word-initial /θ/ and postvocalic /r/.

The study's findings have important consequences for future TESOL research in Malaysia. Given the discrepancy between "standard pronunciations" prescribed by previous studies and listener perception of sociophonetic variants, is it necessary for English teachers to impose Received Pronunciation on their students? When developing a pronunciation model for the teaching of English as a second language, should it be based on local community norms or foreign prestige varieties? As scholars such as Pillai et al. (2012) advocate for a localized pedagogic model of English, the findings of this study may open a dialogue about how English pronunciation can be taught in Malaysian classrooms.

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