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Negotiating social meanings in a plural society: Social perceptions of variants of /l/ in Singapore English

JASPER HONG SIM

University of Cambridge, UK

ABSTRACT

This study illustrates how speech features that emerged from language contact and acquisition in a pluralistic society can accrue diverse social-indexical meanings over time. The social perceptions towards three variants of coda /l/ in Singapore English—namely dark-l, the variant associated with prescriptive norms, and clear-l and vocalised-l, which are variants that arose through language contact—are examined. The findings show that clear-l and vocalised-l are associated with specific ethnic groups and have equally diverse meanings, but their meanings have evolved differently; vocalised-l is an emerging local standard, whereas clear-l remains largely stigmatised. Their diverse meanings are shown to be connected by social factors within a network of interrelated signs, and their interpretations are dependent on the hearer's experiences, such that we are observing different parts of the sociolinguistic reality. Restricted experiences with the social world and regulation of social perception are also shown to potentially contribute to accent-based prejudices. (Indexicality, language contact, ethnolect, lateral consonant, new Englishes, social perception)*

INTRODUCTION

Differential speech features that emerge from language contact and acquisition, such as those that characterise British Asian English (e.g. Sharma 2011; Kirkham 2017) or structural innovations in New English varieties (e.g. Deterding 2007; Gut 2011) can come to gain social-indexical meanings. These features can become emblematic of a particular socio-demographic group or context based on association by contiguity (Silverstein 2003; Agha 2007), and can be selectively used in the creative construction of social personae, styles, and identities, such as through the adoption of a more ethnically distinctive style (Benor 2010). Like other indices, social meanings of differential features are mutable along with the constantly evolving social landscape, where they are (re)interpreted as they are used (Eckert 2012), and may become reallocated with new social functions across generations (e.g. Sharma & Sankaran 2011; Gnevsheva 2020). This is the case for multilinguistic communities who have experienced or are experiencing

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shifts in language use at the societal level, in which social meanings may constantly emerge and evolve, along with what is considered as standard/mainstream or local/marked. Moreover, in culturally and linguistically pluralistic societies, the interpretation of a feature can vary between individuals; not only can one feature index several distinct social personae and qualities, but there is also considerable variation in the backgrounds of the listeners and their experiences with the sociolinguistic world (Johnstone & Kiesling 2008). This study examines the social perceptions towards three variants of coda /l/ in Singapore English (SgE): dark-l, the variant associated with prescriptive norms, and clear-l and vocalised-l, which are variants that arose through language contact. The key findings revealed that while the local variants are primarily associated with the ethnic groups whose other language(s) may have contributed to their emergence, their meanings may have evolved differently; vocalised-l is perceived by many to be pan-Singaporean and is ascribed social meanings of dark-l that suggest an emerging local standard, whereas clear-l remains exclusively associated with the ethnic minorities and is largely stigmatised. The three variants are also revealed to have very diverse and sometimes conflicting social meanings. These are described to be interrelated in a highly complex meaning network and linked by various social factors, and the myriad interpretations are but fragments of a whole sociolinguistic reality, shaped by listeners' experiences with the complex sociolinguistic reality or a lack thereof. Drawing on Eckert's (2008a) notion of an indexical field, the social-indexical meanings of these variants are further organised in a shared space, which is shown to potentially be a means to document change in social meanings in response to the evolving sociolinguistic landscape.

Social-indexical meanings of /l/

The way differential features become recognised as characteristic of a variety/dialect or associated with a particular ethnic/cultural affiliation (Eckert 2008b; Benor 2010; Hoffman & Walker 2010) is enabled through a sociohistorical process of what Agha (2007:81) termed 'enregisterment', which refers to 'processes and practices whereby performable signs become recognised (and regrouped) as belonging to distinct, differentially valorised semiotic registers by a population'. Many studies have shown that a single variable can carry social meanings, and manipulating a single phone is enough to alter the hearer's evaluation of a speaker (e.g. Plichta & Preston 2005; Walker, García, Cortés, & Campbell-Kibler 2014; Chappell 2016). According to Silverstein (2003), such indexical associations can occur at different levels of abstraction or 'orders of indexicality'; a linguistic form gains higher-order indexicality when it gains new meanings that presuppose lower-order meanings. These multiple related social meanings can be further organised in what Eckert (2008a:464) described as an indexical field—'a constellation of meanings that are ideologically linked'. Using hyperarticulated /t/ release as an example, she showed how the feature is associated with clarity and emphasis in

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American English, and in turn its ideological associations allow speakers to employ /t/ release to index different social types, such as nerd girls and gay divas. In other words, the same variant might index different semantically related qualities depending on the context; it may, for instance, index educatedness and nerdiness when used by nerd girls, but prissiness when used by gay divas.

The speech feature of interest in this study is allophones of the alveolar lateral. Cross-linguistically, alveolar laterals differ with regard to their degree of velarisation and/or pharyngealisation, with some languages having a darker (more velarised or pharyngealised) variant than others (Recasens 2012). In addition, some varieties of languages exhibit a clear or dark variant in all syllable positions, while in others they are syllabically conditioned (e.g. Recasens & Espinosa 2005; Kirkham, Turton, & Leemann 2020). Varieties of Southern British English, for example, are often described to have clearer /l/ in the onset and a darker /l/ in the coda (Wells 1992). Contrastingly, likely due to effects of cross-linguistic influence of languages with clearer /l/ variants such as Panjabi, Urdu, and Arabic, British Asian English is often characterised as having clearer allophones of coda /l/ (e.g. Khattab 2002; Sharma 2011; Kirkham 2017). In her study of second generation British Asians, Sharma (2011) found that some speakers constructed different personae by being more ethnically distinct in their speech features towards family members and India-born speakers, but more mainstream with Anglo speakers. Differential features can also emerge from and evoke attitudes that are linked with various sociohistorical and sociopolitical processes. One such example is Simonet's (2010a) study of the alveolar laterals of Catalan-Spanish bilinguals. Majorcan Catalan has dark-l in all positions, while Spanish has clear-l in all positions. Simonet (2010a,b) found that, particularly in Majorca, not only is darker /l/ associated with Catalan-dominant Catalan-Spanish speakers, but it also indexes local and perhaps rural origins of the speaker. Simonet explained that this was perhaps so because Spanish monolingual speakers settled mostly in the main Majorcan metropolitan areas during the mass migratory waves in the 1950s and 1960s, when Majorcan Catalan had a low level of social prestige for sociopolitical reasons. This led Simonet to argue that a reason why his Spanish-dominant female participants had a merged L1 + L2 lateral category could be because they may have distanced themselves from what they might have perceived as Catalan-accented Spanish, which could also explain why they also produced clearer laterals than older females of similar linguistic background.

Variants of coda /l/ in Singapore English

Many structural innovations in New English varieties can be attributed to various influences of the indigenous languages/substrates (Schneider 2003; Gut 2011). Similar to the formation and use of ethnolects (e.g. Sharma & Sankaran 2011; Gnevsheva 2020), these features can stabilise to form a widely accepted local variety, as is the case of Singapore English (Deterding 2007), and are adopted by

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later generations of speakers and remain in production even if speakers have attained proficiency in English, and further be reallocated with social meanings. Therefore what would have been learner errors or effects of cross-linguistic influence for one generation may be acquired from the input by later generations of speakers, and in turn be used in stylistic practice. Two coda alveolar laterals described in previous work on SgE, vocalised-l and clear-l, are examples of such innovations. Coda /l/ of Singaporeans tends to be vocalised, a process in which the lateral is replaced by either a (labial-)velar approximant or a back vowel or semivowel (e.g. *pill* [piu]). After back vowels, coda /l/ may be deleted (e.g. *ball* [bɔː]). Many Malay Singaporeans exhibit a different variant of coda /l/. In his examination of the English production of ten educated Singaporean English-Malay simultaneous/early sequential bilinguals between the ages of nineteen and twenty-eight, Sim (2019) found that his Malay-dominant participants used predominantly clear-l syllable-finally. Sim posited that, rather than this being an effect of cross-linguistic influence, clear-l could have been learned through the input, similar to British Asians (e.g. Sharma 2011; Kirkham 2017). Their maintenance and use of coda clear-l could also be motivated by social-indexical reasons; Sim's Malay-dominant participants were associated with more Malay-dominant families and social circles, and identified more with a Malay-speaking culture. While the present article is not concerned with the aetiology of these two variants, the phonological or phonetic properties of the substrate languages could have contributed to their emergence: Chinese languages do not allow coda laterals, and while Malay has voiced alveolar laterals syllable-finally, they are always clear, in all syllable positions. No study has yet examined the /l/ of Indian Singaporeans, but descriptions of Indian English and also studies on British Asians of South Asian heritage show that clear-l and also retroflex [ɭ] are variably used syllable-finally (Sailaja 2009; Sharma 2011). While it cannot be assumed that clear-l is also used by Indian Singaporeans, we may expect the clear variant to also be associated with them in this study.

Despite a largely stabilised local norm in Singapore, features belonging to established standard varieties of English are often regarded as prescriptively correct. The variant of /l/ associated with these standards would be dark-l. Just as Received Pronunciation (RP; Agha 2003) and Putonghua (Dong 2010) were enregistered as standard and a status emblem, enregisterment of an 'internationally-acceptable' English in Singapore as legitimate and the appropriate norm is facilitated through many state-motivated metadiscursive practices that reinforce its indexical values, such as in classroom instruction, media, political speeches, and government campaigns, most notably the 'Speak Good English Movement' (Rubdy 2001). At the same time, the local varieties and their divergent features are enregistered as incorrect or nonstandard. Such enregisterment of social meanings can transform into socialised habits of speech perception and production. Recent descriptions of SgE describe variation based on the social-indexical meanings of alternative forms of a linguistic feature (e.g. Alsagoff 2007; Leimgruber 2013; Starr & Balasubramaniam

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2019). Depending on the speaker, listener, and context of their use, variants that are associated with standard varieties of English can be used to index formality, authority, and educational attainment. Contrastingly, local dialectal features, which include 'Singlish' and ethnic markers, embody sociocultural capital and often index informality, camaraderie, and group membership.

Multiplicity of interpretations

Matched-guise studies that involved SgE varieties revealed that attitudes are not homogenous amongst Singaporeans, and guises of more colloquial varieties (which included standard–local accents more generally) did not index solidarity traits for all as one would expect (Cavallaro & Ng 2009; Cavallaro, Ng, & Seilhamer 2014). Indeed, indexical meanings can vary even for members within a community, based on their personal experiences with their particular sociolinguistic worlds. In their study of monophthongal /aw/ in Pittsburgh, Johnstone & Kiesling (2008) found that those who heard monophthongal /aw/ as indexing local identity were least likely to use it in unselfconscious speech, and many of those who did use it did not identify it as indexing localness. Locals also attributed higher-order indexical meanings, if they did so at all, to local forms in different ways. The findings show that while a feature may be statistically associated with a particular sociodemographic group or context, it cannot be assumed that the indexical meaning is widely shared with or is the only meaning to members of a community. In another study, Campbell-Kibler (2008) showed that listeners' overall impression of a speaker affects how they interpret the English variable (ING) (the alternation between word-final *-in* [ɪn, ən] and *-ing* [ɪŋ]) in the person's speech; some regarded the *-in* guise as compassionate, while some others, condescending. She added that the 'differences of opinion relate not to disagreements about (ING) alone, but to a difference in how the listeners incorporate their understanding of the variable into their image of the speaker' (2008:638).

Agha (2003) noted that the specific ways a hearer characterises a variant, and therefore also the degree of access to the social meanings of these variants the hearer has, depend on their experiences and their history of socialisation to these contrasts. In socioculturally complex societies like Singapore, there is evidently even greater potential for social meanings to be diverse and subject to different interpretations, in part due to the variation in speaker and listener attributes. Bilingual experience is highly varied, and so are language outcomes, and therefore some speakers or a subpopulation may produce certain features more frequently than others in the community it indexes. Sim (2019), for instance, found that, in spontaneous speech, Malay-dominant Malays used coda clear-l predominantly, while their English-dominant counterparts used dark-l most of the time. In his examination of l-vocalisation in the speech of educated Chinese Singaporeans, Tan (2005) found that the percentage of l-vocalisation (compared to dark-l) varied significantly between speakers, ranging from 39% to 89%. Depending on the hearer and their

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experiences, variants can be characterised in increasingly specific ways; clear-l, for example, can be associated with non-Chinese, Malays, Malay-dominant Malays, and may further evoke images of various related subgroups/subcultures of the community, and thereby also influencing the social meanings that these hearers apply to the variants.

Current objectives

The primary aim of this study is to explore the accrued social-indexical meanings of three variants of coda /l/ in Singapore English—namely dark-l, vocalised-l, and clear-l—against the backdrop of the various sociohistorical and sociopolitical processes that have shaped them. It seeks to answer the following research questions.

(i) Have the variants come to be associated with particular ethnic groups, and furthermore, do they index subcommunities or specific social types?
(ii) What are the social interpretations of these variants and how do they differ between variants?
(iii) How does diversity in listener attributes and experiences in a pluralistic society result in variation in the interpretation of and attitudes towards these variants?

METHODOLOGY

The study was based on the matched-guise technique (MGT), which elicits listeners' reactions to various recordings, or guises, by the same speaker(s) that differed only in the variables of interest.

Stimuli

The creation of the stimuli was constrained by the many inter-ethnic differences in other linguistic features such as intonation (e.g. Lim 2000) which, if acoustically manipulated, could render the stimuli highly unnatural. Therefore, the stimuli were monosyllabic words instead of sentences or short paragraphs. They also came from two speakers of different ethnicities, one who was Malay and the other Chinese, as a means to account for potential variation in speech features other than those informed by previous studies, such as voice quality. Both speakers were born and raised in Singapore and were English-dominant. The Malay speaker was a thirty-four-year-old female, who was teaching in an English-medium school. She used Malay with her family and some friends and was still affiliated to the Malay ethnic community. The Chinese speaker was a twenty-seven-year-old female. She had limited interactions with Singaporeans of other ethnicities and therefore her overall speech features were essentially that of a typical educated Chinese Singaporean.

The materials were three pairs of monosyllabic words that were matched in their vowels (/ɔ, ʌ, i/). The pairs were: *hall, fall*; *hull, sull*; *heel, feel*. These words were

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semantically and phonologically ethnically neutral in SgE. Stimuli for the first word of each pair were produced by the Malay speaker, and the others by the Chinese. The speakers were recorded separately in sound-attenuated rooms, using a Zoom H5 recorder, at a sampling rate of 48 kHz at 16 bit. The Malay speaker was first trained in producing the vocalised and dark variants by the author. The Chinese speaker, who already could produce vocalised-l and dark-l, was trained in the production of clear-l through listening to the recordings of two Malay-dominant Malays. Speakers were then asked to produce alternate tokens for the target words, each carrying a different variant of /l/. Fillers that included other ethnic features, including those specific to Indian Singaporeans, were also recorded. There was a total of forty tokens, including fillers.

The /l/ tokens were first checked to ensure that they were representative of the three variants, using acoustic and auditory cues, before manipulation. Clear-l has a relatively higher F2 and low F1. The mean F2 of the clear-l tokens was 2015.26 Hz ($SD = 60.99$) while the mean F2 for dark-l was 903.29 Hz ($SD = 85.41$), and these values fall within the ranges that distinguish the darker and clearer variants of /l/ across language varieties reported in Recasens (2012). Following previous matched-guise experiments that involved controlled stimuli (e.g. Graff, Labov, & Harris 1986; Fridland, Bartlett, & Kreuz 2004; Campbell-Kibler 2007), the pitch, duration, and intensity of the tokens were manipulated on Praat (Boersma & Weenink 2019), to limit variability between alternate tokens, such that any change in judgment of the hearers can be attributed to the different variants of /l/. However, the coarticulatory effects of the different laterals on the vowel could not be manipulated without them sounding unnatural, and so the tokens also differed slightly in their vowel quality, but the difference is not expected to affect the judgements of the hearers. The stimuli were subsequently checked. Three linguists trained in phonetics were first asked to rate the naturalness of the tokens and to identify the variant of /l/ in each token. Seven naïve Malays were then asked to rate the clear-l tokens on how 'Malay sounding' they were, and were asked to give reasons for low ratings. Most tokens that were rated poorly were those produced by the Chinese speaker, which were deemed by all listeners to sound more 'Indian' and were described to be 'thicker' than the Malay /l/, which could mean that there was more laminal contact with the alveolar ridge in the clear-l of the Chinese speaker. The poorly rated clear-l tokens were re-recorded and checked again, and all the clear-l tokens were rated as at least 'Probably Malay'.

Informants

The responses came from 111 informants recruited through social media and snowball sampling. Their basic demographics are shown in Table 1. The participants had no hearing impairment that would affect their ability to complete the task. They were mostly native Singaporeans, except for six, three of whom had been living in Singapore for at least fifteen years since before they were five years old, and

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TABLE 1. *Listener demographics.*

VARIABLE	*N*	MEDIAN (RANGE)	MEAN (*SD*)
Ethnicity: Chinese/Malay/Indian	65/36/10		
Age		30.5 (18–53)	30.22 (7.98)
Gender: Male/Female/Unknown	29/50/32		
Education level:			
Secondary or below	1		
Post-secondary	16		
Undergraduate	16		
Bachelor's	56		
Postgraduate	22		
Language use (0 = English only)		3 (0–8)	3.03 (1.75)
Cultural affiliation (0 = English only)		4 (0–9)	3.66 (1.99)
Interactions with (0 = Never):			
Chinese		9 (3–10)	8.62 (1.80)
Malays		5 (1–10)	5.66 (3.18)
Indians		4 (0–10)	4.28 (2.88)

the other three had lived in Singapore for more than twenty years at least since they were ten years old. These six participants were also either ethnically Chinese or Malay, and also had Mandarin or Malay as their ethnic mother tongue (EMT) respectively. Listener attributes and factors that could differentiate their varying degrees of access to the various variants in their linguistic environment were considered (Cavallaro & Ng 2009; Cavallaro et al. 2014; Sim 2019). In addition to their ethnicity, age, gender, and education level, all participants were asked to describe their language use pattern on a scale of 0 (only English) to 10 (only EMT), and also their cultural affiliation, again from 0 (only English-speaking) to 10 (only EMT-speaking). Informants were also asked to rate from 0 (never) to 10 (always) the amount of interaction they had had with Singaporeans of the three major ethnic groups (i.e. Chinese, Malays, and Indians; three scores). The gender of thirty-two participants could not be ascertained, and the missing data were coded as a new level ('unknown') for the statistical analyses. A caveat is that there were very few ethnically Indian listeners, and therefore their results were interpreted with caution.

Experimental design

The experiment was hosted on Qualtrics. Participants first underwent a headphone screening test (Woods, Siegel, Traer, & McDermott 2017), before attempting the experiment that comprised two parts: an ethnic association task and an attitude judgement task. In the instructions that preceded each part, participants were told that the speakers were Singaporeans.

In the ethnic association task, listeners heard each token a maximum of five times and responded to the question, 'How near is the pronunciation you have

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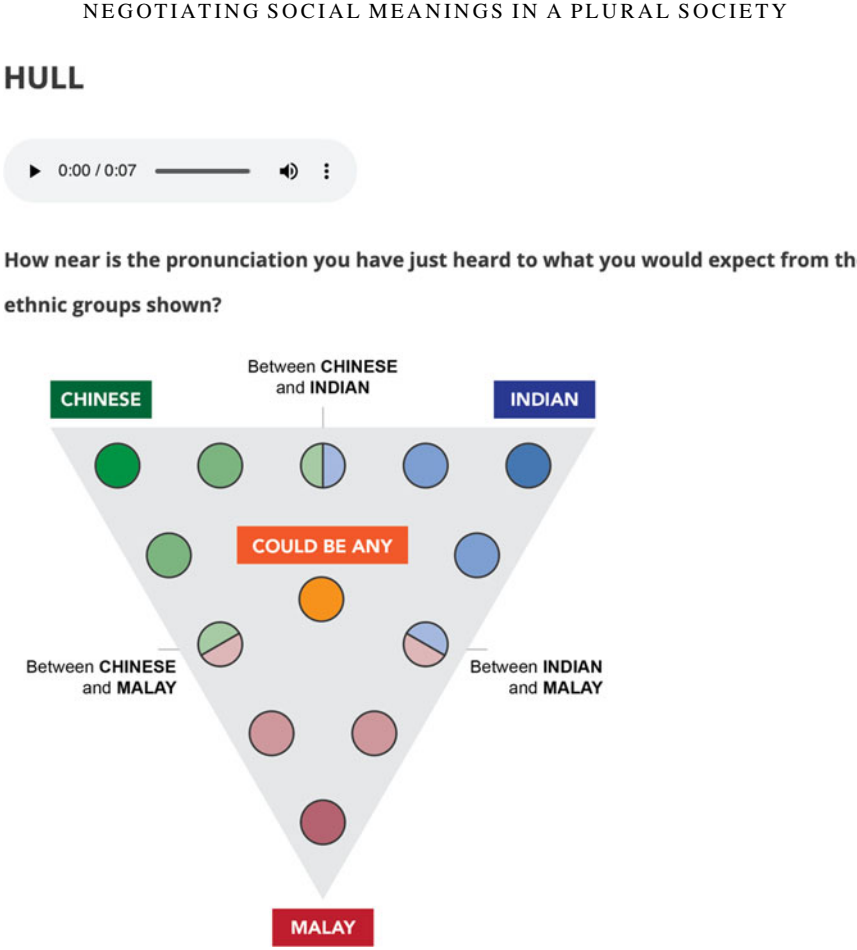

FIGURE 1. A sample item from the ethnic association task.

just heard to what you would expect from the ethnic groups shown?' by clicking on a point on a three-way scale developed for this study (Figure 1). The scale takes into account the relativity of ethnic markedness as perceived by a listener and that a feature can potentially be perceived as shared by members of more than one ethnic group. The ends of the scales indicate a feature as being absolutely representative of the respective ethnic group, and points along the scale and away from one group indicate decreasing affiliation of the feature with that ethnic group but increasing affiliation with the other; the middle point of each side indicates that a feature is considered by a listener to be equally representative of both ethnic groups. Finally, respondents were told to choose the option in the middle of the triangle, 'Could be any', if the feature was thought to be not ethnically distinct. The tokens were pseudorandomised such that no two tokens by the same speaker and no

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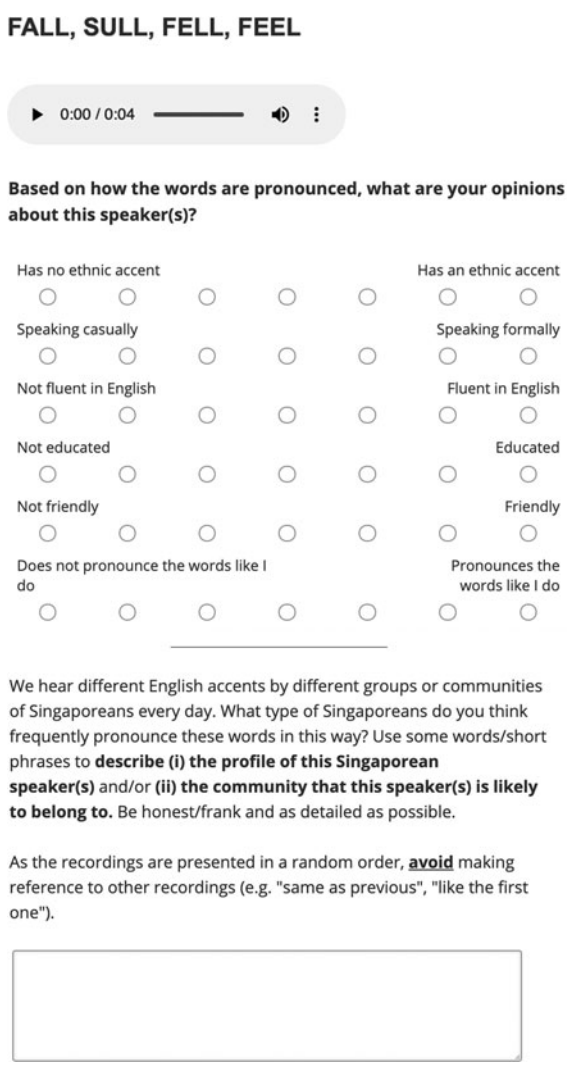

FIGURE 2. A sample item from the attitude judgement task.

two tokens of a word (i.e. with alternative forms) appeared consecutively. Participants completed a practice trial that consisted of two tokens before the actual task.

In the attitude judgement task, participants heard the same tokens but this time the tokens were grouped according to the variant of /l/, and they could listen to the sets as many times as they liked. Listeners were asked to rate each set according to five traits on a seven-point scale, namely ethnic-accentedness, formality, fluency, educatedness, and friendliness (Figure 2). The participants were also asked to

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TABLE 2. *Demographics of interview participants. (Note: language use/cultural affiliation: 0 (only English) to 10 (only Malay).)*

SUBJECT	GENDER	AGE	EDUCATION LEVEL	LANGUAGE USE	CULTURAL AFFILIATION
F1	Female	22	Bachelor's	2	4
F2	Female	21	Undergraduate	3	4
F3	Female	19	Undergraduate	5	7
F4	Female	23	Undergraduate	3	5
M1	Male	21	Undergraduate	5	5
M2	Male	23	Undergraduate	4	5
M3	Male	22	Undergraduate	3	3
M4	Male	22	Undergraduate	1	2
M5	Male	32	Post-secondary	4	3
M6	Male	31	Bachelor's	3	4
M7	Male	35	Bachelor's	4	3

rate how close they thought the pronunciation of the words was to theirs using the same scale. The selection of traits was limited by the nature of the one-word guises in this study, and therefore the informants were also asked to describe the profile of this Singaporean and/or the community that the speaker(s) is most likely to belong to in an open-ended response, in order to elicit other social meanings that could not be captured by these traits.

Metalinguistic interview

As clear-l as a variant in SgE is relatively under-researched, face-to-face metalinguistic talk between the author and eleven other Malay Singaporeans was conducted in order to understand more about its use, associations, and its significance to the Malay ethnic community. Brief demographic information about these informants is presented in Table 2.

RESULTS

Ethnic association task

A total of 1,988 responses were recorded in the ethnic association task. The percentages of ratings for each variant of /l/ are presented in Figure 3, using the same categories shown in Figure 1. For reasons of clarity, only percentages greater than five are shown, and a bubble chart that reflects the relative proportion of ratings for each variant is superimposed. The plots reveal that most informants associated dark-l as a pan-Singaporean feature, although equally many regarded it as at least somewhat Chinese. The reverse is true for vocalised-l; more respondents perceived vocalised-l to be distinctly Chinese than ethnically neutral. In stark contrast, responses for clear-l fell almost exclusively along the MALAY–INDIAN scale.

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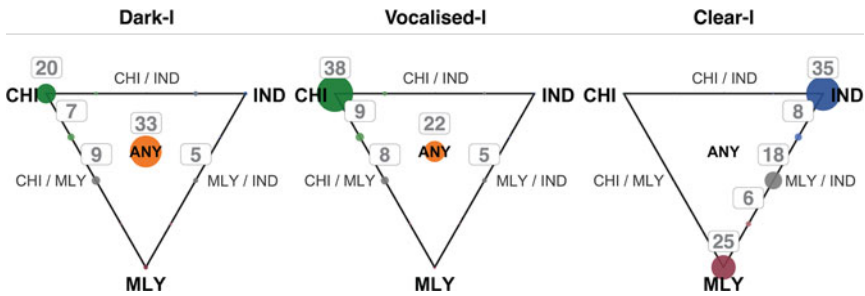

FIGURE 3. Percentage of responses for the ethnic association task by variant of /l/. (Note: Percentages are rounded to the nearest percent and only percentages above five are shown. CHI = CHINESE, MLY = MALAY, IND = INDIAN, ANY = COULD BE ANY.)

To further examine the associations of the /l/ variants with the three different ethnic groups, and to ascertain effects of listener attributes on the ratings, three separate mixed-effects ordinal regression models using the 'ordinal' package (Christensen 2019) on R statistical software (R Core Team 2020), each with CHINESE, MALAY, or INDIAN as the ordinal response variable, were run. With reference to Figure 1, ratings along the three-way scale (i.e. excluding COULD BE ANY) were first transformed to numerical values, starting at '4' for the end of the scale that corresponds to the ethnicity of interest of each model, to '0' at the other two ends, and ratings for categories in between were given the values '3', '2', and '1', according to numerical order; the magnitude of the ratings is thus positively associated with the ethnic affiliation of a variant. The fixed effects included variant (dark/vocalised/clear), speaker (Chinese/Malay), and listener attributes, including ethnicity (Chinese/Malay/Indian), gender (female/male/unknown), age, education level (treated as a continuous variable), degree of interaction with Singaporeans of the ethnicity of interest, language use, and cultural affiliation. Two-way interactions between all main effects were also tested.

Some guises, in particularly those with dark-l, were more likely to be rated as pan-Singaporean. The response COULD BE ANY was modelled using mixed-effects logistic regression using the 'lme4' package (Bates, Mächler, Bolker, & Walker 2015) and the 'lmerTest' package (Kuznetsova, Brockhoff, & Christensen 2017), to ascertain the effect of variant and listener attributes on the likelihood of a guise being rated as pan-Singaporean. The same predictors and contrasts as the previous models were included in this model.

For all models, the random effects structure was kept maximal for subject and token, as justified by the data. To evaluate the contribution of each predictor, and to arrive at a more restricted model, pairwise model comparisons between a full model that included all the explanatory variables and a more restricted model that excluded the predictor under consideration were performed using likelihood ratio tests. Significant interactions were explored using plots of marginal means

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TABLE 3. *Regression coefficients of best-fitting mixed-effects regression models fit to responses of the ethnic association task. (Note: Reference category for variant is dark, speaker is Chinese, and ethnicity is Chinese.)*

RESPONSE (*N*)	FIXED EFFECT	LEVEL	*B*	*SE*	*OR*	[95% CI]	*P*
CHINESE (1625)	Variant	Clear	−5.80	0.62	0.00	0.00–0.01	**< .001**
		Vocalised	0.96	0.20	2.61	1.75–3.89	**< .001**
	Speaker	Malay	0.71	0.32	2.03	1.09–3.79	**.03**
	Ethnicity	Indian	1.02	0.44	2.78	1.18–6.55	**.02**
		Malay	0.05	0.21	1.05	0.70–1.57	.81
MALAY (1625)	Variant	Clear	0.80	0.30	2.23	1.24–4.01	**.01**
		Vocalised	−0.35	0.23	0.71	0.45–1.12	.14
	Ethnicity	Indian	−2.21	0.72	0.11	0.03–0.45	**.002**
		Malay	0.32	0.26	1.37	0.83–2.26	.21
	Variant×Ethnicity	Clear:Indian	2.70	0.82	14.81	2.98–73.49	**.001**
		Voc:Indian	1.06	0.63	2.88	0.85–9.82	.09
		Clear:Malay	−0.34	0.42	0.71	0.31–1.64	.43
		Voc:Malay	−0.70	0.32	0.50	0.26–0.94	**.03**
INDIAN (1625)	Variant	Clear	−0.36	0.82	0.69	0.14–3.44	.66
		Vocalised	−0.76	0.65	0.47	0.13–1.65	.24
	Speaker	Malay	−0.76	0.28	0.47	0.27–0.81	**.007**
	Age		−0.03	0.02	0.97	0.94–1.01	.13
	Variant×Age	Clear:Age	0.09	0.03	1.09	1.04–1.15	**.001**
		Voc:Age	0.00	0.02	1.00	0.96–1.04	.99
MALAY–INDIAN (612)	Speaker	Malay	0.55	0.27	1.73	1.01–2.96	**.04**
	Int_Malay		0.14	0.07	1.15	1.00–1.33	**.04**
	Int_Indian		−0.09	0.08	0.91	0.78–1.06	.21
	Age		−0.06	0.02	0.94	0.90–0.98	**.01**
COULD BE ANY (1998)	Variant	Clear	−5.77	0.82	0.00	0.00–0.02	**< .001**
		Vocalised	−0.69	0.29	0.50	0.29–0.89	**.02**
	Age		−0.09	0.03	0.91	0.87–0.96	**< .001**
	Education		0.45	0.21	1.57	1.05–2.34	**.03**

and pairwise comparisons (with Tukey adjustments) using the 'emmeans' package (Lenth 2021). The results of the best-fitting models are presented in Table 3.

Positive coefficients from the ordinal regression models indicate that rating in higher categories is more likely, that is, more distinctly CHINESE/MALAY/INDIAN. In the best-fitting model with CHINESE as a response variable, the main effects of variant, speaker, and listeners' ethnicity were significant predictors. Compared to dark-l, vocalised-l increased ratings of CHINESE, whereas clear-l decreased ratings. Interestingly, compared to the Chinese speaker, the Malay speaker was rated more CHINESE. In addition, compared to Chinese listeners, Indian respondents were overall more likely to give guises higher ratings of CHINESE. In the MALAY model, the main effects of variant, listeners' ethnicity, and their interaction were significant predictors. The analysis of

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their interaction revealed that clear-l was rated more MALAY than the other two variants by Chinese and Indian informants, but the difference between clear-l and dark-l for Malay listeners was not significant, which suggests that many Malay listeners gave dark-l similar ratings of MALAY as they gave clear-l. Finally, in the INDIAN model, the main effect of speaker and the interaction between variant and age were significant predictors. The guises of the Chinese speaker were overall perceived to be more INDIAN than the Malay speaker. The interaction between variant and age was explored using spotlight analysis to ascertain how ratings of variant varied by three age levels: at the mean, +1 *SD*, and at −1 *SD*. The analysis revealed that, while clear-l was judged to be more INDIAN than dark-l for all informants, older listeners judged clear-l to be more INDIAN than younger listeners did.

Since clear-l was revealed to be strongly associated with both Malay and Indian Singaporeans, additional ordinal regression analysis with the same variables and contrasts was performed on only clear-l tokens and ratings along the MALAY–INDIAN scale. Ratings were changed from '4' (MALAY) to '0' (INDIAN). The reduced model ('MALAY–INDIAN' in Table 3) revealed that the main effects of speaker, amount of interaction with Malays, and age were significant predictors. Compared to the Chinese speaker, the Malay speaker was perceived to be more MALAY. Regardless of their ethnicity, informants who reported higher degree of interactions with Malay Singaporeans judged clear-l to be more MALAY than INDIAN. Finally, age was negatively associated with the ratings; that is, older listeners judged clear-l to be more INDIAN than MALAY, an effect also observed in the previous INDIAN model.

In the best-fitting model for ratings of COULD BE ANY, the main effects of variant, age, and education were significant predictors. Compared to dark-l, both clear-l and vocalised-l were less likely to be rated COULD BE ANY. The likelihood of a token being rated as COULD BE ANY was negatively associated with the age of respondents, but positively associated with education level.

In sum, after controlling for effects of speaker, the findings from the ethnic association task revealed that vocalised-l was more strongly associated with Chinese Singaporeans, clear-l was associated with both Malay and Indian Singaporeans, and dark-l was more likely to be perceived as pan-Singaporean/ethnic-neutral. Listener attributes modulated the ratings. Whereas Chinese and Indian informants judged clear-l to be more representative of the Malays, Malay listeners associated both clear-l and dark-l with their ethnic group. Listeners' reported degree of interaction with Malay Singaporeans and their age influenced their judgement on whether clear-l was perceived as more 'Malay' or 'Indian'; regardless of their ethnicity, listeners who had more interactions with Malay Singaporeans were more likely to perceive clear-l as distinctly 'Malay', and older listeners were more likely to associate clear-l with the Indians.

Attitude judgement: Rating task

The results of the attitude rating task are presented in Figure 4 in terms of relative proportions of the ratings, as a function of variant and trait. Rating of '7' is most

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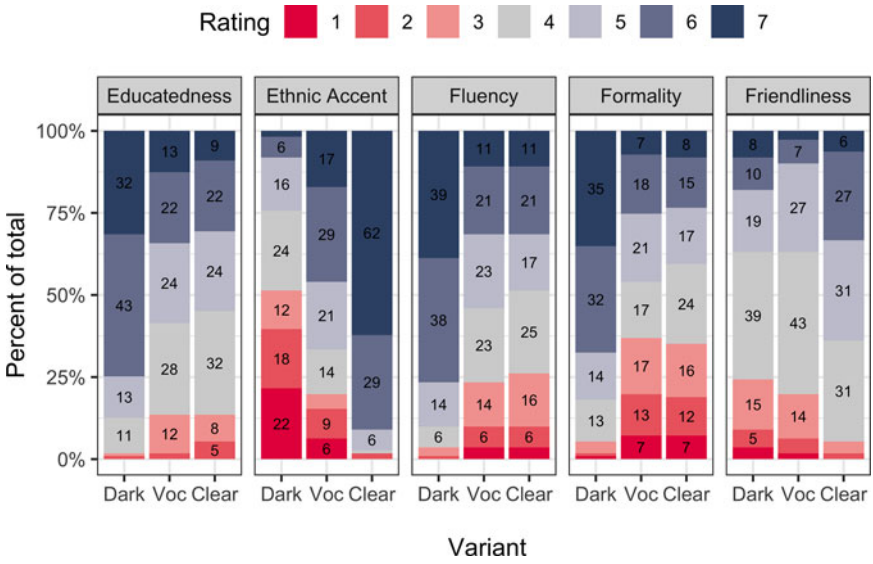

FIGURE 4. Percentages of responses for the attitude rating task as a function of trait and variant of /l/. (Note: Percentages are rounded to the nearest percent and only percentages above five are shown.)

positive (i.e. educated/has an ethnic accent/fluent/formal/friendly), while '1' is most negative. By visual inspection, dark-l appears to have been given greater proportion of ratings above '4' for educatedness, fluency, and formality than the other two variants. Vocalised-l and clear-l did not seem to differ greatly in the ratings for these three traits, and listeners were divided in their opinions. Amongst all variants, clear-l was rated the most ethnic-accented and also the friendliest.

Regression analysis was performed to confirm these observations and to ascertain effects of listener attributes. Considering that some traits may be correlated, principal component analysis was first conducted with orthogonal rotation (varimax) to create index variables. The components were evaluated using the Kaiser criterion and parallel analysis, and two factors met the criteria: a 'status' factor (loading for educatedness, fluency, formality, and ethnic accent) and a 'friendliness' factor, which consisted of friendliness alone. The two factors in combination accounted for 74% of the variance. For all regression models, the random effects structure was kept maximal for subject. The fixed effects included variant and listener attributes, including ethnicity, age, education level, gender, degree of interactions with Singaporeans of the three ethnicities (three separate scores), language use, cultural affiliation, perceived similarity, and two-way interactions between variant and other main effects. The results for the best-fitting models are presented in Table 4.

In the model for 'status', the main effects of variant, similarity, and the two-way interactions between variant and education and between variant and language use

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TABLE 4. *Regression coefficients of best-fitting mixed-effects ordinal regression model fit to responses of the attitude rating task. (Note: Reference category for variant is dark, and gender is female.)*

Response (*n*)	Fixed factor	Level	*B*	*SE*	*OR*	[95% CI]	*p*
Status	Variant	Clear	−2.11	0.66	0.12	0.03–0.44	**.001**
(1332)		Vocalised	−2.72	0.66	0.07	0.02–0.24	**< .001**
	Education		−0.20	0.12	0.82	0.64–1.04	.11
	Language use		−0.02	0.07	0.98	0.86–1.11	.71
	Similarity		0.24	0.04	1.27	1.17–1.38	**< .001**
	Variant×Education	Clear:Edu	0.37	0.14	1.44	1.09–1.91	**.01**
		Voc:Edu	0.32	0.14	1.37	1.03–1.82	**.03**
	Variant×Language use	Clear:Use	−0.04	0.08	0.96	0.82–1.12	.58
		Voc:Use	0.16	0.08	1.17	1.00–1.37	**.04**
Friendliness	Variant	Clear	1.73	0.32	5.62	3.02–10.44	**< .001**
(333)		Vocalised	0.13	0.27	1.14	0.68–1.93	.62
	Similarity		0.19	0.08	1.21	1.04–1.40	**.01**
	Gender	Male	−1.12	0.38	0.33	0.16–0.68	**.003**
		Unknown	−0.53	0.36	0.59	0.29–1.20	.14

TABLE 5. *Open-ended responses for dark-l.*

SPEAKERS	CONTEXTS	QUALITIES
Well-educated	Oral examination	Standard
Chinese	Interview	Accurate/careful
English-dominant	Presentation	Trying hard/cold
Any race		Dictionary pronunciation
Customer-facing jobs		Formal
Lived/studied abroad		
Indian/Malay		
Young		
High social class		
Educator/teacher		
English-dominant peers		
Caucasian/*angmoh*/native speaker		

were significant predictors. Compared to dark-l, both clear-l and vocalised-l decreased status ratings. Perceived similarity was positively associated with status ratings. In the interaction between variant and education, plots of marginal effects revealed that informants who were more educated were more likely to give clear-l and vocalised-l higher ratings of status than listeners who were less educated, but the reverse is true for status ratings of dark-l. Spotlight analysis of the interaction between variant and language use revealed that overall across ratings, listeners who were less English dominant in terms of language use were more likely to give vocalised-l higher ratings of status.

In the 'friendliness' model, the main effects of variant, similarity, and gender were significant predictors. Compared to dark-l and vocalised-l, clear-l was more likely to be given higher friendliness ratings. Friendliness ratings were also positively associated with perceived similarity. Finally, there was an overall tendency for male informants to rate the guises lower on the friendliness scale than female informants.

The key findings from the attitude rating task revealed that guises with dark-l were more positively evaluated along the status dimension, compared to the other two variants. Contrastingly, guises with clear-l were perceived to be the friendliest. Effects of listener attributes were attested; listeners who perceived the guises to be more similar to their own accents were more likely to give higher status and friendliness ratings. Those who were more educated or less English dominant were more likely to give non-dark variants higher status ratings.

Attitude judgement: Open-ended question

The open-ended responses for dark-l are presented in Table 5, categorised according to the speakers it indexes, the contexts or practices in which it is thought to be

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TABLE 6. *Open-ended responses for vocalised-l.*

Group	
A	B
Chinese-dominant	Chinese/Malay/Indian
Middle-aged	Young
Less-educated	Well-educated
L2 speaker	Good articulation/enunciation
Colloquial	Standard/formal
Auntie/housewife/*caifan auntie*	Working professional
Average Singaporean	Middle class

commonly used or occur, and its associated qualities. Listeners across ethnicities were unanimous in their evaluations of dark-l: the speakers that dark-l indexed were the young, well-educated, English-dominant Singaporeans from higher social classes, and native speakers or *angmohs*, a mildly derogatory term to refer to Caucasians. It was considered correct/accurate and standard, and thought to belong to the style used in contexts where formal and careful speech is expected. However, a handful commented that the speaker was cold in her emotions or trying hard to speak good English.

Listeners across ethnicities shared similar social opinions towards vocalised-l, but a sizeable minority had differing views. These opposing views are presented in Table 6. For many (Group A), vocalised-l indexed Singaporeans who are Chinese-dominant/L2 speakers, middle-aged, less educated, and using colloquial English. The variant was associated with similar social types, for example *auntie*, a local cultural term that may refer to middle-aged women who are often lowly-educated, Chinese-educated, and old-fashioned in their ways of thinking (Wong 2006). Vocalised-l also evoked even more specific social types like housewives or *caifan* (菜贩) *auntie*, who are *aunties* that sell 'economy rice' in hawker centres. For some others (Group B), vocalised-l was associated with young, middle-class, well-educated Singaporeans and working professionals. They also regarded the pronunciation to be good articulation and standard, and belong to a style used in formal settings.

Responses for clear-l are presented in Table 7 according to the ethnicity of the listeners. Some traits and attributes were dependent on whether the speaker was perceived to be Malay (M) or Indian (I), as indicated in the table. Compared to vocalised-l, the responses for clear-l were less divergent. Chinese listeners generally associated clear-l with EMT-dominant/L2 speakers and less educated minorities from lower social classes. Malay respondents from both the online survey and metalinguistic talk, however, asserted that while many users of clear-l are Malay-dominant, it is not exclusively used by less educated Malays or those in lower social classes. Those interviewed pointed out that Malays who are highly educated

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TABLE 7. *Responses from open-ended question and metalinguistic interview for clear-l. (Note: (I) (M) = only if speakers were perceived to be Indian (I) or Malay (M).)*

ETHNICITY OF LISTENER		
CHINESE	MALAY	INDIAN
Indian/Malay	Indian/Malay	Indian/Malay
EMT-dominant	EMT-dominant	EMT-dominant (I)
L2 speaker	Young	Foreigner/raised abroad (I)
Thick accent (I)	Thick accent	Speaking with family (M)
Well-educated (I)	EMT-dominant peers	Educated (I)
Less-educated	*Minah-rep* (M)	Middle class (I)
Middle-aged	*Jiwang* (M)	
Young		
Formal (I)		
Low-middle class (I)		
Minah (M)		
Makcik/housewife/*nasi briyani auntie* (M)		

and proficient in English may adopt a more ethnically distinctive style and use clear-l in casual situations or to index group membership:

> we only use it when talking to our friends, like casual…; among my group of Malay friends, that's how we talk to each other. (M3)

> some kid actually got mad at me because I sounded really English-sounding compared to him… I know if I were to be like be a stereotypical Malay… I need to speak differently…when I do hang out with the more *Malay* Malay, that's when the Malayness comes out. (M6)

When the speakers were perceived as Malay, listeners associated the variant with several related social types, one of which is *minah*, a Malay slang term for 'Malay girl'. This term is sometimes used incorrectly by out-group members to refer to a subtype that Malays would recognise as *minah-rep*, a female Malay-dominant gangster/delinquent who is usually uneducated and unruly. Clear-l was also associated with *makciks,* who are the Malay equivalent of Chinese *aunties*, and again in some listeners more specific social types were evoked, such as housewife or *nasi briyani auntie*, which is loosely the Malay equivalent of a *caifan auntie*. To one of the Malay respondents interviewed (M7), his involvement in the Malay arts and cultural scene lets him associate the use of clear-l with *jiwang*, a Malay expression, which means being overly sentimental or lovesick, as well as the multiple art forms that evoke this emotion, such as Malay love poems and soft-rock love ballads, or even personae like *mat/minah-jiwang*—a Malay boy or girl who is overtly romantic/sentimental. Interestingly, opinions were different when the speakers were perceived to be Indian in ethnicity. An Indian who uses clear-l was regarded by Chinese listeners to be well-educated and speaking in a formal setting. Similarly, Indian listeners thought that an Indian speaker who uses clear-l is EMT-dominant

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but is educated and middle class, although a few added that the speaker must either be a foreigner or have been raised abroad.

To summarise, the open-ended responses complement the findings above by revealing the specific social types and qualities that were evoked by each /l/ variant. The overwhelmingly positive evaluations of dark-l contrast with the other two in ways similar to how standard/nonstandard variants are typically characterised. Additionally, the processes by which the local variants were created and transmitted have resulted in numerous social meanings that are notably diverse and sometimes conflicting.

DISCUSSION

In response to the three research questions that this study set out to answer, the findings from the ethnic association task confirmed that listeners were more likely to associate the two local variants that arose from language contact to the ethnic groups whose other language(s) may have had an influence on their emergence; vocalised-l was more likely to be regarded as a feature of Chinese Singaporeans, and clear-l was exclusively associated with Malay/Indian Singaporeans. Contrastingly, dark-l, which is associated with prescriptive standards, was more likely to be regarded as a pan-Singaporean feature. The attitude judgement task revealed that dark-l was given higher ratings on status traits such as educatedness, fluency, and formality, whereas clear-l was given higher friendliness ratings. As predicted, the evaluations of the variants were not uniform across hearers; several listener attributes were found to significantly modulate ethnic associations of and attitudes towards the variants, and open-ended responses revealed that each variant was associated with a variety of social groups/types, qualities, and contexts. The following first discusses the social meanings of the variants and the meaningful predictors/listener attributes that have influenced their interpretations, before describing how the results of this study inform current approaches to studying variation that are based on indexicality.

That dark-l was unanimously accorded social prestige by the listeners in this study and evoked semiotic connections to education, high social status and formality is not unexpected; the findings are aligned with other studies that evaluated perceptions of standard/nonstandard features (e.g. Chappell 2016). As mentioned earlier, social regularity of recognition of language ideals in Singapore is realised through the ideological process of enregisterment, similar to how public perceptions towards RP and Putonghua are shaped (Agha 2003, 2007; Dong 2010). This public awareness of the social value of standard English has been observed in the attitudes towards varieties of Singapore English in past research (e.g. Cavallaro & Ng 2009; Cavallaro et al. 2014), and it is shown here that it extends to specific speech forms. In this study, the ratings of status traits were also found to interact with the education level of the informants; listeners who were more educated were more likely to give clear-l and vocalised-l higher ratings of status, and the

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reverse is true for dark-l. Cavallaro et al. (2014) reported similar findings. Based on their interview responses from 133 Singaporeans, they found that participants with university education expressed more favourable views towards colloquial Singapore English than those without university education. Cavallaro and colleagues surmised that those who had fewer opportunities to acquire proficiency in the standard variety might have more positive views towards it for the social mobility that it promises. Additionally, as pointed out by a reviewer, those who are less well-educated may also be more likely to experience linguistic evaluation of their speech, making them more attuned to dominant speech norms or prestige speech forms.

The sociohistorical processes that shaped vocalised-l and clear-l, which are variants that arose from language contact, have resulted in diverse social meanings, notably in how they indexed multiple social types from different age groups. Yet, their meanings may not have evolved in the same way. Clear-l still largely indexes the same profile of speakers from whom the variant may have originally emerged (i.e. EMT-dominant/L2 speakers) and evokes mainly less positive attributes (e.g. less educated/lower social class). While the same social meanings apply to vocalised-l, many perceived the variant to be a pan-Singaporean feature, less ethnic-accented, and associated with well-educated, middle-class Singaporeans and those speaking in standard English or formally. These divergent interpretations may point to an emerging local standard. This could be due to the hearers' inability to differentiate vocalised-l and dark-l, despite the efforts to ensure that the guises used in this experiment were adequately distinct and 'canonical'. One likely explanation is that vocalised-l has become a very common, if not the dominant variant over time by virtue of the number of local speakers who use it, even by educated Singaporeans and in formal contexts/careful speech (Tan 2005; Deterding 2007), and had therefore gained new social meanings that were once exclusive to dark-l. This is not improbable; the two variants are acoustically similar, and further l-vocalisation occurs even in non-vocalising varieties due to phonetic factors (Scobbie & Wrench 2003). L-vocalisation in British English varieties that have a long established clear–dark allophony is also becoming increasingly widespread, which has been argued to be natural sound change (Johnson & Britain 2007; note, however, that l-vocalisation in SgE is more likely to be a result of language contact/acquisition). Against this baseline, clear-l became more salient/ethnically marked and less mainstream/standard; inevitably, ethnic minorities who use clear-l are more likely to be prejudiced and negatively evaluated.

However, unlike the communities in which dialect levelling is observed or where the speech of minority or heritage speakers converges to the dominant norm, here, clear-l is preserved for socially purposeful work. It is still the unselfconscious variant used predominantly by older generation of Malays who are L2 speakers and younger generation of L1 speakers of English who have acquired it from the input of caregiver or peers (Sim 2019). Metalinguistic talk with the eleven Malay respondents revealed that clear-l is also used variably by Malay non-users,

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especially males, as part of their ethnolinguistic repertoire to signal group membership, in ways similar to British Asians (Sharma 2011; Kirkham 2017). That different variants of /l/ are used within the ethnic community was recognised by Malay listeners in this study, who gave clear-l and dark-l similar ratings of 'Malayness', which reflects actual production data (Sim 2019, 2021). This awareness, however, was not shared by listeners of other ethnicities, who gave significantly lower ratings of MALAY for dark-l. Likewise, while English-dominant and/or educated Malays do use clear-l, the variant was only stereotypically associated with the Malay-dominant and less educated. These findings show how the interpretation of social meanings is dependent on and shaped by individual experiences with the sociolinguistic world, a point that is revisited in the next section. Another finding related to clear-l supports previous findings that showed that social perceptions are context dependent (e.g. Pharao, Maegaard, Møller, & Kristiansen 2014; Walker et al. 2014). Campbell-Kibler (2009), for example, found that the use of *-in* decreased speakers' ratings of education and intelligence only when they were perceived to be from a working-class background. Here, it was revealed that the speakers of clear-l were regarded as less educated and informal if they were perceived to be Malays, but well-educated, middle-class, and formal if perceived to be Indians. It is uncertain, however, whether Indians do indeed use clear-l, given that at present little is known about the /l/ used by Indian Singaporeans. In fact, those who rated clear-l as INDIAN may have made generalisations based on their prior, vague linguistic knowledge of other attributes of the speech of Indian Singaporeans (e.g. "The way Indian… speaks has a certain twang and slang to it."). Some findings of this study may suggest that the /l/ used by Indian Singaporeans is different. First, the clear-l guises of the Malay speaker were rated as more MALAY than the Chinese speaker, which may reflect subtle but perceivable differences in their realisations. This is supported by how informants who reported higher degree of interactions with Malay Singaporeans thought that clear-l was more MALAY. Second, older Singaporeans were found to be more likely to give higher ratings of INDIAN for clear-l, and this may suggest that older-generation Indians might have used clear-l/retroflex-l more frequently than is the case now. Further empirical work can be done to confirm these postulations.

Meanings through different lenses

Hearers in this study were revealed to have different and sometimes conflicting evaluations of the variants. This may be due to hearer biases; in this study, for example, ratings of perceived similarity were positively associated with status and friendliness ratings. Those who were less English-dominant, and therefore presumably more likely to use vocalised-l, gave vocalised-l higher status ratings. Differences could also be due to hearers' individual experiences. Meaning–form associations are created and reinforced in different ways, to different extents, and for different people (Agha 2007; Campbell-Kibler 2008; Johnstone & Kiesling

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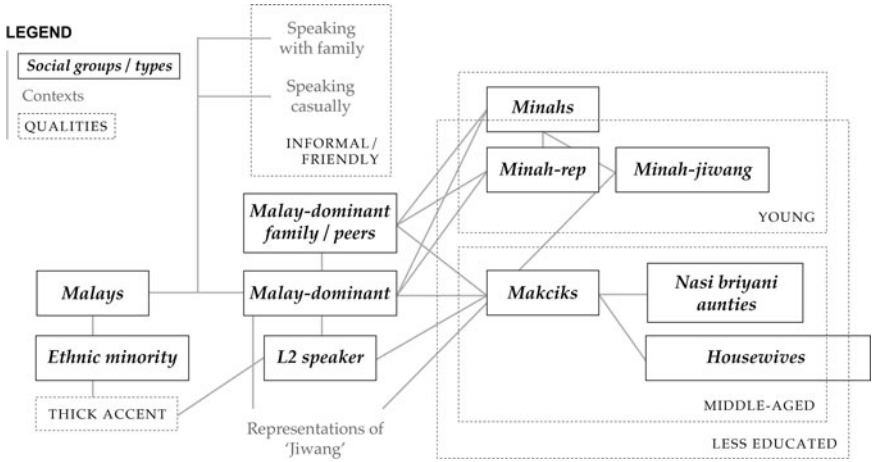

FIGURE 5. An example of how Malay-related social meanings of clear-l are connected.

2008). For some hearers in this study, these experiences lasted only very briefly, with a limited group of individuals, and in restricted contexts. But for others, their experiences may occur in more wide-ranging contexts, and over longer periods of time. Vocalised-l, for instance, evoked very specific encounters with the variant for some hearers (e.g. "Reminds me of my Chinese colleague."), but elicited broader generalisations and stereotypes for others (e.g. "I think it is typical of Chinese people, no matter how educated they are."). The ways Singaporeans are socialised to these variants are further modulated by variation in speaker attributes, such that each /l/ variant can index multiple social types/groups, thereby evoking very diverse attributes and values associated with them.

However, it is proposed here that these seemingly diverse or even conflicting meanings can be described to be interrelated in a highly complex network and linked by various social factors as they are created, and the myriad interpretations are but fragments of a whole sociolinguistic reality, as observed through the lenses of the hearer. Figure 5 is an example of how some of the Malay-related indexical meanings that were observed for clear-l can be connected. In this network, social groups/types are linked by increasingly broader, super-ordinate categories (e.g. *nasi briyani auntie* < *makciks* < Malay-dominant < Malays < …), and distinct or conflicting traits and qualities associated with higher-order categories are reconciled by lower-order categories that are shared (e.g. *minahs* and *makciks* are linked by their being Malay-dominant). Meanings that are not directly linked may also be evoked based on their distant associations; *minahs* may be assumed to be raised by *makciks* in Malay-dominant families, for instance, and they are associated with expressions of *jiwang*. The interpretation of a variant is dependent on and reinforced by the hearer's experiences with the various parts of the network and its user(s)

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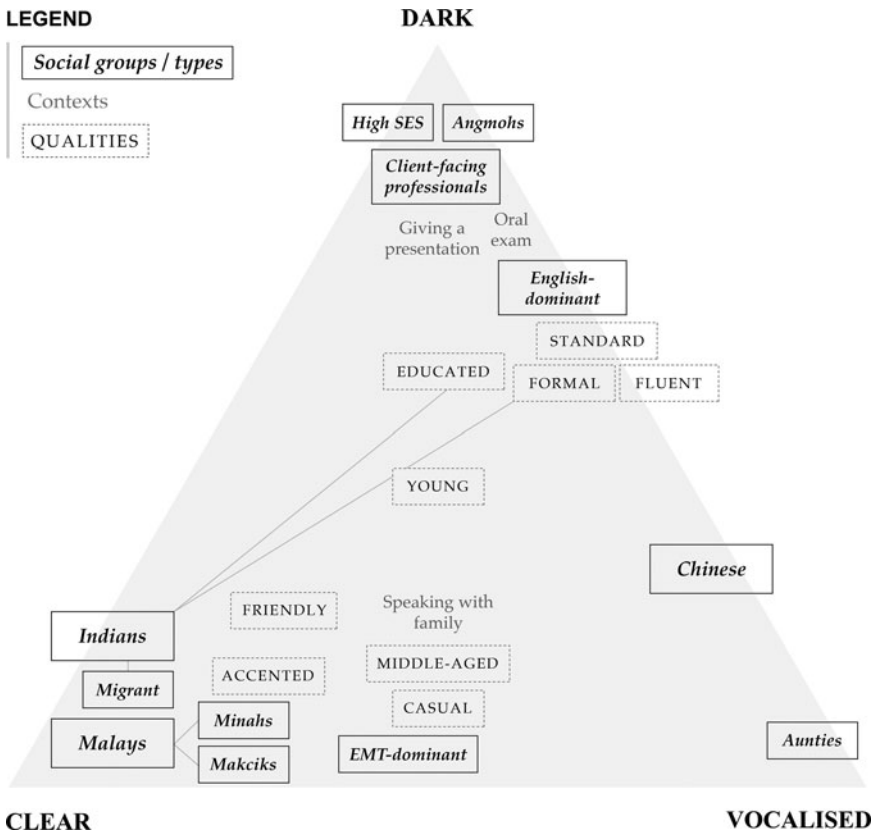

FIGURE 6. A shared indexical field of three variants of /l/ in Singapore English.

and contexts, which may change or expand according to the other speakers and different contexts in which the variant is again encountered. For one, the social perception of clear-l may be limited to the *nasi briyani auntie* that they buy food from, but for another, the meanings of clear-l accumulate from the day-to-day interactions with their Malay neighbours. Therefore, in the same way that hyperarticulated /t/ release can index different social types and semantically related qualities in different communities (Eckert 2008a), alternative variants of a feature in sociolinguistically and socioculturally complex societies like Singapore can index diverse social meanings that are socially related WITHIN the community. This has far-reaching implications for a plural society, as one's experiences with the social world or a lack thereof can result in accent-based prejudices or stereotypes against particular groups, an example being the predominantly negative evaluations of clear-l by Chinese listeners in this study, which do not reflect the true reality of use by the Malay community.

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A shared indexical field

By expanding on Eckert's (2008a) notion of an indexical field, the meaning network of each variant of /l/ can be further combined to form a coherent view of social meanings, as presented in Figure 6. In this approach, social meanings are relative; they can be closer to/further from each variant. While some are more distinct to each variant, such as social types *angmohs* and *minahs*, some are equally shared between two or more variants, such as 'middle-aged' and 'young'. Again, social meanings are inter-related (only a few connections are shown, for the sake of clarity). The index of 'migrant' for clear-l, for instance, is accessible through the index of 'Indian', and so are the associated qualities of formality and educatedness, which speakers who were perceived to be Malay did not evoke. By describing the relationship of social meanings in this way, and based on how indexical fields are intended to be fluid, the model can be useful in comparing how meanings are organised differently or are absent/present between groups of individuals (e.g. old versus young). It can also be useful to reflect change in a community; meanings can be constantly updated based on changes to the social world, where indices can gain or lose affinity with each variant. An example is how status traits like 'fluent', 'formal', and 'standard' might have been very far from vocalised-l for the generation of Singaporeans who were mainly L2 speakers, but are here positioned closer to vocalised-l to reflect the diversity in present views that may point to an emerging local standard.

CONCLUSIONS

This study has shown how differential speech features that arose from language contact and acquisition, specifically vocalised-l and clear-l in Singapore English, can come to index very diverse social meanings, but are connected by the social factors that have shaped them, to form an intricate network of interrelated signs that make up the fabric of a plural society. The findings also showed how the meanings associated with the variants of /l/ can evolve with the changing sociolinguistic landscape, in different ways, and in response to sociopolitical forces that regulate social perception. The resulting myriad interpretations reflect the very unique individual experiences, but also show that limited experiences with the social world may contribute to accent-based prejudice towards others in the plural society.

NOTE

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Address for correspondence:
Jasper Hong Sim
University of Cambridge
Jesus College
Jesus Lane
Cambridge, CB5 8BL, United Kingdom
jhs71@cam.ac.uk

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