The importance of suprasegmental features in language attitude research: Evidence from a study of teachers' attitudes towards Hong Kong English

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Abstract

Previous language attitude research has paid little attention to the (para)linguistic inventory of the speech samples used for accent evaluation. As an example, this study used five Hong Kong English (HKE) voices with more or less localised features, which were assessed by 100 English language teachers in Hong Kong in a verbal-guise experiment. In addition to the closed questions used in the verbal-guise study, we asked the listener judges, in open-ended questions, to reflect on their first-hand impressions of the speakers, their perceived likability, and what in particular they had noticed in the speakers' language. Findings show that suprasegmental features are highlighted as important for speaker identification and evaluation, whereas segmental features are not mentioned. Listener judges mention prosody (intonation, pitch and stress) as particularly salient; nativeness and level of proficiency are also highlighted. Findings are discussed vis-à-vis language attitude research methodologies, and we argue that the study has contributed towards disentangling the language attitudes processes by emphasising the salience of suprasegmetals for accent recognition and evaluation. We conclude with a call to replicate the research in other socio-cultural contexts and to include other research methods.

Keywords: language attitudes; verbal guise; open-ended questions; suprasegmentals, Hong Kong English

Introduction

Language attitudes, defined as "the social meanings people assign to language and its users" (Dragojevic at al., 2021, p. 60), are still being studied extensively within humanities and social science disciplines. Since Lambert et al.'s (1960) initial study of evaluative reactions to spoken language among bilingual Canadians, the field has expanded and diversified. However, as Giles (2022) notes in the Foreword to Kircher and Zipp's recent volume on *Research methods in language attitudes* (2022a), the field flourished in the 1970s, but waned in the coming decades. Studies were published sporadically in the 1980s, 90s and early 2000s, but language attitude research has seen a renaissance in the last 15 years or so as testified by several

important monographs and edited volumes such as Garrett (2010), Giles & Watson, 2013; Kircher & Zipp (2022a); and McKenzie & McNeill (2023). Notwithstanding the quality of these more recent publications, it is a fair criticism of language attitude research in general that the 'novelty' of many new studies was that they were done in a different sociocultural context (Giles, 2022). They employed languages and dialects that had not hitherto been studied, but, according to Giles (ibid.), they were largely descriptive and atheoretical.

The early studies in social psychology used language or dialect as a means to get access to people's 'private uncensored attitudes' (cf. Lambert, 1967) – i.e., as an indirect stereotype elicitation method (Ladegaard, 2020) – and generally paid little attention to the language varieties that were used as stimuli. Broad labels like Received Pronunciation (RP), Welsh accented English, Standard American (SA), or Hong Kong English (HKE) have been used indiscriminately in the literature with little or no information about what these labels mean in terms of their linguistic content. Edwards (1999) issued an early call for more cross-fertilisation between social psychology and linguistics, a call that has been echoed in later papers (Dewaele, 2009). Thus, language attitude studies more firmly embedded in sociolinguistic traditions sometimes included a description of the linguistic inventory of the speech samples used in the experiment (e.g., Bayard at al., 2001; Ladegaard, 2000), but still did not pay much attention to which part(s) of the linguistic inventory led to a particular evaluation.

In Ryan et al.'s (1982) classic definition of language attitudes as "any affective, cognitive or behavioural index of evaluative reactions towards different varieties and their speakers" (p. 7), it is assumed that attitudes apply to entire varieties such as languages, dialects or accents (Kircher & Zipp, 2022b). However, as Buchstaller (2006, p. 365) argues, "audio-recordings [of spoken languages/dialects] contain a wealth of linguistic features, each of which has the potential to trigger its own associations." And if the stimuli used in matched-guise experiments contain variables that trigger regional associations, which many (if not most) speech samples are assumed to do, then participants will presumably draw of their stereotypes of people in a particular region when they assess speech samples in a language attitude experiment and, according to Buchstaller (2006, p. 365) "therefore be biased in their judgements." It should come as no surprise to anyone that we *are* biased when we make judgements about people's competences and personal characteristics based on their speech, so any attempts to create a "locally neutral carrier guise", as Buchstaller (ibid) suggests, would seem futile. She claims to solve the problem by using written speech samples rather than spoken, which allows her to manipulate the variables she is interested in (the quotatives *be like* and *go*), but this creates other problems in that the wealth of social information that comes with speech is missing.

So, while the early research mostly considered attitudes towards varieties as a whole, there is now a growing body of research which looks at attitudes towards particular linguistic features and discourse strategies, including lexical diversity (Giles et al., 1981), vocal fry (creaky voice) (Yuasa, 2010), phonetic variables (consonant deletion) (Diaz-Campos & Killam, 2022), codeswitching (Dewaele & Li

Wei, 2014), and multilingualism (Kircher et al., 2022). Also, a few language attitude studies have manipulated certain aspects of the speech sample to measure the impact this has on listener judges' evaluation. Thus, Campbell-Kibler (2011) manipulated three masculinity-relevant variables: pitch, /s/-fronting/backing, and (ING) in the USA and found that /s/-fronting across speakers and other linguistic cues makes speakers sound less masculine, more gay and less competent (see Maegaard & Pharao, 2016 for a similar finding in Denmark). This suggests that intersectionality is important: people belong to different social categories and different speech sounds may communicate different aspects of identity (such as sexual orientation, ethnicity and social class) and we know little about what impact intersectional identities have on speaker evaluation (Dragojevic et al., 2021). Schoel et al. (2013) propose an instrument that allows researchers to review listener judges' attitudes towards the value, sound and structure of different language varieties. However, the participants in their study have to respond via pre-defined fixed semantic differential scales, like ugly-beautiful, clumsy-graceful, harsh-soft, inelegant-elegant, choppy-fluent etc. This aligns quite closely with the procedure in traditional matched- or verbal-guise experiments, with the only difference that the focus is language, as opposed to the speakers of these language varieties.

Despite recent attempts to conduct more fine-grained analyses of the impact of various linguistic variables on speech recognition and evaluation (see Kircher & Zipp, 2022b and Loureiro-Rodriguez & Acar, 2022 for an overview), there are still gaps in the literature. For example, when an RP-accent generates favourable evaluations on status and competence dimensions, but more negative evaluations on solidarity dimensions, we do not know what part(s) of an RP-accent leads to positive and negative evaluations. It has been argued that it is the association between high-status accents and powerful groups that leads to favourable evaluations on status dimensions in language attitude experiments (Garrett, 2010), but little attention has been paid to identifying which linguistic and/or paralinguistic features (if any) lead to a particular positive or negative evaluation. In other words, are there particular (para)linguistic features that people like or dislike, which may cause them to 'downgrade' or 'upgrade' a particular accent? As Buchstaller (2006) reminds us, there is a wealth of (para)linguistic and, by implication, social information available in any given speech sample, and in order to identify which features trigger people's positive or negative attitudes, we need to ask them.

This ties in with another largely unrecognised problem in the language attitude literature: accents and dialects are often treated as varieties and assumed to have fixed linguistic and paralinguistic inventories. As Sewell (2016) points out: listener judges in language attitude studies are "presented with 'typical' accents, while the nature and effects of variation within the accent continuum is largely unacknowledged" (p. 125). The assumption is that when somebody speaks RP, SA or HKE, we all know what that sounds like. Speech samples are treated as uniform *varieties*, and the significant amount of variation within varieties of the same accent or dialect is often ignored. We concur with Sewell (2016) that we need to move "away from *variety,* and towards *variation*" (p. 134) in order to achieve a deeper understanding of which linguistic and

paralinguistic features lead to positive and negative evaluations. In the case of HKE, Sewell (2016) recommends that this could be conceptualised as variation on a continuum with most localised features at one end, and least localised features at the other, and we adopted this approach in our study.

In the study that we report on in this paper, we set out to do a traditional verbal-guise experiment (Dragojevic & Goatley-Soan, 2022) with five HKE speech samples with more or less localised features using semantic differential scales. But we included additional open-ended questions, which asked participants to identify what in particular they noticed in the person's language and why. Thus, we sought to investigate which linguistic or paralinguistic features people notice when they listen to a speech sample, and to identify which positive or negative associations these features generate. So, the paper offers a critique of much existing language attitude research, which has often failed to pay attention to the (para)linguistic inventory of the speech samples used for evaluative judgement. It thus ties in with a growing body of research which has begun to study the impact of the (para)linguistics of speech samples for accent evaluation (Loureiro-Rodriguez & Acar, 2022), and consider alternative techniques and methodologies for exploring language attitudes (Bellamy, 2022). HKE is used as an example but the focus is methodological. The results from the verbal-guise experiment, which focuses on attitudes towards HKE, have been presented in another paper (Ladegaard & Chan, 2023), so the aim of this article is to report on and discuss the themes that came out of the open-ended questions.

Our study also deviates from traditional language attitude experiments in terms of participants. Overwhelmingly, language attitude research worldwide has been based on responses from students (mostly first-year psychology majors), presumably for reasons of convenience rather than representivity or generalisability. In line with other more recent attempts in the literature to include teachers as listener judges in accent evaluation studies (see, for example, Zhunussova, 2021; Misir & Gürbüz, 2022), we asked English language teachers in Hong Kong because they are interacting with students with different English accents on a daily basis, and they are involved in assessing students' language. So, they are people for whom language attitude is more than a theoretical concept and when we asked them to reflect on which speech features formed the basis of their evaluation, we assumed we asked them to be explicit about issues that are real to them in their daily work. Before we present our findings and discuss their implications, we will outline the methodology of the study, including participants, instruments and procedures.

Methodology

Participants

Surveys were distributed to one hundred English language teachers from different educational institutions across Hong Kong. The invitation to participate in the study was sent to different groups of teachers: (1) in-service primary and secondary school teachers in an MA programme in English Language Teaching (ELT) at a local university, (2) teachers in four local schools across Hong Kong, and (3) staff in the

English Language Centre at a local university. The participants' demographic information is summarised in Table 1.

Table 1: Participants' demographics

Demographics		Number (n=100)	Percentage
Gender	Male	39	39%
	Female	61	61%
Age	Below 26	26	26%
	26 to 50	64	64%
	Above 50	10	10%
Education	BA or equivalent	48	48%
	MA or above	52	52%
Level of Teaching*	Primary Education	30	30%
	Secondary Education	40	40%
	Tertiary Education	30	30%

**Refers to the schools where the participants teach: primary and secondary schools include both local and international schools, and tertiary education includes community colleges and universities.*

Instruments and procedure

The online survey, which consisted of 20 identical questions and a hyperlink for each of the five speech samples, was sent to teachers who had agreed to participate in the study. Participants had to email us to get the survey and the hyperlinks, which allowed us to verify their identity as English language teachers. Each set of questions was preceded by a hyperlink to a short speech sample. The participants were asked to listen to the sound clip and then answer the questions that followed. The first question was open-ended and asked participants to write down their immediate first-hand impression of the speaker in the form of the three words (adjectives or nouns) that first came to mind when they heard this person's voice. This question was followed by ten closed, Likert-scale questions assessing the speakers' perceived status and competence (social status, intelligence, leadership etc.), and perceived solidarity (honesty, kindness, reliability etc.). These questions, which are typical in traditional matched- and verbal-guise experiments, were followed by a number of open-ended questions focusing on what they noticed about the speakers' language. Thematic analysis (Braun & Clarke, 2006) was used as a tool to analyse the 17,576 descriptive words that were generated from the open-ended questions (cf. Talmy, 2010), and this paper will focus on the themes that came out of the open-ended questions.

The five speech samples used for the experiment were excerpts from conversations with five female Hongkongers. They were selected from a larger study of variation in HKE because they had more or less local features in their language: from a fairly 'heavy' HKE accent with several local features (Speaker 1) to a very 'mild' HKE accent with no clearly identifiable local features (Speaker 5) (see Table 2). The speech samples, which were around 15 seconds long, were excerpts from 'natural' conversations with no fixed topic between one of the authors (himself a speaker of HKE) and the individual speakers, and we picked an excerpt from each speaker that was reasonably 'neutral' in terms of content (talk about personal interests/hobbies)[1].

The voices were checked for comparability in a pilot study with ten randomly selected English language teachers. They were asked to assess whether the voices were comparable and reasonably pleasant (no nasalised or high-pitched voices, for example), and they were also asked to review all the questions in the questionnaire to ensure they were clear and unambiguous.

We chose to focus on features of HKE that have previously been identified in the literature as typical for a HKE accent, including TH-fronting/-stopping (Hansen Edwards, 2018), dark /ɬ/ deletion (Sewell & Chan, 2010), use of strong forms of vowels (Hung, 2020), and substitution of /v/ with /w/ (Sewell & Chan, 2010). Finally, all the speakers, except #4, have intonation patterns that share similarities with Cantonese tones, including rising intonation in sentence-final position[2] (Lam, 2017). Although all the speakers (except #5) have different intonation patterns compared to Standard English, including the use of different tonal allocations and the use of sentence-final particles, the amount and intensity differ across voices from 'very pronounced' (# 1) to 'rather weak' (# 3). The demographic information and the HKE features of the speakers' voice clips are outlined in Table 2 (examples are from the speech samples).

Table 2: Speakers' Demographics and HKE Features in Their Language

Speaker	Age	Occupation	HKE Features
#1	40	Clerk in a university office	Substitution of /v/ with [w], as in *develop* [diˈwelʌp] TH-stopping /ð/ → [d], as in *they* [deɪ] Dark /ɬ/ deletion, as in *school* [skʰuː] Use of strong form of vowels, *recent* [riːsʌ̃nt] HKE intonation
#2	30	Financial Advisor	TH-stopping /ð/ → [d], as in *then* [dẽn] Use of strong form of vowels, as in *recent* [riːsʌ̃nt] HKE intonation
#3	33	Lawyer	TH-fronting /θ/ → [f], as in *think* [fĩŋk] HKE intonation
#4	22	Postgraduate Student	TH-stopping /ð/ → [d], as in *there* [deə] HKE intonation
#5	22	Postgraduate Student	No significant HKE features

Findings

First-hand impressions

We will now present the findings from the open-ended questions included in the verbal-guise experiment. The first thematic analysis is in response to the question: 'What is your immediate first-hand impression of this person? Mention the three words (adjectives or nouns) that first come to your mind'. With this question, we wanted to avoid the predictability that is part of the closed questions used in most language attitude experiments: people make assumptions about speakers' social class, education, reliability and sense of humour etc. because this is what we ask them to do. We wanted to see what participants would write when we do not predefine the

categories they should use. Based on the principles outlined in Braun and Clarke (2006), a thematic analysis was performed on the 1,272 descriptive words that this question generated, and the following six themes were identified: **Nativeness**: 505 comments (39.7%) including *native, near native, native-like*; **Proficiency**: 166 comments (13.1%) including *high/low proficiency*, *proficient speaker, fluent*; **Personality**: 280 comments (22%) including *friendly/not friendly, introvert/extrovert, confident/not confident, hesitant*; **Status:** 103 comments (8.1%) including *educated/uneducated, student, teacher*; **Appearanc**e: 52 comments (4.1%) including *female, young, old*; and **Other/Miscellaneous**: 166 comments (13%) including *slow, fast, loud, rushed, fake, poetic, romantic* etc. The Other category consisted of words that had little in common thematically, and did not fit in any of the other categories. The result of the thematic analysis is outlined in Table 3.

Table 3: Thematic Analysis of Descriptive Words

Speaker	#1	#2	#3	#4	#5
Nativeness: 505 (39.7%)					
- Native/ Native-like	0	63	75	12	99
- Non-native	40	5	1	35	0
- Local*	82	9	11	58	15
Proficiency: 166 (13.1%)					
- High	19	36	35	16	44
- Low	14	0	0	2	0
Personality: 280 (22%)					
- Friendly	6	5	44	20	7
- Not Friendly	0	1	0	0	1
- Extroverted	0	13	3	0	1
- Introverted	2	0	0	9	0
- Confident	4	42	15	4	22
- Not Confident	24	0	2	28	4
- Hesitant	17	0	0	4	2
Status: 103 (8.1%)					
- Educated	0	4	7	4	17
- Uneducated	2	0	0	0	0
- Intelligent	0	2	3	0	0
- Unintelligent	1	0	0	0	0
- Student	10	1	4	19	9
- Teacher	5	2	0	0	7
- Parent	3	0	3	0	0
Appearance: 52 (4.1%)					
- Gender (Female)	5	3	4	5	4
- Young	5	1	3	10	7
- Old	3	2	0	0	0

Other					
Miscellaneous: 166 (13%)	35	37	26	33	35
Total	277	226	236	259	274

* Local: references to the speaker's Hong Kong origin, such as *Hongkonger, local, Hong Kong Chinese,* and *Cantonese*

An interesting finding vis-à-vis the aim of this paper is the fact that comments thematically relating to nativeness and proficiency comprise more than half of the comments (671 comments; 52.8%). This suggests that English language teachers in Hong Kong are concerned with a speaker's nativeness and level of proficiency, which is hardly surprising given the nature of their job. However, it is noticeable that more than half of the comments relate to *language* when in fact the question asks them to identify what they first noticed about the *speaker*. This supports the argument that language is *the* most salient component of speaker evaluation (Edwards, 2009), and the immediate first-hand impression of a person is inseparable from their language.

Other interesting findings include the fact that a relatively large number of HKE features leads judges to assess the speaker as local and non-native (#1), which also leads them to see the speaker as less confident and more hesitant. This is in line with other studies which have found that heavily accented local accents are rated lower than native accents on status and competence dimensions (see, for example, McKenzie, 2008). A relatively low number of local features, on the other hand, means that the speaker is assessed as native or native-like and confident (#2, #3 & #5), except #4 who has only two local features but is still seen as local, non-native and not confident. This assessment could be caused by the speaker's HKE intonation pattern, which is slightly more pronounced than the other speakers'. It is also noticeable that all ten pilot judges found the five voices comparable and equally fluent, whereas listener judges in the actual experiment found that fluency is correlated with localisation: speakers who are perceived as less localised are also perceived as more fluent (proficient) (McKenzie, 2008).

Another relevant finding concerning the 'localness–nativeness' interface is the fact that all five speakers were overwhelmingly assessed by the participants as being local. The last of the open-ended questions in the questionnaire asked listener judges to indicate where they thought the speakers were from. The answers to the question 'Where do you think the speaker comes from?' are outlined in Table 4.

Table 4: Origin of Speakers (N=100)

Origin (%)	#1	#2	#3	#4	#5
Hong Kong	85	86	88	77	90
U.S.A. / U.K. / Canada	0	7	5	9	4
China	7	2	3	4	2
South-East Asia	7	3	3	4	2
Don't know	1	2	1	6	2

Overwhelmingly, the participants agree that all five speakers are from Hong Kong. The number for #4 is slightly lower but the speaker is still seen as local by a strong majority, and if we add the numbers for China and South-East Asia (which are, strictly speaking, also correct answers), speakers #1, #2, #3, and #5 would be above 90% correct identification while speaker #4 would be at 85%. Speakers #2, #3 and #5 are overwhelmingly also seen as native or native-like speakers of English with high levels of proficiency (see Table 3), and this shows that being local and being a native(like) speaker of English is not a contradiction for these teachers. This finding is different from what most previous studies of HKE have found, namely that HKE was assessed as an inferior, non-native variety, whereas Inner-Circle varieties of English (especially Standard British English) were seen as native and assessed more positively by people in Hong Kong (Bolton & Kwok, 1990; Zhang, 2014; Chan, 2016). However, research from within the past five years or so has confirmed what our research also finds: that local HKE voices are being more positively assessed (especially on solidarity dimensions), and that being local and a native speaker of English is no longer seen as a contradiction (see Hansen Edwards, 2019; 2021; Ladegaard & Chan, 2023).

Likeability and accent

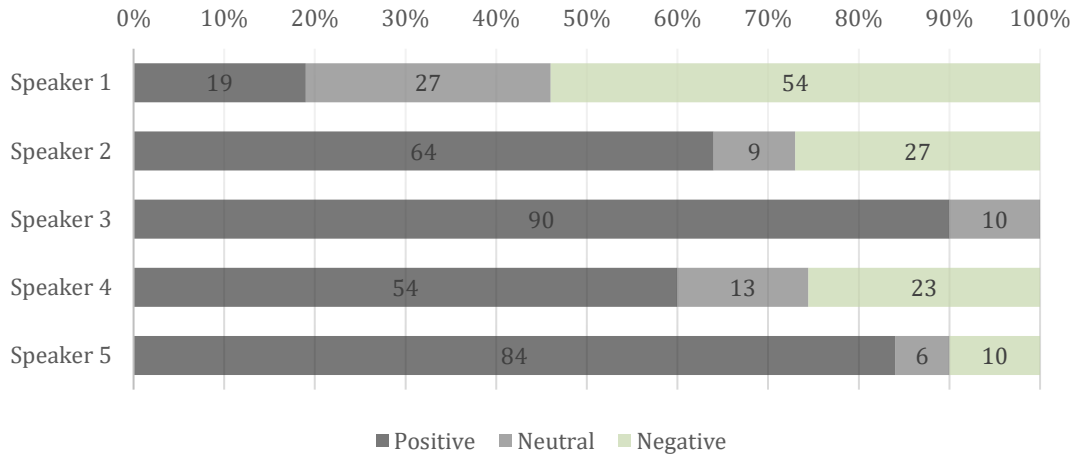
Another question of relevance to the topics we explore in this paper is what cues the participants use to make assessments about speakers' likeability. The answers to the question 'Do you find this person likeable?' (YES/NO) are outlined in Table 5 (N=100).

Table 5: Likeability of speakers

Speaker	#1	#2	#3	#4	#5
YES (Likeable)	38	69	99	78	87
NO (Not likeable)	62	31	1	22	13

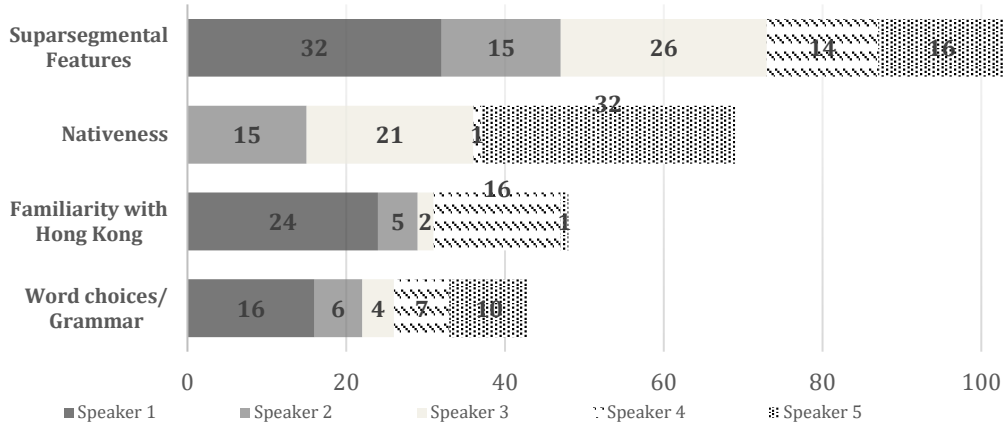
Overall, the participants found speaker #2, #3, #4 and #5 likeable, whereas the opinions about #1 were more divided. Subsequently, we asked the participants to explain (in open format) why they liked or disliked the speaker. A total of 262 comments (shorter or longer sentences) were provided in response to this question ('Why do you like/dislike this speaker?'). The ratio of positive, negative and neutral comments on the five speakers is outlined in Table 6. The negative comments generally explained why they disliked a speaker, and overwhelmingly focused on prosody and other supresegmantal features; the positive comments detailed why they liked the speaker, and mostly focused on nativeness and familiarity with Hong Kong; whereas neutral comments were used to explain both like and dislike. As Table 6 shows, the comments about #1 were mostly negative, whereas the comments about the other speakers (especially #3 and #5) were mostly positive.

Table 6: Positive, negative and neutral comments on the five speakers



Subsequently, we did a thematic analysis of the 262 comments and four main themes (i.e., reasons) were identified: suprasegmental features (e.g., intonation, prosody, tone, stress) (103 comments); Nativeness (68 comments); familiarity with Hong Kong (48 comments); and Vocabulary/grammar (43 comments).

Table 7: Main reasons for liking or disliking speakers



** Some of the participants provided more than one reason and all the answers were counted individually as separate entries.*

Suprasegmental features accounted for almost 40% of the comments, followed by nativeness (26%), familiarity with Hong Kong (18%), and vocabulary/grammar (16%). This shows that our participants notice speakers' prosody, intonation and stress much more than they notice segmental features like grammar and pronunciation. Suprasegmental features were mentioned especially in relation to speakers #1 and #3, whereas nativeness was mentioned most frequently with #3 and #5, familiarity with Hong Kong was singled out with #1 and #4, and vocabulary/grammar with #1 and #5. This echoes, to some extent, with Hansen Edwards (2019), who asked close to 2,000 students in a survey to identify salient features of HKE, and they mentioned accent, grammar and vocabulary, tone and stress as the most important. The use of vocal stimuli in our study may have led to the increased significance attached to suprasegmental features. In other words, when you

hear a voice, prosodic features may come across as more salient, but when you *imagine* a voice, features of pronunciation and grammar may be seen as the most important. Familiarity with HKE was also identified as important in Roy Chan's (2020) research in which intelligibility was correlated with familiarity and positive attitudes towards HKE.

Comments about language

The last question to be considered in this paper is what the participants noticed about the speakers' language. In response to the question, 'What did you notice about the speaker's language?', the participants wrote 369 comments on which we performed another thematic analysis. The answers fell into three main themes as outlined in Table 8. We subsequently asked them to specify, for each sound clip, what they thought was the most prominent feature in her pronunciation, and the findings are outlined in Table 9.

Table 8: Noticeable features in the speakers' language

Feature	**Frequency (Count)**	**Example**
Suprasegmental Features	206 (56%)	*Flat, monotone/ monotonous, ups and downs, syllable-timed/ stress on each word*
Nativeness	109 (29%)	*Native, native-like, native speaker, Accurate/ Proper English*
Origin of Speaker	54 (15%)	*Hong Kong/ Hong Kong-style, Cantonese*

Table 9: Salient Features in Each Sound Clip

Speaker	#1	#2	#3	#4	#5
Suprasegmental Features					
- Flat/ Monotone	36	1	0	2	0
- No Intonation	20	1	0	10	0
- Has Intonation	2	48	35	23	28
Nativeness					
- Native speaker	0	25	45	3	36
Origin of Speaker					
- Hong Kong	15	5	5	29	0

Interestingly, regardless of speaker, as we can see in Table 8, 56% of the comments were about suprasegmental features (especially intonation), such as *flat, monotonous, the ups and downs of her voice* etc. The second main category focused on nativeness, but among these comments, many of them still mentioned prosody, such as *native intonation* and *native tone*, which means that suprasegmental features were overwhelmingly singled out as *the* most important feature in accent recognition and evaluation. Unsurprisingly, the speaker's origin is also referred to as a noticeable feature in her pronunciation. When it comes to salient features in individual speaker's language (Table 9), it is somewhat surprising that speaker #1, who has the most pronounced HKE intonation pattern, clearly influenced by the contours of Cantonese tones, is characterised as having *flat/monotone intonation* or even *no intonation*.

Speakers #2, #3 and #5, on the other hand, whose prosodic patterns are closer to Standard English, are characterised as having intonation, and they are also seen as being native speakers. Most noticeable about speakers #1 and #4 is their Hong Kong origin.

Discussion

This study has highlighted the immense importance of suprasegmental features in accent recognition and evaluation tasks. Even when listener judges were being asked to convey their first-hand impression of the speakers, comments about their perceived nativeness and proficiency/fluency, which are intrinsically linked with prosody, featured strongly in the open-ended comments (Table 3). This became even clearer when participants were being asked to give reasons for their like or dislike of a particular speaker: suprasegmental features were being used to explain dislike for a (heavily) localised HKE accent, and to explain why a HKE accent with fewer localised prosodic features was preferable (Table 7). And this finding became most evident when we asked listener judges to reflect on noticeable features in the speakers' language: suprasegmental features accounted for more than half of the comments, focusing in particular on intonation, stress, and tone (Table 8), whereas segmental features (vowel/consonant sounds and phonemes) were not mentioned at all. This is somewhat surprising, given the amount of time English language teachers would spend teaching their students pronunciation, which traditionally has focused on vowel and consonant sounds, not prosody.

This study thus allows us to answer the question we asked in the introduction, namely which linguistic and paralinguistic features people notice in language attitude experiments, and how these features are linked to accent recognition and evaluation. Overwhelmingly, our listener judges noticed suprasegmental features: intonation, stress and other prosodic features were mentioned repeatedly, which suggests that paralinguistic features, which are rarely taught explicitly, are nevertheless at the forefront of our minds when we engage in accent evaluation tasks. This also means they are of paramount importance for first-hand impression: prosody is important for assessing nativeness and localness and should therefore, arguably, be assigned more importance in (English) language teaching (see Hahn, 2004, for a similar conclusion).

Suprasegmental features have received relatively little attention in the language attitude literature, especially vis-à-vis HKE. Monographs providing overviews of the linguistic inventory of HKE (Setter, Wong & Chan, 2010) or the sociolinguistic soundscape of Hong Kong (Sewell, 2016) have very little on suprasegmentals. Setter et al. (2010) provide a comprehensive overview of the phonetic and phonology, morphosyntax, and discourse and lexis of HKE, but only include a few brief paragraphs on stress, rhythm and intonation arguing that "it is beyond the scope of this book to cover the area in detail" (p. 31); and Sewell (2016) writes extensively about intelligibility in his important book on English pronunciation models using Hong Kong as an example, but has nothing about prosody. However, recent contributions to language attitude research have highlighted emerging trends in the field, including how new technologies facilitate research on attitudes towards

segmental and suprasegmental features (see Loureiro-Rodriguez & Acar, 2022 for examples), and how mixed methods approaches, combining experimental designs with more naturalistic data such as focus groups, interviews and discourse analysis of spoken interaction, might yield more holistic findings about the discursive construction of language attitudes (see Bellamy, 2022 for examples).

Needless to say, we cannot separate the answers we received to the open-ended questions in this study from the listener judges' background. They are English language teachers and are therefore likely to focus more on the speakers' language compared to participants who have different professions. Thus, the focus on nativeness and proficiency in Table 3 is arguably likely related to the participants' background. However, given their jobs as language teachers in Hong Kong where most of their students would be L2-speakers of English, it is likely they will focus on vocabulary and grammar in their teaching, but this is not reflected in their answers. In terms of explaining their (dis)like for the speakers, only 16% of the answers had to do with vocabulary and grammar, whereas almost 40% focused on suprasegmental features (Table 7). Thus, the emphasis on speakers' paralanguage may have less to do with participants' profession, and more to do with what we as listener judges notice in people's language.

Assessing and evaluating regional dialects in Denmark, Ladegaard (2001) asked participants, who were not language teachers, to indicate where they thought the speakers in his study were from, and subsequently to explain why they thought this person was from region X. Overwhelmingly, listener judges mentioned that they used prosodic features (intonation and stress/glottal stop in particular) to assess where the speakers were from. They did not use linguistic terminology and typical answers included *the ups and downs of her voice*, and *the way she stresses words*, but it was clear that regional (and social) identification was done on the basis of speakers' prosodic features. Kang (2010) also points to the importance of suprasegmental features in her study of L2 comprehensibility and accentedness in the USA. She used excerpts from authentic lectures by international teaching assistants (ITAs) from 11 different countries, and asked 53 American undergraduate students to assess these non-native speakers' accented speech. In line with our findings, Kang (2010) found that suprasegmental features (referred to as pitch range and word stress) independently contributed to listeners' judgements. Intonation was singled out as one of the main reasons for negative speaker evaluations: ITAs' speech sound was considered monotonous and the student judges "commented that ITAs' flat tone of voice made the speech not only frustrating but also extremely boring" (Kang, 2010, p. 310).

Kang (2010) suggests that her findings should have implications for the training of ITAs, as well as for the training of English language teachers in general. Because 'suprasegmental errors' (Kang's term) contributes significantly to negative student evaluations, she argues that training of non-native teachers should focus more on teaching the suprasegmental aspects of language use (see also Hahn, 2004). While we agree that it would be advisable to pay more attention to suprasegmental features in foreign language teaching, we also argue that it may prove difficult for the speakers of

some languages to acquire native(-like) intonation patterns, for example. Just like it is extremely difficult (but not impossible) for speakers of English (and other European languages) to acquire Cantonese tones and use them appropriately, it is equally challenging (but not impossible) for native speakers of Cantonese to erase any traces of Cantonese tones when they speak English.

We would also argue that, in the case of HKE, this might not be desirable. The verbal-guise experiment, which was part of the current paper, found that HKE with fewer localised features is gaining recognition in Hong Kong, and the relatively negative evaluation of Speaker 1 (with most localised features) was most evident on status dimensions (Ladegaard & Chan, 2023). This suggests that HKE is finally being recognised as a legitimate variety of English, and to expect speakers of HKE to acquire prosodic patterns akin to Standard British English would not only be difficult, but would also lead to English language teaching in Hong Kong being even more normative and prescriptive than it already is (Roy Chan, 2020). Rather, we would argue that the full potential of HKE needs to be further explored, also in educational contexts, so that students in Hong Kong (and elsewhere) come to appreciate that localised Englishes have something to offer, not only as legitimate means of communication but also as vehicles for a localised identity (Chan, 2016; Hansen Edwards, 2019; Ladegaard & Chan, 2023).

Conclusion

In this paper, we set out to expand on our knowledge about what listener judges react to in accent identification and evaluation studies. Relatively little attention has been given to identifying which linguistic and prosodic features lead to specific evaluations in previous language attitude research, and by adding a number of open-ended questions to a verbal-guise study of teachers' attitudes towards HKE, we aimed to collect empirical data about this question. We found that suprasegmental features are highlighted as an important source of identification of accents, but also as a means of assessing the perceived quality of accents. Prosodic features like intonation, stress and tone are most frequently mentioned as the most noticeable feature in a person's language, and we would argue therefore that this paper has contributed to help "disentangle the language attitudes processes", as advocated by Dragojevic et al. (2021, p. 69).

We do not know whether prosodic features would turn out to be equally salient in other socio-cultural environments. This study was conducted in postcolonial Hong Kong, a city where English has played and continues to play an important role in people's everyday lives, and even more so, in education. EMI education is still favoured by an overwhelming majority of students and parents in Hong Kong, and this sends an important message about the status and prestige associated with English in a city where more than 90% of the population speak Chinese as their L1. It is possible therefore that listener judges in other places would be less conscious of speakers' prosodic features, and it is also possible that non-English language teachers would focus less on speakers' prosody. However, research involving different listener judges and in other socio-cultural contexts suggests that suprasegmental features *are*

salient per se in accent recognition and evaluation (Ladegaard, 2001; Kang, 2010), but this is an empirical question that we would encourage other researchers to explore.

We would also recommend that future studies should adopt more holistic approaches to studying language attitudes. Like the vast majority of language attitude studies, we adopted an experimental design but we acknowledge that more naturalistic approaches, such as analysis of spoken discourse from interviews, focus groups, or naturally occurring data might complement existing findings and address some of the potential shortcomings of this study (cf. Bellamy, 2022). As Liebscher and Dailey-O'Cain (2009) argue, "a discourse analysis of spoken interaction provides the opportunity to add another layer of depth to the analysis of language attitudes" (p. 199). Furthermore, we used female speaker voices and can therefore not make any claims about possible differences between male and female voices vis-à-vis suprasegmental features, so we recommend that future studies also look into potential differences between perceptions of suprasegmentals in male and female speakers. Finally, alternative experimental methods, like measuring language attitudes by using the Personalised Implicit Association Test (Rosseel at al., 2018), also have the potential to add theoretical and methodological rigour to language attitude research.

Edwards (1999, p. 101) reminds us that "We do not react to the world on the basis of sensory input alone but, rather, in terms of what we *perceive* that input to mean" (emphasis added). In this study, we have provided evidence that prosodic features are anything but trivial and insignificant. Rather, they are perceived as providing vital cues for accent recognition, and they are perceived as important determinants of both positive and negative accent evaluations, and we argue therefore that they should be accorded more importance in future language attitude research. In his foreword to Kircher and Zipp's (2022a) handbook of research methods in language attitudes, Giles (2022) argues that, while there is no companion handbook of *theories* in language attitude research, "a move to embrace the creative rapprochement of the broad brush of methods manifested in this volume could, consequently, unleash a rich, novel set of multi-layered theoretical frameworks, as well as more far-reaching conceptualisations and definitions of what we refer to as language attitudes" (p. xviii). With this paper, we have provided further evidence for the importance of a relatively new piece in the language attitude research method and theory development puzzle by highlighting the significance of suprasegmental features for accent recognition and evaluation. It is our hope that future studies will take account of this in their research design.

Notes

1) By 'neutral' content we mean that the speakers make no explicit reference to anything which could label them as belonging to a particular social class or ethnic group, for example. But we acknowledge that, strictly speaking, "there is no such thing as an attitudinally neutral language variety" (Rosseel et al., 2018, p. 33).
2) Rising intonation at the end of a declarative sentence, often referred to as high-rising terminals (HRTs) or 'uptalk', has been identified in varieties of English around the world, including Australian English, New Zealand English, Welsh-

accented English and American English (Warren, 2015). HRTs are not unique to HKE but have been observed as a salient feature among young (female) students in Hong Kong's elite schools (see Cheng & Warren [2005] on rise/rise-fall intonation in HKE).

Data availability statement

The participants in this study did not give written consent for their data to be shared publicly, and supporting data is therefore not available.

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