Linguistics, Literature and Culture: Millennium Realities and Innovative Practices in Asia

Edited by

Shakila Abdul Manan and Hajar Abdul Rahim

CAMBRIDGE SCHOLARS PUBLISHING
TABLE OF CONTENTS

List of Figures.................................................................................. viii
List of Tables................................................................................... ix
Preface.............................................................................................. xi

Introduction ........................................................................................ 1
Realities and New Practices in Linguistics, Literature and Culture in Asia
Shakila Abdul Manan and Hajar Abdul Rahim

Chapter One ....................................................................................... 11
Exploring Tensions in Teaching English for Medical Purposes
within a University Curriculum Informed by Arab Nationalism
and the Forces of Globalisation
Dima Farhat

Chapter Two ....................................................................................... 49
The Production of Back Vowels in Malaysian English
Stefanie Pillai, Anussyia Muthiah and Looi Siew Teip

Chapter Three .................................................................................... 68
Language Shift in the Kristang Community: Process and Product
Lee Eileen

Chapter Four ....................................................................................... 89
Of Roti Canai, Thosai and Tau Sar Pau: “Branding” English
the Malaysian Way
Rita Abdul Rahman Ramakrishna

Chapter Five ....................................................................................... 109
Constructing Solidarity in Cyberspace: An Appraisal Analysis
of Teen Blogs
Quah Seok Hoon
Chapter Two

THE PRODUCTION OF BACK VOWELS IN MALAYSIAN ENGLISH

STEFANIE PILLAI, ANUSSYIA MUTHIAH AND LOOI SIEW TEIP
UNIVERSITY OF MALAYA

Abstract

The chapter discusses a phonological shift taking place in Malaysian English based on an acoustic analysis of the four back rounded vowels in English (/ɪ:/, /ə:/, /ʊ/ and /ø/). The fronting of these vowels, particularly the high back ones, has been reported in British English. Regional varieties of English either display similar patterns or retain a more retracted position in the vowel space. The study reported in this chapter is based on two sets of data, a younger group of Malaysian females comprising different ethnic groups (MYF) and an older group of female Malaysian English speakers (MOF). The most salient finding is that the vowels produced by the older group were further back in the vowel space compared to the ones produced by the younger group. This may be a result of the former maintaining vowels characteristic from an older British English variety. In contrast, the younger group may either be following the current trend of vowel fronting found in present day British English, or they may more likely be displaying pronunciation characteristics that have become part of the local norm. However, unlike some regional varieties of English, the MYF vowels appear to be contrasted in terms of quality whilst length contrast is only apparent for one of the pairs. The MOF group seem to contrast length more than quality, which does not complement their preservation of the overall quality of an older variety of British English. However, this lack of contrast is aligned with the general tendency in regional varieties for not contrasting vowel quality.
Introduction

A reality facing speakers of any language is change. Whilst lexical innovation is the most tangible aspect of language change for most speakers of a language and not infrequently becomes the subject of discussion in popular media, other aspects such as phonological change and syntactic innovation are usually picked up on by the linguist long before they enter the realm of public discussion.

One very tangible phonological change in the pronunciation of Malaysian English is the increasing tendency amongst younger speakers, under the influence of American popular culture, to pronounce the post-vocalic /r/, for example, in words like “bard” and “herd.” Amongst younger Malay speakers, there is also a tendency to un-round the rounded back vowel in words like “lot” and “bought,” again very likely due to the influence of American popular culture.¹

This chapter focuses on another, more subtle, phonological shift taking place in Malaysian English. The discussion is based on an acoustic analysis of the four rounded back vowels in English, i.e. the vowels in words like “cot,” “caught,” “pull,” and “pool.” Particular focus is given to the back vowels, firstly, because the quality of these vowels has changed in British English.² Secondly, these vowels have also been reported as displaying particular characteristics in various varieties of English. In particular, this chapter will address the following questions: (1) What are the acoustic characteristics of the rounded back vowels in Malaysian English? (2) To what extent are there differences in the back vowels produced by Malaysians of different age groups?

Often referred to in the popular media as Manglish, Malaysian English is in fact an umbrella term under which many sub-varieties of Malaysian English can be subsumed. Manglish more correctly refers to the colloquial variety, or varieties.³ Malaysian English is considered to be a second language variety, an outer circle variety or a New English, and as such a variety it is no surprise that it “is significantly different in its linguistic features in the aspects of syntax, morphology and phonology”⁴ from first language varieties of the language. Malaysian English is in fact a complex language, which is used by Malaysians of different ethnic groups, and of different language, socio-economic and geographic backgrounds, with varying degrees of proficiency.⁵ Due to the varied backgrounds of English users in Malaysia, Malaysian English is coloured by different accents.

Current descriptions of Malaysian English pronunciation tend to be based on colloquial Malaysian English. This sub-variety will predictably have more ethnically and geographically marked pronunciation features.⁶ Descriptions of Malaysian English pronunciation also tend to be impressionistic in nature. To address the need to have a more systematic description of Standard Malaysian English, a Corpus of Spoken Malaysian English (COSME) is currently being developed. While data collection is still ongoing for COSME, acoustic analysis has been carried out on the vowels produced by Malaysian speakers of different ethnic and age groups.⁷

Literature Review

Previous studies on Malaysian English vowels have shown there is a lack of contrast between traditionally paired vowels which can be related to the tendency to shorten long vowels resulting in word pairs such as pull and pool, and cot and caught⁸ being pronounced as homophones in Malaysian English. Zuraidah Mohd. Don’s study of Malay speakers, for example, found that they conflated the /ou/ and /au/ into a Malay-like /o/, which tends to be centralised in the vowel space and produced with more

lip rounding than the English counterparts. Not only do Malaysian speakers have a tendency not to contrast vowel quality, but they also do not distinguish vowel duration. This was reported by Wan Aslynn Salwani Wan Ahmad, who found that the Malay speakers in her study did not maintain length distinction between /o/ and /u:/.

However, another study found that while there tended to be a lack of quality and length contrast between the front and central vowels among Malay speakers, the back vowels displayed more contrast just as they did in Philippine English. In fact, both sets of speakers produced the vowels in words like pot and pod similar in quality to /a/, suggesting the possible influence of American English. While this is to be expected in Philippine English, the use of /a/ instead of /o/ by the Malaysian informants may signal a growing trend towards American English among younger Malaysians.

Another study also found more contrast between the back vowels, /o/-/u:/ and /o/-/u:/, compared to the front and central ones among Malaysian speakers. The average measurements of the first and second formant frequencies (F1 and F2) of both sets of vowels were found to differ significantly which indicates that there is quality contrast between the vowel pairs. Scatter plots of these vowels also showed that there were less overlaps between them compared to the other vowel pairs. However, the mean durational difference between the vowel pair was not significant for the /o/-/o:/ pair which interestingly was the most contrasted in terms of vowel quality. Thus, when examining vowel contrast, both parameters, vowel quality and vowel duration, need to be taken into account as it cannot be assumed that a lack of vowel quality necessarily correlates with a lack of length contrast between vowel pairs. Further, length contrast might even override quality contrast as is the case for /o:/ and /u:/ in British English, and thus vowel contrast is perceived more from durational differences rather than vowel quality.

The lack of contrast between vowel pairs is also typically found in other varieties of English, such as in African English, where a lack of vowel contrast was found among speakers from Kenya, Ghana and Zimbabwe. Closer to home, Salbrina Haji Sharbawi also found a similar lack of contrast in the vowels of Brunei English. Her findings showed that both /o/-/u:/ and /o/-/u:/ tended to overlap in Brunei English with /a:/ being more fronted and more open than in British English. Unlike Singapore English, /o/-/u:/ in Brunei English were more fronted. In Singapore English, it is reported that the front vowel pairs and /o/-/u:/ are produced much closer to each other than they are in British English. However, the rounded high back vowels in Singapore English, particularly /u:/, were placed further back than in British English. This is different from Hong Kong English, where the vowel /a:/ is fronted. Detering, Wong and Kirkpatrick are of the opinion that there is no evidence that this phenomenon in Hong Kong English is due to first language influence but may instead be a mirror of similar trends in British English.

Indeed the fronting of the /a:/ and /u:/ has been found among British speakers, especially from the younger age groups. Fabricius suggests that the fronting may have begun in the 1970s based on analysis of recordings from different periods of time, and explains that the FOOT (/u/) vowel in Received Pronunciation (RP) “has undergone a process of fronting and unrounding, in line with Labov’s Pattern 3 predictions of universal directions in vowel chain shifts; that close back vowels move towards the front of the mouth over time.” Ferragne and Pellegrino are sceptical that this shift has taken place although evidence of FOOT and GOOSE (/u:/) fronting was found in other British English dialects (e.g. East Anglia). This is because the fronting did not always occur for both these vowels (e.g. Liverpool) in the dialects examined, with some not showing any evidence.

11 Pillai, Manueli, and Dumanig. “Monophthong Vowels in Malaysian and Philippine English”, 86.

20 Detering et al, “The Pronunciation of Hong Kong English”, 164.
indication of fronting (e.g. East Yorkshire). Further, there was no evidence of neighbouring sounds shifting along with the back vowels as is anticipated in such a vowel shift.

While the reasons for the fronting or otherwise of the back vowels in English remains unclear, the literature shows that apart from the typical lack of vowel contrast (either quality wise and durational) found in some varieties of English, the back vowels also seem to be shifting forward in some varieties. In relation to these trends, the study reported in this chapter looks at the characteristics of the four rounded back vowels in Malaysian English and also discusses how the production of these vowels compares to other varieties of English.

**Methods**

The following sections discuss the methods used in the study.

**Informants**

The data comprises two sets of recordings from COSME. The first set of data comprises recordings from forty-seven female Malaysian undergraduates from different ethnic backgrounds (thirty-one Chinese, ten Indians, five Malays and one of mixed ethnicity) with an average age of twenty-five years. The informants were all English language majors who can be assumed to be proficient in English. The second set of data consists of recordings of six Chinese female Malaysian English speakers who have an average age of sixty-five years. According to all the profiles of these informants, which were collected in informal interview sessions, they all speak English as their dominant language. These older informants were all educated in English medium schools while for the younger informants, Malay was the medium of instruction at school. Based on perceptual tests of selected recordings of the informants and previous findings on the data, the vowel qualities of the informants are not expected to be strongly influenced by their first languages. Further, since they are considered as fluent speakers of English, and were recorded reading a word list (i.e. a careful speech context), it can be assumed that their speech will be less marked.

**Data**

The target vowels were embedded in a CVC context (where C is a stop consonant, and V is the target vowel) and placed in a carrier frame: “Please say CVC again.” The use of the CVC context to elicit the target vowels, in this case, /o/, /ɔ/, /ɔ/ and /u/, provided a constant phonetic environment and ensured that the target vowels were produced. This is why acoustic studies on the production of English vowels typically examine vowels which have been placed in CVC contexts such an hVd. The vowels are also sometimes preceded and/or followed by stop consonants in order to minimise co-articulatory effects of neighbouring sounds on the vowels. The use of a carrier frame helps to maintain the rate of speaking and avoids syllable final lengthening that is found when speakers produce words in isolation, that is, in citation form.

The MYF data comprised the words: “pod,” “board,” “put” and “boot.” Recordings were carried out in a quiet room, with the Kay Elemetrics Computerized Speech Lab (CSL) Model 4500. The MOF data comprising the words “hod,” “body,” “horde,” “board,” “who’d,” “bood,” “hood,” and “Buddha” were carried out at the homes of the respondents using an Ediril R-09 WAV3/MP3 Recorder and Audio Technica Cardioid Stereo Microphones. The recordings yielded a total of 188 tokens, that is, 47 tokens per vowel for MYF and a total of 48 tokens for MOF.

**Analysis**

Praat version 5.1.0.7 was used to listen to and transcribe the data, measure and annotate the first and second formants of the vowels and also the vowel durations. The Formant Frequency Model was the basis for the analysis.
formant analysis of the vowels and is based on the assumption that the first and second formant frequencies or F₁ and F₂ values "provide the human speech perception system with the cues necessary for the recognition of individual vowel qualities."²⁸ Because of this, current studies on vowels commonly employ this method of analysis.²⁹ The basic premise for this model is that F₁ is correlated inversely with vowel height whereas the second formant or F₂ has a direct relationship with vowel fronting. The F₁ and F₂ frequencies (Hz) of the vowels were measured using the automatic Linear Predictive Coding (LPC) with formant tracking superimposed on wide-band spectrograms in Praat. Measurements were taken at the midpoint of the vowel where the vowel is at its most steady state and is least affected by preceding and following consonants (see Fig. 2.1). In cases where the formant tracking did not appear to match the actual formants on the spectrogram or appeared to merge as is apt to occur with back vowels, a combination of visual inspection of the spectrograms together with auditory examination of the data were used to manually obtain the measurements.

Fig. 2.1. Screenshot from Praat for the word pod

The average F₁ and F₂ values of the vowels then were converted from Hertz into Bark scale³⁰ to enable the vowels to be plotted on an F₁-F₂ vowel chart, with separate charts generated for each set of data. The conversion into Bark scale is based on the assumption that it "is thought to be a good approximation of the actual frequency analysis performed by the ear."³¹ The average F₁ and F₂ values were plotted on a F₁-F₂ plot as it has been found to correlate with the traditionally used vowel chart.³² The placement of /u:/-/a:/ and /u:/-/u:/ on a vowel chart provides a visual representation of the placement of the vowels in the vowel space, thus enabling judgements about how far back the target vowels were produced. It also shows how close the vowel pairs are located. To further determine if there is quality contrast between the vowel pairs, scatter plots for each of the vowel pairs in each data set were generated.

The average durations of the vowel pairs in each set of data were compared to determine if vowel contrast was maintained. The duration of the vowel was measured (in milliseconds) from the onset and offset of the vowel based on the periodic voicing portion of the vowel (see Fig. 2.1).

Findings and Discussion

Vowel Placement

Table 2.1 and Table 2.2 present the F₁ and F₂ and durational measurements of the rounded back vowels for the two sets of Malaysian English data while Fig. 2.2 shows the vowels on a vowel chart. The vowel chart shows that the MOF vowels lie further back in the vowel space, and this is further supported by the line graphs in Figs. 2.2 and 2.3. The higher F₁ values for the back vowels in MYF indicate that they are produced lower in the vowel space (with the exception of /u:/). In contrast, the higher F₂ values for MYF mean that they are more advanced in the vowel space than the MOF vowels. In fact, the vowel /u:/ in the MYF data is similarly placed in the vowel space with the same vowel produced by Malaysian informants whose average age was forty-five examined in a previous study.³³ This suggests that younger Malaysian English speakers

³⁰ Pillai, Zunidah Mohd Don and Knowles, "Towards Building"
are producing this vowel more fronted than the older ones. However, in the absence of additional data from different age groups or time periods, it is difficult to ascertain the point at which the shift in the vowel space may have taken place.

Table 2.1. Measurements for Rounded Back Vowels in MYF

<table>
<thead>
<tr>
<th>MYF Vowels</th>
<th>F₁ (Hz)</th>
<th>F₂ (Hz)</th>
<th>F₁ (Bark)</th>
<th>F₂ (Bark)</th>
<th>Duration (msec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ɑ/</td>
<td>806</td>
<td>1200</td>
<td>7.19</td>
<td>9.70</td>
<td>128</td>
</tr>
<tr>
<td>/ɔ/</td>
<td>641</td>
<td>1021</td>
<td>5.92</td>
<td>8.65</td>
<td>129</td>
</tr>
<tr>
<td>/ʊ/</td>
<td>472</td>
<td>1237</td>
<td>4.49</td>
<td>9.90</td>
<td>82</td>
</tr>
<tr>
<td>/u/</td>
<td>410</td>
<td>1026</td>
<td>3.94</td>
<td>8.68</td>
<td>107</td>
</tr>
</tbody>
</table>

Table 2.2. Measurements for Rounded Back Vowels in MOF

<table>
<thead>
<tr>
<th>MOF Vowels</th>
<th>F₁ (Hz)</th>
<th>F₂ (Hz)</th>
<th>F₁ (Bark)</th>
<th>F₂ (Bark)</th>
<th>Duration (msec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ɑ/</td>
<td>639</td>
<td>839</td>
<td>5.90</td>
<td>7.43</td>
<td>99 103</td>
</tr>
<tr>
<td>/ɔ/</td>
<td>543</td>
<td>886</td>
<td>5.10</td>
<td>7.75</td>
<td>256 234</td>
</tr>
<tr>
<td>/ʊ/</td>
<td>395</td>
<td>901</td>
<td>3.80</td>
<td>7.85</td>
<td>97 92</td>
</tr>
<tr>
<td>/u/</td>
<td>360</td>
<td>662</td>
<td>3.48</td>
<td>6.09</td>
<td>190 205</td>
</tr>
</tbody>
</table>

Fig. 2.2. Vowel Chart of Back Vowels in MYF and MOF

The retracted back vowels produced by the MOF could be a manifestation of colonial British English, as the realization of these back vowels is similar to those found in older British speakers. As discussed in the literature review, the fronting of the /ɑ/ and /u/ vowels is common among younger Southern British English speakers, and has also been found in other British dialects. There is, therefore, a possibility that other varieties of English may reflect this trend in vowel fronting, and this has been found in for example Hong Kong English, where /u/ is particularly

---

Chapter Two

One possible explanation that is worth pursuing is Gut's Norm Orientation Hypothesis which posits that a variety of English is likely to display systematic linguistic patterns when the speech community looks towards an endonormative rather than an exonormative norm. According to Gut,

[...]

This Hypothesis could account for the inter-generational differences in Malaysian English in the sense that where standard British English pronunciation (namely RP) prevailed as a model in the teaching of English in Malaysia previously, this appears to have been de-emphasised in the curriculum until recently when it was explicitly stated that British English pronunciation is to be the reference point for the teaching of English in primary schools. Thus, it is likely in the postcolonial period after 1957, there was a gradual shift in the way Malaysians produced English sounds (segmentally and prosodically), along with other linguistic changes that took place in the process of Malaysian English becoming a nativised variety. Many of these features have now become tacitly acceptable not only in the classroom but also in the media and other contexts despite the many complaints about such features being examples of "bad pronunciation."

Vowel Contrast

Having established that there are differences in terms of where the back vowels are located in the vowel space for MYF and MOF, the study also sought to ascertain the extent to which there is vowel contrast both in relation to vowel quality and length contrast. The MYF vowels appear to show more contrast and correlated samples t-tests show that there is a

41 Pillai et al., "Malaysian English," 170.
significant difference in the average F1 and F2 between both the lower 
(t(46)=11.54, p<0.01; t(46)=11.16, p<0.01), and higher back vowel pairs:
(t(46)=5.5, p<0.01; t(46)=10.23, p<0.01). The distribution of all the 
vowels produced in the MYF set is presented in Figs. 2.4 and 2.5, which 
indicates that the contrast between the vowels is more apparent with /o/ -
/ɔː/, which is different from Brunei, Hong Kong and Singapore English 
where this vowel pair tends not to be contrasted.

Fig. 2.5. Scatter Plot of /o/ - /ɔː/ for MYF

No statistical tests were carried out for the MOF data as the sample 
size was small. However, scatter plots for the two vowel pairs were 
generated to examine if they were produced similarly or were contrasted 
(Figs. 2.6 and 2.7). The scatter plots show that vowels in each pair overlap 
with each other. This is especially prominent for the /u:/ - /ʊ/ pair. Thus,
while this pair retains a more retracted position in the vowel space akin to 
older British English, it displays the typical tendency of vowel conflation 
found in some regional varieties of English (e.g. Brunei, Singapore and 
Hong Kong English).
Chapter Two

Fig. 2.8. Scatter Plot of /u/-/u/ for MOF

The vowels produced by the MOF, however, appeared to distinguish vowel length more than the MYF for two vowel pairs (see Table 2.1). In the MOF data, for /u/-/u/, the ratio is 0.5, while the ratio in MYF is .77, which suggests that the former distinguished vowel length more than the MYF. A similar finding applies for /o/-/o/, where for the MYF data, there is essentially no length discrimination between the two vowels (see Table 2.1). This is supported by the fact that there is no statistically significant difference between the average duration of /o/-/o/ in MYF: ($t(46)=.34, p>0.01$). However, the difference between the mean durations of /u/-/u/ was found to be is statistically significant for MYF: ($t(46)=7.79, p<0.01$).

Conclusions

The preliminary findings reported in this chapter suggest that the four rounded back vowels in Malaysian English as used by younger speakers (forty-five years and below) are produced further in the vowel space compared to those produced by older Malaysian English speakers. The actual reasons behind the tendency to front the back vowels remain unclear but they are consistent with trends in British English and in some regional varieties of English. Future research should look into when this shift may have taken place and whether the motivating factor for this shift was a result of influence from British English or a result of endonormative norms establishing themselves in spoken Malaysian English.

The results also show that the back vowels of the MYF tend to show more quality contrast which is somewhat different from typical regional patterns of vowel conflation. The lack of contrast between the vowel pairs among the MOF is in a way contradictory but not wholly unexpected. Whilst the MOF vowels seem to have maintained some semblance of an older variety of British English for their rounded back vowels by producing them further back, at the same time they exhibit the typical lack of vowel contrast found in Malaysian English and regional varieties of English.

To further confirm and strengthen the findings, future research should incorporate a larger sample with more speakers from different age groups, gender, locations and time periods, and also compare the production of these vowels in different speaking contexts.

Works Cited


