

## Rhoticity in Brunei English : A Diachronic Approach

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### Abstract

This paper compares the rhoticity of 21 earlier and 21 more recent recordings of ethnically-Malay undergraduates in Brunei by analysing the pronunciation of five tokens from the Wolf passage: *heard*, *concern*, *short*, *more* and *before*. Using auditory judgements and based on a 2-out-of-5 threshold, it was found that there is a significant difference in the number of rhotic speakers between the two groups as the speakers in the more recent recordings are substantially more rhotic (19 out of 21) than their counterparts (11 out of 21). This confirms the increase in rhoticity in Brunei English that has been suggested in previous research (Deterding & Salbrina, 2013; Nur Raihan, 2016). Possible explanations for this trend include the influence of Brunei Malay, exposure to rhotic varieties of English such as American English and Philippine English, and spelling pronunciation.

### Introduction

A rhotic accent involves pronouncing [r] at the end of a word such as *more* or *far* and before a consonant in words such as *short* and *bark*. In contrast, a non-rhotic speaker only pronounces [r] when it occurs before a vowel, for example in *run*, *bread* and *hurry*, or as a linking consonant in phrases such as *far away* (Roach, 2009, p. 50).

Ladefoged (2006, p. 92) notes that most North American speakers have a rhotic accent. He adds that it was also the norm throughout Britain during the Middle English period (1100–1500), and it still occurs today in the West Country and Scotland.

Rhoticity is also variable in the Englishes spoken in South East Asia. For example, Malaysian English (Baskaran, 2004; Pillai, 2015) and Singapore English (Kirkpatrick, 2007) are claimed to be non-rhotic varieties, though Tan (2012) has shown that some Singapore English speakers with a high level of education and socio-economic status nowadays tend to produce non-prevocalic [r]. On the other hand, rhotic varieties include Philippine English (Tayao, 2004).

In one of the earliest descriptions of the pronunciation of Brunei English, Mossop (1996) did not mention rhoticity. It is not clear if he did not think rhoticity was important or if it was not as widespread then as it is today. More recent research reports that many Brunei English speakers are now rhotic (Salbrina & Deterding, 2010; Deterding & Salbrina, 2013; Deterding, 2014), and it seems to be increasing (Nur Raihan, 2016).

Language change is of course inevitable as a result of a range of factors, including exposure to other languages (Aitchison, 1991). However, it is often difficult to predict the direction of change. This paper attempts to determine whether Brunei English has become more rhotic over the years by comparing the speech of 21 undergraduates who were recorded between 2007 and 2010 with the pronunciation of 21 undergraduates who were recorded in 2016.

For this paper, the undergraduates are referred to using F or M followed by a number, such as F2 (second female undergraduate) and M5 (fifth male undergraduate). As rhoticity describes an accent not the pronunciation of a word, this paper will refer to the occurrence of non-prevocalic [r] in individual tokens as ‘R-colouring’.

## Speech data

This section provides a brief description of the participants and the methodology used for the analysis.

The data for this study are from the recordings of the Wolf passage (Deterding, 2006; see Appendix) from the University of Brunei Darussalam Corpus of Spoken Brunei English (UBDCSBE), which represents a substantial range of the spoken English of reasonably well-educated young Bruneian speakers (Deterding & Salbrina, 2013, p. 9). The recordings took place in an office at the university in two different periods: between 2007 and 2010; and in 2016. Each participant was asked to read the text speaking into a microphone attached to a laptop, and the analysis was done using Praat (Boersma & Weenink, 2010). Prior to the recordings, each participant was given a consent form and a questionnaire on their background and language use.

A total of 42 recordings of ethnically-Malay undergraduates were selected from the corpus, and the identifying numbers were randomised, for example N1 and N15. This was to ensure that the researcher was not influenced by her knowledge of when the participants were recorded. (In this paper, the speakers will be referred to by the original, non-randomised identifiers.) Only Malay participants were analysed in this study to eliminate ethnicity as a variable.

Each undergraduate group has sixteen female and five male speakers. The average age for the first batch of undergraduates is 21.6 while the second group is slightly younger with an average age of 19.7. All the female participants and the majority of the males listed Malay as their most proficient language. Only M1 and M5 claimed to be most proficient in Kedayan and English respectively. Most of the other participants listed English as their L2, though F45 stated Dusun as her L2.

Five tokens from the passage were used to analyse the instance of R-colouring: *heard*, *concern*, *short*, *more* and *before*. These tokens were selected to ensure a range of environments for the realisation of R-colouring; in *more* and *before*, the potential [r] occurs in open syllables (there is no final consonant), while in the remaining three tokens it occurs in closed syllables (there is a final consonant). In all tokens, the potential [r] occurs in a stressed syllable. For this analysis, a falling third formant in the spectrogram was used to support the researcher's initial judgment on whether a speaker produced the [r] in each token (Hall, 1997, p. 107). However, the analysis relies mainly on the perceptual judgements of the researcher, and spectrograms were only examined to provide supplementary evidence in uncertain cases.

To provide an estimate of inter-rater auditory reliability, the results of the researcher were compared with the results of a second researcher who similarly listened to all five tokens in the 42 randomised recordings and provided his judgment of R-colouring in each one.

A 2-out-of-5 threshold was used to determine whether a speaker is rhotic (Deterding & Salbrina, 2013, p. 33): speakers who produce at least two tokens with R-colouring are considered to have a rhotic accent. In addition to judging rhoticity, the researcher tried to guess whether each speaker was from a recent or earlier recording.

## Results

The results for the total number of rhotic speakers and the incidence of R-colouring are presented in this section.

In her attempts to guess whether each recording was earlier or more recent, the author guessed correctly in 26 cases and incorrectly in 16 cases. There is no evidence that this differs at the 5% significance level from chance guessing (sign-test, one-tailed,  $p=0.082$ ). Indeed, there are many cases for which she made the wrong guess, confirming that it is not easy to detect changes in pronunciation that have taken place over the past seven years.

For judgements of the R-colouring of individual tokens, the two researchers agreed on 199 tokens and disagreed on 11 tokens, an inter-rater reliability rate of 94.8%. The author heard 114 tokens as rhotic, while the second researcher heard 117 tokens as rhotic.

For judgements of the rhoticity of the speakers on the 2-out-of-5 threshold, the two researchers agreed on the rhoticity of 40 speakers and disagreed on two, an inter-rater reliability rate of 95.2%. They disagreed about N8 (= F42) and N31 (= F48), both of whom are from the recent recordings. The author judged N8 to be rhotic and N31 to be non-rhotic, while the second researcher judged them the other way round. They both judged 30 out of the 42 speakers to be rhotic, and they agreed on the total number of rhotic speakers for both sets of recordings.

The analyses presented below are based on the perceptions of the author. Table 1 shows the total number of rhotic speakers based on the 2-out-of-5 threshold.

	<b>Rhotic speakers</b>	<b>Non-rhotic speakers</b>
<b>Earlier recordings</b>	11 (52.4%)	10 (47.6%)
<b>Recent recordings</b>	19 (90.5%)	2 (9.5%)
<b>Total</b>	30 (71.4%)	12 (28.6%)

**Table 1.** Total number of rhotic and non-rhotic speakers

As can be seen, about half of the speakers in the earlier recordings were judged to have a rhotic accent, confirming the findings of Salbrina and Deterding (2010) (using different data) and Deterding and Salbrina (2013) (using the same early UBDCSBE recordings as the current study).

In contrast, nearly all the speakers in the more recent recordings have a rhotic accent. These results concur with findings by Nur Raihan (2016) that rhoticity is becoming more widespread in Brunei. The difference in the number of rhotic speakers between the two groups is highly significant ( $\chi^2=7.47$ ,  $df=1$ ,  $p=0.0063$ , though one might note that a chi-square test is not strictly valid if any cell has a value of less than 5; Mackey & Gass, 2005, p. 279). Overall, the results provide solid further evidence that rhoticity is an emerging trend in Brunei English.

Table 2 below illustrates more information on the number of tokens of R-colouring produced by the different speakers.

<b>Number of tokens of R-colouring</b>	<b>Earlier recordings</b>	<b>Recent recordings</b>
0	9	0
1	1	2
2	4	3
3	2	3
4	4	4
5	1	9
<b>Average</b>	1.71	3.71

**Table 2.** Number of speakers producing number of tokens of R-colouring

Nine out of the ten non-rhotic speakers in the earlier recordings (F01, F07, F09, F13, F22, F27, F29, F30, M01) did not produce any tokens of R-colouring while even the two non-rhotic speakers from the more recent recordings (F46, F48) produced one token of R-colouring. In addition, only one speaker from the earlier group (M05) produced R-colouring in all five tokens, while nine of the rhotic speakers from the more recent group (F41, F43, F47, F51, F53, F55, F56, M28, M30) realised all five tokens with R-colouring. The average

for the earlier recordings is 1.71 tokens, while for the more recent recordings it is 3.71 tokens, a highly significant difference ( $t=4.05$ ,  $df=40$ , two tailed,  $p<0.001$ ).

Overall, the more recent speakers had more instances of R-coloured tokens (74.3%) than the earlier speakers (34.3%). The results for the incidence of R-colouring in the different tokens are shown in Table 3.

Tokens	Earlier recordings		Recent recordings	
	[r]	No [r]	[r]	No [r]
<i>heard</i>	9	12	17	4
<i>concern</i>	3	18	15	6
<i>short</i>	5	16	17	4
<i>more</i>	11	10	17	4
<i>before</i>	8	13	12	9
<b>Total</b>	36 (34.3%)	69 (65.7%)	78 (74.3%)	27 (25.7%)

**Table 3.** Incidence of R-colouring

The earlier speakers had the most instances of R-colouring in *more* and the least in *concern*. In contrast, the tokens that had the most instances of R-colouring for the more recent group were *heard*, *short* and *more*, while *before* had fewer tokens. For the earlier group, there seems to be more R-colouring for open syllables (*more*, *before*) (45.2%) than closed syllables (*heard*, *concern*, *short*) (27.0%), coinciding with the observation of Deterding and Salbrina (2013), but in the current study this difference falls just short of significance at the 5% level ( $\chi^2=3.73$ ,  $df=1$ ,  $p=0.054$ ). For the more recent recordings, however, there is little difference between the open syllables (69.0%) and the closed syllables (77.8%) ( $\chi^2=1.01$ ,  $df=1$ ,  $p=0.32$ ).

In summary, the analyses have shown that there is a significant difference in the number of rhotic speakers and incidences of R-colouring between the two groups. The later recordings had substantially more rhotic speakers and more instances of tokens with R-colouring than the earlier recordings. This provides strong evidence that there has been an increase in rhoticity in Brunei English within the span of less than ten years, so, for speakers about 20 years old, Brunei English has become more rhotic.

## Discussion

Recent studies have suggested that rhoticity is a growing trend in Brunei English as more speakers, especially younger ones, are producing non-prevocalic [r] in words such as *door* and *course*, and the current study has provided further evidence in support of this trend. One might ask how and why such changes have occurred. This section attempts to answer why there is a widespread use of rhoticity today when there was no mention of it in the earlier description of Brunei English phonology (Mossop, 1996) and only about half of the speakers recorded seven years ago could be described as rhotic (Deterding & Salbrina, 2013). The status of rhoticity and of Brunei English will also be included.

### **Possible influences on rhoticity**

The principle influence on Brunei English is probably from Brunei Malay, the first language of most of the speakers. Brunei Malay is rhotic (Clynes, 2014), and this is likely to affect the speakers' pronunciation of English. Interestingly, one of the male speakers from the earlier group (M01) claimed to be most proficient in Kedayan, a non-rhotic variety (Clynes, 2014), and it was found that this speaker was one of those who did not produce R-colouring in any of the five tokens.

A second possible reason for the increase in rhoticity in Brunei English is exposure to other rhotic varieties of English, especially General American English, because of the influence of movies, television programmes and music. In addition, there are about 200 Filipino teachers in local schools, and also hundreds of domestic helpers in Brunei homes, so it seems likely that Philippine English may also have some influence on the pronunciation of local speakers (Deterding & Salbrina, 2013, p. 34).

Finally, rhoticity might be considered an example of spelling pronunciation (Nur Raihan, 2015). By definition, rhoticity refers to an accent in which [r] is produced wherever 'r' occurs in the spelling (Ladefoged, 2006, p. 92), so the use of R-colouring clearly matches the spelling of words. Indeed, the pronunciation of Malay words generally closely follows the spelling. There are a few exceptions in Malay, as *perang* [peraŋ] ('blonde') and *perang* [pəraŋ] ('war') are differentiated by the pronunciation of the vowel in the first syllable even though they are written the same, and the consonant 'g' is realised as [dʒ] in the onset of the first syllable in *generasi* (generation) and as [g] at the beginning of *guruh* (thunder) (Nur Raihan, 2015, p. 37). Despite a few irregularities in the pronunciation of Malay such as these, it is suggested that the L1 tendency to pronounce words how they are spelled might have an influence on how speakers in Brunei pronounce English words. Indeed Nur Raihan (2015) reported that there is a positive correlation between rhoticity and spelling pronunciation among female undergraduates.

Deterding (2015, p. 18) suggests that the combination of these influences, Brunei Malay, American English, Philippine English and spelling pronunciation, may be what has caused Brunei English to become more rhotic.

### **Status of Brunei English**

This then leads us to discuss the status of Brunei English. As there is an increase in the number of rhotic speakers possibly due to external influences such as General American and Philippine English, this suggests that Brunei English is shifting away from its ties with British English. Due to this, Nur Raihan (2015, p. 13) proposes that Brunei English might be in the third phase (Nativization) of Schneider's Dynamic Model (2007). In addition, it might not be too far-fetched to consider rhoticity as an identity marker for Bruneians to distinguish their English from other South East Asian varieties of English. This suggests that Brunei English might be shifting towards Phase 4 (Endonormative Stabilization) as it is developing its own pronunciation style (Deterding, 2015, p. 18).

### **Rhoticity and Intelligibility**

One further issue to consider is intelligibility. One might argue that pronouncing the [r] wherever 'r' occurs in the spelling enhances intelligibility rather than hinders it. For example, *saw* and *sore* are differentiated by rhotic speakers while they are homophones for most non-rhotic speakers, and similarly for *caught* and *court*. Jenkins (2000) suggests that maintaining intelligibility is far more important than trying to sound like a native speaker, and she recommends that rhoticity might help enhance intelligibility.

Having a rhotic accent differentiates a speaker of Brunei English from the established British English norm, but if it improves intelligibility in international settings, it should be encouraged. Even though British Received Pronunciation is generally promoted as the pronunciation model in education in Brunei due to the historical ties the country has with Britain (Jones, 2012) and the continued employment of expatriate teachers from places such as the UK and New Zealand by CfBT (Deterding & Salbrina, 2013, p. 18), the use of General American spelling and pronunciation may be becoming widespread in classrooms in Brunei.

## Conclusion

This paper has compared the recordings of 42 undergraduates reading the Wolf passage and found that Brunei English has become more rhotic over the years. It was found that there was a statistically significant difference in the number of rhotic speakers and also the number of tokens with R-colouring between the undergraduates from the earlier recordings and the more recent ones, as the latter had more rhotic speakers and more R-coloured tokens. Possible influences of rhoticity include external factors such as the pronunciation of General American and Philippine English, and internal factors including Brunei Malay and spelling pronunciation. The rise in the number of rhotic speakers in Brunei may be one of the reasons why Brunei English is shifting towards phase 4 of Schneider's Dynamic Model, Endonormative Stabilization.

One issue of the study is that the data reflects careful speech (Labov, 1982, pp. 80–81) as the participants are aware that they are being recorded and they are asked to read from a prepared text. Other limitations include the quality of the recordings and the fewer number of males compared to female speakers in both groups. Further research could include the use of a larger corpus and investigate the possible trends of rhoticity in different ethnicities and a range of different age groups to provide a better insight into the changes that seem to be occurring in Brunei English.

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## Appendix

### The Boy who Cried Wolf (from Deterding, 2006, p. 193)

There was once a poor shepherd boy who used to watch his flocks in the fields next to a dark forest near the foot of a mountain. One hot afternoon, he thought up a good plan to get some company for himself and also have a little fun. Raising his fist in the air, he ran down the village shouting “Wolf, Wolf.” As soon as they heard him, the villagers all rushed from their homes full of concern for his safety, and two of his cousins even stayed with him for a short while. This gave the boy so much pleasure that a few days later he tried exactly the same trick again and once more he was successful. However, not long after, a wolf that had just escaped from the zoo was looking for a change from its usual diet of chicken and duck. So, overcoming its fear of being shot, it actually did come out from the forest and began to threaten the sheep. Racing down to the village, the boy of course cried out even louder than before. Unfortunately, as all the villagers were convinced that he was trying to fool them a third time, they told him, “Go away and don’t bother us again.” And so the wolf had a feast.