Rhoticity in Brunei English

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We might expect Brunei English to be non-rhotic, as the Englishes of both Singapore and Malaysia are non-rhotic and Brunei has strong ethnic, historical, economic and cultural ties with those two countries. The current study compares the R-colouring of read data from female undergraduates in Brunei and Singapore, and it finds that the Brunei data is substantially more rhotic than that of Singapore. It is suggested that this is for two reasons: the main indigenous language of Brunei is Brunei Malay, which is rhotic; and Brunei English is at an earlier stage of development than Singapore English and so it is more susceptible to outside influences, particularly from American media.

Keywords: pronunciation, Brunei English, Singapore English, American influences, rhoticity

1. Introduction

Varieties of English can be described as rhotic or non-rhotic. In rhotic varieties, /r/ occurs wherever there is an ⟨r⟩ in the spelling, including before a consonant or a pause. In contrast, non-rhotic varieties only allow /r/ to occur before a vowel sound (Crystal 2003: 400).

Some people refer to the /r/ in words such as *four* or *cart* in rhotic varieties as "postvocalic /r/", though we may note that /r/ can actually appear in postvocalic position in all varieties of English in the middle of words such as *marry* and as a linking sound in phrases such as *four eggs* (Roach 2009: 115), so it is more accurate to use the term "non-prevocalic /r/" for the occurrence of /r/ before a consonant or a pause in rhotic accents (Trudgill and Hannah 2008: 11). This is the term that will be used here. Occurrence of non-prevocalic /r/ is sometimes called "R-colouring" (Wells 1982: 139), a term that is also used in this paper.

American, Scottish and Irish Englishes are three well-known examples of rhotic varieties, though the English spoken in New York, Boston and the conservative south tends to be non-rhotic (Wells 1982: 76, 220). Some well-documented

English World-Wide 31:2 (2010), **121–137**. DOI 10.1075/eww.31.2.01sha
ISSN 0172–8865 / E-ISSN 1569–9730

non-rhotic varieties are Received Pronunciation British English (RP) and the Englishes of Australia, New Zealand and South Africa (Wells 1982: 76, 220, 542), though there is some variation. For example, there are many rhotic speakers in Otago in the south of New Zealand, largely because of extensive migration from Scotland (Hay, Maclagan and Gordon 2008: 98).

Singapore English is usually described as non-rhotic (Low and Brown 2005: 135; Deterding 2007: 21). However, Tan and Gupta (1992) report that use of non-prevocalic /r/ is a prestige feature for some speakers, and they suggest it may indicate a sound change in progress. Poedjosoedarmo (2000a) also documents evidence for some degree of rhoticity in Singapore English, possibly as a result of influence from American media, and she notes that in reading tasks, the percentage of non-prevocalic /r/ tends to be higher when speakers are reading a wordlist than a passage (which tallies with the classic research of Labov 1966 on New York City). Of the Singapore Malay speakers in her data, 44% have at least one instance of non-prevocalic /r/ in a wordlist task as opposed to only 13% when reading a passage. Eu (2004) similarly reports instances of rhoticity in Singapore English, though she finds that listeners tend to judge it as pretentious.

Malaysian English is also generally assumed to be non-rhotic (e.g. Rajadurai 2006), and Baskaran (2004: 1 039) transcribes the vowel in *word* and *girl* as /ɜː/ with no following /r/, which similarly suggests that the variety is non-rhotic. However, some researchers disagree. For example, Hickey (2004: 564) states that "Malaysian English is also rhotic" and /r/ occurs in words such as *art*, *door*, and *worker*. Others claim that rhoticity in Malaysian English is a new phenomenon, just as in Singapore. Although Rajadurai (2006) states that Malaysian English is non-rhotic because it is derived from British English, she later acknowledges the increasing influence of an American accent on the pronunciation of English in Malaysia, including the use of a flap in words like *better*, so we might assume that rhoticity also sometimes occurs. Ramasamy (2005) similarly suggests that the pronunciation of non-prevocalic /r/ is a new phenomenon in the speech of young Malaysians. Although that study only considered the English of Malaysian Tamils, it seems to confirm that Malaysian English is now not exclusively non-rhotic.

To date, there has been little published about rhoticity in Brunei English. Although Mossop (1996) provides a detailed list of many features of the pronunciation of the English of Brunei, including the absence of dental fricatives, consonant cluster simplification, and use of a glottal stop in place of final /k/, he does not mention rhoticity, though we might note that he transcribes *our* as [aʊɜ] and the vowel in *board* as varying between [ɔː] and [ɔːə] (203), which suggests no rhoticity. In fact, he claims that the close ethnic, historical, economic and cultural ties between Singapore, Malaysia and Brunei have led to phonological systems "that are closely related" (Mossop 1996: 189) for the English in the three countries, and

from this one might expect Brunei English to be non-rhotic. Furthermore, British RP is generally the model of pronunciation promoted in education in Brunei, something that is reinforced by the continuing presence of expatriate teachers supplied by the Centre for British Teachers (CfBT) in many Brunei schools, and this adds to the expectation that the variety should be largely non-rhotic.

The current paper investigates the extent of rhoticity in the English spoken in Brunei using perceptual judgements as well as acoustic measurements, and it further considers some influences on Brunei English. Comparison is made with data from Singapore in order to place the research within the framework of a widely-researched variety of English in South-East Asia and also to facilitate an evaluation of the current status of Brunei English as an emergent variety of English.

2. Historical development of rhoticity in English

Non-rhoticity in English occurs as a result of phonological change. The loss of non-prevocalic /r/ was evident in London English from the mid-18th century and was found in upper class speech in London by the middle of the 19th century, though some people continued to regard it as "vulgar" for a while (Mugglestone 2003: 87). Rhotic accents such as most varieties of American English can be regarded as conservative as they did not undergo this change.

The date of the loss of rhoticity in southern Britain provides a partial explanation for why some English varieties around the world are rhotic while others are not. When English was exported to colonial areas before or during the early 18th century, the resulting variety was a rhotic one, for example in North America. In contrast, when the export of English occurred after the mid-18th century, the variety was more likely to be a non-rhotic one. This is evident with the English varieties in Australia and New Zealand, as settlers from England first arrived in Australia in 1770 and in New Zealand in the 1790s (Jenkins 2009: 7).

However, this is not the only factor. Many people emigrated to America from Ireland, which continues to be rhotic, while emigrants to New Zealand and Australia mostly were from London and other parts of south-east England which were the earliest non-rhotic varieties. And, as noted above, there are many speakers with a rhotic accent in the south of New Zealand as a result of migration from Scotland.

This rationale can be applied to an analysis of the Englishes of Singapore and Malaysia. English was established in the region in the 19th and early 20th centuries, that is, after the loss of non-prevocalic /r/ in most parts of England, and few of the speakers came from Ireland or Scotland.

English was first introduced into Brunei in the late 19th century, so we might expect Brunei English to be non-rhotic. However, there is another important

potential influence: the pronunciation of the indigenous language(s). In Brunei the most commonly used local language is Brunei Malay, which itself is rhotic. This issue will be considered further when we discuss the results in the current study.

3. English in Brunei

Brunei was a British protectorate from 1888 till it gained its full independence in 1984 (Hussainmiya 2006: 14, 68). Its colonial history thus started somewhat later than that of Singapore, which was established as a British colony in 1819.

Malay is officially specified as the national language in Brunei, but from 1984 a bilingual education system was implemented (Ożóg 1996). Until recently, Malay was the medium of instruction for the first three years of primary school, and then English was introduced as the medium of instruction from the fourth year of primary school (Jones 2007), though just recently this has changed, and from 2009 English is stipulated as the medium of instruction for maths and science from the start of primary school (Ministry of Education 2009: 41).

In modelling the emergence of varieties of English around the world, Schneider (2007: 160) claims that Singapore English is in the fourth phase of development of the full five-phase cycle, currently undergoing endonormative stabilization. Though Schneider makes no mention of Brunei, we might assume that Brunei English is in the third phase, that of nativization, partly because the language is less widely used as an inter-ethnic lingua franca than in Singapore, as the lingua franca in Brunei is generally Brunei Malay (Martin 1996). Time will tell whether Brunei English eventually progresses through to the fourth and fifth phases of the cycle, perhaps spurred on by its recent adoption as the medium of instruction for maths and science from the start of primary school.

4. Acoustic evidence of rhoticity

Instrumentally, R-colouring is characterized by a low third formant (F3) (Hayward 2000: 167). Boyce and Espy-Wilson (1994) claim that R-coloured American vowels have third formants that usually fall below 2 000 Hz, but Hagiwara (1995: 118–9) questions this by showing that the syllabic /r/ in his data has an average F3 of 1 995 Hz with a standard deviation of 347 Hz, which means that many of the tokens have an F3 above 2 000 Hz. Although he concludes that most of the tokens have an F3 below 2 342 Hz, he observes that specifying a fixed limit for the F3 of an R-coloured vowel is "an inappropriate way of describing the underlying facts" (Hagiwara 1995: 118).

Attempts will be made here to measure F3 and thereby provide instrumental support for the perceptions of R-colouring. However, we must admit that the correlation between lowered F3 and R-colouring is only approximate, partly because it is not always possible to derive reliable estimates of F3 even with sophisticated acoustic software such as Praat (Boersma and Weenink 2009). Here, we are limiting the study to speakers of one gender, females, and we can note that a fixed specification for the F3 of R-coloured vowels would be even more problematical if we included data from both men and women.

One other issue to be considered is whether R-colouring is characterised by a dipping F3 towards the end of the vocalic portion of the syllable, or whether the whole vowel might have a lowered F3. We may note that, for the American pronunciation of the NURSE vowel (using the lexical keywords of Wells 1982), both Wells (2008) and Jones *et al*. (2003) show R-colouring for the whole vowel, so for example *heard* is shown as [hɜːd]. In contrast, the American pronunciation of the START vowel is shown with /r/ after the vowel, so *hard* is represented as [hɑːrd]. This seems to suggest that, for some vowels at least, the quality of the whole vowel may be affected. However, we should also note that one other factor in the different representation of words such as *heard* and *hard* is that the NURSE vowel can only occur in a potential R-coloured environment, so in American English there is no independent /ɜː/ phoneme, while, in contrast, /ɑː/ can occur with no following /r/ in words in the PALM lexical set such as *calm* and *father*. It is therefore unclear whether there really is a difference in the R-colouring of NURSE and START vowels.

5. Speakers

The speakers consist of 18 Bruneians and 12 Singaporeans, all of them ethnically Malay females. At the time of the recording, the Bruneians (labelled Brun1 to Brun18) were aged between 20 and 23 with a mean age of 21 (SD = 0.9). All were undergraduates at the University of Brunei Darussalam (UBD) doing an English-medium degree, with eleven of them training to be English teachers. The Singaporeans (labelled Sg1 to Sg12) were aged between 19 and 30 with a mean age of 24 (SD = 3.7), and they were all BA undergraduates training to be teachers at the National Institute of Education (NIE) who had chosen English language as their specialty. All the speakers had had more than ten years of experience learning and speaking English, and all were proficient speakers of English.

It was decided to restrict the study to Malay females to limit the variables. In Brunei, Malays represent the majority of the population. In contrast, they constitute just 14% of the population of Singapore, where the overwhelming majority are

Chinese (Deterding 2007: 1) However, using data from females of the same ethnic group facilitates comparison between the results for the two sets of speakers.

6. Data

The recordings for the Brunei speakers were made in a reasonably quiet office at UBD. The Singapore recordings were carried out in the Phonetics Laboratory of NIE. In all cases, a high-quality microphone was placed a few inches from the speakers' mouth and the speech was digitized directly onto a computer at a sampling rate of 22 050 Hz. All the speakers were asked to read the Wolf passage as below (but with no line numbers):

1 There was once a poor shepherd boy who watched his flocks in the fields
2 next to a dark forest near the foot of a mountain. One hot afternoon, he
3 thought up a good plan to get some company for himself and also have a
4 little fun. Raising his fist in the air, he ran down to the village shouting
5 "Wolf, Wolf." As soon as they heard him, the villagers all rushed from
6 their homes, full of concern for his safety, and two of them stayed with him
7 for a while. This gave the boy so much pleasure that a few days later he tried
8 exactly the same trick again, and once more he was successful. However,
9 not long after, a wolf was looking for some change in its usual diet of
10 chicken and duck, so it actually did come out from the forest and began to
11 threaten the sheep. Racing down to the village, the boy of course cried out
12 even louder than before, but as the villagers were convinced that he was
13 trying to fool them a third time, nobody bothered to come and help him,
14 and so the wolf had a feast.

This passage is similar to the text proposed in Deterding (2006).[1] The passage is well suited for the description of English because it contains clear tokens of all the vowels and consonants of English. A comprehensive analysis of the vowels and consonants of these speakers, including their monophthongs, the FACE and GOAT vowels, realisation of the TH-sounds, and L-vocalisation, is presented in Salbrina (2009).

Here, analysis will just focus on tokens of non-prevocalic /r/ in the coda of stressed syllables, as the presence or absence of R-colouring in unstressed syllables can be hard to judge. The following tokens were selected for analysis (with the line numbers shown in brackets):

1. The recordings were made before the text that is published in Deterding (2006) underwent some minor changes on the suggestions of a reviewer.

– word-final: *more* (8), *before* (12)
– before a consonant: *dark* (2), *heard* (5), *concern* (6), *course* (11), *third* (13)

These tokens represent a range of phonological environments for non-prevocalic /r/: word-final in the middle of a phrase (*more*), word-final before a pause (*before*), and non-final before /k/ (*dark*), /d/ (*heard*, *third*), /n/ (*concern*), and /s/ (*course*).

Three tokens of potential non-prevocalic /r/ in stressed syllables were excluded from the analysis: *poor* (line 1), *near* (line 2), and *air* (line 4). All these may involve a centring diphthong in non-rhotic accents, /ʊə/, /ɪə/ and /eə/ respectively, and the distinction between a centring diphthong and a monophthong followed by /r/ is sometimes hard to determine. All the tokens investigated in this study therefore involve a stressed syllable containing a monophthong vowel with or without R-colouring.

One of the tokens, *more* (line 8) is followed by *he*, and if this pronoun is produced in its weak form without an initial /h/ (Roach 2009:91), there is the possibility of a linking /r/ even in non-rhotic accents. We must therefore take care to observe if the results include cases where *more* is the only token with a final /r/. If there are any speakers who have /r/ in *more* but not in any other tokens, this is probably a linking /r/ and it should be disregarded as evidence of the rhoticity of the speaker's accent.

7. Methodology

The presence or absence of non-prevocalic /r/ in the data was investigated in two ways: perceptually and acoustically. Praat software (Boersma and Weenink 2009) was used for both parts of the analysis.

For the perceptual investigation, both investigators listened to all the selected tokens and judged whether each of the vowels is R-coloured or not. This was done by identifying the location of the target word in the waveform and then playing the sound repeatedly using the playback function of Praat. Overall, there was agreement on all but eleven tokens, which represents an agreement rate of nearly 95%. The tokens where there was disagreement will be discussed in the Results section below.

The acoustic analysis depended on measurement of the third formant. For this, the default settings of Praat were adopted: Burg method linear prediction; 5 formants up to a maximum of 5 500 Hz; analysis window of 25 msec duration; dynamic range of 30 dB; pre-emphasis of 50 Hz.

As mentioned above, R-colouring may be reflected in dipping F3 or in overall lowering of F3. Attempts were made to measure changes in the F3 track by

taking two measurements, one near the start of the vowel and one towards its end. However, there are problems with accurate formant tracking of the higher formants such as F3, even with sophisticated software such as Praat, and furthermore, as we have seen, some vowels may be characterised by an overall lowered F3 rather than any dipping in its value. The results here will therefore just discuss the absolute value of F3, even though it is acknowledged that there are limitations to this approach.

In addition to F3, the second formant F2 was also measured. In investigating the vowels of Brunei English, Salbrina (2006) showed that a pre-vocalic /r/ can affect the F2 in words such as *traveller* and *wrapped*, and this suggests that the value of F2 may be an important indicator of R-colouring. Furthermore, measurement of both F2 and F3 allows us to show the results on two-dimensional plots.

8. Results

Table 1 shows the perceptual results for the first author for the Brunei data. The italicised tokens are the ones where there was perceptual disagreement between the two authors: four tokens for Brun9, two for Brun10, and one each for Brun8 and Brun13. All but one of these (*before* for Brun9) involve the first author hearing R-colouring while the second author perceived no R-colouring. Despite these differences, the overall results for the two listeners are quite similar: the first author judged nearly 47% of the tokens to be R-coloured, while the second author found about 42%.

Three Brunei speakers (Brun2, Brun10 and Brun12) have /r/ in all seven tokens, and six speakers (Brun1, Brun7, Brun14, Brun15, Brun16, and Brun18) have /r/ in none of the tokens. If we judge a speaker to be rhotic when at least four of the seven tokens have non-prevocalic /r/, then half of the Bruneians (9 out of 18, or 50%) can be classified as rhotic, a result which both authors agree with.

Table 2 shows the results for the first author for the Singapore data, with the three tokens where there was disagreement between the authors shown in italics (one each for Sg1, Sg2 and Sg7). All these involve the first author hearing R-colouring while the second did not.

Using the results of the first author, just over 8% of the Singapore English tokens are R-coloured, and only one of the speakers might be classified as rhotic. The second author reported fewer instances of R-colouring and no speakers were classified as rhotic, though three out of seven of the tokens of Sg2 were judged to have /r/. Clearly the overall instance of R-colouring is much lower for the Singapore data.

Table 1. R-colouring in the Brunei data

	dark	*heard*	*concern*	*more*	*course*	*before*	*third*	**Total**
Brun1	0	0	0	0	0	0	0	0
Brun2	1	1	1	1	1	1	1	7
Brun3	0	1	0	1	0	1	1	4
Brun4	1	1	0	1	1	1	1	6
Brun5	1	1	1	1	0	1	1	6
Brun6	1	0	0	0	0	0	0	1
Brun7	0	0	0	0	0	0	0	0
Brun8	1	1	0	1	1	1	*1*	6
Brun9	*1*	0	*1*	*1*	0	*0*	0	3
Brun10	1	1	*1*	1	1	1	*1*	7
Brun11	1	1	0	1	0	1	1	5
Brun12	1	1	1	1	1	1	1	7
Brun13	1	*1*	1	0	1	1	1	6
Brun14	0	0	0	0	0	0	0	0
Brun15	0	0	0	0	0	0	0	0
Brun16	0	0	0	0	0	0	0	0
Brun17	0	0	0	0	0	1	0	1
Brun18	0	0	0	0	0	0	0	0
Total								**59 (46.8%)**

Table 3 shows the average F3 values and the standard deviation for the Brunei speakers, who are classified as rhotic or non-rhotic depending on whether four or more of their tokens are R-coloured.

A *t*-test confirms that the average F3 for the rhotic Brunei speakers is significantly lower than that of the non-rhotic ones ($t = 5.71$, $df = 16$, independent samples, two-tailed, $p < 0.001$). This confirms a correlation between F3 and rhoticity, though we should note that one rhotic speaker (Brun3) has a value that is closer to that of the non-rhotic speakers, presumably because only four out of seven of her tokens are actually R-coloured. Furthermore the value for Brun17 is actually lower than that of Brun3.

Table 4 shows the acoustic measurements for the Singaporeans, with the rhotic / non-rhotic classification based on the perceptions of the first author.

We should note that the value for the one rhotic Singaporean (Sg2) is almost identical to the average for the non-rhotic Singaporeans, so in this case the measurement of F3 has not separated out the two categories, presumably because, just

Table 2. Rhoticity in the Singapore data

	dark	*heard*	*concern*	*more*	*course*	*before*	*third*	**Total**
Sg1	0	0	0	0	0	0	*1*	1
Sg2	0	1	*1*	1	0	1	0	4
Sg3	0	0	0	0	0	0	0	0
Sg4	0	0	0	0	0	0	0	0
Sg5	0	0	0	0	0	0	0	0
Sg6	0	0	0	0	0	0	0	0
Sg7	*1*	1	0	0	0	0	0	2
Sg8	0	0	0	0	0	0	0	0
Sg9	0	0	0	0	0	0	0	0
Sg10	0	0	0	0	0	0	0	0
Sg11	0	0	0	0	0	0	0	0
Sg12	0	0	0	0	0	0	0	0
Total								**7 (8.3%)**

Table 3. Average F3 and standard deviations for Brunei speakers

	Non-rhotic			**Rhotic**	
	F3 (Hz)	**SD**		**F3 (Hz)**	**SD**
Brun1	3081	x(214)	Brun2	2308	x(189)
Brun6	2867	x(329)	Brun3	2811	x(356)
Brun7	3029	x(288)	Brun4	2711	x(467)
Brun9	2891	x(418)	Brun5	2696	x(283)
Brun14	3292	x(216)	Brun8	2451	x(359)
Brun15	3099	x(180)	Brun10	2344	x(233)
Brun16	2984	x(259)	Brun11	2445	x(319)
Brun17	2718	x(444)	Brun12	2397	x(198)
Brun18	3010	x(148)	Brun13	2629	x(249)
Average	**2997**	**x(277)**	**Average**	**2532**	**x(295)**

as with Brun3, only four out of seven of the tokens for Sg2 were judged to be R-coloured. In fact, as mentioned above, the second author only heard R-colouring for three of these tokens, in which case Sg2 would not be classified as rhotic.

In order to investigate whether individual R-coloured tokens tend to have lower F3 than non-R-coloured ones, the formant measurements of the individual tokens can be shown on two-dimensional scatter plots of F2 versus F3. For these

Table 4. Average F3 and standard deviations for Singapore speakers

	Non-rhotic			Rhotic	
	F3 (Hz)	**SD**		**F3 (Hz)**	**SD**
Sg1	3083	x(719)	Sg2	2870	x(474)
Sg3	3089	x(169)			
Sg4	2871	x(130)			
Sg5	3007	x(315)			
Sg6	2916	x(215)			
Sg7	2586	x(303)			
Sg8	2800	x(245)			
Sg9	2669	x(202)			
Sg10	2888	x(47)			
Sg11	3003	x(215)			
Sg12	2846	x(299)			
Average	**2887**	**x(260)**	**Average**	**2870**	**x(474)**

vowel plots, the Hertz measurements are first converted to an auditory Bark scale using the formula suggested by Zwicker and Terhardt (1980) to allow a visual representation of the quality of the vowels on a scale that is similar to the way that the human ear perceives them (Hayward 2000: 142). In all the plots, following normal practice, the F2 axis is inverted so that vowels with a fronted value are shown on the left (Ladefoged 2006: 188). However, the F3 axis is not inverted, so tokens with a lowered F3 are shown as lower on the plot.

Figure 1 shows the scatter plot for all 54 tokens of the Brunei data with the NURSE vowel (*heard*, *concern*, *third*), with the white data points being the ones where the first author heard R-colouring. It can be seen that F3 separates out the vowels quite effectively, with just one R-coloured token having a high F3 so intruding into the space occupied by the tokens with no R-colouring. This token is *concern* for Brun5, which both authors heard as R-coloured. Further investigation shows that Brun5 produced this word with the stress on the first syllable, and measurement of F3 to indicate R-colouring for an unstressed second syllable may not be comparable to the other tokens of NURSE.

Figure 2 shows the scatter plot for all 54 tokens of the Brunei data with the FORCE vowel (*course*, *more*, *before*). Once again it can be seen that F3 separates out the two categories quite effectively, with just one R-coloured token towards the left of the plot having a high F3. This is *before* for Brun4, which both authors heard as R-coloured. In fact the F3 is hard to track in this token, which illustrates that formant-tracking software cannot always provide definitive answers, especially for

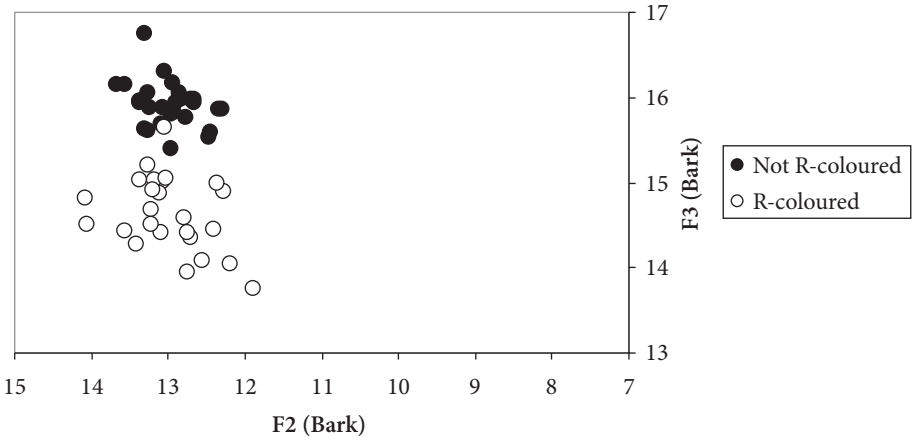

Figure 1. Scatter plot of all Brunei tokens of the NURSE vowel

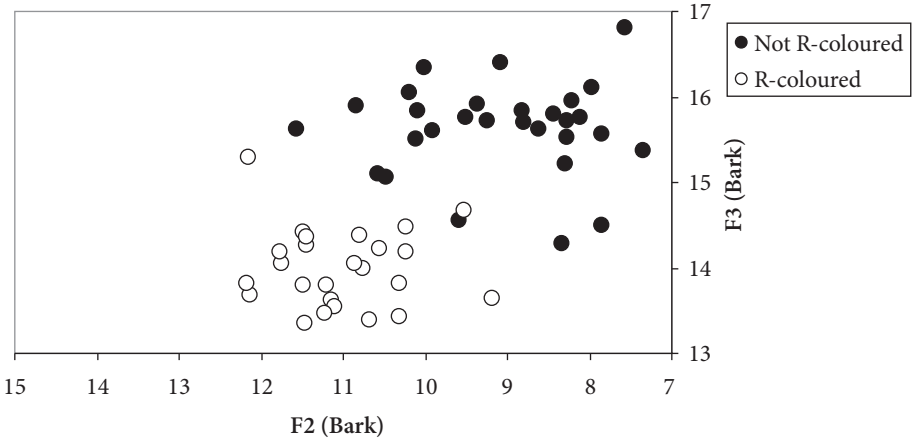

Figure 2. Scatter plot of all Brunei tokens of the FORCE vowel

the higher formants. One other R-coloured token that intrudes a little into the space for the tokens with no R-colouring is *course* for Brun8, even though once again both authors heard it as R-coloured.

Figure 3 shows the scatter plot of the 18 tokens of the Brunei data of *dark*. There are two R-coloured tokens with a high F3 so they intrude into the space of the non-R-coloured tokens. These are the tokens for Brun4 and Brun13, tokens which both authors heard as having R-colouring. Alternatively, one might say that there are two non-R-coloured tokens with a relatively low F3. These are for Brun1 and Brun17, both of which were perceived by both authors to have no R-colouring.

In conclusion, the formant plots work quite well in confirming the auditory judgments, and the measurements of F3 can separate out the R-colouring of

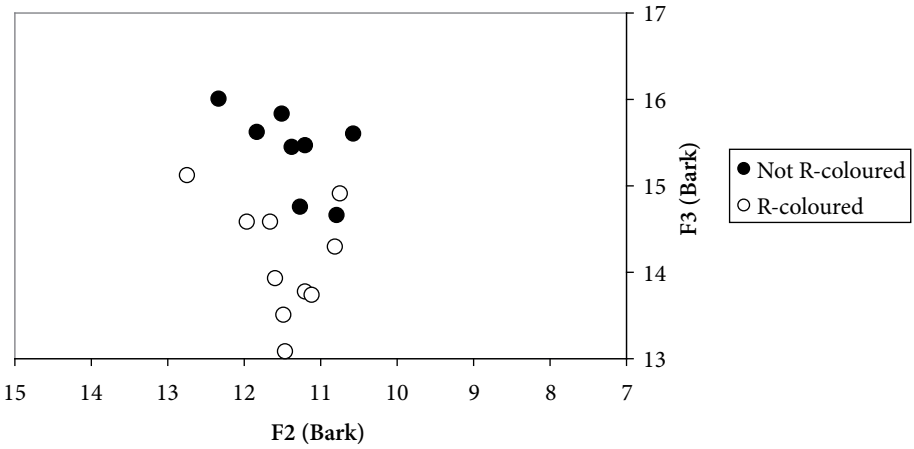

Figure 3. Scatter plot of all Brunei tokens of *dark*

tokens reasonably successfully, though there are a few anomalous cases where the formant measurements are not quite so reliable.

9. Discussion

Brunei English is clearly much more rhotic than Singapore English, with about 50% of speakers being classified as rhotic. This seems rather surprising as it does not tally with the expectation that English is non-rhotic in countries in which the language arrived from Britain after the start of the 19th century. Could the rhoticity of Brunei English be the result of influence from American media? One issue is that there is no evidence that Bruneians watch more American TV or listen to more American music than Singaporeans.

In order to see whether there is a general tendency to follow American English pronunciation in Brunei, three other features were considered: the vowel in *after*, as American English has /æ/ rather than /aː/ (Wells 1982: 133–5); the vowel in *hot* for which American English usually has /aː/ rather than /ɒ/ (Wells 1982: 130–1); and the sound in the middle of *later* which tends to be a tap in American English (Wells 1982: 248). It was found that only one Bruneian (Brun13) has [æ] in *after*; none has [aː] in *hot*; and only two (Brun4 and Brun13) have a tap in *later*. Overall, therefore, there seems little evidence of widespread adoption of an American accent in Brunei, though it is true that one or two speakers may have it.

There seems to be inconsistency in the usage of the American English features and rhoticity in the speech of the Bruneians. For example, with the exception of Brun4 and Brun13, those who have taps in *little* and *later* do not have

non-prevocalic /r/ in their speech and those who are apparently rhotic do not produce *hot* with American English [*a*ː]. Despite these findings, we cannot rule out the American media as one of the influences on Brunei English. In fact, we might consider how a range of influences might combine to affect features of an emergent variety of English, and so we should think about the pronunciation of the indigenous languages of Brunei and Singapore.

All the Bruneian speakers claim that Brunei Malay is their mother tongue, while the Malays in Singapore speak Standard Malay, and a notable difference between Brunei Malay and the Standard Malay spoken in Singapore is in the realization of /r/ in non-prevocalic positions. Brunei Malay is a rhotic variety of Malay, with the /r/ sound often pronounced as a trill (Poedjosoedarmo 1996; Clynes 2001). In contrast, the Standard Malay of Singapore and most of Malaysia generally has no non-prevocalic /r/, and the deletion of /r/ in word-final position is compensated for by the lengthening of the preceding vowel in words such as *tukar* 'change' (Teoh 1996: 47).

It is likely that the rhoticity of Brunei Malay has a bearing on the occurrence of rhoticity in Brunei English. This is not to say that it is the only contributing factor, as influence from the American media may also play a part in this phenomenon. In other words, rhoticity in Brunei English may be a consequence of two sources: Brunei Malay and American English, and these two influences conspire to result in the feature being adopted into Brunei English.

In fact, it may be naïve to look for a single source for a phonetic or grammatical feature in an emergent variety of English. This view is shared by Poedjosoedarmo (2000b) who claims that a combination of sources gives rise to many features in the syntax of the written English of Singaporeans, so for example the occurrence of null-subject structures may have arisen from the influence of both Malay and Chinese.

Finally, we might consider the status of Brunei English in terms of establishing its own norms of pronunciation. We earlier suggested that Brunei English may be in phase 3 of Schneider's (2007) 5-phase model of the development of postcolonial Englishes. If this is correct, it would mean that Brunei English is at an earlier stage than Singapore English, which is already in phase 4. As a result, Brunei English may be less mature as an independent variety and more susceptible to external influences than Singapore English.

It is interesting to note that Hong Kong English also seems to exhibit substantial influences from American English, with Deterding, Wong and Kirkpatrick (2008) reporting that six out of 15 of the speakers in their study had clear influences from American English, including R-colouring of their vowels. We might further note that, just like Brunei but unlike Singapore, English is not the lingua franca of Hong Kong. Schneider (2007: 135) places Hong Kong in phase 3 of the

cycle, and in general we expect varieties that are in phase 3 to be more susceptible to outside influences than those that are undergoing endonormative stabilization in phase 4.

10. Conclusion

This paper has investigated the occurrence of rhoticity in Brunei English and Singapore English. It was found that the Bruneians displayed a higher tendency to realize /r/ in non-prevocalic positions and this finding was supported both auditorily and acoustically. For the Singaporeans, however, only one speaker was perceptually judged to have a rhotic English accent and even then, only about half of her tokens are R-coloured.

The finding does not support the expectation that Brunei English is non-rhotic just like its counterparts in Singapore and Malaysia. At first sight, this is surprising as factors that determine whether an English variety is rhotic seem to be similar in the three nations. Upon closer inspection, however, it was concluded that the widespread nature of rhoticity in Brunei English is partly because Brunei Malay is also rhotic, unlike the Malay spoken in Singapore and most of Malaysia, and this combines with the influence from American media in the country to result in widespread rhoticity in Brunei English.

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