TH in Misunderstandings in Brunei English

Ishamina Athirah

Universiti Brunei Darussalam

Abstract

In standard varieties of English, the TH sounds are pronounced with the dental fricatives [θ, δ], but previous studies have shown that they are commonly realised as plosives [t, d] in many varieties of English, including some native speaker varieties. Furthermore, the realisation of the TH sounds as plosives is common among speakers throughout Southeast Asia. It seems that the use of dental fricatives for the TH sounds is marginal, so they are excluded from the Lingua Franca Core (LFC) proposed by Jenkins (2000). This leads to the implication that alternative pronunciation of the TH sounds is not important in maintaining intelligibility in ELF communication. The current study investigates the intelligibility of Brunei English in ELF communication, and it seeks to determine how many misunderstandings occur because of the pronunciation of the TH sounds. Ten recordings with a total duration of 3 hours and 39 minutes were collected, with each recording consisting of conversations between two people: a Bruneian speaker and a non-Bruneian speaker. Out of 152 tokens of misunderstandings found in these recordings, the pronunciation of the TH sounds in 9 tokens (6%) may be one factor. However, there are other features in most of these tokens that also contribute to the loss of intelligibility, such as pronunciation of vowels, syntax and fast speech. In fact, realisation of initial voiceless TH as [t] is almost never a problem, but weakening of medial voiced TH may sometimes result in a loss of intelligibility.

Introduction

In studies of intelligibility in ELF settings, one central feature concerns pronunciation. This has led Jenkins (2000) to propose a set of pronunciation features called the Lingua Franca Core (LFC) that she suggests are important for international intelligibility. The LFC proposes that all consonant sounds in English are regarded as core features except for the dental fricatives /θ, δ/ and dark [l]. The exclusion of the dental fricatives, which are how the TH sounds are pronounced in standard varieties of English, suggests that substitution of these sounds is not problematic for intelligibility in ELF communication. Indeed, there is variability in the realisation of the TH sounds in many varieties of English around the world, and it has been suggested that perhaps in the future, lack of use of dental fricatives may become increasingly accepted in standard Englishes (Kirkpatrick & Deterding, 2011, p. 376).

This paper is concerned with the intelligibility of alternative pronunciations of the TH sounds, particularly by speakers of Brunei English when they are interacting with people from elsewhere. It aims to determine how many misunderstandings arise because of the pronunciation of the TH sounds, and it therefore seeks to find out if substitution of dental fricatives has little impact on intelligibility in ELF interactions, as the LFC suggests.

Variable pronunciation of the TH sounds

Many studies have shown that the pronunciation of TH sounds varies in different varieties of English. The dental fricatives [θ, δ] are used for the TH sounds in standard varieties of British English (RP) and American English (GA) (Wells, 1982, p. 125) but regional and geographical
variation in English around the world show that dental fricatives are in fact marginal or missing in many places. The TH sounds are commonly realised as alveolar plosives [t, d] or dental plosives [t̪, d̪] by speakers from India (Wells, 1982, p. 629; Sailaja, 2009), Malaysia (Baskaran, 2004), Singapore (Deterding, 2007), Brunei (Deterding & Salbrina, 2013), and throughout Southeast Asia (Deterding & Kirkpatrick, 2006). In fact, this substitution is also found in some native speaker varieties such as in New York City and Southern Ireland (Wells, 1982, p. 429; Cruttenden, 2014, p. 199).

In some varieties of English such as that of London (Cruttenden, 2014, p. 199) and Southern American English accents (Carr, 1999), as well as Hong Kong English (Bolton, 2003), TH may be pronounced with the labio-dental fricatives [f, v]. There is also a tendency for French and German speakers to use the alveolar fricatives [s, z] (Swan & Smith, 2001; Cruttenden, 2014, p. 200), and speakers from China often do the same, although it is reported that some Chinese speakers also use [d] for voiced TH (Deterding, 2006).

In some cases, the TH sounds are realised differently depending on their word position. For example, [g] is used in some Scottish varieties for word-initial voiceless TH, especially before [r] (Wells, 2014, p. 410). Yavas (2006, p. 118) reports that in African American Vernacular English (AAVE), and in some southern dialects of England, the plosives [t, d] are used in initial position, but the fricatives [f, v] occur in medial and final positions, as in nothing [nɑfnɪŋ], mouth [mɑʊf], mother [maʊθ], and smooth [smuːv]. In Singapore English, [t, d] is used in initial and medial positions while [f] is commonly used for voiceless TH in final position (Poedjosoedarmo, 2000; Deterding, 2007, p. 15).

Jenkins (2000, p. 137) claims that the dental fricatives /θ, ð/ are not necessary for intelligibility in ELF interactions and that alternative pronunciations are not usually a problem. However, although Deterding and Kirkpatrick (2006, pp. 395–396) note that using [t] for voiceless TH does not usually cause a problem among speakers in Southeast Asia, further investigation is needed to find out if this substitution is problematic in other parts of Asia such as China and Japan. Furthermore, Deterding (2005) shows that the use of [f] for initial voiceless TH may cause misunderstandings, giving the example of how listeners from Singapore misheard the phrase three nights as free nights uttered by a speaker from England. In this case, it is also possible that the misunderstanding occurred because the Singaporean listeners were not familiar with the speaker’s accent. Indeed, Smith (1992, p. 76) notes that intelligibility is dependent on the listener as well as the speaker, and studies have shown that certain factors such as the listener’s attitude and their perception of the speaker can have an impact (Lindemann, 2010), and furthermore the listener’s own pronunciation as well as familiarity with various accents can be crucial (Ishamina, 2015).

**Brunei English**

Previous studies of the phonological features Brunei English have shown that the TH sounds are commonly realised as plosives, so the consonants at the start of ‘think’ and ‘that’ are frequently realised as [t] and [d] respectively (Mossop, 1996; Salbrina, 2010; Deterding & Salbrina, 2013). This is not surprising since dental fricatives /θ, ð/ are absent both in Brunei Malay (Clynes, 2001) and Standard Malay (Clynes & Deterding, 2011), and furthermore, when English loanwords with voiceless TH appear in Malay, use of [t] is expected, for example in teori (‘theory’) and tesis (‘thesis’) for initial TH, and etika (‘ethics’) and etnik (‘ethnic’) for medial TH.

There is a shortage of studies on the intelligibility of Brunei English in international communication. Deterding and Salbrina (2013, p. 122) briefly note that, based on the predictions of the LFC, the pronunciation features that might be problematic involve lack of distinction in vowel length and the uncertain placement of intonational nucleus. These
suggestions however need to be investigated. Recent studies on the intelligibility of Brunei English show that misunderstandings in international communication may arise from the Bruneians speaking very fast (Ishamina, 2016) and that in some cases, it is the listeners’ own pronunciation and also their unfamiliarity with certain pronunciation and accents that can influence their inability to understand other speakers (Ishamina, 2015).

**Data and methodology**

The corpus used in this study consists of ten audio recordings of conversations with a total duration of about 3 hours and 39 minutes. The recordings were collected at Universiti Brunei Darussalam (UBD) over a period of six months, from late 2013 to early 2014. Each recording, lasting for an average of 22 minutes, involves two participants: a Bruneian and a non-Bruneian speaker.

The selection of participants was deliberate so as to facilitate a study that is concerned with how well non-Bruneians can understand Bruneians when they are interacting in English. A summary of the recordings is listed in Table 1. The recordings are shown with the interviewee first followed by the interviewer.

<table>
<thead>
<tr>
<th>Recording</th>
<th>Duration (min:sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBr2 + FCh1</td>
<td>20:48</td>
</tr>
<tr>
<td>FBr3 + FCh2</td>
<td>22:46</td>
</tr>
<tr>
<td>FBr4 + FCh3</td>
<td>20:56</td>
</tr>
<tr>
<td>FBr5 + FCh4</td>
<td>20:27</td>
</tr>
<tr>
<td>MBr3 + MFr</td>
<td>22:28</td>
</tr>
<tr>
<td>MBr3 + MKo</td>
<td>21:04</td>
</tr>
<tr>
<td>FBr1 + FMd</td>
<td>21:45</td>
</tr>
<tr>
<td>MBr1 + FMd</td>
<td>21:31</td>
</tr>
<tr>
<td>MBr1 + FOm</td>
<td>22:29</td>
</tr>
<tr>
<td>FBr2 + FVn</td>
<td>25:12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3:39:26</strong></td>
</tr>
</tbody>
</table>

Table 1. Recordings

There are 17 participants altogether and they are identified by their gender (F or M) followed by a two-letter code referring to their country of origin. The participants include eight Bruneians (FBr1, FBr2, FBr3, FBr4, FBr5, MBr1, MBr2, MBr3), four from China (FCh1, FCh2, FCh3, FCh4), and one each from the Maldives (FMd), Oman (FOM), Vietnam (FVn), France (MFr), and Korea (MKo). Three participants, MBr1, MBr3 and FMd took part in two separate recordings. Sixteen participants were students at UBD at the time recordings were made and one, MFr, was a visiting researcher. All non-Bruneian participants had been in Brunei for less than a year when the recordings were collected. Since none of the participants listed English as their first language and all used English as either a second or foreign language, the interactions can be regarded as that of ELF communication.

After the collection of recordings was completed, the researcher transcribed them using the transcription conventions of the VOICE corpus (VOICE, 2007). When transcribing, there were instances of unclear speech but this was easily remedied by meeting the participants again to ask for clarification. Part of the reason why these participants were selected is that they were available to meet the researcher again after the recordings were made.

The data analysis in this study is based on feedback collected from the non-Bruneian participants. Since the aim of the study is to find how intelligible Brunei English speech is, the analysis relies heavily on feedback from the non-Bruneians. The researcher subsequently
conducted a dictation task in which a misunderstanding may have occurred
were selected and played to the non-Bruneians, who were asked to transcribe what they heard. This methodology of obtaining feedback is essential for studies on intelligibility as it can reveal misunderstandings that are not signaled in the recordings (Deterding, 2013, p. 25) as many speakers have a tendency to adopt the ‘let-it-pass’ strategy rather than asking for clarification (Firth, 1996).

The analysis has identified a total of 152 tokens of misunderstanding. Only 31 (20%) of these are signalled in the recordings, for example when a participant asks for clarification, and overwhelming majority, 121 tokens (80%), emerged from the feedback obtained from the non-Bruneian participants.

The tokens of misunderstanding have been classified based on the cause(s) of the misunderstanding in terms of the linguistic features of pronunciation, lexis, syntax and semantics. This paper is only concerned with tokens that involve TH pronunciation in the misunderstanding, but many of these tokens are cross-classified under another category, so for example, a token may have both pronunciation and syntax as factors that contribute to the misunderstanding. In many cases, it is difficult to be certain about the main cause of a misunderstanding so a range of factors may be suggested (Pitzl, Breiteneder & Klimpfinger, 2008).

### Findings

Out of the total of 152 tokens of misunderstanding that have been identified in the corpus, there are only 9 tokens (6%) in which the pronunciation of TH sounds may be a factor. As shown in Table 2, these tokens are classified in terms of voiceless and voiced TH and also their word position. Voiceless and voiced TH are discussed separately in the following subsections.

<table>
<thead>
<tr>
<th></th>
<th>Voiceless TH</th>
<th>Voiced TH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Medial</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Table 2. TH tokens**

#### Voiceless TH

There are three tokens involving voiceless TH and they are presented in Table 3. (In the ‘Context’ column, the misunderstood words are in bold font and italicised.)

<table>
<thead>
<tr>
<th>Tok. Rec.</th>
<th>Word</th>
<th>Heard as</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 MBr3+MFr</td>
<td>thought</td>
<td>tell</td>
<td>you have a <em>thought</em> that they are not … good</td>
</tr>
<tr>
<td>89 MBr3+MKo</td>
<td>both of</td>
<td>but if</td>
<td><em>both of</em> my parents erm from ethnic groups</td>
</tr>
<tr>
<td>113 FBr1+FMd</td>
<td>north side</td>
<td>know that</td>
<td>malaysia would be like yeah <em>north side</em> right</td>
</tr>
</tbody>
</table>

**Table 3. Tokens involving voiceless TH**

In Token 80, initial TH in *thought* is pronounced with [t]. However, there are other issues in this token, as MBr3 uses a short vowel, [ʌ] instead of the expected [ɔː], and also has a glottal stop at the end of the word, pronouncing the word as [tʌʔ]. Indeed, elsewhere in the recording MFr does not have a problem with MBr3’s regular use of [t] for initial voiceless TH. In fact, Token 80 is the only one in the whole corpus in which initial voiceless TH is
implicated, and it seems that the use of [t] actually plays a minor role in causing this misunderstanding to occur.

The next two tokens involve word-final TH. In Token 89, MBr3, has voiced [d] for the final voiceless TH in *both* so his pronunciation of the phrase *both of* is *[bdnθ]*. MKo transcribed *but if*, as he hears the alveolar tap [t] which is similar to [d]. This tap is normal in American English when /t/ is followed immediately by a vowel and the previous syllable is stressed, as in *city* [stiː] and *water* [waːtər] (Wells, 2008), and we might note that the listener, MKo, speaks English with an American accent which is likely to influence his perception of other people’s speech. Furthermore, MKo subsequently reported that MBr3 is speaking very fast so this token is also classified under fast speech as playing a role in the misunderstanding (Ishamina, 2016). Therefore, although this token involves TH pronunciation, MBr3’s realisation of final voiceless TH with the voiced plosive [d] is only one factor in causing the misunderstanding.

For Token 113, FMd cannot understand *north side* pronounced as *[nɔθaɪd]*. FBr1 has [0] for final TH in *north*, but she drops the initial [s] in *side* and this is likely to be the problem. It seems that FBr1 has difficulty pronouncing the dental fricative [θ] immediately followed by the alveolar fricative [s]. Perhaps if she had dropped [θ] and pronounced [s] instead, her speech would have been more intelligible to FMd.

**Voiced TH**

The tokens involving voiced TH are presented in Table 4. The majority of them involve medial TH. In all six tokens, the voiced TH is realised as [d].

<table>
<thead>
<tr>
<th>Tok.</th>
<th>Rec.</th>
<th>Word</th>
<th>Heard as</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
<td>MBr3+MKo</td>
<td>to the</td>
<td>today</td>
<td>to take me <em>to</em> the <em>&lt;spel&gt; u b d &lt;/spel&gt;</em> so i have difficulty in hearing it</td>
</tr>
<tr>
<td>102</td>
<td>MBr3+MKo</td>
<td>others part</td>
<td>other spot</td>
<td>the others part is the sungai i mean the river</td>
</tr>
<tr>
<td>147</td>
<td>FBr2+FVn</td>
<td>although</td>
<td>look</td>
<td><em>although</em> it’s a small country but i think it’s furthering their studies or working</td>
</tr>
<tr>
<td>63</td>
<td>MBr3+MFr</td>
<td>furthering</td>
<td>foreign</td>
<td>either <em>furthering</em> their studies or working</td>
</tr>
<tr>
<td>82</td>
<td>MBr3+MFr</td>
<td>furthering</td>
<td>foreign</td>
<td>i start doing my ah <em>furthering</em> my study here</td>
</tr>
<tr>
<td>139</td>
<td>FBr2+FVn</td>
<td>further</td>
<td>final</td>
<td>given the chance to <em>further</em> your study</td>
</tr>
</tbody>
</table>

**Table 4.** Tokens involving voiced TH

The first three tokens have a clear [d] for the voiced TH sound. In Token 99, MKo hears *today* rather than *to the* and he later explained that this is because it is followed by a proper noun, UBD, and he did not expect the use of an article the before UBD. In this case, the pronunciation of the with [d] does not seem to be a problem, and non-standard syntax is the key factor here.

The rest of the tokens involve medial TH. In Token 102, MBr3 pronounces [d] in *others* but the misunderstanding occurs in the following word *part*. In fact, the problem lies with the spurious ‘s’ in *others*, as MKo assumes that the ‘s’ belongs to the *part* and he hears *spot* instead. He has no problem understanding *other* pronounced with [d].

In Token 147, FVn does not hear the plosive [d] for medial voiced TH in *although*. In this token however, perhaps vowel quality may be more important, as the word is pronounced as *[ɑldə]* with [ə] in the first syllable rather than the expected [ɑː] in standard pronunciation. Although there may be a problem with medial TH, it is uncertain if the use of [d] is the main issue.

Tokens 63, 82 and 139 all involve *further(ing)*. In all three tokens, the medial voiced TH is weakened as a result of fast speech, and the listeners have difficulty in hearing it. In both Tokens 63 and 82, MFr hears an approximant [r] instead of a TH sound, and in Token 139,
FVn hears a nasal [n]. Approximants and nasals are sonorant sounds, not obstruents, so in all three tokens there seems to be weakening.

**Conclusion**

The findings show that the pronunciation of the TH sounds does not generally interfere with intelligibility, as other factors seem to be more important. These include use of a glottal stop at the end of *thought* (Token 80), omission of initial [s] in *north side* (Token 113), a spurious ‘s’ in *others part* (Token 102), vowel quality in *although* (Token 147), and syntax in *to the* (Token 99).

However, the analysis suggests that the pronunciation of medial voiced TH by Brunei speakers may sometimes be problematic when it gets weakened as a result of fast speech. The use of [d] for medial voiced TH may not generally be a problem, but if the sound is so weakened that it is not heard as an obstruent, this may lead to loss of intelligibility.

We can conclude that use of [t] for initial voiceless TH is not a problem, but elision of medial TH can be problematic. The findings also concur with the LFC proposed by Jenkins (2000) that use of dental fricative is not important for intelligibility in ELF settings. Various realisations of TH sounds are fine, but their omission or substantial weakening may cause misunderstandings to occur.

**References**


