The University of the West Indies St. Augustine Campus
Faculty of Humanities and Education
Department of Modern Languages and Linguistics
LING 3099 Special Project in Linguistics

COVER PAGE

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Semi-Rhoticity in Trinidadian English of 7-8 year olds:

Based on Dunross Preparatory School

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Supervised by: Dr. Jo-Anne Ferreira

LING 3099

28 APRIL 2017
Acknowledgements

Thanks to Vice Principal, Mrs. Michelle Braznell-Meade, for accommodating me and to Ms. Laura Welch for her time and patience.
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Abstract

This study evaluates changing rhoticity in the traditionally non-rhotic variety of Trinidadian English. The rhotic features are linking $r$ and intrusive $r$ where these terms are together known as $R$-Sandhi or $R$-Liaison. Previous studies have described rhotic features in the Trinidadian English variety according to adult speech and in this study I examine these features in children’s speech. The study aims to determine these rhotic features in the speech of some children. This was done with the assistance of and permission to conduct the study at Dunross Preparatory School. I was allowed to interview five children in a classroom setting with their teacher. All the children ranged in ages 7-8 years old using a methodology that involved a wordlist, sentence and story reading elicitation tasks for the data collection process.
Chapter 1: Introduction

This study is concerned with evaluation of rhoticity in the non-rhotic variety of Trinidadian (Standard) English (TrE hereafter) among children within the age range of seven (7) to eight (8). TrE is a non-rhotic variety as indicated by linguists Wells and Ferreira, and has had a history of being a non-rhotic variety which was possibly due to the British influence on the language (Wells 578). Non-rhoticity is explained as a feature of a language that excludes /r/ (in its surface representation) from preconsonantal and absolute-final environments (Wells 76). In recent times, TrE has been demonstrating signs of rhoticity which is not a feature of the language.

Rhoticity has been appearing through a phenomenon called R-sandhi or R-liaison. These are separated into two categories; linking-\(r\) and intrusive-\(r\). Apart from the actual appearance of /\(r\)/ (R-liaison) across word and morpheme boundaries, there is also the rhotacisation of vowels which is also known as \(r\)-colouring. With all these features appearing across the variety is making it become rhotic. While \(R\)-Sandhi occurs intervocally, \(r\)-colouring occurs on the close-mid central [\(\theta\)] (Ferreira & Drayton 10) or the open-mid central [\(\acute{\epsilon}\)] (Wells 137) unrounded vowel of TrE variety which is not a feature of fully rhotic speech but semi-rhotic speech.

The study was carried out on children from Dunross Preparatory School located in Westmoorings, Trinidad. Dunross Preparatory School was chosen to evaluate the rhoticity in the children’s speech as previous studies have been described based on rhotic features of older generations.

Using frameworks from Asprey (2006) and Barras (2011) where they described rhotic features in adult speech of non-rhotic languages, this study builds on the theory of semi-rhotic
features in the non-rhotic variety of TrE in the speech of children. With these points, it has raised the question of:

**What are the features of rhoticity being displayed in the speech of 7-8 year olds of Dunross Preparatory School?**

i. Linking \( r \)?

ii. Intrusive \( r \)?

iii. \( r \) Colouring of the close-mid/open-mid central vowel or others?

In chapter 2, the literature on rhoticity in English varieties and the Trinidadian English variety is reviewed. This is followed by the methodology which breaks down the data collection and analysis process in chapter 3. The results of the analysis of the study using the Praat system follows in chapter 4. In chapter 5, the explanation of the results is discussed. Chapter 6 summarises the study and provides guidelines for future work of this nature.
Chapter 2: Literature Review

2.1 HISTORICAL BACKGROUND OF TRINIDADIAN ENGLISH

The language situation of Trinidad is quite diverse historically in terms of its colonial exposure to European languages such as Spanish, French and English with the British being the final colonizers who had a linguistic war with the French for linguistic superiority (Ferreira 1-6). English remained the dominant language and was eventually given official language status (Ferreira 3-4). Trinidad & Tobago is then recognized as being a part of the English-official Caribbean (Lacoste 1). Ferreira has described TrE as a national variety that is “mutually intelligible with other varieties of English and differs from other such dialects only in certain phonetic differences, and in some lexical items” (6). As the British were the last colonizers in the country, Wells connects the metropolitan speech of England being generally non-rhotic to the reason why TrE is non-rhotic (578). He then continues, “the Trinidadian ‘accent’ is non-rhotic” (578).

2.2 RHOTICITY

In the phenomenon of non-rhoticity, there are phonological processes that take place similar to rhoticity. The phonological process that occurs in TrE is postvocalic \( r \) deletion (Shin 108). Underlyingly, it is there in words such as “far” but appears without \( /r/ \) in its surface form ([fɑː]). Wells describes this phenomenon as R Dropping (218). As mentioned above, TrE is a non-rhotic variety of English. Rhotic varieties pronounce the historical [\( \text{i} \)] in all positions and non-rhotic varieties pronounce the [\( \text{i} \)] in onset position (before the nucleus) of a syllable as in read /\text{r}i:\text{d}/ or story /\text{s}t\text{ə}\text{r}i\text{t}/ but does not appear in coda position of the syllable (Mompeán-González & Mompeán-Guillamón 734). However, in the non-rhotic variety of TrE,
there has been occurrences of \(R\)-Sandhi (Barras 2) or \(R\)-Liaison (Mompeán-González & Mompeán-Guillamón 735) which are collective names for the phenomena linking \(r\) and intrusive \(r\). Apart from \(R\)-Sandhi, there is also the phenomenon of \(r\)-colouring of vowels which is strictly applied to the vowel \([\theta]\) (close-mid central unrounded) in TrE (Ferreira & Drayton 10). With these manifestations, Ferreira & Drayton claim particular groups of speakers rhotacise only one of the three \(r\)-coloured vowels ([\(\theta\]), [\(\alpha\]), [\(\partial\)]) (10). In TrE, it is uncommon for speakers to rhotacise the open back unrounded vowel [\(\alpha\)] and the open-mid back rounded vowel [\(\partial\)] as in \(car\ [k\partial:\partial\]) and \(store\ [st\partial:\partial\])

### 2.2.1 \(R\)-SANDHI OR \(R\)-LIAISON

According to Broadbent, linking \(r\) is used to refer to the occurrence of \(/r/\) after certain vowels namely [\(\alpha\], [\(\partial\] and [\(\partial\)] (282). These vowels were based on the study of West Yorkshire variety of English. Additionally, Ferreira & Drayton (2015) includes the vowel [\(\theta\)] while Wells (1982) includes the vowel [\(\partial\)]. Both of these vowels are rhotacised in the TrE variety of English. Linking \(r\) occurrences are found in instances where \(/r/\) is “followed immediately after a vowel… across internal (e.g., \(storing\ [st\partial:\partial\])\) or external morpheme boundaries (e.g., \(store\ it\ [st\partial:\partial\ 1t/\]).” (Mompeán-González & Mompeán-Guillamón 734). Instances of linking \(r\) occur in either internal morpheme boundaries or external morpheme boundaries but \(/r/\) in the linking \(r\) feature has to be in an intervocalic situation like the examples provided (\(storing\) and \(store\ it\)). Another form of rhotacisation that may appear in non-rhotic varieties is where the \(/r/\) comes across as a form of “hyper-rhoticity” (Barras 23) as in “Rosita[r] and Clementina” in the calypso sung by the Mighty Sparrow (Ferreira & Drayton 8). Broadbent also explains intrusive \(r\) to be a feature like
linking r where /r/ appears between [ə], [ɔ] and [ə] and a following vowel initial morpheme where the only difference is in linking r situations, there is a historical /r/ “re-emerging” and intrusive r has no such etymological justification (282). Mompeán-Gonzalez & Mompeán-Guillamón explains intrusive r in more depth placing his reasoning as phonotactic constraints when he claims that it is “an epenthetic r-sound in intervocalic positions” which never historically had an /r/ in its spelling and is mostly used to avoid a phonological “discomfort” called vowel hiatus (lack of a consonant separating two vowels in separate syllables) (734). Phonological “discomforts” are usually made more manageable with the application of phonological processes and Mompeán-Gonzalez & Mompeán-Guillamón describes intrusive r as epenthetic and is a phonological process referred to as epenthesis (734) - the addition of a sound in between syllables to allow for ease of articulation.

2.2.2 R-COLOURED VOWELS

In non-rhotic varieties like TrE, Ferreira & Drayton indicates there is rhotacisation or the /r/ only appears on the vowel [ə] (close-mid central unrounded vowel) while Wells has a differing standpoint of the vowel that Ferreira & Drayton used to indicate where rhotacisation occurs and he opted use the generalized form of the phoneme: the open-mid central unrounded vowel [ə] (137). This refers to allophony where they are allophones of the same phoneme as both are produced in different accents but does not create a different word with the interchange of the phonemes. Ferreira & Drayton (2015) also explained the rhotacisation do not occur on the open back unrounded vowel [ə] as in start /stɑːt/ and the open-mid back rounded vowel [ɔ] as in
escort /ɛskəːt/ which is referred to as semi-rhoticity (the rhotacisation of the vowels is marked with the symbol [˞ ]) (10) in TrE variety.

**Significance of the study and research questions**

This study is significant because the phenomenon of elements of rhoticity in the non-rhotic variety of TrE has been discussion among linguists such as Ferreira, Drayton, Barras, Broadbent and others and this paper will help to evaluate further the status of rhoticity in TrE and possibly discover more sources of the rhoticity. This study is also important as it will show the aspects of rhoticity within the language as well as building on theories of rhotic features in non-rhotic varieties of English. With the system of Praat which analyses the phonetics and acoustics of a person’s speech, the data that will be provided will be of great significance in recording the phenomena. The Praat system will then determine the frequency of the formants confirming the most prominent part of semi-rhoticity in the variety whether it be through linking r, intrusive r or r-colouring of the close-mid/open-mid central unrounded vowel. The main research question and associated sub-questions raised are:

What are the features of rhoticity being displayed in the speech of 7-8 year olds of Dunross Preparatory School?

I. Linking r?

II. Intrusive r?

III. r Colouring of the close-mid/open-mid central vowel or others?
Chapter 3: Methodology

In this chapter, I describe the process of collecting and analysing the data. Ferreira & Drayton (2015) and Wells (1982) speak of TrE becoming rhotacised and this study evaluates the appearance of this phenomenon in specifically 7-8 year olds. I collected the data by means of non-participating observation. The data collection method, non-participant observation, is a process by which the researcher does not get involved in the activities of the group but remain a passive observer, watching and listening to its activities and interactions drawing conclusions from them. Spontaneous speech events were not recorded due to time constraints. However, the children were asked to perform other elicitation tasks such as wordlist, sentence and story reading elicitation tasks which were recorded for conclusions to be drawn about the rhotic phenomenon. In the first section of the chapter, I explain the preparation process of collecting data. This includes requesting permission of the institution, creating age appropriate elicitation tasks and having the tasks be reviewed by the teacher. In the second section, I explain the process of actual data collection at the institution.

3.1 DATA COLLECTION

3.1.1 The Preparation Process

I began this process by requesting permission of the institution. This study was initially based on students of Maria Regina Grade School. When permission was requested of the school, I was refused. On the 6th March 2017, I attended Dunross Preparatory School to request permission where I presented a signed permission request letter signed by the University of the
West Indies and was told the Principal was not there but she will contact me the following day. I was contacted and forwarded to Laura Welch who is a teacher of different groups of children. She requested that I attended the school on the day in which she teaches the age range that I desired to carry out my study. She also requested to review the elicitation tasks to evaluate if they were age appropriate. We kept in contact via email in order for her to see the original elicitation tasks and changes were made where she made recommendations. On the 15th March, we came to an agreement on the format of the elicitation tasks. The elicitation tasks were created in the time frame of five days where I researched age appropriate words for the wordlist, sentence and story reading tasks.

3.1.1.1 The Wordlist Task

The wordlist elicitation task included words with all r-coloured vowels with more frequency of words with the close-mid central [ɘ]/ the open-mid central [ɜ] unrounded vowels. The wordlist was in the form of pictures. These pictures were displayed on a Windows Surface RT tablet. There was a list of 10 pictures and were not displayed in any particular order. (see APPENDIX 1)

3.1.1.2 The Sentence Reading Task

This was a list of 10 sentences where all phenomena of rhoticity in the language were included, these phenomena being r-colouring of the close-mid central [ɘ]/ the open-mid central [ɜ] unrounded vowels along with other r-coloured vowels, linking r and intrusive r. This task was done in the form of a game where each child has the choice of which of their peers may read
the following sentence. The sentences are provided in Table 1 below indicating the rhotic features in each sentence.

Table 1. Sentence Reading Elicitation Task with rhotic feature indication

<table>
<thead>
<tr>
<th>SENTENCES</th>
<th>RHOTIC FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$r$-coloured</td>
</tr>
<tr>
<td></td>
<td>Linking</td>
</tr>
<tr>
<td></td>
<td>Intrusive</td>
</tr>
<tr>
<td>The ruler is on the desk.</td>
<td>-</td>
</tr>
<tr>
<td>I got more apples today.</td>
<td>-</td>
</tr>
<tr>
<td>Mummy is in the third car over there.</td>
<td>✓</td>
</tr>
<tr>
<td>Lisa and Jane played at the farm yesterday.</td>
<td>✓</td>
</tr>
<tr>
<td>I saw an elephant and a bird at the zoo.</td>
<td>✓</td>
</tr>
<tr>
<td>I am wearing a shirt.</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>The lion was roaring at the girl.</td>
<td>✓</td>
</tr>
<tr>
<td>I was drawing in art class today.</td>
<td>✓</td>
</tr>
<tr>
<td>Daddy and I went to Africa and rode on an elephant.</td>
<td>-</td>
</tr>
<tr>
<td>My sister is a nurse.</td>
<td>✓</td>
</tr>
</tbody>
</table>

### 3.1.1.3 The Story Reading Task

This is a short story that I generated that includes all rhotic features that my study is focused on (r-colouring of vowels, linking r and intrusive r). This short story was given to each child and was asked to read it. It was presented in the format of a letter sized page and the font type and size was Times New Roman 20 (see APPENDIX 2)

### 3.1.2 Data Collecting Process

On the 16th March, I went to the Dunross Preparatory School where I met with Laura Welch. She indicated that the children’s names could not be used in the study as that required permission from the parents of the informants. She explained that I will have five informants and a 45-minute time slot to conduct the study. Then, we went to her classroom where it was empty
and we discussed the way in which the elicitation tasks will be presented to the informants. For the sentence reading task, we wrote the sentences on bristol board and they were accompanied by drawings of the main object in the sentence. After writing the sentences, we cut them out as per each sentence. After we completed this task, she brought the informants into the classroom where she explained to them the elicitation tasks that was required of them to complete.

I began by setting up the sound recording application on my personal device; POSH L640 LTE VOLT. When I began to record, I explained to each informant what was required of them for the first task which was the reading of the wordlist. As mentioned above, the wordlist was in the form of pictures (see APPENDIX 1). Therefore, the informant had to produce the word associated with the picture. The next task was the story reading task. I presented each informant with a letter sized page with the story in the font type of Times New Roman and size of 20 and they were asked to read it. After each informant completed the wordlist and story reading elicitation tasks, they all sat around a table where Laura distributed the sentences written on the bristol board. Each informant received two sentences that were turned over on the table so that they were not able to rehearse the sentence before their turn. At that time, I placed my personal device for recording in the centre of the table that the informants sat around. Informant 1 was given a bean bag to pass to another informant once completed his first sentence. Once the cycle of first sentences were over, informant 1 began the cycle again where he read his second sentence and the others followed once the bean bag was passed to them. When this exercise was complete, I ideally wanted to record them with the teacher in class for record of a spontaneous speech event. However, the time for the class had ended and the informants had to move on to
another class. In the completion of the tasks, the informants were given stickers for their cooperation.

3.2 DATA ANALYSIS

The recordings were uploaded to the Praat software where Praat was used to determine and analyse the rhotic features in TrE. Praat is a speech analysis software which is free and downloadable online at www.praat.org and was developed and is still being developed by Paul Boersma and David Weenink at the University of Amsterdam. The audio recording of the informants was uploaded to my laptop where it was cut according to the rhotic features that were displayed or were not displayed. The application used to cut the audio recording was Direct WAV MP3 Cutter. After the audio was cut, each part was uploaded to Praat and spectrograms were generated. The recordings were replayed multiple times in order to determine where the features appear on each spectrogram for effective analysis. /r/ on a spectrogram is identified by the depression of the third formant. As r-colouring of the close-mid central [ƞ]/ the open-mid central [ɜ] unrounded vowels, linking r and intrusive r were the only aspects of the informants’ speech observed, the words and phrases that include the above mentioned rhotic features in the recordings were magnified and analysed based on the location of the third formant. Image 1 shows a rhotacised open-mid central unrounded vowel [ɜː]. The depression of the third dark line is called the formant and all words and phrases were analysed based on this feature on the spectrogram.
Image 1: Sample of rhotacised open-mid central unrounded vowel on a spectrogram.
Chapter 4: Results

According to Ferreira & Drayton (2015), particular groups of speakers rhotacise only one of the three \(r\)-coloured vowels ([ə], [ɑ], [ɔ]) (10), that vowel being the close-mid central unrounded vowel [ə] and the open-mid central unrounded vowel [ɔ] (Wells 137). In each elicitation task, words with each vowel sound mentioned above was included where [ɾ] was a postvocalic sound. \(R\)-sandhi (linking \(r\) and intrusive \(r\)) was placed in the sentence and story reading tasks only. In light of these details, I will present the results of the performed elicitation tasks in the form of spectrograms which is generated from the program mentioned above, Praat. As mentioned before, what determines /ɾ/ or rhotacisation in a word via audio recording placed in Praat which generates a spectrogram is the depression of the third formant on the spectrogram.

\textit{RQ: What are the features of rhoticity being displayed in the speech of 7-8 year olds of Dunross Preparatory School?}

(i) \hspace{1cm} Linking \(r\)

Sentence Reading Elicitation Task

As mentioned before, the linking \(r\) feature was only placed in the sentence and story reading elicitation tasks. In the sentence reading elicitation task, informants displayed the feature across internal morpheme boundaries.

Spectrogram 1. “I am wearing a shirt”
In Spectrogram 1, Informant 4 read the sentence, ['aɪə'mɛəːɪŋeɪʃɤːt] “I am wearing a shirt”, and the vertical line shows where the third formant is momentarily depressed where she says “wearing”. In Spectrogram 2, Informant 3 read the sentence, ['dələɪjonəwɔːɹəɹɪŋət] “The lion was roaring at the girl”, where the vertical line shows the third formant is also depressed when making the link across the internal morpheme boundary in “roaring”.

Spectrogram 2. “The lion was roaring at the girl”
However, in the other case of across external morpheme boundaries in the sentence reading elicitation task, like in the sentences [ˈðəˈɹuˌləɪzɔːnˈðədɛsk] “The ruler is on the desk” and [ˈmaɪsɪzənɜːs] “My sister is a nurse”, each informant who read their assigned sentence that displayed that particular feature did not link “ruler is” or “sister is”.

**Story Reading Elicitation Task**

In this task, informants only received this feature across external boundaries. All informants did not display this feature in two instances of the feature appearing in the task. The two instances being /lɛtɔː/ and əː stɔː.ʃiː/ “…letter and a story…” and /mɔː apl.ə/ “…more apples…”. However, Informant 3 produced ['fɑː.ɹəwɛt] “…far away…” by using the feature across the external morpheme boundary. The vertical line on Spectrogram 3 below shows the depression of the third formant when the informant produces the phrase.

Spectrogram 3. “…far away…”
On the other hand, Spectrogram 4 shows how the third formant which determines the appearance of rhotacisation is not present in the phrase /lɛtəː and əː stɔːɬiː/ “…letter and a story…”.

Spectrogram 4. “…letter and a story…”

(ii) Intrusive r

Sentence Reading Elicitation Task
Instances of intrusive $r$ was not common throughout this task. Most informants did not utilize this feature across external morpheme boundaries in their assigned sentences. [aɪ səː an ˈɛliː ɪ fənt and øː ˈbəːd at ˈðə ˈzuː] “I saw an elephant and a bird at the zoo” and [ˈdaɪdiː and aɪ ˈwɛnt tuː ˈafər ˈkəː and ˈdəːn an ˈɛliː ɪ fənt] “Daddy and I went to Africa and rode on an elephant” were sentences in which Informant 5 did not display the feature of intrusive $r$ in both “…saw an…” and “…Africa and…”. However, Informant 1 did display the feature in his assigned sentence across an internal morpheme boundary in the sentence [ˈdəɹɔː ɪn ˈæt ˈkləs təɹdeː] “…drawing in art class today”. The vertical line in Spectrogram 5 shows the depressed third formant.

Spectrogram 5. “…drawing in art class today”.

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**Story Reading Elicitation Task**
In this task, it also was not common for the informants to use the intrusive r feature. All instances were across external morpheme boundaries. These instances were [ˈɑfɪəkə and] “…Africa and…” and [ˈɪndɪə and] “… India and…”. Spectrogram 6 shows Informant 5 saying “Africa and India”.

Spectrogram 6. “Africa and India”

(iii) r Colouring of the open-mid central unrounded vowel

Wordlist Elicitation Task

The informants did not display r colouring of the [a] and [ə] vowels as in card /kaːd/ and corn /kɔːn/. However, Informant 4 rhotacised [aʰ] in farm [faʰm] and [əʰ] in fork [fɔʰk]. The vertical line on Spectrogram 7 shows the depression in the third formant when Informant 4 says farm.
On the other hand, all other words were rhotacised by informants. There was only one instance where Informant 1 did not rhotacise third /θɜːd/.

**Sentence Reading Elicitation Task**

In this task, there were four sentences with r coloured vowel words. All informants rhotacised the words *nurse* as in the sentence [ˈmaɪˈsaɪsɪəz ˈeɪz ˈnɜːsɨs] “my sister is a nurse”, *shirt* as in the sentence [ˈaɪˈæm ˈwɜːʃɨt] “I am wearing a shirt” and *girl* as in the sentence [ˈðə ˈlaɪən ˈwɜːz ˈɹɔːɹɪŋ ət ˈðə ˈθɜːrd ˈkɜːr] “the lion was roaring at the girl”. However, Informant 4 rhotacised the open front unrounded vowel in *car* as in the sentence [mʌɹɪz ɪn ˈθɜːrd ˈkɜːr] “mummy is in the third car over there”. The vertical line on Spectrogram 8 shows the depression of the third formant in *car*. 
Spectrogram 8. “mummy is in the third car over there”

Story Reading Elicitation Task

Each informant rhotacised the \( \text{r} \) coloured vowel in “bird” and “girl”. In addition to this, Informant 4 rhotacised \( \text{her} \) as in the phrase \[1\text{həɹ} 1\text{fɚɛɹnз}\] “…her friends…”, \( \text{letters} \) \[1\text{lɛɹtəɹз}\] and \( \text{more} \) as in the phrase \[1\text{məɹ} ˈ\text{apl əɻ}\] “…more apples…”. In the phrase \( \text{more apples} \), the vertical line on Spectrogram 9 shows Informant 4 rhotacising the \( \text{r} \)-coloured vowel in \( \text{more} \) opposed to using the linking \( \text{r} \) feature.
Spectrogram 9. “…more apples…”
Chapter 5: Discussion

5.1 Linking r

The frequency and appearance of the features linking r and intrusive r in TrE aligns with Ferreira & Drayton (2015). They state the feature intrusive r appears less frequently than the linking r feature in TrE (8). Linking r has only appeared intervocally in cases of across internal morpheme boundaries in words such as *wearing* [ˈweəɹɪŋ] and *roaring* [ˈɹɔːɹɪŋ] where these words without present continuous tense morpheme (-ing) is pronounced in a non-rhotic variety such as TrE will be *wear* [weəɹ] and *roar* [ɹɔːɹ]. However, this feature was not common across external morpheme boundaries except for one instance of linking *far* and *away* ['faɹəweɪ]. This phenomenon is explained as historical /r/ “re-emerging” (Broadbent 282).

5.2 Intrusive r

In the case of the feature intrusive r, as stated by Ferreira & Drayton (2015), this feature appears less frequently than the linking r feature (8). This aligns with the results of my study where informants did not use this feature in phrases such as [ˈafɪɹɪkər] "...Africa and…", [ˈɪnɹɪɒnt] “... India and…”, [ɹɪɹɪfənt] and [ɹɪɹɪmɹ] at [ɹəɹɪz] “I saw an elephant and a bird at the zoo” and [ɹɪɹɪfənt] and aɪ_ɹɪɹɪfənt] "Daddy and I went to Africa and rode on an elephant”. On the other hand, there was one case where the use of intrusive r across an internal boundary (drawing transcribed as
In this case, the informant inserted /r/ as a form of phonotactic where he avoided vowel hiatus (adjacent vowels belonging to separate syllables). Intrusive r appears in the case of a word that ends in a true vowel and is followed by a word or suffix that is vowel initial. Therefore, intrusive r appears when hiatus arises among morpheme boundaries (McCarthy 171). This explains the case of the informant saying [dəɹɪŋ] opposed to [dəɪŋ].

5.3 *R-Colouring of the open-mid central unrounded vowel*

In semi-rhotic varieties like TrE, rhotacisation is largely restricted to the open-mid central unrounded vowel (Wells 137) in a stressed position (Ferreira & Drayton 10). However, fully rhotic varieties rhotacise this vowel along with the open back unrounded vowel [ɑ] and the open-mid back rounded vowel [ɔ]. Most informants retained the notion of semi-rhoticity where words like card /kɑːd/ and corn /kɔːn/ were not rhotacised as posited by Ferreira & Drayton (2015). Words that included the open-mid central unrounded vowel, all informants displayed rhotacisation except for one informant in the word *third* where it was not rhotacised ([θɜːd]).

On the other hand, there was one particular informant that differed in many other cases. In non-rhotic varieties, Broadbent states that /r/ is not allowed to stay in the rhyme as in ‘star’ [stɑː] unless some form of resyllabification occurs as in ‘star is’ [stɑːɪz] (286) (qtd. Mohanan). However, this informant kept /r/ in most places making her TrE variety more rhotic than semi-rhotic. The informant rhotacised *farm, fork, car, her, letters* and *more* as in ‘more apples’ where she does not use the linking r feature but rhotacises *more* without the application of the linking r feature. The informant did not rhotacise all words which did not indicate full rhoticity as she did not rhotacise *card, corn, over* and *there.*
5.4 Limitations

The study was not able to determine rhotic features of each informant. This was due to time constraints and a lack of representation of all features in each task. The study was conducted in a 45-minute time slot in one day. This was challenging as data collection material had to be limited in order not to cross the time limit. The length of all tasks were shortened. The wordlist elicitation task did not have words that would have elicited linking $r$ or intrusive $r$ features across internal morpheme boundaries. The sentence reading elicitation task was not distributed among every informant in order to determine if sentences that were assigned to other informants may have had or may not have had rhotacisation elicitations. Also, the story reading elicitation task did not have any instances of linking $r$ or intrusive $r$ features across internal morpheme boundaries or words that placed the open-mid back rounded vowel preconsonantal to /$r$/ such as in ‘fork’ or ‘short’.

Another limitation was the excessive noise. The teacher made an effort to keep the informants as quiet as possible but there was still a good deal of noise on the recordings. This posed a problem as the analysis of the data included these noises. On Praat, noise on a spectrogram is identified by the darkness between each formant. However, each formant is identified by its darkness on a spectrogram. Therefore, the noise made it hard in most cases to identify where the formants are especially in the case of determining the depressions in the third formants which was important to determining accurate results on the study.
Chapter 6: Conclusion

This study aimed to evaluate the phenomenon of semi-rhoticity in the non-rhotic variety of TrE. It is important because studies have only been conducted on adult speech and conclusions about the rhoticity in the language have only been made for older generations. It is necessary to include conclusions about the rhoticity in the language from the perspective of children as the feature will be carried into their adult stages.

This study was analysed using the Praat sound analysis programme. Praat was used to generate spectrograms where rhotic features were determined by a depressed third formant on the spectrogram. Rhotic features entailed linking $\mathbf{r}$, intrusive $\mathbf{r}$ and $\mathbf{r}$ colouring of the open-mid central unrounded vowel. Using Praat revealed that informants did not use linking $\mathbf{r}$ feature across external morpheme boundaries except for one informant in the utterance ‘far away’. The intrusive $\mathbf{r}$ feature was not common across both external and internal morpheme boundaries. However, one informant displayed the intrusive $\mathbf{r}$ feature in the word ‘drawing’. Finally, it revealed the informants use of $\mathbf{r}$ colouring of the open-mid central unrounded vowel where all informants rhotacised this vowel in every instance except for one informant in the word ‘third’. Praat also revealed $\mathbf{r}$ colouring of other vowels such as the open back unrounded vowel and the open-mid back rounded vowel in one informant’s speech which appeared to be more rhotic than the other informants.
The study was limited in terms of time constraints, data collection material and sound quality. The time allotted to complete the study effectively was not sufficient, the length of the tasks were shortened in the interest of time and getting as much of the features recorded as possible and the sound quality was affected negatively as it was noisy and the noise made identifying features on the spectrogram difficult.

For future studies of this nature, it is advised that three (3) hours be allotted to collect data in its most effective way in that all informants are able to participate in every data collection sample in every elicitation task in order to determine the rhoticity in their variety. Also, it is advised that the study be conducted in a quiet environment as noise disrupts the recordings, hindering the analysis and making it difficult to determine formants on the spectrogram.
APPENDIX 1

Word List

Card
Corn

Dirty
Farm

Fork
Girl
APPENDIX 2

Anna, The Writer.

In a land, far away, there was a girl named Anna. Anna loves to write. Anna likes to write letters to her friends. Anna has friends in Africa and India and she writes letters to them. John lives in India and Jane lives in Africa. Anna is writing a letter and a story for Jane and John. The story is about a bird that lives on a farm and it always asks for more apples to eat. John and Jane love the story. Anna hopes to go to Africa and India to see her friends one day.
WORKS CITED


