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The patterns of changing rhoticity in Trinidadian English among students of The University of the West Indies, St. Augustine campus

Justin Carrington

Supervisor: Dr. Jo-Anne Ferreira

Ling 3099

Special Project in Linguistics

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Abstract

Although there are several studies that have been conducted within the Caribbean with regard to varieties of English, on an international scale, compared to the Caribbean in general, Phonological studies of other varieties of English are far more numerous. As a result, linguistic profiles have been built among these varieties. Generally speaking, the feature of rhoticity has been well documented with respect to rhotic and non-rhotic dialects. After previous conclusions were made that the Trinidadian variety of English is clearly non-rhotic, the argument now is that Trinidadian English is showing inconsistent levels of semi-rhoticity. Consequently, an investigation is needed to assist in determining whether Trinidadian English is or is not displaying more frequent patterns of rhoticity.

This study aims to examine the patterns of rhoticity that occurs in Trinidadian English using a tertiary level population. This target population is gathered by use of stratified sampling, complimented by convenience sampling. The framework used to guide this study is based on the theory that /r/ is realized pre- and intervocalically, the former when preceded by the non-high vowels ([ɜ] [ə] [ɑ] [ɔ]) in particular. A variety of elicitation tasks is used along with an open dialogue of conversation which provides adequate opportunities for the occurrence of the rhotic features linking r, intrusive r and r-colouring. Conversely, this study also examines natural speech versus artificial speech. Therefore, a mixed methodology is used in order to provide an adequate analysis of the occurrences. The findings of this study fill the gap among this age group as no previous study has been conducted since Trinidadian English has recently begun to develop semi-rhoticity.

Chapter 1: Introduction

Recent scholarly activity in Trinidad has led to a review of the presence or absence of rhoticity with regard to Trinidadian English (hereafter TrE). This variety of English had previously been considered non-rhotic in the Caribbean (Wells 578). The topic for this research is the patterns of changing rhoticity in TrE among students of the University of the West Indies, St. Augustine campus (hereafter UWI). To date, there have been studies conducted on the phonology of TrE like Winford (1978), Wilson (2007) and (2013) as well as, Leung (2012) when she examined monophthongs in TrE. Additionally, the study conducted by Ferreira and Drayton identified inconsistent levels of semi rhoticity in TrE (2015) while Barclay indicated low levels of rhoticity among children in TrE (2017). Notwithstanding the importance of these studies, research in Phonology, more specifically, rhoticity in TrE deserves further attention. For example, Wells previously mentioned TrE being non-rhotic (578) before the turn of the century. But the study by Ferreira and Drayton in particular shows that there may be a change occurring.

Studies outside Trinidad have been expansive. Books, as well as (under)graduate studies, have been conducted on different aspects of rhoticity. Szabo has investigated the "Social and Regional Variation of intrusive r" while Barras has looked at "The Sociophonology of Rhoticity and R-sandhi in East Lancashire English". These studies were performed on varieties such as New Zealand English, Received Pronunciation and East Lancashire English. Szabo in particular noted that linguistic, as well as, non-linguistic factors contributed to the occurrence of intrusive r across non-rhotic varieties. Intrusive r is a feature of non-rhotic varieties but, another feature of these varieties is linking r. Knútsson stated that linking r occurs due to a linguistic factor limiting its possible scope for occurring. These two

features are critical to the study as they would help identify if indeed TrE can still be considered a full non-rhotic variety.

In the context of this study, further research will provide an analysis to support previous studies on TrE. As highlighted previously, from studies outside Trinidad, a look at the factors that contribute to the occurrence of intrusive r and linking r in TrE can be assessed with the linguistic factors that occur. By extension, identifying these factors will also assist in referencing the inconsistencies mentioned by Ferreira and Drayton and providing a further analysis of TrE. Wells stated that TrE was a non-rhotic dialect of English in his book in 1982. However, a new generation of speakers currently exist since then, and as a result, also deserves to be examined in order to compare with Wells' assessment of TrE. Barclay focused on children between the ages of 7 to 8 years old with Ferreira and Drayton having fewer restrictions in terms of class. Subsequently, this research will not only look at the young adults that currently attend the UWI, but will examine two courses in the UWI, namely, a linguistics and non-linguistics course. The analysis of these two courses will be examined in terms of the context they occur and the population that produces them.

As a result, these points raise the question, what are the patterns of rhoticity occurring in the speech of some young Trinbagonian first year students at the UWI? In Phonology, many studies have been conducted among the different varieties of English and TrE should be given just as much attention because the status of a language linguistically can change due to different factors, like language contact. The study will not focus on reasons for any possible change despite the relevance it may have as time would permit this opportunity currently. However, these reasons can range from language contact to even the media. In a time where Standard English is considered the correct form of speaking, pronunciation in TrE

may cause hypercorrection in some cases which, as a result, can lead to intrusive r occurring. Incidentally, would this clarify if these occurrences appear in different forms of speech. Whether that be in conversation or reading, it may appear in both settings or just one. This raises the point, in what contexts do they occur?

This study will look at a University population where academic success is valued highly. This population, as opposed to others, is the educated population. They may want to replicate leaders in their culture/society or media-based personalities. As a result, the impact that this exposure may have can dictate the variety produced with regard to rhoticity. Importance is placed on writing where courses are offered at the University to improve academic writing such as, English foundation courses. Writing and speech are both unique even though they have been compared before but can writing influence speech? With regard to TrE, there have been no indication in the past as previous students of the UWI have retained their non-rhotic speech. Yet there have been instances noted by Ferreira and Drayton (2015) that the 'Convent accent' has showed signs of 'the rhotacisation of the TrE close-mid central vowel'. The 'Convent accent' is more a social class rather than school based according to Ferreira and Drayton (2015). As a result, the social classes within the UWI would be a pertinent area to examine as there are multiple classes that interact with one another regularly whether in formal or informal speech.

A study of this nature would supplement the previous studies done and provide a context for why there is an occurrence in the non-rhotic variety of TrE. Apart from this, having more research in this area would assist linguists in the future, in examining different aspects in the speech of Trinbagonians. In the context of the Caribbean, it is known that Barbados, is a rhotic variety and that Jamaica is semi rhotic but additional research can

clarify if Trinidad can be added to the list of being semi rhotic in a Caribbean that is dominated by non-rhotic varieties.

Chapter 2: Literature Review

2.1.1 Features of rhotic and non-rhotic varieties of English

The languages of the world all display linguistic features which make them distinguishable. One of these linguistic features is that of rhoticity where there are two classes, namely, rhotic and non-rhotic languages. Rhotic languages and dialects tend to exhibit some variant of the phoneme /r/ in environments "where other closely related languages do not show this sound" (Wiese 1). These environments are before consonants and in word final positions which are before a pause (Roach 60-61). Wiese further explains that while many languages may usually contain one rhotic phoneme, there are rare cases where languages have two or even three rhotic phonemes (3). Roach also indicates that accents "in which /r/ only occurs before vowels are called non-rhotic" (Roach 61). In the Caribbean, there are more non-rhotic varieties of English than rhotic varieties with Trinidadian English (TrE hereafter) being non-rhotic.

2.1.2 Linking R and Intrusive R (R-Sandhi)

Non-rhotic dialects do not contain a sound in the syllable coda position but are further classified into those that display "linking r" and "intrusive r" (Wiese 15). These can be viewed from a phonological analysis where in non-rhotic dialects, the phoneme /r/ is realized in a specific environment being prevocalically (Knútsson). In contrast to rhotic dialects, there is also the term R Dropping where Wells describes it as the historical /r/ being eliminated except in the environment of a following vowel (218). Where linking r describes the phoneme /r/ occurring intervocalically following a non-high vowel as in the word fearing

/ˈfɪərɪŋ/, R Dropping describes the phoneme /r/ being dropped in a word such as feared /fɪəd/ (Wells 218). Knútsson states that the occurrence of "linking r" can be justified where it occurs intervocalically where the first vowel must be a non-high vowel being ([ɜ] [ə] [ɑ] [ɔ]). However, "intrusive r" does not follow a rigid concept in non-rhotic dialects as it is inserted even if there is no evidence of [r] in the orthography.

Wiese highlights that the selection of /r/ in the "intrusive r" feature is that it is the optimal consonant in a non-margin position because of its value on the sonority scale (15). The sonority scale is defined as a list of segments that show the relative resonance of phonetic segments in relation to other segments (SIL Glossary). Szabo focused on the social and variational change of "intrusive r" highlighting this significant change in her study. Consider the pronunciations of two different words, floor and flaw. She further highlighted that since non-rhotic speakers no longer produced the word floor as /flɔːr/ but as /flɔː/, it became homophonous with flaw /flɔː/ (Szabo 53). Despite the difference in spelling, the identical nature of the pronunciation means these two words have no distinction (Szabo 53). Apart from Wiese, Szabo indicated that if two words end in the same vowel but one of the words has a historical /r/, it can cause confusion among some non-rhotic speakers (53). As a result, the "intrusive r" is inserted resulting in forms such as flaw[r] (Szabo 53).

Authors such as Knútsson argue, that "intrusive r" occurs less than "linking r" in non-rhotic varieties. While Szabo highlights the insertion of "intrusive r", where it follows the non-high vowels mentioned earlier in this paper. Another author noted that intrusion may not occur in all non-rhotic dialects that can do so (Gick 32). As a result, the patterns that "linking r" and "intrusive r" occur are not concrete among all non-rhotic dialects. Each non-rhotic dialect may have unique occurrences with regard to rhoticity and may vary even in

the context that they occur. This variation is not accounted for in all non-rhotic varieties. Szabo noted the loss of rhoticity and emergence of r-sandhi in New Zealand English with reference to a study conducted by Hay & Sudbury (66). R Sandhi is a name which refers to "linking r' and "intrusive r" (Barras 2). As a result, it would be wrong to dismiss further possible investigations across non-rhotic varieties to identify if any changes has occurred over time.

2.2 Trinidadian English

Trinidad and Tobago has had a dynamic linguistic history having seen the European languages of Spanish, French and English be the dominant language at different points in history (Ferreira 1-4). This was due to colonial ruling (excluding the French) at different points with the British being the final rulers making English the last European language to dominate the country (Ferreira 1-6). The official language is currently English with Ferreira also describing 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 opposed to other Caribbean territories, TrE does not retain the historical final /r/ (Wells 578). Examples of linking r would occur in (after it) or even (hear it).

Additionally, Ferreira & Drayton observed the cases of "intrusive r" occurring even though it occurred to a lesser extent compared to "linking r" in cases such as (Rosita[r] and Clementina) (8). Their study concluded that TrE has started to show signs of being semi-rhotic. However, these occurrences are not consistent in speech with no clear pattern indicated. This foundation laid by Ferreira and Drayton have provided more questions than answers with this recent development. As a result, building a theory that identifies the

occurrences of linking r and intrusive r in TrE still requires further investigation that compliments the foundation laid by Ferreira and Drayton.

There have been results that have shown inconsistencies among 7 and 8-year olds with regard to “linking r” (Barclay 16-17). While in some cases, students may have used the feature of “linking r” across external boundaries where there were some that did not, as was the case in [ˈmaɪ ˈsɪsˌtəː ɪz əː nɜ˜ːs] “My sister is a nurse” (Barclay 16). There was also little to no evidence to suggest the occurrence of “intrusive r” among this age group across internal and external word boundaries (Barclay 17-18). No exact pattern was identified among this age group as there were hardly any consistent evidence to establish occurrences. However, Ferreira & Drayton highlighted particular groups such as socially based, gender based, school based and age based displaying levels of semi rhoticity (10). Despite highlighting the groups there was no indication as to the context in which these levels of semi rhoticity occurred. Ferreira and Drayton highlighted the ‘Convent accent’, as being a group showing levels of semi rhoticity (Ferreira, Drayton 10). In this accent, Ferreira & Drayton indicated the use of the postvocalic /r/ which occurs following the close mid central unrounded /əː/ which has come to be an optional choice for some students in formal or conscious situations (10). Coincidentally, Wells indicates a different viewpoint where he states that rhotacization occurs following the open mid central unrounded /ɜː/ which is the generalized form of the phoneme (137). Both comparisons can be categorized as ‘r colouring’ which is another aspect among non-rhotic varieties. However, these differences can be determined as allophones of the same phoneme as they may both be produced in different accents but it does not create a different word with an interchange in phonemes (Barclay 6).

The evidence to substantiate the previous studies on TrE in identifying rhoticity has only highlighted inconsistent occurrences of rhotic features among limited age groups. Ultimately, I am not going to expand on the sociolinguistic theory in this paper but rather extend the linguistic description. However, the study from Ferreira & Drayton highlighted specific instances when rhoticity may occur which would have been in "lexical borrowings where /r/ is realized in the syllable final (coda) position as in nagar /nʌˈgɑr/" (8). As they suggest, this instance could more indicate a preference for the original pronunciation rather than it being evidence of increasing rhoticity. Additionally, the context they have been noted to occur in is informal speech but not in reading.

Barclay also highlights the similarities among children in their speech as they use "linking r" more than "intrusive r" where the occurrence of "intrusive r" was rare (25). Her study involved a reading elicitation task but as noted before, it was from 7 to 8 year olds. At the UWI, St. Augustine campus, can the same be said of "linking r" and "intrusive r"? With variations noted in the occurrence of "intrusive r", is this feature more prominent or less prominent than "linking r"? The previous studies on TrE have noted the later to be the case in particular age groups. A connection is needed between the older generation and younger generation in order to ascertain the status of TrE with regard to rhoticity. Studies across all age groups can assist in identifying if further emergence of "linking r" and "intrusive r" is occurring.

2.3 Significance of Study and Research Questions

The current patterns in TrE shows that there are inconsistent levels of rhoticity but more studies would help in classifying TrE in an updated linguistic description. The research conducted in this paper can supplement studies done by linguists such as Barclay, Ferreira

and Drayton. This can provide a further evaluation of TrE and even note any differences in features such as linking r, intrusive r or r colouring. Apart from this, building such a linguistic profile would be complementary to the field of linguistics, as there have been observations of variations developed on rhoticity in TrE. Students at the University of the West Indies, St. Augustine campus have been an untapped environment, yet this same environment is the hub for regional and international students with different accents and dialects. As such, local students are exposed to these interactions for a minimum of three years which highlights the language contact that occurs. While this study does not focus on the language contact itself, this area in linguistics has always been a critical feature in language change. The significance of this study is only another step in linguistic research with respect to language development. In this case, it would be the possible change of TrE from a non-rhotic to a semi-rhotic variety of English. Additionally, these students are the future leaders and entrepreneurs of Trinidad & Tobago and the production of their speech holds significance as they are the link between secondary education and employees in the workplace.

This then raises the question, what are the patterns of rhoticity occurring in the speech of some young Trinbagonian first year students at the University of the West Indies, St Augustine campus? However, these patterns must occur within a context which would be identified from the data. This data would then provide the context that justifies these occurrences. It highlights the need for another question being asked which is; in what contexts do these patterns occur? The studies conducted by Szabo and Soskuthy, focused on why intrusive r occurred in non-rhotic varieties outside of TrE where Szabo concluded that the production of “intrusive r” might be socially or stylistically conditioned (Szabo 76). Ultimately, because “intrusive r” does not follow a rigid concept in occurrence it has been investigated more than “linking r”. Conclusions were also made where there are many aspects

for “intrusive r” that are unaccounted for (Soskuthy 57), which indicates that further investigations are needed. Consequently, this provides reasoning that more research is needed on TrE that may account for these aspects or patterns of rhoticity. However, this study will give equal attention to both “intrusive r”, “linking r” and r-colouring.

RQ: What are the patterns of rhoticity occurring in the speech of some young Trinbagonian first year students at the University of the West Indies, St Augustine?

Sub Question: In what contexts do these patterns occur?

Chapter 3: Methodology

The research design undertaken is a mixed one with Tashakkori and Teddlie describing a mixed methodology as a combination of qualitative and quantitative approaches into the research methodology of a single study (1998).

'Qualitative Research by means of explanation is research that cannot be quantified' (Strauss, 1990). Creswell defines qualitative research as "an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem." (1994). He further discusses that a researcher "builds a complex or holistic picture" of the research that they are conducting (Creswell 1994). Qualitative approaches to research seek to answer the 'how' and 'why' questions of the study (Western Australian Centre for Health Promotion Research 2010), whereas quantitative approaches seek to answer the 'what' questions of the research (Babbie 2010).

This research utilizes a case study approach with this allowing a level of flexibility during the research (Cassell, Symon). A quantitative approach, usually has "no information on contextual factors to help interpret the results or to explain variations in behaviour" which highlights a weakness to this approach (InterAction). Similarly, qualitative data seeks to identify trends but you cannot validate these trends by calculating a p-value, compared to quantitative data which you can validate (Madrigal, McClain). However, the benefits of utilizing a mixed methodology can validate or corroborate the results obtained from other methods after noting particular trends (CIRT). This approach will also provide more comprehensive data while reducing personal bias in the analysis. As a result, having a mixed design allows for proper interpretation and observation of the data while having numerical evidence of occurrence that supplements the patterns based on how consistent they are. The

positionality of this research paper is an etic approach where the frameworks would be analysed to see if the results would be applied in a new setting

3.1 Sampling

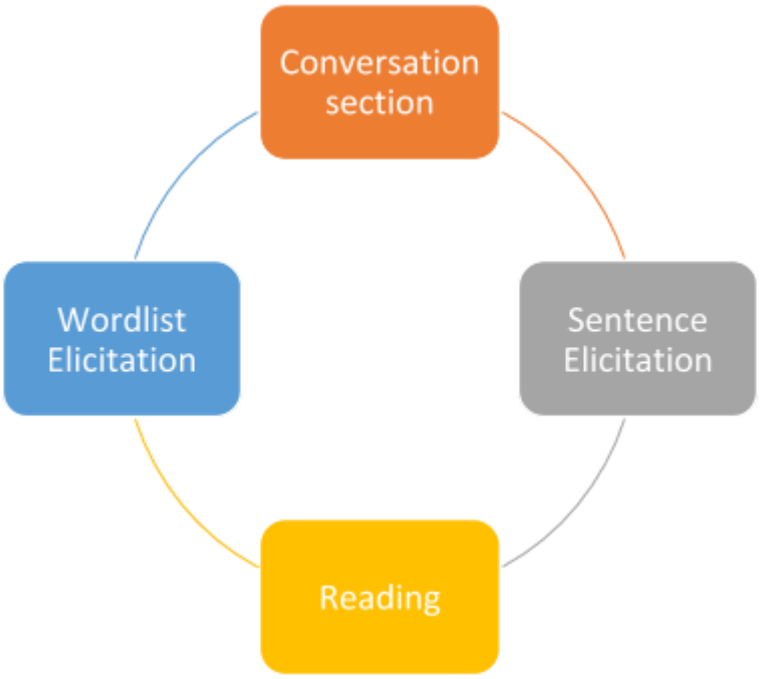
Stratified sampling was used to select participants where Buchstaller and Khattab describes this method of sampling, by dividing the main population into groups (78). In this case, the population of the year one students of the UWI, St. Augustine campus was divided into two groups being a linguistics first year course and a non-linguistics first year course. As a result, two independent variables arise, being the course, they are doing in the UWI and their gender. Independent variables are when their factors can cause an influence to another phenomenon, that being a dependent variable (Business Dictionary). The dependent variable would be the rhotic features being linking or intrusive r. The intended sample size equated to six (6) persons per cell as Meyerhoff and Schleef (2010) argue that this figure should suffice to make statistically sound generalisations about the data. As a result, the total number of participants were twenty-four (24).

Permission was requested from lecturers of the two courses, during the second semester in February. Once permission was granted, the participants were informed that this study is for the purpose of my research project for my degree and that I needed linguistic data in order to complete my study. After requesting both classes for their participation, another sampling strategy was needed, being, convenience sampling. This allows not only for recruiting subjects bearing representativeness in mind, but for convenience (Buchstaller and Khattab 76). Despite its convenience, the usage of this sampling method allows a survey of the field before using a more elaborate sample (Buchstaller and Khattab 76). Following access to the participants, the data contained numerical values in the case of recording how

many times the non-rhotic features occur, which would only supplement the research. The data required accumulated to approximately four (4) hours in total, as was recommended by Barclay (2017) with the time span for collecting the data amounting to four weeks.

3.2.1 Data Collection

The research methodology used for this study was iterative. Iterative methodologies are when each stage can be worked on at the same time as opposed to a linear methodology (Daden). This was selected due to the nature of this study being, identifying any occurring patterns of rhoticity, as each stage were not used to validate each other, but rather, to show results from different angles of the phenomenon. As a result, one can see triangulation being an important aspect of this study. Triangulation involves 'using multiple data sources in an investigation to produce understanding' (Cohen, Crabtree), with a method triangulation, being the type that was used. This helped identify the consistency of findings generated by different data collection methods (Cohen, Crabtree). The chart below shows the different methods used to generate the possible occurrences.



3.2.2 The Conversation Section

A semi-structured interview was utilized as the informal part of the interview. Participants were given five (5) open-ended questions apart from stating their age and the area that they are from. Another question that was used was for the participant to indicate if they spent any time out of the country for more than a year. This was asked to see if there may have been any outside influence responsible for their speech.

3.2.3 Sentence Elicitation Task

Participants were given a total of 53 sentences to read. This was one of the formal elicitations used as part of the study. The sentences in the sentence elicitation tasks were designed for the possible occurrence of linking r, intrusive r or r-colouring. There were thirteen (13) filler sentences which weren't engineered randomly but contained words where

rhotic speakers would realise a coda /r/, to provide evidence for speakers' rhoticity or non-rhoticity (Barras 2011).

3.2.4 Reading Task

Another part to the formal speech section was the use of a short passage. Participants were asked to read the story observing regular grammar protocols. This method was used by Barclay (2017) in her study which included the possible environments for linking r, intrusive r and r-colouring to occur. As opposed to the sentence task, where a longer pause length was used in-between sentences, the reading task allowed for the participant to read and pause at their own rate giving a different dimension in this task.

3.2.5 Wordlist Elicitation Task

The last elicitation task was a word list, which consisted of twenty (20) words. These words were selected to identify possible occurrences of r-coloured vowels as well. Only three (3) were filler words being *'speech', 'read'* and *'hawk'*. The majority of the word list contained words where the historical r was dropped according to Wells. However, the selection of the words was to see if coda r would be produced. The word list was also designed to examine homophonous words where some speakers may hypercorrect and use intrusive r in the example of the words, *'floor'* and *'flaw'*.

3.3 Limitations

The open-ended questions would not automatically guarantee participants' elicitation of linking r, intrusive r or r-colouring features. As a result, the questions used were on topics they would be able to generate a lengthy response which therefore, maintained the informal

part of the interview. Additionally, the wordlist elicitation task did not have words that would have elicited linking r or intrusive r features across internal morpheme boundaries.

Beyond this, the interviews were held separately as no group discussion was able to occur due to different schedules of the participants and researcher, which would have been an additional method with regard to informal speech. Apart from this, the interviews were conducted on different days in different settings on campus which could have affected the response levels of participants. With one on one interviews held, this would have possibly altered the speech of the participants as they may produce formal speech even in a relaxed setting. As a result, this may have had an effect on the results.

Due to the nature of the study, a large proportion of participants would have given a greater analysis on classes but time was a factor, which required the use of stratified sampling. Also, the researcher had no previous background in the use of the Praat software, which is used by linguists and speech pathologist in identifying speech sounds. As a result, this would have provided a spectrogram visual of the occurrences of the rhotic features. No software was used to collate these results though, as they were physically checked and rechecked to in the event of any human error.

3.4 Data Analysis

The selection of the data is based on the theory that Asprey alluded to, where the phonetic context that was most likely to produce /r/ in non-rhotic varieties would be following the schwa vowel and preceding a consonant (84). Additionally, Knútsson stated that the occurrence of “linking r” can be justified where it occurs intervocalically where the first vowel must be a non-high vowel being ([ɜ] [ə] [ɑ] [ɔ]).

One aim will be to identify if the theory applies to TrE, where /r/ is realised following non-high vowels including the schwa and preceding a consonant/vowel as the most likely environment to occur in. The next aim would be to analyse the inconsistencies of semi rhoticity occurring, as Ferreira and Drayton alluded to. In discovering if these theories hold, a further analysis will be undertaken to identify the contexts that these features do occur and what may contribute to them. The contexts they occur in can expand on further discussions as to why this may the case. The actual data was recorded on a Samsung J2 device. When all the data was collected, it was uploaded to a laptop. Then I used the program Audacity 2.2.2, to examine each interview identifying the occurrences that were relevant to this study. This program was used due to its ease of access and it also had an audio spectrum analysis. The recordings were replayed multiple times in order to determine where the features appeared with only linking r, intrusive r and r-colouring being the features examined. The data was then tallied to highlight the frequency in patterns.

All sets of data include potential instances of rhoticity, linking r and intrusive r and r-colouring. In the sentences task for example, (i) contains a potential instance of linking r. (ii) contains a potential instance of intrusive r while (iii) contains a potential instance of r-colouring together with a further potential instance of intrusive r.

(i) “The radio tuner always goes on the bottom shelf.”

(ii) “The tuna always sells out quickly.”

(iii) “I was sawing up some logs in the back garden.”

By coding each potential instance of r-colouring, linking-r and intrusive-r for its degree of constriction, frequency counts can be generated for all three types of r (Barras 2011).

One key factor was looking at the artificial (formal) speech versus natural (informal) speech. In the artificial speech the morpheme boundary linking r occurred most frequently, especially in the sentence elicitation task. There were also notable occurrences of r-colouring of the close mid central unrounded vowel /ɜː/, as indicated by Ferreira & Drayton. However, these features were not restricted by their variables as the occurrence of the morpheme boundary linking r happened with both courses and genders. With respect to r-colouring, only females made such a production. Additionally, only females displayed signs of semi rhoticity in their speech in the natural speech, as well as in the short story and wordlist tasks. In line with the research question, patterns were identified from different sections of the interviews.

Chapter 4: Results

The data collected can be broken down into the different areas of the interview. These being the conversation section, sentence elicitation, short story reading and wordlist. Accordingly, these will be used as categories to discuss the results from an open coding perspective. Thus, they can then be used to compare similarities and differences (Polit & Beck 2010). Tables will also be used in order to quantify the occurrences, as well as, providing a point of reference in the discussion section.

As highlighted before, the occurrence of /r/ would be intervocalically with the preceding vowel being a non-high vowel which includes the schwa (Asprey, Knútsson). Ferreira & Drayton also concurred that particular groups of speakers rhotacized only one of the three r-coloured vowels ([ɚ], [ɑ], [ɔ]) (10), that vowel being the close-mid central unrounded vowel [ɚ] and the open-mid central unrounded vowel [ɜ] (Wells 137). The natural speech was not a guided elicitation task, which therefore, left the possibility for any kind of production of rhoticity features being examined in this study. However, the artificial speech production was guided. Each elicitation task contained word and morpheme boundaries for linking and intrusive r using the non-high vowels mentioned previously, as well as, words with the postvocalic [ɹ] with the r-coloured vowels except the word list task. The word list task did not involve the possible occurrence of any word or morpheme boundary for linking and intrusive r.

RQ: What are the patterns of rhoticity occurring in the speech of some young Trinbagonian first year students at the University of the West Indies, St Augustine?

(i) Conversation Section

R-colouring

During the conversation section there were no occurrences of linking r or intrusive r in participants speech. However, participants did rhotacize the r-coloured vowels at least once. Of the Linguistics class, only two (2) females displayed this occurrence in words such as [ˈhɚd] "heard", [mɔˈ˞ʃɑlə˞ʤi] "morphology", [kɑ˞nəvəl] "carnival", [daɪˈvɚsɪti] "diversity" and [fɚst] "first". With respect to the Communications class only three (3) females displayed this occurrence in the words [wɚk] "work", [ˈvɚʌnɪkə] "Veronica", [fɚm] "firm", [kɑ˞nəvəl] "carnival" and [wɚdz] "words". The only word to occur more than once between both classes was "carnival". Table 1 shows how many times each r-coloured vowel occurred in natural speech among the variables

Table 1.

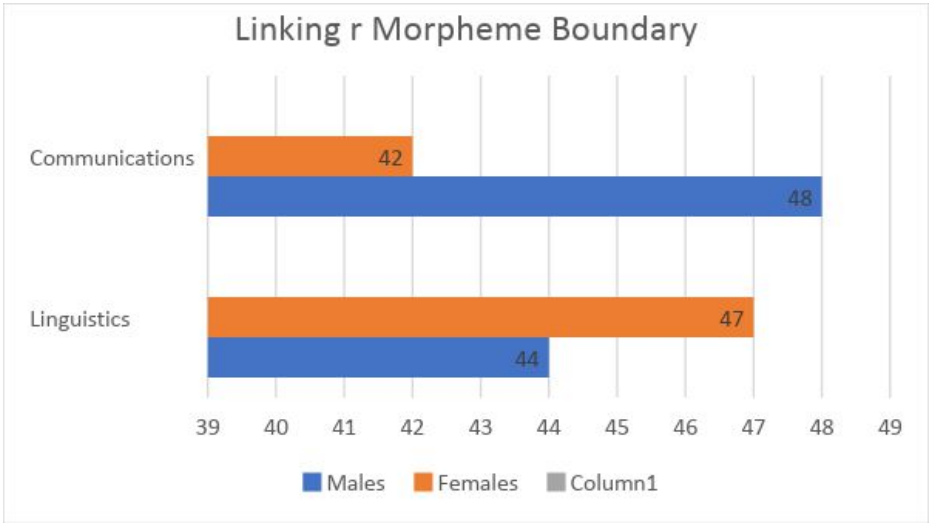
	Linguistics		Communications	
	Males	Females	Males	Females
ɚ	0	3	0	4
ɔ˞	0	1	0	0
ɑ˞	0	2	0	1

(ii) Sentence Elicitation Task

Linking r

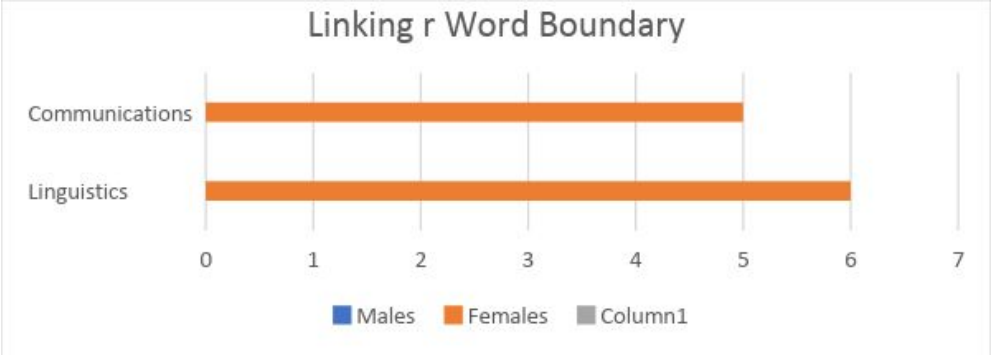
This task contained the highest frequency of rhotic features with linking r being mostly prevalent in morpheme boundaries where the preceding vowels were ([ə], [ɜ], [ɑ], [ɔ], [ɛ]). Within the sentences where linking r was produced there was no less than 67% of the 24 participants that produced it. Some of these sentences were "That bird has very *feathery* wings", "The workmen are *tarring* the road today, so there'll be delays", "That's an incredibly *furry* cat". The words in italics are the ones that contained the morpheme boundary linking r. Appendix A contains a full list of the sentences and their respective features placed for elicitation. Table 2 shows the distribution of morpheme boundary linking r in total.

Table 2.



However, the word boundary linking r occurred a lot among the participants. In fact, this feature only occurred eleven (11) times in total in the whole study compared to 181 times for morpheme boundary linking r. The sentence that had the most frequent occurrence was "The cat left fur everywhere" with three (3) from the linguistics class and two (2) participants from communications. Incidentally, all eleven (11) participants to produce this feature were female. Table 3 shows the distribution of linking r across word boundaries.

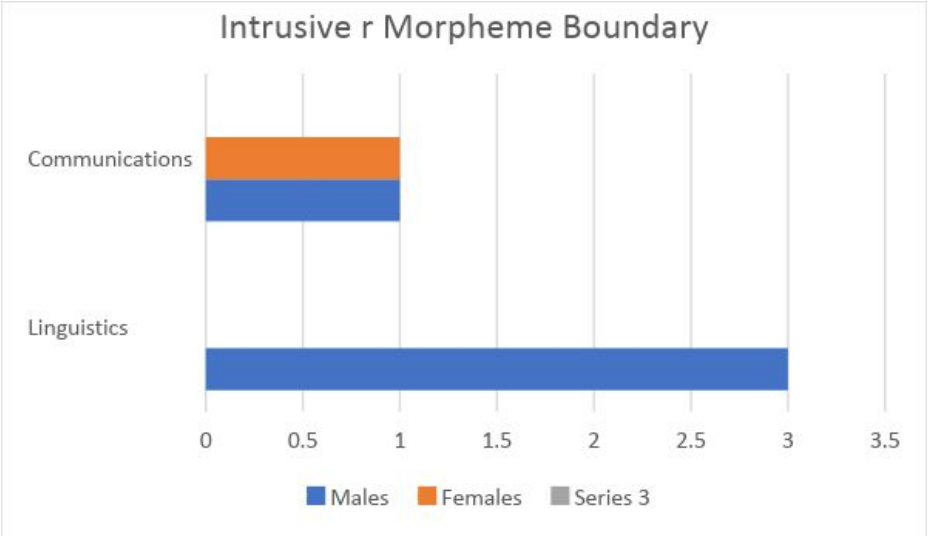
Table 3.



Intrusive r

Unlike the linking r feature there was a distinctive contrast in the occurrence of intrusive r across word and morpheme boundaries. Analysis shows that there were no occurrences for intrusive r across word boundaries. However, there was a total of five occurrences within morpheme boundaries between two sentences. These sentences being "You need to teach your cat that climbing and clawing are only allowed on her scratching post, not on your furniture" and "I was sawing up some logs in the back garden". The morpheme boundaries were [klɔɪŋ] "clawing" and [ˈsɔɪŋ]. An interesting point is that only one (1) female produced this feature of all participants to do so. Table 4 shows the distribution of intrusive r across morpheme boundaries.

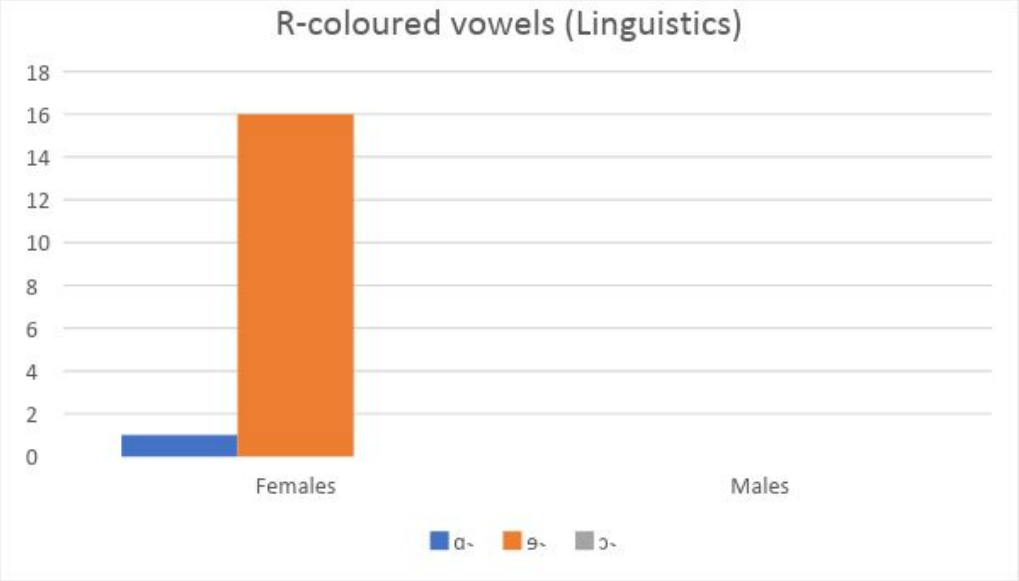
Table 4.



R-colouring

The sentence task also allowed for the production r-coloured vowels as part of the artificial speech aspect. Only one (1) female participant from the Communications class produced this occurrence once in the word [wɘ˞k] “work”. In the Linguistics class, four (4) females rhotacized their vowels from the list mentioned earlier ([ɘ], [ɑ], [ɔ]). The list of words that produced these occurrences were [fɘ˞st] “first”, [mɘ˞kəri] “Mercury”, [bɘ˞d] “bird”, [wɘ˞kmɛn] “workmen”, [gɑ˞ˈdən] “garden”, [wɘ˞k] “work”, [ɘ˞θ] “earth”, [bɘ˞nz] “Burns”, [sɘ˞ve:] “survey”, [ˈɕɘ˞mən] “German”, [hɘ˞] “her”. Table 5 shows how the occurrences of the production of the r-coloured vowels among the Linguistics participants.

Table 5.



(iii) Short Story Task

Linking r

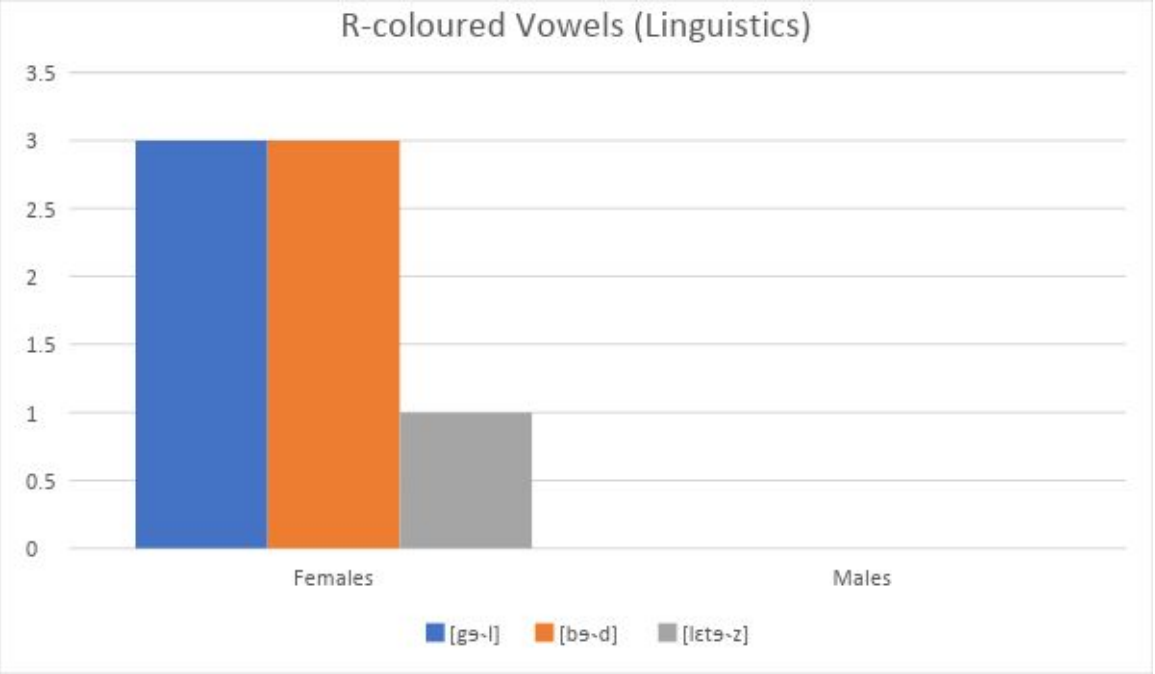
In this task, participants realized linking across word boundaries with the only one being in the phrase [‘fɑːɹəˌweɪ] “far away”. Only three (3) participants from the Linguistics class produced this occurrence where these same three participants produced r-coloured vowels in the sentence elicitation task. The other instances where linking r could have been realized did not occur, being, /lɛtəː and əː stɔːɹiː/ “letter and a story” and /mɔː aplˌz/ “more apples”.

R-colouring

The same four (4) participants in the Linguistics class that produced r-coloured vowels also did it here in the short story reading. These words were [gə˞l] “girl”, [bə˞d] “bird” and [lɛtə˞z] “letters” with “girl” and “bird” in particular occurring three times each.

The Communications class only had one occurrence of an r-coloured vowel from a female participant being the word [bɘ˞d] “bird”. Table 6 shows the frequency of occurrence among the Linguistics class for the r-coloured vowels.

Table 6.



(iv) Word List Task

<u>R-colouring</u>

This task was the least productive in terms of occurrences of rhotic features. There were only three (3) occurrences across both classes and genders with the word being [bɘ˞n] “burn”. These three occurrences were produced by females with one from Communications and two from Linguistics. There were homophonous pairs such as /flɔː/ “floor” “flaw”, /rɔː/ “raw” “roar” and /pɔː/ “paw” “pour”. However, these words occurred in isolation and

speakers avoided any hypercorrection that would have allowed the production of intrusive r in the words “flaw”, “paw” or “raw”.

Chapter 5: Discussion

5.1 Linking r

The frequency of occurrence of linking r in this study has varied. The theory that linking r is most likely to occur intervocalically with the preceding vowel being a non-high vowel does stand true. However, it is not a definite consistent occurrence. For example, in the natural (informal) speech section of the interview, there were no occurrences of linking r even though Ferreira & Drayton indicated that linking r can appear within informal speech. A reason for this non-occurrence could be due to the fact that there was no level of familiarity between the participant and the interviewer.

Despite this, the sentence elicitation task saw a more consistent level of linking r occurring. Two instances where linking r had a strong occurrence were when the suffix (-y) and (-ing) were added. In words like "*tarring*", "*barring", "feathery" and "furry"* the occurrence was over 50% across morpheme boundaries. Compared to the other elicitation tasks, this one stood out as the highest productive task. An interesting point was that there was no huge disproportion of occurrence in the variables of gender or class. This does not confirm or deny previous studies but it does indicate that linking r does not necessarily occur based on gender or education. Contrastively, external word boundaries rarely displayed an occurrence of linking r with the ratio being 16:1 with the occurrence of morpheme boundary linking r. But its occurrence does allude to the fact that it has to occur intervocalically because the preceding vowel on the times it did occur was the close-mid central unrounded vowel [ɘ] which confirms the theory of Knútsson. This being said, linking r in TrE is most likely to be produced within a morpheme boundary intervocalically, preceded by a non-high vowel and followed by the suffix [-ɪŋ] or [-i].

5.2 Intrusive r

Intrusive r has seen a number of studies conducted, as it does not follow a rigid concept like linking r. As Ferreira & Drayton highlighted, intrusive r rarely occurs in TrE. The results of this study, aligns with what they indicated as there were barely any consistent results of intrusive r occurring in TrE. Across the different areas of the interviews, intrusive r occurred five (5) times in total, all of which were in the sentence elicitation task. The only occurrence was following the back open-mid rounded vowel [ɔ]. However, the orthography in which these occurrences were made was "*clawing"* and *"sawing*". 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) which was the case for these occurrences.

Another point lies in the form of one of the variables, where all except one participant were male in producing this feature. It would be easy to assume that males are more probable to display intrusive based on such a low occurrence. As noted before, the occurrence of intrusive r is more varied but also rare in TrE. One can only assume if the occurrence becomes more frequent within the data to provide such justification. Additionally, with the sentence task being the only area this feature occur, there isn't much justification from other areas of the interview to draw up a conclusion.

5.3 R-colouring

Among all features, this was the only one to show some level of consistency in occurrence in all areas of the interview. 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]. The previous study by Barclay also highlighted the occurrence of r-coloured vowels in TrE among children, retaining this notion made by Ferreira & Drayton.

However, this study had a consistent level of production with regard to the participants who produced this feature with all being female. Ferreira & Drayton raised the point that the close-mid central unrounded vowel [ɘ] tends to be rhotacized by a social group in particular, being the "Convent accent". The closest background attained from participants were the area they were from which would not provide a direct link to their secondary school education. But results show that the same vowel [ɘ] is rhotacized the most among the three possible vowels. This indicates that the females who produced this feature may have had exposure to the social class mentioned earlier. The representation of those that produced this feature amounted to 29% of the total population and 58% of the total number of females that participated.

The difference with this disproportion within the variable of gender compared to intrusive r, is that the r-coloured vowels occurred across artificial and natural speech. Additionally, based on previous studies, the vowel highlighted for the possible occurrence of the rhotacized vowel occurred 86% of the time of the total number of occurrences for all rhotacized vowels. One can possibly draw a hypothesis, that females are more than likely to

rhotacize their vowels, especially the close-mid central unrounded vowel [ɘ], in TrE. However, this only shows that TrE is displaying levels of being semi-rhotic still.

5.4 Comparison of Features

Indeed, the results do confirm that TrE is semi-rhotic with this study providing supporting evidence to the studies of Ferreira & Drayton and Barclay. With respect to the Caribbean, Jamaican English is also a semi rhotic variety of English but this was confirmed before this study. In comparing TrE and JE, there are still differences where TrE is still showing inconsistent signs of rhoticity especially in the case of intrusive r. However, the only new theory to come out of this study would be the occurrence of the linking r feature intervocalically with the specific environments mentioned previously in Chapter 4. Additionally, the features generally occurred within artificial speech as opposed to natural speech. This can be due to the visuals of the orthographic transcriptions backed with their education background of how a word should sound. As a result, the level of occurrence between formal and informal speech highlights that formal speech is more likely to produce rhotic features.

5.5 Comparison of Variables

In the entire study, female participants displayed rhotic features more than males. In total females produced rhotic features 57% of the time compared to 43% of males. However, this figure is heavily influenced from the occurrence of linking r as it covers the majority of occurrences. Without the linking r feature, females produced the other rhotic features at 91% compared to 9% for males. One factor that could have contributed to this would be the previously mentioned social class, being the ‘Convent accent’. This assumption could be made due to the occurrence of the rhotacized vowel [ɘ˞]. Other factors are unaccounted for at

this point as there wasn't a large background check done on the participants. One can also argue that there is a larger population in the UWI which could reflect a larger number of females producing rhotic features but these representations were taken from two classes and not a subset of the entire University population. As a result, looking at the most prominent occurrence, being linking r in this study, there isn't a large disproportion of occurrence between males and females.

Another argument would be that students of the Linguistics class may have some level of background with regard to sound production. However, this would not control their phonological production which would have been developed prior to entering the UWI. Between the two classes, the production of rhotic features amounted to 56% from the Linguistics class and 44% of the Communications class. This statistical data shows that there is a slightly stronger occurrence among participants in the Linguistics class. However, it should not be discredited of the percentage for those in the Communications class which should eliminate the assumption that a background on Phonology could contribute to the production of rhotic features.

Another factor to take into consideration is that even though all participants are Trinidad natives, only one participant spent more than six months of her education in Barbados, with Barbados being a rhotic variety of English. Indeed, her production of rhotic features may have been influenced by this as this participant accounted for 9.5% of the total amount of times all the features were produced. Language contact and her language development in this case, could have contributed to her level of rhotic production.

Chapter 6: Conclusion

This study aimed to evaluate the patterns of rhoticity occurring in the non-rhotic variety of TrE. The focus was on the UWI population as previous studies were conducted on children and an older generation over the age of 30. A study of this nature would have supported previous studies completed on TrE, as well as, building on the linguistic profile that already exists where TrE has been showing signs of inconsistent semi-rhoticity.

This study focused on the patterns of occurrences where the environments that they occurred would be of importance. The features examined were linking r, intrusive r and r-coloured vowels with confirmations being made on the theory that /r/ is realized intervocalically or following a non-high vowel and preceding a consonant. More specifically, the non-high vowels would be ([ɜ] [ə] [ɑ] [ɔ]) (Knútsson), where they are more likely to occur for the linking r feature. The same applies for the rhotacized vowels ([ɚ], [ɑ˞], [ɔ˞]) where all vowels were rhotacized at least once in this study confirming this theory (Ferreira & Drayton). However, a deeper explanation was provided for the occurrence of linking r across morpheme boundaries. Where the it is most likely to occur intervocalically preceding the vowel /ɪ/ in the suffix [ɪŋ] and the vowel /i/ from the suffix [i].

The most prominent feature that occurred was linking r with the least being intrusive r. Previous studies highlighted this occurrence with this study supporting that theory. Additionally, morpheme and word boundaries were used between linking r and intrusive r, particularly in the sentence task to see if there would be a variation of results or consistency in occurrences. The only consistencies were that linking r occurred in morpheme boundaries, as highlighted previously and that intrusive r rarely occurred. Another aspect that was examined was natural speech versus artificial speech with the natural speech of participants

rarely producing any amount of rhotic features. In contrast, the artificial speech produced the majority of rhotic features indicating that formal speaking is more likely to illicit rhotic features in TrE. R-coloured vowels also occurred across all aspects of the interviews showing that this was the most consistent feature with respect to appearing in all four sections.

The data was analysed with support of quantifiable data to give a visual representation of the occurrences with respect to the pattern being identified. Also, independent variables were included to see the distribution of occurrences between classes and gender. However, this was not a sociolinguistic study, so these variables were used as support rather than the main focus of the study. Despite this, the data showed that the Linguistics class and females overall produced more rhotic features across the study. There was no major disproportion in occurrences apart from intrusive r and r-colouring between females and males but one female speaker attained some of her education in a rhotic variety of English which contributed to the results.

Overall, this study shows that TrE is showing more consistent signs of becoming semi-rhotic. However, further studies on a larger scale has to be carried out in order to get a greater analysis of rhoticity in TrE. Additionally, a group setting is recommended for future studies that can illicit speech among participants especially those who are comfortable with each other. This would contribute to the natural aspect of speech as there was not much to go from in this study. Four (4) hours of data was gathered but for a study on a larger scale, more will be required especially when trying to gather the occurrences of features during a semi-structured interview. Finally, it is advised that getting all or the majority of participants interviewed in the same setting can contribute in giving all participants an equal environment to be interviewed in, minimizing possible influence of results due to different environments.

Appendix A

Key: MB – Morpheme Boundary, WB – Word Boundary

1. The radio tuner always goes on the bottom shelf. (WB linking r)

2. Dogs like to gnaw on bones. (WB intrusive r)

3. The gate was barring our way so we climbed over it. (MB linking r)

4. The first four planets in the solar system are Mercury, Venus, Earth and Mars. (Filler sentence)

6. The birds soar up in the sky but you can still hear them singing. (WB linking r)

7. When we went on holiday there was a spa in the village. (WB intrusive r)

8. Use a garden fork to break up the soil. (Filler sentence)

9. She kept making these long drawn out “ummmm” and “uhhhh” noises. It was so annoying that I said, “Stop umm-ing and uhhh-ing and get on with it!” (MB intrusive r)

10. Look at that car over there: it’s bright yellow. (WB linking r)

11. He uses a lot of slang. He says yeah instead of yes. (WB intrusive r)

12. I got a referral to see a specialist next week. (MB linking r)

13. In England people sometimes call William Shakespeare “the bard” but in Scotland they use that word to describe Robert Burns. (Filler sentence)

14. I stare every time I see a Rolls Royce go by, in case someone famous is in it. (WB linking r)

15. When he can't think of the answer he just goes "Uhhh" until someone else says it. (WB intrusive r)

16. Port of Spain is the capital of Trinidad. (Filler sentence)

17. I'm going to make a withdrawal from the bank. (MB intrusive r)

18. The cat left fur everywhere. (WB linking r)

19. There's a difference between a comma and a full stop. (WB intrusive r)

20. The price of gas keeps soaring up higher and higher these days. (MB linking r)

21. It's always a good idea to take an Ordnance Survey map if you go hill walking. (Filler sentence)

22. A metal ruler always comes in handy when you're doing DIY. (WB linking r)

23. Guess what? I saw an elephant in town today. (WB intrusive r)

24. He shoulda eaten something before he set off. (Intrusive r Reduced vowel)

25. I adore all dogs, especially German Shepherds. (WB linking r)

26. We're flying to Panama on Tuesday from Manchester Airport. (WB intrusive r)

27. They were just staring at it in disbelief. (MB linking r)

28. I think Emma'll be here soon. (Intrusive r Reduced vowel)

29. He had a big scar on his cheek. (WB linking r)

30. I was stirring the mixture just like the recipe told me to. (MB linking r)

31. The ice-cream has a kind of vanilla-y taste. (MB intrusive r)

32. Don't leave the window open, there's a wasp just outside. (Filler sentence)

33. That bird has very feathery wings. (MB linking r)

34. You need to teach your cat that climbing and clawing are only allowed on her scratching post, not on your furniture. (MB intrusive r)

35. How do Angela and Becky cope with the stress? (WB intrusive r)

36. She thought the kitten was adorable. (MB linking r)

37. We were um-ing and ah-ing for ages. (MB intrusive r)

38. I sent a letter and a postcard when I was on holiday. (WB linking r)

39. The workmen are tarring the road today, so there'll be delays. (MB linking r) ɑ

40. I said I was gonna and I did, so there! (Intrusive r Reduced vowel)

41. It's got a more intense flavour if you like spicy food. (WB linking r)

42. My grandma always likes a cup of tea. (WB intrusive r)

43. That apple crumble tastes a bit pearish. (MB linking r)

44. You hafta investigate the situation before you start accusing people. (Intrusive r Reduced vowel)

45. Do ya always talk so loudly? (Intrusive r Reduced vowel)

46. That's an incredibly furry cat. (MB linking r)

47. They swear all the time while they're at work. (WB linking r)

48. You need butter and lard if you're making shortcrust pastry. (Filler sentence)

49. The tuna always sells out quickly. (WB intrusive r)

50. I suppose it was quite a humorous story, but I didn't find it very funny. (MB linking r)

51. I was sawing up some logs in the back garden. (MB intrusive r)

52. You need to stir everything together thoroughly. (WB linking r)

53. This cake is really moreish—I can't stop eating it! (MB linking r)

Appendix B

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.

Appendix C

Word List

Four Burn

Floor	Story
Speech	Cure
Fear	Raw
Cunupia	China
Flaw	Hawk
Bear	Pour
Curry	Fork
Arima	Read
Roar	Paw

Works Cited

Asprey, Esther. "Investigating Residual Rhoticity in a Non-Rhotic Accent." Citeseerx, The Pennsylvania State University, 2006, citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.597.6249.

Babbie, Earl R. The Practice of Social Research. 12th ed. Belmont, CA: Wadsworth Cengage, 2010; Muijs, Daniel. Doing Quantitative Research in Education with SPSS. 2nd edition. London: SAGE Publications, 2010.

Barclay, Keneisha. "Semi-Rhoticity of Trinidadian English of 7-8 year olds." 2017. Unpublished undergraduate Linguistics project. The University of the West Indies, St. Augustine.

Barras, William Simon. “The Sociophonology of Rhoticity and R-sandhi in East Lancashire English”. Diss. University of Edinburgh, 2010, pp. 1-268.

Buchstaller, Isabelle, et al. “Population Samples.” Research Methods in Linguistics, edited by Devyani Sharma, Cambridge University Press, 2013, pp. 74–95, www.scribd.com/doc/224338270/Research-Methods-in-Linguistics.

Cassell, Catherine, and Gillian Symon. Essential Guide to Qualitative Methods in Organizational Research. SAGE, 2004, books.google.tt/books?id=1rPSA16gxIwC&dq=what+is+an+intrinsic+case+study&lr=&source=gbs_navlinks_s.

Creswell, John W. Research Design: Qualitative and Quantitative Approaches. Sage Publications, 1994.

Cohen, D., and Crabtree, B. “Triangulation.” Robert Wood Johnson Foundation, RWJF, 2008, www.qualres.org/HomeTria-3692.html.

Daden, Tom. “The Difference Between Iterative and Linear Methodologies.” Prezi.com, 1 Feb. 2013, prezi.com/jr12s9wrqynt/the-difference-between-iterative-and-linear-methodologies/.

Ferreira, Jo-Anne S. “(A Brief Overview of) The Sociolinguistic Situation of Trinidad and Tobago.”, pp. 1–17. Guest lecture given at the Departamento de Línguas Clássicas e Vernáculas (LIV), Instituto de Letras, Universidade de Brasília (15 May 1997). www.academia.edu/2573401/_a_brief_overview_of_the_sociolinguistic_history_of_trinidad_and_tobago.

Ferreira, Jo-Anne S., with Kathy-Ann Drayton: “Trinidadian English: A Phonetic Illustration.” Unpublished article. pp. 1–10.

Gick, Bryan. 1999. “A Gesture-Based Account of Intrusive Consonants in English”. Phonology 16. Cambridge University Press. pp. 24–54.

Knútsson, Pétur. “Linking (and ‘Intrusive’) r.” Topics Template, University of Iceland, 17 Oct. 2017, notendur.hi.is/peturk/KENNSLA/02/TOP/rlinking.html.

Madrigal, Demetrius, and Bryan McClain. “Strengths and Weaknesses of Quantitative and Qualitative Research.” UXmatters, Pabini Gabriel-Petit, 3 Sept. 2012, www.uxmatters.com/mt/archives/2012/09/strengths-and-weaknesses-of-quantitative-and-qualitative-research.php.

Mc Carthy, John J. "A Case of Surface Constraint Violation." Canadian Journal of Linguistics 38(2) (1993): 171. Web. 30 Apr. 2018.

Meyerhoff, Miriam, et al. Doing Sociolinguistics. Routledge, 2015, file:///C:/Users/Justin/Downloads/MacKenzie,%20Laurel%3B%20Meyerhoff,%20Miriam%3B%20Schleef,%20Erik%20Doing%20sociolinguistics%20%20a%20practical%20guide%20to%20data%20collection%20and%20analysis.pdf.

“Overview of Mixed Methods.” Center for Innovation in Research and Teaching, CIRT, cirt.gcu.edu/research/developmentresources/research_ready/mixed_methods/overvie.

Polit, Denise F., and Cheryl Tatano Beck. Essentials of Nursing Research. Lippincott Williams & Wilkins, 2010.

Roach, Peter. “Nasals and Other Consonants.” English Phonetics and Phonology. 2nd ed., Cambridge University Press, 1991, pp. 60–61.

Sazbo, Petra Florina. “Social and Regional Variation of intrusive /r/.” 2015. Eötvös Loránd University, Budapest. http://seas3.elte.hu/odd/odd9/04_SZABO_Petra_Florina.pdf

“Sonority Scale.” SIL Glossary of Linguistic Terms, 24 Apr. 2017, www.glossary.sil.org/term/sonority-scaleSóskuthy, Márton. 2009. Why r? An alternative look at intrusive-r in English. Master's thesis, Eötvös Loránd University, Budapest. http://www-users.york.ac.uk/~ms1341/soskuthy-ma-thesis-intrusive-r-2009.pdf

Strauss, Anslem L. and Juliet M. Corbin. “Basics of Qualitative Research.” 1990 Second Ed. Vol. 15. Newbury Park, CA: Sage.

Tashakkori, Abbas, and Charles Teddlie. Mixed Methodology: Combining Qualitative and Quantitative Approaches. vol. 46, Sage Publishing, 1998, books.google.tt/books?id=qtW04-pRJZ0C&printsec=frontcover&dq=tashakkori+and+teddlie+1998&hl=en&sa=X&ved=0ahUKEwj1_KPK6fvXAhWNSd8KHTLlAWEQ6AEIJzAA#v=onepage&q=tashakkori and teddlie 1998&f=false.

Wells, John C. Accents of English, Vol. 1. Cambridge UP, 1982.

Wells, John C. Accents of English, Vol. 3. Cambridge UP, 1982.

Western Australian Centre for Health Promotion Research, “Data Collection Methods” 2010, My-Peer Toolkit, http://mypeer.org.au/monitoring-evaluation/data-collection-methods/

"What Is an Independent Variable? Definition and Meaning." BusinessDictionary.com, WebFinance Inc., www.businessdictionary.com/definition/independent-variable.html.

Wiese, Richard. The Representation of Rhotics. Research Gate, ResearchGate, 2011, www.bing.com/cr?IG=6F27A1D819E241B8BBE087BDF35AE77D&CID=2ABE310B8F0C6FAC28123A588EA36E3B&rd=1&h=PfE46Rydxuq6uAfntSqhX-6-TICW3Y-4WmnQRhv40Ec&v=1&r=https%3a%2f%2fwww.researchgate.net%2fpublication%2f259082119_The_Representation_of_Rhotics&p=DevEx,5066.1.