EXPLICIT INSTRUCTION OF RHOTICITY: TEACHING THE PHONOLOGICAL FEATURES OF INTERNATIONAL VARIETIES OF ENGLISH TO IMPROVE THE LISTENING COMPREHENSION OF ENGLISH LEARNERS

by

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A capstone submitted in partial fulfillment of the
requirements for the degree of Master of Arts in English as a Second Language.

Hamline University
Saint Paul, Minnesota
December 2013

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CHAPTER ONE: INTRODUCTION

In an increasingly connected world, English learners (ELs) may come into contact with a wider variety of people than ever before from the vast, diverse group of English speakers. The English speaking world comprises up to 1.5 billion people according to recent estimates (Crystal, 2003b). Although some ELs may only come into contact with a small number of varieties of English, other ELs may connect with a much larger or more unpredictable numbers of varieties of English. For instance, some ELs want to travel internationally or close international business deals. Other ELs want to work in areas like international journalism or take courses in English at university. These goals could bring them into contact with people who speak an unfamiliar variety of English.

In areas like international business, it is possible to end up needing to negotiate with people from nearly anywhere. If a company in Japan makes a deal with a company in Australia, will the Japanese employees understand the Australian employees' speech? What if the next year the company makes a deal with a company in Northern Ireland? Or Singapore? How well will the ELs involved manage to understand their new international colleagues during high pressure conference calls?

International English presents a linguistically complex situation. For those who have to negotiate with many varieties, listening in a second language to some of those varieties can be a challenging task. It can also be a challenge to know how to begin to help ELs develop ways of grappling with this variation in order to use English

successfully with whomever they may end up speaking to in the future.

Background of the Researcher

As an American English speaking teacher of English as a Second Language (ESL) who has taught in both England and Australia, I have seen how coping with different varieties of English can be a challenge for ELs. Many of my students have had difficulty with listening comprehension in England and Australia, possibly because they studied only American English in their home countries. Frequently in classes I have taught, variety specific features like rhoticity that affect many words, were unknown to ELs or created points of confusion. Other ELs I have known over the years have told me anecdotes about meeting someone from Australia, India, or Scotland, and how they suddenly felt as though they barely knew English even if they could use English well with speakers of Standard American English (SAE) or Standard British English (SBE). SAE is the American English typically used in news broadcasts; SBE is the English of educated speakers from the South East of England. SBE is a modified form of Received Pronunciation (RP), in that it frequently has innovations that RP speakers do not use. It is more commonly used than RP. It can also be referred to as Near RP (Sachiko, 2009).

Comprehension of unfamiliar varieties has been difficult for friends who have studied and used English extensively. I have a Brazilian friend who has been living in Los Angeles for several years and has strong SAE listening and speaking skills. When she visited me in the South of England, she found listening comprehension much more difficult. ELs around the world face a similar predicament. Even after years of English study, some ELs say they continue to struggle with English listening (Vincent-Durroux &

Poussard, 2009). Many of them feel comfortable reading English but find breaking a stream of speech down into comprehensible units challenging (Huang, 2006). Could some of this be due to a lack of knowledge about phonological differences among different varieties of English?

Although I am working with ELs in England, most of my students have not been interested in living in England in the long term. I believe it likely that though few of them would use the term themselves, they are in fact EIL (English as an international language) ELs, rather than English as a Foreign language (EFL) or ESL ELs. As ELs learning EIL, their needs are likely to be different. With goals like engaging in international business, journalism and travel (Friedrich, 2000; Friedrich, 2003), being familiar with more than one variety of English would be useful.

This problem is far from unique to English. Any language that has a global distribution like French or Spanish is bound to have significant differences among varieties that are potential problems for learners of those languages. I learned about variety-related listening comprehension difficulties as a student of Portuguese, another language spoken in different ways depending on where one is in the Portuguese-speaking world. Until I had studied the connection between the sound system and the written language and how this changes according to region, I had difficulty understanding any variety of spoken Portuguese despite being able to read proficiently. Once I had studied the connection between pronunciation and orthography in the various regions of Brazil, my listening comprehension greatly improved. I could finally make the connections between what I had been hearing and my previously acquired written knowledge of the

language.

This contrasted strongly with my experience in Spain a few months later. A few months before going to Spain I took a course called Hispanic Linguistics. One of the modules was on the phonology of Spanish. I not only arrived in Spain having studied the basics, but I was aware of various allophones, such as those of /d/, /g/ and /b/ between vowels, and socio-economic and geographic variations, such as the variations of /s/ and the use of *ceceo*. I stepped off the plane conversing easily with my host family and teachers in Spain. My Brazilian experience, however, was a struggle to understand speech at all for the first several weeks until I studied the connections between what I was hearing and what I already knew how to read.

Role of the Researcher

In order to research the effects of explicit instruction on listening comprehension, I created a lesson with the intention of teaching the lesson to ELs living in the local area. I searched for participants by posting advertisements on Gumtree, an online message board. Gumtree has a section dedicated to connecting language learners with language teachers or other types of second language exchange. All participants were adult volunteers interested in improving their listening. I chose to advertise for participants instead of asking private students because I was not teaching regularly at the time of the study.

Rhoticity

I chose to focus on rhoticity because affects the pronunciation of many common words and it may be a more teachable rule compared to /t/ variation, for instance, which

varies much less predictably across the varieties of English. More than this, McMahon, Heggarty, McMahon and Maguire (2007) suggested a correlation between rhoticity, non-rhoticity and phonetic similarity. That is, rhotic varieties are more generally similar to each other than they are to non-rhotic varieties phonetically. Non-rhotic varieties are more similar to each other than to the rhotic varieties. Their study involved comparing phonetic features of several varieties of English. All non-rhotic varieties of British English were grouped with Victoria (Australia) English whereas Irish and Scottish varieties, despite their geographical proximity to England, were grouped with SAE. They suggested that their findings may indicate that whether a variety is rhotic or non-rhotic unifies varieties in a significant way.

Today, most of the people in England speak a non-rhotic variety of English; only speakers from the South West retain rhotic pronunciation.

The varieties of English spoken in Wales, New Zealand and Australia are also non-rhotic, as can be seen in Figure 1.

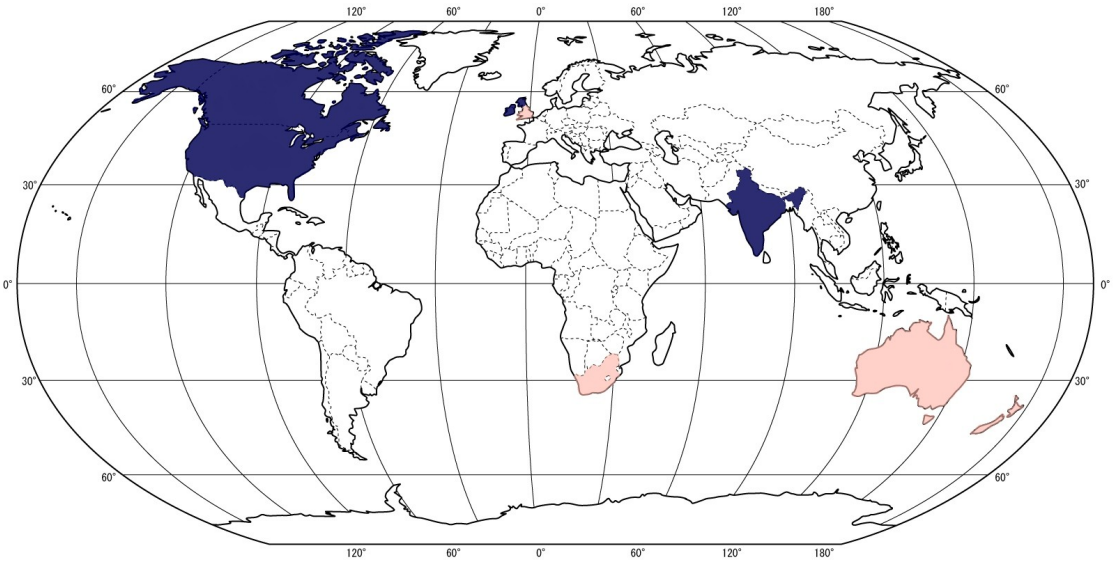

Figure 1: Rhoticity and Non-Rhoticity in the English Speaking World
Predominately rhotic countries are in blue, predominately non-rhotic countries are in pink

People in Scotland, Ireland and Northern Ireland speak rhotic varieties of English. Most North Americans speak rhotic varieties of English (Crystal, 2003a). There are some traditionally non-rhotic regions in the United States, but most of these are shifting toward rhoticity (Baranowski, 2007; Hinton & Pollock, 2000; Strand, Wroblewski & Good, 2010). In India, South Africa and the Caribbean, there is great variation in that rhoticity relates to social class, gender and the influence of other languages. For instance, Afrikaans-speaking South Africans are more likely to speak a rhotic variety of English than other South Africans (Crystal, 2003a).

Defining Rhoticity

In rhotic varieties, /r/ pronounced in all positions. There is a phenomenon called r-coloring in some rhotic varieties of North American English, including, SAE, that is common and tends to strongly influence the realization of vowels followed by /r/. For instance, the difference between /ɪ/ and /i/ is neutralized before /r/ in words like *beer*, as is the difference between /ɛ/ and /e/ in a word like *bear* (Clark and Hillenbrand, 2003). Similar r-coloring occurs in words like *door* and *star,* which does not occur in any non-rhotic varieties (Clark and Hillenbrand, 2007).

Defining Non-Rhoticity

In non-rhotic varieties, the realization of /r/ changes. Word initially, intervocalically or in a consonant cluster, /r/ is pronounced as a rhotic consonant, while in other positions the sound value of /r/ changes. In most non-rhotic varieties, /r/ becomes schwa in words like *fear*, */fiə/,* and lengthens the vowels in words like *star*, /stɑ:/, and *port*, /pɔ:t/.

The change from /r/ to schwa in non-rhotic varieties has caused an assortment of triphthongs to exist that do not exist in rhotic varieties such as /faɪə/ in fire. In addition, in non-rhotic varieties, the pronunciation of some sets of words, such as *pander-panda*, /pændə/*,* and *source-sauce*, /sɔ:s/ have become homophones. There is also a phenomenon called linking or intrusive /r/. In the case of linking /r/, /r/ will only occur if a vowel follows. Linking /r/ occurs across the boundaries of words *Africa and Asia*, /æfɹɪkə˞ndeɪzə/, and within a word, *drawing,* /dɹɑɹɪŋ/. Linking /r/ causes words like *sawing* and *soaring* to be homophones in most non-rhotic varieties (Heselwood, 2009). In

Australian and New Zealand English, the merging of /ɪ/ and /ə/ have led to another set of non-rhotic related mergers, like *dancers-dances,* /dænsəz/*,* and *boxers-boxes*, /boksəz/ (Watson, MacLagan, & Harrington, 2000). All of this complexity in regard to rhoticity has the potential to confuse ELs who are unaware or have a low level awareness of non-rhoticity.

Rhoticity is a feature that leads to many differences between varieties of English. To an EL, these variations may appear to be random instead of a single, systematic variation among varieties of English. This complex rule may be difficult to acquire without explicit instruction. This rule is important for ELs to be aware of if they want to speak to people from many parts of the English-speaking world.

Guiding Questions

In order to answer the following questions, a group of adult ELs will participate in a short course on rhoticity in the hope of improving their listening comprehension: With this study, I will address the following questions:

1) Can ELs without previous explicit instruction on the topic of rhoticity
    i. understand words affected by rhoticity?
    ii. identify the varieties of the speakers?
    iii. hold a preference for a variety?
2) Does this preference influence comprehension?
3) Given instruction in rhoticity, do ELs' aural comprehension of different varieties of English improve?
4) Given instruction in rhoticity, do ELs consider studying rhoticity in the context

of different varieties of English useful?

Summary

In Chapter One I introduced my research topic. I discussed my interest in phonological language variation and listening comprehension. I explained my personal experience with L2 listening as a learner of Spanish and Portuguese and as a teacher of international ELs. I discussed how these experiences inspired my interest in the potential benefit of explicit teaching of variety-related features of varieties of any language with extensive variation. I introduced the context of the study, that is, the increasingly international position of English in the world. In Chapter Two, I present a review of literature relevant to my research questions including the challenges of listening comprehension; perception, production and their relationship to EL expectations; awareness and attitudes of varieties; the relationship between experience with L2 and listening comprehension; and the effect of explicit teaching on listening. In Chapter Three I present the methodology of the study, which includes pre- and post-testing of all participants, pre- and post-study survey, and the implementation of a short course on phonology focused on rhoticity. Chapter Four presents the results. In Chapter Five I reflect on the data collected. I also discuss the limitations of the study and the potential benefits of the findings. I then make suggestions for further research.

CHAPTER TWO: LITERATURE REVIEW

The purpose of this study is to find out if explicit instruction on rhoticity in the context of international English learning improves listening comprehension of different varieties of English. In particular, my questions are:

1) Can ELs without previous explicit instruction on the topic of rhoticity

   i. understand words affected by rhoticity?

   ii. identify the varieties of the speakers?

   iii. hold a preference for a variety?

2) Does this preference influence comprehension?

3) Given instruction in rhoticity, do ELs' aural comprehension of different varieties of English improve?

4) Given instruction in rhoticity, do ELs consider studying rhoticity in the context of different varieties of English useful?

Through this study, I offered explicit instruction on rhoticity to ELs in the South East of England and measured its effects on listening comprehension. In the end, I will determine whether explicit instruction on the phonological feature of rhoticity can help adult ELs improve listening comprehension of varieties of English.

This chapter presents an overview of listening comprehension in international contexts. It discusses the relationship between production, perception and expectations of what ELs think they will hear. It examines how much awareness ELs have of

different varieties and what ELs think of them. It discusses how awareness of different varieties impacts on listening comprehension. It reviews what is known about acquisition and comprehension of variety-specific features. Finally, I present research on the explicit teaching of phonological concepts and its link to overall listening comprehension.

Listening Comprehension

Listening comprehension is essential for most non-written communication, both for L1 and L2. Listening comprises 40-50% of our communication; followed by speaking with 25-30%; reading with 11-16% and writing with only about 9% (Gilakjani & Ahmadi, 2011). What people end up listening to can be related to nearly any area in life and, unlike many formal written texts, the speaker may change topic without much warning (Hamouda, 2012). Not being able to understand what is being said can lead to misunderstandings and frustration (Chan, 2011). Despite its importance to our overall communication, listening can be one of the most challenging areas of language to acquire as an adult. It has also been researched the least of all the main language skills and is the least well understood of the skills (Hamouda, 2012; Vandergrift, 2007), possibly because it is largely unobservable (Graham, 2006). Listening comprehension is a challenging area of language in which to become proficient, even with homogeneous input in a relatively uniform speech community. The English-speaking world is far from homogeneous, which can make learning to listen proficiently difficult for ELs who need to speak with people from multiple places.

In a study in Saudi Arabia, Hamouda (2012) examined the problems that ELs have with listening. As can be seen in detail in Appendix A, the majority of the ELs in

the study rated their listening skills as poor or average. Many also found listening to be always or usually difficult. Many ELs also found it difficult to recognize words they knew because of how they were pronounced. More than half usually or always had difficulty with known words in a stream of speech. Many had trouble with the difference between careful and casual pronunciations. Some ELs reported that they had trouble noticing auxiliaries and that the words seemed to blend together in speech by native speakers (Hamouda, 2012).

A group of English speakers who were learning French in Great Britain had problems similar to those found in Hamouda's 2012 study. When questioned about their listening, the majority of a group of 16-18 year olds felt listening was their weakest skill, even after years of French study. Even after 6-8 years, most learners of French felt strongest in reading and speaking and still weak in listening. Learners of French mentioned missing or mishearing words they thought to be vital to comprehension. Three learners said unfamiliar accents were a problem. Another eight claimed that understanding words in a stream of speech was a problem (Graham, 2006)

Altenberg (2005) studied Spanish-speaking ELs and how their perceptions of word boundaries compared to those of native speakers, such as *keep sparking* versus *keeps parking*. Her results suggest that ELs are significantly worse than native speakers in their use of acoustic phonetic cues. Acoustic phonetic cues are acoustic-phonetic characteristics that can serve as markers of when syllable and word boundaries occur in language. These cues can include allophonic variation. The participants in Altenberg's (2005) study correctly segmented only 76% of the time compared to 96% for native

speakers. Acoustic phonetic cues in this case includes the aspirated allophones of /p/ in *parking*, but not *sparking*, the longer /s/ in *stalking* than the /s/ in *keeps*, the longer closure of the lips in *keep* than in *keeps*, and the higher amplitude of the /s/ in *stalking* than in *keeps*. There was no significant difference between the intermediate and advanced ELs. Altenberg (2005) believed these results indicate that the recognition of acoustic phonetic cues may not improve simply because of a higher level of proficiency and experience.

Other common processing problems involving listening include not recognizing words that ELs thought they already knew, lack of ability to chunk streams of speech, and being unable to form a mental representation of a word heard. These were problems for both a lower-level group and a higher-level group (Goh, 2000). One EL in the study commented, "Sometimes there are two or three words together and the pronunciation sounds like another word, and I get confused" (Goh, 2000, p. 58). This comment demonstrates the difficulty in understanding a stream of speech and being unable to chunk streams of speech into the individual parts according to the researcher. Many commented that they had learned words by memorizing the spelling rather than both the spelling and the pronunciation (Goh, 2000).

Even some advanced ELs still report struggling with listening (Graham, 2006; Hamouda, 2012). Common listening problems include: coping with a stream of speech (Goh, 2000); not recognizing a word ELs thought they knew in speech (Goh, 2000; Hamouda, 2012) and not recognizing the cues that native-speakers use to differentiate one word from another (Altenberg, 2005; Hamouda, 2012).

Challenges with Listening Comprehension in Academic Situations

Many ELs study English for a particular purpose, often to take courses in English at university, which requires a high level of listening skill (Friedrich, 2003). For some ELs, studying in English can involve completing an entire degree in English. Using self-ratings of Chinese ELs studying in degree programs in the United States (US), Huang (2006) found that 92% had difficulties understanding lectures when studying in in the US. In particular, liberal arts students who had been studying there for less than a year said they understood only 60% to 70% of lectures in their majors. All ELs gave themselves weak ratings for listening and speaking. ELs who had been studying in the U.S. for a year were more confident in their listening abilities than those who had been there for less time (Huang, 2006).

In a similar study in Australia, Zhang and Mi (2010) found that nearly all Chinese ELs had trouble with academic listening and this problem tended to last about two years. Like the Huang (2006) study, those in more language-heavy courses tended to suffer more problems due to lack of listening skills, while those that were more number-based, like math, had fewer listening problems.

The general problems some ELs have with listening extend to the academic world. Successful academic listening can take up to two years to develop in an immersion environment and students in more mathematics-based courses tend to reach a comfortable level of proficiency earlier than students of the arts and other more language-heavy subjects (Huang, 2006; Zhang & Mi, 2010).

Perceptual Problems and EL Expectations

As was shown in the previous section, ELs in a variety of situations report struggling with listening comprehension. As ESL teachers, it is necessary to understand why ELs struggle and how to improve this situation. In Tench's (2003) study of production and perception of British vowels by Korean ELs, he argued that some difficulties, particularly vowel perception, may have been due to their exposure to primarily American English rather than any British varieties. For example, one participant confused *hurt* with *hut*.

In the Goh (2000) study, many ELs reported that they had learned words by memorizing the spelling rather than both the spelling and the pronunciation. Goh (2000) argued that memorizing spelling without pronunciation may have led to some inaccurate expectations of the actual pronunciation. In Chan's (2011) study of ELs in Hong Kong, she tested participants on perception of isolated phonemes, isolated English words and English words embedded in a sentence. She found that most problems were not with differentiating individual phonemes, but rather occurred when ELs encountered them embedded in words. She argued that difficulty understanding a stream of speech may have been due to interference of EL's ideas of word pronunciations based on previous incorrect or incomplete knowledge of the actual pronunciation of the words.

Chan's (2011) study used RP, the variety the participants were studying, and two of the sounds with which her ELs most struggled were /ɔ/ and /ɒ/. These sounds had a distinguishing accuracy of only 69% while many other vowel pairs for this group of advanced ELs were near 90-100%. Chan (2011) thought some of this was due to the

sounds being close together in the mouth. /ɔ/ is found in many words influenced by non-rhoticity, such as in the difference between *port* and *pot.* The difference between the two words is much more noticeable in rhotic varieties.

Halff (1987) encountered another case of listening expectations not being met and causing misunderstanding. In her study, French speakers listened to a non-rhotic variety and misheard the phrase 'a happier year' as 'a happy a year,' even though that didn't make much sense. Poussard and Vincent-Durroux (2002) think this error was likely due to expecting an /r/ when there was, instead, a schwa and the participants may have only associated schwa with the indefinite article, *a*. In another study in France, Poussard and Vincent-Durroux (2002) found that French ELs tend to pronounce /r/ in words like *card* like a speaker from a rhotic variety even though they were taught British English. The researchers argued from this that the ELs were expecting to hear an /r/ in spoken English. The researchers believed that when ELs not only didn't hear anything they perceived to be an /r/ but also heard a 'stretched vowel' that did not sound how they expected it to sound, they often didn't understand.

Incorrect expectations appear to cause misunderstandings, some of which may be related to the issue of rhoticity given the examples of *hurt* being mistaken for *hut* (Tench, 2003) and *a happier year* being mistaken for *a happy a year* (Halff, 1987). Another issue of expectations not being met is when ELs learn a word's spelling before hearing its pronunciation and thus imagine its spoken form to be different from how it sounds (Chan, 2011).

A majority of ELs in the studies above found listening to be one of the most, if not

the most, difficult skill to master to a comfortable level (Graham, 2006; Hamouda, 2012; Zhang & Mi, 2010). Many ELs in the studies above had trouble connecting words they already thought they knew to words they were hearing (Goh, 2000; Hamouda, 2012). As a result, they struggled in breaking down a stream of speech into comprehensible parts (Goh, 2000). These problems do not always improve over time with continued study (Graham, 2006; Hamouda, 2012). There is some evidence that part of the difficulty with listening in a second language may be incorrect expectations about how a word actually sounds in speech (Chan, 2011; Halff, 1987; Hamouda, 2012; Poussard & Vincent-Durroux, 2002; Tench; 2003).

EL Awareness of and Attitude Toward Varieties of English

ELs' attitudes toward and awareness of varieties of English are two other potential issues in regard to the teaching of varieties and variety-related phonological features. Do ELs think it is important to understand more than one variety of English? Can ELs identify a speaker's variety? If they are aware of different varieties, are they able to identify them? Friedrich (2000) surveyed Brazilians and Argentines on their experience with and thoughts regarding varieties of English. The majority of the participants in Brazil said they were learning American English and the only other variety identified was British English. There appeared to be a lack of awareness of other varieties. In regard to intelligibility, 41% said British English was easier to understand. Friedrich (2000) found this to be high considering 82% said American English was the variety they were learning. She thought this discrepancy might be due to her participants having heard more varieties of American English. She thought that if ELs found American regional

varieties more difficult to understand, they may have assumed American English was generally more difficult to understand.

The Argentines in Friedrich's (2003) follow-up study were in a situation similar to those in Brazil. There was little knowledge of other varieties of English beyond SBE and SAE. More than half of the participants said they spoke British English and a quarter didn't know which variety they spoke. Despite this, 70% said American English was more useful. The author thought that the mismatch between what they believed they spoke, British English, and what they thought was useful, American English, can most likely be attributed to Argentina's historical links to Britain.

In a study in Japan, Sachiko (2009) found a similar lack of awareness of any varieties but SAE and RP. She studied the attitudes of 56 Japanese university students who had not been abroad more than a month. They listened to six varieties of English: SAE, Australian, Scottish, Indian, Singaporean English and Near RP. The researcher defined Near RP as a variety that consists of many, but not all, RP features. The ELs perceived Near RP and SAE as being the most understandable and they reacted the most positively to Near RP and SAE. They rated the speaker of Near RP as the most careful speaker, with SAE trailing behind Indian and Australian in terms of perceived carefulness. SAE was rated the most fluent with Australian also receiving a high fluency rating. Both SAE and Australian English were perceived as not being as careful. Sachiko (2009) believes this may indicate that the ELs actually understood the Near RP, but not the SAE speaker or the Australian speaker. The researcher found understanding Near RP better than SAE peculiar given SAE is most often used in classroom recordings in Japan.

Despite the most exposure to SAE, they still seemed to struggle with it.

Sachiko (2009) thought that subjects who perceived English to be a world language would more likely be tolerant of Asian varieties like Indian and Singaporean. This did not turn out to be the case. Even subjects who strongly believed English should be used as a world lingua franca tended not to have positive views on Asian varieties of English. Instead, their view seemed to correlate with their preference for Anglicized language and culture. The author explains their dislike of Asian varieties of English as a potential lack of knowledge of other varieties. The author also believes that the ELs may have a mistaken perception of 'world lingua franca' in that they may have taken "understanding cultures and viewpoints all over the world" as "understanding cultures and viewpoints from the English-speaking world" (Sachiko, 2009, p. 12).

Kang (2010) found a similar lack of awareness of varieties other than SAE in her study of 238 ELs in New Zealand and the United States. The ELs in the US felt much more positive about the local varieties they were exposed to. Although 93% of all ELs in the study said that pronunciation is important for communication and that they were concerned with how they sound, 37% did not want to sound like native speakers in New Zealand compared to only 5% in the US who didn't want to sound like native speakers of SAE. 26% of the participants in New Zealand actively avoided sounding like a native speaker from New Zealand. Only 8% in the US attempted not to sound like a SAE speaker. 40% of participants in New Zealand didn't think the variety the teachers used gave them an excellent model while only 5% of participants in the US felt this way. 87% of ELs found studying pronunciation in NZ confusing because there were too many

accents. Only 13% of the participants in the US agreed that studying pronunciation in the US was confusing.

63% of participants in New Zealand were not satisfied with pronunciation teaching, compared with 27% of the participants in the US who felt dissatisfaction. In an open question asking why, common responses included “teachers' confusing models” or “no specific instruction” (Kang, 2010, p. 111). When asked the best places to study pronunciation**,** 30% in New Zealand said they would prefer to go back to their home countries to study it. The US was ranked second best place by 26.3%, then England, then New Zealand. Only 3% in the US in Kang's study (2010) chose their home country as the best place to study pronunciation. 65% in the US chose the US. Kang (2010) argues that this indicates that not only do ELs feel obliged to attain near native pronunciation, but that they also feel more attached to North American English than New Zealand English. She concludes that this is most likely due to being more used to SAE in media, but either way, negative attitudes about the local variety of the place in which the ELs are learning English is a problem. Kang suggests that ELs may be confused because their English teachers were often unaware of different varieties of English and therefore did not teach them. She recommends that teachers learn more about different varieties of English so they can present a poly-model that raises awareness of multiple varieties.

Undergraduate Singaporeans in the Peng and Brown 2002 study (2002) also had negative opinions of less familiar varieties. The participants were asked to identify and rate three varieties of English in regard to a variety of traits of the speakers such as refined or friendly. All participants were very proficient users of English due to

Singapore's institutional use of English. The three varieties the Singaporeans identified and rated were RP, Singaporean English and Estuary English (EE). EE is the English spoken in the South East of England that is sociolinguistically located somewhere between Cockney and RP and it serves as a bridge of sorts between the various classes of South East of England. Participants could easily perceive the differences between RP, EE and their own variety of Singaporean English. ELs in Singapore showed a strong dislike for EE while rating RP as being more refined and standard. They also found RP most intelligible, even more so than their own variety, giving the RP speakers intelligibility rating of 92 and 91 and the two Singaporean speakers 74 for both. The EE speakers only received an intelligibility rating of 58 each.

A comprehensive study on attitudes, both those of ELs and native speakers, toward varieties of English was done by Bayard and Green (2002). They studied the views of both ELs and native speakers of English on the speech of typical speakers of SBE, SAE, Australian English and New Zealand English. The SBE speakers spoke varieties that were rated by the researchers to be "middle to innovative RP" (Bayard & Green, 2002, p.22). The SAE speakers spoke the Inland Northern variety, which was judged to be the least regionally colored by the researchers. The researchers chose the Australian and New Zealand speakers because they spoke varieties that were not too broad or too cultivated. They obtained data from ELs from 19 countries on five continents who responded to the different varieties of speech using a Likert scale. The scale used gave 1 to 6 ratings on things like whether one finds someone educated, friendly, attractive, and several other attributes. There were 1700 participants total from

the 19 countries involved. Groups ranged in size from 8 to 257, depending on the region. Participants heard nine voices twice in the same order. The first time they listened, they rated each variety using a Likert-type scale. A variety of attributes were rated including friendliness, assertiveness, and reliability. The second time they listened they answered questions about perceived social class, education level and age.

In Europe, Bayard and Green (2002) studied ELs in Sweden, Germany, and Finland, all of whom showed the most solidarity with SAE samples. The European ELs could tell the difference between SBE and SAE well and the English male speaker of SBE received the highest prestige rating from the European respondents.

Bayard and Green (2002) found similar connections within their Asian data. ELs from Hong Kong, mainland China, Singapore, Japan, Malaysia, and Indonesia all gave the SAE speakers the highest ratings, which they found somewhat surprising in the case of mainland China**,** due to China's relationship with the United States at the time. New Zealand and SBE both received low ratings all over Asia, including in regard to power and status for SBE. Most Asians did not identify the SBE as a variety from England, including those from Hong Kong, despite the long history of British control. The only other Pacific sample aside from Inner Circle countries, Australia and New Zealand, was from Fiji, where there are many broadcasts from New Zealand. The frequency of broadcasts may account for higher rating for New Zealand compared with the other groups. Argentinians and Brazilians, the South American representatives in the study, both recognized SAE most easily and rated it highly. They gave negative solidarity ratings to SBE. This study also asked for estimates of television viewing and all groups

indicated that they watched a large number of programs in SAE compared to all other varieties. The researchers felt this explains the all around high ratings for SAE.

ELs around the world have very low awareness of varieties beyond SAE and SBE (Bayard & Green, 2002; Friedrich, 2000; Kang, 2010; Sachiko, 2009). Both Outer Circle and less well-known Inner Circle varieties are not held in very high regard by many ELs and the actual awareness of the less well known Inner Circle varieties and their place in the English-speaking world appears to be quite low (Sachiko, 2009).

Acquisition and Comprehension of Different Varieties of a Language

Ringer-Hilfinger (2012) found that some Spanish learners were not sensitive to its regional features. She studied learner awareness of the *ceceo*, a feature of the Spanish of Northern Spanish. *Ceceo* is the use of /θ/ for the letter z, such as in *zapato*, /θapato/or for the c sound of ce, /θe/, and ci, /θi/, such as *centro, /θentɾo/* and *cinco, /θinko/*. In the Americas, all of the previous examples are pronounced with /s/. The researcher also measured learner use of *ceceo* and examined learner attitude toward it. She had two groups of participants, a treatment group that studied abroad in Spain and a control group at an American university who did not study abroad. There were pre-study abroad, during study abroad and post-study abroad assessments of the treatment group. The control group were only assessed once at the time of the post-study abroad assessment of the treatment group. Only six uses of *ceceo* occurred in all the spoken data of the learners. Even if learners claimed to use *ceceo* often or somewhat, some of those learners didn't use it at all or used it very little during the assessment. Her results showed that the majority of pre-study abroad or at-home students were unaware of *ceceo*. Of the during-

and post-assessment groups, participants noticed when *ceceo* was used between 50% and 100% of the time. Five of the 15 had a very high (75-100%) awareness. None were in the at-home group. One student mentioned not feeling confident about the use of theta and being unsure where to use it. No one mentioned explicitly studying the feature.

Most of the participants who studied in Spain did so because they wanted to travel in Europe. Only one went to Spain in order to learn Spain's specific variety of Spanish; the rest of the participants did not mention wanting to learn a particular variety of Spanish. The researchers thought that lack of desire to acquire the local variety may be why a study abroad program did not appear to significantly affect learners' use of *ceceo* (Ringer-Hilfinger, 2012).

Geeslin and Gudmestad (2008) conducted a similar study on *ceceo* use by learners of Spanish. They also studied *s* weakening, which is both a geographic and social feature, while *ceceo* is primarily geographic. Their participants were 130 university level Spanish learners who had been studying Spanish for 10 to 15 years. Some had studied abroad and some had not. Some of those who had studied abroad studied in Spain. Out of the 130 spontaneous speech samples they collected, only nine used *ceceo* at all and only five produced s weakening. All speakers who produced *ceceo* were in the highest two levels of proficiency. All learners with experience abroad who demonstrated use of *ceceo* and/or s weakening did study in Spain. At all levels there were participants who had studied in Spain but did not use them. As with the Ringer-Hilfinger (2012) study, Geeslin and Gudmestad (2008) also concluded that going to a region that uses *ceceo* did not cause learners to acquire the feature in question in most cases.

Exposure to a variety was also insufficient for acquisition of listening comprehension of the participants in Matsuura, Chiba and Fujieda's study (1991). They tested the effect of exposure to Irish English on the intelligibility and on the comprehensibility judgments of Japanese ELs. Participants were studying English in Japan. A third of the participants were taught English by an Irish teacher. The rest were taught English by American teachers. Intelligibility was measured with a listening cloze. For the cloze, six speech samples were taken from various parts of the United States and Ireland, three from each country. Those who had studied with Irish teachers scored 16.08 on average on their dictation, while those who had not studied with Irish teachers scored an average of 18.80 on their dictation. Comprehensibility was measured with a 7 point Likert-type scale participants used to gauge how easily they believed they understood the speaker. Despite having a lower intelligibility score, the ELs who studied with Irish teachers gave the Irish speakers higher comprehensibility scores. The researchers believe that this indicates the participants felt they understood more than they actually did. Matsuura, Chiba and Fujieda (1991) believed that the study shows that regular exposure to a variety is not necessarily enough to improve listening comprehension. Instead, they thought exposure primarily only led to increased confidence when listening to the variety.

In study done in Singapore, a country with extensive English use, six ELs found comprehension of an unfamiliar variety difficult. The six ELs from the National Institute of Education listened to recordings of speakers from England talking about their lives, which they were asked to transcribe in their entirety (Deterding, 2005). The participants could listen to the recordings as often as they thought was necessary. The speakers

recorded for the transcriptions were a 19 year-old from Cambridge who had lived in England until the age of ten, moved to Singapore and still used a near RP accent. The second was a 20 year-old from Southampton who spent a few months in London, and went to university in Bath. He exhibited intervocalic glottalling of /t/, as in / sɪʔi/ for *city*, and some th-fronting, as in /fɪŋ/ for *thing*. The third speaker was 18, also from Southampton, and had spent no time in London. He was a high school student in his final year of school, living in Singapore. He also exhibited intervocalic glottalling of /t/ (Deterding, 2005).

The Singaporeans had almost no trouble with the recordings of the first speaker who used a near RP variety of English. However, they had considerable difficulty with the other two speakers who used many EE features. For instance, "I'm looking at Durham as well" was interpreted as "I look dumb as well." The participant may have interpreted the word incorrectly because Durham is a place name. However, in the opinion of the researcher, the lack of understanding seemed to go beyond names of locations. He said that their listening difficulties prevented them from understanding long tracts of speech rather than just the parts with place names. For instance, word medial /t/ glottalization was not transcribed accurately. Three simply gave up at the attempt to transcribe "Nottingham City," with one writing "see" for city and another writing "limousine." Words with th-fronting that sounded like other words caused comprehension problems. For instance, the sentence "we were only there for three nights" was transcribed as "we don't have enough free nights," "what I really don't have free life," "we don't have free license," and "we don't have free life." Like *free/three*,

fought/thought presented comprehension difficulties while *fings/things* did not. Th-fronting exists in Singaporean English, but only word finally, such as in *north*. Word initially, /t/ is preferred so *three* becomes /tri/ rather than /fri/. The researcher thought *free/three* was a problem because it was not present in Singaporean English, but word final th-fronting was not a problem because it was a shared feature (Deterding, 2005).

From the errors mentioned above, Deterding (2005) deduced that the lack of ability to interpret the idea from context, even when the phrase was interpreted as nonsense, seems to show bottom up processing. He also concluded that even listeners who don't use dental fricatives in their own speech have difficulty with speakers who use unexpected sounds as replacements, such as in the case with *free* and *three* above. He thought that even if they had trouble producing a dental fricative, they seemed to expect either a dental fricative or the replacement they produced, but not a third option. Deterdring (2005) believed that the level of listening difficulty for the participants came out of lack of awareness of certain features being different from their expectations.

Unfamiliar varieties can be challenging even or native-speakers of English. Sumnera and Samuel (2009) studied the effects of non-rhoticity on native speakers of English from the U.S. They defined three groups: SAE speakers, overt-NYC speakers who spoke a non-rhotic variety of English, and covert-NYC speakers who spoke a rhotic variety of English but lived in areas with both rhotic and non-rhotic speakers. There were 16 participants in each group. The participants heard audio primes from a mix of speakers of SAE and non-rhotic NYC English in 4 combinations. For instance, first they would hear *baker* in a SAE accent and then *baker* in a non-rhotic NYC accent. The participants

needed to write down what the word made them think of, such as *bread* for *baker*. The SAE speakers with no previous exposure to non-rhotic varieties had a significantly higher error rate than the NYC groups for the NYC non-rhotic prompts. All users, including overt-NYC speakers, responded best to SAE prompts.

The results suggest that listeners who had regular experience with both varieties were more able to understand all the NYC speakers. The participants with experience with both varieties did better than the SAE speakers with no previous experience with non-rhoticity. Sumnera and Samuel (2009) concluded that experience with surface variation is essential in order to enable listeners to process multiple forms equally.

Due to the ability of the NYC speakers to understand two forms well even when they only produce one form themselves, Sumnera and Samuel (2009) proposed the idea of a fluent listener who is able to understand multiple regular variants of a particular word across varieties, such as /bekə/ and /bekɚ/ for *baker*. A person can be fluent in one area of a variety such as visual word recognition, and not another, such as oral production.

The studies above indicate that exposure to variety-related phonological differences may not lead to acquisition of the differences. Spanish learners studying in Spain did not frequently acquire use of *ceceo* (Geeslin & Gudmestad, 2008; Ringer-Hilfinger, 2012). Having a teacher from a less known variety also did not seem to be enough to acquire that variety either, as in the case of the Japanese ELs with Irish teachers. The ELs simply felt more confident without understanding more of the variety (Matsuura, Chiba & Fujieda, 1991). Even for native speakers of English and speakers

with long term regular use of English as an L2, lack of familiarity with a variety led to less comprehension, and more exposure led to greater comprehension of the feature (Deterding, 2005; Sumnera & Samuel, 2009).

Explicit Teaching

In the above studies, there have been several examples in which ELs failed to notice a particular feature despite being exposed over time to an environment rich in input of that feature. This was the finding when ELs were coping with only one or two varieties, those taught in courses previously and the current input (Geeslin & Gudmestad, 2008; Ringer-Hilfinger, 2012). There is also evidence that ELs in many regions of the world seem primarily or only used to SAE and occasionally SBE (Bayard & Green, 2002). Without comprehensive instruction on the phonological differences among varieties, ELs become frustrated and then disengage from further learning once they perceive too much phonological variation (Kang, 2010).

Not all features improve even with prolonged exposure. Therefore, discovering which features don't improve without explicit instruction could be a fruitful area of study. Derwing, Thomson, Foote, and Munro (2012) looked at which features were noticed in listening over 10 months without being taught in a target language environment. Their participants had been studying English between 5 months and 2 years. Perception of *can*/*can't* and word stress did not improve. Perception of sentence stress, intonation and –teen or -ty (as in fifteen and fifty) did improve without being taught in a target language environment. They recommend explicitly teaching *can/can't* and any other features that may not improve over time.

It is possible that mistakes such as the *hurt/hut* confusion (Tench, 2003) and the *a happier year/a happy a year* confusion (Halff, 1987) that result from non-rhoticity are also features that do not improve over time. More than that, non-rhoticity is a complex feature attached to other complex or potentially confusing phenomena, such as intrusive /r/ and the series of merged categories, such as the *source/sauce* example in all non-rhotic varieties and the *boxers/boxes* example in Australian and New Zealand English (Watson, MacLagan, & Harrington, 2000).

Although none of the literature reviewed indicates that the effects of explicit instruction of rhoticity have been studied, Huthaily (2008) studied the effects of explicit phonological instruction on English-speaking students of Arabic. The study included two groups of university students. The control group studied the sounds and letters of Arabic without any special phonological training, mainly using a video called *Alif Baa with DVDS: Introduction to Arabic Letters and Sounds,* focusing on repetition drills. The treatment group was given an introduction to phonology in the form of explicit instruction and a website, in addition to the DVD. The phonological teaching included giving a brief introduction to the speech mechanism, teaching linguistic terminology to describe speech sounds, and the vowel and consonant sounds of both languages. The students also engaged in sound production, sound recognition and sound repetition. The intervention lasted 5 weeks.

Pre-tests and post-tests were given in both recognition and production. The sound recognition test was an online test and was made up of a list of sets of minimal pairs. The words used in the test were chosen in order to use the sounds being tested word-initially,

word-medially and word-finally. The sounds were selected in order to test pairs that would seem very similar to English speakers. The control group had an average score of 85% correct on the sound recognition post-test, while the treatment group had an average score of 95% (Huthaily, 2008).

Huthaily (2008) also recorded qualitative data on the students' opinions on the intervention through an online post-course survey. The students were asked, “Did the course on phonetics and phonology of Arabic improve your listening and/or speaking skills in Arabic? – Explain.” There were 21 positive responses and only one negative. Positive comments included: all language programs should provide comparative instruction in linguistics of English and the other language being studied, the intervention gave a better sense of how to pronounce the letters/words and the intervention taught how to listen more effectively. Huthaily's (2008) results support the findings in Vincent-Durroux, Poussard, Lavaur, and Aparicio's (2009) study in which ELs felt explicit instruction of phonological features was useful for improving their listening.

Given Huthaily's (2008) results in regard to the positive effects of explicit instruction on improving listening comprehension, explicit instruction of phonological features seems to be a promising area of study to pursue. Is it possible that explicit instruction of phonological features could help ELs listen to multiple varieties of English more successfully? In particular, something as complex as rhoticity, a feature uncommon in most other languages, and certainly uncommon to the large extent that it is exists in the English-speaking world, seems less likely to be noticed without explicit instruction.

The Gap

There is a need for more research on how hearing unfamiliar varieties of English influences success in listening comprehension (Hamouda, 2012; Kang, 2010; Major, et al., 2005; Tench, 2003). ELs are generally unaware of different varieties of English (Bayard & Green, 2002; Friedrich, 2000; Friedrich, 2003; Kang, 2010). In order to raise awareness of international varieties of English, Deterding (2005) and Sachiko (2009) advise exposing ELs to a wide range of commonly used varieties of English. Deterding (2005) believes this exposure would leave ELs more equipped to communicate internationally. Jenkins (2006) also believes focusing on the phonological norms of only one or two varieties is limiting for ELs. Matsuura, Chiba and Fujieda (1999) proposed that teaching materials should be created with recognition of English as a world language rather than mainly using SAE or another single variety.

Rhoticity, in particular, seems like a strong candidate for explicit instruction of a variety related feature because at least some ELs appear to be unaware of it (Halff, 1987; Poussard & Vincent-Durroux, 2002; Tench, 2003). This lack of awareness has led to some misunderstandings that would have seemed less likely had ELs been familiar with non-rhoticity. In addition, non-rhoticity is a feature that creates unexpected homophones like sauce/source in non-rhotic varieties. Rhoticity is also a complex feature with properties such as linking /r/ in the case of non-rhotic varieties, and r-coloring in the case of rhotic varieties.

Finally, on the individual student level, many ELs complained of listening comprehension problems. Their complaints include not being able to parse a stream of

speech, not being able to tell where the boundaries of words are, and not being able to recognize the spoken version of words they know in written form (Goh, 2000). Research indicates that many ELs who study abroad in an English-speaking country arrive without these necessary pieces of phonological information to facilitate listening and, as a result, struggle with listening (Huang, 2006; Zang & Mi, 2010).

ELs have also mentioned listening-related confusion when exposed to many varieties without any guidance (Kang, 2010). In Hamouda's (2012) Saudi Arabian study, all the ELs found comprehension difficult when different varieties were used, with 26.7% stating they sometimes, 43.4% usually, and 30% always found listening to different varieties difficult. In the post-survey interviews, ELs reported feeling confused by the different variations of English. The ELs said the instructors tried to teach them British English in class but they heard American English on television and the two varieties sounded very different (Hamouda, 2012). These ELs felt ill equipped to deal with variation. ELs from many different backgrounds have also expressed a desire to use English for international communication (Bayard & Green, 2002; Friedrich, 2000; Friedrich, 2003; Sachiko, 2009). Using English for international communication will likely involve needing to interact with speakers from more than one variety. International communication could be more effective if ELs can master listening comprehension both within a variety and across varieties. Explicit instruction of variety-related phonological differences may be a promising route to understanding many varieties spoken English.

In the context of teaching international ELs, with this capstone, I want to answer the following questions:

1) Can ELs without previous explicit instruction on the topic of rhoticity

i. understand words affected by rhoticity?

ii. identify the varieties of the speakers?

iii. hold a preference for a variety?

2) Does this preference influence comprehension?

3) Given instruction in rhoticity, do ELs' aural comprehension of different varieties of English improve?

4) Given instruction in rhoticity, do ELs consider studying rhoticity in the context of different varieties of English useful?

Summary

This chapter reviewed the research on EL listening comprehension. It discussed the importance of listening comprehension to communication. It discussed problems related to general EL listening comprehension, which included inability to understand a stream of speech and lack of awareness of phonological details interfering with comprehension. It discussed the listening comprehension issues that are more common to ELs studying at universities in English-speaking countries, such as the amount of time in the target language environment it takes for an EL to understand a university lecture easily. The chapter discussed the relationship between perception, production and expectations in listening. EL awareness of and attitudes toward different varieties of English were reviewed. It was found that ELs are typically most aware of SAE and have little awareness of other varieties. Results of recent studies on the effects of explicitly teaching phonological features were examined. Finally, from a review of the literature,

the need for research on the effects of rhoticity on listening comprehension was shown. The need for explicit instruction in rhoticity was stated.

In Chapter Three, I explain my research paradigm. I describe my participants and location. I discuss my research techniques and materials. I discuss how I analyzed and verified my data. I show how the study was conducted in an ethical manner.

CHAPTER THREE: METHODOLOGY

This study is designed to explore how rhoticity affects ELs' listening comprehension of different varieties of English. In this study, I want to answer the questions:

1) Can ELs without previous explicit instruction on the topic of rhoticity

   i. understand words affected by rhoticity?

   ii. identify the varieties of the speakers?

   iii. hold a preference for a variety?

2) Does this preference influence comprehension?

3) Given instruction in rhoticity, do ELs' aural comprehension of different varieties of English improve?

4) Given instruction in rhoticity, do ELs consider studying rhoticity in the context of different varieties of English useful?

This chapter describes the methodologies used in this study. First, a description of the research design and paradigm is given. Second, I discuss the participants and location. Next, the data collection techniques are presented including the data collection tools: the pre-test survey, the pre-test, the post-test, and the post-test survey. Then I describe how I compiled and analyzed the data. Finally, I give a description of the verification and ethics of my study.

Research Paradigm and Methods

The study used a mix of qualitative and quantitative techniques similar in design to Huthaily's (2008) study. Quantitative data was collected to answer whether students without previous explicit instruction on the topic of rhoticity have difficulty understanding words affected by rhoticity. Quantitative data was also collected to compare achievement test scores between the treatment group, who received explicit instruction on rhoticity, and the control group, who received no explicit instruction, to answer whether explicit instruction of rhoticity improve ELs' aural comprehension of different varieties of English. Quantitative data was collected from both the treatment group and the control group in the form of a pre-test before the intervention. Quantitative data was also collected in the form of a post-test after the intervention from the treatment group. During the pre-test, qualitative data was also collected via an open-ended question to find out whether participants could identify where the speaker was from and whether EL preference for a variety influenced comprehension. Qualitative data was collected through two surveys, pre- and post-course. The post-test survey assessed ELs' attitudes towards the intervention. To give context to the study, additional data was collected from the participants in the pre-test survey such as length of study, age, and difficulty in aural comprehension of unfamiliar varieties.

Like Huthaily's study (2008), this study used mixed methods in order to overcome the limitations of using either qualitative or quantitative data on their own (Creswell, 2003). Using a mixed method gives multiple perspectives, which allow researchers to enhance the validity and reliability of the data. Achievement is typically measured with

quantitative measurements as it was in this study. With such a small pool of participants, quantitative measures alone can be limit the validity of quantitative data (McKay, 2006). In addition, quantitative data alone does not always give sufficient context to interpret the results well. A combination of quantitative and qualitative data allows for more accurate interpretation of the quantitative data. Qualitative data is also an accepted way to collect data on phenomena that are not directly observable, such as attitudinal data and reflections about one's own learning (Mackey & Gass, 2005).

The pre-test/post-test design was chosen because it is a common design for measuring the effects of a treatment. The measurement is done by comparing the results of the pre- and post-tests. The texts of both tests were taken from the same source and writer in order to ensure that they were a similar level of difficulty. Similar levels of difficulty ensure that the results are a reliable measure of improvement (Mackey & Gass, 2005).

Another part of the study design was the use of treatment and control groups. The use of treatment and control groups is a standard type of experimental design. In most designs of this type, both groups would take the pre-test and post-test, but only the treatment group would receive treatments (Mackey & Gass, 2005). A modification was made for this study. Only the treatments group received the post-test. This decision was due to only having a one-day difference between the two tests. It seemed unlikely that anything would change for the control group participants in a period of less than twenty four hours.

Data Collection

Participants

Participants were selected based on interest in participating in a short course within the context of being ELs studying abroad in the South East of England. Participants were young adult ELs whose proficiency levels ranged from intermediate to advanced. Their time in England ranged from six weeks to three years. Their native languages were Korean, Castilian Spanish and European Portuguese. They had studied English between one year and ten years. The participants were recruited via advertising on Gumtree, a website that allows advertisements to be posted for a local audience.

Location

The study was carried out in a small city with several English language schools on the coast of the South East of England. It is a popular summer study destination for ELs. The testing and courses were given in the function room of a local tea shop. The tea shop was chosen because it was available at the time and had a private space suitable for a small group of participants.

Data Collection: Technique 1

Data collection technique 1 was a pre-test survey, which can be found in Appendix B. It was used to collect information such as amount of time spent studying English and previous experience in English speaking countries. Surveys were chosen as a way of allowing ELs to report about themselves, their experience learning English, and their reasons for learning English. Surveys are a method commonly used by researchers to learn information that is not available from production data alone. This collection tool

was used to more accurately interpret the data collected from the other tools. It was designed to allow for thick description of the context of the study given there were few participants and only a short period of time in which to conduct the study (Mackey & Gass, 2005). Knowledge of ELs' past experiences with English was useful to interpret data more accurately. If an EL had been familiar with many varieties already or did not find listening difficult, the quantitative test results would mean something different than the results of ELs who were not familiar with many varieties of English and found listening difficult. Both closed and open-ended questions were used. Closed questions were used because they are easily quantifiable. Open-ended questions were used in order to give the possibility for more insight than quantitative data alone could give. A potential limitation of open-ended questions is inaccurate responses due to lack of participant awareness of his or her own attitudes toward past or present learning experiences. To counter these potential effects, both closed and open-ended questions were used. In addition, this survey was filled out in an L2 for all participants, which may have caused participants to respond less fully than they may have in their L1 (Mackey & Gass, 2005). Participants were given the survey to fill out when they arrived, before taking the pre-test and without knowing whether they were in the treatment or control group.

Data Collection: Technique 2

Data collection technique 2 was a listening pre-test, which can be found in Appendix C. The pre-test was given to answer the following questions: 1) Do students without previous explicit instruction on the topic of rhoticity have difficulty

understanding words affected by rhoticity? 2) Can ELs identify where a speaker is from? 3) Does EL preference for a variety influence comprehension?

The test used a cloze with an open-ended format, that is, the participants had to formulate their own answer (Toyohashi & Tokiwa, 2009). In some studies on clozes in listening tests, it has been shown that in L2 listening, multiple-choice formats are easier than open-ended formats (In'nami, 2006; Teng, 1999). Toyohashi and Tokiwa (2009) found listening tests with multiple-choice to be 78% easier than open-ended listening tests. An open-ended format was also chosen because EL errors provided data to show how they reacted to non-rhoticity.

Participating ELs were told what the topic would be before they were given the pre-test. The audio was played in a program called Audicity on my laptop with a Rokono Bass+ Mini Speaker. The pre-test consisted of recordings by speakers from the South of the United States (speaker 1), the South East of England (speaker 2), rural Northern Ireland (speaker 3) and New South Wales, Australia (speaker 4). Each recording was only played once. The ELs listened to short recordings on common topics: globalization and social media. They filled out a cloze in which all of the missing words were influenced by rhoticity. They filled out the cloze as they listened to the recordings. The readings for the recordings were taken from two sources. All readings used can be found in appendix C. The first source was ESL Reading Lessons, a website offering free ESL readings on a variety of language related topics. The website listed these readings as intermediate level (Hughes, 2013). Readings were selected to be on topics that are common knowledge to avoid ELs preferring one topic to another or knowing more about one topic than another.

As with Matsuura, Chiba and Fujieda's study (1999), the readers were asked to read naturally, as though the recording was intended for native speakers.

ELs were asked to answer questions about how easy the reading was to understand, where the speaker was from and if they liked the speaker. The first question used a Likert-type scale (Vagias, 2006). The questions can be found in appendix C. The last two questions were open-ended. The answers to the first question provided quantitative data about how easily the participants thought they could understand each variety. The answers to the second question provided quantitative data about if the participants knew where the speakers were from. The last question provided qualitative data about how positively they felt about the variety.

Data Collection: Technique 3

Data collection technique 3 was the post-test, which can be found in Appendix D. It was given after the short review course. It was similar to the pre-test. The recordings for the test came from the same four speakers from the pre-test. The same cloze method was used. Both tests had words removed and the ELs needed to fill in what they thought they have heard. The texts were on different topics from the pre-test. The topics were chosen because I believed them to be common knowledge; they were ice cream and the health benefits of being outdoors.

Data Collection: Technique 4

Data collection technique 4 was a post-test survey, which can be found in Appendix E. The collected data from the post-test survey determined how well the intervention was received by the ELs in the treatment group. I modified the questions

from the Huthaily 2008 study by putting the first two in a Likert-type format (Vagias, 2006) to make them more quantifiable, but both questions were followed up with a "why or why not" question. The last two questions were completely open-ended. The survey was given after the post-test had finished.

Procedure

Participants

The seven participants were divided into two levels by proficiency: intermediate and upper intermediate/advanced. Proficiency levels were self-reported by the ELs through e-mail communication prior to the study. I met with each level and gave them the pre-test survey and the pre-test. These two levels were then each divided into control and treatment groups, totalling four groups. The treatment groups were chosen by drawing names. The treatment groups then attended a short course during which the concept of rhoticity was explicitly taught in a style similar to the explicit phonological instruction of Huthaily's (2008) study. The control group did not receive any intervention.

The following day, there was a twenty-minute review courses for the intermediate treatment group and another for the upper-intermediate/advanced treatment group. After the review, the post-study test and post-test survey were given to the treatment groups. No follow up tests were given to the control groups as nothing is likely to have changed over the course of a day.

Materials

Audio recordings. For the pre-test, the lesson itself and the post-test, I used audio

recordings made by speakers from the South of the United States (speaker 1), the South East of England (speaker 2), rural Northern Ireland (speaker 3) and New South Wales, Australia (speaker 4). The audio was edited together and played in a program called Audicity on my laptop with a Rokono Bass+ Mini Speaker. All speakers were volunteers who read a script I prepared. The scripts were readings from ESL Reading Lessons, a website that modifies texts from the Simple English Wikipedia into material for lessons (Hughes, 2013). The readings were on globalization, social media, ice cream and the health benefits of being outside. The articles above were divided in two to create four readings. Each speaker read one of the reading. They also recorded a series of words influenced by rhoticity to be used as examples during the explicit teaching portion of the study which can be found in Appendix F. The readings with the answers can be found in Appendix C. The speakers used their own recording equipment because they live in different parts of the world. The quality was similar for all recordings.

Pre-test survey. The ELs were given a short survey to collect information on their experience with and interest in studying English. The pre-test survey is adapted from a combination of the survey used by Matsuura, Chiba and Fujieda (1999) and the survey by Hamouda (2012). The survey asked nine open-ended questions about age, sex, nationality, and occupation, in addition to how long participants had been studying English, how long they had been in England, if they had been to any other English-speaking countries, which varieties they thought they had heard and why they were studying English. The last two questions used a Likert-type scale with five options ranging from always to never to give response to whether the participants found listening

difficult and whether they found unfamiliar varieties difficult to understand. Both questions had an open-ended portion asking why if the participants answered always, often or sometimes.

Pre-test. The pre-test was an open-ended cloze listening test. The audio used was made by speakers from the South of the United States (speaker 1), the South East of England (speaker 2), rural Northern Ireland (speaker 3) and New South Wales, Australia (speaker 4). Participants completed the cloze while listening. Recordings were only played once.

After each speaker's reading, participants were asked to answer three questions about the pre-test: if they found the speaker easy to understand, where they thought the speaker was from and if they liked the speaker's variety. Participants were given as much time was needed, which was approximately five minutes per speaker.

Lesson materials. For the explicit teaching portion of the study, I used printed flashcards to give visual representation to the words the ELs heard as examples and for any other necessary written words, such as the word rhoticity itself and the names of English-speaking countries discussed. These were made because there was not a surface suitable for writing, such as a whiteboard.. The flashcards were made online at Free Printable Flash Card Maker. In addition, at the end of the lesson, I gave the participants a document summarizing what was taught to allow them to review if they desired. The content of the flashcards can be found in Appendix F.

Post-test. The post-test was similar to the pre-test. The recordings were provided by the same four speakers, but the topics were changed to ice cream and the health benefits

of being outdoors, also thought to be general knowledge topics taken from the same sources. The ELs were not asked where the speakers were from again due to having been told the previous day in the course.

Post-test survey. ELs were given a short survey on their opinion on the benefits of the intervention. The participants were asked for their level of agreement with the following statements: "The lesson on rhoticity improved my listening of other dialects of English" and "I felt that the lesson on dialects was useful." These two questions used a Likert-type scale with seven options ranging from strongly agree to strongly disagree. Both questions included an open- ended question of why or why not. The last two questions asked participants which speakers they found easiest and hardest to understand and if they had any other comments or suggestions.

Data Analysis

For compiling the data, ELs received one point for each correct word as defined above in the cloze for both the pre- and post-tests. For both tests, ELs scored one point per correct word given. The ELs could receive a total of 5 points per reading. I also added up the totals for each speaker out of 35 possible points for the pre-test and 20 possible point on the post-test. This was done to show how well the group responded to each speaker's variety. The pre-test results were compared with the post-test results to see if improvement had been made, both by individual participants and in the group response to each speaker. The pre-test group results were compared for each speaker to see which speaker the group understood best and worst.

For both tests, ELs received no score if the space was left blank or if the spelling

was too far off to show phonetic understanding of the rhotic feature. If the word was misspelled, but indicated the participant understood the word, it was counted as correct. If some part of the word that did not have to do with rhoticity was left off, it was also counted. For instance, most participants wrote *are* in place of *aren't* for the American speaker, but this still showed understanding of how she pronounced /r/ and the vowel related to /r/.

Quantitative data analysis was also used to determine if EL preference for a variety influenced comprehension. Pre-test scores were compared to responses to the statement "I found the speaker easy to understand" and to the question "Did you like the speaker?" Post-test scores were compared to the responses to "Which speaker did you find easiest to understand, one, two, three, or four? Which did you find the most difficult?"

Whether ELs can identify where a speaker is from was answered quantitatively as well. Results were compiled into tables and the number of correct answers was tabulated. Whether ELs consider studying rhoticity in the context of different varieties of English useful was also answered by compiling the number of positive answers. For all questions, the remaining qualitative data was used to give more depth and validity by using thick description. Data from the surveys and open-ended questions from the pre-test were used to contextualize the quantitative data (McKay and Gass, 2005).

Verification of Data

Several approaches were used to increase the validity of the study. First, I used multiple methods for data collection and analysis. Both qualitative and quantitative

sources of data were collected to confirm findings. Having several sources of data provides more information for more accurate interpretation of the data (McKay and Gass, 2005). These sources of data collection included quantitative pre- and post-tests and qualitative pre- and post-test surveys.

In addition to using multiple methods, I have used thick description, that is, including all data and all data collection tools in their entirety. Thick description allows readers to understand the characteristics of the research context and participants. Thick description allows readers to compare their own research situation with that of the study and determine which findings may be transferred to their setting. It also allows for full replication of the study (McKay and Gass, 2005).

Ethics

I ensured that all participants had complete privacy during the data collection by using a private space with a closed door. They were told that they were able to withdraw from the study at any time and for any reason without prejudice. I told them they were free to leave questions blank if they were uncomfortable or simply didn't want to answer them. Participants' names were not used. I identified them using numbers, both on the data in my possession and in this capstone. If I use the data in any future publications, the numbering system will be maintained in place of names. All records of responses to tests and surveys are safely stored on a password-protected USB drive. In addition, before the study, I received permission from Hamline University to carry out this study. I also requested and received permission from the participants themselves to perform the research and use their data in the form of consent letters. These letters asked for

permission for use of the data and ensured that all identities would remain confidential.

Summary

In this chapter I showed why the research paradigm was justified. Additionally, the participants and setting of the study were given. This chapter presented the tools I used for data collection. It presented the procedures used. These materials include a pre- and post-test survey and pre- and post-tests. I explained how the data was collected in the context of an explicit lesson on rhoticity. The next chapter presents the results of this study.

CHAPTER FOUR: RESULTS

This study took place over a period of three days in a tea shop in a small city on the coast of the South East of England. There were two groups of participants, a control group and a treatment group. The participants were intermediate and advanced ELs who had come to England to improve their English. Data was collected in the form of a pre-test survey, a listening pre-test, a listening post-test and a post-test survey. Through the collection of these data, I sought to find the answer to the following questions:

1) Can ELs without previous explicit instruction on the topic of rhoticity
    i. understand words affected by rhoticity?
    ii. identify the varieties of the speakers?
    iii. hold a preference for a variety?
2) Does this preference influence comprehension?
3) Given instruction in rhoticity, do ELs' aural comprehension of different varieties of English improve?
4) Given instruction in rhoticity, do ELs consider studying rhoticity in the context of different varieties of English useful?

Pre-Test Survey Results

I surveyed the participants through their biographical data to be sure they were suitable for that study, that is ELs with international goals for English learning rather than ELs who were planning to live in England for years. I wanted to know their past

experience with English to get an idea of their proficiency to give the results more context. I wanted this information in order to use thick description and give a full picture of the context of the group involved in the study. As can be seen in detail in Table 1, participants' proficiency levels ranged from intermediate to advanced. Their ages ranged from 22 to 28 years old. There were three women and four men total in both the treatment and control groups. They were from Spain, Portugal and South Korea.

Table 1
Biographical Information from the Pre-Test Survey

Participant	Proficiency Level	Age	Sex	Nationality
1	Intermediate	25	Male	Spanish
2	Intermediate	24	Female	Spanish
3	Intermediate	25	Female	Spanish
4	Intermediate	22	Female	South Korean
5	Upper Intermediate	25	Male	Spanish
6	Upper Intermediate	26	Male	Spanish
7	Advanced	28	Male	Portuguese

As can be seen in detail in Table 2, the participants had been studying English between one year and ten years. They had spent between six weeks and three years in England. Two had visited other English speaking countries; in both cases the other country was Ireland. Participant 5 had spent one month in Ireland and participant 7 had spent a week there. Participants 1 through 4 had not been to any other English speaking country and participant 6 did not answer the question.

Table 2
English Experience of Participants from the Pre-Test Survey

Participant	Time Studying English	Time in England	Other English-speaking Countries Visited
1	3 years	1.5 months	None
2	2 years	2 months	None
3	1 year	3 weeks	None
4	10 years	3 months	None
5	5 years	1 month	Ireland for 1 month
6	3 years	2.5 years	No answer
7	3 years	3 years	Ireland for 1 week

The survey also asked participants what varieties of English they had heard the most in past ESL classes or while visiting or living in English-speaking countries in order to give context to the results of their pre-tests. If a participant had considerable experience with one of the varieties involved in the listening tests, this could have affected the results of that participant. Participants did not seem able to identify varieties with confidence. Most participants only identified varieties that sound markedly different, like Scottish English with its trilled r, or varieties that are commonly heard in

international media, like SAE. Participant 1 said he thought he heard the varieties spoken in Brighton, Scotland and Liverpool, but he was unsure. Participant 2 said she had heard only one, but did not mention which one that was. Participant 3 said she had mainly heard the American variety due to films and television. Participant 4 said Irish with a question mark. Participant 5 said he had heard American and Scottish varieties the most. Participant 6 gave no answer. Participant 7 said he could not tell the difference between different varieties but that he had had teachers from many places. He said he could only tell when someone was Scottish, Indian or Pakistani.

All participants in the study were typical of the ELs I had in mind when designing the lesson in the study. They all intended to return home to use English in international contexts such as working with people in English as part of their jobs or studying in English. They had very similar profiles to the ELs in Friedrich's studies (2000, 2003). Participants 1, 3, 4, 5 and 6 said they were learning English to a get a job in their home countries. Participant 4, in particular, said she wanted to work in an airport. Participants' current jobs included two factory workers, an au pair, a history student, a shop assistant and two were unemployed. Participants 2 and 7 said they needed English to study. Participant 7 said that he had required readings in English for his degree in Portugal and that he had struggled to understand many of them.

Data were collected on their assessment of the level of difficulty with listening to give context to test scores. If a participant found listening easier or harder, this knowledge influences what their test scores mean. Receiving high scores on a post-test a participant found easy means something different than when a participant found listening

difficult and improved between a pre- and post-tests. All participants found listening to English difficult at least sometimes, as can be seen in Table 3.

Table 3
Listening Difficulty Results from the Pre-Test Survey

Participant	Found Listening to English Difficult	Found Listening to Unfamiliar Varieties Difficult
1	Sometimes	Sometimes
2	Often	Always
3	Sometimes	Sometimes
4	Often	Often
5	Sometimes	Often
6	Sometimes	Often
7	Sometimes	Sometimes

Participants 1, 3, 5, 6 and 7 said that they sometimes found listening to English difficult. Participants 2 and 4 said they often found listening to English difficult. Participant 1 said he found native speakers more difficult to understand than other English speakers. Participant 3 said listening was difficult because there are many dialects and different accents. Participant 4 said, “I think I don't know any word and pronunciation is different.” Participant 5 said strong accents, slang, and fast speech were difficult. Participant 6 also mentioned fast speech. Participant 7 said that even after three years in England working in a restaurant, he still had trouble with listening sometimes. All of the participants still had some difficulty with listening despite studying English for up to several years.

Given that all participants reported having difficulty with general English

listening, it was unsurprising that all of them said unfamiliar varieties were difficult to understand. As can be seen in Table 3, participants 1, 3, and 7 said they sometimes found unfamiliar varieties of English difficult to understand. Participants 4, 5 and 6 said they often found unfamiliar varieties of English difficult to understand. Participant 2 said she always found unfamiliar varieties of English difficult to understand. Participant 1 thought varieties were sometimes hard to understand because unlike his native language, Spanish, the pronunciation of words is different from how they are written while with Spanish, the pronunciation was the same as how it was written. Participant 2 thought she always found different varieties difficult because she was only listening to one or possibly two at the time. Participant 3 said she sometimes had trouble with varieties, "for example Scottish dialects. They don't pronunciate (sic) a lot (to me)." Participant 4 said she often found unfamiliar varieties difficult because she felt she didn't know English well. Participant 5 said, "The pronunciation of some words are different, so while you try to translate them you miss a part of the conversation. If you cannot translate them, you can miss even the context." Participant 6 said he often had trouble because he was not used to listening to different varieties of English. Participant 7 reiterated that he didn't know when someone has a different accent.

Pre-Test Listening Results

The pre-test and its follow-up questions was intended to answer the following questions: Do students without previous explicit instruction on the topic of rhoticity have difficulty understanding words affected by rhoticity? Can ELs identify the varieties of the speakers? Do ELs hold a preference for a variety? Does this preference for a variety

influence comprehension?

A pre-test was used to see if participants understood rhotic-influenced words. In addition, participants were asked if they could tell where any of the speakers were from and if they liked the variety they had just heard. The test for each variety could receive a maximum of 5 points. 4 out of 5 or 80% was considered a high score due to the low number of possible points involved. As seen in Table 4, all upper intermediate and advanced participants received high scores. Overall, participants scored most highly on the reading of the American variety. As can be seen in Table 4, the participants scored a total of 31 out of a possible 35 points for the American variety. The overall score for the reading in the Australian variety was the lowest, receiving 24 out of a possible 35 points.

Table 4
Pre-Test Results: Accuracy by Variety

Participant	American	South Eastern British	Northern Irish	Australian
1	4	4	2	3
2	4	3	3	1
3	4	4	5	3
4	4	4	5	2
5	5	5	5	5
6	5	5	4	5
7	5	5	5	5
Total by Variety	**31**	**30**	**29**	**24**

The highest possible pre-test score was 5 for each variety. The highest possible total per variety is 35.

Pre-Test Results by Variety

The test for the American variety had the highest scores, receiving a total of 88.5%. Participants 5, 6, and 7, all advanced or upper-intermediate level ELs, scored perfectly on the American variety. The intermediate group all scored 4 out of 5. None of the intermediate participants got #4, *war*, right for the American variety. Everyone except participant 5 answered *are* instead of *aren't* for the American variety. It was counted as a correct answer due to wanting to test rhoticity and not variations of /t/.

The SBE variety received the second highest overall accuracy score, 85.7%. Participants 5, 6, and 7 all scored perfectly on the SBE variety. Intermediate-level participants 1, 3, and 4 scored 80% and intermediate-level participant 2 scored 60%. Participants 1, 2, and 4 got, *work*, wrong. Participant 1 answered *are*, participant 4 responded *arcues* and participant 2 gave no response. Participant 2 also gave no response for #3, *culture*, and participant 3 answered #5 *people* in place of *popular*.

The Northern Irish variety received the third highest overall store, 82.8%. Intermediate-level participants 3 and 4 and advanced/upper-intermediate participants 5 and 7 scored perfectly on this test. Upper-intermediate participant 6 scored 80%, intermediate participant 2 scored 60% and intermediate participant 1 scored 40%. Participants 1 and 6 left #1, *four* blank. Participant 1 also left #2, *pictures*, blank. Participants 1 and 2 both got #5, *another*, wrong. Participant 1 for responded *a lot of* and participant 2 left it blank. She also left #3, *work*, blank.

The Australian variety received the lowest score, 68.5%. All advanced and upper-intermediate participants scored perfectly. Of the intermediate participants,

participants 1 and 3 scored 60%, participant 4 scored 40% and participant 2 scored 20%. Participants 1, 2, 3 and 4 all got #1, *where*, wrong. Participant 1 answered *some*, participants 2 and 3 gave no answer and participant 4 answered *but*. Participant 2 answered *a* in place of *are* for #2. Participants 2 and 4 both got #3, *another*, wrong. Participant 2 didn't respond and participant 4 answered *the.* All intermediate participants got #5, *here*, wrong. Participants 1 and 4 both answered *easy*, participant 2 responded *in*, and participant 2 didn't respond.

Ease of Understanding the Varieties

After each reading, participants were asked if they found the variety easy to understand. This was asked to contribute to thick description of the context. As can be seen in Table 5, all participants said the statement "I found this speaker easy to understand" true for the American variety.

Table 5
Level of agreement with the statement "I found the speaker easy to understand."

Participant	American	South Eastern British	Northern Irish	Australian
1	4	3	2	3
2	4	3	2	2
3	4	4	2	3
4	4	3	2	2
5	4	4	2	4
6	4	4	2	3
7	4	4	2	3

4 = true, 3 = somewhat true, 2 = somewhat false, 1 = false

All participants found the statement somewhat false for the Northern Irish variety. All participants answered true or somewhat true for the SBE variety. The Australian variety had mixed results. Two participants found the statement somewhat false and the other five found it somewhat true or true.

Identification of Varieties

As another part of the pre-test, after each reading, participants were asked where they thought the speakers were from in order to see if they were able to identify the varieties. The participants gave a wide variety of answers; most answers were incorrect as can be seen in Table 6. The American speaker was correctly identified by the most participants, three. Two participants were able to correctly identify where the SBE speaker was from. No one was able to identify where the Northern Irish speaker was from. Only one participant was able to identify where the Australian speaker was from. Overall, participants were not able to identify accurately where the speaker was from.

Table 6
Results of Whether Participants Could Identify Where the Speakers Were From

Participant	American	South Eastern British	Northern Irish	Australian
1	Yes	Yes	No	No
2	No	No	No	No
3	No	No	No	No
4	No	No	No	Unclear
5	Yes	Yes	No	No
6	Yes	No	No	Yes
7	No	No	No	No

Participants 1, 5, 6 knew the American speaker was from the United States. Participant 3 thought she was Canadian. Participant 4 thought that the American speaker was English. Participants 2 and 7 said they didn't know where she was from. Participants 1 and 5 knew that the SBE speaker was from England. Participant 4 thought that the SBE speaker was American. Participant 6 thought the SBE was from Ireland. Participant 7 thought she was American because of the use of the word *movie* in the reading. Participant 2 said she didn't know where the SBE speaker was from. Participants 1, 2, 3, 5 said that they didn't know where the Northern Irish speaker was from. Participants 4 and 6 thought she was Scottish. Participant 7 thought she was from the North of England. Participants 2, 5, and 7 said they didn't know. Participant 1 thought the Australian speaker might be American. Participant 3 thought the Australian speaker was Polish. Participant 4's answer to the Australian speaker was: "this speaker came from another country?" This answer was excluded due to not giving a yes or no response to a polar question.

Likability of the Varieties

For the next post-listening pre-test question, "Do you like the dialect? Why or why not?, " speaker 3's answers were not included because she did not seem to understand the question. She gave answers relating to her opinion on globalization, which can be found with the complete answers to all pre-test questions in Appendix I. Participant 4 seemed to have a reversed use of *yes* and *no* that contrasted with the rest of her answers. Complete answers of all participants can be found in Appendix I.

As can be seen in Table 7, all participants liked the American variety. Participants 1, 4, and 7 said the speaker was easy to understand. Participant 7 also said her pronunciation was clear. They all scored highly on her listening. She had both a high score for likability and comprehension.

Table 7
Responses to "Do you like the dialect?"

Participant	American	South Eastern British	Northern Irish	Australian
1	Yes	No	No	Yes
2	Yes	Yes	No	No
4	Yes	Yes	No	Unclear
5	Yes	Yes	No	Yes
6	Yes	No	No	Yes
7	Yes	Yes	Yes	Yes

Five out of six participants liked the SBE variety. Participant 1 said he didn't like SBE because, for him it, it was much more difficult than the previous variety, American English. Participant 6 agreed that she was hard to understand. Although participant 2 liked SBE, she said the pronunciation of the SBE speaker was more difficult than the previous text. Participants 4 and 7 found the pronunciation clear.

The SBE variety had more mixed results in the comparison of the likability and comprehension. All the upper intermediate and advanced participants scored perfectly, but only two of the three liked the variety. One of the intermediate participants who scored highly liked her speech, but another who also scored 80% didn't like her speech

and one with a 60% score did like it.

Only participant 7 liked the Northern Irish variety, and he said he liked it because it was challenging. Participants 1 and 2 said they didn't like it because the speaker spoke fast. Participants 4, 5, and 6 said the speech was difficult to understand. Despite only one participant liking the Northern Irish variety, five participants scored highly on her listening.

All but one participant liked the Australian variety. Participant 1 said the speaker was easy to understand and spoke slowly. Participant 6 also thought the speaker was easy to understand. This may have been in comparison to the previous speaker, the Northern Irish speaker, whose variety participant 1 said he didn't like because she spoke fast. Participant 7 said he liked the Australian variety because the speaker sounded easy-going. Participant 2 said she didn't like it because she thought the pronunciation was not good.

Participant 4 gave a somewhat puzzling answer for the Australian variety, for the previous question, "Where do you think this speaker is from?," she had responded, "This speaker is from another country?" In response to "Do you like the dialect? Why or why not?," she had answered, "No, I think she came from another country." She may have meant that she was not from England and that she had been unsure at first. This response was not counted because it was unclear.

The only one who answered that she didn't like the Australian variety only scored 20% on comprehension of the Australian variety, while all upper intermediate and advanced participants who said they liked it received high scores. Participant 1, an intermediate-level EL who liked it, scored 60%.

From the results, the participants clearly did hold preferences. There was a strong preference for the American variety and a strong lack of preference for the Northern Irish variety. Likability and comprehension were both high for all participants with the American variety and for advanced and upper-intermediate participants with the Australian variety. However, lack of preference did not prevent comprehension of the Northern Irish variety. The SBE variety likability scores and comprehension scores were very mixed and likability and comprehension were not strongly connected for her variety.

Post-Test Results

The post-test was designed to answer the following question: Does explicit instruction of rhoticity improve ELs' aural comprehension of different varieties of English? For the post-test, as can be seen in table 8, the participants scored lowest on the reading for the American variety and the highest on the reading for the Australian variety.

Table 8
Post-Test Results: Accuracy by Variety

Participant	American	South Eastern British	Northern Irish	Australian
2	3	4	1	3
4	4	5	4	4
6	5	5	4	5
7	4	4	5	5
Total by Variety	**12**	**14**	**14**	**17**

The highest possible pre-test score was 5 for each variety. The highest possible total per variety is 20.

This result is the opposite of the pre-test, in which participants scored the lowest on the reading for the Australian variety and the highest on the reading for the American variety. (See table 4). Comprehension improved for Australian and SBE speakers, but decreased for the rhotic speakers.

The total score for the treatment group went down two points from the pre-test to the post-test for the American speaker as can be seen in Figure 2. The total score improved by two points for the SBE speaker. The total score went down three points for the Northern Irish variety. The total score improved by four points for the Australian variety.

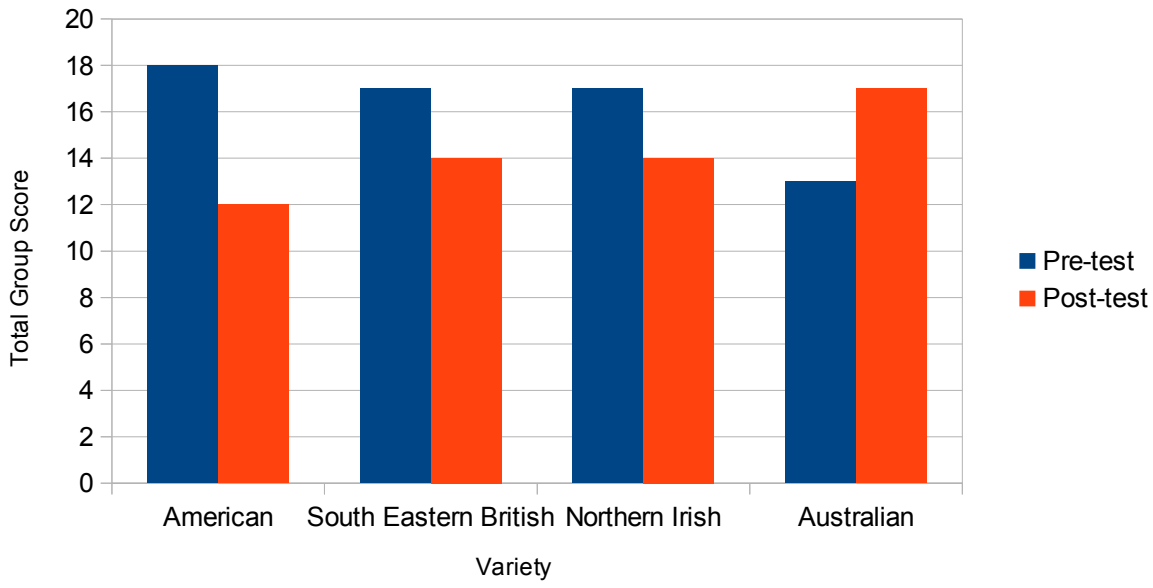

Figure 2: Bar Graph Comparing Total Group Score for Pre- and Post-test Results by Variety

Post-Test Results for the Different Varieties

Participants scored the lowest on the reading of the American variety, with the

reading only receiving 12 out of 20 points, 60%. As for individual scores, participant 2 and 7 did worse on this variety, while participants 4 and 6 remained the same. Participant 2 gave no answer for #1, *year*, and *talking* in place of *started* for the American variety. Participant 4 responded with *always* in place for *early* for the American variety. Participant 6 answered *earlies* in place of *early* for #4 for the American variety but this was accepted due to the rhotic aspect being correct. Participant 7 answered *as* in place of early for #4 for the American variety.

Participants 2 and 4 improved from the pre-test on the SBE variety. Participant 6 remained the same. Participant 7 did worse. Participant 2 improved by one point and participant 4 by two points. Participants 2 and 4 both answered *early* for *earliest* for #1 for the SBE variety, but this was considered an acceptable answer because the aspect pertaining to rhoticity was correct. Participant 2 responded late in place of later for #3 for the SBE variety. Participant 4 received a perfect score for the SBE variety. Participant 7 and *earlier* in place of *earliest* for the SBE variety.

Participants scored lower on the Northern Irish variety over all. Participants 2 and 4 did worse, while participants 6 and 7 remained the same. Participant 2 gave no answer for #1, *are*, #2, *nature*, or #4, *burn*, and answered *faster* in place for *factors* for #5. Participant 4 gave no answer for #1, *are*, and answered *actors* for *factors*. This was accepted though due to getting the rhotic portion correct. She answered *were* in place for *are* for #1 for the Australian variety. Participant 6 gave no response for #1, *are*, for the Northern Irish variety.

The test on the Australian variety received the highest scores on the post-test

reading, receiving 17 out of 20 points, 85%. Participants 2 and 4 improved by two points each from the pre-test. Participants 6 and 7 remained the same. Participant 2 gave no answer for #2, *happier*, and #3, *nature*, for the Australian variety.

The greatest improvement from pre- to post-test was for the Australian variety.

Post-Test Survey

The post-test survey was intended to answer whether ELs consider studying rhoticity useful. Participants 2 and 4 agreed that the lesson on rhoticity improved their listening. Participant 6 somewhat disagreed and participant 7 somewhat agreed. Participant 2 said she agreed because she didn't know the different varieties before. Participant 4 said in the past, she was always confused about the different sounds between English and American people. She said she thinks she understands English better than before. Participant 6 somewhat disagreed because according to him, "the theory was <u>perfect</u> (his emphasis) but it is needed more time practicing it if you want to improve the listening." Participant 7 said he could tell the difference in some words but he still couldn't differentiate between the different varieties.

Participants 2 and 7 strongly agreed that the lesson on rhoticity was useful. Participant 4 somewhat agreed and participant 6 somewhat disagreed. Participant 7 thought that over time, this knowledge would be useful to improving his pronunciation. Participant 2 had a similar comment that she can take care of her pronunciation now. Participant 4 said it was useful somewhat useful because the same word can have different pronunciations and two words can have the same pronunciation and she felt pronunciation was important for conversation. Participant 6 said the same as his answer

to the first question.

All participants found the American variety the easiest to understand, though participant 7 said all varieties were equally easy for him except the Northern Irish variety. (See Table 9). Participant 6 also thought the Northern Irish variety was the most difficult to understand. Participant 2 found the SBE variety harder to understand and participant 4 found the Australian variety the hardest, though their listening test scores improved for both varieties. Informally during the lesson, all participants in all sessions commented that the Northern Irish speaker spoke very fast compared to the others.

Table 9
Varieties Found Easiest and Hardest to Understand

Participant	American	South Eastern British	Northern Irish	Australian
2	Easiest	Hardest		
4	Easiest			Hardest
6	Easiest		Hardest	
7	Easiest	Easiest	Hardest	Easiest

Only participant 6 had a suggestion. He said it would help when listening to the words if I had said which person was going to say it because sometimes he did not know which accent was being played.

Conclusion

This chapter explained the results of the pre- and post-tests and the pre- and post-test surveys. It also described some of the comments participants made on the surveys. The results of the pre-test revealed that prior to the lesson on rhoticity,

participants were more successful at listening comprehension of a rhotic American speaker than to either of the non-rhotic speakers. Although they did not score as high on the listening for the Northern Irish variety, they did score more highly on the Northern Irish listening test than on the Australian listening test. Explicit instruction of rhoticity had mixed results. The comprehension of the Australian variety went up considerably, 15%, but comprehension of the American variety went down 28.5% and comprehension of the SBE variety and the Northern Irish variety went down as well. Most participants considered the lesson useful and all participants felt it would help them improve their listening in the future. Only one out of seven participants could identify the origin of the speakers with a high degree of accuracy. Whether or not a participant liked a variety did not seem strongly related to how well they could understand it.

Summary

This chapter was a presentation of the results from the data collection. I gave the results to the pre-test survey and the pre-test. I discussed how accurately the participants could understand the speakers, if the participants could identify the speaker's variety and whether the participants liked the speakers' variety. I gave the post-test and post-test survey results. I discussed which speakers the participants found easiest and hardest to understand.

In Chapter Five, I analyze the findings of the study, discuss the limitations and implications of the study, and give suggestions for further research.

CHAPTER FIVE: CONCLUSIONS

The goal of this study was to answer the following questions:

1) Can ELs without previous explicit instruction on the topic of rhoticity

   i. understand words affected by rhoticity?

   ii. identify the varieties of the speakers?

   iii. hold a preference for a variety?

2) Does this preference influence comprehension?

3) Given instruction in rhoticity, do ELs' aural comprehension of different varieties of English improve?

4) Given instruction in rhoticity, do ELs consider studying rhoticity in the context of different varieties of English useful?

Major Findings

The results of the study have confirmed my belief that explicit instruction of phonological features is useful for improving listening comprehension. It has also confirmed that ELs, particularly lower level learners, have difficulty with listening comprehension of non-rhotic varieties. In the following sections, I will give detailed answers to each of my research questions.

Non-Rhoticity and Listening

My study has shown me that intermediate level ELs have difficulty understanding

non-rhotic varieties. For the pre-test, the participants found the American variety the easiest to understand. Despite all ELs saying that the Northern Irish speaker spoke too fast and that the variety was hard to understand, five of the seven participants received high scores on comprehension of the Northern Irish variety. The lowest scores were on the Australian speaker's test. As with Halff's (1989) and Tench's work (2003), there were errors that indicated that ELs misunderstood certain words if they were unaware of non-rhoticity. The intermediate group made some errors that may have indicated lack of knowledge of non-rhotic varieties that interfered with comprehension. For instance, participant 1 answered *some* for *where* for #1 with /ʌ/ and the /ɛ:/ on the Australian variety. Both sounds were open-mid unrounded vowels with no audible /r/. Participant 4 also mistook /ɛ:/ for /ʌ/, but she wrote the word *but*. Participants 1 and 4 most likely did not know to expect /ɛ:/ as a pronunciation of /r/, but did hear a vowel that was similar to another vowel in English they were familiar with. Participants 2 and 3 also had trouble with the Australian pronunciation of *where*, giving no answer.

Participants 1 and 4 made the same error for #5. They thought the Australian speaker said *easy* for *here*, both involving /i/ sounds and no audible /r/. Participant 4 thought *here* was *in*. These errors may indicate that participants heard the /i/ in the /hiə/, but didn't know how to correctly interpret the rest of the word and made guesses with short words containing /i/ or /ɪ/. Participant 4 also answered *the* in place of *another*, which may indicate she had trouble noticing any unstressed vowels whether they were involved in the non-rhotic feature or not. Participant 2 answered *a* in place of *are* for the Australian speaker, which may have indicated a lack of knowledge of non-rhoticity, but

that she heard what the Australian speaker said correctly, /aː/. Participant 3 answered #5 *people* in place of *popular* for the SBE speaker. These particular errors could indicate either a lack of knowledge of non-rhoticty or a lack of familiarity with Australian English or both. In the case of these particular words, all of them would be pronounced very similarly in SBE. Intermediate level ELs do seem to have difficulty understanding words affected by rhoticity without explicit instruction, similar to the participants in Deterding's (2005) study in Singapore who had listening comprehension difficulty with unexpected features of which they were not aware and to the native speakers who were unfamiliar with non-rhotic varieties in Sumnera and Samuel's (2009) study.

The advanced group made almost no errors and none of note. Their lack of errors could indicate that non-rhoticity was no longer a listening comprehension issue for them or that the test was too easy for their level of proficiency. They may have been able to guess correctly from context. In addition, in the case of of two of the upper-intermediate and advanced ELs, they had been in England for between two and a half and three years. The time spent immersed in a non-rhotic variety may have been sufficient for them to understand both rhotic and non-rhotic varieties well.

Speaker Identification

As studies discussed in the literature review suggest (Bayard and Green, 2002; Kang, 2010; Sachiko (2009), there was a low awareness of dialectal varieties of English. None of the participants could identify where the speakers were from consistently. The American speaker was correctly identified the most times, which is similar to the results of Bayard and Green's (2002) study in which SAE speakers were correctly identified

most often by the majority of their participants. The American speaker was correctly identified by three of the seven participants. In addition, participant 3 thought she was Canadian, which may have indicated she noticed certain North American features. Two participants were able to identify the SBE speaker's origin. Participants who were unable to identify her origin included the two upper-intermediate and advanced participants who had been living in England for between two and a half and three years. No one was able to identify the Northern Irish speaker, though some participants thought she was Scottish, which may have indicated they noticed that she used rhotic pronunciation but was not from North America. Only one participant was able to identify the Australian speaker's origin. The correct responses total to only six out of thirty five, only 17%, which shows that the participants could not identify where a speaker is from most of the time.

Variety Preference and Comprehension

The American variety had both a high score for likeability and comprehension. The SBE variety had mixed results for both likeability and comprehensibility. No one preferred the Northern Irish variety, but despite not preferring it, five out of seven participants scored perfectly on the reading. The variety's likeability and comprehensibility didn't correspond. Most of the participants liked the Australian variety. The only one who said she didn't like the Australian speaker's variety received a low score of 20%. All the others scored between 60% and 100%. From these data, there is not a strong, consistent relationship between EL preference for a variety and comprehensibility.

Explicit Instruction of Rhoticity and Aural Comprehension of Different Varieties of English

Listening to non-rhotic varieties improved for both post-tested intermediate participants. Participant 2 and participant 4 both improved by 20% with the SBE speaker and 40% with the Australian speaker. Participant 2 improved on the SBE and Australian readings, but did worse on the American and Northern Irish readings. Participant 4 remained the same for the American reading, improved on the SBE and Australian readings and did worse on the Northern Irish readings. It is possible that due to the short amount of time, participants were still sorting out the differences in their minds and they were hyper aware of non-rhoticity. This hyper awareness may have led to more trouble with rhotic speakers while they integrated the information into their overall information about English.

The results for the advanced group were less conclusive. Participant 6 scored exactly the same for both tests with only one wrong on the Northern Irish pre- and post-tests. Participant 7 scored slightly less highly on the post-tests, but all of his scores remained high scores. As was discussed above, given they scored well on the pre-test, they may have already been easily able to understand non-rhotic varieties. The results of the post-test show that for lower level ELs, explicit instruction in rhoticity appears to improve comprehension. The results were not conclusive for more advanced ELs.

Utility of Explicit Instruction on Phonological Concepts

The intermediate participants both thought that the lesson on rhoticity improved their listening despite it being a short time in between the two tests. In particular,

participant 4 said that she had always been confused about dialect differences between the U.S. and the U.K. in the past but that the intervention had clarified the differences for her. Her improved test results indicate that she understood the non-rhotic speakers better than the previous day. Participant 2's test improved non-rhotic results also connected with her impression that her listening had improved.

Participants 2 and 7 strongly agreed that the lesson on rhoticity was useful. Participant 4 somewhat agreed and participant 6 somewhat disagreed due to thinking more time was needed. Participant 7 thought that over time, this knowledge would be useful to improving his pronunciation. It seems that though they didn't all feel they had immediately improved, they thought that they would over time with their new knowledge. These results indicate that the participants found explicit instruction on rhoticity useful, similar to the results in Huthaily's (2008) study, in which nearly all of his participants found explicit instruction of phonological concepts useful.

Limitations

The most significant limitations were having a small group and a short amount of time. I was not able to meet regularly with the participants to observe their progress over a longer span. The study took place over three days, which may not be enough time to integrate a new rule into an EL's listening skills. Participant 6 said, “the theory was perfect (his emphasis) but it is needed more time practicing it if you want to improve the listening.” I agree with him. It is possible that if there had been more time, more significant changes would have been seen. For instance, participant 7 said he could tell the difference in some words but he still couldn't differentiate between the different

varieties, which was unsurprising given the length of the study. In addition, there were only seven participants total and only four in the treatment group. With such a small sample, it is hard to generalize their experiences.

The type and the level of the test may have been two other limitations. The level of the text may have been too easy for upper intermediate and advanced learners, who all received nearly perfect scores on both the pre- and post-tests. Perfect scores occurred whether the participants found them easy to understand or not, or knew where they were from or not. The type of test, a cloze, may have also been a limitation. It is possible that the more advanced participants were able to guess from the context since they were able to see the rest of the reading printed in front of them. If I were to repeat the study, I would have different tests for different levels.

Variation in the speed of the speech of the speakers was also a limitation. The Northern Irish speaker spoke much faster than the other three and all participants commented on this during the lesson. The participants may have understood her better if if she had spoken at the same rate as the other speakers. This made it more difficult to test for understanding of rhoticity in particular. Despite finding her somewhat difficult to understand, two of the four intermediate ELs made perfect scores on the Northern Irish reading. Despite finding it fast and unfamiliar in many ways, the presence of post-vocalic /r/ may have made her easier for them to understand than if it had been speech of a similar speed by an unfamiliar non-rhotic speaker.

The limitations of the study included limited time and a small group of participants. The possibility that the level of the test materials was too easy for the

upper-intermediate and advanced participants was also a limitation. The final limitation was that the speech of the Northern Irish speaker was considerably faster than that of the other three speakers.

Implications

Despite the lack of time for integration and long-term review, three of the four participants thought it was a useful course and two believed it improved their listening. The only participant who somewhat disagreed said he felt that over time, the lesson on rhoticity would be useful for improving listening. In addition, both intermediate-lever participants improved listening comprehension after the intervention. Given it was well received and immediately beneficial in improving listening comprehension to non-rhotic varieties, it would be useful to introduce rhoticity as a small part of curricula for ELs with similar profiles to those who improved: intermediate-level with goals of returning to their home countries for internationally related word.

Further Research

My strongest recommendation for further research is a replication of the study by someone who could conduct the study over a longer period of time. More than that, similar studies should be done both on rhoticity and on other variations across varieties on a wider scale to find out if these findings can be generalized to a larger group of ELs.

Conducting the research for this capstone has confirmed my belief that explicit instruction is useful for phonological features. In Chapter One I described how my own language learning experiences with variety-related phonological variation and my experience as an English teacher of ELs with international goals led me to ask the

following questions:

1) Can ELs without previous explicit instruction on the topic of rhoticity

   i. understand words affected by rhoticity?

   ii. identify the varieties of the speakers?

   iii. hold a preference for a variety?

2) Does this preference influence comprehension?

3) Given instruction in rhoticity, do ELs' aural comprehension of different varieties of English improve?

4) Given instruction in rhoticity, do ELs consider studying rhoticity in the context of different varieties of English useful?

APPENDIX A

RELEVANT RESULTS FROM HAMOUDA'S 2012 SURVEY ON LISTENING

Statement from Hamouda (2012)	Frequency of Agreement	Percentage of ELs (%)
I find listening difficult	Sometimes	13.3
	Often	30.1
	Always	33.3
I find pronunciation familiar but cannot recognize the words	Sometimes	33.3
	Often	25
	Sometimes	30
I found it difficult to recognize words I know because of the way they are pronounced	Always	33.3
	Often	25
	Sometimes	36.7
There were words I would normally understand in writing, but when I heard them in a stream of speech, I found it difficult to tell where one word finishes and another begins	Always	36.7
	Often	33.3
	Sometimes	16.7
I find it difficult to understand the natural meaning of words which are not pronounced clearly	Always	36.7
	Often	20
	Sometimes	33.3
I find it difficult to understand well when speakers speak with a variety of accents	Always	30
	Often	43.3
	Sometimes	26.7

APPENDIX B

PRE-TEST SURVEY

Pre-Test Survey Level of English_____ Name_____

Please answer the following questions about yourself.

1. How old are you?

2. Are you male or female?

3. Where are you from?

4. What are you studying? If you are not studying, what is your occupation?

5. How long have you been studying English (please answer in months/years or give a date)

6. How long have you been in England?

7. Have you been to any other English speaking countries? If so, for which ones and for how long?

8. What dialects of English have you heard the most (Please think about where your past teachers have been from and what kind of audio was used in classes or in films and television you have seen in English)?

9. Why are you studying English?

Circle which one you think is true for you:

10. I find listening to English difficult.

always often sometimes rarely never

If you answered always, often or sometimes, please state why:

11. I find unfamiliar dialects of English difficult to understand.

always often sometimes rarely never

If you answered always, often or sometimes, please state why:

APPENDIX C

PRE-TEST

Fill in the blank with the word you hear. Name_____ Level _____

Reading 1

Speaker 1

Globalization is the process that makes economies and societies from all around the world become more and more connected. This means that people, ideas, technology, money, services, and many **1) <u>other</u>** things are moving between countries and changing the way people think and act.

Not everyone thinks the same way about globalization. Some people think it is good, some people think it is bad. Some believe that globalization helps rich people get **2) <u>richer</u>** and makes poor people poorer. These people say that globalization helps big companies like Coca-Cola and McDonald's destroy local businesses. The people who think globalization is a good thing argue that globalization helps poorer people to become richer. They also think that it doesn't damage local **3) <u>cultures</u>**. These people also believe globalization helps prevent conflicts like **4) <u>war</u>.** This is because countries that have economic connections will try hard to maintain good relationships with each other so their economies **5) <u>aren't</u>** damaged.

Circle the answer you find most true for you

1) I found this speaker easy to understand.

True Somewhat True Somewhat False False

2) Where do you think this speaker is from?

3) Do you like the dialect? Why or why not?

Speaker 2 Name_____ Level _____

Globalization has had a very strong effect on employment and jobs throughout the world. For some workers, such as engineers, lawyers, and **1) <u>bankers</u>**, globalization has been a good development. These workers are able to successfully compete globally and have seen an increase in their salaries. But for those who **2) <u>work</u>** in factories or in the service industry (at hotels, shops and restaurants), it has not been good. These types of jobs have been exposed to increasing competition from workers from poorer countries. A worker from a poorer country will do the same job for less money. This decreases the salaries for that job, so people get paid less to do it.

3) <u>Cultures</u> have also been effected by globalization. Foods such as Japanese noodles, Indian curry and French cheeses have spread around the world. We can also see an increase in the use of Chinese characters in tattoos. Some people get these tattoos without actually knowing what the characters mean. **4) <u>Another</u>** area effected by globalization is the film industry. Most people have seen American movies. But due to globalization, Korean, Indian and Japanese movies have become more **5) <u>popular</u>** worldwide.

Circle the answer you find most true for you

1) I found this speaker easy to understand.

True Somewhat True Somewhat False False

2) Where do you think this speaker is from?

3) Do you like the dialect? Why or why not?

Fill in the blank with the word you hear. Name_____ Level _____

Reading 2

Speaker 3

I'm sure you have heard of Facebook and Twitter. In fact, there is a good chance that you use them. You might also have heard of LinkedIn and MySpace. These **1) four** websites are the most popular social media websites. But what exactly is "social media"?

Social media can be defined as web-based and mobile media that are used for people to interact, connect and communicate with each other. These types of media often involve the creation and sharing of content (writing, **2) pictures**, and video) that people make themselves, mostly through the Internet.

In general, there are six different types of social media. The first type involves people getting together to **3) work** on a project. Wikipedia is an example of this type of social media. Blogs and micro-blogs (such as Twitter) are another type of social media. There **4) are** other websites that allow people to share content such as pictures, articles or videos. YouTube is the most well-known website of this type. **5) Another** type of social media are social networking sites. These sites allow people to stay in touch with friends, make new ones and join communities.

Circle the answer you find most true for you

1) I found this speaker easy to understand.

True Somewhat True Somewhat False False

2) Where do you think this speaker is from?

3) Do you like the dialect? Why or why not?

Speaker 4 Name_____ Level _____

Facebook is an example of this type of social media site. Many people like to play games on the Internet and, yes, there are social media games as well. These games allow gamers to interact with each other and play with or against other gamers. World of Warcraft is a good example. The final type of social media is websites like Second Life, **1) <u>where</u>** people can create avatars and use and create objects, as if they were in the real world.

Social media are different from traditional media. In the past, media was created from one place, normally a company. Then the company would send out the media to consumers. Magazines, books and movies **2) <u>are</u>** all examples of this. But with social media, many individual people in different locations create content. **3) <u>Another</u>** difference is that people who produce content in social media don't need very special skills. On the other hand, in traditional media, people need special skills to produce something. Another difference is that social media can be produced much **4) <u>faster</u>**. It takes only a few minutes to write a twitter post, for example. But it can take many months to put together a magazine, or years to make a movie.

Some people think social media is good and some think it is bad. But whatever you might think, social media is **5) <u>here</u>** to stay.

Circle the answer you find most true for you

1) I found this speaker easy to understand.

True Somewhat True Somewhat False False

2) Where do you think this speaker is from?

3) Do you like the dialect? Why or why not?

APPENDIX D

POST-TEST

Fill in the blank with the word you hear. Name_____ Level_____

Reading 3

Speaker 1

Ice cream is one of the most popular desserts in the world. Over four billion gallons (15.1 billion liters) are consumed each **1) year** worldwide. Although many people enjoy this frozen dessert, not too many people know its history.

Eating frozen sweets **2) started** about two thousand years ago. In ancient Italy, Persia and China, ice (or sometimes snow) was mixed with fruit or fruit juice. In ancient Rome, the Emperor Nero had snow brought down from the mountains and mixed with fruit.

Arabs were the **3) first** people to add milk to frozen desserts. Instead of fruit juice, they added sugar as a sweetener. But sugar wasn't the only thing added. They also added dried fruits and nuts. As **4) early** as 1,000 years ago ice cream could be found in Baghdad, Damascus and Cairo.

Much later, in the sixteenth century, the rulers of ancient India used horsemen to bring ice down from the mountains to make sorbets. Also during this time a famous Italian duchess, Catherine de Medici brought ice cream to France. A hundred years **5) later** , in the seventeenth century, ice cream could be found in England.

Speaker 2 Name_____ Level _____

After this time, ice cream and ice cream recipes were mentioned in books. One of the **1) <u>earliest</u>** ice cream recipes appeared in a cookbook from 1718. The Oxford English Dictionary claims that the first mention of the phrase "ice cream" was in a magazine that was published in the year 1744.

About one hundred years later, in the 1870's, a German **2) <u>engineer</u>** invented something that would later help make ice cream available worldwide. This invention was the freezer. **3) <u>later</u>** still, in 1926, an improved method of freezing was invented. This is when ice cream started to spread all over the **4) <u>world</u>** because it could be more easily made and transported.

These days there are many companies that sell ice cream and the number of different flavours available is well over 1,000. Frozen desserts have been around for a long time and will most likely be enjoyed well into the **5) <u>future</u>**.

Reading 4 Name_____ Level _____

Speaker 3

There are many things you can do to have a healthy life. Many people know that eating healthy food and exercising **1) <u>are</u>** two of them. Something else people can do is to spend time outdoors, in **2) <u>nature</u>**. Scientists have discovered what most of us already know: being outside has positive effects on human health.

Being outdoors exposes us to sunlight – which aids our production of vitamin D, which helps many parts of the body **3) <u>work</u>** properly such as the brain, heart, skin. Vitamin D also helps the body maintain good bone health. But don't spend too much time in the sun as it can **4) <u>burn</u>** you.

Spending time outdoors can also help reduce the chance of being overweight. People tend to be inactive inside. Additionally they are more inclined to eat a snack. These two **5) <u>factors</u>** can lead to weight gain. But when people are outdoors they do things: they are active. This activity can help control weight.

Speaker 4 Name_____ Level _____

Another benefit of being outside is the positive effect it can have on personal relationships. When people **1) <u>are</u>** outside they tend to do things with people. This can lead to an improved social life, which has been shown to make people **2) <u>happier</u>**.

One of the biggest benefits of spending time outdoors is stress reduction. When people spend time in **3) <u>nature</u>**, such as at a park, they experience more positive feelings and fewer negative ones. This leads to a decrease in stress, which can lead to **4) <u>better</u>** health because stress lowers your body's ability to fight off sickness.

Many people spend long hours at work where they spend most of the day inside. After such a day, spending some time outside will have a calming effect, which can reduce stress. Being out side can also help give you energy if you feel **5) <u>tired</u>**. The fresh air can also help increase the amount of oxygen on your body.

APPENDIX E

POST-TEST SURVEY

Post-Test Survey Name_____ Level _____

Chose the option that most accurately shows what you think of the following statements:

1. The lesson on rhoticity improved my listening of other dialects of English

Strongly agree Agree Somewhat agree Neither agree or disagree

Somewhat disagree Disagree Strongly disagree

Why or why not?

2. I felt that the lesson on dialects was useful.

Strongly agree Agree Somewhat agree Neither agree or disagree

Somewhat disagree Disagree Strongly disagree

Why or why not?

3) Which speaker did you find easiest to understand, one, two, three, or four? Which did you find the most difficult?

4) Do you have any other comments or suggestions? If so, write them below:

APPENDIX F

FLASHCARD CONTENT

red	merry	forget	comfort
car	kɑː	formerly	formally
hard	hɑːd	area	airier
aunt	aren't	beer	bɪə
caught	court	engineer	hear/here
port	pɔːt	hour	aʊə
sauce	source	cow aʊə	about ə
soar	sore	shower	flour/flower
saw	pet ɛ	fire	faɪə
flaw	floor	eye aɪ	inspire
bought ɔː	father ɑː	fair enough	for instance
burn	bɜːn	Jessica asked me	Jessicar asked me
learn	word	soaring	sawing
bird	girl	sawring	drawing
journey	Germany	rhoticity	rhotic
were	sir	non-rhotic	England
fair	fɛː	Wales	Scotland
care	where	Ireland	Northern Ireland
computer	kəmˈpjuːtə	Australia	New Zealand
answer	mother	United States	Canada
sugar	measure	far	bored

APPENDIX G

INCORRECT PARTICIPANT ANSWERS TO THE PRE-TEST

Participant 1 - Reading 1 – Speaker 1

4) war – no answer

5) are for aren't – judged acceptable

Participant 1 – Reading 2 – Speaker 2

2) are for work

Participant 1 – Reading 2 – Speaker 3

1) four – no answer

2) pictures – no answer

5) a lot of for another

Participant 1 – Reading 2 – Speaker 4

1) Some for where

5) easy for here

Participant 2 - Reading 1 – Speaker 1

4) war – no answer

5) are for aren't – OK tho

Participant 2 – Reading 2 – Speaker 2

2) work – no answer

3) culture – no answer

Participant 2 – Reading 2 – Speaker 3

3) work – no answer

5) another – no answer

Participant 2 – Reading 2 – Speaker 4

1) where – no answer

2) a for are

3) another – no answer

5) here – no answer

Participant 3 - Reading 1 – Speaker 1

4) war – no answer

5) are for aren't – judged acceptable

Participant 3 – Reading 1 – Speaker 2

5) people for popular

Participant 3 – Reading 2 – Speaker 4

1) where – no answer

5) in for here

Participant 4 – Reading 1 – Speaker 1

3) curture for culture – judged acceptable

4) war – no answer

5) are for aren't – judged acceptable

Participant 4 – Reading 1 – Speaker 2

2) arcues for work

Participant 4 – Reading 2 – Speaker 4

1) but for where

3) the for another

5) easy for here

Participant 6 – Reading 1 – Speaker 1

1) are for aren't – judged acceptable

Participant 6 – Reading 2 – Speaker 3

1) four – no answer

Participant 7 – Reading 1 – Speaker 1

1) are for aren't – judged acceptable

APPENDIX H

INCORRECT PARTICIPANT ANSWERS TO THE POST-TEST

Participant 2 – Reading 3 – Speaker 1

1) year – no answer

2) talking for started

Participant 2 – Reading 3 – Speaker 2

1) early for earliest – judged acceptable

3) late for later

Participant 2 – Reading 4 – Speaker 3

1) are – no answer

2) nature – no answer

4) burn – no answer

5) faster for factors

Participant 2 – Reading 4 – Speaker 4

2) happier – no answer

3) nature – no answer

Participant 4 – Reading 3 – Speaker 1

4) always for early

Participant 4 – Reading 3 – Speaker 2

1) early for earliest – judged acceptable

Participant 4 – Reading 4 – Speaker 3

1) are – no answer

5) actors for factors – judged acceptable

Participant 4 – Reading 4 – Speaker 4

1) were for are

Participant 6 – Reading 3 – Speaker 1

4) earlies for early – judged acceptable

Participant 6 – Reading 4 – Speaker 3

1) are – no answer

Participant 7 – Reading 3 – Speaker 1

4) as for early

Participant 7 – Reading 3 – Speaker 2

1) earlier for earliest

APPENDIX I

ANSWERS TO OPEN ENDED PRE-TEST QUESTIONS

Question: Did you like the dialect? Why or why not?

Participant 1

American Speaker: Yes, because for me it's easy to understand

SBE Speaker: I don't like it because for me way more difficult than the other dialect

Northern Irish Speaker: No, I don't like because she speaks faster and the dialect is difficult to understand

Australian Speaker: Yes, because for me it's easy to understand and the speaker talks lower.

Participant 2

American Speaker: Yes, because I understand it very well.

SBE Speaker: Yes, I understand but the pronunciation is more difficult than the other text.

Northern Irish Speaker: No, because it is faster.

Australian Speaker: No, because the pronunciation is not good.

Participant 3

American Speaker: Yes, I think it's very interesting the globalization.

SBE Speaker: Yes, this dialect is about globalization mainly in films, foods and the differents in the

culture.

Northern Irish Speaker: No, I don't. The issue is very interesting but it was so quick and I don't

understand well.

Australian Speaker: Yes, I think it is a current issue.

Participant 4

American Speaker: No, because it's easy to understand.

SBE Speaker: I think, no. The pronunciation is clear.

Northern Irish Speaker: Yes. It was a little difficult to understand and the pronunciation was

different.

Australian Speaker: No, I think she came from another country.

Participant 5

American Speaker: Yes, I do because it is easy for me to understand.

SBE Speaker: Yes, I do.

Northern Irish Speaker: No, I don't because it was very difficult to understand.

Australian Speaker: Yes, I do.

Participant 6

American Speaker: Yes, because it is easy to understand.

SBE Speaker: Not so much. Not so good pronunciation.

Northern Irish Speaker: No. Difficult to understand.

Australian Speaker: Yes, I could understand it quite well.

Participant 7

American Speaker: Yes, I do. Because it sounds very clear.

SBE Speaker: Yes, I do, it is clear. She said “movie”, so I would say she is American.

Northern Irish Speaker: Yes, do like it. It's quite challenging.

Australia Speaker: Yes, I do. It sounds easy-going.

APPENDIX J

ANSWERS TO OPEN ENDED POST-TEST QUESTIONS

Why or why not response to “ The lesson on rhoticity improved my listening of other dialects of English.”

Participant 2: Because I didn't know the different dialects.

Participant 4: I always confussed about English people sound and American sound. But now I think I understand English better than before.

Participant 6: The theory was perfect but it is needed more time practising it if you want to improve the listening.

Participant 7: I've realised the difference in some words, but still I'm not able to differentiate the dialects.

Why or why not response to “I felt that the lesson on dialects was useful.”

Participant 2: Because now I care my pronunciation.

Participant 4: Because the same word has different pronunciation and two different word have same pronunciation. Pronunciation is very important to conversation.

Participant 6: Same as above

Participant 7: Even if I do not realise how, slow and slow, steap by steap, this kind of exercises help me to improve my accent.

Responses to “Which speaker did you find easiest to understand, one, two, three, or four? Which did you find the most difficult?”

Participant 2: I find easiest to understand the first speaker. I find the worst difficult the second speaker.

Participant 4: First one is the easiest and last woman is the most difficult.

Participant 6: Easiest → First one. Most difficult → third one.

Participant 7: I found speaker 1, 2, and 4 pretty similar. Speaker 3 was more difficult than the others.

Response to “Do you have any other comments or suggestions? If so, write them below:”

Participant 2: I think that it is an interesting class!

Participant 4: Thank you for your lesson. It was very useful for me.

Participant 6: It would help when listening to the words, say which person is going to say it (the Irish, the British...) Because sometimes it did not know which accent was being played.

Participant 7: No answer

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