

The Effects of Accent Familiarity on English as a Foreign Language Students' Word Recognition and Comprehension of the English Language

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ABSTRACT

Tests and in class assessments of EFL (English as a foreign language) listening comprehension generally attempt to sample from language that reflects what students will be expected to comprehend in the relevant contexts. Unfortunately, most listening tests and assessments do not consider or address the issue of accented English in ESL listening. This study examined the issues and problems EFL students face when listening to unfamiliar accents. Three groups (n=99) of Bachelor of Arts English major students enrolled at Rajamangala University of Technology Krungthep, Bangkok, Thailand were exposed to various accents at different frequency levels throughout the Advanced Listening and Speaking course. Tests were conducted to establish whether accent familiarity affected students' understanding of the English language. The results of the tests suggest that familiarity of an accent can aid listener comprehension.

Keywords: Accent, Familiarity, Comprehension

INTRODUCTION

Most English as a second language textbooks use either standard British or standard American accents for their audio listening dialogues. In this regard most standardized tests also use standard-English accents. Unfortunately, there are few resources that address the fact that accented English is a normal part of EFL/ESL (English as a foreign language/ English as a second language) listening (Derwing, Rossiter, & Munro, 2002; Hart, n.d.). As English is now being used as the world's lingua franca (second language) various different accents and dialects can be heard. Students that are unfamiliar with a certain accent or dialect will face inevitable problems in regard to listening

comprehension. A lack of knowledge of different accents can leave the university graduate unprepared for real life situations. Year on year, the number of tourists to Thailand generally increases. In 2014 the number of foreign tourists to visit the country was nearly 25 million. These visitors are from various continents around the world with the majority of visitors to Thailand coming from non-native English speaking countries (Vanhaleweyk, n.d.).

STATEMENT OF THE PROBLEM AND RATIONALE

Tourism is one of the largest sectors of the Thai economy. Every year visitors from all over the world descend on Thailand for its weather, beaches, culture and nightlife.

English has become invaluable to many people as many local people adopt English as a means of conducting business with visiting tourists. This statement is true not only for the educated elite but for people from all sorts of backgrounds that need to conduct business with foreign travellers. In order to maintain and increase tourist numbers Thai people need to understand and communicate with visitors from all nations (Nicholls, 2014). Thai students have been shown to lack confidence when speaking English. Many students use memorisation as a technique to learn the language and listening skills are also problematic. Graduates therefore are rarely situated at the hotel front office due to their low English proficiency levels (Charunsri, 2011; Yusica, n.d). This situation is not only restricted to tourism. Trade and business negotiations are also effected by low English levels. This situation is exasperated by the many different forms of English spoken worldwide. It has been estimated that around 1.5 billion people worldwide speak English. Around 1.1 billion of those speakers are second language users so therefore English is now a global language (Crystal, 2012). Although, Standard English is usually taught within the classroom this has not standardized the way people speak the language. A short pilot study at RMUTK, found that 47 out of 99 students found unfamiliar accents a main problem when communicating in English.

ESL listening comprehension assessment requires test developers to sample from the language that examinees will be required to listen. Test developers must confront the fact that students may encounter accents of English other than standard American, standard British or standard Australian. If a test of listening comprehension is to reflect the authentic language spoken, it should include accented English. However, accented language can affect the listening

comprehension of ESL listeners. These affects vary depending on native language and accent familiarity (Major, Fitzmaurice, Bunta, & Balasubramanian, 2002).

There is some recognition of the issue. For example, English test such as TOEFL and IELTS use a range of standard native accents in their listening assessment (Cambridge ESOL, 2008; ETS, 2005). Textbooks manufacturers face the issue of which form of English to use. Most textbooks use either Standard British or Standard American English (Hart, n.d). However in many of the target-language use domains for which listening tests and in class assessments are designed such as health communication, business and tourism listeners are likely to encounter not only a wide range of native speaker accents but also a range of second language speaker accents. As an example, if English spoken as both a first and second language are taken into account there are many different forms. These include British and Irish, American, Canadian, Australian, New Zealand & South Pacific, Caribbean, South African, Nigeria, Ghana, Kenya, India, Pakistan, Sri Lanka, Nepal, Bangladesh, Malaysia, Singapore, Philippines and Hong Kong (Crystal, 1995). Within those forms of the language many accents exist. It is no wonder that students become increasingly confused and frustrated with this situation. Students may go from one native or non-native teacher to the next each with a different accent and a different way of pronouncing a word. Teachers with a strong regional accent may find employment teaching ESL difficult. In 2010, The Arizona Department of Education went as far as suggesting that teachers who had heavy accents would be temporarily reassigned (Liberman, 2010). The issue of non-standard accents in English has been largely ignored. As more and more students around the world learn English the situation will only worsen. It is

therefore important that students are equipped with the skills and knowledge to understand or at least be aware of other forms of English.

RESEARCH QUESTIONS

1. Does accent familiarity affect language learners' listening comprehension levels?
2. Is there a significant difference between language learners' listening comprehension levels between familiar, moderately familiar, less familiar and unfamiliar accents in English?

RESEARCH OBJECTIVES

To examine whether accent familiarity affects language learners listening comprehension levels. To investigate whether there is a significant difference between language learners listening comprehension levels between familiar, moderately familiar, less familiar and unfamiliar accents in English.

ALTERNATIVE HYPOTHESES

H_a1. Accent familiarity affects language learners' listening comprehension levels.
 H_a2. There is a significant difference between language learners listening comprehension levels between familiar, moderately familiar, less familiar and unfamiliar accents in English.

NULL HYPOTHESES

H₀1 Accent familiarity does not affect language learners listening comprehension levels.

H₀2. There is no significant difference between language learners listening comprehension levels between familiar, moderately familiar, less familiar and unfamiliar accents in English.

SIGNIFICANCE OF THE RESEARCH

The results of this study would be useful as reference material for researchers in

related fields and to conduct further research for the purpose of understanding the difficulties that students encounter with listening comprehension when learning the English language. The data obtained may be used as empirical evidence about students' comprehension and understanding of unfamiliar accents. This information may be used to adapt existing media, courses and curriculums.

LITERATURE REVIEW

Language comprehension may be affected by a number of factors. An often cited reason for poor understanding is a speaker's accent. Research has shown that familiarity with a speaker's accent can affect comprehension. Listening is not an all-or-nothing phenomenon. The level of effort required will depend on the degree of acoustic mismatch in any given listening situation. Van Engen and Peelle (2014) suggest that a familiar accent or one that is similar to a familiar accent can be well understood and require little to no additional effort from the listener. Furthermore, it is known that listeners can rapidly adapt to both foreign accented speech and speech produced in unfamiliar accents (Van Engen, & Peelle, 2014). Gass and Varonis (1984) cited familiarity as a factor in the understanding of accented speech. Tests performed by native English speakers showed that familiarity with non-native English speech, a certain accent all had an effect on the intelligibility. Bross (1992) also supports the position of familiarity by suggesting that the key to intelligibility is the concept of calibration. Calibration is the listener's ability to make correlations between the different sounds of the speaker's accent with the sounds of the listener's own accent. Bross (1992) suggests that once the listener calibrates the message, then intelligibility will naturally occur. Bross' view was supported by Clarke and Garrett's study on accents.

Clarke and Garrett (2004) studied the benefits of brief exposure to non-native speech. Native English listeners were exposed to English sentences produced by non-native speakers. It was found that processing speeds were initially slower for accented speech but increased through exposure. The findings suggest that recognition is related to deviations in language speech patterns.

Contrary to the positive results, other research has found little or no significant effects of accent familiarity on listeners' comprehension. Kennedy and Trofimovich (2008) evaluated 24 native English speakers on their comprehension of English utterances produced by both English and Mandarin speakers. Half of the listeners did not have any experience with L2 (second language) speech. The other half were experienced listeners of non-native speech due to TESL/TEFL experience. All listeners rated comprehensibility and accentedness of each utterance. Kennedy and Trofimovich (2008) found that the experienced listeners were more accurate in their transcription of the utterances than inexperienced listeners. The study found though that there were no significant differences between the two groups' ratings of comprehensibility or 'accentedness'. Kennedy and Trofimovich (2008) concluded that accent familiarity did not affect listeners' ratings of L2 speech. Matsuura, Chiba, Mahoney and Rilling (2014) examined whether a slower speech rate enhanced listening comprehension of unfamiliar English varieties. The study found that students achieved significantly higher mean comprehension scores with the slowed speech rate but there were no significant effects noted for the more familiar accent (Matsuura, Chiba, Mahoney, & Rilling, 2014).

It appears from the previous research that accent familiarity may aid listener

comprehension and assist a listener in more accurate transcription of speech. Slower speech rates may also aid understanding. Short exposure appears to help listeners in their comprehension of unfamiliar accents. Results of tests may be affected by the listeners' native mother tongue and the speed of the speech rate.

VARIABLES

Dependent variable:

- Listening comprehension

Independent variables:

- Familiar
- Moderately familiar
- Less familiar
- Unfamiliar English accents

METHOD AND DESIGN

The various accents used in the classroom were chosen after discussions with the students to gauge pre familiarity levels. During the course of two semesters students were exposed to British (English), Croatian, Indian, Irish, Indian, Korean, Spanish and Thai accents. The accents were divided into four categories: familiar (Standard British English and Thai), moderately familiar (Irish and Spanish), less familiar (Korean and Indian) and unfamiliar (Nigerian and Croatian). The lecturer's British (English) accent was supplemented with various audio materials. The students were naturally familiar with the Thai accent. Irish and Spanish accents were used in around 50% of the classes, Korean and Indian accents were used in around 25% of the classes and Croatian and Nigerian accents were never used in the classes. For the assessment process, eight short (approximately 4-5 minutes) listening dialogues were used to assess Thai students' overall comprehension and accurateness of word recognition. The tests were produced using audio files found at

wordhead.org (“ello Learn English Naturally”, n.d). Each accent test included questions related to the text to check for understanding and a fill in the gaps exercise to assess for word recognition. The chosen topics were all familiar to the students and had previously been covered during the courses. Topics included food, travel, shopping and celebrations. All of the dialogues were rated at an intermediate level. The speech rates were similar and the audio files adjusted to 92.0 dB (decibels). The tests were administered over several weeks in order to minimise the influence of fatigue and tiredness on the results. The more familiar accents were tested before the less familiar accents. Any improvements in ability would therefore positively influence the less familiar accents tests. Some limitations were placed on the research design due to a lack of quality listening materials at the students’ proficiency level.

POPULATION AND SAMPLE

The population was 99 year 2 students enrolled in the English for International Communication Bachelor’s Degree at RMUTK, Bangkok, Thailand. The sample was all of the year 2 students (n=99) taking the Advanced Listening and Speaking course in semester 1, 2015.

DATA COLLECTION AND ANALYSIS

Quantitative data was collected for this study. Test data was collected through in class tests. The tests were conducted over several weeks. This ensured that learner fatigue did not adversely affect the results. Results from students that did not complete all the tests were discarded in this study. The data was analysed to establish whether there were significant differences between the test scores for the different accents.

RESULTS

The results of the tests showed some overall differences in comprehension test scores between the 8 different accents (see Table 1). The highest overall score was for the Thai accent at an average of 8.13 out of 10. The second highest overall average score was for the Irish accent at 6.93 out of 10. The British accent showed a similar overall average score at 6.85 out of 10. The fourth highest overall average score was for the Spanish accent at 6.47 out of 10. Therefore the familiar and moderately familiar accents all scored higher than the less familiar and unfamiliar accents. The Korean accent overall average score was 5.87 out of 10, followed by Indian at 4.85 out of 10, this was similar to the Croatian at 4.83 out of 10. The lowest overall score was for the Nigerian accent at 3.71 out of 10. Differences in the mean scores for the familiar, moderately familiar, less familiar and unfamiliar groups were noted (see Table 2). A One Way ANOVA test showed there was a statistically significant difference between groups as determined ($F=191.34, p = .000$). The results Post Hoc Tukey test showed a significant difference of (.00) between all of the four groups namely familiar, moderately familiar, less familiar and unfamiliar (see Table 3). The results would therefore suggest that accent familiarity effects listening Comprehension.

Table 1 Listening Comprehension Test Mean Scores and Standard Deviation

Accent Familiarity	Average Score out of 10	Standard deviation
Familiar (1)	7.49	1.50
Moderately Familiar (2)	6.71	1.35
Less Familiar (3)	5.37	1.56
Unfamiliar (4)	4.28	1.38

Table 2 Mean Scores and Standard Deviation between Levels of Familiarity

Accent	Average score out of 10	Standard deviation
Thai	8.13	1.32
Irish	6.93	1.23
British	6.85	1.38
Spanish	6.47	1.41
Korean	5.87	1.48
Indian	4.85	1.46
Croatian	4.83	1.32
Nigerian	3.71	1.21

Table 3 Significant Differences between Groups

Group	Significance
Familiar (1) to Moderately Familiar (2)	.00
Familiar (1) to Less Familiar (3)	.00
Familiar (1) to Unfamiliar (4)	.00
Moderately Familiar (2) to Less Familiar (3)	.00
Moderately Familiar (2) to Unfamiliar (4)	.00
Less Familiar (3) to Unfamiliar (4)	.00

DISCUSSION

The study appears to support previous research that suggests that exposure to unfamiliar accent aids comprehensibility (Bross, 1992; Clarke & Garrett, 2004; Van Engen & Peelle, 2014). Clarke and Garrett's (2004) suggestion that some exposure to an unfamiliar accent aids listening comprehension appears to be supported by this study. The results show similar scores for the British and Irish and the Indian and Croatian tests. Viewed in isolation these test scores would not support the hypothesis that greater familiarity of an accent increases listening comprehension in second language learners. When the results are viewed together, the scores appear to follow a pattern of higher scores for the most familiar to lower scores for the less/unfamiliar accents. It would therefore appear that greater familiarity with an English accent affects overall listening comprehension. The results clearly show that students were most familiar or had greater comprehension of the Thai accent. This is no surprise due to the demography of the students. The higher levels of comprehension may be due to the way Thais naturally pronounce English words. For Thai listeners these sounds may be more familiar to their ear than for example a Spanish or Croatian speaker. As suggested by Bross (1992), little or no calibration is needed when the accent is familiar to the listener. Hence, the Thai accent was easier to understand in the listening tests.

The following are just a few of the many pronunciation issues related to the accents used in this study. British (English) and Irish accents used in this study had various differences. For example, in Irish English, the "r" after vowels is pronounced but in British English it is often dropped. In addition, the sound for "e" in Irish accents is more like "e" in "bet," instead of

like "ei" in "bait." The "o" sound in Irish English is similar to the vowel sound in the "paw" instead of like the "ou" sound in "coat." The sound for "th" in Irish English sounds similar to a "t". For example, "Thin" sounds like "tin". In the Thai language the "th" sound does not exist. This issue also a problem for Croatian speakers where there is also no equivalent of the "th" sound. The sound produced by Thai speakers is often similar to the "t" sound produced by Irish speakers of English. In a similar respect Spanish and Thai speakers of English have a tendency to stretch various vowel sounds. In Spanish there is no distinction between short and long vowels whereas in there are distinct differences between the two. The Thai and Spanish learners compensate for a lack of understanding by stretching the vowel sounds. Difficulties in pronouncing the "r" sound is a problem shared by Thai, Korean and Nigerian learners. Nigerian speakers of English will often use the "r" and "l" sounds interchangeably where Thai and Koreans pronounce the "r" sound closer to an "l". Also the plural "s" placed at the end of words also can prove difficult to pronounce. A similar issue exists with the "v" sound in both Thai and Indian speakers of English. This sound is often pronounced as a "w" which again is due to first language interference (Swan & Smith, 2001).

The results of the study may suggest that instructors need to expose students to various different accents during the process of learning English. Differences in pronunciation should be highlighted during the learning process. Students should also be encouraged to listen to various different accents outside of the classroom environment. In a Thai context students would probably be exposed to the Thai accent from their non-native school tutors and possibly standard British and American accents from listening resources

(Hart, n.d). Unfortunately, these accents may not be the most useful for Thai students as they are likely to be exposed to non-native accents. For example in 2015, Chinese nationals made up the largest number of tourists to Thailand with nearly 8 million visitors. These numbers can fluctuate though depending on security and safety issues and political and economic situations. In 2014 over 1.6 million Russians visited the kingdom, as of 2015 this number had halved (Vanhaleweyk, n.d). It is therefore difficult to design listening comprehension materials around fluctuating visitor numbers to the country. In addition, there are few useful listening comprehension resources that use Chinese speakers of English. Although there is no straightforward solution it is important that learners are aware of the difficulties. Strategies such as listening within context could be adopted in order to aid understanding. Exposure to the most common non-native accents such as Indian and highlighting differences in speech could prove helpful (Cunningham, 2008). As this study has shown there appears to be benefits to exposure to non-native forms of English. In addition, instructors of the English language should have some understanding of linguistics and the issues related to non-standard forms of pronunciation.

LIMITATIONS

The study is limited to a small demographic group. Limitations were also placed on the study by students having different levels of mastery of the English language. The topic of the listening test may also influence the results of the test. Difficulties were encountered during the process of finding suitable materials for listening comprehension. It was therefore only possible to study a limited range of accents. As the course was part of a bachelor's degree program it was not

possible to use both an experiment and control group in the study.

CONCLUSION

The study suggests significant differences between accent familiarity and listener comprehension. Tests results may therefore be positively and negatively affected by the use of different accents. Examiners should therefore need to consider which accents will be used in standardized testing. Instructors should also consider the most appropriate accents to use when designing an English listening based course. It may be more useful to consider the use of accents that students will be most exposed to and not just those of British and American speakers. In this regard, manufacturers of learning materials should consider using more diverse accents in their listening materials. These again could be regionalized and based on the learners' needs. Further studies are necessary to establish the effects of speech rate, male and female voice differences and topic familiarity. A larger study that uses both a control and experiment group may provide more accurate results. Further studies are needed to provide a clearer understanding of the area of accent comprehension.

REFERENCE

- [1] Bross, R. An application of structural linguistics to intelligibility measurement of impaired speakers of English. *Intelligibility in speech disorders: Theory, measurement and management*. 1992. 35-65. Available from: https://books.google.co.uk/books?hl=en&lr=&id=rd9BAAAAQBAJ&oi=fnd&pg=PA35&dq=Bross+1992+the+key+to+intelligibility+is+the+concept+of+calibration%20%80%99+&ots=RSnNMUfaCv&sig=y8823V_o_oBiRrsQ6JnvdLbHqY#v=onepage&q&f=false.
- [2] Cambridge ESOL IELTS teaching resource. 2008. [updated 2008 March 1;]. Available from: [www.cambridgeesol.org/teach/ielts/listening/aboutthepaper/overview.htm](http://cambridgeesol.org/teach/ielts/listening/aboutthepaper/overview.htm).
- [3] Charunsri, K. The Needs and Problems of English Language Skills for the Hotel Front Office Staff in Chinatown, Bangkok. 2011 [updated 2015 April 8;]. Available from: <http://digi.library.tu.ac.th/thesis/lg/0606/title-appendices.pdf>.
- [4] Clarke, C. M., & Garrett, M. F. Rapid adaptation to foreign-accented English. *The Journal of the Acoustical Society of America*, 2004; 116(6): 3647-3658. Available from: http://www.researchgate.net/profile/Merrill_Garrett/publication/8072143_Rapid_adaptation_to_foreignaccented_English/links/0f317531b3f40ad58d000000.pdf.
- [5] Crystal, D. *The Circle of World English*, Cambridge Encyclopedia of the English Language. Cambridge, UK: Cambridge University Press; 1995.
- [6] Crystal, D. (2012). English as a global language. Cambridge University Press.
- [7] Derwing, T. M., Rossiter, M. J., & Munro, M. J. Teaching native speakers to listen to foreign-accented speech. *Journal of Multilingual and Multicultural Development* 2002; 23(4): 245-259. Available from: <http://www.tandfonline.com/doi/abs/10.1080/01434630208666468#.VfjxdRGqqko>.
- [8] elllo Learn English Naturally. (n.d.). Available from: <http://www.wordheard.org/sort/>.
- [9] ETS [Educational Testing Service] *TOEFL iBT Tips: How to Prepare for the NextGeneration TOEFL Test and Communicate with Comfort*. Princeton, NJ: ETS; (2005).
- [10] Gass, S., & Varonis, E. M. The effect of familiarity on the comprehensibility of nonnative speech. *Language Learning* 1984; 34: 65-89. Retrieved from: <http://deepblue.lib.umich.edu/bitstream/handle/2027.42/98153/j.1467-1770.1984.tb00996.x.pdf?sequence=1>
- [11] Hart, G. (n.d.). *What Is Standard English?*. Available from: <http://www.eslbase.com/teaching/standardEnglish>.
- [12] Kennedy, S., & Trofimovich, P. Intelligibility, comprehensibility, and accentedness of L2 speech: The role of listener experience and semantic context. *Canadian Modern Language Review* 2008; 64(3): 459-489. Available from: http://muse.jhu.edu/login?auth=0&type=summary&url=journals/canadian_modern_language_review/v064/64.3kennedy.pdf.
- [13] Liberman, M. Removing teachers with "accented" speech?. 2010. Available from: <http://languagelog.ldc.upenn.edu/nll/?p=2365>.

- [14] Major, R. C., Fitzmaurice, S. F., Bunta, F., & Balasubramanian, C. The effects of nonnative accents on listening comprehension: Implications for ESL assessment. *TESOL quarterly*, 2002. 36(2): 173-190. Available from: http://203.72.145.166/TESOL/TQD_2008/VOL_36_2.pdf
- [15] Matsuura, H., Chiba, R., Mahoney, S., & Rilling, S. Accent and speech rate effects in English as a lingua franca. *System* 2014; 46: 143-150. Available from: http://www.researchgate.net/profile/Hiroko_Matsuura/publication/265555290_Y_Accent_and_speech_rate_effects_in_English_as_a_lingua-franca/links/5460b7c80cf295b561637512.pdf.
- [16] Nicholls, P. The ASEAN Mutual Recognition Agreement on Tourism Professionals in Thailand: A Mixed Blessing? *AU-GSB e-Journal* 2014; Vol 7 No 1:[2015nApril 7th]. Available from:<http://www.assumptionjournal.au.edu/index.php/AU-GSB/article/view/442>.
- [17] Van Engen, K. J., & Peelle, J. E. Listening effort and accented speech. *Frontiers in human neuroscience*, 2014;8. Available from:<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4122174/>.
- [18] Vanhalewyk, G. (n.d). Tourism Statistics Thailand 20002014. Available from:<http://www.thaiwebsites.com/tourism.asp>.
- [19] Yusica, U. (n.d). Problems Faced by Thai Students in Speaking English. [updated 2015 April 7]. Available from: http://www.academia.edu/9423968/PROBLEM_FACED_BY_THAI_STUDENT_IN_SPEAKING_ENGLISH.