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A STUDY OF ARABIC-SPEAKING ENGLISH LANGUAGE LEARNER'S
SPOKEN COMPREHENSIBILITY

by

Sophia G. A. Lataille

A Thesis Submitted in Partial Fulfillment
of the Requirements for a Degree with Honors
(French and Secondary Education)

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ABSTRACT

The purpose of this study is to explore the factors that affect the comprehensibility of oral language produced by English language learners whose first language is Arabic. This study will analyze four separate interviews with English language learners phonetically. Apart from the phonetic analysis, an analysis of supra-segmental errors, syntax, morphology, and semantics will be provided for each speaker. This study will also take into account the perceptions of a range of native speakers of the English language. Through each analysis the goal is to identify the factors that most affect comprehensibility in order to create an education plan for each individual English language learner which will highlight the aspects of the English language that will most improve their spoken comprehensibility and the educational strategies that could be used to help them achieve this improvement.

The parameters of this study are limited by the fact that only four English language learners were interviewed and only fifteen native speakers rated them, not including the principal investigator. The data, therefore, are not significant quantitatively, however they are significant qualitatively. Analyzing four English language learners of the same language background can give researchers insight into common problems among learners of that language. It can also provide information about the key factors interfering with their comprehensibility and intelligibility. The linguistic information provided will, therefore, help a small subgroup of English language learners and teachers, yet the information provided concerning the instruction of these language learners can be applied to a larger population.

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Literature Review

Many studies have been conducted regarding language learner proficiency as well as native speakers' perceptions of the speech of these learners (Ludwig, 1982; Schairer, 1992; Okamura, 1995; Scales, Wennerstrom, Richard & Wu, 2006; Kang, Rubin, & Pickering, 2010). Although these studies have had a similar purpose, specifically to gather more information on the difficulties of language learning, they have each been done with a different focus. There is a definite shift in focus and procedure in this type of research from the time when the first study presented was executed in 1982 to the present. Ludwig's 1982 study focused on the native speaker judgements of language learners, which was a new line of research at the time (Ludwig, 1982). This theme aligns with those of other studies done closer to the present day, with the exception of a few details. Native speakers were asked to judge language learners on comprehensibility, irritation, acceptability, communicative strategies, and the personality of the L2 speaker (Ludwig, 1982). Schairer's study done in 1992 had similar goals and procedures. This research focused on native speakers' reactions to non-native speech as well; however, the native speakers were asked to rate learners based on the comprehensibility, agreeableness of the voice, and nativeness of the accent of the non-native speaker. This study was also conducted with native Spanish speakers and Spanish language learners instead of English language learners. The one advance in this study compared to the study completed in 1982 is that it provided supplementary information through a phonetic analysis of the non-native speech (Schairer, 1992). The goals in both studies are quite different from goals we see in more recent research on language learners, because even though they include comprehensibility in their reflections, it is not the main purpose.

Okamura's study conducted in 1995 focused on native speakers' evaluation of the learners' grammar, fluency, appropriateness, vocabulary, comprehensibility, and pronunciation (Okamura, 1995). These foci are different from the previous two studies because they do not address the agreeableness or the personality of the language learner. Instead, this study focuses on more defined criteria. The research in this article also suggested that "comprehensibility seems to be the most important criterion for evaluating learners' language, while the results showed that fluency and grammar distinguished good from poor language learners best" (Okamura, 1995). This study began to explore why different criteria should be used to evaluate language learners and why more trivial criteria should be forgotten. A study conducted by Scales, Wennerstrom, Richard, and Wu in 2006 focused on accentedness, intelligibility, and comprehensibility when studying language learners (Scales, Wennerstrom, Richard, & Wu, 2006). This shows a change of focus in research on language learning. Through comparing past studies to more recent research, it is clear that the focus is starting to narrow in the discussion of what is important when researching language learning. Another recent study conducted in 2010 by Kang, Rubin, and Pickering assessed language learners' pronunciation, accent, grammatical accuracy, vocabulary, rate of speech, and organization in order to measure how much suprasegmentals affect perceived proficiency and comprehensibility. This study used computers to measure the accents of English language learners, as well as human raters to measure suprasegmentals (Kang, Rubin, & Pickering, 2010). Although this study focused on specifics, the overall goal was to determine what affects the perceived proficiency and comprehensibility of English language learners.

Comprehensibility

The term comprehensibility has been used in several different ways in language learning research; however, a 2006 text defined it as assigning meaning to utterances (Kachru & Neson, 2006). Comprehensibility therefore focuses on the semantics of oral language in regards to the listener. According to Derwing and Munro, it is important for English language learners to shift their focus from native-like pronunciation to comprehensibility, which is a more realistic goal (Derwing & Munro, 2005). A few studies have been done to determine what factors most inhibit comprehensibility. One study of the role of lexical stress found that stress shift greatly affected comprehensibility of language learners among native speakers (Field, 2005). Another study conducted by Huxley in 1986 focused entirely on Arabic-speaking students learning American English, however, the study focused on written instead of oral communication. Even though this study did not focus on the spoken language, it still showed that the English produced by Arabic-speaking language learners reflected first language interference due to semantic transfer, which means that there was an inappropriate transfer of elements from one language to another (Huxley, 1986). A different study conducted by Kachru and Neson focused more on the listener and less on the speaker in claiming that familiarity with an accent greatly affects comprehensibility (Kachru & Neson, 2006). These studies focused on the factors that most affect the comprehensibility of English language learners as a whole; however, it is also important to understand how a person's first language can affect their ability to learn and communicate in another language and how the difficulties differ depending on both their first language (L1) and the target language (L2).

Evolving Goals of Research

Evidently the goals of research on language learning have changed drastically over the past thirty years. Now research has shifted towards a focus in comprehensibility in regards to language learning. An article written about second language accent and pronunciation teaching stated that mutual comprehensibility is the primary consideration for communication. Later in the same article, Derwing and Munro explain that "improved intelligibility is generally identified by pedagogical specialists as the most important outcome of pronunciation instruction" (Derwing & Munro, 2005). Even though this article focused on accent and pronunciation, the purpose of the instruction was to improve comprehensibility. Another article by Okamura stated that comprehensibility was the most important criterion (Okamura, 1995). In some instances English language learners have a different idea of what their main goal should be. In a 2006 study 62% of English learners said that their goal was to sound like a native speaker, whereas only 38% said that their goal was intelligibility (Scales, Wennerstrom, Richard, & Wu, 2006). Kachru and Neson believed that there is nothing good or even better about a native accent, which is what language learners should believe (Kachru & Neson 2006). Gaining a native accent should not be the goal of learning a language. Instead, teachers and learners alike should focus on comprehensibility. Studies on language learners should determine exactly what language errors are effecting comprehensibility to guide language learners in focusing on those areas (Ludwig 1982). These studies should also help to guide teachers in understanding how to approach the language teaching process so as to make it most valuable for language learners by focusing on the factors that affect comprehensibility.

Arabic-Speaking English Language Learners

Along with these broader difficulties that inhibit comprehensibility, Avery and Ehrlich concentrated on defining common difficulties with consonants, vowels, stress, rhythm, and intonation found in Arabic speakers learning the English language. A common error, in this case, refers to any error that many Arabic speaking English language learners make when speaking English. These errors are not made by all Arabic-speaking English language learners, rather, they are deemed common because they are prevalent among this specific population of ELLs (Avery & Ehrlich, 2008). Although there are many different dialects of Arabic, there are common pronunciation difficulties that apply to most learners of the English language whose first language is Arabic. Some common consonantal difficulties are /b/ vs. /p/, /v/ vs. /f/, /ð/ vs. /θ/, /dʒ/ vs. /tʃ/, and /r/. These pairs of phonemes can be difficult to distinguish between because of voicing. The first phoneme in each pair is voiced, meaning that the vocal chords vibrate when it is uttered. The second phoneme in each pair is unvoiced, meaning that the vocal chords do not vibrate when said. Distinguishing between voiced and unvoiced consonants is a common difficulty among English language learners. A few common vowel difficulties include tense vs. lax vowels, /ɛ/ vs. /æ/ vs. /ʌ/ vs. /a/, and /ɛ/ vs. /ɪ/. Stress, rhythm, and intonation are other areas where problems can arise. Word stress, in particular, is oftentimes difficult for English language learners whose first language is Arabic because Arabic has fairly regular word stress in comparison to English. Stress in English can fall on almost any syllable of a word, whereas in other languages, word stress falls on the same syllable, which is more predictable. Arabic-speaking English language learners may have difficulty in changing the location of the stress for different words (Avery & Ehrlich, 2008). Although Arabic is a stress-timed language, unstressed

vowels are not reduced to the extent that they are in English. In a stress-timed language, there is a tendency for stressed syllables to occur at regular intervals. The amount of time it takes to say a sentence in a stress-timed language depends on the number of stressed syllables, not on the total number of syllables. It can be difficult for Arabic-speaking English language learners to especially reduce vowels in lieu of stress (Avery & Ehrlich, 2008). This is an overview of common difficulties native Arabic speakers have with learning spoken English.

English Language Learner Education

There has been a lot of research in the past concerning English language learning and education. One of the leading theorists in this area is Stephen Krashen, whose theories relate more to language acquisition than learning. According to Krashen language learning refers to formal instruction resulting in knowledge about the language, whereas language acquisition refers to meaningful interactions and a focus on communication resulting in a subconscious acquisition process similar to a child learning their first language. One of his theories concerning language acquisition states that "a necessary (but not sufficient) condition to move from stage i to stage $i + 1$ is that the acquirer understand input that contains $i + 1$, where "understand" means that the acquirer is focussed on the meaning and not the form of the message" (Krashen, 1982). Again, this relates to acquisition, and not learning. This theory reveals the importance of providing language learners with input that is slightly above their current level. Another aspect of this theory is the Affective Filter hypothesis, which states how affective factors, such as motivation, self-confidence, and anxiety, relate to the second language acquisition process (Krashen, 1982). This hypothesis denotes the need for language learners to have high levels of

motivation, high self-confidence, and low anxiety in order to best acquire a second language. This hypothesis and the $i + 1$ theory have helped to shape English language learner education today.

Analysis of Interviews

During this study four interviews were conducted with different Arabic-speaking English language learners. These four individuals will be referred to henceforth as Speaker No. 1, Speaker No. 2, Speaker No. 3, and Speaker No. 4. Two answers to the same questions from each speaker will be analyzed. Each analysis begins with a transcription of the recording into the International Phonetic Alphabet, which was done by the author. The intent during this transcription process was to transcribe the sounds exactly as they were perceived by the author. Each sound was listened to several times, however, the following transcriptions may contain errors that could have occurred due to the difficulty of hearing each sound exactly as it was produced. Certain speakers' rapid or muffled speech were a few factors that affected the author's accuracy during the transcription process. Even though there may be errors, these transcriptions will provide an insight into what sounds these learners may have difficulty pronouncing and whether or not these difficulties affect comprehensibility. These transcriptions will be used to find major differences between the speech of these non-native speakers and Standard American English. Instead of discussing every pronunciation error, the focus will be on recurring errors or errors that greatly affect comprehensibility. Apart from the phonetic analysis, an analysis of supra-segmental errors, syntax, morphology, and semantics will be provided for each speaker.

IPA Transcription

Speaker No. 1

- What do you like and dislike about the US?

Actually nothing until now. United States — to me as an Iraqi people. United State liberate us.
/ækfʊəlɪnʌθɪŋgəntənə jʊnəɪtədsteɪtsəwɛntʊmi æzɪnʌrʌkɪpɪpəl jʊnəɪtədsteɪtləɪbərəɪtʌs

Give us our liberation from Saddam regime. So when I talk some American people and told me
gɪfʌsətərləɪbərəɪfən frʌmsɑdɑmrəzɪmb sɔwɛnəɪtəksʌməmɛrəkənɪpəl æntoʊlmɪsʌm

some — I told them no. A person, George W. Bush, my mind have big unlimited huge respect.
— aɪtoʊlzɛmnoʊ əpɛərsən dʒɔrdʒdʌbəljʊbʊf maɪmaɪndhævɪgənlɪmətədʒʊdʒrɛspɛkt/

- When did you start learning English?

Actually we have classes (of) English in High School. But also (at?) University as undergraduate.
/ækfʊəli wɪhʌvklæsɛz ɪnɪŋglɪʃ ɪnhɑɪsku bʌtʌlsɔʊæjʊnəvɜrsəti æzʌndəgrædʒəwət

But I start learn my language and I think my skills get development at the master degree.
bʌtʌɪstɔrtləɪnmaɪlæŋgwɛdʒ ændʌɪθɪŋkmaɪskɪlzɡɛtdɪvɛləʊpɪmɛnt ætðəmæstədɛɡri

Cause you know master degree all of the reference in English. Often the papers reference what you need,
kɔʊzjʊnoʊmæstədɪɡri əlʌfdərəfərənsɪnɪŋɡəlɪʃ ɔʊfən ðəpɛɪpɜrs rɛfərənsɔwʌtjʊnɪd

okay, are the books, the reference, I mean reference as in papers, also the internet. When you take it,
oʊkeɪ əzəbʊks zərəfərəns aɪmɪnrɛfərənsæzəpɛɪpɜz əlsɔʊzɪntɜnɛt wɛnjʊteɪkɪt

all of in English, so there's nothing in Arabic. So at that time, in 2003
əlʌvɪnɪŋɡəlɪʃ sɔʊðɛəznʌθɪŋɡɪnærəbɪk sɔʊædætəɪm aɪntʊθəʊzəndændɛtəri

I start to improve my language.
aɪstɔrttuəmpɪruvmaɪlæŋgwɛdʒ/

Speaker No. 2

- What do you like and dislike about the US?

Actually when I was born, uh, I dream to live in the, I would, I dream to visit the United State. So I
/ækfʊəlwɛnəɪwʌzbɔrn ə aɪdrɪmtu ə ɪvɪndə aɪwʊd ə aɪdrɪmtʊvɪzɪtðəjʊnəɪtədsteɪt sɔʊəɪə

saw everything that is good in the United States.
sɔʊvriθɪŋɡɪzɡʊd ɪndəjʊnəɪtədsteɪt/

- When did you start learning English?

I don't remember but I think before five years old.
/ə aɪdʊtrɪmɛmbər bʌtaɪθɪŋkbɪfɔːrə faɪfjɪrzoʊl/

Speaker No. 3

- What do you like and dislike about the US?

I like study in University because give me more opportunity to improve my language.
/ə aɪlaɪkstɑdɪmjunəvɜːr bɪkɔzðɪsə ɡɪvmɪmɔːr ə ɔpɔrtunɪtɪtɪmpruvmaɪlæŋɡwɪdʒ

Yeah, but I dislike the weather because very cold here yeah.
jæ bʌtaɪdɪslɑɪk ðəwɛdər bɪkɔzverɪkɔʊlɦɪrjæ/

- When did you start learning English?

I start learn English language in Intensive English Institute, in IEI, in the University of Maine
/aɪstɑrtlɜːnɪŋɡlɪʃlæŋɡwɪdʒ ɪnɪntensɪvɪŋɡlɪʃɪnstətut ɪnɑɪɑɪ ɪnðəjunəvɜːrsətɪɑfmɛɪn

and it's an honor to have the chance to study here in IEI, Intensive English Institute,
əndɪtsənənər tuhævðəʃæns tʌstɑdiheər ɪnɑɪɑɪ ɪntensɪvɪŋɡlɪʃɪnstə,tut

and, I'm so proud to be a student here at the University of Maine.
ændɑmsɔʊpraʊdtubiəstudənthɪr æðəjunəvɜːrsətɪɑfmɛɪn/

Speaker No. 4

- What do you like and dislike about the US?

Actually that I like it here, they are organized. Everything is ordered, it's like
/æktʃʊli ðædɑɪlaɪkɪθɪr ðeɪɑrɑrgənɑɪzɪd ɛvrɪθɪŋɪzɑrdɜːd ɪslɑɪk

you don't need to pay a lot of effort to finish your job. If you want to go shop,
jʊdɔʊnɪdtəbeɪlətɑvɛfɜːrt tuɪnɪʃɪvɜːdʒəb ɪfjuwɑntʊɡoʊʃɑp

if you want to shop something you can go online and get it,
ɪfjuwɑntʊʃɑpsʌmθɪŋ ʃʊkæŋɡoʊɔnlɑɪn ændɡɛdɪt

and you are sitting at home they will knock your door and deliver it to you. Yeah, like this. I have told you
ændjuɑrsɪtɪŋæθoʊsm ðeɪwɪlnɑkɪvɜːrdɔːr ændɪlɪvɜːɪtʊju jæ laɪkdɪs ɑɪhævtoʊldju

the technique I use here, it is make everything easy. And the other thing I dislike here actually,
ðɪtɛknɪkaɪjuzəɦɪr ɪtɪzmeɪkɛvrɪθɪŋɡɪzɪ ændɪlðərθɪŋ aɪdɪslɑɪkəɦɪræktʃəli

nobody here care about learning the Arabic and middle-east culture.

nɔrbɔðihirkɛr əbavtɪlɜrnɪŋðɪærəbɪk ændmɪdəlɪstklɪfər/

- When did you start learning English?

I start learn English in my primary school, but they learn us, they teach us English and Arabic.

/aɪstɑrlɜrnɪŋglɪʃ ɪnmaɪpraɪmərəskul bʌðeɪlɜrnʌs ðeɪtɪdʒʌs ɪŋglɪʃænærəbɪk

They speak Arabic and write English. They taught us the grammar, but they didn't well,
ðeɪspɪkærəbɪk ændaraɪtɪŋglɪʃ ðeɪtɔʃʌsðɪgrɒmər bʌtðeɪdɪdɛntweəl

cause it's like rote, rote learning, you know what I mean? It didn't make sense. Yes. The,
kɑzɪtʃlɑkrɔʊt rɔʊtɪlɜrnɪŋg ju:nɔʊwʌtɑɪmɪn ɪtɪdɪdn'tmeɪksens jɛs ðɪ

what can I say to you, the actual learning I consider here, when I came here I learn English,
wʌtkænəɪseɪtʃu ðɪækʃʊəlɜrnɪŋ aɪkənsɪdərɪhɪr wɛnəɪkɛɪmhɪr aɪlɜrnɪŋglɪʃ

I start to talk English. This is my first time to speak English.

aɪstɑrtʊtɔkɪŋglɪʃ ðɪsɪzmaɪfɜrstɑɪmtʊspɪkɪŋglɪʃ/

Phonetic Analysis

Speaker No. 1

/ŋ/

During the interview Speaker No. 1 only made a couple errors with this sound. Instead of pronouncing /ŋ/ he would pronounce /ŋg/. He made this error when he said the word *nothing* in his answers to both questions by pronouncing the word as /nʌθɪŋg/ instead of /nʌθɪŋ/. This error does not interfere with the comprehensibility of his speech.

/v/ vs. /f/

Speaker No. 1 showed some difficulty differentiating between these two consonants. Instead of pronouncing *give* as /gɪv/, he pronounced it /gɪf/, substituting /f/ for /v/. Here he has replaced the voiced fricative /v/ with the voiceless fricative /f/, a process which is called

devoicing. He also pronounced /ʌf/ instead of /ʌv/, however, he later fixed this problem. Neither of these pronunciation errors greatly affected the comprehensibility of his speech.

/θ/ and /ð/

Speaker No. 1 substituted /t/ and /d/ for /θ/ and /ð/ respectively. He has substituted a voiceless stop for the voiceless interdental fricative /θ/ and a voiced stop for the voiced interdental /ð/. Yet again, Speaker No. 1 has made the common error for English language learners of devoicing. One example is when he pronounced *them* as /dɛm/ instead of /ðɛm/. He also pronounced *the* as /də/ instead of /ðə/, *three* as /tri/ instead of /θri/, and *that* as /dæt/ instead of /ðæt/. From time to time he also substituted /z/ for /ð/. He did this twice when he pronounced the word *the* as /zə/ instead of /ðə/. In each case Speaker No. 1 is substituting a different phoneme for an English interdental. Interdental consonants are rare and not found in many languages, thus they are notoriously difficult for English language learners. Although Speaker No. 1 often had difficulty pronouncing these two sounds it only slightly affected the comprehensibility of his speech, although it did greatly add to his non-native accent.

Speaker No. 2

/ŋ/

During the interview Speaker No. 2 only made a couple errors with this sound. Instead of pronouncing /ŋ/ he would pronounce /ŋg/, by adding a consonant sound to the end of the word. He only made this error when he said the word *everything*. This error did not affect the overall comprehensibility of his speech.

/v/ vs. /f/

Speaker No. 2 made errors when differentiating between these two consonants. Instead of pronouncing *five* as /faɪv/, he pronounced it /faɪf/, substituting the voiceless fricative /f/ for the voiced fricative /v/. This devoicing error did not affect the comprehensibility of his speech.

English /r/

Although Speaker No. 2 did not use a lot of words containing the phoneme /r/, when he did use it he pronounced it with a trill. One example of this is when he pronounced the word *arrives* with a strong trill during his recitation of the excerpt from *The Great Gatsby*. The mispronunciation of /r/ is a common error for English language learners, seeing as most languages have an /r/ that is different from the English /r/. This error did not affect the overall comprehensibility of his speech.

Speaker No. 3

/ð/

During the interview Speaker No. 3 only made one error with these sounds, however, when working with such a small speech sample, even one mistake such as this is important to note. Speaker No. 3 pronounced the word *weather* as /wɛdər/ instead of /wɛðər/, substituting the voiced alveolar stop /d/ for the voiced dental fricative /ð/. Although this does not negatively affect comprehensibility, it does add to his non-native accent and is something that could be worked on with further instruction and practice.

/v/ vs. /f/

Speaker No. 3 made a few errors when differentiating between these two consonants. Twice during this portion of his interview Speaker No. 3 pronounced *of* as /av/, instead of /af/,

substituting the voiced fricative /v/ for the voiceless fricative /f/. This pronunciation error did not affect the comprehensibility of his speech.

English /r/

Speaker No. 3 seemed to have difficulty pronouncing the English /r/. He pronounced it as an uvular sound when it is supposed to be alveolar or post-alveolar. This error, however, did not negatively affect the comprehensibility of his speech. The best example of this error is his pronunciation of the word *more* or /mɔr/.

Speaker No. 4

/p/ vs. /b/

Speaker No. 4 only made one error concerning these two phonemes. He pronounced the word *pay* as /beɪ/ instead of /peɪ/, substituting the voiced /b/ for a voiceless /p/. In this example the error did not inhibit comprehensibility, however, in another situation this error could easily negatively affect comprehensibility because Speaker No. 4 could confuse a different set of minimal pairs when the context does not tell the listener which one he is trying to say. Fortunately, in this situation the context allowed for the author to comprehend this word.

/ŋ/

During the interview Speaker No. 4 made a few errors with this sound. Instead of pronouncing /ŋ/ he would pronounce /ŋg/ by adding an extra consonant phoneme to the end of the word. He made this mistake when he pronounced *everything* as /ɛvriθɪŋg/ instead of /ɛvriθɪŋ/. He also pronounced *something* as /sʌmθɪŋg/ and *learning* as /lɜ:rnɪŋg/. Although this is a fairly consistent error, it does not seem to interfere with the comprehensibility of his speech.

/θ/ and /ð/

During the interview Speaker No. 4 made a few errors with these phonemes. Speaker No. 4 pronounced the word *this* as /dɪs/ instead of /ðɪs/, substituting the alveolar /d/ for the fricative /ð/. He also pronounced the word *the* as /di/ instead of /ði/. Although this does not negatively affect comprehensibility, it adds to his non-native accent and is something that could be worked on in a classroom setting.

tʃ vs. dʒ

Speaker No. 4 made one error concerning these two sounds. He pronounced the word *teach* as /tidʒ/ instead of /tʃ/. In this case Speaker No. 4 has used voicing rather than devoicing in his pronunciation. This did not interfere with the comprehensibility of his speech, and the rarity of the error in his speech sample shows that this may be an infrequent error.

General Phonological Errors

Speaker No. 1

During the interview Speaker No. 1 deleted many consonants from his speech. Deleting consonants from the middle and end of words was quite common in his interview. A few times he also did not pronounce a consonant at the beginning of a word. In his answer to the first question Speaker No. 1 pronounced *until* as /əntɛ/ instead of /əntɪl/. Not only did he delete the final consonant, he also changed the vowel sound. His speech during this answer was quite hurried, which may have affected his pronunciation. There were a few other examples of consonant cluster simplification in Speaker No. 1's interview. He pronounced *and* as /æn/ instead of /ænd/, and *told* as /tɔl/ instead of /tɔld/. Speaker No. 1 also pronounced *high school* as /haisku/

instead of /haɪskul/, deleting the final /l/. Although it is true that some words can be understood with the deletion of the final consonant, this general phonological error could still affect comprehensibility in some cases. As for deleting a middle consonant, he did this less frequently. One example from his interview was when he pronounced *start* as /stat/ instead of /start/, although it must be noted that this is an acceptable pronunciation in different varieties of English.

Speaker No. 1 made errors concerning consonant clusters. He would frequently delete consonants to avoid consonant clusters, or add a vowel sound into the consonant cluster. In pronouncing the words *papers* as /peɪpɜz/ instead of /peɪpɜrɜz/, Speaker No. 1 deleted the consonant /r/ to avoid pronouncing the consonant cluster and changing the syllable structure. When pronouncing the word *English*, he added a vowel sound to the consonant cluster by pronouncing /ɪŋgəlɪʃ/ instead of /ɪŋglɪʃ/ to avoid the consonant cluster. Both of these were recurring errors, which indicates that he continuously makes errors when pronouncing these specific consonant clusters. At another point during the interview he also added a schwa between two words that ended and started with consonants. This is yet another indication that Speaker No. 1 makes errors when pronouncing some consonant clusters. Although these errors are frequent, they only slightly inhibited the comprehensibility of his English. His use of the schwa only slightly affected his comprehensibility because it is the most frequently occurring vowel in American English (Avery & Ehrlich, 2008).

Speaker No. 1 made multiple errors concerning differentiating between the low vowels /ɛ/, /æ/, /ʌ/, and /a/. One example of a mispronunciation of a low vowel was when he pronounced *have* as /hʌv/ instead of /hæv/. Speaker No. 1 mispronounced other vowel sounds, however, the only recurring problems have already been stated. The rest of the mispronunciations may have

been because he was speaking quickly, but they do not seem to be problems that recur on a regular basis.

Speaker No. 2

During the interview Speaker No. 2 deleted many consonants from his speech. Although he did not have long responses to his questions, both responses contained errors involving the deletion of consonants. In his answer to the first question he deleted the /s/ at the end of *United States* by pronouncing it as /junaitədsteɪt/. This error did not affect comprehensibility. In his answer to the second question, Speaker No. 2 deleted multiple consonants which made it more difficult to comprehend him. He pronounced *don't* as /dɒʊt/ instead of /dɒʊnt/. He also pronounced *old* as /ɔʊl/ instead of /ɔʊld/. These are two examples which show that he deletes both internal and final consonants, an error that could inhibit comprehensibility.

Speaker No. 2 did not seem to have a lot of trouble pronouncing consonant clusters in his answers to the two questions analyzed, however, in other sections of the interview Speaker No. 2 made errors concerning the pronunciation of consonant clusters. In his reading of the excerpt from *The Great Gatsby*, Speaker No. 2 mispronounced the word *stretch*. He tried to pronounce the word twice, realizing that he was wrong, however, both times he added a vowel sound to the first consonant cluster after *s* and before *tr*. This gives the impression that if he had expanded on his answers more, errors concerning consonant clusters in his personal responses to the questions may have occurred more frequently. The same can be said for vowel pronunciation. From this small speech sample he seems to be able to pronounce vowel sounds fairly well. If we were to analyze a larger speech sample from Speaker No. 2, however, it is likely that there would be

more recurring errors in regards to the pronunciation of vowels. Speaker No. 2 also spoke relatively slowly, which helped him to enunciate each sound and made comprehension much easier.

Speaker No. 3

During the interview Speaker No. 3 deleted many consonants and even syllables from his speech. Although he did not have long responses to his questions, both responses contained errors involving the deletion of final consonants. In his answer to the first question he deleted the /d/ at the end of *cold* by pronouncing it as /kɒl/. This error slightly affected comprehensibility. In his answer to the second question, Speaker No. 3 deleted the final consonant in the word *at* by pronouncing it /æ/. This did not interfere with the comprehensibility of his speech. In his answer to the first question, Speaker No. 3 also deleted two syllables from the end of the word *university*, by pronouncing it as /junəvɜː/ rendering it nearly incomprehensible. Speaker No. 3 makes many errors concerning the deletion of consonants and even syllables.

Speaker No. 3 did not make errors when pronouncing consonant clusters in his answers to the two questions deeply analyzed phonetically. He did, however, make errors pronouncing consonant clusters in his reading of the excerpt from *The Great Gatsby*. Speaker No. 3 made an error when pronouncing the word *against*. He inserted a vowel sound between *again* and *st*, circumventing the pronunciation of all three consonants clumped together. If he had expanded on his own answers more, errors concerning consonant clusters may have arisen. His vowel pronunciation, on the other hand, seemed to be a source of difficulty, especially in his answer to the second question. Speaker No. 3 had difficulties pronouncing the low vowel sound /æ/ in the

word *and*. He also showed difficulties pronouncing the sounds /i/ and occasionally /ɪ/ when pronounced with another vowel. These mispronunciations slightly affect comprehensibility and could be practiced more thoroughly in a classroom setting.

Speaker No. 4

Although Speaker No. 4 seems to have more phonological errors than the others, it must be taken into consideration that his speech sample is larger and more advanced. He uses more advanced grammar and vocabulary than a few of the previous speakers, who may have had fewer phonological mistakes, yet had very simple answers to the questions. During his interview Speaker No. 4 deleted many consonants and even syllables from his speech. When pronouncing the word *it's* at one point during his interview Speaker No. 4 deleted the /t/ from the middle of the word. This could have partially been because of the rapidity of his speech. Speaker No. 4 also deleted the final consonant /t/ from the word *don't*. Neither of these mistakes greatly affected the comprehensibility of his speech. Speaker No. 4 also deleted the final /t/ from the word *start*, the final /t/ from the word *but*, the final /d/ from the word *and*, and the final /t/ from the word *didn't*. All of these examples show us that that final consonants, especially /t/ and /d/, are something that Speaker No. 4 should work on in order to make his speech more comprehensible. Although these errors did not greatly affect comprehensibility, there were a few times when the deletion of the final consonant made the word unclear, such as in his pronunciation of the word *and*. He pronounced /aen/, which really could have been *an*, *in*, or *and*. After reviewing the interview and looking at context it was determined that it was in fact *and*, although in day-to-day conversation

the word would have been very difficult to determine, thus negatively affecting comprehensibility.

In his speech there are a couple examples of Speaker No. 4's having unclear pronunciation, which led to more difficult comprehensibility. He pronounced the word *nobody* as /nɔrbɔdi/. In his pronunciation of this word he has not only used the wrong vowel sounds, he has also added a consonant. The /r/ in the middle of this word definitely inhibits the comprehensibility of his speech, although he may have made this error due to the rapidity of his discourse. Another example of mispronunciation affecting the comprehensibility of his speech is the word *primary* or *primer*. After listening to this word many times, it sounded as if he said /praɪmɛr/, however, due to context, the author believed that he was actually trying to say *primary*. The deletion of the final vowel sound and the substitution of another vowel sound greatly inhibited the comprehensibility of this word. In his speech this didn't happen often, yet when it did occur, it greatly affected the overall comprehensibility of his speech.

Speaker No. 4 did not seem to have a lot of trouble pronouncing consonant clusters. His vowel pronunciation, on the other hand, seemed to be a source of error. He made a few vowel pronunciation errors concerning the phoneme /ɔ/ in the words *organized* and *ordered*. He also seemed to add schwas when they were not necessary. He pronounced the word *use* as /juzə/, adding a schwa after the word in order to break up the consonant cluster created by the beginning of the next word *here*. He pronounced both words together as /juzəhɪr/. He made the same error in his pronunciation of the word *dislike*. He also added an extra vowel sound to the word *write* by pronouncing it /raɪtɪ/. Although these mistakes are noticeable, they do not negatively affect comprehensibility.

Supra-Segmental Errors

Speaker No. 1

Supra-segmental errors are important to analyze because they can affect comprehensibility by distracting listeners from the meaning of words. Speaker No. 1 made errors phonetically concerning supra-segmental aspects of the spoken language. Errors concerning word stress, intonation, rhythm, and vowel reduction are all present in his interview. Recall that Arabic is a stress-timed language just like English, which means that the stressed syllables are said at approximately regular intervals, and unstressed syllables shorten to fit this rhythm (Avery & Ehrlich, 2008). Even though Speaker No. 1 has a stressed-timed first language, word stress in Arabic is regular relative to word stress in English, which can cause problems for Arabic learners who expect English word stress to be as regular as it is in Arabic. Speaker No. 1's sentence stress was quite accurate, even so, his word stress was less accurate at different times throughout his interview. Here is one example of Speaker No. 1's word stress:

liberate

Here the size of the letter represents the amount of stress placed on it. Speaker No. 1 placed a lot of stress on the final syllable, whereas a native speaker would be more likely to only stress the first syllable of this word. Speaker No. 1 overall had very good word stress, which did not affect comprehensibility.

Speaker No. 2

Speaker No. 2's sentence stress was fairly accurate, however, his use of word stress was less accurate from time to time. In his reading of the poem during the interview, Speaker No. 2 said the word *ecstasies* with the following word stress:

ecStasies

The size of the letter is used to represent the amount of stress Speaker No. 2 has placed on it. Speaker No. 2 has placed the stress on the middle syllable of this word, whereas most native American English speakers would place the word stress on the first syllable. Speaker No. 2 has also only stressed parts of syllables, meaning that he has separated the final syllable of this word. This could inhibit comprehensibility because the unstressed part of the syllable might get lost. Speaker No. 2 overall had very good word stress which did not affect comprehensibility. It is hard to tell whether word stress will be a problem that affects comprehensibility in the future because Speaker No. 2 did not use many multisyllabic words when answering questions during the interview.

Speaker No. 3

Speaker No. 3's sentence and word stress were oftentimes not congruent with Standard American pronunciation. Here are two examples of his sentence and word stress interfering with the natural rhythm of his speech:

give me **more** opportunity

language

Speaker No. 3 has put a lot of stress on the word *more* when it was not appropriate to do so according to Standard American English. Although this example does not affect comprehensibility, word and sentence stress are both problems that can negatively affect comprehensibility when repeated. In the second example, however, his stress of the word language does affect the comprehensibility of his speech. Standard American English puts the stress on the first syllable in this word, not the second. When Speaker No. 3 put the stress on the second syllable, it made this word more difficult to understand.

Speaker No. 4

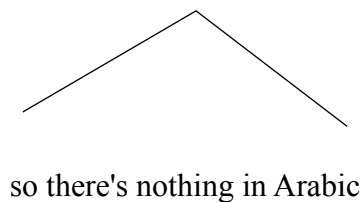
Even though Speaker No. 4 has a stressed-timed first language, word stress in Arabic is regular relative to word stress in English, which can cause problems for Arabic learners who expect English word stress to be as regular as it is in Arabic. Contrary to this statement, however, this English language learner's word and sentence stress were very accurate. He pronounced many poly-syllabic words with accurate stress, showing his ability to use Standard American word stress. His sentence stress was not as accurate, but it was only due to the fact that his rhythm in the English language is not completely accurate and it takes time for Speaker No. 4 to find words to express himself. Here is an example of accurate word stress.

about

Speaker No. 4 has put a lot of stress on the second syllable of this word, making the first syllable an unstressed schwa. Speaker No. 4 pronounced this word correctly, and part of his success is due to the fact that he used correct word stress.

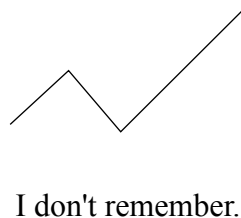
Speaker No. 1

Speaker No. 1's intonation will be shown using a rising and falling line to demonstrate the rising and falling intonation of the speaker. In this example, Speaker No. 1 has used intonation quite well to express feeling behind his words. This use of intonation was very accurate and added to the meaning of his speech.



Speaker No. 2

Next is an example of Speaker No. 2's intonation. In this example, the intonation of his speech is not completely accurate:



This intonation is quite different from native speech because he has ended a sentence with a higher intonation, without trying to ask a question. A native speaker would have high intonation for *don't* and then it would fall until the end of the thought. Although what he is saying can still

be understood, his intonation makes his accent sound stronger and could possibly inhibit comprehensibility in other circumstances.

Speaker No. 3

Next is an example of Speaker No. 3's intonation. In this example, the intonation of his speech is not completely accurate:

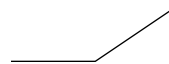


I like study

This intonation is quite different from native speech because he has ended a thought with a higher intonation. A native speaker would have high intonation for *like* and then it would fall until the end of the thought. Although what he is saying can still be understood, his intonation makes his accent sound stronger and could possibly inhibit comprehensibility in other circumstances.

Speaker No. 4

Next is an example of Speaker No. 4's intonation. Speaker No. 4 made more errors concerning intonation than word stress. In this example, the intonation of his speech is not the same intonation an American native speaker would use:



sets us free.

This intonation is quite different from native speech because he has ended a thought with high intonation. A native speaker would have higher intonation for *sets* and then it would fall until the

end of the thought. Although what he is saying can still be understood, his intonation makes his accent sound stronger and could possibly inhibit comprehensibility in other circumstances.

Speaker No. 1

The rhythm of his speech slightly inhibited comprehensibility when he struggled to find a word or explain something. This created some confusion at points, but the author of this study could still understand the point he was trying to make. Speaker No. 1 made errors in regards to vowel reduction, as well as differentiating between stressed and unstressed vowels. During his interview, he produced full vowels in unstressed syllables which slightly affected both the rhythm of his speech and comprehensibility.

Speaker No. 2

The rhythm of his speech slightly inhibited comprehensibility when he took time to find a word. He used the schwa when he was thinking during both questions, which shows a certain understanding of the English language; nonetheless, these breaks in his thoughts broke up the rhythm of his speech. During his interview Speaker No. 2 took time to find the right vocabulary words and grammatical structures, which shows that he could benefit from further practice in these areas. In this case, pronunciation did not seem to be the biggest factor that affected his comprehensibility.

Speaker No. 3

The rhythm of his speech slightly inhibited comprehensibility when he struggled to find a word. Using the schwa when he was thinking during both questions shows that he knows how Americans express this, however, it definitely broke up the rhythm of his speech. During his interview Speaker No. 3 took a lot of time to find the right vocabulary word, which may indicate his need for further vocabulary practice.

Speaker No. 4

Although his level of English proficiency seems to be quite high, his rhythm is still not completely accurate because his sentences and word clusters are all separated. If he worked on rhythm, his English intonation and stress may grow to match native speech patterns also.

Syntactical Analysis

Speaker No. 1

Speaker No. 1 made a few errors concerning syntax. The last sentence from his answer to the first question contains syntactical errors: "a person, George W. Bush, my mind have big unlimited huge respect". Although what he is trying to say can be understood, it is more difficult to understand because of the word order he has used. Speaker No. 1 is the subject of the sentence, yet he starts the sentence by talking about the object. This shows that he has not completely grasped English word order and that he does not completely understand the different parts of a sentence. Although he could be understood in this situation, his syntactical errors could

quickly inhibit comprehensibility in other circumstances. His problem with syntax could also point to a further difficulties with the grammatical structure of English.

There were only a few examples of errors concerning subject and verb agreement in his entire interview. Speaker No. 1 said "my mind have" instead of "my mind has" in his answer to the first question, but subject and verb agreement does not seem to be a main grammatical problem for this speaker. Speaker No. 1 also said "United State liberate us", showing wrong subject and verb agreement, the wrong verb tense, and the deletion of the article *the*. He used the verb *to liberate* in the present instead of the past. Speaker No. 1 made other errors concerning verb tenses than subject and verb agreement, such as using the wrong verb tense when he said "Give us our liberation". Again, he used the present tense instead of the past. This sentence could be interpreted as being the imperative or an order because of his misuse of the present tense. There are multiple other examples of Speaker No. 1's using the present tense instead of the past, and although it does not affect comprehensibility in every situation, it has the potential of affecting it from time to time.

In his answer to the second question, Speaker No. 1 used an infinitive accurately. He said, "I start to improve my language". Earlier in his interview, Speaker No. 1 failed to use an infinitive in the phrase, "But I start learn my language". In this example he left out the *to*. Through both of these examples it is clear that Speaker No. 1 has learned about infinitives, but may not be entirely comfortable using them. It was also clear through his interview that he did not know how to use gerunds. He used none during his interview, which may indicate that he has never learned about them before.

There are not enough data to conclude whether or not Speaker No. 1 has an adequate understanding of contractions. He only used one: *there's*, but he used it accurately. His lack of contractions, however, does not inhibit the comprehensibility of his speech. Speaker No. 1 also used prepositions fairly accurately. He accurately used phrases such as "to me", "in high school", and "in Arabic". He also completely left out a preposition in the phrase "I talk some American people". This shows that Speaker No. 1 uses English prepositions accurately most of the time, but he could still benefit from further instruction on the subject. Speaker No. 1 also leaves out personal pronouns frequently, which could affect comprehensibility. One example of this is "Give us our liberation from Saddam regime". He completely left out the personal pronoun, which gives this sentence an ambiguous meaning. Speaker No. 1 also leaves out a lot of articles. In the sentence "But also University as undergraduate" Speaker No. 1 has left out two articles and a preposition. This inhibits the comprehensibility of his speech and is a topic that he should be instructed in further.

Speaker No. 2

In this small speech sample taken from the interview there was only one example where Speaker No. 2 mixed up English word order and it affected the meaning of his speech. His answer to the first question contained the sentence, " So I saw everything that is good in the United States". Here he has switched the order of *everything* and *that*. Most native speakers would say, "so I saw that everything was good in the United States". Although it is still an awkward sentence, it is more accurate according to Standard American English than the one said by Speaker No. 2 because of the change in syntax as well as verb tense. Since his speech sample

is so small, this was the only error he made with English word order. There is a good chance that more syntactical errors could be found in other parts of the interview.

There were no errors of subject and verb agreement in this speech sample. Speaker No. 2 used very simple speech to answer these questions, which may explain the lack of mistakes. Speaker No. 2 only used verbs in the first person singular which could show his uncertainty of other verb tenses and their conjugations. If Speaker No. 2 had been asked to speak about someone else or a group of other people, this uncertainty may have become more clear. Verb tenses, on the other hand, seem to be more of a challenge for Speaker No. 2. In the first part of his first answer he used the accurate past tense of the verb. In the second part of the sentence, however, he did not use the proper verb tenses. It is evident that he was confused by this grammatical structure because he restarted his thought a couple times. In the end, Speaker No. 2 used a present and an infinitive when he should have used the past tense (have dreamt) and a gerund (of visiting). This is a very complicated grammatical structure and his hesitation showed that he understood he was not using the proper verb tenses. This also shows that he may not know how to use infinitives and the difference between infinitives and gerunds. This example of a verb tense error in his speech most affected his comprehensibility.

There are not enough data to conclude whether or not Speaker No. 2 understands contractions. He only used one contraction, *don't*, but he used it accurately. His lack of contractions does not inhibit the comprehensibility of his speech. Speaker No. 2 also seems to use prepositions fairly accurately. He accurately used phrases such as "live in", "in the United States", and "before five years old". Again, even though he did not misuse any prepositions in this short speech sample that does not mean that he would have difficulty using them in other

contexts. Although Speaker No. 2 has not used vocabulary and grammar perfectly, his speech is comprehensible.

Speaker No. 3

There were no examples of Speaker No. 3 mixing up word order in this speech sample. This is a rather small sample of his speech, so if a larger sample were examined, examples of this error may be found. It is interesting that his answer to the second question seems very well rehearsed and practiced, which leads to the assumption that he has practiced and used this statement a lot. The reason why he did not make any word order mistakes may be because he was comfortable answering these questions and was familiar with his responses.

There were a few errors of subject and verb agreement in this speech sample. In the first sentence he said, "give me more opportunity". Here he has completely left out the subject and the implied subject does not agree with the verb. He should have said, "it gives me". In the second sentence, he has completely left out the subject and the verb of the dependent clause. Speaker No. 3 said, "because very cold here" when he should have said, "because it is very cold here". Speaker No. 3 also made errors concerning verb tenses. Multiple times throughout the speech sample Speaker No. 3 did not use the infinitive properly. In the first sentence he says, "I like study" when he should have used the infinitive "to study". Later in the same sentence, however, he uses the infinitive "to improve" perfectly. He made the same error in the first sentence of the second question. He said "I start learn" when he should have used the infinitive "to learn". Again, later in the same sentence, Speaker No. 3 uses the infinitive correctly. This shows an inconsistent knowledge of infinitives, and perhaps even confusion about using infinitives in the beginning of

a sentence. Speaker No. 3 did not use any gerunds in this speech sample which shows that he may not know what they are and how to use them. Aside from gerunds and infinitives, Speaker No. 3 only had one error concerning other verb tenses in this small speech sample. In his answer to the second question, he began with a verb in the present tense when it should have been past. He said, "I start learn English" when it should have been "I started". If a larger speech sample had been analyzed closely, it is likely that more verb tense errors would have arisen for Speaker No. 3.

There are not enough data to conclude whether or not Speaker No. 3 understands contractions. He only used the contractions *I'm* and *it's*, but he used them accurately. His lack of contractions does not inhibit the comprehensibility of his speech. Speaker No. 3 also used prepositions fairly accurately. He accurately used phrases such as "in IEI" and "at the University of Maine". Again, even though Speaker No. 3 did not misuse any prepositions in this short speech sample, that does not mean that he would not have difficulty using them in other contexts. Speaker No. 3's use of grammar slightly inhibits his comprehensibility, especially in the first question, and is something that he should receive further instruction on to improve his overall spoken comprehensibility.

Speaker No. 4

Speaker No. 4 did not make errors concerning syntax. He did, however, make a few errors concerning verbs in this speech sample. The only error concerning subject and verb agreement was in his statement "nobody here care". Instead it should be "nobody here cares". Speaker No. 4 could have made this mistake because he has the word *here* between the subject

and verb. This agreement error is not severe, it is more important and worth noting that the syntax with the word *here* is correct. The only other error that somewhat has to do with subject and verb agreement is when Speaker No. 4 said "it is make everything easy". Here he has inserted the verb *to be* in the present tense when he shouldn't have, and because of this he has not made the verb agree with the subject. He should have said "it makes everything easy". The other errors Speaker No. 4 made concerning verbs largely have to do with infinitives and gerunds. At one point Speaker No. 4 said, "I start learn English". First, the verb *to start* should be in the past and not the present. Second, the verb *to learn* should actually be a gerund. At another point Speaker No. 4 also said, "when I came here I learn English". He has used the verb *to come* in the past and the verb *to learn* in the present, when they should both be in the past tense. Later he said, "I start to talk English". Yet again this shows a verb, *to start*, that should be in the past and is in the present. This also shows that Speaker No. 4 used an infinitive when he should have used a gerund. In his final sentence Speaker No. 4 said, "my first time to speak English". Again, he should have used a gerund instead of an infinitive. All of these examples show us that there are a few grammar topics this learner should focus on concerning verbs. Speaker No. 4 should be instructed on the difference between gerunds and infinitives and when to use them both. He should also practice using the past and present tenses, as well as when he needs to use the same tense in a sentence.

There are not enough data to conclude whether or not Speaker No. 3 understands contractions. He only used the contractions *don't* and *it's*, but he used them accurately. Speaker No. 4 made errors concerning prepositions. Throughout his interview he left them out of his speech several times. During his interview he said, "if you want to shop something", leaving out

the preposition *for*. He also said, "they will knock your door", leaving out the preposition *on*.

These are the only two examples from this speech sample where he misused prepositions, and it should be noted that he used prepositions correctly at multiple other points during his interview.

This shows us that Speaker No. 4 can use prepositions, although when he is speaking quickly and not paying attention he may make mistakes from time to time. Speaker No. 4 seems to need the most practice with verbs, seeing as he did not make many errors in regards to contractions or prepositions, and he made multiple errors concerning both verb tenses and subject and verb agreement.

Morphological Analysis

Speaker No. 1

Many forms of morphology have already been discussed in the phonological section of this paper. Verb tense is an example of morphology which was discussed in depth earlier on in those sections. A couple specific examples of words which Speaker No. 1 used accurately and can be analyzed morphologically are "unlimited" and "development". Speaker No. 1 has used the word "unlimited" by adding the prefix (bound morpheme) -un to the beginning of the root word (free morpheme) "limited" in order to make another adjective with a different meaning. Speaker No. 1 also used the word "development", adding the -ment suffix to the end of the word in order to use it as a noun. By adding other suffixes, such as -ed, this word then becomes an adjective or a verb ("developed"). These examples show that he can accurately change words to meet his needs while speaking, although it does not show whether or not he understands the rules behind these changes.

Speaker No. 2

Many forms of morphology have already been discussed in the phonological section of this paper. Verb tense is an example of morphology which was discussed earlier on. Speaker No. 2 struggled to accurately change verbs into different tenses. Through his speech sample it is evident that he only accurately uses verbs in their present or infinitive forms consistently. Speaker No. 2 did accurately add an *s* to *years* in order to make it plural, which shows that he has this skill. His use of simple grammar shows that he does not have an in depth understanding of morphology and how to use it when speaking English.

Speaker No. 3

Many forms of morphology have already been discussed in the phonological section of this paper. Verb tense is an example of morphology which was discussed earlier on. Speaker No. 3 struggled to accurately change verbs into different tenses. Through his speech sample we can tell that he is only consistently accurate when using verbs in their present tense, and struggles makes errors using the infinitive form. Speaker No. 3 also failed to use morphology to accurately use the word "opportunity". In his first answer he said, "give me more opportunity" when he should have said "gives me more opportunities", making this last word plural because of the word *more*. His use of simple grammar shows that he does not have an in depth understanding of morphology and how to use it when speaking English.

Speaker No. 4

Many forms of morphology have already been discussed in the phonological section of this paper. Verb tense is an example of morphology which was discussed earlier on. Speaker No. 4 struggled to change verbs into their proper tenses. Other aspects of Speaker No. 4's use of morphology, however, show that he has a very good understanding of the English language and how to change words to fit his desired meaning. The first few examples of this is when he used the adjectives *organized* and *ordered*. Here Speaker No. 4 has taken the verbs *organize* and *order* and added an *ed* to the end of them in order to create adjectives. He also made the verb *sit* into an adjective by adding an *ing* onto the end to make *sitting*. This shows that he not only understands how to make adjectives from verbs, but he also understands how to do this for a multitude of different words. Speaker No. 4 has also shown that he knows how to make verbs into nouns through his use of the word *learning*. He has taken the verb *learn* and added a *ing* in order to make it a noun. Although verb tenses have already been discussed in great detail, his accurate use of the past participle of *teach*, *taught*, must be noted. This is a difficult past participle, one that must be remembered, and Speaker No. 4 has used it accurately. Overall Speaker No. 4's use of morphology shows advanced knowledge and use of the English language.

Semantic Analysis

Speaker No. 1

Speaker No. 1 made errors when choosing words at multiple points during his interview. This shows that he needs to not only practice the language, but also to be exposed to it more frequently. Other than frequently taking time to find words, Speaker No. 1 also chose some

words that made his speech sound awkward and somewhat inhibited comprehensibility. One example of this is when he said, "when I talk some American people and told me". In this part of the sentence Speaker No. 1 chose to say "American people" instead of "Americans". As I stated before, he also left out a personal pronoun in front of told, which muddles the meaning of the sentence and affects comprehensibility. There are a few other examples such as this which shows that Speaker No. 1 needs more practice with and exposure to the language to become more comfortable with Standard English grammar and vocabulary.

Speaker No. 2

Speaker No. 2 did not make errors when expressing himself because of a lack of vocabulary, but rather because of a lack of grammatical knowledge. As stated earlier, Speaker No. 2 used simple words and only made errors when expressing himself once. This happened because he did not understand which verb tense to use to properly express what he was trying to say. There were only a couple words that he chose during his interview that could have been improved. In his sentence, "I saw everything that is good in the United States", he should have picked a different word other than *saw* and a different word for *good*. This would have made his meaning more clear, however, the sentence is still comprehensible.

Speaker No. 3

Speaker No. 3 did not make errors when expressing himself because of a lack of vocabulary, but rather a lack of grammatical knowledge. As stated earlier, Speaker No. 1 used simple words and only made errors when expressing himself a few times. Perhaps the reason

why he did not struggle for vocabulary was because of the simplicity of the language he used when answering these questions. In this small speech sample he did not use any words incorrectly. Each word he chose to use accurately portrayed what he was trying to say. This shows that Speaker No. 3 is not held back by his understanding of vocabulary, nevertheless, this may be because the vocabulary he used was very simple. Perhaps if Speaker No. 3 was using more advanced vocabulary and talking about more advanced topics he would have made more errors concerning semantics.

Speaker No. 4

Speaker No. 4 did not make errors when expressing himself because of a lack of vocabulary, yet certain words he used did not fit the meaning he was trying to get across. The best example of this is when Speaker No. 4 said, "need to pay a lot of effort". This is not Standard American English, and native speakers would never use the verb *to pay* in this situation. Instead, native speakers would use the words *to give*, *to exert*, or *to use*. More accurately, native speakers may just say "need to try hard". This is the only example in the transcribed speech sample above, however, it is probable that Speaker No. 4 makes similar errors with semantics in day-to-day life. Although this problem does arise in his speech, it does not seem to be a factor that negatively affects the comprehensibility of his speech.

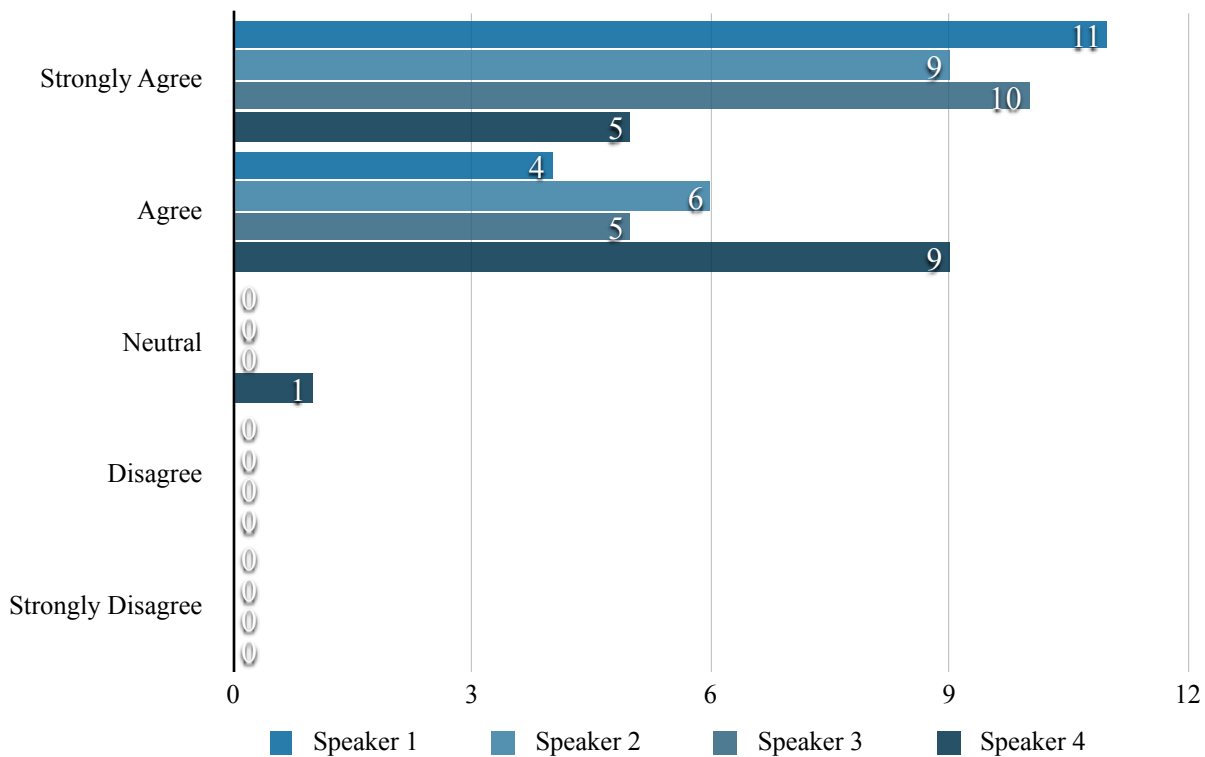
Native Listener Questionnaire Data Analysis

Data were gathered from 15 different native English speakers in order to get a better perspective on how others in the community comprehend the speech of these four English language learners. For the sake of clarity, these native speakers will be referred to as native listeners from here on out. These native listeners heard the same segments of each interview that were transcribed and analyzed in the previous section. After listening to each segment, the native listeners were asked to answer the same eight questions. The questions and outcomes of the questionnaire are found below. This questionnaire asked native listeners to analyze each speakers' accent, grammar, vocabulary, and comprehensibility. A variety of people were asked to fill out the questionnaire and listen to the interviews. The goal was to have the people listening to the interviews represent the population that would most likely interact with these non-native speakers on a daily basis on and off campus. A total of six females and nine males completed the questionnaire.

Of the 15 total native listeners 12 are currently University students, the other three are people who work in the community. Out of the 15 native listeners there were six females and nine males. Of the 12 current students, five were engineering students. There were also two history majors, two English majors, one education major, one biology and premed student, and one business student. Out of the 15 native listeners only three had other languages spoken at home. These other languages included American Sign Language (ASL), French, and Spanish. Out of the 15 native listeners there were also only two people who spoke other languages proficiently. The languages included were ASL, French and Spanish. Before the native listeners filled out the questionnaire, each one stated how much experience they thought they had with

non-native speakers of English on a scale from 1-10 (1 being no experience and 10 being a lot of experience). One person gave himself a 1 and one person gave himself a 2. Three people gave themselves a 3, and one person gave herself a 3.5. One person gave himself a 4, and one person gave herself a 5. Four people gave themselves a 6, two people an 8, and only one a 10. Following are charts displaying the data from the questionnaire and an analysis of each.

Chart 1: This speaker has an accent.



Question One. Question one asked native listeners to state their level of agreement with the statement "This speaker has an accent". As indicated in Chart 1, the majority of native listeners either agreed or strongly agreed that all of these speakers have an accent. There was only one person who answered that they were neutral to this statement, showing that they did not necessarily think that the fourth speaker had an accent.

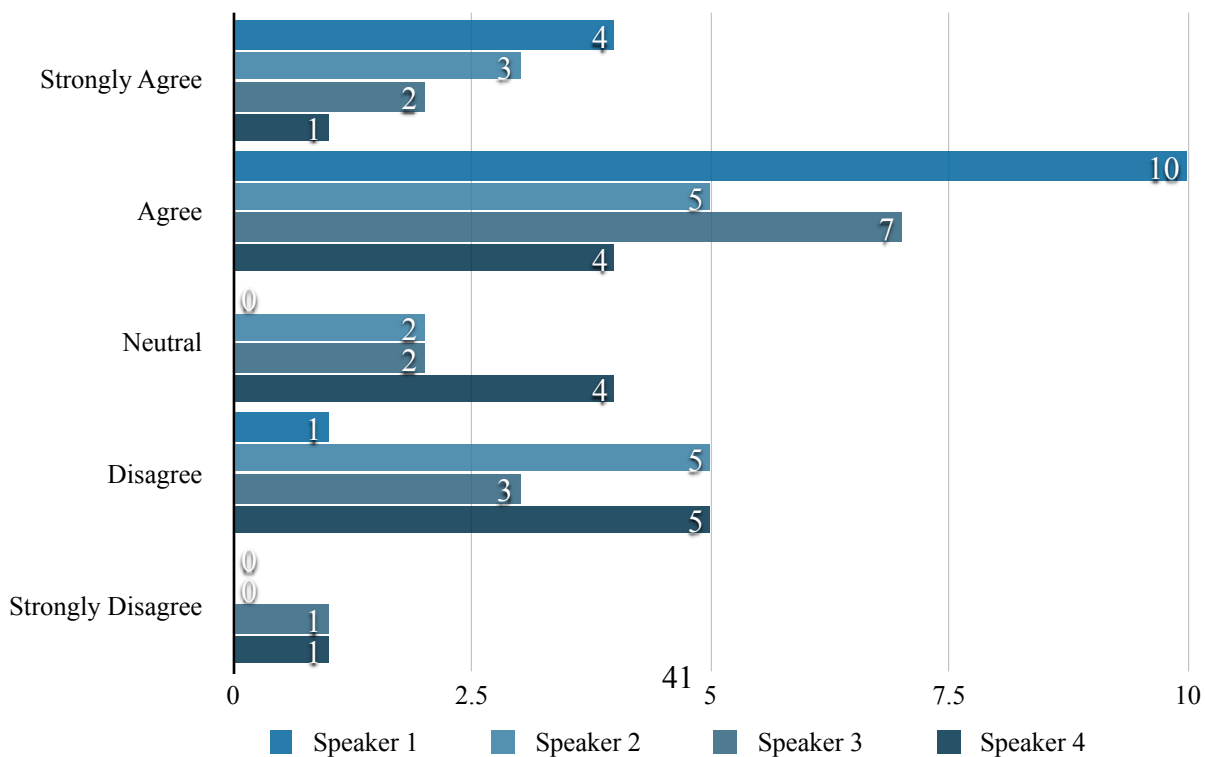
Speaker No. 1. Approximately 73% of native listeners strongly agreed with the statement that the first speaker has an accent.

Speaker No. 2 and 3. Only 60% and 67% of native listeners strongly agreed that Speaker No. 2 and 3 have an accent respectively.

Speaker No. 4. Only about 33% of native listeners strongly agreed that the fourth and final speaker has an accent.

Interpretations. These data show that some of these speakers have a stronger accent than others. Although the data may also show that after listening to multiple interviews of non-native speakers with a similar accent the native listeners became more lenient when judging the later interviews. Or perhaps these native listeners became more comfortable with the accents of each speaker after listening to them for a longer amount of time. If all of these hypotheses are set aside, it can be inferred from the data that the first speaker has the strongest accent and that the final speaker has achieved the best Standard American accent.

Chart 2: This speaker's accent somewhat affected how well I was able to understand him.



Question Two. Question two asked native listeners to state their level of agreement with the statement "This speaker's accent somewhat affected how well I was able to understand him". Although it is not explicitly stated, this question is gauging the level of comprehensibility achieved by each non native speaker. More specifically, this question is looking at native-listener perceptions of how accent interferes with comprehensibility. The data provided by this question are much more varied than the data provided by question number one, which shows that native listeners had more differing opinions among themselves and about each separate non-native speaker concerning this question.

Speaker No. 1. According to Chart 2 approximately 93% of native listeners agreed or strongly agreed that the Speaker No. 1's accent somewhat affected how well they were able to understand him. There was only one person who disagreed and thought that Speaker No. 1's accent did not affect how well they were able to understand him. It is interesting to see that the percentages of native listeners who agree and strongly agree with this statement steadily go down as they listen to more non-native interviews.

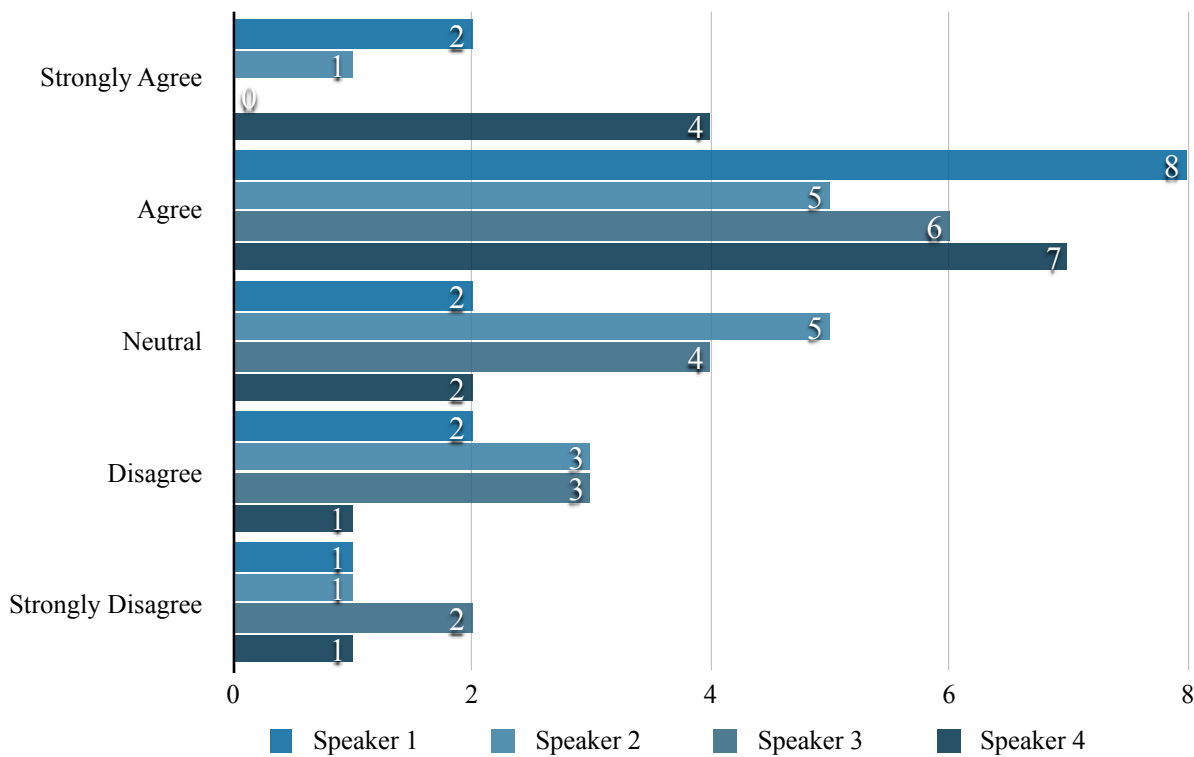
Speaker No. 2. According to Chart 2 approximately 53% of native listeners agreed or strongly agreed that Speaker No. 2's accent somewhat affected how well they were able to understand him.

Speaker No. 3. According to Chart 2 60% of native listeners agreed or strongly agreed that Speaker No. 3's accent somewhat affected how well they were able to understand him.

Speaker No. 4. Finally, only 33% of native listeners agreed or strongly agreed that Speaker No. 4's accent somewhat affected how well they were able to understand him.

Interpretations. Although this information could show how much each speaker's accent affected how well native listeners were able to understand him, it is also possible that this information shows that native listeners become more comfortable understanding non-native speakers after being exposed to more of their speech.

Chart 3: This speaker used vocabulary fairly well.



Question Three. Question three asked native listeners to state their level of agreement with the statement "This speaker used vocabulary fairly well."

Speaker No. 1. Approximately 67% of native listeners agreed or strongly agreed that Speaker No. 1 used vocabulary fairly well. 20% of native listeners, however, disagreed or strongly disagreed with this statement, believing that Speaker No. 1 did not use vocabulary fairly well. According to Chart 3 approximately 13% of native listeners were neutral to this question

concerning Speaker No. 1. This shows that the majority of native listeners thought that Speaker No. 1 used vocabulary fairly well, although there were a few native listeners who disagreed with the statement.

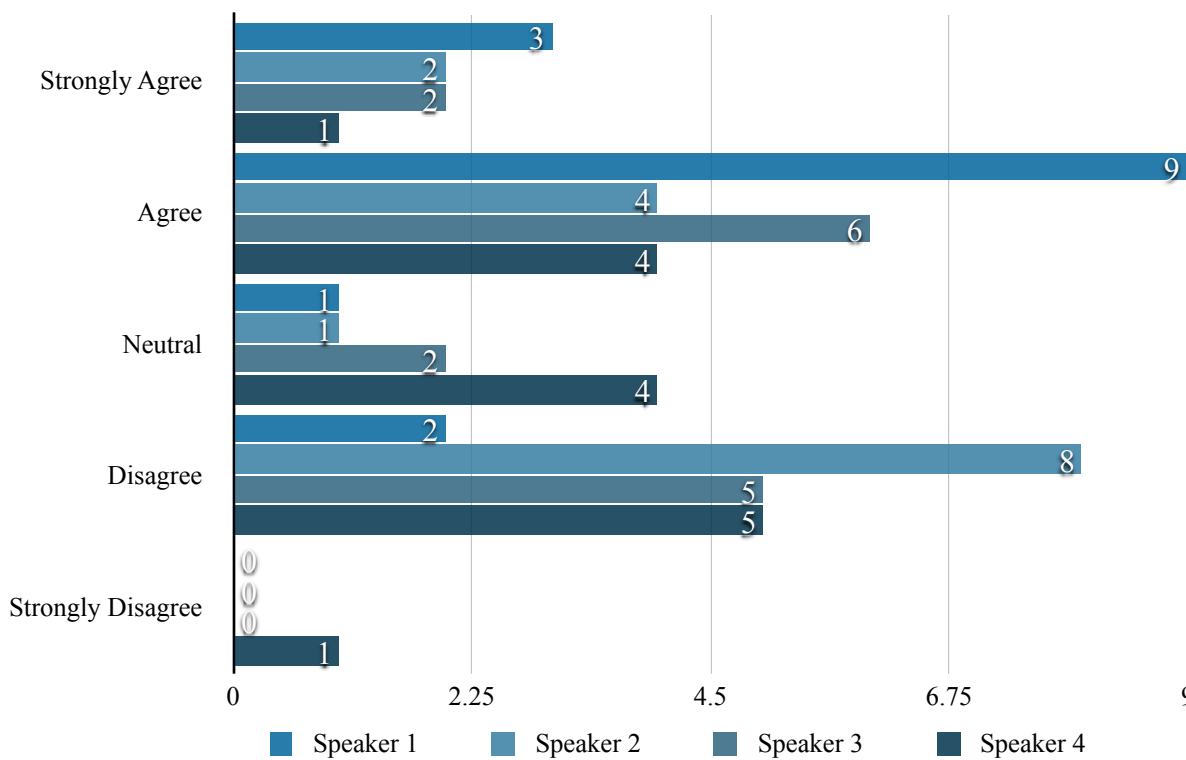
Speaker No. 2. Only 40% of native listeners agreed or strongly agreed that Speaker No. 2 used vocabulary fairly well. In comparison to Speaker No. 1, this is a much lower percentage. Approximately 33% of native listeners were neutral to this statement, meaning that they were unsure of whether Speaker No. 2 used vocabulary fairly well or not. About 27% of native listeners disagreed with this statement, meaning that they did not think Speaker No. 2 used vocabulary fairly well. The outcome of the questionnaire was much more straightforward for Speaker No. 1. Looking at the responses for Speaker No. 2 on Chart 3 reveals a lot of discrepancy between the opinions of native listeners concerning the language use of this non-native speaker.

Speaker No. 3. Speaker No. 3 was the only one out of the four speakers who had zero native listeners respond 'strongly agree' to this question. About 40% of native listeners agreed that Speaker No. 3 used vocabulary fairly well, however, about 27% were neutral to this statement and about 33% disagreed. Speaker No. 3 had the lowest percentage of people who agreed, meaning that in general native listeners did not think he used vocabulary well.

Speaker No. 4. Speaker No. 4 had completely different results. According to Chart 3 approximately 73% of native listeners strongly agreed or agreed that this speaker used vocabulary fairly well. Only 13% of native listeners were neutral to this statement, and only about 13% of native listeners disagreed with this statement. These data show us that the majority of native listeners believed Speaker No. 4 used vocabulary fairly well.

Interpretations. This question elicited a wide variety of responses from native listeners which shows that native listeners took time to reflect on each non-native speaker's use of vocabulary. Unlike the responses to question two, native listeners seemed to evaluate each speaker separately for question three, not allowing their previous answers to dictate their responses.

Chart 4: This speaker's accent somewhat interfered with my comprehension of his speech.



Question Four. Question four asked native listeners to state their level of agreement with the statement "This speaker's accent somewhat interfered with my comprehension of his speech."

Speaker No. 1. According to Chart 4 80% of native listeners agreed or strongly agreed with this statement in regards to Speaker No. 1. This aligns with the data found through question two which state that approximately 93% of native listeners agreed or strongly agreed that

Speaker No. 1's accent somewhat affected how well they were able to understand him. These questions are asking the same thing yet are worded differently in order to gather more accurate data. The fact that the results of these questions for Speaker No. 1 align so well shows that these data are reliable to a certain degree. Only approximately 7% of listeners were neutral to this statement concerning Speaker No. 1, and only about 13% of listeners disagreed with the statement. There were no listeners who strongly disagreed with this statement for Speaker No. 1.

Speaker No. 2. Speaker No. 2 had about 40% of native listeners agree or strongly agree that his accent somewhat interfered with their comprehension of his speech. According to Chart 2 approximately 53% of native listeners agreed or strongly agreed that Speaker No. 2's accent somewhat affected how well they were able to understand him. It is interesting to note that for both Speaker No. 1 and 2 the percentage of native listeners who thought their accent interfered with the comprehensibility of their speech decreased from question two to question four.

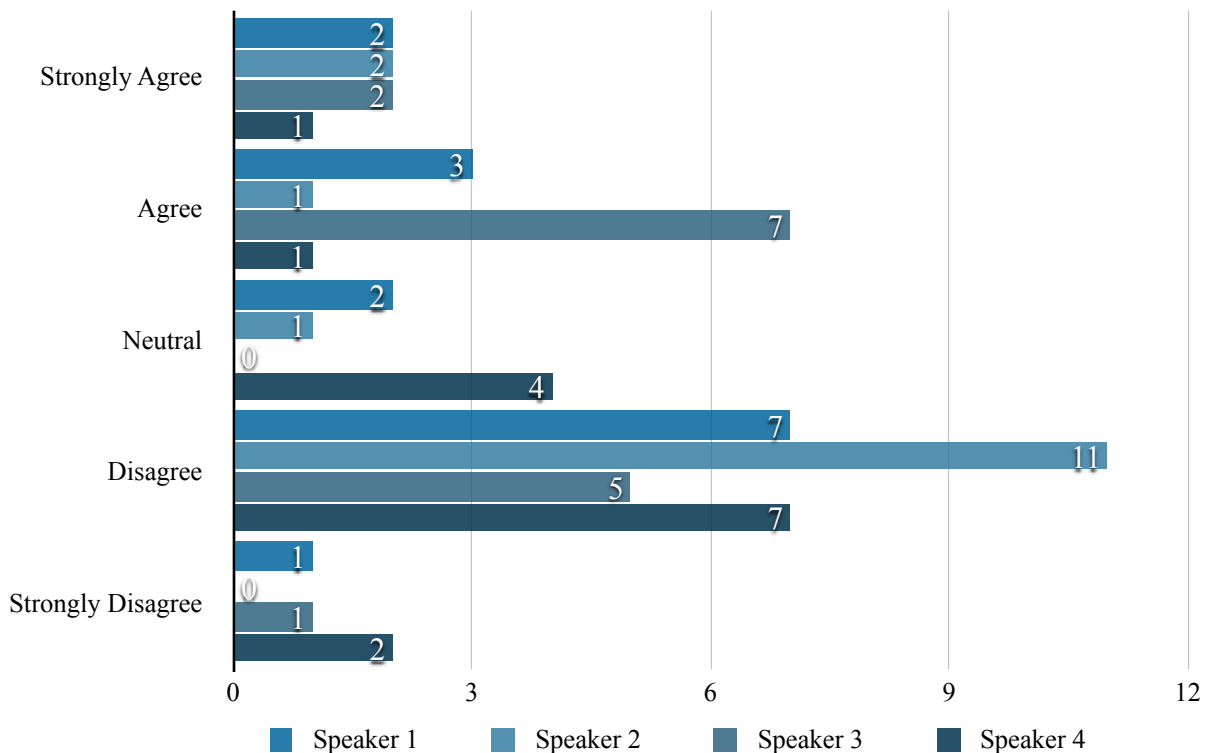
Interpretations. The close percentages show us that the information is somewhat reliable, however, the slight decrease in both responses could also indicate that after so much time spent listening to the interviews, native listeners became more accustomed to the accents of these speakers.

Speaker No. 3. Chart 4 indicates that Speaker No. 3 had approximately 53% of native listeners agree or strongly agree that his accent somewhat interfered with the comprehension of his speech. According to Chart 2, approximately 60% of native listeners agreed or strongly agreed that Speaker No. 3's accent somewhat affected how well they were able to understand him. The percentages of native listeners who thought that this speaker's accent interfered with their comprehension of his speech was very similar in both questions, which shows us that the

findings are somewhat accurate. Approximately 13% of native listeners were neutral to the statement, and about 33% disagreed with the statement. No native listeners strongly disagreed with the statement for Speaker No. 3.

Speaker No. 4. Speaker No. 4 had approximately 33% of native listeners agree or strongly agree that his accent somewhat interfered with the comprehension of his speech. This is the exact percentage that agreed or strongly agreed to a similar statement in question two, with the same distribution between the two choices. About 27% of native listeners were neutral to this statement regarding Speaker No. 4, and 33% of native listeners disagreed. Speaker No. 4 was the only one out of the four listeners to have a native listener strongly disagree. This supports the accuracy of the data found and shows that the majority of native listeners did not think Speaker No. 4's accent affect the comprehensibility of his speech.

Chart 5: This speaker's use of grammar somewhat interfered with my comprehension of his speech.



Question Five. Question five asked native listeners of English to state their level of agreement with the statement "This speaker's use of grammar somewhat interfered with my comprehension of his speech."

Speaker No. 1. Approximately 53% of native listeners disagreed or strongly disagreed with this statement in regards to Speaker No. 1, meaning that they did not think grammar interfered with their comprehension of his speech. About 13% of native listeners were neutral to this statement when listening to Speaker No. 1. Finally, about 33% of native listeners either agreed or strongly agreed that grammar interfered with the comprehensibility of Speaker No. 1. Although the majority of native listeners disagreed with this statement, there is still a large amount of native listeners who were either neutral or agreed.

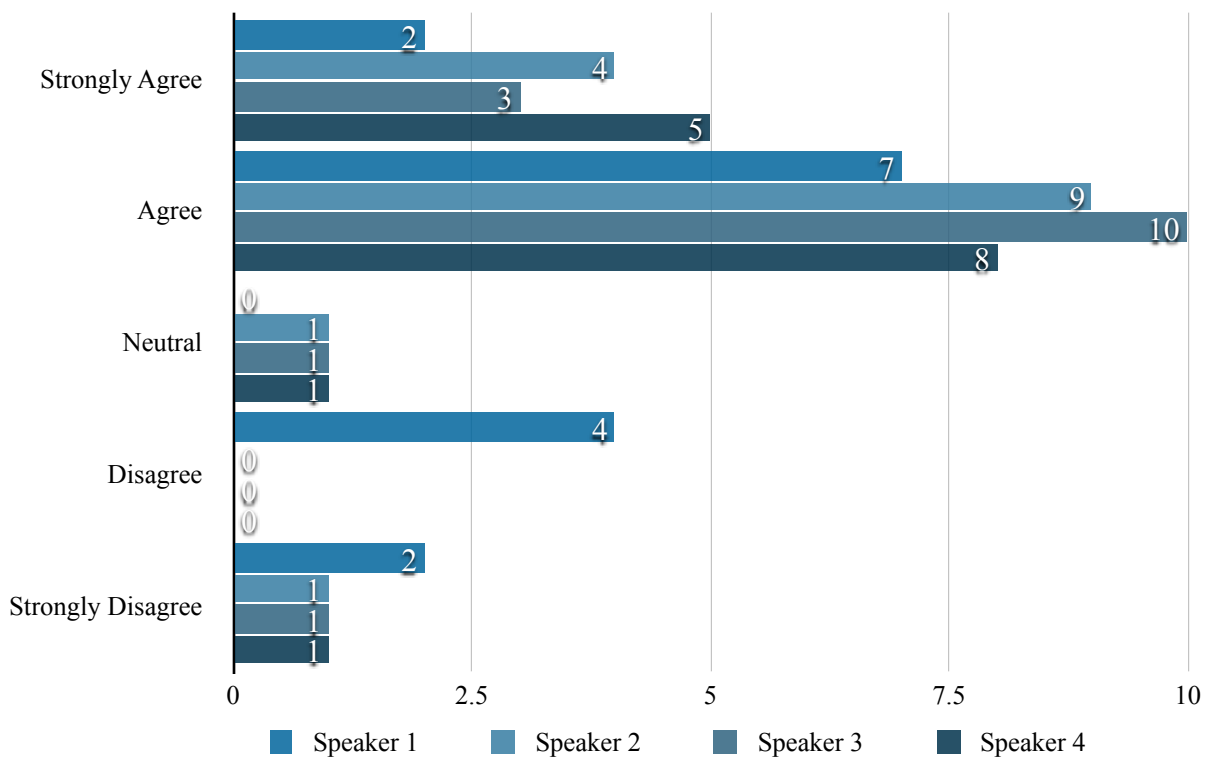
Speaker No. 2. For Speaker No. 2, Chart 5 indicates that approximately 73% of native listeners disagreed with this statement and did not think that his use of grammar interfered with the comprehensibility of his speech, although no native listeners strongly disagreed with this statement. About 7% of native listeners were neutral to this statement in regards to Speaker No. 2, and 20% of native listeners either agreed or strongly agreed. The data for Speaker No. 2 clearly show that the vast majority of native listeners believed that his use of grammar did not interfere with the comprehensibility of his speech.

Speaker No. 3. Speaker No. 3 had much different results than the previous two speakers. Only 40% of native listeners disagreed with the statement and there were no native listeners who were neutral to the statement for Speaker No. 3. The remaining 60% of native listeners either agreed or strongly agreed that Speaker No. 3's use of grammar somewhat interfered with their comprehension of his speech, which may indicate that this is true to some degree.

Speaker No. 4. Speaker No. 4 had similar results to the first two speakers. 60% of native listeners either disagreed or strongly disagreed that Speaker No. 4's use of grammar interfered with his comprehensibility. Approximately 27% of native listeners were neutral to this statement in regards to Speaker No. 4, and only 13% of native listeners agreed or strongly agreed with this statement. This shows that the majority of native listeners believed that Speaker No. 4's use of grammar did not interfere with his comprehensibility

Interpretations. The data from this question tell us a lot about the differences of each speaker and how well each native speaker was able to understand them. By looking at the chart we can see that there was overall disagreement with this statement, meaning that native listeners in general did not think that grammar interfered with comprehensibility.

Chart 6: I understood most of the main points this speaker was trying to make.



Question Six. Question six asked native listeners to state their level of agreement with the statement "I understood most of the main points this speaker was trying to make." By just looking at the chart above we see an overwhelming trend of agreement with this statement. This means that the majority of native listeners understood most of the main points each speaker was trying to make, which indicates their level of comprehensibility.

Speaker No. 1. Speaker No. 1 was the speaker with the highest percentage of native speaker in disagreement with this statement in regards to his speech. Approximately 40% of native listeners disagreed or strongly disagreed with this statement in regards to Speaker No. 1, and no native listeners were neutral. Although the percentage of native listeners in disagreement with the this statement is high, there is still a high percentage of native listeners in agreement. 60% of native listeners agreed or strongly agreed with this statement, indicating that the majority of native listeners could understand the main points Speaker No. 1 was trying to make.

Speaker No. 2. Speaker No. 2 had more definitive results. Approximately 87% of native listeners agreed or strongly agreed that they could understand the main points that Speaker No. 2 was trying to make. Only about 6% of native listeners were neutral to this statement in regards to Speaker No. 2, and the same amount strongly disagreed with this statement. This shows that the vast majority of native listeners could understand the main points that Speaker No. 2 was making.

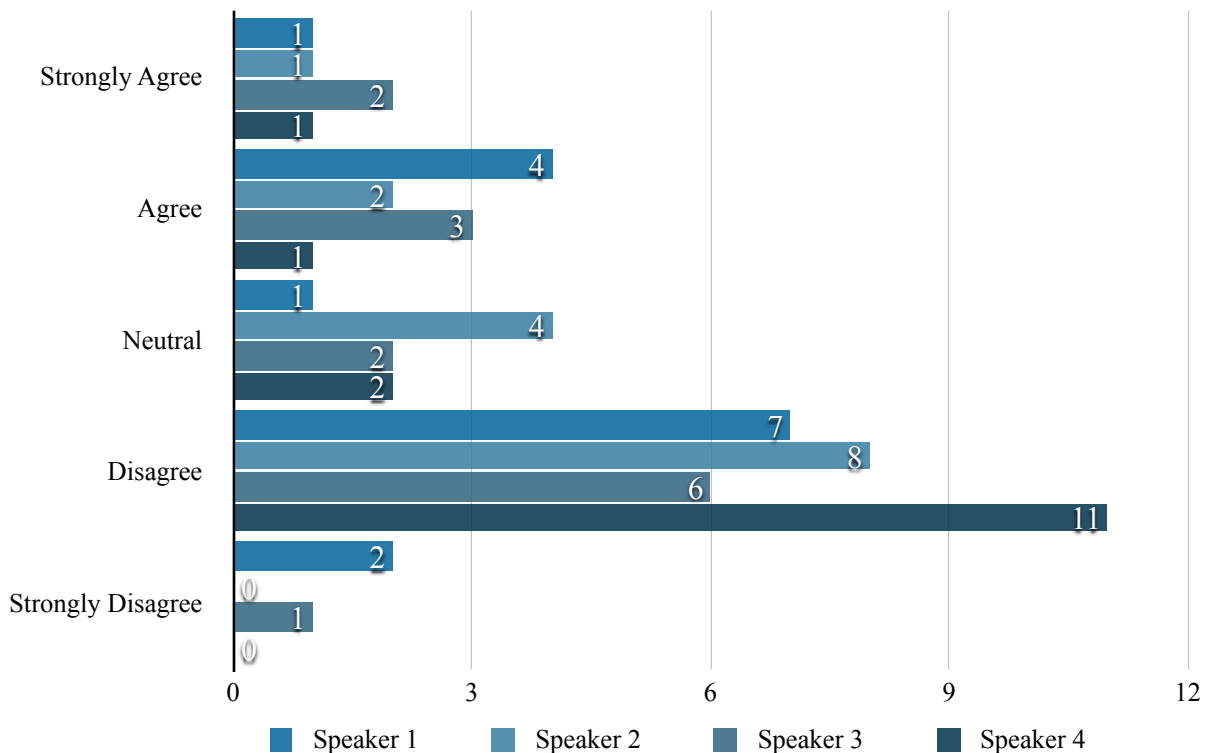
Speaker No. 3. Speaker No. 3 had similar data to Speaker No. 2. Approximately 87% of native listeners agreed or strongly agreed that they could understand the main points of Speaker No. 3. Only about 6% of native listeners were neutral to this statement in regards to Speaker No. 3, and the same amount strongly disagreed. The only differences between the data for Speaker

No. 2 and 3 are the distributions between agree and strongly agree. Speaker No. 2 had more native listeners strongly agree with the statement than Speaker No. 3.

Speaker No. 4. Speaker No. 4 also had surprisingly similar data according to Chart 6. About 87% of native listeners agreed or strongly agreed that they could understand the main points of Speaker No. 4. Speaker No. 4 had the most native listeners say that they strongly agreed with the statement, indicating that his main ideas were the easiest to understand. Speaker No. 4 also had only about 6% of native listeners who were neutral or strongly disagreed with this statement. There were no native listeners who simply disagreed with the statement in regards to Speaker No. 4.

Interpretations. The trends in the data, especially on Chart 7, show an overall comprehension of what the listeners were saying and the points they were trying to make.

Chart 7: This speaker's use of vocabulary somewhat interfered with my comprehension of his speech.



Question Seven. Question seven asks native listeners to state their level of agreement with the statement "This speaker's use of vocabulary somewhat interfered with my comprehension of his speech." This question aligns with question three, which stated "This speaker used vocabulary fairly well". Chart 3 had an overall trend of agreement, meaning that native listeners thought that the speakers overall used vocabulary fairly well. The overall trend of disagreement to question seven supports the earlier findings from question three, indicating that native listeners in general did not think vocabulary interfered with comprehensibility.

Speaker No. 1. 60% of native listeners disagreed or strongly disagreed with this statement in regards to Speaker No. 1. Only about 7% of native listeners were neutral, and approximately 33% of native listeners either agreed or strongly agreed with this statement in regards to Speaker No. 1. Although Speaker No. 1 has the highest percentage of agreement out of the four speakers, the majority of native listeners disagreed with this statement meaning that, overall, native listeners thought that Speaker No. 1's use of vocabulary did not interfere with the comprehensibility of his speech.

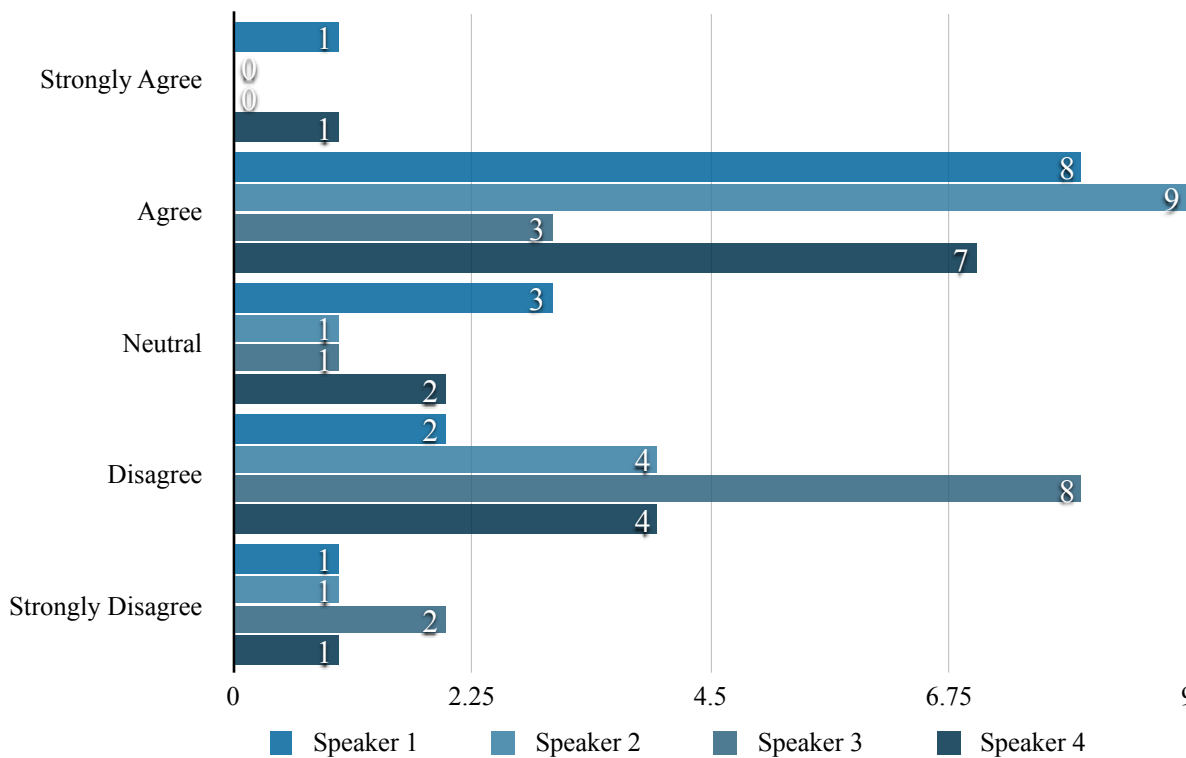
Speaker No. 2. Approximately 53% of native listeners disagreed with that Speaker No. 2's use of vocabulary somewhat interfered with the comprehensibility of his speech. About 27% of native listeners were neutral to this statement, and 20% of native listeners agreed or strongly agreed with this statement in regards to Speaker No. 2. Although the data are less definitive, the majority of native listeners still thought that Speaker No. 2's use of vocabulary did not interfere with the comprehensibility of his speech.

Speaker No. 3. Approximately 47% of native listeners disagreed or strongly disagreed with this statement in regards to Speaker No. 3. About 13% of native listeners were neutral to

this statement, and about 33% of native listeners either agreed or strongly agreed. Speaker No. 3 has the lowest percentage of disagreement, meaning that out of the four speakers, native listeners thought that his use of vocabulary interfered with the comprehensibility of his speech the most.

Speaker No. 4. Approximately 73% of native listeners disagreed that Speaker No. 4's use of vocabulary interfered with their comprehension of his speech. This is the highest percentage of native listeners to disagree with this statement out of the four speakers, however, it is interesting to note that no one strongly disagreed with this statement in regards to Speaker No. 4. Only about 13% of native listeners were neutral to this statement, and about the same percentage either agreed or strongly agreed. This shows that the majority of native listeners thought that Speaker No. 4's use of vocabulary did not interfere with their ability to comprehend his speech.

Chart 8: This speaker used grammar fairly accurately.



Question Eight. Question eight asks native listeners to state their level of agreement with the statement "This speaker used grammar fairly accurately." This question aligns with question five which stated that "This speaker's use of grammar somewhat interfered with my comprehension of his speech." The information from both questions will help to create a clearer picture of the data provided. The responses to question five seemed to have more of a trend than the responses to question eight, which seem to be quite different for each of the four speakers.

Speaker No. 1. 60% of native listeners agreed or strongly agreed that Speaker No. 1 used grammar fairly accurately. About 20% of native listeners were neutral to the statement, and 20% of native listeners either disagreed or strongly disagreed. This shows that the majority of native listeners thought that Speaker No. 1 used grammar fairly accurately, although there was some disagreement.

Speaker No. 2. 60% of native listeners agreed or strongly agreed that Speaker No. 2 used grammar fairly accurately. Only about 7% of native listeners were neutral to the statement in regards to Speaker No. 2, and approximately 33% of native listeners either disagreed or strongly disagreed. Although the percentage of agreement with this statement is the same for Speaker No. 1 and Speaker No. 2, there was a higher percentage of disagreement for Speaker No. 2, meaning that more native listeners thought that Speaker No. 2 did not use grammar fairly accurately.

Speaker No. 3. Speaker No. 3 had the lowest level of agreement from native listeners to this statement. Only 20% of native listeners agreed to this statement in regards to Speaker No. 3, and no native listeners strongly agreed. About 7% of native listeners were neutral, but approximately 67% of native listeners disagreed or strongly disagreed. This shows that native listeners thought that Speaker No. 3 did not use grammar accurately. This aligns with the

findings in question five, where 60% of native listeners either agreed or strongly agreed that Speaker No. 3's use of grammar somewhat interfered with their comprehension of his speech. The data collected from these two questions indicate that Speaker No. 3's use of grammar interferes with his comprehensibility for these native listeners.

Speaker No. 4. Speaker No. 4 had approximately 53% of native listeners agree or strongly agree that he used grammar fairly accurately. Approximately 13% of native listeners were neutral, however, about 33% of native listeners either disagreed or strongly disagreed. These data show that the majority of native listeners thought that Speaker No. 4 used grammar fairly accurately, however, there were still other native listeners who that that his use of grammar was not accurate.

Pedagogical Conclusions

Through analyzing the data it has become evident that each of these four speakers has different strengths and weaknesses when it comes to communicating in spoken English. This study will conclude by using the information from the analysis of each interview as well as the native listener data to discuss possible educational strategies for each speaker. This pedagogical discussion will focus on ways of improving the comprehensibility of each speaker.

Speaker No. 1

One hundred percent of native listeners either agreed or strongly agreed that this speaker had an accent, and of them 73% strongly agreed with the statement. These data would not be as significant for this study if 93% of native listeners had not agreed or strongly agreed that the first speaker's accent somewhat affected how well they were able to understand him. These data show that the majority of native listeners thought Speaker No. 1 had an accent and that his accent affected his comprehensibility. However, according to the data gathered by the native listener questionnaires, Speaker No. 1's use of grammar and vocabulary did not negatively interfere with the comprehensibility of his speech. The native listener data concerning Speaker No. 1 bring us to the conclusion that focusing on the different aspects of language that contribute to accent will be most beneficial to him in regards to improving comprehensibility.

Pinpointing the specific factors of accent that are most affecting Speaker No. 1's comprehensibility is a challenge. The innumerable different variations of pronunciation, tone, and rhythm render it nearly impossible to detect which one should be focused on specifically in order to improve comprehensibility. The analysis done by the author of this study will give some

insight into the specific factors that may need to be targeted. Based on the author's understanding, one phonetic error in particular was recurring and slightly affected the comprehensibility of his speech: the substitution of stops /t/ and /d/ for /θ/ and /ð/ respectively. Examples of this are when he pronounced *three* as /tri/ and *them* as /ðem/. According to Avery and Ehrlich (2008), this is a common problem for speakers of some dialects of Arabic. Multiple different strategies could be used to practice these sounds. The first strategy that could be used for Speaker No. 1 is to practice the mouth positions made when creating these sounds. As these sounds are fricatives, the first step would be to make sure Speaker No. 1 is producing them without stopping the airstream. Speaker No. 1 could also practice putting his tongue between his teeth, ensuring contact with the teeth and tongue. The second strategy that could be used is practicing pronouncing ordinal numbers in dates, seeing as most ordinal numbers contain the /θ/ sound. The final strategy that Speaker No. 1 could use to practice producing these sounds is tongue twisters. Avery and Ehrlich offer "Those three thugs think that they threw those things there." as a good way to practice differentiating between the sounds /ð/ and /θ/.

Speaker No. 1 could also benefit from practice concerning final consonant clusters. During his interview he would delete certain consonants to avoid pronouncing these complex sounds. There are multiple educational strategies that could be used to help Speaker No. 1 improve his pronunciation of final consonant clusters. A simple strategy for practicing specific consonant clusters begins by practicing 2-word clusters. He would pronounce these two words separately, and then gradually eliminate more of the second word until the two words become one word with a final consonant cluster. During his interview, Speaker No. 1 pronounced the word *start* as /stat/, deleting the /r/ in order to avoid the final consonant cluster. The

pronunciation of this word could be practiced using this strategy by having Speaker No. 1 practice the two words *star* and *tan* together (Avery and Ehrlich, 2008). The next step would be to have him practice pronouncing *star* and *ta*. Then, finally, Speaker No. 1 could drop the final vowel and practice the word *start* with the final consonant cluster.

Speaker No. 1 could benefit from instruction on differentiating between the four vowel phonemes /ɛ/, /æ/, /ʌ/, and /ɑ/. First, Speaker No. 1 could benefit from practice pronouncing the contrast between /ɛ/ and /æ/ by exaggerating the dropping of the jaw with /æ/. The /æ/ sound is also found in words concerning emotion, such as *mad* and *glad*. Having Speaker No. 1 practice the pronunciation of expressing emotions could be prove to be a second strategy. The third strategy for practicing the production of the vowel sounds /ɛ/ and /æ/ is to use minimal pairs. Using minimal pairs to practice the difference between these two sounds would be a good way for Speaker No. 1 to develop the skill to pronounce these two sounds more accurately in accordance with standard American pronunciation. In regards to the vowel sounds /ʌ/ and /ɑ/, the same strategies could be used. Speaker No. 1 could practice pronouncing these two vowel sounds together as /ʌɑ/ in order to discover that the mouth is more open with the pronunciation of /ɑ/. Minimal pairs could also be used to practice the production of these vowels. Finally, listening discrimination could be used as a strategy to help in the identification of each of these vowel sounds, which in turn would help the learner to differentiate between them.

Although there were no specific recurring suprasegmental errors in Speaker No. 1's interview, certain suprasegmental aspects of his spoken language affected comprehensibility at certain points. This speaker would benefit from instruction in English stress, rhythm, and intonation because they are key elements of English pronunciation that could greatly increase the

comprehensibility of his speech (Avery and Ehrlich, 2008). Stress may be marked by the three variables length, pitch, and loudness. Both syllable and word stress could be practiced with Speaker No. 1 in order to improve his comprehensibility. A few strategies that could be used for stress instruction could be schwa-identification tasks and stress-identification tasks. First, Speaker No. 1 would identify the reduced vowel in a list of words after his instructor pronounced each one in a schwa identification task. This would help Speaker No. 1 practice identifying reduced and unstressed vowels. In the second strategy, a stress identification task, Speaker No. 1 would indicate the stressed syllable in multiple polysyllabic words.

Speaker No. 1 has certain strengths when speaking English, but he also has certain areas that need improvement. Above are just a few of the strategies that could be used in instruction to help improve the comprehensibility of Speaker No. 1. This list is by no means comprehensive, although it does give insight into a few pedagogical strategies that could be used to improve Speaker No. 1's spoken comprehensibility. Improving comprehensibility is not something that could happen in a lesson, or even after a week of instruction. Comprehensibility is something that can only be improved over time with increased levels and frequency of input and output. Each of the strategies discussed above would only assist this speaker in improving his comprehensibility to a certain degree. His comprehensibility will most likely be improved exponentially over time and with a combination of formal instruction and day-to-day acquisition in the real world. The strategies listed above would help to expedite this process.

Speaker No. 2

The native listener questionnaire results were less conclusive for Speaker No. 2 seeing as the answers of native listeners were more varied for each question. Approximately 53% of native speakers agreed or strongly agreed that Speaker No. 2's accent somewhat affected how well they were able to understand him, and only 60% of native listeners strongly agreed that Speaker No. 2 has an accent. These percentages are much lower than the data shown for Speaker No. 1, indicating that native listeners did not think Speaker No. 2's accent was inhibiting his comprehensibility as much as Speaker No. 1's accent. Similarly, approximately 87% of native speakers agreed or strongly agreed that they could understand the main points that Speaker No. 2 was trying to make. This high percentage of native listeners could indicate that Speaker No. 2 has good comprehensibility. These numbers may also be indicative of the fact that Speaker No. 2's answers in the interview were the shortest and most concise. This indicates that Speaker No. 2 may benefit most from building his vocabulary and elaborating on ideas in oral communication.

A multitude of different strategies exist for improving the depth and complexity of oral communication in English language learners, however, the best strategy to use depends on the learner. Speaker No. 2 would most likely benefit from having a conversation partner; a native English speaker to meet with him on a regular basis in order to simply chat and practice interpersonal communication. Meeting with a conversation partner multiple times each week would slowly help to build the vocabulary of Speaker No. 2, which would in turn help him to elaborate and express more complex thoughts in conversation. One strategy a conversation partner could use with Speaker No. 2 is to identify his interests, and then read an article with him concerning this topic. The article would supply Speaker No. 2 with more advanced vocabulary

and ideas, thus sparking more complex and in-depth conversation. A conversation partner is one of the strategies that could be used to help Speaker No. 2 to elaborate on his ideas during oral communication.

Speaker No. 2 could also benefit from formal grammar instruction concerning verbs. Grammar instruction concerning verbs could help Speaker No. 2 increase his comprehensibility and his ability to elaborate on ideas. Speaker No. 2 only used verbs in the first person singular in his answers to the two questions that were analyzed in depth. This may be representative of the nature of the questions themselves; however, it may also indicate his need for further practice using verbs in the second and third person. Speaker No. 2 could also benefit from formal instruction concerning verb tenses. He misused verb tenses several times, relying on the present tense when another was correct. This shows that Speaker No. 2 could benefit from instruction on verb tenses other than the present, as well as practice using those verb tenses in conversation.

According to the data from this study, Speaker No. 2 would most likely benefit from an increased level and amount of input and output. The input and output provided by a conversation partner would enable Speaker No. 2 to build the vocabulary and skills necessary to improve his comprehensibility over time. Having a conversation partner that he could meet with on a regular basis may also aid Speaker No. 2 in having a lower affective filter when conversing (See Krashen, Page 6). This means that Speaker No. 2 may feel more comfortable expanding on his thoughts if he were in a low stress environment with someone he is comfortable with. Further research with Speaker No. 2 could determine if his affective filter was a factor inhibiting his speech, however, with the data gathered from this study it cannot be verified. Speaker No. 2 would also benefit from formal instruction concerning verb tenses in order to improve his ability

to express himself and his ideas. As previously stated for Speaker No. 1, comprehensibility of spoken language only improves over time with a lot of practice. The strategy of meeting with a conversation partner would help Speaker No. 2 to increase the amount of English he spoke and heard every day, however, there are a variety of ways he could increase his input and output such as taking classes, watching television, or talking with friends.

Speaker No. 3

Approximately 67% of native listeners strongly agreed that Speaker No. 3 has an accent. According to the chart 60% of native listeners agreed or strongly agreed that Speaker No. 3's accent somewhat affected how well they were able to understand him. This shows that Speaker No. 3's accent affects comprehensibility to some extent. Speaker No. 3 also had the lowest percentage of native listeners agree to the statement that they used vocabulary fairly accurately, meaning that in general native listeners thought that Speaker No. 3 did not use vocabulary well. In both questions concerning grammar use the majority of native listeners agreed that Speaker No. 3's use of grammar somewhat interfered with their comprehension of his speech, showing that his use of grammar affected his comprehensibility to some degree. In spite of these data showing factors that inhibit Speaker No. 3's comprehensibility, approximately 87% of native speakers agreed or strongly agreed that they could understand his main points. The data gathered from the native listener questionnaire indicates that Speaker No. 3 is comprehensible overall, however, his use of grammar, vocabulary, and accent are all factors that inhibit his comprehensibility to some degree.

Speaker No. 3 occasionally deleted final consonants from his speech, which affected his comprehensibility. The deletion of final consonants is oftentimes linked to problems pronouncing final consonant clusters. In his interview Speaker No. 3 made some errors concerning final consonant clusters, which may show that he could benefit from instruction on the topic. There are multiple educational strategies that could be used to help Speaker No. 3 improve his pronunciation of final consonant clusters, however, the strategy listed for Speaker No. 1 would also work well in this situation. This strategy included pronouncing two words separately, and then gradually eliminating more of the second word until the two words become one word with a final consonant cluster. During his interview, Speaker No. 3 pronounced the word *cold* as /kɔʊl/, deleting the /d/ in order to avoid the final consonant cluster. The pronunciation of this word could be practiced using this strategy by having Speaker No. 1 practice the two words *coal* and *dawn* together (Avery and Ehrlich, 2008). The next step would be to have Speaker No. 1 practice pronouncing *cole* and *daw*. Then, finally, Speaker No. 1 could drop the final vowel sounds and practice the word *cold* with the final consonant cluster.

Speaker No. 3 would also benefit from further instruction in grammar. Formal grammar instruction would especially help Speaker No. 3 in improving his overall comprehensibility. During his interview Speaker No. 3 made errors concerning subject and verb agreement, as well as verb tenses. Multiple times during his interview Speaker No. 3 left out the subject, and the verb did not agree with the implied subject. Formal instruction concerning the use of subjects and their agreement with verbs would help to improve his overall comprehensibility. This instruction topic ties into the other grammar topic that Speaker No. 3 had difficulty with. Speaker No. 3 used the wrong verb tense several times during his interview, showing an inconsistent

ability to use them properly. Speaker No. 3 would benefit greatly from instruction over the different verb tenses including when to use them and how to form them.

Speaker No. 3 has certain strengths when speaking English, but he also has certain areas that need improvement. Above are just a few of the strategies that could be used in instruction to help improve the comprehensibility of Speaker No. 3. This list is by no means comprehensive, although it does give insight into a few pedagogical strategies that could be used to improve Speaker No. 3's spoken comprehensibility. Comprehensibility is something that can only be improved over time with increased levels and frequency of input and output. Each of the strategies discussed above would only assist Speaker No. 3 in improving his comprehensibility to a certain degree. His comprehensibility will most likely be improved exponentially over time and with a combination of formal instruction and day to day acquisition in the real world. One other way to assist Speaker No. 3 in improving his comprehensibility is to have him meet with a conversation partner a few times a week. This would give Speaker No. 3 the chance to practice his spoken language with a native speaker, as well as practice what he was learning in the classroom environment. Having a conversation partner would allow Speaker No. 3 to practice his pronunciation and grammar, but it would also help him to build vocabulary.

Speaker No. 4

Only about 33% of native listeners strongly agreed that the fourth and final speaker has an accent and only 33% of native listeners agreed or strongly agreed that Speaker No. 4's accent somewhat affected how well they were able to understand him. Compared to the other speakers, these are very low percentages that show Speaker No. 4 speaks English with an accent that does

not affect the majority of people's ability to comprehend him. Native listeners also thought that Speaker No. 4 used vocabulary and grammar well. About 87% of native listeners agreed or strongly agreed that they could understand the main points of Speaker No. 4. This speaker also had the most native listeners strongly agree with this statement. The native listener questionnaire data reveal that native listeners perceived this speaker to have the best accent, and to use grammar and vocabulary the most accurately. Although Speaker No. 4 has certain strengths, further practice and instruction in a few areas could still improve his overall comprehensibility. Speaker No. 4 is at a more advanced level of English, therefore he could benefit from more advanced instruction in grammar and vocabulary.

Speaker No. 4 would benefit from further instruction on English verb tenses as well as gerunds and infinitives. During his interview Speaker No. 4 made multiple errors concerning verb tenses, gerunds, and infinitives, showing that there is room for improvement in all three areas. Much like with Speaker No. 3, Speaker No. 4 could benefit from formal grammar instruction in a classroom environment. Speaker No. 4 would benefit from lessons teaching the differences between infinitives and gerunds and when to use them. He would also benefit from verb tense practice, involving when to use each of the different tenses. He would benefit from instruction in each of these three areas, especially if the instruction could be supplemented with the opportunity to practice. Grammar instruction on its own only does so much, but when paired with interpersonal communication practice, it can help to improve the comprehensibility of any given speaker. Being able to meet with a conversation partner in addition to formal instruction would help Speaker No. 4 to improve his comprehensibility. Meeting with someone to discuss the news or magazine articles could also really help Speaker No. 4 to build his vocabulary. A

conversation partner would be the best way for Speaker No. 4 to practice using the grammar learned through instruction, as well as continue to improve his spoken comprehensibility.

As stated before, spoken comprehensibility is not greatly improved in a short period. It takes time and effort to improve in any language. Each of the four speakers who were part of this study had already achieved some level of comprehensibility in spoken English. Assessing each of their interviews only leads to a more educated hypothesis of what type of instruction they could benefit from the most. Each of these English language learners have different strengths and weaknesses, however, each one of them could improve their comprehensibility through increasing the time they spend speaking and listening to the English language. Specific pronunciation problems and grammatical constructions can interfere greatly with comprehensibility, however, these are things that can be addressed in the classroom environment. If these speakers truly want to improve their English, they need to look beyond the classroom.

Conclusion

This study supports and confirms findings from previous research done in the field by Avery, Ehrlich, and Huxley concerning the problems of Arabic-speaking English language learners (Avery & Ehrlich, 2008; Huxley, 1986). The data gathered from this project would be especially useful on an individual basis to assist in the instruction of each Arabic-speaking English language learner whom we interviewed; however, the findings cannot be universally applied to all Arabic-speaking English language learners due to the limited size of the corpus. Future research could expand upon this study by interviewing female as well as male English language learners with a view to looking for gender differences. We noted that each speaker was challenged by differentiating between the consonants /p/ (voiceless) and /b/ (voiced). Additional research could be done to learn when this challenge negatively affects comprehensibility if in fact it does. In addition, more research could be conducted concerning the linguistic analysis of Arabic-speaking English language learners in order to expand upon these findings.

A larger and more comprehensive study, which goes beyond the scope of the current project, could include a larger sample size of English language learners, as well as learners from a variety of linguistic backgrounds in order to find factors that most effect spoken English comprehensibility. In our project, we were able to gain insight into multiple phonetic challenges that highly affected the accent of each English language learner but may not have affected their overall spoken comprehensibility. Future studies may look to gain a deeper understanding by analyzing speech from other contexts in addition to the interview and readings developed here. We have learned, too, that interviews tend to limit the language learners to the questions they are being asked, whereas in day-to-day life, they are required to respond to countless different

circumstances and interactions. In regard to data concerning native-speaker reactions to English language learners, we learned that the majority of native speakers with whom we worked understood the speech of the English language learners, as seen on Chart 6. These data show that the speech of the English language learners is overall comprehensible according to native-speaker reactions. The inclusion of natural speech samples would provide additional data for analysis and testing with native speakers.

In conclusion, conducting this study has taught the writer how complicated it is to study actual speech. Creating interview questions, selecting appropriate readings, finding willing interview consultants, transcribing speech samples and analysis, is an immense and sometimes tedious undertaking. In addition, the second phase involving testing comprehensibility presents its own challenges in avoiding skewing native speakers' responses. However, data collection and analysis are an immensely worthwhile endeavor, and this project constitutes a valuable first step in the field of linguistic analysis and development of instructional guidelines for English language learners.

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Appendix A: IRB Approval Letter

Office of the Vice President
For Research
*Protection of Human Subjects
Review Board*



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MEMORANDUM

TO: Sophia Lataille

FROM: Gayle Jones
Assistant to the Institutional Review Board for the Protection of Human Subjects (IRB)

SUBJECT: “English Language Learner Linguistic Profiles,” #2015-02-16

DATE: March 16, 2015

The above referenced project was approved by the University of Maine’s Institutional Review Board for the Protection of Human Subjects (IRB) in an expedited review. The approval period is 3/3/2015 through 3/2/2016. A continuing review of this project must be conducted by the IRB before the end of the approval period. Although you will receive a request for this information approximately 6-8 weeks before that date, it is your responsibility to submit the information in sufficient time to allow for review before the approval period expires.

Enclosed is an approved copy of the consent document for this project. The approval for this consent expires on 3/2/2016. **This approved copy must be duplicated and used when enrolling subjects during the approval period.**

Please remember that each subject must be given a copy of the consent document. Any unanticipated problems or harm to the subject must be reported to the IRB immediately. Any proposed changes to the research must be approved by the IRB **prior** to implementation. Any significant new findings must be reported to the subject.

If you have questions, please contact me at 1-1498. Thank you.

pc: Jane Smith Chris Mares

Maine’s Land Grant and Sea Grant University
A Member of the University of Maine System

Appendix B: English IPA Chart:

vowels		consonants	
IPA	examples	IPA	examples
ʌ	c <u>u</u> p, l <u>u</u> ck	b	<u>b</u> ad, l <u>a</u> b
ɑ:	<u>a</u> rm, f <u>a</u> ther	d	<u>d</u> id, l <u>a</u> dy
æ	<u>c</u> at, bl <u>a</u> ck	f	<u>f</u> ind, <u>i</u> f
ə	<u>a</u> way, cin <u>e</u> ma	g	<u>g</u> ive, fl <u>a</u> g
e	<u>m</u> et, b <u>e</u> d	h	<u>h</u> ow, <u>h</u> ello
ɜ:	<u>t</u> urn, <u>l</u> earn	j	<u>y</u> es, <u>y</u> ellow
ɪ	<u>h</u> it, <u>s</u> it <u>i</u> ng	k	<u>c</u> at, b <u>a</u> ck
i:	<u>s</u> ee, <u>h</u> eat	l	<u>l</u> eg, <u>l</u> ittle
ɒ	<u>h</u> ot, r <u>o</u> ck	m	<u>m</u> an, l <u>e</u> mon
ɔ:	<u>c</u> all, <u>f</u> our	n	<u>n</u> o, t <u>e</u> n
ʊ	<u>p</u> ut, <u>c</u> ould	ŋ	<u>s</u> ing, f <u>i</u> ng <u>er</u>
u:	<u>b</u> lue, <u>f</u> ood	p	<u>p</u> et, m <u>a</u> p
aɪ	<u>f</u> ive, <u>e</u> ye	r	<u>r</u> ed, t <u>r</u> y
aʊ	<u>n</u> ow, <u>o</u> ut	s	<u>s</u> un, m <u>i</u> ss
ɔʊ	<u>g</u> o, <u>h</u> ome	ʃ	<u>s</u> he, cr <u>a</u> sh
eə	<u>w</u> here, <u>a</u> ir	t	<u>t</u> ea, g <u>e</u> t <u>t</u> ing
eɪ	<u>s</u> ay, <u>e</u> ight	tʃ	<u>c</u> heck, <u>ch</u> urch
ɪə	<u>n</u> ear, <u>h</u> ere	θ	<u>t</u> hink, b <u>o</u> th
ɔɪ	<u>b</u> oy, <u>j</u> oin	ð	<u>t</u> his, m <u>o</u> ther
ʊə	<u>p</u> ure, <u>t</u> ourist	v	<u>v</u> oice, <u>f</u> ive
		w	<u>w</u> et, <u>w</u> indow
		z	<u>z</u> oo, l <u>a</u> zy
		ʒ	<u>p</u> leasure, <u>v</u> ision
		dʒ	<u>j</u> ust, l <u>a</u> rge

<https://tkacmaz.wordpress.com/pron1/>

Author's Biography

Sophia G. A. Lataille was born in Bangor, Maine on February 12, 1993. She was raised in Hampden, Maine and graduated from Hampden Academy in 2011. Majoring in both French and Secondary Education, Sophia has a minor in Latin and a certification in teaching English as a Second Language. She is the president of the University of Maine French Club, and a member of Kappa Delta Pi and Pi Lambda Theta. She has received the PLT Student Support Scholarship, the Cole Land Transportation Scholarship, the Roger B. Hill Scholarship, and the Slott Family Language Immersion Scholarship. Upon graduation Sophia plans to teach English abroad before returning to work in Maine as a high school French teacher.