# Raising English Suprasegmental Awareness on an Adult L2 Learner Through Reading Aloud Sessions

Benjamin Sanchez Murillo

Temple University
Japan Campus
Tokyo Center

TESL 5611 Applied Language Study I: Phonology and the Lexicon
Dr. Tomoko Nemoto
April 13, 2021

# Raising English Suprasegmental Awareness on an Adult L2 Learner Through Reading Aloud Sessions

## Introduction

Japanese speakers with English experience studying abroad in English-speaking countries often describe that native English speakers speak too fast and that their speech becomes difficult to comprehend. While it might be true that comprehensibility difficulties might stem from listening to fast speech (Celce-Murcia et al., 2010), there is also the possibility that the misunderstanding Japanese speakers might be experiencing is due to rhythm patterns of a stress-timed language from the perspective of their syllable-time language (Otake et al., 1996).

When Japanese speakers produce English speech, Japanese speakers might be speaking from their L1 syllable-timed language by applying equal weight to syllables, thus giving a native speaker of English an impression of a staccato-like rhythm and potentially causing comprehensibility issues (Avery & Ehrlich, 1992).

In terms of English production, some native English speakers tend to interpret Japanese speech's rhythm as monotone (Avery & Ehrlich, 1992). Saito and Saito (2016) state that the reason Japanese speech is perceived as monotonous is "because their pitch movement might not be distinctive enough with final-rising or final-falling intonation" (p. 596). This type of monotonous speech can be a factor affecting comprehensibility (Avery & Ehrlich, 1992).

These observations led me to investigate how it could be possible to improve the comprehensibility and accentedness in a Japanese speaker's speech production elicited from reading aloud sessions and whether novice raters would be able to notice these changes.

**Literature Review**

According to Munro and Derwing (1999), comprehensibility is the listeners' perceived judgments when evaluating their understanding of L2 speech. These differences in perceptions between English and Japanese speech and their relative comprehensibility prompted me to investigate other pronunciation aspects that might affect comprehensibility.

When studying different pronunciation aspects, it is essential to identify the classification of major pronunciation features. The term pronunciation can be classified as segmental features or suprasegmental features (Celce-Murcia et al., 2010). Segmental features are the sound of vowels and consonants while, suprasegmental features transcend the segmental levels and include stress, rhythm, and intonation (Celce-Murcia et al., 2010). However, although both segmental and suprasegmental features are important features to teach in the classroom, it is not often possible to cover both aspects due to time constraints. Teachers must prioritize which aspect to teach (Saito & Saito, 2016).

In the past, researchers have made compelling arguments as to why they gave more importance to suprasegmental instruction over segmental instruction. For example, Derwing et al. (1998) stated that speakers who had suprasegmental instructions (i.e., rhythm, intonation & stress) "could apparently transfer their learning to spontaneous production" (p. 406). Saito et al. (2016) mentioned that word stress and intonation are critical features appearing equally in beginner, intermediate, and advanced levels, while segmental precision was characteristic of the intermediate and advanced levels. In short, it seems that suprasegmental instructions can be transferred to spontaneous production for students at different skill levels.

A method teachers use in teaching pronunciation is reading aloud (RA) (Gibson, 2008). Gibson (2008) suggested a couple of benefits of reading aloud. She indicated that reading aloud can be beneficial for diagnostic purposes and pronunciation improvement purposes.

However, it might be difficult for speakers of syllable-time languages to perceive suprasegmental instructions differences unless someone creates an awareness of these differences (Schmidt, 1990). In terms of reading aloud benefits, Gibson (2008) stated that "by reading aloud longer stretches of text, prosodic features (which occur in spontaneous speech as well as RA) can be focused upon" (p. 31). According to Gibson (2008), these reading-aloud activities' goal was to raise awareness of these features to show that the produced words flow naturally.

Following the suggestions of the noticing hypothesis set out by Richard Schmidt, that a starting point to learning is being able to notice input (Schmidt, 1990), Gibson's (2008) view as to the reading aloud goals and compelling arguments from past researchers on suprasegmental instruction and capabilities of transferability in spontaneous production (Derwing et al., 1998; Saito et al., 2016), I proceeded to bring awareness to the differences of syllable-time language and stress-timed language and teach suprasegmental features to improve the production of sentence stress, intonation, and rhythm in a series of reading aloud activities.

***Stress***

English is a stress-timed language, while Japanese is a syllable-timed language (Avery & Ehrlich, 1992). When Japanese speakers read a text in English, they tend to use the rhythm style of Japanese, thus affecting the comprehensibility of their English production (Avery & Ehrlich, 1992).

Celce-Murcia et al. (2010) suggested that it is important to teach stress to learners, especially from syllable-timed languages, as misplaced lexical stress may result in miscommunication. Primary stress or sentence stress is the combination of different aspects such as pitch and vowel duration. Depending on speech context, this combination can introduce new information (Hahn, 2004).

Additionally, Celce-Murcia et al. (2010) defined word stress as "the differentiated levels of stressed and unstressed syllables within a word" (p. 185). Celce-Murcia et al. (2010) also stated that an indication of making stress salient to listeners is lower vowel duration in the stress syllables and higher pitch. To illustrate this saliency, Celce-Murcia et al. (2010) used orthographical modifications such as letter capitalization to syllables requiring stronger stress and the use of lower case letters to syllables that call for unstressed productions. For example, the word *AC-a-**DEM-**ic* consists of three syllables. The non-bolded capital letters and lower case letters receive light and no stress, respectively, and the bolded capital letters receive stronger stress (Celce-Murcia et al., 2010). Thus, one could argue that orthographical modifications to indicate stress aides in the distinctions between stressed and unstressed syllables, such as Japanese speakers.

One of the aspects differentiating English and Japanese languages is how syllables are stressed, and these differences play a role in English syllable perception difficulties among Japanese speakers (Avery & Ehrlich, 1992). For example, Avery and Ehrlich (1992) stated that English, a stress-timed language, marks stress syllables by length and loudness. On the other hand, the Japanese language is pitch-accented, meaning that pitch plays an important role in determining stress. This difference in stress causes difficulties for Japanese speakers when they attempt to either produce or perceive English stress patterns (Avery & Ehrlich, 1992).

In sum, noticing sentence stress or word stress can help speakers communicate accurately (Celce-Murcia et al., 2010) and identify the saliency of a word's stress (Avery & Ehrlich, 1992).

***Rhythm & Intonation***

Combining different word stress patterns creates the rhythm of the English language (Celce-Murcia et al., 2010). In the English sound system, the mid-central vowel known as schwa occurs very frequently in English, and it is described as a reduced vowel (Avery & Ehrlich, 1992). In contrast, Japanese does not have the equivalent of a reduced vowel such as the schwa. The absence of this feature in the Japanese language can cause problems with producing appropriate rhythm when producing English utterances (Avery & Ehrlich, 1992).

In terms of perceived accentedness, rhythm, and speech rate, Polyanskaya and Ordin (2019) found that accent rating will depend on whether the target and native languages are similar or different. The speech rate will make contributions to accentedness in different proportions. For example, if the languages are rhythmically similar, then the perceived accentedness will be of a lesser effect than rate. However, if the languages are rhythmically different, then rhythm will significantly impact the rate.

During speech production, the rising and falling of the voice are known as intonation (Celce-Murcia et al., 2010), and pitch is the highness or lowness of a speaker (Celce-Murcia et al., 2010). Saito et al. (2016) defined it as the melody of English and as the different pitch changes that occur when we speak. Applying appropriate intonation can express the intent on behalf of a speaker (Celce-Murcia et al., 2010). For example, intonation can be used to get someone's attention or express emotion just by modifying the pitch in a speech stream (Celce-Murcia et al., 2010). Therefore, being aware of intonation and acquiring intonation can help learners fully convey their intentions when communicating in English.

One way of teaching intonation is to expose students to intonation contours (Celce-Murcia et al., 2010). An intonation contour is the "movement of pitch within an intonation unit" (Celce-Murcia et al., 2010, p. 231). An intonation unit, a segment of discourse, can be taught to students by illustrating intonation contours pitch movements with rising and falling lines (Celce-Murcia et al., 2010). These intonation contours occurring in intonation units can be separated into thought groups using forward slashes for easier identification (Rasinski, 1994). These separations of thought groups are known as phrase-cued texts (Rasinski, 1994). Rasinski (1994) defined a phrase-cued text as a "written passage in which intrasentential phrase boundaries are explicitly marked or cued for the reader" (p. 166).

### *Experienced vs. Novice Raters*

Comprehensibility and accentedness are based on listeners' rating judgments. Isaacs and Trofimovich (2012) suggested that experienced raters "would be more able to identify a fuller range of aspects of speech that they consider when scoring comprehensibility than novice raters, who may have less clearly developed criteria for L2 oral assessment" (p. 488-489), on the other hand, the researchers also mentioned those novice raters "tended to describe only a small set of default features in learner's speech (e.g., pausing, speech rate)" (p. 488-489). However, for this study, I was interested in how novice raters would perceive comprehensibility and accentedness.

## Research Questions

This project came about to bring awareness of the suprasegmental aspects of rhythm, stress, and intonation present in English-connected speech. The literature review gave an overview of these suprasegmental aspects and how they can affect English pronunciation's comprehensibility and accentedness among native speakers. This study focused on the following research questions to explore these relationships further:

1. Would novice raters find speech elicited from reading aloud sessions based on suprasegmental instructions comprehensible?
2. Would novice raters find improvement in accentedness from speech elicited from reading aloud sessions based on suprasegmental instructions?

## Method

### *Participant*

The participant of this study was a Japanese woman in her mid-twenties. To protect her privacy, I will use Maki as a pseudonym. Maki has had experience studying English while attending junior high school and via Kumon's English as a Foreign Language program. She is currently a fourth-year university student with practicum experience teaching Japanese as a Foreign Language in Australia. Maki showed interest in studying abroad in an English-speaking country and showed interest in learning different ways to improve her pronunciation. To measure her English proficiency, Maki took the International English Language Testing System (IELTS) and scored 5.5. Maki is currently looking for work and is preparing to take the Test of English for International Communication (TOEIC) exam. Maki's spontaneous conversation was fluent and comprehensible, and she was able to keep up a natural conversation going.

### *Raters*

The two raters were native North American English speakers (a 36-year-old male and a 31-year-old female) currently living in the United States. Raters reported listening to English 90% of their time and Spanish the remaining of their time, both at home and at work. The raters reported having normal hearing. The raters lacked experience using questionnaires to rate the comprehensibility and accentedness of speech and lacked experience teaching a second

language, so they were considered novice raters.

***Pedagogical Materials***

The five reading passages I used in the reading aloud sessions were from Kumon's English as a Foreign Language program worksheets. The program's worksheets include a passage and a set of questions to assess the reader's comprehension. I typed the passages in separate word documents. I used the Flesch-Kincaid readability statistics feature in the Spelling and Grammar options in Microsoft's Word program to obtain the worksheet's grade level, reading ease, and word count. To check the passage's lexical composition, I used Tom Cobb's vocab profiler (Cobb, n.d.). All reading passages were approximately similar in word count and grammatical composition.

***Assessment Instruments***

The sound recordings from the pre-test (PreT) session, post-test session one (PT1), and post-test session two (PT2) were reviewed by two raters and used a 9-point questionnaire to assess the recordings for comprehensibility (see Appendix A) and accentedness (see Appendix B). The questionnaire in this study used a 9-point scale to determine the level of comprehensibility (1 = *difficult to understand*, 9 = *easy to understand*), and a separate questionnaire also used a 9-point scale to assess the level of accentedness (1 = *strong accent*, 9 = *no accent*). Although I created the questionnaire, the idea behind using a 9-point questionnaire was following Munro and Derwing's (1995) suggestion. Munro and Derwing (1995) used a 9-point questionnaire as they believed that their "method of assessing both perceived comprehensibility and accent with a 9-point rating scale permits a more appropriate comparison between the two data sets" (p. 92).

Although the grade level and reading ease differed slightly, Maki stated she understood the passages' main idea (See Table 1).

Table 1

*Lexical Data for Passages*

| | PreT | S1 | S2 | S3 | PT1 | PT2 |
|---|---|---|---|---|---|---|
| Grade Level | 7.5 | 8.1 | 7.6 | 5.2 | 7.5 | 8.3 |
| Reading Ease | 75.5 | 71 | 66.5 | 72.2 | 75.5 | 64.5 |
| Word count | 295 | 295 | 277 | 294 | 295 | 291 |
| K1 words | 88.67% | 89.80% | 82.73% | 83.11% | 88.67% | 78.52% |
| K2 words | 3.67% | 3.62% | 5.40% | 7.43% | 3.67% | 7.05% |
| AWL | 1.33% | 0.66% | 5.04% | 1.01% | 1.33% | 0.00% |
| Off-list words | 6.33% | 5.92% | 6.83% | 8.45% | 6.33% | 7.05% |

Note. Grade Level = Flesch-Kincaid Grade Level, Reading Ease = Flesch- Reading Ease, and Word count = Flesch-Word Count from Microsoft Word.

K1 words = 1st 1,000 most frequent words of English, K2 words = 2nd 1,000 most frequent words of English, AWL = Academic Word List words, and Off-list = Off-list words from https://www.lextutor.ca/vp/eng/

Pre-test (PreT), treatment session one (S1), treatment session two (S2), treatment session three (S3), post-test session one (PT1), and post-test session two (PT2)

**Procedure**

This study consisted of reading-aloud activities. The reading aloud activities consisted of five sessions and consisted of a diagnostic test, PreT, S1, S2, S3, PT1, and PT2. The diagnostic test and PreT were administered the same day, the treatment sessions (S1, S2, and S3) were administered once a week, and the post-test sessions were administered on the same day.

The diagnostic test consisted of a brief introduction about the reading aloud project and a brief description of sentence stress, rhythm, and intonation. After the brief introduction and explanation of the different suprasegmental features, the pre-test started.

In the PreT session, I asked Maki to listen to how I read the first passage (see Appendix C). After I finished reading, I asked Maki if she had any questions about the passage or any questions about the way I read. She said she understood the passage and proceeded to read and recorded her production. Maki was able to reproduce the stress of some of the words in the passage and seemed to correct other words' stress almost as if she was using her memory to help her remember where I had placed stress. Overall, Maki lacked fluency and consisted of word-by-word reading, making her speech production choppy. These PreT results gave me an idea as to how I would proceed with S1.

S1 consisted of explaining how to place stress and intonation when reading aloud (see Appendix D). I explained that, in general, words that carry information like nouns and verbs receive stress and that intonation varies depending on the message a speaker is trying to convey, such as when a speaker wishes to express or elicit facts. I then read the passage to Maki, and after finishing, I showed the places where I had stressed words and where I had placed intonation and asked Maki to read aloud. After listening to Maki's production, I noticed that my lessons needed improvement as I noticed that she missed stressing some words, and Maki did not apply

appropriate intonation where required. It gave me the impression Maki was memorizing my production and was unable to produce proper stress and intonation, in other words, from not being able to remember all of my output. Perhaps Maki would benefit more if she could also visualize stress and intonation as she read future passages.

In S2, I used a passage with two different versions, an unmodified passage version (see Appendix E) and a modified passage version (see Appendix F). The unmodified version was the same passage appearing in the worksheets transcribed into a Word document. The modified version included capitalized words used to visualize the stress and used single and double forward slashes to separate sentences into thought groups. Before reading the passage, I showed Maki both versions and explained to Maki that words in capital letters represented that they should be stressed when read aloud.

In this session, I also segmented the text using single slashes for each thought group and double forward slashes to indicate the end of a sentence. I started the lesson by reminding Maki that I verbally described a thought group's concepts, stress, and intonation in a prior treatment. In this treatment session, I marked the text to indicate the concepts of thought group and stress.

I first read the original non-modified passage and asked Maki to listen and pay attention to how I read the passage. After completing the reading, I asked Maki to read the passage, and I recorded the reading. While she was reading, I noticed that Maki was able to stress a couple of words. I then showed her the text segmented passage with slashes and capital letters representing the words that carried the stress. I explained that the capital letters indicated the word's stress and that the word or words in between the single forward slashes represented a thought group. The double forward slash meant the end of a sentence.

I then asked Maki to listen to how I read the words with capital letters and the words between slashes and read. After I finished, I asked Maki to read the segmented text and recorded the session. During her reading, I noticed that she could reproduce some of the pauses and stress some of the words, particularly the stress of the word *finally* and the word *and*. When I asked Maki for her feedback on slashes and capital letters, Maki indicated that she thought they were helpful. Maki stated that she was already aware of text segmentation from a phonology class in her university and found segmentations helpful. Maki's feedback and production results prompted me to continue using visual cues for the intonation aspects in S3.

In S3, I modified the passage by adding intonation contour lines with arrows (see Appendix G). Before starting the session, I showed Maki the modified passage and explained the meaning of intonation and how to either raise or lower the intonation depending on the arrow's direction. An arrow in an upward direction represented a raised intonation, and an arrow in a downward direction represented a lowered intonation. I then read a couple of sentences as an example of how I placed intonation in the sentences so that she could repeat them. When Maki was reading the passage, I paid attention if she could follow the intonation arrows, but I could not hear changes in intonation. However, after reviewing the recording, I noticed that she was not reading from the passage I had modified, and instead, she was reading directly from the worksheets without intonation markings. Unfortunately, I was able to identify this issue after the sessions were completed. Perhaps part of the lack of intonation in reading the passage was because she did not use the visual cues I had provided.

Session 4 (PT1) and Session 5 (PT2) consisted of two passages administered the same day. PT1 consisted of reading the same passage as the PreT without any modifications to the text (see Appendix C). This post-test session intended to determine if Maki would apply stress,

intonation, and rhythm aspects I taught in previous lessons. This time, Maki was able to use intonation aspects as in the PreT and was also able to place stress accordingly. However, results were different in PT2.

PT2 consisted of an unfamiliar passage. I wanted to see if any progress made in the sessions was due to the lessons or because the Maki memorized how I read the passage and did not necessarily use the suprasegmental features (see Appendix H). The reading of the PT2 lacked the fluency than PT1; however, the reasons were not clear. One possibility is that Maki found the passage more complicated than the others. Maki did state that a particular sentence was difficult to understand. The sentence was *You could not possibly have come at a better time, my dear Watson*. Although the passage was comprised of generally similar lexical composition, the Flesch-Kincaid Grade Level for this passage was the highest at 8.3, so it is possible that this grade level reading was a little more complicated in general.

**Rating Procedure**

The raters evaluated the speech samples individually and at different times to avoid discussing the speech samples among themselves. One of the raters reported having computer issues, so instead of delivering the speech samples via email and rating at home, both raters listened to the speech samples via a smartphone video call. The room where the speech samples were evaluated was quiet. The raters first listened to a recording of my voice to ensure the smartphone video call did not affect the speech sample's voice quality. After making sure the voice quality was not an issue, raters were then presented with the questionnaire scale.

Raters received a brief explanation as to how to use the rating scale. Raters learned that they would rate comprehensibility in terms of efforts they needed to exert to understand Maki's read-aloud speech samples and how close the speech sounds native-like (Saito et al., 2016).

Raters indicated they understood the scales and proceeded to listen to the samples. The speech samples were played in random order, and raters were free from requesting hearing the same samples multiple times if needed. After raters finished listening to a speech sample, raters would verbally indicate their score using the appropriate scale.

**Results and Discussion**

Once the raters completed evaluating Maki's speech samples from the PreT, PT1, and PT2 sessions for comprehensibility and accentedness, the scores were added, and the mean scores were calculated (See Table 2). In terms of the first research question of whether novice raters (native speakers of English) find speech elicited from reading aloud sessions based on suprasegmental instructions comprehensible, the novice raters found the speech comprehensible for PT1.

Comprehensibility ratings for the reading aloud sessions indicated a two-point gain as compared from the PreT and PT1. However, there was no change as compared to the PreT and PT2. The raters seemed to agree that Maki improved her comprehensibility during the PT1 evaluation but decreased while evaluating the PT2 speech sample.

During a discussion after the PT2 session, Maki indicated that some parts of this particular passage were a bit more challenging to understand. Upon closer inspection and after comparing the differences between PT2 and the other passages, the PT2 passage was classified as a higher grade level (i.e., 8.3) than the PT1 and PT2 passages (i.e., 7.5). Moreover, PT2 also contained a higher percentage of off-list words, 6.33% for the PreT passage and 14.43% for the PT2 passage.

Although these differences among the passages were probably a contributing factor for Maki's production, a further study focusing on these differences is suggested.

Table 2

*Comprehensibility Ratings*

| | PreT | PT1 | PT2 |
|---|---|---|---|
| Rater (36 M) | 4.00 | 6.00 | 5.00 |
| Rater (31 F) | 5.00 | 7.00 | 4.00 |
| Mean | 4.50 | 6.50 | 4.50 |

Notes. 1 = *difficult to understand*; 9 = *easy to understand.*

Pre-test (PreT), Post-test 1(PT1), and Post-test 2(PT2)

In terms of the second question, whether novice raters would find improvements in accentedness from speech elicited from reading aloud sessions based on suprasegmental instructions, the novice raters found improvement from PreT to PT1. As a group, they also found no difference between PreT and PT2 (see Table 3).

Table 3

*Accentedness Ratings*

| | PreT | PT1 | PT2 |
|---|---|---|---|
| Rater (36 M) | 5.00 | 5.00 | 4.00 |
| Rater (31 F) | 4.00 | 7.00 | 5.00 |
| Mean | 4.50 | 6.00 | 4.50 |

Note. 1 = *strong accent*; 9 = *no accent*.

Pre-test (PreT), Post-test 1(PT1), and Post-test 2(PT2)

Although individually, raters noticed a difference in accentedness, their overall scores revealed that they considered comprehensibility and accentedness to be the same. These findings are in line with Issacs and Trofimovich (2012) that "comprehensibility and accentedness are often conflated descriptors" (p. 501).

It is challenging to generalize current findings on whether teaching suprasegmentals (i.e., stress, rhythm, and intonation) can improve the comprehensibility and accentedness as the study consisted of only one participant and five sessions. However, inexperienced raters in this study were able to detect improvement in both comprehensibility and accentedness.

***Pedagogical Implications***

One of the pedagogical implications from this study is that raising awareness of different pronunciation features and pronunciation instructions can be beneficial for L2 learners. Therefore, it is then possible to state that bringing Maki's awareness to suprasegmental aspects in reading aloud sessions was enough to make slight improvements in comprehensibility and accentedness from novice raters' perspective.

Another pedagogical implication is using familiar text. The reading aloud sessions were taken from worksheets Maki was already familiar with when she was learning English. I believe this familiarity helped maintain her motivation to continue with the study. The purpose of the study was to improve Maki's English pronunciation. Therefore, removing factors such as unfamiliar text would have probably added an unnecessary layer to achieve the study's goals. Future teachers who wish to teach pronunciation using reading aloud sessions would probably find it more beneficial to use text their students have used in the past.

Finally, implementing reading aloud sessions does not necessarily need to be performed exclusively in a classroom setting (Gibson, 2009). Gibson (2009) also described how books

specializing in reading aloud suggest using language laboratories as it can allow for the recording of the passages for later examination. Alternatively, a reading aloud session could be implemented online, such as the sessions implemented in this study. However, this study only used one student, so it is difficult to determine whether online sessions with multiple students would achieve desirable results.

***Limitations***

Several limitations could have affected the results of this study. One of the limitations was the time allotted per session to teach suprasegmental aspects appropriately. Perhaps allocating a couple of sessions to explain the differences of the three pronunciation aspects followed by a practice session could have improved Maki's understanding between the aspects, which could have resulted in better comprehensibility and accentedness ratings.

Another limitation of this study was the focus of one pronunciation aspect. There were times within the study where I observed minimal segmental pronunciation errors with /l/, /r/, and /ɚ/. If the study had also included instructions geared at raising awareness in segmental aspects, Maki could have combined these instructions, and her production could have improved.

Lastly, the other limitation that could have affected this study's results was that all reading passages did not have a similar Flesch-Kinkaid reading level among the reading passages. It is possible that these differences affected Maki's reading comprehension causing her to produce speech that was difficult to comprehend for novice raters.

**Conclusion**

The intention for this project was to determine whether teaching suprasegmental aspects (i.e., stress, rhythm, and intonation) using reading aloud sessions would improve Maki's pronunciation and how novice raters would perceive Maki's accentedness and comprehensibility. While novice raters found that Maki improved on her comprehensibility and accentedness, they also seemed to have conflated their ratings as both mean scores were the same.

There are several changes I would implement, to improve on the current study. First, I would add more participants to form an experimental and control group. Having one participant in the research and not comparing the effects of suprasegmental instructions with other pronunciation features makes it difficult to distinguish whether the sessions genuinely had a significant impact. For example, I would enhance the instructions' focus to include segmental aspects of pronunciation such as /r/, /l/, and /ɚ/ for a more balanced approach to teaching pronunciation. Second, I would try including expert raters in the experiment to compare rating perceptions between novice raters and expert raters. Although novice raters brought value to the study by simply noting Maki's pronunciation, I became curious about how expert raters would judge Maki's pronunciation and how far apart novice raters from expert raters would fall. Finally, I would expand the number of pronunciation sessions to include practice sessions to feel more confident explaining the project accurately.

Overall, this project was exciting. Through the reading aloud sessions and feedback from Maki, I was able to raise awareness of suprasegmental aspects of pronunciation. Still, I also learned through direct comments how these and other pronunciation aspects are not taught in school. Maki mentioned that she was familiar with segmenting thought groups using forward slashes; however, she said she reviewed this strategy while attending university. Therefore,

future EFL teachers should consider implementing reading aloud sessions as part of raising pronunciation awareness as early as possible as EFL students frequently do not have an opportunity to practice their pronunciation skills outside of the classroom.

**References**

Avery, P., & Ehrlich, S. (1992). Teaching American English Pronunciation. New York, NY: Oxford University Press.

Celce-Murcia, M., Brinton, D., Goodwin, J., & Griner, B. (2010). *Teaching Pronunciation: A course book and reference guide.* Cambridge, England: Cambridge University Press.

Cobb, T. (n.d.). Web vocabprofile. Retrieved from http://www.lextutor.ca/vp/eng/

Derwing, T. M., Munro, M. J. (1995). Foreign accent, comprehensibility, and intelligibility in the speech of second language learners. *Language Learning*, *45*(1), 73–97. https://doi.org/10.1111/j.1467-1770.1995.tb00963.x

Derwing, T. M., Munro, M. J., & Wiebe, G. (1998). Evidence in favor of a broad framework for pronunciation instruction. *Language Learning*, *48*(3), 393–410. https://doi.org/10.1111/0023-8333.00047

Gibson, S. (2008). Reading aloud: A useful learning tool? *ELT Journal*, *62*(1), 29–36. https://doi.org/10.1093/elt/ccm075

Hahn, D. L. (2004). Primary stress and intelligibility: Research to motivate the teaching of suprasegmentals. *TESOL Quarterly*, *38*(2), 201–223. https://doi.org/10.2307/3588378

Isaacs, T., & Trofimovich, P. (2012). Deconstructing comprehensibility: Identifying the linguistic influences on listener's L2 comprehensibility ratings. *Studies in Second Language Acquisition*, *34*(3), 475–505. https://doi.org/10.1017/S0272263112000150

Otake, T., Hatano, G., & Yoneyama, K. (1996). Speech segmentation by Japanese listeners. In T. Otake & A. Cutler (Eds.), *Phonological structure and language processing: Cross-linguistic studies* (pp.183-201). Berlin: Mouton.

Polyanskaya, L., & Ordin, M. (2019). The effect of speech rhythm and speaking rate on

assessment of pronunciation in a second language. *Applied Psycholinguistics*, *40*(3), 795–819. https://doi.org/10.1017/S0142716419000067

Rasinski, T.V. (1994). Developing syntactic sensitivity in reading through phrase-cued texts. *Intervention in School and Clinic*, *29*(3), 165–168. https://doi.org/10.1177/105345129402900307

Saito, K., Trofimovich, P., & Isaacs, T. (2016). Second language speech production: Investigating linguistic correlates of comprehensibility and accentedness for learners at different ability levels. *Applied Psycholinguistics*, *37*(2), 217–240. https://doi.org/10.1017/S0142716414000502

Saito, Y., & Saito, K. (2016). Differential effects of instruction on the development of second language comprehensibility, word stress, rhythm, and intonation: The case of inexperienced Japanese EFL learners. *Language Teaching Research*, *21*(5), 589–608. https://doi.org/10.1177/1362168816643111

Schmidt, R. W. (1990). The role of consciousness in second language learning. *Applied linguistics*, *11*(2), 129-158. https://doi.org/10.1093/applin/11.2.129

# Appendix A

## Comprehensibility Likert Rating Scales

**Indicate your opinion about the comprehensibility using the scale below**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|
| ← | ← | ← Very Difficult to Understand | | | Very Easy to Understand | | → | → → |

# Appendix B

## Accentedness Likert Rating Scales

**Indicate your opinion about the accentedness using the scale below**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|
| ← | ← | ← | Strong Accent | | No Accent | → | → | → |

# Appendix C

## Passage for the Pre-Test (PreT) and First Post-Test Sessions (PT1)

Paul McCartney, An Essay

I was going through a really difficult time around the autumn of 1968. It was late in the Beatles' career and we had begun making a new album, a follow-up to the *White Album*. As a group we were starting to have problems. I think I was sensing that the Beetles were breaking up, so I was staying up too late at night, drinking, clubbing, the way a lot of people were at the time. I was really living and playing hard.

The other guys were all living out in the country with their partners, but I was still a bachelor in London with my own house in St. John's wood. And that was kind of at the back of my mind also, that maybe it was about time I found someone, because it was before I got together with Linda. So, I was exhausted! Some nights I'd go to bed and my head would just flop on the pillow; and when I'd wake up, I'd have difficulty pulling it off, thinking, "Good job I woke up just then or I might have suffocated."

Then one night, somewhere between deep sleep and insomnia, I had the most comforting dream about my mother, who died when I was only fourteen. She had been a nurse, my mum, and very hardworking, because she wanted the best for us. We weren't a well-off family---We didn't have a car, we just about had a television—so both of my parents went out to work, and Mum contributed a good half to the family income. At night when she came home, she would cook, so we didn't have a lot of time with each other. But she was just a very comforting presence in my life.

# Appendix D

## Passage for the First Treatment Session (S1)

The Diary of a Young Girl

Writing in a diary is a really strange experience for someone like me. Not only because I've never written anything before, but also because it seems to me that later on neither I nor anyone else will be interested in the musings of a thirteen-year-old schoolgirl. Oh well, it doesn't matter. I feel like writing, and I have an even greater need to get all kinds of things off my chest.

'Paper has more patience that people.' I thought of this saying on one of those days when I was feeling a little depressed and was sitting at home with my chin in my hands, bored and listless, wondering whether to stay in or go out. I finally stayed where I was, brooding. Yes, paper does have more patience, and since I'm not planning to let anyone else read this stiff-backed notebook grandly referred to as a 'diary', unless I should ever find a real friend, it probably won't make a bit of difference.

Now I'm back to the point that prompted me to keep a diary in the first place: I don't have a friend.

Let me put it more clearly, since no one will believe that a thirteen-year-old girl is completely alone in the world. And I'm not. I have loving parents and a sixteen-year-old sister, and there are about thirty people I can call friends. I have a throng of admirers who can't keep their adoring eyes off me and who sometimes have to resort to using a broken pocket mirror to try and catch a glimpse of me in the classroom. I have a family, loving aunts and a good home. No, on the surface I seem to have everything, except my one true friend.

# Appendix E

## Passage for the Second Treatment Session Unmodified Version (S2)

Our March to Freedom

Friends, comrades and fellow South Africans. I greet you all in the name of peace, democracy and freedom for all. I stand here before you not as a prophet but as a humble servant of you, the people. Your tireless and heroic sacrifices have made it possible for me to be here today.

I therefore place the remaining years of my life in your hands. On this day of my release, I extend my sincere gratitude to the millions here and around the world who have campaigned tirelessly for my release.

I send special greetings to the people of Cape Town, my home for thirty years. Your mass marches and struggle were a constant source of strength to all political prisoners. I extend my greetings to the working class of our country. Your organized strength is the pride of our movement. You remain the most dependable force in the struggle against exploitation and oppression.

On this occasion, we thank the world community for their great contribution to the anti-apartheid struggle. Without your support, our struggle would not have reached this advanced stage. The sacrifice of the front line will be remembered by South Africans forever.

Finally I must express my deep appreciation for the strength given to me during my long and lonely years in prison by my beloved wife and family. I am convinced that your pain and suffering was far greater than my own.

At this stage I wish to make only a few preliminary comments. I will make a more complete statement after I have consulted with my comrades. Today the majority of South Africans, black and white, realize the apartheid has no future.

## Appendix F

## Passage for the Second Treatment Session Modified Version (S2)

Our March to Freedom

FrIEnds, / comrades / and fellow South Africans. //

I greet you ALL in the name of pEAce, / democracy / and freedom for all. //

I stand here before you / NOT as a prophet / but as a humble servant of YOU, / the people. //

Your tireless and heroic SACrifices / have made it possible for me to be HERE today. //

I therefore place the REMAINING years of MY life / in your hands. //

On this day of my release, / I extend my sincERE gratitude to the millions here AND around the WORLD who have campaigned tirelessly for my release. //

I send special greetings to the people of CAPE TOWN / my home / for thirty years. //

YOUR mass marches and struggle / were a constant source of strength to ALL political prisoners. //

I extend my greetings to the working class of our country. / Your organized strength is the PRIde of our movement. //

You remain the MOST dependable force in the struggle agaINST exploitation AND oppression. //

On this occasion / we thank the world community / for their great contribution to the anti-apartheid struggle. //

Without your support, / our struggle would not have REACHED this ADVANCED stage. //

The sacrifice of the front line will be remEMbered / by South Africans / forever. //

FINALLY / I must express my deep appreciation/ for the strength given to ME during my LONG and LONELY years in prison by my beloved WIFE / and family. //

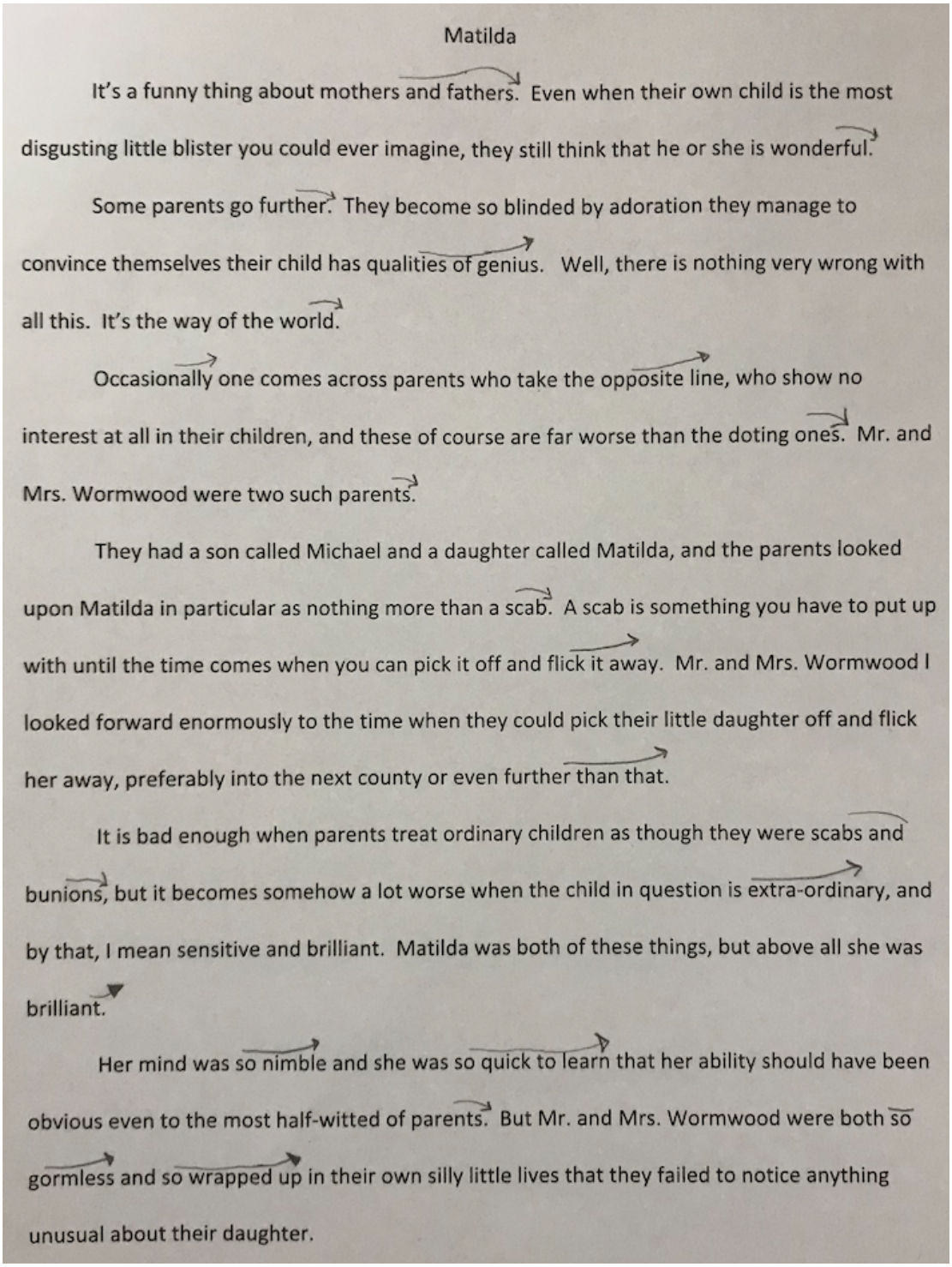
I am CONVINCED / that YOUR pain AND suffering / WAS far greater than my own. //

At this STAGE I wish to make only a FEW preliminary comments. / I will make a more comPLETE statement after I have consulted with my comrades. //

ToDAY the majority of South Africans, BLACK AND WHITE, realize the apartheid HAS NO future. //

# Appendix G

## Passage for the Third Treatment Session (S3)



Matilda

It's a funny thing about mothers and fathers. Even when their own child is the most disgusting little blister you could ever imagine, they still think that he or she is wonderful.

Some parents go further. They become so blinded by adoration they manage to convince themselves their child has qualities of genius. Well, there is nothing very wrong with all this. It's the way of the world.

Occasionally one comes across parents who take the opposite line, who show no interest at all in their children, and these of course are far worse than the doting ones. Mr. and Mrs. Wormwood were two such parents.

They had a son called Michael and a daughter called Matilda, and the parents looked upon Matilda in particular as nothing more than a scab. A scab is something you have to put up with until the time comes when you can pick it off and flick it away. Mr. and Mrs. Wormwood I looked forward enormously to the time when they could pick their little daughter off and flick her away, preferably into the next county or even further than that.

It is bad enough when parents treat ordinary children as though they were scabs and bunions, but it becomes somehow a lot worse when the child in question is extra-ordinary, and by that, I mean sensitive and brilliant. Matilda was both of these things, but above all she was brilliant.

Her mind was so nimble and she was so quick to learn that her ability should have been obvious even to the most half-witted of parents. But Mr. and Mrs. Wormwood were both so gormless and so wrapped up in their own silly little lives that they failed to notice anything unusual about their daughter.

## Appendix H

## Passage for the Second Post-Test Session (PT2)

Paul McCartney, An Essay

I was going through a really difficult time around the autumn of 1968. It was late in the Beatles' career and we had begun making a new album, a follow-up to the *White Album*. As a group we were starting to have problems. I think I was sensing that the Beetles were breaking up, so I was staying up too late at night, drinking, clubbing, the way a lot of people were at the time. I was really living and playing hard.

The other guys were all living out in the country with their partners, but I was still a bachelor in London with my own house in St. John's wood. And that was kind of at the back of my mind also, that maybe it was about time I found someone, because it was before I got together with Linda. So, I was exhausted! Some nights I'd go to bed and my head would just flop on the pillow; and when I'd wake up, I'd have difficulty pulling it off, thinking, "Good job I woke up just then or I might have suffocated."

Then one night, somewhere between deep sleep and insomnia, I had the most comforting dream about my mother, who died when I was only fourteen. She had been a nurse, my mum, and very hardworking, because she wanted the best for us. We weren't a well-off family---We didn't have a car, we just about had a television—so both of my parents went out to work, and Mum contributed a good half to the family income. At night when she came home, she would cook, so we didn't have a lot of time with each other. But she was just a very comforting presence in my life.