

The Linguistic Slide : A Different Approach to “R” Instruction

Makoto Yoshii and David Joyce

Background study on instruction of “R”

The current methods for teaching pronunciation of the letter “r” to Japanese students are deficient. The fact is that few students acquire the capability to pronounce this sound clearly, distinct from the letter “L”. Part of the reason students are failing to acquire the sound is that the current teaching method focuses on tongue position charts, a difficult concept to remember when in the process of talking.¹⁾ Few people understand the nature of the letter “r” well enough to construct it comfortably. Thus we decided to test the efficacy of a different method of “r” instruction. In this method we taught the “r” sound by altering the students’ perspective as to the nature of the letter “r” and using visual aids to help them remember how to shape the sound. Studies have been done to investigate the effectiveness of the use of visual aids in enhancing pronunciation. Molholt (1988) used computer-assisted instruction utilizing visual displays of speech patterns for the purpose of improving the communication skills of the students. Goh (1993) looked at a speech aid that would provide the student with a score based on the similarity between the student’s pronunciation and the native speaker’s using the graphical user interface. Fledge (1988) explored the use of visual information to train specifically in the area of vowel production. He used an optoelectronic glossometer to measure tongue-palate distances and to provide visual feedback specifying

1) See appendix A.

tongue targets for the vowel sounds. All these studies focused on the tongue position and feedback from the visual cues, which were produced through rather expensive and sophisticated equipment such as a computer or an optoelectronic glossometer. In our study we focused on the concept of teaching the “r” sound using simple visual aids rather than by tongue position. Our hypothesis is that this method is capable of improving students’ ability to clearly and distinctly pronounce the “r” sound in a relatively short period of time when compared with the length of time they have been studying English as a whole.

Research Objective

A new approach to instruction of the letter “r” with the use of visual cues and treating “r” as a combination of vowels will be effective in teaching the sound and helping students pronounce it properly.

This present study examines whether students will do better on a pronunciation test after this instruction method, comparing the test results with the previous test given before the instruction.

Method

Sample

Thirty-four students from two schools, a local city University and a Junior College, participated in the test. They were all Sophomores, majoring in English language or English literature.

Research Design

1) We designed and gave a pronunciation test at the beginning of the semester. The test consisted of 19 sentences with an approximately equal mix of initial, middle, and terminal “r” sounds.²⁾ By “initial” we mean an “r” sound that either begins a word or is directly preceded only

2) See appendix B for a test sample.

by a consonant. A “middle r” is one that is bracketed by vowels, where the “r” serves as a transformation from one vowel sound to another. A “terminal r” is an “r” that is preceded by a vowel and followed either by a consonant or nothing. We divided the “r” sound into three categories because the physical method of constructing the sounds is slightly different, especially with terminal “r”. The students read each sentence. They had never seen the sentences before the test. The students did not know they were being tested on “r”. We recorded the test sessions on video tape.

2) We gave the pronunciation instruction in each class session for about 25 minutes. We went over all the basic sounds including the “r” sound. For this sound we taught the pronunciation with visual aids and dividing the words into 3 patterns. When we taught, we instructed the students to forget everything they had been told about the “r” sound up to that point. We also told them to stop associating it with the Japanese “ra-ri-ru-re-ro” that occurs in romanji. We showed them that the Japanese sound is, structurally much closer to “l” than it is to “r”. “R”, we explained, is not a normal consonant. It fulfills the role of a consonant positionally, but is actually constituted of several vowel sounds, pronounced quickly, a very complex diphthong. Two other letters that function similarly are Y and W. Then, using a native speaker as the model, we pronounced the “r” sound exaggeratedly slowly, as if we were in a movie reduced to slow motion so that the students could hear each vowel more distinctly. One image that seemed to help them understand this concept was that of five slices of bread pressed into the size of one slice. “Is it five slices, or is it one?” we asked. The answer, of course, is that is both. By slowing down the pronunciation of the “r” to the point of exaggeration, the students were then able to distinguish the separate parts more clearly, rather like

separating the bread slices. The students’ tongues, we explained, should be in the same position as when they are going to make a vowel sound naturally, especially the long “u”. We then had them practice the sound by saying it extremely slowly, in part to help circumvent the habit reflex of the Japanese tongue flip “r”.

Next, we showed the students the diagrams³⁾ and explained their relationship to the different “r” sounds. The first picture, the slide, is similar to an “r” in the initial position of the word, e.g., in such words as run, race, rat, really, and rob. It always starts with a “u” sound and then slides into whatever vowel follows the R. The next two pictures illustrate the way the sound functions when “r” is bracketed by two vowel sounds, one on either side. Using the roller coaster picture, the vowel sound enters as a normal vowel (“e” in the example), is transformed to the “u” sound at its peak, and then slides again into the final vowel sound (“y” from using the word “very” as an example—other such words are sorry, leery, and tomorrow). The hourglass is a different way for the students to imagine the same function, this time showing more clearly how the mouth moves when making the “r” sound. The mouth starts wide with the initial vowel, narrows into a “u” sound (note that when English speakers make the “u” sound they typically close the mouth smaller than Japanese speakers do), then widens again to the final vowel sound. The last picture, the funnel, is intended to help the students imagine how their mouth functions when they need to make an “r” sound at the end of the word. The vowel sound starts wide, narrows to R’s narrowest sound (just before the “r” becomes a “u” sound), and then stops, cut short, like a funnel, found in such words as baker, care, war, beer, and door. One brief note: the typical “er” ending in such words as baker or doer is an especially

3) Sample diagrams are in appendix D.

shortened form of the funnel, using only the narrowed part, the “rrr” sound. The “e” part is shortened to the point it almost doesn’t exist. We also included instruction in other difficult sounds so that the students would not be aware of any special purpose on our part, such as the “th” sound, the short “i” sound, “f vs. v”, and the “si-shi” differentiation.

3) After 3 months of periodic instruction and occasional reminders, we gave the same pronunciation test again. The students read the sentences and we recorded the session on video. Again, the students did not know that we were testing their “r” pronunciation capability. Since there had been a three month time lapse, and the students had not seen the test in the interim time, we deemed the possibility of the students becoming familiar with the test to be remote, especially since the students didn’t know what we were testing for.

4) For grading the results, we asked 4 native speakers (Americans) who were all English instructors at the college level to check the students’ tests. They looked at the videos, then marked when “r” was pronounced correctly, using score sheets.⁴⁾ We compared the results and only counted “r” as correctly pronounced if 3 or more examiners agreed that the sound was correctly produced (meaning that only when 3 or more examiners marked the sound as correct). The examiners did not know which tape was the first and which was the second test.

Results

We used T-test to compare the results between the first and second test. The t-score was 4.47 ($p < 0.01$). The results (in appendix E) showed that, on the whole, the students’ scores improved significantly on the second test, with an overall average increase in ability of 45.1%. The students showed the highest initial skill level with the initial “r”

4) Sample score sheet is appendix C.

sound, probably due to the fact that an initial “r” is easier for the student to remember to make, since it begins a sound unit. The most improvement was seen in the middle “r” words, with a total increase of 58.4%. The second highest increase was with terminal “r” words, which showed a 55.8% increase. The lowest level of increase, which was still high enough to be statistically significant, was in the initial “r” words, which showed a 21.1% increase. We speculate that the students improved less in the initial “r” category because they showed a higher level of skill to begin with.

Conclusion/Discussion

We were pleased with the results of our test. The students showed remarkable improvement in their production of the “r” sound using this new method, despite a short period of instruction, so we have high hopes for the use of this technique in teaching pronunciation in future classes. We found that the students could, with conscious effort, duplicate the “r” sound correctly in normal conversation, which seemed to please the students, since it is the “r” sound that they feel the most insecure about. The most significant area of increase was in the students’ ability to produce the “middle r” sound (an “r” bracketed by vowels). We suspect that as the students get caught up in speaking, they are the most likely to revert to the native Japanese habit of the “ra-ri-ru-re-roo” tongue flip, but this method, especially the visual aids, seems to help them keep the difference in mind. As an interesting note, there was a slightly higher level of increase among what would be considered the better skilled students than there was among the less skilled ones, probably because of motivation on the part of the students.

There are several areas we would like to pursue this study further. We would like to see the effectiveness of this method in a

longer term study, possibly utilizing first-time learners. We also want to compare the efficiency of this method to that of the traditional way of teaching the sound by using a control group and comparing the results.

This paper is based on a presentation done at the Kyushu Eigo Kyōiku Gakkai, held at Kagoshima Daigaku on November 21, 1993.

Works Consulted

- Flege, James Euil. "Using Visual Information to Train Foreign-Language Vowel Production." *Language Learning* ; 1988, 38, 3, Sept, 365-407.
- Goh, Hooi Ian Susan. "A Low-Cost Speech Teaching Aid For Teaching English to Speakers of Other Languages." *System* ; 1993, 21, 3, Aug, 349-357.
- Molholt, Garry. "Computer Assisted Instruction in Pronunciation for Chinese Speakers of American English." *Tesol Quarterly* ; 1988, 22, 1, Mar, 91-111.
- Someya, Shooichi. *Eigo Hatsuon-no Kihon Enshu*. Macmillan Language House, 1991

Appendix A

6. 反転音

[r] 齒茎反転音 (alveolar retroflex)



[発音の仕方]

舌先を喉の奥に向けて反転させ、上歯の歯茎の方に接近させます。しかし、下を口腔内のどの部分にも触れさせず、狭い間隙からそのまま呼気を放出させます。声帯は振動させます。語頭・語中・語尾のいずれの位置にも現れます。

[r] rice, road, riddle, rocket, rapid, radio
preach, drive, support, carrot, parrot, sunrise
loser, researcher, vapor, planner, cluster, conquer

[r]音の発音は、アメリカ英語とイギリス英語とは異なります(まめ知識 17 参照のこと)。

[日本語音との比較]

反転音 [r] は日本語としては存在しません。ラ行音に現れる [r] 音は [r]音に類似していますが、舌先を一度上歯の歯茎の位置で破裂させて調音するのに対し、英語の [r] 音は口腔内のどの部分にも触れさせずに調音するために、後者の方がより母音的な特徴が強いという違いがあります。また、英語の [r] 音は唇を丸めて発音することに注意しましょう。日本語の [r] 音は、唇が横に広がりがちです。

Appendix B

My number is _____.

My name is _____.

There was a fire in the area.

It's rare to see Americans in Shimonoseki.

Go through the door and you'll find it on your right.
The rush-hour traffic in Tokyo is very bad.
Merry Christmas, Brad.
Terry wrote a long letter to her.
Hironomiya is the crown prince.
Robocop is a popular movie in America.
He traveled all over the world.
Randy likes riding roller-coasters.
I think the smell of roses is truly refreshing.
Harrison Ford has been in a variety of movies.
It's far too large to fit in the car.
Bert and Ernie are famous characters on Sesame Street.
Here he comes now ! Hurry up !
Marilyn Monroe wasn't really a natural blonde.
Close the curtains, please. It's too bright.
Be careful! I think there's a rat in there.
Sorry, but I couldn't manage to arrive in Korea on time.

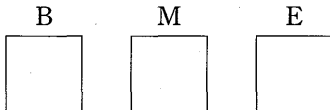
Appendix C

My number is _____.

My name is _____.

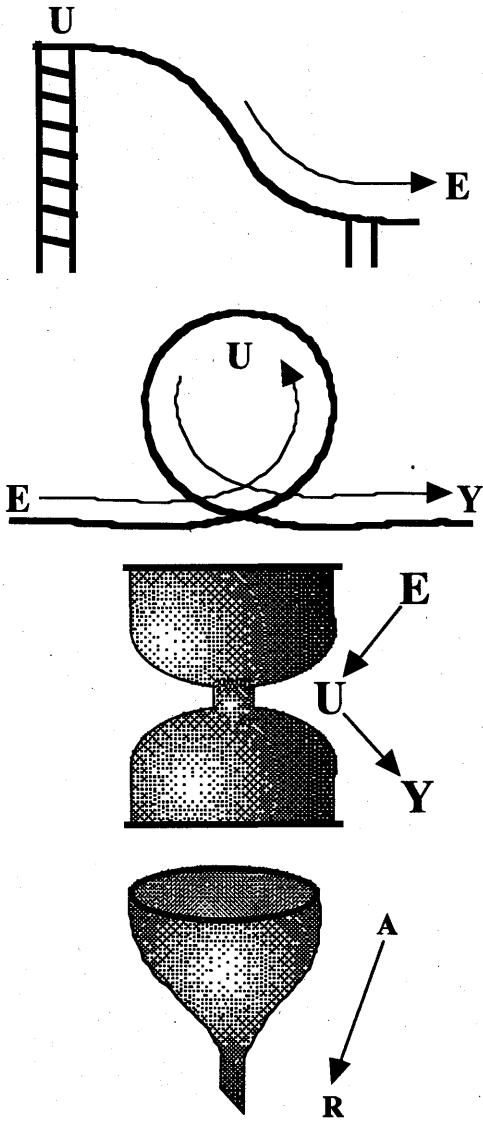
1. There was a fire in the area.
2. It's rare to see Americans in Shimonoseki.
3. Go through the door and you'll find it on your right.
4. The rush-hour traffic in Tokyo is very bad.
5. Merry Christmas, Brad.

6. Terry wrote a long letter to her.
7. Hironomiya is the crown prince.
8. Robocop is a popular movie in America.
9. He traveled all over the world.
10. Randy likes riding roller-coasters.
11. I think the smell of roses is truly refreshing.
12. Harrison Ford has been in a variety of movies.
13. It's far too large to fit in the car.
14. Bert and Ernie are famous characters on Sesame Street.
15. Here he comes now ! Hurry up !
16. Marilyn Monroe wasn't really a natural blonde.
17. Close the curtains, please. It's too bright.
18. Be careful ! I think there's a rat in there.
19. Sorry, but I couldn't manage to arrive in Korea on time.

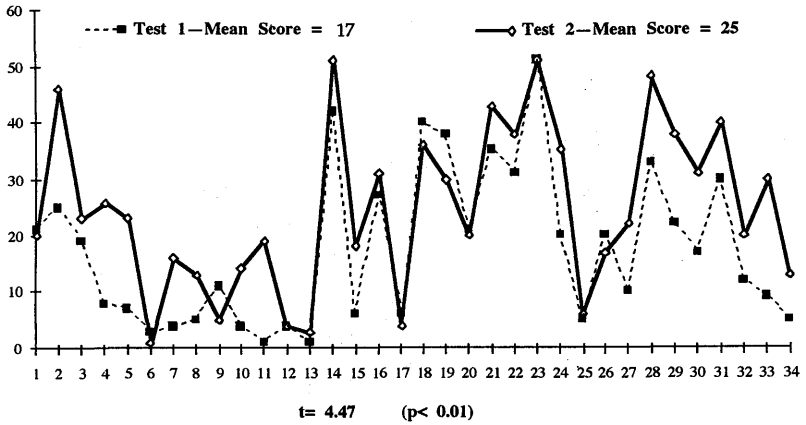


{ beginnig "r" -
 middle "r" =
 end "r" =

Appendix D



Appendix E



Overall Results

