The Phonological Role in English Pronunciation Instruction

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The purpose of this paper is to demonstrate a more effective way for improving Korean students' pronunciation relating to the phonological role in English pronunciation instruction. Three different aspects of pronunciation will be considered: general, syllabic, prosodic aspects relating to the two language differences, as well as the teaching of pronunciation in the classroom. In addition to that, from the American-style language training of students, what problems the students encounter will be demonstrated. Hence, this will make clear what problems the Korean students face when attempting to speak English. Furthermore, an alternative for teaching English pronunciation, which makes use of a new program students can access on the internet regardless of their place and space, will be suggested. Giving consideration to the result of this study suggests that it is necessary to develop this methodology of instruction further.

1. Difficulties in teaching English Pronunciation to Korean Students

1.1. Language Differences in both English and Korean

One thing that most Korean students have difficulty with is their pronunciation of the phonemic aspects; several sounds existing in English, consonants and vowels, that aren't in Korean phonemes. From this respect, admittedly, it is hard for Korean students to perceive and pronounce non-Korean sounds. For example, when Korean students try to pronounce the sound /b/, they almost always mispronounce it as /p/ because the sound /b/ isn't in Korean.

1.1.1. Phonemic aspects

Now, if we compare the two languages regarding the articulation of consonants, we can definitely see the articulatory difference. In English, there are just Bilabial, Labiodental, Dental, Alveolar, Palatoalveolar, Palatal, Velar and Glottal sounds, but in Korean there are only Bilabial, Alveolar, Palatoalveolar, Velar and Glottal sounds. The phonemes not existing in Korean are as follows: /b, d, g, f, v, θ , δ , \int , ϕ , \sharp , 3, j/ (Jun, 1995)

Another thing that causes Korean students to have difficulty when attempting to pronounce English sounds correctly is their inability to discriminate those English allophonic sounds. As we know, a sound can be changed into a slightly different sound given the context of the sound within a word or connected words. If the sound change occurs in a word, the result will be one of several allophones of the sound. For example, the sound /p/ will be three different sounds depending on these contexts: pen, spool, cap. In this example, the first /p/ of 'pen' is pronounced as an aspirated sound, the second, /p/ after /s/ is unaspirated, and the final /p/ is unexploded. Another problem relating to Korean students' pronunciation is the disagreement between the spelling and the pronunciation of the sound. Due to a lack of understanding of English pronunciation, the students frequently try to infer the pronunciation of words or word based on how they are spelt. This is suggested in the following examples:

(1) think [T], weather [D], ship [S], pleasure [Z], judge [dZ]

Consideration has been given to the difficulty that Korean students have when attempting to pronounce English consonants. However, consideration should also be given to the fact that Korean students have difficulty pronouncing English vowels. In English there are tense vowels and lax vowels, but not in Korean. Therefore, Korean students have difficulty perceiving the different qualities of the vowels when they hear any words. This is suggested in the following examples:

(2) [i:] : beat, lead, sheep, meat

[1]: bit, lid, ship, mitt

In fact, Korean students may have difficulty discriminating the two vowels when they listen to the words. Because they have only an innate knowledge of tense vowel /i:/ of Korean, it is hard to listen and speak the words including the vowels.

Another thing that causes Korean students to have difficulty pronouncing English vowel sounds is that there is a sound difference in the articulation of vowel sounds. In English, there are Front, Central, and Back vowels, while in Korean there are just Front and Back vowels. Therefore, there are no phonemes, /1, e, æ, ə, ɔ, v/ in Korean language. The differences are shown in the chart below:

		Front	Central	Back	
		(unrounded)	(unrounded)	(rounded)	
high	tense	i		u	
	lax	Ι		U	
mid	tense	e	ə	0	
	lax	3	Λ	Э	
low		Q	а	a	

Га	bl	e	1.	Engl	lisł	1 V	ow	els
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	Front	Back	
	unrounded	unrounded	rounded
high	i	ш	u
Mid	8	Λ	0
Low		α	

Table 2. Korean vowels (Shin, 2003)

1.1.2. Prosodic aspects

We can see other differences in the two languages regarding other prosodic aspects, which are referred to as stress and rhythm. In general, English is known as a stress-timed language, by which there is rhythm and intonation created by the alternation of stressed syllables and unstressed syllables in words and sentences. But the Korean language is a syllable-timed language where each syllable tends to be stressed and to be of approximately equal duration. Therefore, Korean students can't fluently speak and read any sentences; they just read sentences mechanically. Given this fact, it is necessary for Korean students to be educated taking into consideration the phonological aspects of the English language.

2. Pronunciation Difficulty in Classroom Pronunciation Teaching

2.1. General aspects

2.1.1. Pronunciation based on Spelling

As stated above, Korean students tend to pronounce words based on spelling. A few representative examples are as follows:

(3) mascot [máskat]), but Kor.: [mascot] Madonna [mədɑ́nə], but Kor. :[madonna]

2.1.2. "Not fully Opened Mouth" in Pronunciation

When Korean students practice their English sounds, most of them usually do not open their mouth due to their mother tongue's innate effects. As stated above, they have no concept of English Front and Back low vowels, /Q, \mathfrak{D} , \mathfrak{A} /.

2.1.3. Students' Pronunciation Style Blocking Effects

Most Koreans have studied English for several years from early childhood to adulthood. Also, following graduation from university they often continue to study English at the companies where they work. As a result of these many years of learning English, their pronunciation habits play a

blocking role in acquiring the correct pronunciation. This is suggested in the following examples:

(4) 'strategy' [strádəd3i], but Korean students' case, [strátid3i]

2.1.4. No Weakening in Unstressed syllables

As stated above, the English language has stressed and unstressed vowels, while the Korean language does not. Also in English, unstressed syllables of function words are usually compressed and blended together in anticipation of the stressed content words. But Korean students have no idea about reduced syllable resulting in schwa in most cases. For example: 'product > product(n), 'conduct(N) > conduct(V).' In fact, they always tend to pronounce the vowels of the words in the previous examples as stressed syllable types.

2.2. Syllable aspects

2.2.1. No Blending between two sounds

Students usually can't blend the following two sounds when they read any sentences: 'Got \underline{y} ou!' [ga f]. Almost all students pronounce the phrase separately like 'got' and 'you'. That is, they have no understanding about the blending of the final sound of a word and the first sound of the next word. This is perhaps due to a learned response from early childhood when they were instructed to read sentences by pronouncing all words clearly and separately.

2.2.2. No Elision (linking) (Pennington, 1996)

There are a few phenomena arising regarding the two sounds, one of them is regarding elision. Consider the three kinds of the phenomena with the given examples below (5). Unfortunately Korean students don't have this kind of knowledge. Moreover, they can't read the following linking words. In fact, it is really hard for them to pronounce words in any sentence.

- (5) a. Bridging via an existing sound, this serves as a transition between two words
 (ex) when I [@En\$I], is a [@c (]
 - b. No emergence of a Transitional Glide between two words
 (ex) saylit [selj l] (j=y), golinside [gou w Insald]
 - c. No Consonant attraction, in which the final consonant of a word is pronounced as though it is the first sound of the following word
 (ex) 'bad apple' [bQ dQ pl], 'his arm' [hI@a řm]

2.2.3. Rare Reduction or Loss of Initial Unstressed Syllable

The loss of the initial unstressed syllable of a word is a common phenomenon in many cases of informal English speech such as in Hong Kong, Singapore or Africa English. (Pennington, 1996)) Hence, it is understandable that Korean students also have difficulty when they speak or read any sentences. The examples are as follows:

(6) <u>about</u>, <u>around</u>, <u>excuse</u>, <u>expect</u>, <u>occasionally</u>, <u>unless</u>, <u>because</u>

Instead of reducing the initial syllable of a word, Korean students tend to pronounce all the syllables of the word in stressed form, irregardless of which syllable has the stress.

2.3. Prosodic aspects

In English, stress is a cover-term for three prosodic features: duration, or length; intensity, or loudness; and pitch, or fundamental frequency. (Pennington, 1996:129) This means that English speakers always use those prosodic aspects whenever they speak or read. Therefore the use of stress when Korean students speak English is a very essential element innate to English. But to Korean students this is an unfamiliar part to acquire as they learn the English language.

One of the reasons that this causes them to have difficulty when speaking English is that their language is a syllable-timed language, and this leads to stressed forms of all the syllables when they speak or read any words or sentences. In addition to this fact, they have no concept of how stress makes the meaning of a word change and which syllable of a word is stressed. Consider the following.

2.3.1. No concept of stress

In Korean, there is little difference in vowel length. Korean students are not always conscious of that when they speak or read sentences. This may originate from their innate speech habits; they usually speak in the same tone. In Korean, there may be a variation in loudness, but not a variation in stress. For example, in Korean there are a few words that are the same in word form but different in meaning, ' $\overset{\text{H}}{\overset{\text{H}}}$ ' (night) and ' $\overset{\text{H}}{\overset{\text{H}}}$ ' (chestnut). In these words, Korean students do not speak these words differently even though they know that the latter is a little longer. Therefore they need to learn the prosodic parts.

2.3.2. Difficulty in discrimination of levels (degree) of stresses in Korean

One of several difficult things for Korean students to acquire is stress-level-distinction; they are unable to discriminate between the different stresses. English has commonly three levels of stresses: High - Primary stress (); Medium – Secondary stress (), Tertiary stress (), Quaternary stress

(); Weakest- Demi-beat () (Pennington, 1996:131)

But, for Korean students, it is extremely hard to make a distinction between secondary and tertiary stress. They can distinguish between primary and quaternary stress. This problem is also due to the language difference between English and Korean. In Korean there are no stress differences so Koreans students don't have any concept about those stress differences. Furthermore, they don't fully understand how stress can differentiate between two meanings of an expression as in the example below (7).

- (7) (a) bight bouse fixee per 'a person who does light housekeeping'
 - (b) bight bouse fixee per 'a person who takes care of a lighthouse'

2.3.3. Stress shift affected by mother tongues (Pennington, 1996:173)

Although many tone languages have their own stress patterns, the speakers of the language may be affected by the stress patterns of English. For example, in Singaporean English, the main stress is placed on the secondary syllable of words like *character, economic, faculty, colleague*. Also, in Indian English, the opposite trend is true, main stress is usually placed on the first syllable in words like *about, mistake, defense, events, degree, hotel, percent*. (Bansal, 1990:227; Wells, 1982:631)

Korean students usually place the main stress on the first syllable as does Indian English. Hence, this also supports the fact that Korean students should learn the stress patterns of English in order to correct their misguided stress patterns.

2.3.4. No idea to NSR

The NSR (Nuclear Stress Rule) dictates that the main stress is placed on the last content word. I.e. the rightmost stressed element before a pause. (Chomsky & Halle, 1968) For example, 'my favorite + movie' --> 'my favorite movie.'

This is a kind of rule for assigning stress. And Korean students have been aware of this since middle school up until college. But, Korean students are unable to apply this rule. When the stress collides with each other in a sentence or a phrase as in the above example, how the stresses are changed within the phrase is not well understood by Korean students.

2.3.5. No recognition between stress and information

Korean students also have no explicit knowledge of the relationship between stress and information. This is in accordance to Pennington' statement: "In the unmarked or usual case in English, utterance-initial position is reserved for shared or known information, while new information is introduced in utterance-final position. As a consequence, the least marked stress pattern for an English utterance contains the main stress (or tonic accent) on the last content words." (Pennington, 1996:138)

In spite of these facts, Korean students have no understanding that new information is introduced in final position in utterance. And therefore, they may just follow their own stress patterns when they read the utterances or speak them. In addition, they don't know an accentuation for producing emphasis or contrasts in utterances. They may speak without putting an emphasis on any word. This is suggested in the following examples:

(8) (a) Who is Pat? → Pat's the diRECtor. (not the TEAcher)
(b) Who's the director → i) The director is PAT. (not MARty)
ii) PAT's the director. (not MARty)

2.4. The Results of Korean Students of American Language Training

20 Korean students went to George Fox Univ., Newberg, Or, America for 3 weeks. When they spoke English to the American students of the university, several problems could be associated to their pronunciations as stated above. The problems were mainly related to consonants, vowels and stress, causing a lack of communication with native English speakers. The problems that are related to English consonants are as follows:

As seen in the above, Korean students have a strong tendency to replace [b], [p], [s], [l] with [v], [f], [T], [r] because the Korean language has no such phonemes. As a result, the students also had problems in communication with others. They had difficulty distinguishing consonants from other consonants as well as vowel sounds from other vowel sounds. The examples concerned with vowel sounds are as follows: [Q] and [e], 'fool' [u] and 'full' [U], etc.

There was a miscommunication arising from not being able to put the stress on the correct syllable, for example, one student had to repeat the word, 'merit' three or four times because the other person couldn't understand the word he spoke. He said he pronounced the word not as [mérit] but as [me-ri-t]. Another error in pronunciation occurred with the same student, who based his pronunciation of the word 'mascot' upon how it was spelled. He pronounced 'mascot' not as [méskat] but as [ma-s-ko-t].

Ultimately, all the difficulties regarding pronunciation previously mentioned can be generally applied to the vast majority of Korean students. Therefore we should find an alternative for improving Korean students' pronunciation.

3. Alternative for Teaching English Pronunciation to Korean Students

As several errors were seen regarding Korean students' pronunciation, it is necessary to find an alternative for them to improve their pronunciation. Nevertheless, we should agree on the fact that traditional teaching methods have limits when it comes to the teaching of pronunciation. Moreover, it is necessary to be able to give students the most important thing, motivation. Furthermore, the reason we need an alternative is due to Korean and foreign teacher's limitations regarding the teaching of pronunciation. Although they both have skills to a certain extent, they themselves need much time to practice and speak the English sounds correctly. Besides this, students have several limitations such as those of time and space for practicing when attempting to overcome their pronunciation errors.

I have thought of a new method for teaching English pronunciation, which uses an on-line program, Dr. Speaking, produced by Language Technology, Korea. I adopted and continue to utilize the program in my classroom. The number of our total students is 44 and they can always access the program on the internet anywhere and anytime they want. They first listen to a native speaker's pronunciation and then repeat the sounds. In addition, they can record their voice and then compare it to the native speaker's voice.

The students should practice vowel and consonant sounds, or intonation patterns according to their levels. First, they can practice the basics-"basic level", then intermediate skills-"level skills", and finally "intonation patterns". Last semester, the results of the program's testing showed us that the total grade of our students was an average of 76.6 points in both consonants and vowels, and in intonation part, 47.4 points. But even though their pronunciation improved somewhat, sound errors still frequently occurred regarding the vowels and consonants: vowels - /e, Q, ´, , eI, ou, cI, consonants - /p, T, D, z, Z, dZ, r, w/.

4. Conclusion

Looking at English pronunciation from an educational perspective, we always encounter limitations in teaching pronunciation to students. First, we considered syllable, prosodic aspect differences in the two languages, Korean and English. Following that, we then considered what pronunciation difficulties were in "classroom pronunciation teaching", in which we overviewed general aspects, syllable aspects, and prosodic aspects. We also considered the effects of the George Fox America language training on the students.

Of all these things we considered, none of them have proven to be satisfactory for teaching Korean students English pronunciation. Therefore, we should find an alternative for that, and at this point I suggest this new program that students could utilize and access easily.

However, we know that in the program, some vowels sounds are the same, but the voice quality is a little different. In addition to that, the sounds of the English consonants are sometimes not clear. Therefore the program will be developed further in the future for the students. For the improvement of the students' pronunciation, we still continue to pursue what aspects of the program can be improved so as to achieve the most effective method of teaching English pronunciation.

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