PHONOLOGICAL PROBLEMS IN TEACHING
ENGLISH TO KOREANS

by

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Approved by:

Major Professor
ACKNOWLEDGMENTS

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CHAPTER 1
INTRODUCTION

1.0 "In learning a new language the chief problem is not at first that of learning vocabulary items. It is, first, the mastery of the sound system-- to understand the stream of speech, to hear the distinctive sound features and to approximate their production."¹

The task of learning a new language, then, is one of acquiring the habits and the patterns of the new system of arbitrarily chosen and organized sounds which serve native speakers as a means of communication.

1.1 It is an obvious fact that when learning a foreign language students tend to transfer their entire native language system in the process, including its phonemes and their variants, its stress and rhythm patterns, and its intonation patterns.² Thus we can understand the widely observed fact that the pronunciation of a Korean speaker learning English is quite noticeably different from that of a Spanish speaker learning English.

1.2 The speaker of one language listening to persons speaking another language that he does not understand, will hear the foreign language sound units in terms of his own sound system. Phonemic differences in the foreign language will be consistently missed by him if parallel phonemic differences are not present in his native language.³

1.3 The most basic elements in the expression system are the phonemes.⁴

In any language, there is a definite and usually small number of phonemes, or classes of speech sounds.

1.4 The sounds of the language may be taught one at a time in isolation by contrasting them in what is called "minimal pairs". Also, the sounds
must be taught systematically in progression. This will permit the learners to associate each little segment of the language with every other segment they have already acquired.

STATEMENT OF THE PROBLEM

1.5 Any observant native English speaker with experience in listening to Koreans speaking English can make a list of the typical pronunciation and discrimination difficulties encountered by the Korean learning English. This is not enough to provide a basis for an effective, efficient approach to the teaching of English pronunciation to Koreans. Well planned language learning materials demand not only valid predictions of the difficulties that will arise, but also an understanding of the cause and nature of each difficulty. The purpose of this report is to demonstrate the methods advocated by linguistic scientists in approaching the main problems of teaching English pronunciation to Korean speakers. Intonation features will not be considered.

METHODS AND PROCEDURES

1.6 The linguistic, or audio-lingual, approach advocated here is an imitation process using systematic phonological drills based on descriptive analysis of the sound-systems of English and Korean, comparison of the two systems, and description of the troublesome contrasts.

1.7 The first step in the procedure is to present the phonemic inventories of the two languages, in chart form, tabulated on the same criteria of classification: points of articulation horizontally, and air-stream variations vertically. Second, the contrasts between the two inventories are noted, and then the contrasts are explored in
terms of phonetics and allophonics. Finally, on the basis of contrasts noted and interferences predicted, drills are suggested for meeting the problems Korean speakers may be expected to encounter in learning the pronunciation of English.

REVIEW OF LITERATURE

1.8 Since World War II, a growing recognition of the relevance of linguistics to language teaching has brought on the development of a methodology for the application of the findings of linguistic investigation to the teaching of foreign languages. There are many books which are concerned with the contrastive analysis approach to language teaching.

1.9 General studies of descriptive linguistics and phonetics done by linguists can shed much light on the contrastive analysis of English and Korean. Bloch5 demonstrates the distinction between articulatory phonetics and structural phonemics. Bronstein6 gives an introduction to phonetics and a thorough consideration of all the elements of the sound system of American English, with a background in general phonetics and a presentation of the alternative analyses. Bloomfield7 presents the fullest introduction to linguistics regarded from a behavioristic angle, and an indispensable summary and guide. Francis8 discusses carefully the allophonics of English. Also he gives an idea of how to organize the consonant and vowel charts by analyzing the articulations. Fries9 study is concerned with the teaching of reading and seeks to analyze and restate a number of fundamental questions about reading. Gleason10 introduces an exceptionally clear and competent description of present techniques of analysis. Hill11 discusses the assimilations dependent on the vowel environments and systematic assimilations which are
dependent on conditioning. Jones\textsuperscript{12} shows the idea of phonemes as implicit in the work of all phoneticians and orthographists who have employed broad transcriptions. Kantner\textsuperscript{13} and Wise\textsuperscript{14} use diagrams in observing consonant and vowel systems for articulation training of students in English as a foreign language. Lado\textsuperscript{15} attempts to relate descriptive linguistic principles to the problems of second-language teaching. He deals with the comparison of sound systems and points out the value of contrastive studies. Sapir\textsuperscript{16} discussed many of the aspects of the language, through the race, the culture, and the literature. He posited the idea of patterns in language - a powerful influence on subsequent researches on structure of language. Smith and Trager\textsuperscript{17} present the system of English phonemics most generally used by linguists in the past few years. The most significant contributions were the analysis and classification of clause terminals.

1.10 Due to the growing demand for contrastive analysis, some pairs of languages have been contrasted by linguists.\textsuperscript{18} There are studies in descriptive analysis of Korean, but contrastive English/Korean analysis on the phonological level has remained relatively untouched and information is very scarce.

1.11 Although Korean has not been widely studied on the phonology level, Martin has presented some hints by analyzing the phonemes of Korean in three ways: in terms of articulatory components, of auditory qualities, and of distinctive opositions. He presents a diagram of Korean consonants and vowels. I must disagree with him, however, on one point. According to his study, Korean has nine vowel phonemes including /O/ and /Ə/ as
separate phonemes,\textsuperscript{19} but /\textalpha/ and /\textsigma/ are allophones of one phoneme in Korean as in /s\textalpha ri/ or /s\textsigma ri/ 'frost'. One of his significant studies concerns the two pitch components in Korean. These can be noted at the end of phrase or sentence. The intonation morph is always in conjunction with the pause phoneme, but there are occurrences of pauses without an intonation morph.\textsuperscript{20} Also he presents theoretical problems of morpheme identification in Korean.

1.12 Han studied phonetic patterns which control actual vowel length in Korean. In Korean, the writing system does not provide any symbolization for noting the differences in vowel length.\textsuperscript{21} The aim of her study is to describe a part of the phonological rules of Korean by limiting the study to one of the features, the duration of a vowel, which changes its length according to its environment. Several linguists have already noted that vowel duration is phonemic in Korean. This view has been held by both native scholars and non-native linguists. Korean speakers of English tend to use vowel duration as a substitute for English vowel glide.

1.13 Park\textsuperscript{22} realized the importance of the implication of linguistics in language teaching. He presents a useful description of Korean for foreigners by analyzing the articulations of Korean. But he does not discuss the allophonic variations. Also I must disagree with him on one point in the consonants. He sees /\textsigma/ and /\textsigmai/ as allophones of the same phoneme. But /\textsigma/ and /\textsigmai/ are definitely separate phonemes as in /\textsigma in/ 'shoes' or /\textsigmai in/ 'fifty'.

1.14 Lee\textsuperscript{23} attempts to describe allophonic variations in spoken forms in Korean according to regional differences. He discusses mainly
[\[\alpha\] and [\[\epsilon\] variations compared with the standard of Korean. But his study serves only those who have interests in the field of general linguistics. Other studies in this field have been done by native scholars, but the analyses depend on the morphophonemic changes in the written form.

1.15 Jung, Lee, and Skalozub have done contrastive analysis between English and Korean. Still these do not give much information on the phonology level.

1.16 The contrastive analysis done by linguist on other languages can shed much light on the analysis of Korean. Walter Lehn and William Slager attempt to apply the findings of linguistics to teaching English to speakers of other languages. They specially apply the results of modern analysis of English and Egyptian to the teaching of English as a foreign language to speakers of Egyption. They suggest the principle that materials for effective instruction in a foreign language must be based on a contrastive study of the target language and the mother-tongue of the learner. Such a contrast is essential because it helps to identify which sounds or grammatical patterns will be especially difficult for the learner.

1.17 Engler shows the significance of systematic audiolingual drill in his study regarding second language teaching. He mentions that a pattern drill does not pretend to be "real" communication nor the be-all and end-all in language teaching methodology, but rather a means of acquiring the habits and skills necessary in the use of language for communication. Pattern drills can be used with either phonology or grammar problems.
Besides the above materials, there were a number of contrastive studies done which gave me some good information in analyzing and contrasting Korean and English. The above studies, of course, are reliable sources and a great help to me in my research, but there is no doubt that further study on Korean is needed.
## CONTRASTIVE ANALYSIS OF THE CONSONANTS OF ENGLISH AND KOREAN

2.1 Consonants are classified according to place and manner of articulation. The consonant phonemes of English and Korean may be tabulated as follows.\(^29\)

### English

<table>
<thead>
<tr>
<th></th>
<th>Voiceless</th>
<th>Voiced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stops</td>
<td>p</td>
<td>t</td>
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<tr>
<td></td>
<td>b</td>
<td>d</td>
</tr>
<tr>
<td></td>
<td>k</td>
<td>g</td>
</tr>
<tr>
<td>Affricates*</td>
<td>Voiceless</td>
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<td></td>
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<td>£</td>
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<tr>
<td></td>
<td>Voiced</td>
<td>j</td>
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<tr>
<td>Fricatives</td>
<td>Voiceless</td>
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<td>Lateral</td>
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<tr>
<td>Retroflex</td>
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<td>r</td>
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<tr>
<td>Nasals</td>
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<td>Semivowels</td>
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<td>y</td>
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<td></td>
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<td>h</td>
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</tbody>
</table>

*Engler sees /tʃ/ and /dʒ/ as consonant clusters rather than unit phonemes. However, since Korean uses /ʈ/ and /j/ as unit phonemes, for my convenience in teaching English to Koreans, I am positing English /tʃ/ and /j/ as unit affricate phonemes.*
### Korean

<table>
<thead>
<tr>
<th>Stops</th>
<th>Lenis-unaspirated</th>
<th>Aspirated</th>
<th>Fortis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p</td>
<td>t</td>
<td>k</td>
</tr>
<tr>
<td></td>
<td>p'</td>
<td>t'</td>
<td>k'</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>T</td>
<td>K</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Affricates</th>
<th>Lenis-unaspirated</th>
<th>Aspirated</th>
<th>Fortis</th>
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<td>k'</td>
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<table>
<thead>
<tr>
<th>Fricatives</th>
<th>Lenis-unaspirated</th>
<th>Fortis</th>
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<th>Lateral</th>
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<table>
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<tr>
<th>Nasals</th>
<th>m</th>
<th>n</th>
<th>ñ</th>
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<tr>
<th>Semivowels</th>
<th>w</th>
<th>y</th>
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#### 2.2 Contrastive Consonant Phoneme Inventory

As indicated by the chart, the consonant systems of English and Korean are slightly different. English has twenty-four consonant phonemes while Korean has twenty-one. The difference is accounted for by the fact that English lacks counterparts for the Korean aspirated stops /p t k/, the fortis stops /P T K/, the aspirated affricate /č'/, the fortis affricate /č/ and the fortis fricative /S/, but does have the voiced stops /b d g/, voiced alveopalatal affricate /ʤ/, fricatives /f v h ẓ z ɹ/, retroflex /ʈ/, and semivowel /h/.

#### 2.3 Articulation of consonants

A Korean speaker should have little difficulty in producing English consonants in isolation but there are of course phonetic and allophonic details which must be taken into account if the student is to achieve control over the phonology.
2.31 **Stops**

The Korean speaker can usually employ his Korean articulation for the English /p t k/ with satisfactory results. The predictable problems of articulation in the stop series are associated with /b d g/.

2.311 **English /b/** is a voiced bilabial stop. The production of / b / is similar with that of / p / but voiced. The Korean will confuse / p / and / b / because he has no / b / in Korean. English / b / should be taught by drill contrasting / p / and / b / in initial, medial, and the final position, so that there is no difficulty in distinguishing / p / and / b /.

A drill contrasting / p / with / b / will helpful for learning English / b / articulation:

- pin - bin
- puff - buff
- prim - brim

maple - Mable
ample - amble
crumple - crumble

tap - tab
rope - robe
mop - mob

2.312 **English /d/** is produced in a manner paralleling that of Korean /t/, with two exceptions: (1) the vocal bands are in vibration, (2) there is no strong aspiration.30

Since the Korean speaker uses /d/ in such borrowed words as 'donuts' or 'drive', he should be able to produce English /d/ in isolation with little trouble. The problem is to get the student to discriminate between the English /d/ and /t/ in the medial and the final positions.

A drill like the following is usually helpful in establishing the contrast:

- pin - bin
- puff - buff
- prim - brim

maple - Mable
ample - amble
crumple - crumble

tap - tab
rope - robe
mop - mob
bitter - bidder  
traiter - trader  
shutter - shudder  
hit - hid  
sat - sad  
but - bud

2.313 **English /g/** is a voiced velar stop formed substantially like /k/, but with the vocal bands vibrating, and with slightly less breath force. **English /g/** occurs at the beginning, middle, and end of words as in 'gate', 'beggar', and 'log'.

The substitution of a fortis stop /k/ for **English /g/** is found in the speech of Korean speakers. Learning to achieve an acceptable sound takes considerable ear training and practice.

A drill contrasting /k/ with /g/ will help establish the articulation of /g/:

```
cap - gap  vicar - vigor  flock - frog
cot - got  snicker - snigger  back - bag
came - game  broken - brogan  pick - pig
```

2.32 **Affricate /j/**

Though Korean learners should have no difficulty in producing English /ɛ/, they will have difficulty with /j/, because /j/ occurs in Korean only as a positional variant of /ɛ/ before /i/ as in their pronunciation of "jeep". They therefore will try to substitute /ɛ/ for /j/ in all other environments, and confuse the two in such pairs as "cheap-jeep".

Drill beginning with /j/ in initial position before /i/, then before other vowels, then in medial position with other vowels, then in final position, in each case contrasting with /ɛ/, should
be helpful in establishing this discrimination.

jeep - cheap  edges - etches  ridge - rich
jest - chest  surges - searches  lunge - lunch
jug - chug  badges - batches  purge - perch

2.33 Fricatives

The predictable problems of discrimination and articulation in the fricative series are associated with /f v θ ɣ z/. Korean has two alveolar voiceless fricative sounds, /s, S/, and one alveopalatal voiceless /ʃ/, compared with eight fricatives in English. Most of the problems in learning English occur with these fricatives. When Koreans try to produce the English /f/, they usually replace it with an aspirated /pʰ/ sound which occurs in Korean. The English /v/ they replace with a Korean /p/, /θ/ with /tʃ/, and /ɣ/ with /tʃ/. For example Korean speakers pronounce 'father' as /pʰaTʰaɾ/.

2.331 English /f/ is a voiceless, fricative labiodental continuant. It is made by bringing the upper front teeth and the lower lip into light contact and passing an unvocalized breath stream through the constricted spaces between the teeth and the lips. The sound /f/ occurs initially, medially, and finally, as in 'foe', 'effect', and 'if'.

2.331 The Korean speaker uses /p-hw/ on an apparently morphologically conditioned basis as follows: a voiceless aspirated bilabial stop /pʰ/ for English /f/ in the medial and final position in such borrowed words as /sopʰa/ 'sofa' and /ʃipʰ/ 'chief', and /hw/ for the English /f/ in such borrowed words as /hwɔʃən/ 'fashion'. Korean students must, therefore, practice these sounds separately in the
initial position, the medial position, and the final position, so that they learn to discriminate among the English /f, p, hw/.

A drill contrasting /hw/ with /f/ in the initial position will help to establish /f/ articulation:

<table>
<thead>
<tr>
<th>/hw/</th>
<th>/f/</th>
</tr>
</thead>
<tbody>
<tr>
<td>wheat</td>
<td>feet</td>
</tr>
<tr>
<td>white</td>
<td>fight</td>
</tr>
<tr>
<td>whale</td>
<td>fail</td>
</tr>
<tr>
<td>while</td>
<td>file</td>
</tr>
</tbody>
</table>

A drill contrasting /p/ with /f/ in the initial, the medial and the final positions:

<table>
<thead>
<tr>
<th>/f p/</th>
<th>/-f- -p-/</th>
<th>/-f -p/</th>
</tr>
</thead>
<tbody>
<tr>
<td>fin-pin</td>
<td>suffer - supper</td>
<td>strife - stripe</td>
</tr>
<tr>
<td>fashion - passion</td>
<td>aft - apt</td>
<td>wife - wipe</td>
</tr>
<tr>
<td>fair - pair</td>
<td>differ - dipper</td>
<td>chief - cheap</td>
</tr>
</tbody>
</table>

2.332 English /v/ is a voiced, fricative, labiodental continuant. It is made by resting the upper teeth lightly on the lower lip, closing the velum, and the passing the vocalized breath stream through the constricted spaces between the lips and teeth.33

2.3321 Since the Korean fortis /P/ is close to the English /b/, Korean speakers tend to substitute /p/ for English /v/ in the initial, the medial, and the final position. They have a strong habit of substituting /p/ for /v/ in such borrowed words as /piktori/ 'victory', /peyl/ 'veil', /powlt/ 'volt' in the initial position, /hapad/ 'Harvard', /sarpis/ 'service' in the medial position, and /sarp/ 'serve' in the
final position.

2.3322 It should be clear that all that is necessary in order to avoid the substitution of /p/ for /v/ is to touch the lower lip against the teeth rather than against the upper lip.

A drill contrasting English /b/ with /v/ will help to establish the /v/ articulation:

- very - berry
- volt - bolt
- vile - bile

Harvard - harbored
covered - cupboard
riven - ribbon
dove - dub
rove - robe
serve - Serb

2.333 English /θ/ is a voiceless apico-dental fricative. In the pronunciation of the sound /θ/ the tip of the tongue is pushed forward until it is between the teeth. The air is forced out through the narrow opening between the upper teeth and the tongue.

2.3331 It is common initially, as in 'thin' /θin/, and finally, as in 'wrath' /raθ/, rather rare medially as in 'ether' /'iθə/.

2.3332 Korean students need special drills to avoid forming a habit of protruding the tongue in an interdental position.

2.3333 Subsequent drill contrasting /t/ and /θ/, and /s/ and /θ/ will help establish acceptable habits for /θ/:

- thin - tin
- thorn - torn
- three - tree
- deaths - debts
- pithy - pity
- faiths - fates

/θ/ and /t/

wrath - rat
both - boat
tooth - toot

/θ/ and /s/
thin - sin  bath - bass  
thank - sank  faith - face  
thick - sick  mouth - mouse

2.3334 **English** /θ/ is a voiced dental fricative, made by placing the tip of the tongue in light contact with the back surfaces of the front teeth and passing a stream of vocalized air through the constructed spaces between the tongue and teeth. The velum is closed and the sides of the tongue are in contact with the upper molars. It appears in all positions, as in 'then' /then/, 'either' /iyər/, and 'bathe' /beyə/.  

2.3341 Since /θ/ does not occur in Korean, students will need to take particular care in pronouncing /θ/ as described above. Particularly, Koreans will need to avoid substituting /T/ for /θ/. Also they should avoid protruding the tongue in an exaggerated interdental position.  

A drill contrasting /d/ with /θ/ will help establish articulation of /θ/:

there - dare  father - fodder  writher - ride  
they - day  lather - ladder  bathe - bayed  
then - den  breathing - breeding  seethe - seed

2.3342 Since Koreans have neither /θ/ nor /θ/ in their native language, it is naturally difficult for them to distinguish between /θ/ and /θ/ in English. Both consonants are made in the same place and in the same manner. The only difference is that one is voiced, and the other is a voiceless sound. This contrast may be taught with special
pattern drills contrasting English /θ/ and /ð/ sounds.

- teeth
- wreath
- loath
- sooth
- teethe
- wreathe
- loathe
- soothe

2.335 English /z/ is a voiced alveolar fricative. /z/ is produced essentially with the same tongue position as /s/, but with the tongue muscles slightly relaxed and the vocal band vibrating. Since Korean has /s/, there is not much trouble in adding voice to produce the English /z/.

2.3351 Korean students quite often have trouble distinguishing between /s/ and /z/ in the final position. They regularly substitute /s/ for final /z/, thereby destroying the distinction between such pairs as 'fuss' and 'fuzz' and 'race' and 'raise'. Also they frequently substitute /s/ for the initial /z/, making zinc sound like sink.

Drills contrasting /s/ and /z/ in the final and initial position will help them to avoid forming a habit of substituting /s/ for /z/:

- sip - zip
- sown - zone
- seal - zeal
- niece - knees
- pace - pays
- hiss - his

2.336 English /ʃ/ is a voiced, palato-alveolar fricatives. /ʃ/ is made by simultaneously blocking the nasal passage with the velum, raising the tongue against the lateral inner surface of the upper molars with the tip directed toward a point just back of the
alveolar ridge, and passing the vocalized breath stream through the closed stricture between the blade of the tongue and the palate. 38

2.3361 Since Koreans have /s/ Korean speakers have little difficulty in achieving the English /z/ in isolation, by simply adding voice to /s/, but they often have trouble distinguishing between /s/ and /z/ because they are allophones of the same phoneme in Korean while they are separate phonemes in English. English /z/ is of limited distribution, appearing medially, and in the final position only in a small group of words recently borrowed from French. 39

A drill contrasting /s/ and /z/ will help establish the /z/ articulation and discrimination between /s/ and /z/: dilution - delusion Confucian - confusion glacier - glazier

2.34 Lateral /l/

Since Korean has /l/ and /r/ as allophones of the same phoneme, the Korean speaker has difficulty in discriminating between them as separate phonemes in English. Korean /l/ occurs between vowels and consonants and in the final position, while /r/ occurs only in the intervocalic position. Neither occurs in initial position in Korean, so English "light" is realized as "right", while "radio" becomes "ladio", "elicit" becomes "ericit", and so forth, but "erect" and "feel" present no problem. Further discussion of the /l, r/ problem is presented in 2.35 below, under "Retroflex /r/".

2.341 In general most American /l/’s are "dark". 40 The English dark /l/ is typically produced with the tip of the tongue
touching the alveolar ridge, the mid-part curving downward, and the back raised. The resulting schwa-colored /l/ causes any English vowel before /l/ to have an off glide in the direction of mid-central. 41

2.342 In most dialects of American English, there are four recognizable /l/ allophones. These are the voiced and voiceless apico-alveolar laterals, the voiced apico-alveolar laterals, the voiced apico-alveolar lateral with dorso-velar coarticulation, and the voiced dorso-velar lateral. 42 Francis describes the distribution of /l/ allophones in English as follows:

a. The voiced apico-alveolar lateral, /l/ the so-called "clear l". It occurs in initial position and between a voiced consonant and following vowel as in link /lI\k/ and glance /gl\ns/. 
b. The voiceless apico-alveolar lateral, /l/ occurs often with voiceless consonants, as in flip /f\lip/. The sound is never heard initially. 
c. The voiced apico-alveolar with dorso-velar co-articulation, /l/, is the usual variety of so-called "dark l," found after vowels and as a syllabic nucleus in English. Examples of the usual position of this sound are gulf /glf/ and bottle /baf/. 
d. The voiced dorso-velar, /l/, is an occasional dialectal or individual variant of /l/, replacing it in some or all positions as in /mlk/, /mlk/, and /mlwk/. 43

2.343 The usual problem for the Korean speaker is producing English /l/ in the initial and intervocalic position.

A drill like the following is usually helpful in establishing the articulation of /l/:

/l-/       V-V
light      color
lime       solar
lion       jelly
2.35 **Retroflex /r/**

The English /r/ is formed in various ways in different dialects and by different individual speakers. Korean does not have the retroflex /r/ as a separate phoneme from the lateral /l/, but as an allophone of the /l/ phoneme. Korean /r/ occurs only in the intervocalic position while /l/ occurs between vowels and consonants and in the final position. Neither /r/ nor /l/ occurs in the initial position in Korean. Since a Korean speaker uses the sound /r/ in the intervocalic position, the articulation of /r/ in isolation should be no problem. The problem is to get him to use consistently and accurately the English /l/ and /r/ in the following positions: initial and intervocalic positions, between the consonant and the following vowel and in final position.

2.351 The /r/ in English is usually accompanied by some slight protrusion of the lips, and it is generally frictionless. Before vowels, /r/ is a vowel-like glide. In post vocalic position speakers of English often substitute a vowel for the /r/, or delete it entirely. 44

2.352 Also a predictable problem for Korean students is to distinguish among the three allophones of the English /r/. Wise describes the distribution of the three /r/ allophones as follows:

Distribution of English /r/

- **Fricative** /r/ occurs after /t/ or /d/, as in try /tɹɪ̞/ and dry /dɹɪ̞/, trilled /r/ occurs after /θ/, as in three /θɹɪ̞/, one-tap trill /ɻ/ occurs in British English, either within a word, as in very /'veɪri/ or at the end of a word as in 'far away' /farəwɛi/. 45

2.353 Korean students must, therefore, practice /r/ in the
initial, post consonantal, intervocalic, and post vocalic positions. This will lead to the proper articulation of the English /r/ as distinguished from the Korean /l/.

-VC  V-V  C-V  /-r/
reap  very  dread  color
rink  arrow  breed  solar
rove  array  graze  car

2.36 Nasals /n/

The Korean student should meet no difficulty in the articulation of English nasals /m n l/ since they are essentially the same as their Korean counterparts. He should be cautioned, that the English /n/ hits the back of the alveolar ridge close to the upper teeth while the Korean /n/ touches between the teeth and alveolar ridge. English /n/ has one principle allophone, /n/. As with /m/, a longer version, /n/, may appear finally. The voiceless /n/ is sometimes heard between the initial /s/ and the following vowel as in /spip/. Syllabic /n/, like /m/, is phonemically treated as /an/ or /in/.46

A drill for the English /n/ will help Korean students to establish /n/ articulation:
kneel  cunning  phone
nail  guns  lane
number  scenes  ran

2.37 Semivowels

In the consonant chart in 2.1 above, a line was drawn above "Semivowels." This is to call further attention to the fact that the labels "stops, fricatives," etc., indicate modes of articulation, while
"Semivowels" is not that kind of term, but rather a distributional term.

"From an articulatory viewpoint, /w y h/ are similar to fricatives, but from a distributional viewpoint, it is more convenient to class them separately. In the pre-vocalic position in the same syllable with following vowel, they function like consonants, but in post-vocalic position in the same syllable with preceding vowel, they function as vocalic off-glides."47 Semivowels are further discussed under "Vowels" below.
CHAPTER 3

CONTRASTIVE ANALYSIS OF THE VOWELS OF
ENGLISH AND KOREAN

3.1 English Vowels

English vowels are classified according to the position of the highest part of the tongue during articulation. The vowel phonemes of English and Korean may be tabulated as follows.

<table>
<thead>
<tr>
<th>English</th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i</td>
<td>ï</td>
<td>u</td>
</tr>
<tr>
<td>Mid</td>
<td>e</td>
<td>ə</td>
<td>o</td>
</tr>
<tr>
<td>Low</td>
<td>æ</td>
<td>a</td>
<td>ɔ</td>
</tr>
</tbody>
</table>

3.11 The front vowels are made with lips spread, the back vowels with lips rounded, and the central vowels take a neutral lip shape. Also the lip action is progressively less prominent from high to low, and neutral for the central vowel. These nine vowel phonemes combine with the semivowels /w y h/ in dialect and ideolect variation to form the "gliding" vowel nuclei so characteristic of English, and the traditional diphthongs /ay oy aw/. 49

3.12 With reduction of stress all may undergo modification in quality in the direction of central so that in unstressed syllables they frequently are morphophonically replaced by /ã/ or /ɨ/. 50

3.13 It is commonly stated that English vowels are not "pure" as noted earlier. Almost all of them combine with semivowels /w y h/ to form complex-vowel, syllabic nuclei. It seems pedagogically efficient to use the "complex-vowel neucleus" concept in classroom
teaching. A complex nucleus usually consists of two phonemes, one of the short vowels followed by one of the three /w y h/ glides. The 36 syllabic nuclei that have been established—nine simple and twenty-seven complex nuclei—do not, of course, all occur in the speech of any one speaker. Smith shows the occurrence of vocalic nuclei in the several varieties of English as follows:

<table>
<thead>
<tr>
<th>V</th>
<th>Vy</th>
<th>Vw</th>
<th>Vh</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i/</td>
<td>pit</td>
<td>bee</td>
<td>few</td>
</tr>
<tr>
<td>/e/</td>
<td>pet</td>
<td>bay</td>
<td>house</td>
</tr>
<tr>
<td>/ə/</td>
<td>pat</td>
<td>pass</td>
<td>house</td>
</tr>
<tr>
<td>/ɪ/</td>
<td>just</td>
<td>bee</td>
<td>moon</td>
</tr>
<tr>
<td>/ɑ/</td>
<td>cut</td>
<td>bird</td>
<td>go</td>
</tr>
<tr>
<td>/æ/</td>
<td>cot</td>
<td>buy</td>
<td>house</td>
</tr>
<tr>
<td>/u/</td>
<td>put</td>
<td>buoy</td>
<td>do</td>
</tr>
<tr>
<td>/o/</td>
<td>home</td>
<td>boy</td>
<td>go</td>
</tr>
<tr>
<td>/ɔ/</td>
<td>wash</td>
<td>wash</td>
<td>law</td>
</tr>
</tbody>
</table>

### 3.2 Korean

<table>
<thead>
<tr>
<th>Front</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>unrounded</td>
<td>rounded</td>
</tr>
<tr>
<td>High</td>
<td>i</td>
</tr>
<tr>
<td>Mid</td>
<td>e</td>
</tr>
<tr>
<td>Low</td>
<td>æ</td>
</tr>
</tbody>
</table>

3.21 Most Korean vowels are pure vowels, using just one position of the articulators, and without the off-glide which is so common in English. Some other vowel sounds, involving more than one mouth position, are designated by Martin as diphthongs. Korean has
two semivowel phonemes occurring before the vowels as follows:

\[
\begin{array}{c}
/wi/ & /yu/ \\
/we/ & /wa/ & /ye/ & /ya/ & /ye/ & /yo/ \\
/wa/ & /ya/ & /we/ & /ya/ & /we/ & /ya/
\end{array}
\]

3.22 Korean vowel phonemes have both a long and a short version, and the length feature /:/ is phonemically complex. For some speakers there are few contrasts of long and short vowels; for others there are 30 or 40 minimal pairs distinguished by vowel duration alone. Furthermore, some of the minimal pairs are composed of two words belonging to two different form classes, which have quite distinct syntactic distribution.

3.23 The positions of the tongue for vowels in Korean are generally slightly higher than those for the corresponding English sounds. The Korean front vowels /i/, /e/, and /æ/ are made with un-rounded lips while /o/ and /ʊ/ are made with lips rounded. The back vowels /i/, /a/, /a/ are made with the lips unrounded while /u/ and /o/ are made with lips rounded and protruded.

3.3 Contrasts of English and Korean Vowel Systems

**Korean**

\[
\begin{array}{c}
/i/ & /ʊ/ & /a/ & /u/ \\
/kim/ & /će/ & /kam/ & /kun/ \\
'seaweed' & 'mouse' & 'gold' & 'a. country' \\
/e/ & /ö/ & /ə/ & /o/ \\
/ke/ & /hö/ & /käm/ & /kom/ \\
'dog' & 'sun' & 'sword' & 'bear'
\end{array}
\]
3.32 As this scheme indicates, English makes one discrimination which the Korean speaker does not have /ɔ/, but American speaker does not have /ü/ and /ö/.

3.32 In general, then, the main predictable problem for the Korean speaker in the controlling of the English vowel system is in producing the low back vowel /ɔ/.

3.4 **English /ɔ/**

Korean often confuses /ɔ/ with /o/, and /ɔ/ with /a/. Also he usually substitutes either /ə/ for /ɔ/ or /o/ for /ɔ/. The /ɔ/ is not phonemic in Korean, but occurs in such borrowed words /kɔpi/ 'coffee' and /kɔtɛn/ 'curtain'. Since the Korean uses this sound, it should not be difficult for him to produce it in isolation.

3.41 **English /ɔ/** varies in pronunciation between /ɔh/ and /ɔ/ according to individual or community choice or according to dialect. It appear initially, as in 'all' /ɔl/, or finally, as in 'law' /lɔh/.

Fries explains /ɔ/ phonetically as follows:
The vowel sound /o/ is a low back close sound. The sound /o/ is produced with the back of the tongue in the low position. The muscles are comparatively tense. The lips are less rounded than it is in the pronunciation of /o/. During the pronunciation of /o/, the mouth is more opens than it is in the pronunciation of /o/. Notice the difference in tongue position between /o/ and /o/.

--- Tongue position during the pronunciation of /o/
— Tongue position during the pronunciation of /o/
— Tongue position during the pronunciation of /a/.

Drills contrasting /o/, /o/, /o/, /o/, and /o/, /o/ will help establish acceptable articulation habits for /o/.

<table>
<thead>
<tr>
<th>/o/</th>
<th>/o/</th>
<th>/o/</th>
<th>/a/</th>
</tr>
</thead>
<tbody>
<tr>
<td>awe</td>
<td>oh(owe)</td>
<td>chalk</td>
<td>chock</td>
</tr>
<tr>
<td>ought</td>
<td>oat</td>
<td>paul</td>
<td>poll</td>
</tr>
<tr>
<td>fall</td>
<td>foal</td>
<td>taught</td>
<td>tot</td>
</tr>
<tr>
<td>ball</td>
<td>bowl</td>
<td>cawed</td>
<td>cod</td>
</tr>
<tr>
<td>/o/</td>
<td>/a/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>talk</td>
<td>tuck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dawn</td>
<td>done</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 4

PHONOLOGY DRILLS

4.0 Introduction The following phonology drills are designed to present systematically the pronunciation of problem sounds in English for Korean speakers. An exercise based on a problem is handled successfully when the students know they are drilling on that problem. But when later they try to communicate in the language, their attention necessarily shifts to the message, while the mechanics of the language fall back upon the habit system, and the native language takes over.61 What the student needs is habit-forming practice. A pattern practice drill does not pretend to be "real" communication or the be-all and end-all in language teaching methodology;62 but rather a means of acquiring the habits and skills necessary in the use of the problem English sound series /j f v ð z ð l r ç/ in communication.

4.1 Each drill is preceded by a label indicating the articulatory point of the drill. This is followed by the command to "Listen;". A number of examples are provided to give the student time to recognize what he is to do, and then the command is given to the student to "Repeat;".

4.2 Repetition drill requires the student to repeat after the English speaker each of a number of utterances containing examples of the point being taught. In the demonstration the English speaker gives an utterance, the Korean speaker gives a translation of that utterance, and so on. By these means the student is given time both to hear adequately what he is going to have to repeat and to gain some idea of the structural significance of the pattern being
presented. When sufficient examples have been given to assure that the student knows how to carry out the assignment, the student is given the command "Repeat:", whereupon the English speaker gives the first item and pauses for the student to repeat, then item two, and so on. This is the imitation and repetition phase. Immitation and repetition drills based on contrastive analysis are the basic teaching methods used.
Drill 1.

1.1 Repetition drill. English /ʃ/ is a voiced, apico-alveolar affricate.

Listen: This is a jack.
This is a jail.
This is a jug.
This is a forgery.
This is a surgeon.
This is a budget.
This is a lounge.

Repeat: This is a jack.
This is a jail.
This is a jug.
This is a jet.
This is a jar.
This is a forgery.
This is a surgeon.
This is a budget.
This is a bridge.
This is a lounge.
This is a badge.
This is an orange.
/f/

Drill 2.

2.1 Repetition drill. English /f/ is a voiceless fricative labiodental.

Listen:
I have a father.
I have a friend.
I have a rifle.
I have a sofa.
I have a knife.
I have a wife.

Repeat:
I have a father.
I have a friend.
I have a fan.
I have a frame.
I have a film.
I have a raft.
I have a rifle.
I have a sofa.
I have a wafer.
I have a knife.
I have a wolf.
I have a cuff.
31

/v/

Drill 3.

3.1 Repetition drill. /v/ is a voiced, fricative, labiodental continuant.

Listen:
I've spilled gravy on my vest.
I've had very little vacation.
I've prevented an accident.
I've sealed the envelope.
I've had pretty gloves.
I've seen a dove.

Repeat:
I've spilled gravy on my vest.
I've had very little vacation
I've several vices.
I've lived in a village.
I've had a pretty flower vase.
I've prevented an accident.
I've sealed the envelope.
I've moved.
I've had a raven.
I've had pretty gloves.
I've seen a dove.
Drill 4.

4.1 Repetition drill. English /θ/ is a voiceless apicodental fricative.

Listen:  He's thirsty.
         He's quite thrilled.
         He's at the theatre.
         He's in the bathtub.
         He's going south.

Repeat: He's thirsty.
         He's quite thrilled.
         He's at the theatre.
         He's thin.
         He's in the bathtub.
         He's methodical.
         He's an author.
         He's ruthless.
         He's going south.
         He's wealthy.
         He's faithful.
         He's fourth in line.
5.1 Repetition drill. English /ʃ/ is a voiced apico-dental fricative.

Listen:  
It's there.  
It's this.  
It's his father.  
It's a scythe.  
It's an old lathe.

Repeat:  
It's there.  
It's this.  
It's his father.  
It's my father's lathe.  
It's a worthy trip.  
It's pretty heather.  
It's an old scythe.  
It's his clothing.  
It's his father.
Drill 6.

6.1 Repetition drill. /z/ is a voiced alveolar fricative.

Listen:  
He has a zebra.  
He has zinc.  
He has a pleasant personality.  
He has a good fuse.  
He has pretty roses.  

Repeat:  
He has a zebra.  
He has zinc.  
He has a pleasant personality.  
He has a good fuse.  
He has pretty roses.  
He has different coins.  
He has many barns.  
He has several rooms in his apartment.  
He has strong arms.
Drill 7.

7.1 Repetition drill. /ʒ/ is a voiced, palato-alveolar fricative.

Listen:  It's a casual dress.
         It's pink rouge.
         It's a mirage.
         It's an unusual accident.

Repeat: It's a casual dress.
        It's pink rouge.
        It's a mirage.
        It's an unusual accident.
        It's confusion.
        It's azure.
        It's an allusion.
        It's a garage.
        It's a pleasure.
/1/

Drill 8

8.1 Repetition drill. English /l/ is an alveolar voiced lateral.

Listen:  
She loves a lark.
She loves the flute.
She loves wool sweaters.
She loves mild soap.
She loves pink veils.

Repeat:  
She loves a lark.
She loves lime.
She loves little babies.
She loves Labor Day.
She loves the flute.
She loves mild soap.
She loves to collect stamps.
She loves to play the piano.
She loves wool sweaters.
She loves blue tiles.
Drill 9.

9.1 Repetition drill. English /r/ is an alveolar voiced retroflex.

Listen:  
You're wrong.
You're a romanticist.
You're strong.
You're frank.
You're poor.
You're tired.

Repeat:  
You're wrong.
You're a romanticist.
You're rich.
You're a frank man.
You're a strong boy.
You're a hero.
You're tired.
You're right.
Drill 10.

10.1 Repetition drill. English /ɔ/ is low, back vowel.

Listen:  

It's a big office.
It's an auditorium.
It's a big hall.
It's a chalk-board.

Repeat:  

It's a big office.
It's an auditorium.
It's August.
It's an orange.
It's a big hall.
It's dawn.
It's a chalk-board.
It's paul's.
It's a fawn.
It's a gauze dressing.
FOOTNOTES


3Ibid.


10Gleason.


16Edward Sapir, Language: An Introduction to The Study of


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28 Leo F. Engler, "Problems in English/German Contrastive Analysis" Unpub. Doctoral diss. (Austin, Texas, 1962).

29 Ibid., p. 3.

30 Wise, p. 124.


32 Kantner and West, p. 144.
33 Wise, p. 133.

34 Ibid., p. 134.


36 Kantner, p. 145.


38 Ibid., p. 137.

39 Francis, p. 78.

40 Wise, p. 131.

41 Engler, p. 8.

42 Francis, p. 83.

43 Ibid.

44 Wise, p. 133.

45 Ibid.

46 Francis, p. 134.

47 Engler, p. 10.

48 Ibid.

49 Ibid.

50 Ibid., p. 11.

51 Trager and Smith, p. 22.

52 cf. Samuel Martin, op. cit. Martin posits /ɔ/ and /ɑ/ as separate phonemes, while I have classed them together under a single phoneme /ɔ/, since Korean speakers do not discriminate between them
at the informal spoken level. Where Martin considers /ü/ a semivowel, I posit /ü/ and /ö/ as separate vowel phonemes.

53 Martin, p. 365.
54 Ibid.
55 Mieko Han, p. 8.
56 Park, p. 3.
57 Engler, p. 12.
58 Francis, p. 102.
59 Fries, p. 440-441.
60 Ibid.
61 Lado, p. 105.
62 Engler, p. 61.
63 Ibid.
64 Ibid.
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PHONOLOGICAL PROBLEMS IN TEACHING ENGLISH TO KOREANS

by

EUN SEUNG LEE

B.A., EWHA WOMEN'S UNIVERSITY, KOREA, 1963

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the requirements for the degree

MASTER OF ARTS

Department of Speech

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1966
ABSTRACT

Purpose: The purpose of this report is to present an effective way of approaching the main problems in teaching English pronunciation to Korean speakers, by providing a contrastive analysis of the phonological systems of the two languages. It is assumed that the purpose to be attained is the practical control of the language for teaching and use, rather than knowledge about the language.

Procedure: The method advocated here is the audio-lingual approach, i.e., an imitation process using phonology drills, in turn based on contrastive analysis of the sound-systems of English and Korean. First, the phonemic inventories of the two languages are presented in chart form, tabulated on the same criteria of classification: points of articulation horizontally, and air-stream variations vertically. Second, the contrasts between the two inventories are noted, and then the contrasts are explored in terms of phonetics and allophonics. Finally, on the basis of the contrasts noted and interferences predicted, drills are suggested for meeting the problems Korean speakers may be expected to encounter in learning the pronunciation of English.

Summary of Findings: In the contrastive consonant phoneme inventory, the consonants of English and Korean are found to be slightly different. The differences are accounted for by the fact that English lacks counterparts for the Korean aspirated stops /pʰ tʰ kʰ/, the fortis stops /P T K/, the aspirated affricate /č/, the fortis affricate /ţ/ and the fortis fricative /s/, but does have the voiced stops /b d g/, the voiced alveopalatal affricate /ģ/, and the fricatives /f v ð ɹ z ɹ/,
all lacking counterparts in Korean. The greatest difficulty for
Korean speakers in learning English is found in the fricative series.
As the vowel scheme indicates, English makes one discrimination /s/
which the Korean speaker does not have, but Korean does have /œ/
and /ö/ which are lacking in English.

To overcome these problems, first, the teacher must see the
potential conflict areas by contrasting the sound systems of the
learner's language and the target language. From this, he can then
develop pronunciation drills which contrast the problem sounds and
provide the student with opportunity for systematic practice, sufficient
to establish habits of appropriate articulation in pronouncing English.

This report suggests drill procedure for each of the contrasts
discussed, and a set of example drills, one for each of the English
phonemes identified as troublesome for Korean learners, is appended.