

A Contrastive Analysis of Korean and English Consonants (II)

—Some phonotactic problems and the modified category—

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Chapter I. Problems

1.1 Phonotactic Problems

The chart of allophonic distribution¹⁾ shows that in Korean, out of nineteen consonants only seven consonants occur finally, all except /ŋ/ occur initially, and all occur medially. The following table depicts this at a glance :

	<i>Initially</i>	<i>Medially</i>	<i>Finally</i>
/p/	pal 'foot'	napi 'butterfly'	pap 'rice'
/p'/	p'uli 'root'	pap'i 'busily'	—
/pʰ/	pʰi 'blood'	kipʰi 'depth'	—
/t/	tal 'moon'	kito 'prayer'	nat 'grain'
/t'/	t'al 'daughter'	it'a 'later'	—
/tʰ/	tʰal 'mask'	səltʰaŋ 'sugar'	—
/k/	kalsæk 'brown'	sikan 'time'	nak 'pleasure'
/k'/	k'alsæk 'color'	ik'i 'moss'	—
/kʰ/	kʰalsæk 'color of a knife'	amkʰəs 'female'	—
/tʃ/	tʃa 'to sleep'	kitʃa 'reporter'	—
/tʃ'/	tʃ'a 'be salty'	ka:tʃ'a 'fake'	—
/tʃʰ/	tʃʰa 'car'	kitʃʰa 'train'	—

1) Cf. Soon-T. Kim's "A Contrastive Analysis of Korean and English Consonants(I)" Cheju Branch, The English Literary Society of Korea, No.1 1976, pp.41-43.

/s/	sa 'to buy'	kisa 'driver'	—
/s'/	s'a 'be cheap'	pis'a 'be expensive'	—
/m/	man 'ten thousand'	kiman 'deceit'	pam 'night'
/n/	na 'I'	sinyə 'maid'	son 'hand'
/ŋ/	—	soŋatʃi 'calf'	waŋ 'king'
/l/	lamyən 'a kind of noodle'	nalli 'commotion'	kil 'road'
/h/	hana 'one'	sonhæ 'loss'	—

Some might argue that /p^h, t^h, k^h, k^h, s, s', tʃ, tʃ^h/ occur finally in Korean as they appear in the following examples :

ip ^h	'leaf'
pat ^h	'cultivated, dry field'
pak'	'outside'
puək ^h	'kitchen'
mas	'taste'
is'—	'to exist'
natʃ	'day time'
natʃ ^h	'face'

These consonants indeed occur finally as in the above examples. These examples, however, are represented in Korean orthography which is morphophonemic-i.e., the meaning of a word is taken into consideration in writing. They, therefore, are to be taken as the base form of the morphophonemes-i.e., underlying forms in transformational-generative terms, which are reduced to comparable lax forms through morphophonemic rules such as Neutralization and Plosivization²⁾ as follows :

ip ^h	→	ip (via Neutralization)
pat ^h	→	pat (via Neutralization)
pak'	→	pak (via Neutralization)
puək ^h	→	puək (via Neutralization)

2) Chin-w. Kim, "Rule Ordering in Korean phonology" *On-o(Language)*, Seoul:1976, 1. pp. 60-83.

mas	→	mat (via Plosivization)
is'	→	it' (via Plosivization)
nat	→	nat (via Plosivization)
natʃ ^h	→	nat (via Plosivization)

Such consonants, therefore, occur finally only on the morphophonemic level and not on the phonemic level and morphophonemic representation is beyond the scope of this paper.

On the other hand, in English, out of twenty-two consonants, twenty contrast initially, all twenty-two contrast medially and twenty-one contrast finally as the following chart shows :

	<i>Initially</i>	<i>Medially</i>	<i>Finally</i>
/p/	pin	speak	top
/b/	bin	baby	nab
/t/	tin	stay	hit
/d/	do	medicine	hid
/k/	king	hiking	pick
/g/	go	ago	big
/tʃ/	chin	teaching	beach
/dʒ/	Joe	lodging	judge
/f/	five	nephew	knife
/v/	vine	navy	hive
/θ/	thin	healthy	teeth
/ð/	the	clothes	breath
/s/	son	basin	kiss
/z/	zoo	design	his
/ʃ/	shoe	tissue	wash
/ʒ/	—	measure	rouge
/m/	man	small	him
/n/	nun	deny	kin
/ŋ/	—	singing	king

/l/	love	slow	bell
/r/	rose	derive	fur
/h/	home	behave	—

By contrasting the distribution of Korean phonemes with that of English we arrive at the hypothesis that all English consonants except for /p, t, k, m, n, ŋ, l/ are difficult when they occur finally to Korean students learning English as a second language. On empirical data, this hypothesis is proven to be true. Korean students tend to pronounce the following words with an extra vowel as seen in the transcription :

/b/	cab	[k ^h æbf]
/d/	cad	[k ^h ædf]
/g/	bag	[bægf]
/tʃ/	beach	[bitʃI]
/dʒ/	badge	[bædʒI]
/f/	beef	[bifU]
/v/	hive	[haIvU]
/θ/	teeth	[t ^h isθ]
/ð/	breath	[bIridθ]
/s/	bus	[pəsθ]
/z/	as	[ædʒθ]
/ʃ/	wash	[waʃI]
/ʒ/	garage	[gəradʒI]
/r/	car	[k ^h a:]

The reverse of the hypothesis—i. e., that the English final /p, t, k, m, n, ŋ, l/ present no problems to Korean students is not wholly true. It is true only for /m, n, ŋ, l/. In the case of /p, t, k/, however, the reverse is only true when they are not released. The Korean counterparts of those are never released, whereas, in English, they may be optionally released. In such a case, Korean students again tend to insert one kind of vowel or another after them:

		<i>Unreleased</i>	<i>Released</i>
/p/	tip	[t ^h Ip̚]	[t ^h Ip̚ʰ]
/t/	hit	[hIt̚]	[hIt̚ʰ]
/k/	pick	[p ^h Ik̚]	[p ^h Ik̚ʰ]

Korean final consonants pose no special problems to English speakers learning Korean as a second language. They, however, are to be reminded that ;

1) Korean final consonants are never released, and that 2) Korean has morphophonemic rules which reduce morphophonemic final consonants-i. e., all consonants except /p, t, k, m, n, ŋ, l/ to /p, t, k/.

Insertion of an extra vowel in English pronunciation by Korean students is more pervasive than what has been discussed so far. Owing to the difference in the syllabic structure of Korean and English, Korean students tend to insert a vowel between English consonants in succession within a syllable.

Korean phonological syllables are of the following eight types :

V	i	'this'
CV	pi	'rain'
VC	il	'one'
CVC	sil	'thread'
SV ³⁾	wi	'top'
CSV	kwi	'ear'
SVC	jak	'about'
CSVC	pjæk	'wall'

Again, some might argue that Korean has a syllable that ends in two consonants in such words as talk "chicken," jətəlp "eight," manh- "to be many" etc. These are morphophonemic shapes and are never pronounced with two consonants and one of the two consonants is deleted by a morphophonemic rule called cluster simplification rule.

Others might want to argue that Korean has medial consonant clusters by presenting

3) S stands for the semi-vowels /j/ or /w/.

the preceding examples followed by a morpheme with an initial vowel-e.g., talk+i which is pronounced [talgi], jətəlp+i [jədəlbi], where i is a subject marker, or manh+i [manhi], where i is an adverbializer. The syllable boundary in Korean, however, is between two consonants if the two consonants are flanked by a vowel on each side and [jədəlbi] is to be analyzed to consist of the first syllable *jə*, the second syllable *dəl*, and the third syllable *bi*.

In Korean pronunciation, therefore, consonant clusters are non-existent in a syllable. In English, on the other hand, there are thirty-nine initial consonant clusters and 151 final consonant clusters.⁴⁾ These clusters may be represented in their canonical forms as follows:

V	a, oh
CV	he, go
CCV	flee, ski
CCCV	spree, screw
VC	if, an
VCC	apt, loved
VCCC	ample, acts
VCCCC	angles, prompts

The observation made so far provides us with the conclusion that Korean consonants are always either preceded or followed by a vowel whereas English consonants do not always occur either preceded or followed by a vowel. A corollary derived from this conclusion is that Korean students would have difficulty in pronouncing English consonants which are neither preceded nor followed by a vowel.

Some of the examples listed above are apt to be pronounced as follows :

- 1) apt [æpt^h]
- 2) loved [rəbɪd^h]
- 3) ample [æmp^hl]
- 4) acts [ækt^hs]

4) Charles C. Fries, *Teaching and Learning English as a Foreign Language*, Ann Arbor: University of Michigan Press, 1945. p.18.

5) angles [ængɪlsɪ]

6) prompts [pʰɪrəmpʰɪtʰɪsɪ]

In first exampl *apt*, the *p* is pronounced properly because it is preceded by the vowel æ. In the second example *loved* the *v* is pronounced with an extra vowel ɪ although it is preceded by the vowel o. This is because in the Korean syllabic system the o is considered to occur with the preceding consonant l and v is left unpreceded by a vowel. In the third example *ample*, the only extra vowel is ɪ. The l, although not followed by a vowel does not occur with an extra vowel because it occurs finally in Korean too. In the fifth and sixth examples, l and m respectively are not pronounced with an extra vowel because Koreans consider them as the final consonants of the preceding syllable and they also occur as final consonants in Korean.

English speaking students who have a much more complicated syllabic structure than Korean have no problem of inserting an extra vowel in their pronunciation of Korean words.

1.2 Obstruents

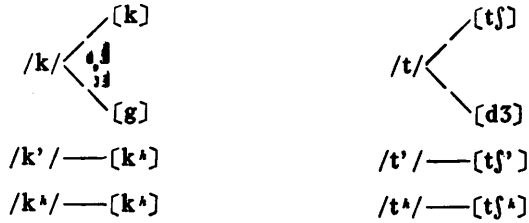
As briefly mentioned so far the most conspicuous characteristics of Korean obstruents and those of English are that in Korean, voicing is not a significant feature, whereas laxness, tenseness, and aspiration are distinctive features. In English, on the other hand, voicing is phonemic whereas laxness, tenseness, and aspiration are phonetic features which do not have the function of distinguishing meaning.

By the allophones of Korean and English phonemes show, Korean obstruents and those of English have the following allophones respectively:⁵⁾

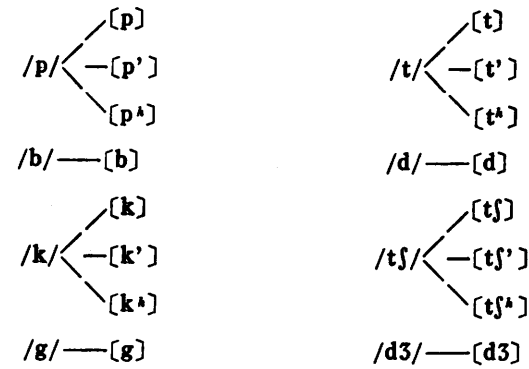
Korean obstruents



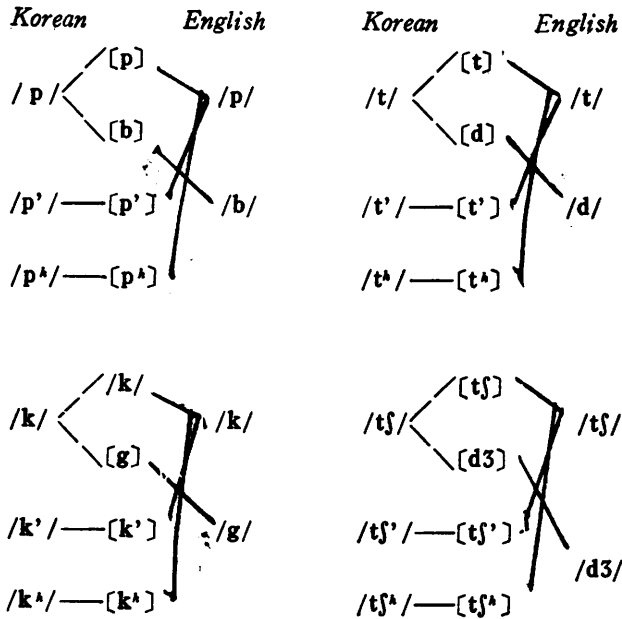
5) Only the allophones which are relevant for contrasting the two phonological systems have been listed.



English obstruents



When these two tables of the phonemes and allophones of obstruents are collapsed into each other, the following chart results:



From these schemata, we can visualize that in Korean, although voicing is not significant and the English voiced obstruents /b, d, g, dʒ/ and voiceless /p, t, k, tʃ/ don't exist as separate phonemes, they occur as allophonic members of the lax obstruents /p, t, k, tʃ/. The reverse is also true-i. e., in English, laxness, tenseness, and aspiration are not phonemic and the Korean lax obstruents /p, t, k, tʃ/, tense obstruents /pʰ, tʰ, kʰ, tʃʰ/, and aspirated ones /pʰ, tʰ, kʰ, tʃʰ/ don't constitute phonemic contrasts in English. They are allophonic variants of the voiceless obstruents /p, t, k, tʃ/.

Korean students have little problem learning English voiceless obstruents. Korean students replace the allophones of the English voiceless obstruents with their independent phonemes, aspirated obstruents which are phonetically almost equivalent-i. e., they substitute the Korean /pʰ, tʰ, kʰ, tʃʰ/ for the English /p, t, k, tʃ/ wherever these English phonemes occur and produce the following pronunciation:

police	[pʰəlɪs]
pin	[pʰɪn]
apart	[əpʰɑrt]
spell	[spʰɛl]
upper	[ʌpʰə]
hope	[houpʰ] ⁶⁾
cup	[kʰʌpʰ] ⁶⁾
empty	[empʰɪtʰɪ] ⁶⁾

In all these examples except for pin and apart, p's are more strongly aspirated than in the authentic English pronunciation because the Korean /pʰ/ is used. This overaspiration is also true for other English obstruents.

Such a distortion, however, does not produce communicational noise and does not interfere with communication, because English speakers are not trained to hear the difference in the degree of aspiration.

Korean students, however, have problems with English voiced obstruents, particularly when they occur in non-intervocalic positions. The Korean voiced allophones of

6) when the syllabic final obstruents are released.

the lax obstruents, which are not in the threshold of consciousness of a Korean, occur only in intervocalic positions. Korean students, therefore, tend to substitute the voiceless allophones of their lax obstruents for the voiced allophones which occur in non-intervocalic positions and pronounce the following words as transcribed:

[p]	for	[b]	boy	[poɪ]		
			cab	[kæp̚]	or	[kæbɪ]
						when released.
[t]	for	[d]	do	[tu]		
			hid	[hɪt̚]	or	[hɪdɪ]
[k]	for	[g]	go	[ko]		
			bag	[pæk̚]	or	[pægɪ]
[t]	for	[d]	Joe	[tʃo]		
			judge			[tʃədʒɪ]

In the last example, the [tʃ] never occurs finally in Korean and the unreleased alterant is not observed, which is also true in English.

The reason why the voiceless allophones of the Korean lax obstruents /p, t, k, tʃ/ are substituted for English voiced obstruents in non-intervocalic position is because in the psychological reality of Korean speakers, the obstruents are registered in a binary system as follows:

	Lax	Tense	Aspirated
Tenseness	—	+	—
Aspiration	—	—	+

That is, Koreans think that their lax obstruents are neither aspirated nor tensed. English voiced obstruents also are neither aspirated nor tensed. The Korean lax obstruents, therefore, are the best substitutes for the English voiced obstruents.

These lax obstruents happen to have voiceless allophones in non-intervocalic positions and sound more like the English voiceless obstruents /p, t, k, tʃ/ to English speaking people. Such substitution, therefore, causes noise in the communication.

For English speaking students, the three way contrast of Korean obstruents poses a perplexing learning problem. The difference between the lax series and the aspirated series in the initial position is only a matter of degree of aspiration. The lax obstruents are weakly aspirated and the aspirated obstruents are heavily aspirated. English speaking students' ears are not tuned to distinguish the degree of aspiration because that is only an allophonic difference in English.

The Korean tense obstruents occur in English only as allophones of the voiceless obstruents with an extremely limited distribution after an /s/ in general. English speaking students, therefore, are not aware of the fact that English has such sounds as allophones of voiceless obstruents.

English obstruents are to be classified in the split category for Korean students and Korean obstruents in the same category for English speaking students. The voiced obstruents of English have to be listed under a reinterpreted category too, because, although Korean has voiced allophones, their distribution is different.

1.3 Stops

We have, so far, discussed the contrastive features and ensuing learning problems pertaining to obstruents as a whole. There is a special problem in learning English stops when they occur finally. For example, in *cap* and *cab*, the only distinguishing feature is that the *cap* ends in the voiceless stop /p/ and *cab* in the voiced stop /b/. Such a distinction, however, is nullified when the final consonants are not released. Stops are produced in the following three articulatory stages:

- 1) A set of articulators, or two different articulators, are in contact.
- 2) Slight pressure of the breath stream builds up behind the closure.
- 3) Upon relaxation of the closure, or occlusion, the sound is exploded.⁷⁾

Voicing occurs in the third stage only. The unreleased variants of the stops are deprived of the third stage which is the only stage in which the distinctive feature manifests itself. This explains why the voiceless stops and voiced stops are identical when they occur in a final position. This nullification of voicing, however, does not leave the semantic interpretation of the utterances concerned to the contextual

7) Arthur J. Bronstein, *The Pronunciation of American English*, New York: Appleton Century Crofts, Inc., 1960. p. 67.

redundancy. What effects meaning difference in such a case is the length of the preceding vowel-i. e., the vowel preceding a voiced stop is longer (and therefore more fully voiced) than the one followed by a voiceless stop. The æ of *cap* is shorter than the æ of *cab*. In English the length of a vowel is not phonemic (at least in the analysis we have adopted in this study), whereas it is phonemic in Korean as the following examples show:

i	'this'	i:	'two'
pæ	'pear'	pæ:	'double'
tʃaŋ	'market'	tʃa:ŋ	'closet' etc.

Korean students will naturally hesitate to lengthen or shorten the same vowel in the same environment because such lengthening changes meaning in Korean. They, however, have to pay particular attention to the lengthening of the vowel before a voiced stop and the shortening of it before a voiceless stop in these examples:

nap	[næp ⁻]	bit	[bit ⁻]	buck	[bʌk ⁻]
nab	[næ'b ⁻]	bid	[bi'd ⁻]	bug	[bʌ'g ⁻]

Having covered the problems caused by the obstruents in general or the stops as a whole, we are now ready to treat individual phonemes in the obstruent category separately.

Korean /p/

The Korean /p/ has [β] as an allophone. It is, however, in free variation with [b] which is expected in an intervocalic position, which is also the environment where [β] occurs. English speaking students, therefore, don't have to make any extra effort to learn it.

English /b/

The English /b/ has an allophone of [b], which is completely devoiced before the consonant /s/ or /f/. The allophone is in free variation with [b⁻]. Again when they

try to produce the voiceless allophone, they have to be more careful in lengthening the preceding vowel than in the case where the same vowel is followed by /p/:

lobster [la'bstə]
lopsided [lɒpsaɪdɪd]

English /t/

In an intervocalic position, English /t/ may be manifested by the [tʰ] slightly aspirated, [t̚] voiced, or the [ɾ] flapped /r/. Some even argue that /t/ in such a position may be replaced with /d/, in which case the distinction between such words as *writer* and *rider* is null, Korean students will do well if they use their /t/ in this environment.

Korean /t/, /t'/, and /tʰ/

The Korean /t, t', tʰ/ (and /s/, /s'/, /l/, /n/) are defined by Huh⁸⁾ as dental and as alveolar by Lee.⁹⁾ In my own idiolect they are more dental than alveolar. Such a fine distinction, however, is not significant because, the difference in the point of articulation between the teeth and the alveolar ridge does not effect a difference in meaning.

Korean /k/

It is pronounced as a velar voiced fricative [v̞] before /u/. It, however, is in free variation with [g], a voiced velar stop.

1.4 Fricatives

Korean has three fricatives of /s, s', h/, whereas English has nine fricatives of /f, v, θ, ð, z, ʒ, ʒ, h/. The English /f, v, θ, ð, z, ʒ/ are new to Korean students. For Korean students, the English /f, v, θ, ð, z, ʒ/ belong to the new category, the English /ʒ/ to the reinterpreted category, and /h/ to the transfer category. For English speaking students learning Korean, /s/ and /s'/ should be classified in the reinterpreted category and /h/ in the transfer category.

8) Woong Huh, *Kuk-ə Umunnon* (Korean Phonology), Seoul : Chungumsa, 1960. p. 45

9) Hee Sung Lee, *Kuk-ə-hak Kyelon* (An Introduction to the Korean Language), Seoul:Minjung Publishing Co., 1962. p. 100

English /f, v/

The English /f/ is usually replaced by Korean students by a [p^h] when it occurs with a high vowel and by [hw] before low vowels. For example,

feet	[p ^h i:t ^h]	fight	[hwaɪt ^h]
food	[p ^h u:d ^h]	fencing	[hwensɪŋ]

The /v/ is usually replaced by Korean /b/.

English /θ, ð/

/θ/ is usually replaced by [s], [t] or [t'] and /ð/ by [t] or [d],

thank	[sæŋk-], [tæŋk-] or [t'æŋk-]
this	[tis]
without	[widaut-]

English /z, ʒ/

They are both substituted for by the Korean /tʃ/. When /z/ occurs finally and is partially devoiced as in boys [bbɔɪz], Korean students tend to completely devoice the /z/ and replace it with /s/. This is again because Koreans cannot hear voicing and the /s/ in that environment is partially devoiced.

English /ʃ/

It should be classified in the reinterpreted category because Koreans perceive it as [s] plus the semi-consonant [w] or [j] and pronounce the following words as transcribed with little abnormality in pronunciation:

ship	[swɪp-]
push	[p ^h ʊswɪ]
action	[æk-sjən]

Such a successful replacement may be accounted for by the discussion in the following section.

Korean /s/

Korean /s/ has the alveolar [ʃ] as its allophone before /i/, /j/, and /w/ and Korean si 'o'clock' is pronounced [ʃi]. This [ʃ], however, is different from the English allophone [ʃ] in that:

- 1) The Korean [ʃ] is alveolar whereas the English [ʃ] is post-alveolar: and
- 2) The English [ʃ] is produced with a much wider groove of the tongue than the Korean [ʃ] is. English speaking students, therefore, have to produce the Korean [ʃ] with their tongue further front in the mouth and with less groove of the tongue.

Korean students substitute this Korean [ʃ] for the English [ʃ] by adding to it either [j], which makes a [ʃj] further back or a [w], which makes [ʃ] further grooved.

Korean /s'/

It does not occur in English as a phoneme, although it occurs as an allophone of English /s/, and presents a tenacious problem for students learning Korean—i. e., they have almost a perpetual problem in mastering the distinction in the following minimal pairs:

sal	'flesh'	bisan	'arsenic acid'
s'al	'rice'	bis'an	'expensive'

1.5 Nasals

Both Korean and English have three nasals /m, n, ŋ/. In spite of the fact that these two sets of nasals have different allophones for the nasals, they are generally interchangeable.

1.6 Laterals

English has one lateral while Korean has two laterals /l/ and /r/. The major allophones of the Korean lateral are the dark l [ɭ] and the flapped r [r̥], which is, in English, an allophone of /t/ as in such words like *water*, *city*, *hottle*, etc. This means that the Korean lateral lacks the clear l and the entire phoneme of /r/. The English /r/, therefore, has to be classified in the new category for Korean students. The English /l/ on the other hand has to be grouped in the reinterpreted category. Korean students substitute the Korean lateral for both /l/ and /r/ because of its proximity in their acoustic perception. Korean students have further problems with these phonemes because, in Korean, the lateral never occurs initially except in a few loan words. Due to this complex reason, /l/ and /r/ present almost insurmountable problems to Korean

students learning English as a second language.

On the other hand, English speaking students have little or no problem with the Korean lateral. They can use the flapped r in such words as [ařĩraŋ], a name of a song, and the dark l in such words as [sal] 'flesh,' the former being an allophone of English /t/ and the latter that of English /l/. The Korean lateral, therefore, is listed in the reinterpreted category for English speakers.

1.7 Glide-semivowels

According to the analyses we have adopted in this study, there are two glide-semivowels of /w/ and /j/ in both Korean and English. They are mutually interchangeable and are to be classified in the transfer category for both Korean speaking students and English speaking students.

Chapter 2. Conclusion

The discussions presented in the preceding chapter can now be summarized in the framework originally proposed by Stockwell¹⁰⁾ and modified in this paper as follows. He classifies phonological problems in the following order of difficulty:

1. New categories: learner must acquire new and unfamiliar unity.
2. Split categories: learner must split familiar unity.
3. Absent categories: learner must avoid category altogether.
4. Coalesced categories: learner must unify contrasting categories.
5. Reinterpreted categories: learner must embody familiar categories in strange shapes.
6. Transferred categories: learner must transfer familiar categories essentially unaltered.

2.1 Modified Category:

For Korean students learning English

Categories

Possible Substitutes

A. New categories

10) cf., Robert P. Stockwell, *A Contrastive Analysis of English and Tagalog* (Mimeographed Copy: University of California; n. d.), 1970.

- (a) /f/ [p] before high vowel and [hw] before low vowel
- (b) /v/ [b]
- (c) /θ/ [s], [t], [t']
- (d) /ð/ [t]
- (e) /z/ [s] in final position
[d] elsewhere
- (f) /ʒ/ [dʒ]
- (g) /r/ [r]

B. Split categories

- (a) /p/ [p^h]
- (b) /b/ [b] in V_V¹¹⁾, [p] elsewhere
- (c) /t/ [t^h] or [r] in V_V, [t^h] elsewhere
- (d) /d/ [d] in V_V, [t] elsewhere
- (e) /k/ [k^h]
- (f) /g/ [g] in V_V, [k] elsewhere
- (g) /tʃ/ [tʃ^h]
- (h) /dʒ/ [dʒ] in V_V, [tʃ] elsewhere

C. Coalesced categories

- (a) /p/ /p^h/
- (b) /t/ /t^h/
- (c) /k/ /k^h/
- (d) /tʃ/ /tʃ^h/
- (e) /s/ /s/ or /s^h/

D. Reinterpreted categories

- (a) /b/ [b] in V_V and [p] elsewhere
- (b) /d/ [d] in V_V, [t] elsewhere
- (c) /g/ [g] in V_V, [k] elsewhere
- (d) /dʒ/ [dʒ] in V_V, [tʃ] elsewhere
- (e) /l/ [r] initially or V_V,

11) V_V is to be read "between voiced phones."

[l] elsewhere

(f) /s/ Alveo-palatal [ʃ] before [i], [j], [w]; [s] elsewhere

(g) /ʃ/ [s]+[wi] or [s]+[j]

E. Transferred categories

(a) /m/ /m/

(b) /n/ /n/

(c) /ŋ/ /ŋ/

(d) /h/ /h/

(e) /w/ /w/

(f) /j/ /j/

F. Absent categories

None

2.2 For English speaking students learning Korean*Categories**Possible Substitutes***A. New categories**

None

B. Split categories(a) /p/ [b] in V__V and [p^h] elsewhere(b) /p^h/ [b](c) /p^h/ [p^h](d) /t/ [d] in V__V, [t^h] elsewhere(e) /t^h/ [d](f) /t^h/ [t^h](g) /k/ [g] in V__V, [k^h] elsewhere(h) /k^h/ [g](i) /k^h/ [k^h](j) /tʃ/ [dʒ] in V__V, [tʃ^h] elsewhere(k) /tʃ^h/ [dʒ](l) /tʃ^h/ [tʃ^h]

(m) /s/ [s]

(n) /s' / [s]

C. Coalesced categories

- (a) /p/ [b] in V_V, [p^h] elsewhere
- (b) /t/ [d] in V_V, [t^h] elsewhere
- (c) /k/ [g] in V_V, [k^h] elsewhere
- (d) /tʃ/ [dʒ] in V_V, [tʃ^h] elsewhere

D. Reinterpreted categories

- (a) /s/ [ʃ] in _i, _j, _w, and [s] elsewhere
- (b) /s' / [s]
- (c) /l/ [ɾ]^{*}_, V_V, and [l] elsewhere

E. Transferred categories

- (a) /m/ /m/
- (b) /n/ /n/
- (c) /ŋ/ /ŋ/
- (d) /h/ /h/
- (e) /w/ /w/
- (f) /j/ /j/

F. Absent categories

- (a) /f/
- (b) /v/
- (c) /θ/
- (d) /ð/
- (e) /z/
- (f) /ʒ/
- (g) /r/

Some are listed in more than one category. For example, English /b/ is listed in the Split Category as well as in the Reinterpreted Category. It is because Korean /p/, as has been discussed, is pronounced more like English /p/ in some environments and more like English /b/ in others. The Korean /p/, therefore, is split into two English Phonemes of /p/ and /b/. The reason why the English /b/ is also listed in

the Reinterpreted Category is because the [b] in Korean occurs only intervocally, whereas it is not so restricted in English,

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—要約—

韓·英語 子音의 對照分析 (II)

—音素配列 문제와 新部類 設定—

金 順 澤

I. Stockwell은 音韻体系的 對照分析 研究 結果를 다음 難易度の 順序에 따라 배열하였다.

1. 새로운 部類
2. 分離部類
3. 없는 部類
4. 並合部類
5. 再分析部類
6. 轉移部類

本稿에서는 韓·英語의 子音体系를 중심으로 문제가 별로 될 수 없는 部類를 轉移部類 다음에 넣어서 外國語 習得上 이를 제일 쉬운 部類로 다시 배열하는 것이 그 목적이다.

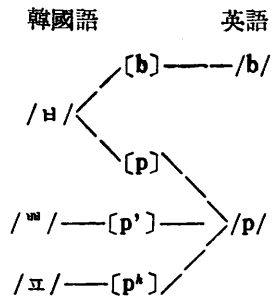
II. 韓國語 子音 21개와 英語의 24개의 音素를 對照해 보면, /b/는 두 言語에서의 有無보다도 韓國語 [b]는 變異音으로 存在하고 있는데, 그 音素 配列上의 문제는 分布狀況 如何에 따라 問題性이 內包되고 있는 것이다.

이를 간단히 살펴보면,

(1) 英語子音 22개 중에서 (半母音 제외) 21개가 終聲으로, 韓國語 子音 19개 중에서 7개만이 각각 終聲으로 쓰이고 있으며 韓國語의 /p, t, k, l, m, n, ŋ/ 외의 子音이 終聲으로 英語에 나타날 때는 發音上의 문제가 생기고 /p, t, k,/가 破裂 여부에 따라서 問題性이 생기게 된다.

(2) 두 言語의 子音群 문제인데, 그것은 初聲이나 終聲에 나타나고 있으나 韓國語에 없는 子音群을 여분의 母音을 子音 사이에 삽입하는 잘못을 저지르게 된다.

(3) 그 閉鎖音 중에서 한 보기를 들면,



Ⅱ. 結論으로 두 言語의 子音音素 配列上의 문제점들을 머리에 두고, Stockwell 이 그 難易度에 의해서 設定했던 部類를 兩國人的 實情에 맞게 再設定하면 다음과 같다.

(1) 韓國人이 英語를 習得할 때.

1. 새로운 部類
2. 分離 部類
3. 並合 部類
4. 再分析 部類
5. 轉移 部類
6. 없는 部類

(2) 美國人이 韓國語를 習得할 때.

1. 새로운 部類
2. 分離 部類
3. 並合 部類
4. 再分析 部類
5. 轉移 部類
6. 없는 部類