

# Some Remarks on Reconstructing Earlier Korean

S. Robert Ramsey

Prior to the fifteenth century, Korean had fewer pitch distinctions than it did in the Middle Korean period. Internal evidence suggests that many, if not most, of these distinctions arose from an earlier, predictable pitch shape.

The principal hypotheses summarized in this paper are as follows: The accent classes and word tones of the modern Korean dialects can largely be derived from the Middle Korean pitch system. However, this same dialect evidence, together with philological evidence adduced by Kim Wancin and Ceng Yenchan, also suggests that pitch variation after the first high pitch in a Middle Korean phrase was not distinctive. Many of the tonal distinctions that did exist in Middle Korean were not original. There was once a typical pitch shape for native Korean morphemes in which the last syllable was automatically made prominent. For two-syllable nouns, for example, this canonical shape was Low-High. Morphemes with different pitch patterns were aberrancies. Some were loans. Other came to have a different pitch pattern because of a distinctive segmental shape. Still others may have been etymological compounds that had been reanalyzed.

A significant cause of some exceptional pitch patterns was vowel syncope. Among other things, it is suggested that the monosyllabic, high-pitched shapes of verb stems such as *khŭ-* 'be big' and *thŏ-* 'ride' were created through the loss of a first-syllable vowel. Recent philological evidence uncovered by Lee Ki-Moon shows what the earlier segmental shapes of these verb stems were.

Today I would like to talk to you about some aspects of earlier Korean. The seed out of which many of these ideas grew is the accent system of the Pukchong dialect of South Hamkyeng. In that dialect, words are distinguished by differences in pitch. It has become increasingly common to speak of a system of this type as a "tonal system", adopting terms largely made popular by the autosegmental theory of Goldsmith and others working in that framework, such as Haraguchi. I do not place much importance on terminology; to me, the important thing is that the terms used should be

as simple as possible and, above all, comprehensible. I continue to refer to the system as “accent”, because I find it such a simple and easy-to-understand word. In my usage, “accent” means first and foremost a way of marking a location in the word—a syllable—as prominent. That is the way pitch is used in the Hamkyeng dialect. In múcikay ka nassta the first syllable of the word ‘rainbow’ stands out because of its higher pitch; in hopuléy-mi the third syllable is clearly more prominent than the syllables around it because it has the highest pitch.

Pukcheng dialect has what might be called a purely accentual pitch system. That is to say, all of the pitches in a phrase can be predicted once the location of the accented syllable is known. This system is slightly different from the systems found in the dialects of Kyengsang, where pitch is also distinctive.

In Kyengsang dialects, words and phrases that do not contain an accented syllable can have contrasting patterns of pitch. Words such as ‘rainbow’ are pronounced with the first two syllables high in pitch, and everything thereafter low in pitch: MUCIkay; MUCIkay. man. to; MUCIkay. mankhum. There are no pitch patterns like these in Hamkyeng. Such Kyengsang phrases contain no accented syllable. The pattern is a tonal pattern spread over the whole word or phrase. Kyengsang dialects have pitch systems that combine accentual systems with those perhaps better describable as word tone.

When I was still studying at Seoul National, I made arguments that this “mixed” pitch system of Kyengsang was the result of historical change from a system more like that of Hamkyeng. I will not repeat those arguments here; I mention them only to show that, from the first, my ideas about earlier Korean started from research on Hamkyeng accent.

Soon afterwards, I decided that the phonological structure of Middle Korean, in particular the pitch system, contained traces left by important historical changes. For one thing, I made arguments that the accentual distinctions found in Korean, and which are attested by the *pangcem* of Middle Korean, were not originally part of the language. They arose, rather, through phonological changes in the segmentals. I first presented details of these arguments in a paper published by the Language Research Institute of SNU in *Language Research*, in 1986; the arguments were further elaborated in subsequent papers.

Did Korean originally distinguish words by differences in pitch? Let me present some of the reasons why I believe that pitch was predictable in earlier Korean.

First, following the arguments of Ceng Yenchan and Kim Wancin, I have concluded that, in a Middle Korean word, pitch differences after the first high pitch were not distinctive. For example, in the word sūmulh ‘twenty’ the first syllable is always high in pitch. But the pitch of the second syllable varies; sometimes it is recorded as high, sometimes as low.

yēlhīmyē sūmūlhīmyē *Myoŋep yenhwa kyeng* 2.57

nāy nāhī sūmūlhēy *Nungem kyeng* 2.6

In 1973 I attended the graduate seminars Professor Kim Wancin taught on these problems. In those seminars, and in his related publications, Professor Kim argued that successive high pitches were subject to “rules of rhythm” (*yultong uy kyuchik*), such as his well-known prosodic constraint *Keseng pullyen sam*, a rule which disallowed three high pitches in a single breath group. Following the arguments of Professor Kim, I reasoned that, if these pitches could change from high to low without changing the meaning of the word, only the location of the FIRST high pitch was distinctive.

This conclusion of mine was based upon the research of Ceng Yenchan and Kim Wancin, and, I believe, it is correct. It also results in a Middle Korean pitch system that has, in essence, the same number of distinctive patterns are found through a comparison with the modern dialect reflexes. Thus, it may be seen that my assumptions about Middle Korean are subtly influenced by research on the accent systems of the modern dialects, a fact that has not escaped the sharp eye of Samuel E. Martin. In his recent *Reference Grammar of Korean*, Professor Martin questions these assumptions. He suggests that there were more pitch distinctions in Middle Korean (or, perhaps, in pre-Middle Korean) than I would recognize. He sets up more distinctive accent classes than I do. For example (leaving aside the words with rising pitch), I recognize three patterns of pitch as distinctive for two-syllable nouns:

Low-Low: mōzōm ‘mind’, pōlōm ‘wind’, ...

Low-High: kwōkí ‘meat’, ātōl ‘son’, ...

High-High/High-Low: āki ‘child’, kūmul ‘net’, ...

Here, as I have said, I follow Ceng Yenchang and Kim Wancin in believing that the patterns High–High and High–Low did not distinguish lexical items. Martin, however, suggests that these two patterns did contrast—if not completely at the Middle Korean stage, then at a stage of the language slightly earlier in time. As he puts it: “...patterns [such as HH and HL] are merged in the reflexes found in the modern dialects...” (p. 62) Where I would have an earlier Korean with fewer pitch distinctions than Middle Korean, he would have more. Where I recognize three distinctive patterns for two–syllable nouns, he recognizes four.

Martin gives a long list of nouns that alternate between HH and HL patterns. But he cautions that grouping all nouns that begin with a high pitch into that same class is philologically unwarranted. Some nouns are attested in Middle Korean with only one of the two patterns: tántí ‘jar’, stúmúl ‘rice wash–water’, ptáلكí ‘strawberry’, thúlím ‘belch’, thwúkwú ‘helmet’, and yémsywó ‘goat’ appear only with HH attestations; kwúlwúm ‘cloud’ and kácí ‘branch’ are predominantly HL (the small number of attestations with a HH pattern are questionable, Martin believes), and a few nouns are only attested as HL: kwúki ‘ladle’, pákhâ ‘mint’, tóyphâ ‘plane’, píywúk, ‘chick’, púhèng ‘owl’, séli ‘midst’, and thwólân ‘taro’.

This characterization of the facts is undeniably correct. We must certainly be careful not to misrepresent the philological data. Martin is right to advise caution in this regard. But we must also remember that the philological record is not in every case complete. Some of the nouns with a HL pattern, for example, are attested only as entries in the 16th–century dictionary *Hwunmong cahoy*. We know that there were already perturbations in the Middle Korean pitch system by the middle of that century. Can we say with certitude that these nouns were never pronounced with the pattern HH in the 15th century?

If we recognize HL as a pitch pattern distinct from HH, then we must also recognize both of these two patterns as distinct from the far larger class of HH/HL alternating nouns. There would thus be not one, but three accent classes that began with a high pitch. Surely, proliferating accent classes in this way is the wrong direction to go in reconstructing earlier Korean.

There are a number of reasons to believe earlier Korean had fewer, not more, pitch distinctions than Middle Korean. Here is one:

A few years ago, I selected fairly randomly 197 two-syllable nouns in Middle Korean and sorted them by accent class. The distribution of the nouns among the three accent classes was surprising:

Low-Low:	46 (23%)
Low-High:	121 (62%)
High-High/High-Low:	<u>30</u> (15%)
	197 (100%)

The disparity in the size of these classes is far greater than we would expect if the distribution were random. Note, in particular, the size of the class to which Martin has drawn our attention: the alternating pattern HH/HL is the smallest class by far. Could such a tiny class represent the merger of two, or even three, earlier classes? If that were so, the earlier accent classes would have been negligibly small in size, each approximately twelve times smaller than the enormous Low-High class.

Let us focus on another problem. To my mind, the most important question to be explained is this: why is the pattern Low-High is so overwhelmingly larger than the other two? There are three possibilities: (1) The pattern represents the merger of earlier distinctions; (2) it has bled off members of the other classes; or (3) it represents the canonical shape of two-syllable nouns in earlier Korean, and the other two patterns are aberrant, new creations.

I believe the third possibility to be the most likely explanation. At the very least, it is a good working hypothesis, because the pitches of much of the vocabulary in the smaller classes appear to be secondary developments. In many cases, for example, the LL pitch type appears to have been phonologically conditioned. Notice that many of the nouns have a distinctive vocalism, with minimal vowels in both syllables: kǒzǒl 'autumn', mǒzǒm 'heart, mind', pǒlǒm 'wind', etc. Many of the nouns in the class have been reconstructed with a second-syllable minimal vowel bounded by two voiced consonants; e.g., \*nǎmǒG 'wood', \*kwǔmǔG 'hole', nwǒlǒG 'deer', \*ǎzǒG 'younger brother', \*kǒlǒl 'powder', and many more. It is possible that the segmental shape somehow conditioned the low pitch of the second syllable.

Many of the nouns with a high-pitched first syllable are morphemically complex. The noun yǎmsywo 'goat' is said to mean 'bearded ox'; pyǎkay 'pillow', kǒlay 'plow', wǔlGey 'thunder', etc. are nominalizations of verb

forms; phōli ‘fly’ contains the nominal suffix -i; words such as stūmul ‘rice wash–water’ are even more obviously composed of more than one morpheme.

Many nouns with the LL pattern are loans from Chinese. For example, we find kācī ‘eggplant’, kwōchywō ‘pepper’, lwōktwū ‘green peas’, twōcōk ‘thief’, syākwōng ‘boatman’, cywūngsōng ‘animal’, cyēksām ‘jacket’, and many more.

I do not claim to be able to explain the pitch shapes of all of the nouns in these smaller classes. Still, assuming that they were somehow aberrant seems to be a useful hypothesis to explore. Beyond the above suggestions, I also find it suspicious that many of the uniformly low–pitched words designate objects that are not native to the Korean peninsula. No one would dispute that the term pūthyē ‘Buddha’ is borrowed, even though we are not quite sure about the source. Pears, barley, and cotton are not originally Korean plants; could the words for them also be loans?

Let me rephrase my hypothesis about pitches in earlier Korean: I believe that there was once a typical pitch shape for native Korean morphemes in which the last syllable was automatically made prominent. For two–syllable nouns, for example, this canonical shape was Low–High. Morphemes with different pitch pattern were aberrancies. Some of them were loans. Others came to have a different pitch pattern because of a distinctive segmental shape. Still others may have been etymological compounds that had been re-analyzed.

A significant and interesting cause of some exceptional pitch patterns was vowel syncope. One suggestion I have made in recent years is that a certain class of tonic, monosyllable verb stems was created through the loss of a first–syllable vowel. I am thinking of verb stems such as the following:

phō– ‘dig’; phū– ‘spread, bloom’; thō– ‘burn’; thō– ‘mount, ride’; thō– ‘put in, add’; thō– ‘get, receive’; thō– ‘part, divide’; thī– ‘hit, strike’; thī– ‘draw (a line)’; thī– ‘stretch (a line)’; thī– ‘press (a stamp)’; chō– ‘kick’; chō– ‘be cold’; chō– ‘put on, wear (something pinned, tied, or strapped on)’; chō– ‘fill’; chū– ‘remove’; chū– ‘dance’; chī– ‘raise (animals, livestock)’; khū– ‘be big’;

pcō– ‘assemble, weave’; pcō– ‘squeeze, extract’; pcō– ‘be salty’; psō– ‘wrap up, pack’; psō– ‘excrete (urine or feces)’; psū– ‘use’; psū– ‘be bit-

ter'; pskō- 'shell, peel, hatch'; pskū- 'extinguish'; pskī- 'jam into'; ptō- 'pick, pluck'; ptū- 'float'; ptū- 'open (eyes)'; ptū- 'turn bad (from heat)'; ptī- 'steam'; pthō- 'strike, play (zither)'; pthū- 'burst'; skī- 'cloud up'; skī- 'put into, put on'; ssō- 'be cheap'; ssō- 'pile up, build'; ssū- 'write'; ssū- 'wear (a hat)'; stū- 'scoop, dip (water, rice)'; stū- 'cauterize with moxa'.

Notice that these monosyllable stems have four characteristics:

- (1) high pitch
- (2) open syllable
- (3) the initial consonant is a cluster or an aspirate
- (4) the vowel is a minimal vowel (o or u) or i.

I have suggested that these stems were once two syllables long. The first syllable in the earlier forms had an unaccented (low-pitched) minimal vowel (o or u) that was subsequently lost through syncope. When this low-pitched vowel was lost, the only syllable left was one with a high pitch. The vowel subject to syncope had separated two obstruents; when it was lost, the obstruents came together to form a consonant cluster or an aspirate.

Here are some of the forms I offered as reconstructions:

- \*sūtūtā > stūtā 'scoop'
- \*pūtūtā > ptūtā 'open (eyes)'
- \*pōcōtā > pcōtā 'squeeze'

In the stems with aspirated initials, aspiration seems to be the trace of a velar obstruent. If this is true, the question is: what was the identity of this velar obstruent? In the Pukcheng dialect of Hamkyeng, I noted that a simple /k/ is sometimes found corresponding to aspiration in the Seoul forms. For example: The Pukcheng reflex of Seoul phath 'redbean' is phaykki; alongside Seoul swuch 'charcoal' we find Pukcheng swukk- (and Middle Korean swūsk); Seoul yuch 'four-stick game' is Pukcheng yukk-; and Seoul puekh is Pukcheng peekk 'firehole'. In this case, however, I tried to keep from being too unduly influenced by my work on Hamkyeng dialect; Hamkyeng /k/ might itself be derived from some other obstruent. Making no commitment as to the identity of the velar, I wrote it only as \*H and offered the following reconstructions:

- \*pùHútá > phútá ‘spread’
- \*tòHótá > thótá ‘burn’
- \*còHótá > chótá ‘kick’
- \*kùHútá > khútá ‘be big’

That is where my work on these verbs remained until last year. At that time I happened to meet again with Professor Lee Ki-Moon, who brought to my attention some new discoveries he had made about two of the entries in the *Jilín lèishì* (*Kyeylim yusa*). Making use of interpretations suggested by Cin Thayha, Professor Lee deduced that the phonograms used to transcribe the words for ‘ride’ and ‘big’ indicated that the stems of these verbs were at that time pronounced *\*hoto-* and *\*huku-*. This discovery of Professor Lee’s is an extremely important one. For one thing, we can see that the *Kyeylim yusa* transcriptions of these verbs had often been misidentified or gone unrecognized quite simply because the phonological shapes in the twelfth century were so different from those of Middle Korean. More importantly, as a result of Professor Lee’s discovery we now have concrete documentation of how the aspirated consonants in these two Korean words arose. At least in these two cases, we know that the velar obstruent that produced aspiration was simply /h/.

I had claimed that aspiration arose through vowel syncope. Now we see that the creation of these aspirates also required metathesis of the two consonants—or, it might be argued, progressive assimilation of the aspiration. In any case, it was an additional phonological step that I had not anticipated.

Professor Lee’s discovery shows that my reconstructions contained an important mistake. Reordering the consonants in these forms opens up new possibilities. For one thing, I believe that the first syllable might well have been a separate morpheme of the shape *\*ho/hu-* that functioned as a verbal prefix.

But, at the same time, the new philological information also provides exciting confirmation of the reconstructions, at least in their broad outline. It shows that vowel syncope was indeed the phonological process that produced aspiration in these verb forms.

Moreover, this new information lends credence to the hypothesis that I have outlined above concerning pitch in earlier Korean. If the pitch shape, or melody, of these stems was Low-High in earlier Korean, the vowel of

the first syllable would have been subject to elision because it was a low-pitched, or unaccented, minimal vowel. After it elided, only the high-pitched vowel of the second syllable was left in the morpheme, resulting in the stem shape we find at the Middle Korean stage. Note that once a high-pitched vowel was left in initial position, a new contrast with low-pitched, monosyllabic stems was created.

In sum, we see that in these cases Middle Korean pitch distinctions were the result of internal developments. They are but one example of how pitch distinctions arose in Korean. I do not claim that all of the Middle Korean pitch contrasts can be explained in this way, of course; to expect anything like that would be naive. Producing explanations for all of the rich pitch contrasts found in that language would be a formidable task indeed; complete explanations may never be forthcoming. What I am suggesting, however, is that a model of predictable pitch is a useful hypothesis to explore. By searching for ways to explain the pitch distinctions of Korean rather than simply projecting them back into all our earlier models of the language, there is much that I believe we can learn about Korean etymology.

Again, I appreciate your giving me the opportunity to speak with you today. It has been a pleasure to speak at the institution where most of the ideas I have talked about first took shape. I look forward to continuing to learn from discussions with all of you, both today and at opportunities in the future. Thank you very much.

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Dept. of Hebrew and East Asian Languages  
University of Maryland  
College Park, MD 20742  
U. S. A.