Professor Sang Oak Lee has been a leading researcher in the field of Korean tonology. The recent republication (Lee 2007) of his doctoral dissertation on Middle Korean tonology makes accessible his important work to a new generation of researchers. This is timely because the nature of the tonal systems of various modern Korean dialects, particularly the Kyungsang dialects, has become the focus of much recent research, both in terms of their phonetics and their (morpho)phonology. One of the issues that is still debated is whether South Kyungsang Korean is a tone language or a pitch-accent language. Two of the most recent dissertations on this dialect take opposing views: Chang (2007) argues for its tonal nature, largely based on phonetic evidence, maintaining that it has a three-way tonal contrast. On the other hand, Dongmyung Lee (2009) argues from a combination of evidence that South Kyungsang Korean is a pitch-accent system with an initial tone register. Already in Professor Sang Oak Lee’s dissertation (Chapter 3), there is an excellent discussion on the supposed dichotomy of pitch-accent languages vs. tone languages and he maintains like McCawley (1970) and somewhat similar to Hyman (2006) that there is a continuum of how deeply tonal a language is rather than there being a strict dichotomy between tone and pitch-accent. As Professor Lee argues in his dissertation for Middle Korean, a single language can display characteristics of both pitch-accent and tone in its prosodic system. He also suggested that the modern dialects reflect a pitch-accent system rather than a deeply tonal system. However, I suspect the debate about the modern dialects will continue in the foreseeable future,
though I view the debate as largely being a phonological debate over how phonetic facts about pitch in the different dialects (especially the Kyungsang dialects) are interpreted.

Given Professor Sang Oak Lee’s long-standing interest in Korean tonology, I thought I would focus my contribution on an issue of the loanword tonology of Kyungsang Korean. In discussions on Kyungsang Korean tonology, researchers make a distinction between North Kyungsang (NK) Korean and South Kyungsang (SK) Korean. One important tonological difference between the two dialects is that in the NK dialect multisyllabic words can begin with a sequence of low tones while in the SK dialect one of the first two syllables must have a high tone. This difference is manifested in loanword tonology. Consider how the two dialects borrow the four-syllable word ‘America’. In NK the tone pattern for this word is LLHL, but in SK it is LHHL. In both dialects the accent (i.e. the location of the pitch fall) is on the penultimate syllable; the difference is on the second syllable. In a sense, the expected pattern is what is found in the NK dialect given that recent discussions on loanword phonology in the Kyungsang dialects (e.g. Kenstowicz and Sohn 2001, Chung 2002a,b, Lee 2009) show that light syllables (i.e. CV syllables) overwhelmingly are correlated with low tone. However, in the SK borrowing of ‘America’ the second syllable cannot have low tone even though it is light because of the absolute constraint on the tonology of SK words, whether native or borrowed, that words cannot begin in a sequence of low tones. This constraint is further manifested in the difference between the two dialects in the borrowing of trisyllabic loanwords where the medial vowel is epenthetic (i.e. a vowel that is not in the source language word). For example, according to Chung (2002b) in the NK dialect the English word ‘metro’ is borrowed as me.tʰæ.ro with the tone pattern LLH with final accent. This reflects a strong tendency in borrowings to avoid having an epenthetic accented vowel. However, in the SK dialect described by Lee (2009), the source of the SK data to be discussed in this paper, a word like ‘metro’ would be borrowed as me.tʰi.ro with the tone pattern LHL where the epenthetic vowel is indeed accented. The penultimate syllable is accented in such words so as to avoid
a sequence of two low tone syllables at the beginning of the word. (Initial accent does not occur in SK in loanwords like ‘metro’ but would occur in cases of double epenthesis as in the borrowing of the English word ‘desk’ as [te.sì.kʰi], which has the tone pattern HLL. See Lee (2009) for discussion.) Examples like ‘metro’ show the impact of the constraint against words beginning in a sequence of low tones, a constraint that does not exist (or is low-ranked from an optimality-theoretic perspective) in the NK dialect. Given this as background, I would like to focus the remainder of this article on an observation regarding loanword borrowing into the SK dialect, also noted by Kubozono (2007), namely that loanwords in SK are always borrowed as accented. In order to do this, I would like to first briefly present and illustrate what is meant by unaccented in SK. I will then show how loanwords are never borrowed as unaccented or accentless, and I will conclude by offering an explanation for this. Some of what I will present for SK is applicable to NK, but the notion of unaccented words is perhaps more relevant in SK Korean than in NK.

Lee and Davis (2009a,b) have recently argued that SK words can be unaccented. An essential character of accentless words is that they do not have a pitch fall. Compare, for example, the Japanese word in (1a) with that in (1b) taken from Haraguchi (1999).

(1) Japanese Accented vs. Unaccented Class

<table>
<thead>
<tr>
<th>(1a) kaki+ga ‘fence (nom.)’</th>
<th>(1b) kaki+ga ‘persimmon (nom.)’</th>
</tr>
</thead>
<tbody>
<tr>
<td>L H L</td>
<td>L H H</td>
</tr>
</tbody>
</table>

The word in (1b) is accentless since there is no pitch fall even when the suffix is added. On the other hand, the word in (1a) is considered final-accented since the word witnesses a pitch fall once a suffix is added. South Kyungsang Korean has disyllabic words exactly like the Japanese words in (1) where disyllabic nouns that are LH have different suffixal tone patterns. This is seen by the SK data in (2) where the nominative case marker is added so as to
make clear the two different classes.

(2) Tone Patterns of SK Native Words

<p>| | | | |</p>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>a.</td>
<td>kə.ri.m+i</td>
<td>b.</td>
<td>na.mu.+ka</td>
</tr>
<tr>
<td>L</td>
<td>H</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>‘fertilizer (nom.)’</td>
<td>‘tree (nom.)’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>sa.ra.m+i</td>
<td>d.</td>
<td>ne.mo.+ka</td>
</tr>
<tr>
<td>L</td>
<td>H</td>
<td>H</td>
<td>L</td>
</tr>
<tr>
<td>‘human (nom.)’</td>
<td>‘square (nom.)’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The SK words in (2a-b) resembles the Japanese word in (1a) in that they have final accent on the base noun (as seen by the presence of a pitch fall on the nominative suffix) while the SK words in (2c-d) resembles the Japanese word in (1b) in that they are unaccented with no pitch fall on the suffix.

While the examples in (2c-d) reflect the clearest type of case for the notion of unaccented words in SK, monosyllabic words can also be unaccented. It is well-known in the tonal literature on SK that there are three types of monosyllabic words with respect to tone that are reflected by different tonal behavior under suffixation. Consider the three-way contrast in (3).

(3) Tone Patterns of SK native monosyllabic words

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>mal</td>
<td>mal+i</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td></td>
<td>H</td>
<td>L</td>
</tr>
<tr>
<td>‘horse’</td>
<td>‘horse (nom.)’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1 These words are also discussed by Chang (2007) who views these disyllabic words as having different underlying tonal patterns even though they are not perceptually distinct. We maintain that their difference reflects final accented vs. unaccented.

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b. mal  
   mal+i  
   H  
   H  H  
   measuring unit  
   measuring unit (nom.)

c. mal  
   mal+i  
   L  
   L  H  
   ‘language’  
   ‘language (nom.)’

In analyzing the pattern in (3) with respect to accentuation, it is clear that only the word in (3a) is accented since, similar to the words in (2a-b), it witnesses a pitch fall when the nominative suffix is added. The words in (3b) and (3c) are unaccented since no pitch fall occurs even when the nominative suffix is added. The example in (3b) is exactly like (2c) and (2d) in that the suffixal form ends in a sequence of high tones. The word in (3c) differs from (3b) in that it has an initial low tone, but it is like (3b) in taking a high tone on the nominative suffix. (In 3c the suffix cannot be low tone since, as mentioned, SK words cannot begin in a sequence of low tones.) Since there is no pitch fall, the word is still considered accentless.

Now that we have established the nature of accentless behavior in SK native words, it is interesting to consider the behavior of loanwords under suffixation, specifically looking at loanwords that are reported to be borrowed with the last syllable containing a high tone. Such loanwords always have a low tone when the nominative suffix is added. This is seen by the representative examples in (4) where (4a) shows a monosyllabic loanword and (4b) a disyllabic one.

(4) Tone Patterns of SK loanwords with a high tone on the final syllable

a. kʰәp  
   kʰәp +i  
   H  
   H  L  
   ‘cup’  
   ‘cup (nom.)’

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b. ti.rim   ti.rim+i  
   L H   L H  L  
   ‘dream’  ‘dream (nom.)’

Since the examples in (4) witness a pitch fall when the suffix is added, they are borrowed with accent on the final syllable. We thus concur with Kubozono (2007) in observing that loanwords SK are always borrowed as accented. This is even the case for SK loanwords that come from Japanese. Although we will not detail it here, Lee (2009) points out that Japanese borrowings into SK always have a pitch fall even if the source word is unaccented in Japanese. For example, the Japanese word [udoN] ‘noodles’ is unaccented and has the tone pattern LHH when the nominative suffix is added, [udoN+ ga]. However, its borrowing into the SK dialect witnesses a pitch fall when the suffix is added, [udoN+i] LHL, thus indicating its accented nature in SK.

While loanwords are always borrowed as accented, when we exam a fuller range of suffixal patterns on loanwords with accent on the final syllable, we observe that they do not really pattern like native words with final accent such as that in (2c) or (3a). First, consider the data in (5) where we show the unaffixed form, the nominative form, and the form with the suffix [+ca.ɾam] ‘like’ for the disyllabic native words that were shown in (2a) and (2c), respectively.

(5) Suffixal patterns for [kə.ɾim] ‘fertilizer’ and [sa.ɾam] ‘human’

a. kə.ɾi.m   kə.ɾi.m+i   kə.ɾi.m+ca.ɾam  
   L H   L H  L  
   ‘fertilizer’  ‘fertilizer (nom.)’  ‘like fertilizer’

b. sa.ɾam   sa.ɾa.m+i   sa.ɾa.m+ca.ɾam  
   L H   L H  H  
   ‘human’  ‘human (nom.)’  ‘like human’

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In the third column in (5), the accent occurs on the initial syllable of the
suffix (i.e. the location of the pitch fall) regardless of whether the base is
underlyingly accented or unaccented. This is seen most clearly in the third
column of (5b) and contrasts with the second column in (5b) where the nominative
suffix is added. The pattern shown by the third column in (5) can be accounted
under the assumption that the suffix [+cə.ɾəm] is underlyingly accented (with
the tone pattern HL) and that two accents cannot appear in a single prosodic
word. With [kə.rim+cə.ɾəm] in (5a), the accent on the stem deletes when adjacent
to the suffix [+cə.ɾəm] resulting in the LHHL tone pattern for [kə.rim+cə.ɾəm].
This shows that the first accent deletes when there are accents on adjacent
syllables.2

Now consider the pattern of suffixation of the loanword [ti.rim] LH
‘dream’ in (6).

(6) Suffixal tone patterns for [ti.rim] ‘dream’

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ti.rim</td>
<td>ti.rim+i</td>
<td>ti.rim+cə.ɾəm</td>
</tr>
<tr>
<td>L H</td>
<td>L H L</td>
<td>L H L</td>
</tr>
<tr>
<td>‘dream’</td>
<td>‘dream (nom.)’</td>
<td>‘like a dream’</td>
</tr>
</tbody>
</table>

As seen in the third column in (6) the suffix [+cə.ɾəm] deaccents when it
is added to the loanword. This contrasts sharply with (5); the suffixing pattern
shown in (6) is a pattern that is only witnessed in loanwords.

Now let us consider the more complicated case of the suffixation pattern
with suffix [+cə.ɾəm] to the native monosyllabic forms shown in (3). In (7),
we show the tone pattern of the group in (3) with a third column added
showing the pattern associated with the suffixification of [+cə.ɾəm].

2 It should be noted that when two underlying accents in a SK word are not
adjacent, the second one deletes. This can be seen in the example [ki.rim] HL
‘oil’. When suffixed by [+cə.ɾəm] the resulting output is [ki. rim+cə.ɾəm]
HLLL ‘like oil’. Here the first accent cannot delete since the resulting output
would begin with a sequence of low tones, which is not allowed in SK.
(7) Suffixal tone Patterns of SK native monosyllabic words

<table>
<thead>
<tr>
<th></th>
<th>mal</th>
<th>mal+i</th>
<th>mal+SocketAddress</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>H</td>
<td>H</td>
<td>L H L</td>
</tr>
<tr>
<td></td>
<td>‘horse’</td>
<td>‘horse (nom.)’</td>
<td>‘like a horse’</td>
</tr>
<tr>
<td>B.</td>
<td>H</td>
<td>H H</td>
<td>H H L</td>
</tr>
<tr>
<td></td>
<td>measuring unit</td>
<td>measuring unit (nom.)</td>
<td>like measuring unit</td>
</tr>
<tr>
<td>C.</td>
<td>L</td>
<td>L H</td>
<td>L H H</td>
</tr>
<tr>
<td></td>
<td>‘language’</td>
<td>‘language (nom.)’</td>
<td>‘like language’</td>
</tr>
</tbody>
</table>

The only straightforward example in (7) is the form in (7b) where [+SocketAddress] is suffixed to unaccented [mal] H ‘measuring unit’. When the accented suffix [+SocketAddress] is added to the unaccented form in (7b) the accent of the whole word is on the suffix, just as we see for the unaccented word in (5b). The form [mal+SocketAddress] LHL ‘like a horse’ in (7a) reflects the deaccentuation of the first of two adjacent accents. This is what we saw in the third column in (5a), but, here in (7a), the deaccented syllable takes a low tone. In (5a), the deaccented stem syllable in [SocketAddress+SocketAddress] LHHL ‘like fertilizer’ cannot take a low tone since the resulting word would begin in a sequence of low tones, which is prohibited in SK. As for the example in (7c), [mal+SocketAddress] LHH ‘like language’ with the deaccentuation of the suffix, one can either view it as deaccentuation that is characteristic of monosyllabic words beginning with low tone or as a way of avoiding a potential homophony with the accented class of (7a) when [SocketAddress] is suffixed (e.g. [mal+SocketAddress] LHL ‘like a horse’). Regardless of the details of the explanation, the data in (7) show that native SK monosyllabic forms have three different conjugation patterns when suffixes are added depending on the tone and accent property of the base noun.
Now let us consider the conjugation pattern for monosyllabic loanwords. This is exemplified in (8) for the loanword [kʰəp] H ‘cup’ and is reflective of all monosyllabic loanwords.

(8) Suffixal tone patterns for [kʰəp] ‘cup’

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>kʰəp</td>
<td>kʰəp+i</td>
<td>kʰəp+cə.ɾəm</td>
</tr>
<tr>
<td>H</td>
<td>H L</td>
<td>H L</td>
</tr>
<tr>
<td>‘cup’</td>
<td>‘cup (nom.)’</td>
<td>‘like a cup’</td>
</tr>
</tbody>
</table>

As seen in the third column in (8) the suffix [+cə.ɾəm] deaccents when it is added to the loanword. This distinguishes the monosyllabic loanword from the three types of monosyllabic native words in (7), none of which show the patterns that we see with the loanword in (8). The conjugation pattern in (8), though, is exactly what we saw for the disyllabic loanword in (6). With suffixation onto loanwords, the suffixes always surface with low tone regardless of their independent accentual properties.

In this paper so far, we have made two observations regarding the properties of SK loanwords. First, as also noted by Kubozono (2007), SK loanwords are always accented. Second, suffixes attached to loanwords always take low tone regardless of their independent accentual properties. In the final part of this paper, we briefly speculate on the explanation for why SK loanwords have these properties.

One of the important observations about SK tonal patterning that has been noted by a variety of researchers is that SK words cannot begin with a sequence of two low tones. If the first syllable of the SK word has low tone then the second syllable must have high tone. However, if the first syllable of the word begins with a high tone then the second syllable can either have a high tone or a low tone. Based on this observation, Lee (2009) proposes that SK Korean witnesses a tone register system. Words that begin with low tone are in the low tone register class. Words that begin with high tone are either in the high tone register class (if the following syllable has high tone) or they have initial accent (if the following syllable has low tone).
It is a lexical property of individual SK words as to which class they belong. These three classes are manifested by the monosyllabic triplet in (7) whereby [mal] L ‘language’ is unaccented in the low tone register class, [mal] H ‘measuring unit’ is unaccented in the high tone register class, and [mal] H ‘horse’ is initially accented (and thus does not belong to a register class). Given this and their pattern of suffixation, I propose here that the difference between an accented word and an unaccented word in SK is that accented words are required to have foot structure whereas unaccented words do not have foot structure. Thus, given the data in (7), [mal] ‘horse’ surfaces with foot structure while [mal] ‘measuring unit’ and [mal] ‘language’ do not have foot structure. If one considers the middle column in (7), [mal+i] HL ‘horse (nom.)’ would have a trochaic foot where the high tone is associated with the head of the foot (i.e. the initial syllable of the foot in a trochaic system) and the low tone with the nonhead syllable. On the other hand, neither [mal+i] HH ‘measuring unit (nom.)’ nor [mal+i] LH ‘language (nom.)’ manifest foot structure. This difference in foot structure also occurs in (5) where [kɔ.ri.m+i] LHL ‘fertilizer (nom.)’ in (5a) has a trochaic foot over the last two syllables where the head of the foot has high tone, but no such foot structure occurs with [saram+i] LHH ‘human (nom.)’ in (5b). The claim made here is that the trochaic foot is a syllable trochee that is not quantity sensitive and that any SK native word that is accented surfaces with this foot structure; the foot-head has high tone and the nonhead has low tone. The lack of quantity-sensitivity of the foot can be seen in final accented words like [kɔ.rim] ‘fertilizer’ and [na.mu] ‘tree’\(^3\). Both these words are final-accented but there should be a difference if the system were quantity sensitive. Moreover, SK no longer has distinctive vowel length. This is consistent with quantity insensitivity and is a characteristic that distinguishes SK from North

\(^3\) These examples show that the trochaic foot can be degenerate. For example, final accented [na.mu] LH ‘tree’ would have a degenerate foot over the final syllable when unsuffixed, but would have a proper trochaic foot over the last two syllables in [na.mu+ka] LHL ‘tree (nom.)’ when followed by an unaccented suffix.
Kyungsang Korean, which preserves vowel length.

Given that we have suggested that accented native words have quantity-insensitive trochaic feet (i.e. syllabic trochees using the terminology of Hayes 1995), how do we account for the observation that loanwords are always accented and have suffixes that always surface with low tone regardless of their underlying accentual properties. A good part of the explanation for this has been put forward by Kubozono (2007) who argues quite persuasively on acoustic evidence that loanwords are sensitive to the mora instead of the syllable. While Kubozono does not discuss the loanword conjugation pattern that we see in (6) and (8), the mora sensitivity of loanwords can account for the pattern. Kubozono notes that loanwords like [ti.rim] LH ‘dream’ in (6) and [kʰap] H ‘dream’ in (8) that have accent on the final syllable always have a bimoraic final syllable. Moreover, phonetically they have a falling tone on the final syllable. That is, the final syllables in these loanwords are really HL and not H. If they are HL, then the suffixal tone patterns in (6) and (8) Where suffixes always surface with low tone are easily explained. For example, the hypothetical underlying tone pattern for [kʰap+cə.rom] ‘like a cup’ in (8) would be HL+HL. Here, the initial H tone has to remain on the stem or else the word would begin with a sequence of low tones. This is quite different from [mal+cə.rom] ‘like a horse’in (7a) which has the underlying tone pattern HHL with adjacent accents. Here the first syllable deaccents. The fact that [mal] is bimoraic is irrelevant since the foot over the accented word [mal] ‘horse’ is not a bimoraic trochaic foot (it is a syllable trochee), whereas the foot structure in [kʰap] ‘cup’ is mora-sensitive.4

While Kubozono (2007) makes the correct observation that loanwords in SK are always accented and are mora-sensitive, he does not offer an explanation for the difference other than to suggest that loanwords might reflect a default trochaic structure that may be witnessed elsewhere in the

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4 As a side point, when said in isolation or in phrase-final position both [mal] ‘horse’ and [kʰap] ‘cup’ would have falling tone. However, this is clearly a phonetic effect only with native words like [mal] ‘horse’ (see, in particular Chang 2007:6), but has been phonologized on loanwords like [kʰap] ‘cup’.

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language. Still, if loanwords reflect default trochaic structure, why is it that the trochaic structure in loanwords is quantity sensitive but not in native words. We now turn to a consideration of this issue.

Given that SK words have a register tone system in which the first syllable of a word (if unaccented) is arbitrarily assigned to the low tone or high tone register class, the issue immediately arises with loanwords as to how to assign them to a register class. What strategy does SK use to assign initial register tone to a loanword? It should be pointed out that in native SK words, it is unpredictable as to whether a word has an initial H tone register or an initial L tone register. For example, register assignment is not based on the quality of the first segment in the word, the nature of the vowel, or factors like syllable weight. This issue of assigning loanwords to a register class has been recently discussed by Kenstowicz and Hsieh (2008) for Lhassa Tibetan, which has a register system where initial syllables must be either assigned high tone or low tone. While with native Tibetan words the assignment of initial register tone is an unpredictable lexical property, Kenstowicz and Hsieh (2008) show that both Mandarin and English loanwords into Tibetan are predictably assigned to a register class based on the laryngeal features of the initial consonant (regardless of the tone or stress properties of the source word). Essentially, source words beginning with voiceless (aspirated) consonants are borrowed with initial high tone into Tibetan; other source words are borrowed with initial low tone. It is interesting that SK Korean does not adopt a similar strategy in assigning loanwords to a tone register class, given that phonetically it is known that aspirated stops in Korean is correlated with somewhat higher pitch on a following vowel as compared to lax consonants (see, for example, Jun 1993 among others). Rather, as shown in detail by Lee (2009), SK Korean assigns loanwords to register class based on the weight of the initial syllable. If the initial syllable is heavy, it is assigned a high tone. If the initial syllable is light, it is assigned a low tone and the following syllable must have a high tone (in order to avoid a word beginning with a sequence of low tones). This is exemplified by the examples in (9).

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(9) Tone patterns on SK loanwords

a. kol.pʰi   HL    ‘golf’
b. rep.so.ti  HHL  ‘rhapsody’
c. ti.rim    LH(L) ‘dream’
d. a.me.ri.ka LHHL ‘America’
(e. mupi     HL    ‘movie’)

The examples in (9) illustrate the primary way of tonal assignment on loanwords. As mentioned, if the first syllable is heavy it is assigned a high tone; if it is light it is assigned a low tone. All following syllables are assigned a high tone, except the last mora always has to have low tone. This is what (9) illustrates. The data item in (9e) makes clear that low tone always has to go on the last mora. The data item in (9c) has a falling tone (HL) on the final syllable, which is bimoraic.

What should be apparent about the assignment of initial tone on loanwords like in (9), and as detailed by Lee (2009), is that it reflects an initial iambic system. In an iambic system, an initial heavy syllable would constitute a foot on its own, but an initial light syllable followed by another syllable would constitute a right-headed foot (Hayes 1995). For the loanwords in (9), an iambic foot is assigned at the beginning of the word with the head of the foot associated with high tone. In (9a-b) there is a foot over the initial heavy syllable; it is assigned high tone since it is the head of the foot. In (9c-d), there is an iambic foot over the first two syllables; the second syllable is assigned high tone since it is the head of the iambic foot while the first syllable is assigned low tone since it is a non-head. In Lee’s (2009) analysis, the high tone that is the head of the iambic foot then spreads rightward in the word to all but the last mora. This high tone spreading is seen in (9b) where the H tone spreads from the initial syllable onto the penultimate syllable in [rep.so.ti] HHL ‘rhapsody’ and in (9d) where it spreads from the second syllable onto the penultimate syllable in [a.me.ri.ka] LHHL ‘America’.

The analysis of initial register in loanwords based on the assignment
of an initial iambic foot provides us with an explanation for why loanwords are always accented. They are accented because they are required to have foot structure. This is consistent with our earlier claim that the difference between accented and unaccented native words is that accented native words have foot structure, but unaccented words do not. In native words, though, the foot is trochaic and the foot head is associated with the accented syllable. This is not the case with loanwords. An initial iambic foot is required on loanwords to account for the assignment of tone register. The accented syllable in loanwords, though, just as in native words, is the syllable that has a high tone immediately before the pitch fall. This does not have to correspond to the head of the foot in loanwords. In (9b) and (9d) the accented syllable is the penultimate syllable, which does not correspond to the head of the iambic foot, although in the other examples in (9) the accented syllable is the head of the (iambic) foot. It should be noted, though, that because of the nature of the tone spreading from the H tone of the iambic foot, the accented syllable in loanwords would always be the one containing the penultimate mora. This is the case of all the examples in (9) and is consistent with Kubozono’s (2007) observation that loanwords have accent on the penultimate mora. However, the claim I make for why loanwords in SK must be accented is somewhat different than Kubozono’s (2007). He claims that loanwords are accented because they reflect a default trochaic system that emerges in loanwords, but hidden by the system of lexical accentuation in the language. My claim is that loanwords are accented because they are required to have foot structure. In a sense, the two claims are not incompatible. Given that the loanwords are required to have foot structure, we see the emergence of the unmarked pattern of penultimate accentuation; however, on the view here, the penultimate accentuation on loanwords is not a reflection of trochaic foot structure.

One further observation under my proposal that loanwords have an initial iambic foot while accented native words have a syllable trochee, is that the difference between mora-sensitivity of loanwords and the lack of mora-sensitivity of native words is readily understood as a consequence of the
two different types of foot structures. Iambic foot structure is inherently mora sensitive (see, in particular, Kager 1993 on this point) while syllable trochees are not. Thus, we observe the different conjugation pattern in loanwords (as opposed to native words as contrasted in (8) and (7)) reflects the mora as a domain for tonal assignment, whereas it is the syllable that is the domain for tonal assignment in native words. (This point is also made by Lee 2009.)

As a final matter of concern, we must ask why SK uses a strategy of syllable weight to assign an initial register to loanwords (i.e. H tone to initial heavy syllables, L tone to initial light syllables) and not some other strategy such as one based on the nature of the word initial segment, as in Lhasa Tibetan, and which would have a phonetic base in SK. We suggest that since there is already a correlation in the language between H tone and the head of the foot with accented words, the strategy of foot assignment is used to assign register at the beginning of the word where H tone will be associated with the head of the foot. With such a strategy, the foot structure could only be iambic. An initial trochaic foot would always put H tone on the first syllable. An iambic foot would put the H tone sometimes on the first syllable and sometimes on the second. Iambic feet are inherently quantity-sensitive, thus the SK initial register system on loanwords is quantity-sensitive. But this initial iambic foot is not an accentual foot; it is a strategy that the language uses to assign the initial register tone. The penultimate accent on loanwords may indeed reflect an unmarked accentuation pattern as suggested by Kubozono (2007), but under the analysis here, it would not reflect a trochaic foot structure on loanwords.

In this paper, inspired by work of Sang-Oak Lee, I have offered speculations as to why loanwords are accented in South Kyungsang Korean. We suggest that they are accented because they are required to have foot structure, and that foot structure is a property of accented words in SK, as opposed to unaccented words in SK which do not have foot structure. However, the foot structure is different between native SK words and loanwords. In native SK accented words, the foot is a trochaic accentual foot that is not quantity-sensitive (i.e. it is not sensitive to mora structure), whereas in loanwords,
the foot is not accentual, but is required for the assignment of the initial tone register; the foot on loanwords is iambic, assigned from the left edge of the word. As is typical of iambic feet, it is sensitive to mora structure.

The discussion in this paper for the most part does not apply to North Kyungsang Korean since that dialect does not have an initial tone register system like SK. Nonetheless, the perspective here that loanwords must have foot structure is probably relevant for NK Korean as well. One important observation about loanwords in the NK dialect is that monosyllabic loanwords in NK always have high tone with low tone on any following suffix. Monosyllabic loanwords are never borrowed into the double H class in NK where a monosyllabic word with H tone also has H tone on the suffix. If we analyze the double H monosyllabic class of NK as being accentless without foot structure, then we have an explanation for why loanwords are never borrowed into that class. As shown by works on NK loanwords such as Kenstowicz and Sohn (2001), NK loanwords are always borrowed with trochaic foot structure. If monosyllabic double H words in SK do not have foot structure, then loanwords cannot fall into that class. We leave this and other related matters on the loanword tonology of the Kyungsang dialects to future research.

References:


McCawley, James (1970) Some tonal systems that come close to being pitch accent systems but don’t quite make it. *Papers from the Sixth Regional Meeting of the Chicago Linguistics Society*: 526-532.