

The Korean Syllable And Moraic Theory

In this paper, I investigate the composition of the Korean syllable with respect to the phonology of moras established by Hayes (1989), by focusing on the phenomena of coda obstruent neutralization, as shown in (1), and post-obstruent tensing, illustrated in (2). I will compare this view with that set up by Ahn & Iverson (2004) and show that moraic theory is advantageous, not only in explaining these mechanisms, but also in pointing to a generalization where the two processes are connected.

As has been well-documented, Korean presents a three-way obstruent system, contrasting [lax], [aspirated], and [tense], as shown in (3). The lax series is voiceless and moderately aspirated word-initially and voiced intervocalically. The aspirated series is also voiceless, heavily aspirated word-initially and moderately aspirated word medially. The tense series, however, is never aspirated, which suggests that it must be structurally different from the “lenition-friendly” lax and aspirated series. Also, no clusters are allowed at the onset in Korean, except geminates, which leads both Avery & Idsardy (2001) and Ahn & Iverson to posit that these tense consonants are geminate versions of the lax consonants.

Coda obstruent neutralization involves the change of the aspirated and tense series into an equivalent member in the lax series, when unreleased. I will follow Ahn & Iverson in that they argue that the aspirated and tense series share some characteristics, and propose that what these two series have in common is that they must neutralize in order to acquire a mora in the coda position, in specific environments where they are unreleased (i.e. before a consonant, word-finally, etc). In this way, only /p/, /t/, and /k/ trigger Weight by Position, due to what one could assume to be a language-specific requirement. Thus, /nat^h/ ‘piece, unit’ would exhibit the structures in (4).

This representation is crucial in order to explain post-obstruent tensing, whereby a lax segment ‘geminates’ after [-son][-cont]. This process is easily accounted for by resorting to our Weight by Position hypothesis. Because the lax consonants are not able to keep their acquired mora in environments other than those specified above, this mora gets re-assigned to the following segment. Remarkably, this creates an unpredicted moraic onset. Nevertheless, one could suppose that the languages that permit a geminate onset (Davis (1999), Abramson (1992)) would have to resort to a similar moraic structure, which -though marked- is required under this assumption. In this way, after the neutralization of /c/ into [t], the word /mac-su/ ‘rivalry’ goes through the process laid out in (5).

I conclude that the moraic account of gemination is more appealing than Ahn & Iverson’s, in that the latter theory is not convincing in two respects. The way they explain post-obstruent tensing first errs in resorting to parasitic gemination and linking a C slot to two different roots –which in addition present different laryngeal specifications (viz. constricted and neutral). Second, their representation implies that the timing of the utterance does not change (there are only two C-slots, one for the coda obstruent and one for the onset tense obstruent) thus ignoring the length difference they associate with the tense series to begin with.

To sum up, Hayes’ framework serves us well in deciphering the workings of coda obstruent neutralization and post-obstruent tensing, and in some respects presents a more plausible picture of these processes than Ahn & Iverson do. Also, the moraic account honors the similarities between these processes, in that it imparts a special quality to the Korean [-son][-cont] group: it triggers both Weight by Position and tensing of the following obstruent.

(1) Coda ostruent neutralization

/p^h p'/ → [p]
 /t^h t' c^h c' s s' h/ → [t]
 /k^h k'/ → [k]

(2) Post-obstruent tensing

pak sa [paks'a] 'doctor'
 pak ca [paks'a] 'rhythm'
 mac su [mats'u] 'rivalry'

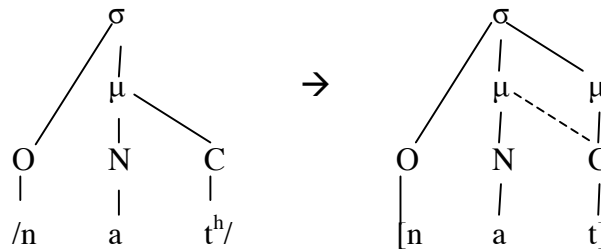
(3) Three-way obstruent system

[tal]	'moon'	[pul]	'fire'	[kin]*	'weight unit'
[t ^h al]	'mask'	[p ^h ul]	'grass'	[k ^h in]*	'large'
[t'al]	'daughter'	[p'ul]	'horn'	[k'in]*	'rope'

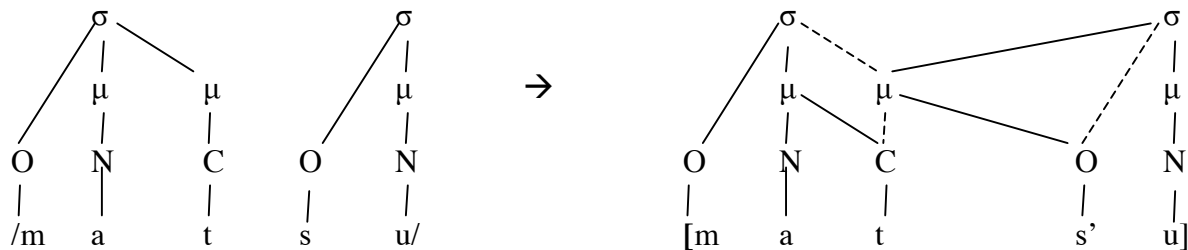
* [i] is used in place of the high mid unrounded vowel.

Ahn & Iverson (2004)

(4)



(5)



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