Appendix E

Description of the excluded disharmonic forms containing non-initial /a/ in Section 5.4

(a) Two forms were listed as mistakes of a harmonic form and of an echo formation with a syllabic change in the dictionary (1).

(1) *mullak-mullak*   a mistake of *mulləŋ-mulləŋ* 'squashy'

   əp'ak-cəp'ak   a mistake of *əp'ak-cap'ak* 'irregulary'

(b) Twenty-seven forms could have been affected by the /ə/∼/o/ merger in North Korean dialects. As mentioned in Section 4.1, dark /ə/ is merging (or has merged) with light /o/ in North Korean (Kwak, 2003). If this synchronic merger is taken into account, North Korean forms that appeared in the sequences of #ə_a and #ə_a_a in the dataset could be considered harmonic. There were 31 forms displaying the sequences of interest and of those, 27 forms were labeled as North Korean and so eliminated. As for the /ɛ/∼/e/merger in South Korean, none of the disharmonic forms containing non-initial /a/appeared in vowel sequences that could be affected by the merger, and so none were eliminated for this reason.

(c) Four forms were not listed in the dictionary. Upon a search of their natural use in Kaist Concordance Program, it was found that none of them occurred in natural data.

(d) Two forms had meanings that are not sound-symbolic, as shown in (2).

(2) *mitʰa-mitʰa*   'suspicious'

   kɨmpaŋ-kɨmpaŋ   'soon'

For partial reduplication, there were 33 forms containing sequences that appeared to exhibit partial reduplication (i.e., #e_a_a, #ə_a_a, #i_a_a, #i_i_a, #ɨ_ɨ_a, and #u_a_a). Of those, all of 15 forms that appeared in the sequences #ə_a_a and #ɨ_ɨ_a had been eliminated previously, as they were the potential target of the /ə/~/o/ merger, or because they had no entries in the dictionary. In the sequences #e_a_a , #i_a_a, and #i_i_a, all of the occurring 11 forms instantiated suffixation and therefore they did not undergo elimination. Lastly, as shown in (3), the remaining seven forms that appeared in the sequence #u_a_a instantiated partial reduplication, but none of their unreduplicated base forms including *pʰutak-pʰutak* were listed in the dataset. This indicated that the information about vowel harmony that they provide did not duplicate with any other forms and so they were kept.

(3)

Base		Partial reduplication	
kʰuŋt'ak(-kʰuŋt'ak)	N/A	kʰuŋtakt'ak(-kʰuŋtakt'ak) (NK)	'sound of a small drum'
pʰutak(-pʰutak) (NK)	'flappings of the wings'	pʰutatak(-pʰutatak)	'rapid flappings of the wings'
utak(-utak)	N/A	utatak(-utatak) (NK)	'sudden burst'
utak(-utak)	N/A	utaktak(-utaktak) (NK)	'running suddenly'
utʰaŋ(-utʰaŋ)	N/A	utaŋtʰaŋ(-utaŋtʰaŋ)	'with a thud'
hutak(-hutak)	N/A	hutatak(-hutatak)	'running rapidly'
hutak(-hutak)	N/A	hutaktak(-hutaktak)	'running suddenly'

Reference

Kwak, C.-K. (2003). Hyentaykwukeuy moumcheykyewa ku pyenhwauy panghyang [The vowel system of contemporary Korean and direction of change]. *Kuwkehak [Korean Linguistics], 41*, 59-91.