Prosodic structuring generally involves dual functions, prosodic phrasing and prominence marking, and is often discussed under the rubric of ‘prosodic strengthening’ that refers to a spatial and/or a temporal expansion of articulation of gestures at a prosodic boundary or under prominence (accent/focus) [1,2,3]. The detailed phonetic implementation of prosodic strengthening, however, may vary depending on the source of strengthening (boundary vs. prominence), and on individual languages [4,5,6,7]. Our understanding of prosodic strengthening is still in embryonic stage, and research on prosodic strengthening has been skewed towards Indo-European languages. The present study therefore continues to explore articulatory reflexes of prosodic strengthening in Korean and compare the results with those of English in an effort to understand how languages may differ in the way prosodic strengthening is phonetically realized.

Two different articulatory data sets (obtained with an EMA, Electromagnetic Articulography) have been examined: (1) the tongue movement data in V#V (/a/-to-/i/, with 6 speakers of Seoul Korean) and (2) the lip closing and opening movement data in V#CV (/a/- C-/a/, ‘C’ = bilabial stops, with 5 speakers of Seoul Korean). The target sequences were embedded in a carrier sentence; the prosodic boundary (‘#’) was either an Intonational Phrase or a Word boundary; and for the tongue movement, the test word was either accented or unaccented.

Results are summarized as follows. First, the tongue movement at an IP boundary is larger, longer, and faster, which is largely comparable to the prominence effect. Second, as for the boundary (domain-initial) strengthening of bilabial stops, the (consonantal) lip closing movement is larger, longer and slower, but the (vocalic) lip opening movement is larger and faster. These boundary strengthening patterns in Korean are different from those in English: the trans-boundary tongue movement is slower in English, but faster in Korean; and the lip opening gesture is slower in English, but faster/larger in Korean [8,9,10].

The results therefore demonstrate some degree of inseparability of boundary- versus prominence-driven strengthening in Korean, which is remarkably different from prosodic strengthening patterns observed in English. The cross-linguistic difference is interpreted as stemming from different prosodic systems of the languages. With no functional demands that may come from the lexical stress system, Korean appears to have more freedom to strengthen articulation at prosodic junctures in a way that is comparable to prominence marking. This is consistent with the observation that focus marking in Korean is more likely accompanied by prosodic phrasing headed by the focused word in the domain-initial position [cf. 11,12]. We therefore propose that prominence marking is modulated by boundary marking in Korean, in such a way that domain-initial strengthening is accompanied by some degree of prominence. The results will be also discussed in terms of their implications regarding how dynamical theories [e.g.13,14,15] may account for the extent to which articulatory variation due to prosodic strengthening is cross-linguistically applicable versus language-specifically attuned.
References  (The author can choose the format of the reference list as long as it is consistent.)


Instruction: The abstract must be submitted as a one-sided, single-spaced page, 1-inch margins all around, and in Times 12 point font. Submit your file BOTH as a WORD (.doc) format AND a .PDF format and embed the special fonts into the document. The content can be whatever combination of text, figures, tables, and examples. References can be optionally given on the 2nd page. You can also cite references either by using [1, 2, 3…] as in this sample or by directly citing them (e.g., “Ladefoged (2001)”, “Chomsky (2015)”). Please send the abstract files (two files) to ickorling@gmail.com. The file name should include the first author’s [Last Name]_[First Name]_[Subfield] as in “Tom_Peterson_Phonetics.pdf.”