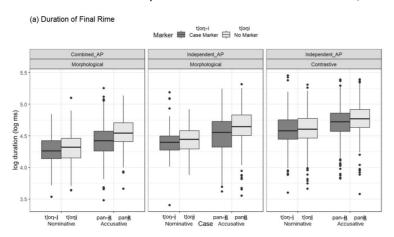
Prosodic case-marking in the absence of morphological case markers in Korean

Richard Hatcher¹, Sahyang Kim^{1,2}, Taehong Cho¹

¹Hanyang Institute of Phonetics and Cognitive Science of Language, Hanyang University, ²Hongik University Introduction: Korean's morphological system richly employs particles for grammatical functions, including case marking [1]. However, casual speech often sees the omission of these markers, leaving a potential gap in signaling grammatical roles. This study hypothesizes that prosody—through tone-segment alignment, magnitude of fundamental frequency (F0) extrema, and durational patterns—compensates for this absence, thus maintaining the morphosyntactic structure intact [2], [3], [4].

Methods: Utilizing speech data from 21 native Korean speakers, this investigation contrasts segmentally neutralized noun phrases with and without nominative or accusative markers in varied focus conditions. Participants were presented with 16 pairs of test words, embedded in sentences under two focus conditions: broad and corrective. To aid in elicitation and ensure clarity of context, each test word was accompanied by a visual representation of its meaning. The study initially analyzed a total of 4,032 tokens, derived from 21 speakers who each produced 16 pairs of words, differentiated by two morphological structures, across two focus contexts, and repeated three times; however, only 3,909 tokens were ultimately used for analysis after excluding those containing speech errors.

Results: The findings reveal significant prosodic differentiation between cases, with prosodic cues modifying both the temporal and tonal dimensions of speech to signal case roles. The influence of morphological structure on the duration of the final rime interacts with focus type, where, despite corrective focus exhibiting longer overall durations, the effect of morphological structure is noticeably diminished. Similarly, the effect was stronger for targets in the accusative case where the case marker consists of two segments, *=il*. In regard to f0, words with case markers exhibited overall higher contours and in some cases a later peak, highlighting a prosodic distinction tied to morphological marking. As with duration, the effect of morphological structure was attenuated but retained significance under corrective focus. The study reveals Korean's adept use of prosody to signal grammatical roles when morphological markers are absent, with these distinctions most pronounced in broad focus contexts, ensuring clear and effective communication.



- [1] H. M. Sohn, *The Korean language*, Reprinted, 1. paperback ed. in Cambridge language surveys. Cambridge: Cambridge Univ. Press, 2001.
- [2] S. Shattuck-Hufnagel and A. E. Turk, "A prosody tutorial for investigators of auditory sentence processing," J. Psycholinguist. Res., vol. 25, no. 2, pp. 193–247, 1996.
- [3] I. Feldhausen, "The prosody-syntax interface in Catalan," University of Pottsdam, 2008. Accessed: Jan. 15, 2024.
- [4] P. Strycharczuk, "Phonetic Detail and Phonetic Gradience in Morphological Processes," in Oxford Research Encyclopedia of Linguistics, 2019. doi: 10.1093/acrefore/9780199384655.013.616.

