

Harvard Linguistics Colloquium

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Location: Emerson 305 and Zoom

Title: The phonetic details of word-level prosodic structure: evidence from Hawaiian

Abstract: Previous research has shown that the segmental and phonetic realization of consonants can be sensitive to word-internal prosodic and metrical boundaries (e.g., Vaysman 2009, Bennett 2018, Shaw 2007). At the same time, other work has shown that prosodic prominence, such as stressed or accented syllables, has a separate effect on phonetic implementation (e.g. Cho and Keating 2009, Garellek 2014, Katsika and Tsai 2021). This talk focuses on the word-level factors affecting glottal and oral stops in Hawaiian. We first investigate whether word-internal prosodic or metrical factors, or prosodic prominence such as stressed syllables account for the realization of glottal stop, and then we extend the same analysis to the realization of voice onset time (VOT) in oral stops. Data comes from the 1970s-80s radio program Ka Leo Hawai'i. Using a variant of Parker Jones' (2010) computational prosodic grammar, stops were automatically coded for (lexical) word position, syllable stress, syllable weight, and Prosodic Word position. Results show that word-internal metrical structures do condition phonetic realization, but prosodic prominence does not for either kind of stop. Rather, what is often taken to be the "stronger" articulations (i.e. full closure in glottal stops and longer VOT in oral stops) are instead associated with word-internal boundaries or other prosodically weak positions, which may reflect the recruitment of phonetic correlates to disambiguate or enhance potentially less perceptible elements in Hawaiian. (Work in collaboration with 'Ōiwi Parker Jones)