

American Norwegian tonal accents and English stress in contact

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This presentation examines pitch in Norwegian and English stressed syllables among present-day American Norwegian (AmNo) heritage language (HL) bilinguals. Norwegian contrasts two types of stressed syllables based on pitch contours over a trochaic foot, which normally correspond to monosyllabic and disyllabic roots. In Eastern Norwegian, an Accent 1 trochee consists of an LH contour, whereas an Accent 2 trochee is HLH (Kristoffersen 2000). These are distinct from how pitch is used in English stress, typically occurring as an HL foot (e.g., Thomas 2011:194). Polinsky (2018:120) hypothesizes that prosody is an important characteristic that distinguishes HL speakers from baseline groups, so prosodic patterns are extremely valuable for understanding HL speech. Although there are some impressionistic descriptions—Haugen (1969) mentions tonal accents in English loanwords and Moen (1991) discusses the intonation of AmNo-English bilinguals' English—there has been no empirical study of Norwegian tonal accents in contact with English stress. Accordingly, the AmNo case, where pitch is associated with a contrast, illuminates unexplored interactions between (socio)phonetics and phonology (Natvig 2019, 2021) in an HL context.

Data used in this study are a collection of bilingual interviews conducted in 2018 with four AmNo speakers from the Westby/Coon Valley area in Vernon County, Wisconsin. These individuals speak rural Eastern Norwegian varieties (Haugen 1969; Hjelde 2015), which are consistent with the tonal accent system described in Kristoffersen (2000). Words with primary stress in Norwegian and English are manually marked in Praat (Boersma & Weenink 2022), and pitch listings are extracted from each member of the trochee. Tokens are annotated for prosodic position—pre-focus, focus, or post-focus—to account for any potential phrase-level prosodic effects, particularly for Norwegian post-focus words that decline in pitch until the end of the phrase (Kristoffersen 2000:284). Finally, the pitch contours are compared qualitatively for expected language-specific patterns within and across speakers. These include whether there is evidence of Norwegian Accent 1 and Accent 2 contrasts, and the extent expected Accent 1 (LH), Accent 2 (HLH), and English (HL) trochees are produced.

Preliminary results from one speaker are consistent with the retention of the accent contrast for expected forms and all three types of stressed syllable pitches (Figure 1). In ¹*dag-en* 'the day' the trochee consisting of stressed [ɑ:] and unstressed [n] has an LH contour. However, ²*heime* '(at) home', is produced with HL on the stressed vowel [ɛɪ] and H on [ə]. In contrast, both English words, *later* and *whatever*, have higher pitches in the stressed vowels than the subsequent unstressed ones. Additional data from this speaker, as well as from the three additional speakers, will shed light on how consistent these pitch distinctions are within and across participants, as well as in various prosodic positions. In analyzing these results, we test the hypothesis that HL phonological structures are relatively stable (Polinsky 2018:115), and examine the extent to which maintained prosodic contrasts may be expressed with phonetic influences from the majority language (Chang & Yao 2016; Chang 2019).

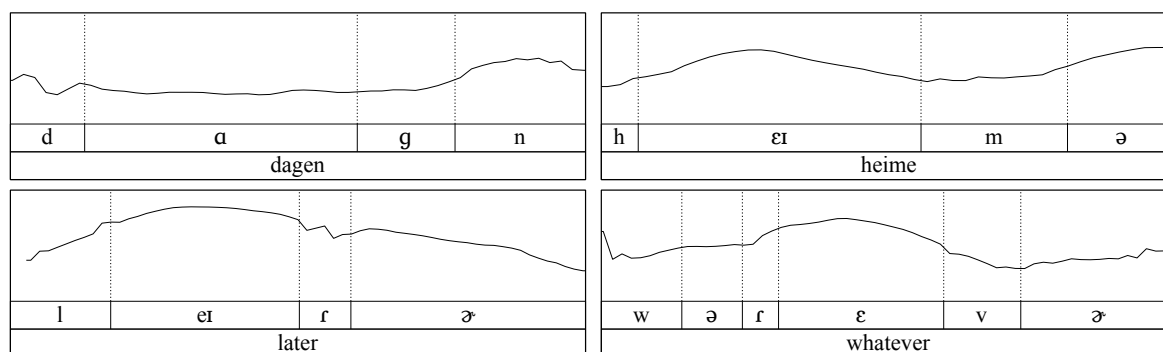


Figure 1. Pitch tracks (visible range between 100Hz and 200Hz) for stressed syllables in Norwegian ¹*dagen* ‘the day’, ²*heime* ‘(at) home’, and English *later* and *whatever*.

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