SONG AND WORD-LEVEL STRESS CONFLICTS IN ESTONIAN REGILAUL

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I don't use folksongs, rather, folksongs use me -Veljo Tormis

1. RESULTS

1.1. peripheral vowels /i,a,u/ vowel space area.

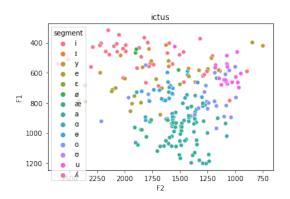


FIGURE 1. f1 and f2 (Hz) values in ictus position

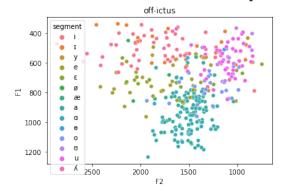


FIGURE 2. f1 and f2 (Hz) values in off-ictus position

1.2. Vowel Space in Ictus and off-Ictus positions.

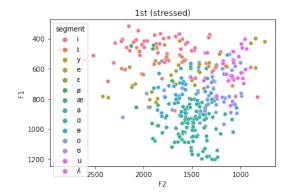


FIGURE 3. f1 and f2 (Hz) in stressed vowels

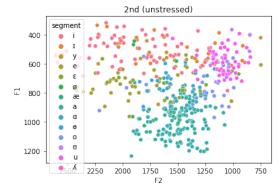


FIGURE 4. f1 and f2 (Hz) in unstressed vowels

- 1.3. Vowel Space in stressed and unstressed syllables.
- 1.4. ictus-stress conflicts. Vowel plots for each condition can be seen in ?? below:
- 1.5. **spectral tilt.** NB: changes to be implemented in this section will first describe the measurements in the musical meter context (ictus/off-ictus), then the word-stress context, and finally compare all four conditions across each other (which is what is included below, though it is quite confusing and difficult to read.)

Significant results are seen for both word stress (syllable) and ictus (position), as can be seen in the following table: We see significant results between ictus and off-ictus positions, as expected. First syllables in ictus and off-ictus position exhibit a signifiant (p=0.0698452) difference in constriction, preserving the song position's dominion over prominence. However, we see first syllables in off-ictus position show a significant decrease in h1-h2 compared to second syllables in off-ictus position, evidence of more glottal constriction for initial (stressed) syllables.

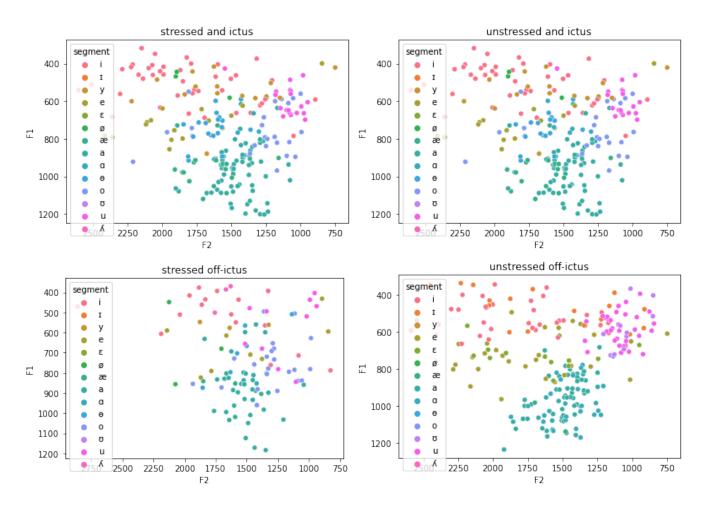


FIGURE 5. Left to right: first and second syllable vowels, respectively. Top row is ictus position, bottom row is off-ictus position.

TABLE 1. Tukey multiple comparisons of means 95% family-wise confidence level Fit: $aov(formula = h1.h2\ position * syllable,\ data = tilt.data)$

	diff	lwr	upr	p adj
positions: off-ictus	12.37437	3.673399	21.07534	0.0053693
syllables :2nd-1st	-8.136296	-16.93409	0.6614939	0.0698452
position*syllable interaction				
off:1-ictus:1	24.577556	8.688246	40.4668658	0.0004325
ictus:2-ictus:1	3.086197	-16.618579	22.7909725	0.9778216
off:2-ictus:1	5.978019	-7.736755	19.6927934	0.6759446
ictus:2-off:1	-21.491359	-43.159486	0.1767675	0.0528343
off:2-off:1	-18.599537	-35.010647	-2.1884259	0.0189653
off:2-ictus:2	2.891822	-17.236083	23.0197277	0.9827156