Neutralisation of ±tense opposition in Standard Austrian German

Conceição Cunha

This study investigates the contrast of tense and lax vowels in Standard German (SG) and in Standard Austrian German (SAG), based on previous research suggesting an approximation of SAG lax vowels towards their tense counterparts. The main question to answer is, whether the lax vowel space is vertically expanded in SAG compared with SG, and the quality contrast in [±tense] more reduced and phonetically less marked in SAG than in SG. In order to test this, physiological movement data of tense and lax vowels from seven SG und eight SAG speakers were analyzed. We measured the Euclidean distance between [±tense] vowel pairs in a PCA-transformed space extracted at the acoustically temporal midpoint of the vowels.

The results show smaller Euclidean distances in high vowels pairs /i-ı, y-v, u- σ / and low vowels /a:-a/ velocities of the tongue's vertical movement in SAG and SG, resulting from greater differences between [±tense] vowels in SG than in SAG. The tentative conclusion from these results is that phonetic height reduction may have been phonologized to a much greater extent in Standard German than in Standard Austrian.