

4pSC6. Intrinsic pitch in German: A puzzle? Christine Mooshammer^a (Res. Ctr. of General Linguist., Jägerstr. 10/11, 10117 Berlin, Germany, timo@zas.gwz-berlin.de), Phil Hoole (Inst. für Phonetik, München, Germany), Peter Alfonso (Office of Res., Knoxville, TN 37996-0140), and Susanne Fuchs^b (Res. Ctr. of General Linguist., Germany)

Intrinsic pitch (F0) differences have often been attributed to a physiological consequence of articulation, i.e. higher tongue-jaw position yields higher F0. However, Fischer-Jørgensen showed that German tense-lax pairs are produced with a similar F0 despite the lower tongue positions of lax vowels. She also found better agreement between F0 and jaw position than for tongue height. The first aim of this study was to replicate Fischer-Jørgensen's study using EMMA (seven speakers). Second, the contribution of jaw position on F0 was examined by a bite-block condition (three speakers). The results of Fischer-Jørgensen were confirmed concerning similar F0 of tense-lax pairs, where the jaw rather than the tongue better correlated with F0, because jaw position differences between tense-lax vowel pairs were smaller than the tongue position differences. However, it seemed unlikely that this could be any kind of causal explanation, because frequent cases were found of somewhat higher F0 in the lax member of a pair, despite somewhat lower jaw position, and because of the fact that the same patterns of F0 differences were found for the bite-block and normal condition. ^a Currently at Dept. of Audiol. and Speech, University of Tennessee, Knoxville, TN. ^b Also at Queen Margaret Univ. College, Edinburgh.