

ACOUSTICS2008/2007
Articulatory coordination in German and English onset and coda clusters

Marianne Pouplier and Stefania Marin
Institute of Phonetics and Speech Processing, University of Munich, 80799 Munich, Germany

Articulatorily, onset consonants differ from coda consonants in their spatial as well as their temporal characteristics in that onsets exhibit greater spatial displacement and are generally less variable than codas. As to their temporal organization, it has been claimed that onsets, but not codas exhibit a so-called *c*-center organization in which all consonant gestures of a cluster are organized as a single complex structure with respect to the vowel, while consonant clusters in codas have been hypothesized to be organized sequentially [Browman & Goldstein 1988 *Phonetica*]. While some studies have confirmed the *c*-center hypothesis for onsets but not codas, others found a *c*-center organization for both onset and coda consonants. The current study uses German and English onset and coda clusters to test systematically the *c*-center hypothesis on the basis of EMA data. Results for both languages indicate that a *c*-center organization may be observed in both onset and coda position, yet it does not appear consistently for all clusters. Also cross word-boundary clusters may exhibit *c*-center organization, possibly indicating resyllabification.