

ACOUSTICS2008/3056**Word-initial voiceless geminate stops: production and perception**

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Quantity contrasts (i.e. singleton vs. geminate consonants, short vs. long vowels) are common in the languages of the world. Yet, most singleton-geminate contrasts occur in word-medial position. Languages that allow gemination in other than word-medial position (word-initially or word-finally) are quite few. Even less frequent is the occurrence in the languages of the world of word-initial voiceless geminate stops. Pattani Malay (Abramson, 1986), Turgovian Swiss German (Kraehenmann, 2003), Tashlhiyt Berber (Ridouane, 2007), are the only documented languages that allow singleton-geminate contrasts word-initially for all native consonants, including both voiced and voiceless plosives. In this work we deal with word-initial voiceless geminate stops in Tashlhiyt Berber and present results from 3 experiments: 1) a production study including acoustic and electropalatographic measurements 2) a native-listener experiment with labelling and discrimination, and 3) a cross-language perceptual experiment, with listeners of two languages differing in gemination: Italian (in which gemination only occurs word-medially) and French (in which gemination only occurs between words in continuous speech).