

# Selective attention to features: How Polish learners of English and French perceive Dutch vowels

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In this paper non-native speech perception is argued to be based on the interplay of categories and feature clusters. Non-native speech perception has traditionally been examined in relation to assimilations of these non-native language speech sounds which are similar to first language sounds and new category formation for considerably different sounds (Flege 1995, Best 1995, Best and Tyler 2007). This paper tests the postulate by Pajak and Levy (2014) whereby an important role of selective attention to features is seen as supplementing the role of categories in non-native speech perception, even if the context for using these features is different in the two languages involved. Additionally this paper elaborates on Pajak and Levy's (2014) hypothesis to claim that categories and certain feature combinations are crucial for faithful non-native vowel perception.

Perception experiments were designed with the aim of testing whether the acquisition of L2 with specific vowel features facilitates the perception of foreign language vowels with the same feature used in different contexts (cf. Bohn and Best 2012). 10 Polish learners of English and 10 Polish learners of French completed discrimination and assimilation (categorization and goodness rating) tests on seven Dutch vowel contrasts. Discrimination is hypothesized to be consistent with the Perceptual Assimilation Model (Best 1995, Best and Tyler 2007) types, and asymmetries predicted by the Natural Referent Vowel framework (Polka and Bohn 2003, 2011) are mainly expected for single-category assimilations (see Tyler et al. 2014 who suggest that perceptual assimilation might modulate the effects of vowel peripherality on non-native vowel perception). The choice of languages serves the purpose of examining the role of features related to acoustic characteristics of vowel quality, tenseness and lip rounding. Dutch has an extensive vowel inventory with front unrounded, front rounded and back rounded vowels. Dutch vowels are also distinguished by tenseness. English does not have front rounded vowels, but it uses tenseness as features specifying vowel categories and it has low vowels. French also has a relatively large vowel inventory, it has a front rounded vowel, but it does not use tenseness contrastively. The preliminary results support the hypothesis and point to the vital role of the tongue height and lip rounding in foreign vowel perception.

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