The naïve non-native perception of Brazilian Portuguese nasal vowels by French and English speakers

Non-native adults may experience some difficulties discriminating phonemes of a second language (L2) that do not serve to distinguish lexical items in their mother tongue (L1) (e.g. Best 1995, Brown 1998, Best and Tyler 2007), a classical example being the difficulty for Japanese adults to distinguish English /r/-/l/ (e.g. Goto 1971). According to the Feature Model (FM) proposed by Brown (1998), adults will be able to create new sound categories only if these can be built from contrastive features in their L1, in this case [coronal]. This hypothesis has been tested on various consonantal contrasts (e.g. Brown 2000, Larson-Hall 2004, Colantoni and Steele 2008), but it appears that vocalic features have never been examined from this perspective.

The present study aims to test the validity of the FM's predictions with respect to the vocalic nasal-oral contrast of Brazilian Portuguese (BP). The naïve perception of the BP contrasts /ĩ/-/i/, /ẽ/-/e/, /õ/-/o/, and /ũ/-/u/ by French and English speakers will be examined using a 4IAX discrimination task. These two languages differ with respect to the status of nasality, given that French possesses the [nasal] feature for non-high vowels, while English only uses this feature to contrast consonants. Therefore, it will be possible to determine whether, during the first exposure to BP nasal vowels, the [nasal] feature can be combined with new high vowels in the case of French speakers and be deployed from the consonantal to the vocalic system in the case of English speakers.

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