

the same or a different accent background. Listeners were asked to identify old words as being produced in the same or a different voice. Initial results indicate that hearing repetitions in the same accent improves recognition memory, but interferes with voice identification.

**5pSC3. Rapid and long-lasting adaptation to foreign-accented speech.**

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In foreign-accented speech, listeners have to handle noticeable deviations from the standard pronunciation of a target language. Three cross-modal priming experiments investigated how short- and long-term experiences with a foreign accent influence word recognition by native listeners. In experiment 1, German-accented words were presented to Dutch listeners who had either extensive or limited prior experience with German-accented Dutch. Accented words either contained a diphthong substitution that deviated acoustically quite largely from the canonical form (*huis* [hœys], “house”, pronounced as [hoys]), or that deviated acoustically to a lesser extent (*lijst* [lst], “list”, pronounced as [lɪst]). The mispronunciations never created lexical ambiguity in Dutch. While long-term experience facilitated word recognition for both types of substitutions, limited experience facilitated recognition only of words with acoustically smaller deviations. In experiment 2, Dutch listeners with limited experience listened to the German speaker for 4 min before participating in the cross-modal priming experiment. The results showed that speaker-specific learning effects for acoustically large deviations can be obtained already after a brief exposure, as long as the exposure contains evidence of the deviations. Experiment 3 investigates whether these short-term adaptation effects for foreign-accented speech are speaker-independent.

**5pSC4. Lexical influences on children’s perception of foreign-accented speech.** Tessa Bent (Dept. of Speech and Hearing Sci., Indiana Univ., 200 S. Jordan Ave., Bloomington, IN 47405, [tbent@indiana.edu](mailto:tbent@indiana.edu))

The ability to perceive speech accurately in the face of multiple sources of variability appears to develop during early and middle childhood. However, the cognitive-linguistic skills that underlie these improvements are unknown. Early-middle childhood is a time of rapid development in many areas of cognition and language, including the expansion of the lexicon. Lexical development includes both changes in lexicon size and changes in lexicon structure. Research suggests that as the lexicon grows, the words within the lexicon become more highly specified moving from more holistic representations to more fine-grained, segmental representations. This study tested how the expansion and restructuring of the lexicon are related to the ability to perceive highly variable speech signals. Specifically, the perception of foreign-accented speech — a common, real-world source of speech variability — was tested. The relationship between lexicon size and the perception of lexically easy (i.e., high-frequency words from sparse neighborhoods) and lexically hard (i.e., low-frequency words from dense neighborhoods) foreign-accented words was investigated for 5- and 6-year-old children. [Work supported by NIDCD 1R21DC010021.]

**5pSC5. Studying dimensions of perceptual change in Spanish-English bilinguals.** Annie J. Olmstead (Dept. of Psych., SUNY, 600 Hawk Dr., New Paltz, NY 12561), Leah Fabiano-Smith (Dept. of Commun. Disord., SUNY, New Paltz, NY 12561), and Navin Viswanathan (Dept. of Psych., SUNY, New Paltz, NY 12561)

The differences between perception and production in Spanish-English bilinguals and English monolinguals are well-documented. [Goldstein (2001).] These differences are sometimes attributed to changes in the language users’ perceptual sensitivities as a function of learning a second language. [Best (1994); (1995).] In the current study, we focus on the covariation of perceptual sensitivities and proficiency in L2 in Spanish-English bilinguals with the goal of developing a composite measure of perceptual accentedness. Specifically, we focus on categorization along a voicing continuum, goodness of category fit, vowel identification and discrimination, and bilabial stop/aspirant detection tasks. Through a combination of these perceptual tasks we seek to determine whether certain dimensions change more readily than others and if certain changes are strongly correlated. Fi-