

Semantic Contextual Cues and Listener Adaptation to Foreign-Accented English

The context surrounding words can facilitate word recognition for native and non-native listeners. However, for degraded speech signals, (e.g. with noise), non-natives may lose the ability to take advantage of contextual cues unless the speech is clearly produced (Bradlow and Alexander, 2007). This study investigated whether: 1) foreign-accented speech degrades the signal such that natives show reduced ability to take advantage of context, and, 2) both native and non-native listeners adapt to foreign-accented speech. Native and non-native listeners were exposed to accented speech in two blocks. In each block, half the sentence final words were in high and half were in low predictability contexts. Listeners were asked to identify sentence final words. In a single talker condition, natives benefitted from context and adapted to the accent; nonnatives could not use context but showed adaption. In a multi-talker condition, natives benefitted from context and adapted to the accent. Context effects were only seen though in sentences produced by speakers of L1 Chinese, an accent the subject pool was formerly familiar with. Non-natives benefitted from context and adapted, however the context effect was only seen when listener and speaker L1 matched. These results suggest that accented speech disrupts the native ability to take advantage of context, but this can be overcome by adaptation to the speaker or past exposure to an accent. Non-natives benefit substantially from a talker-listener L1 match, thus allowing them to function at higher processing levels. Both natives and non-natives can adapt to accented speech over time, both talker-specific and multi-talker.

Count: 252 words