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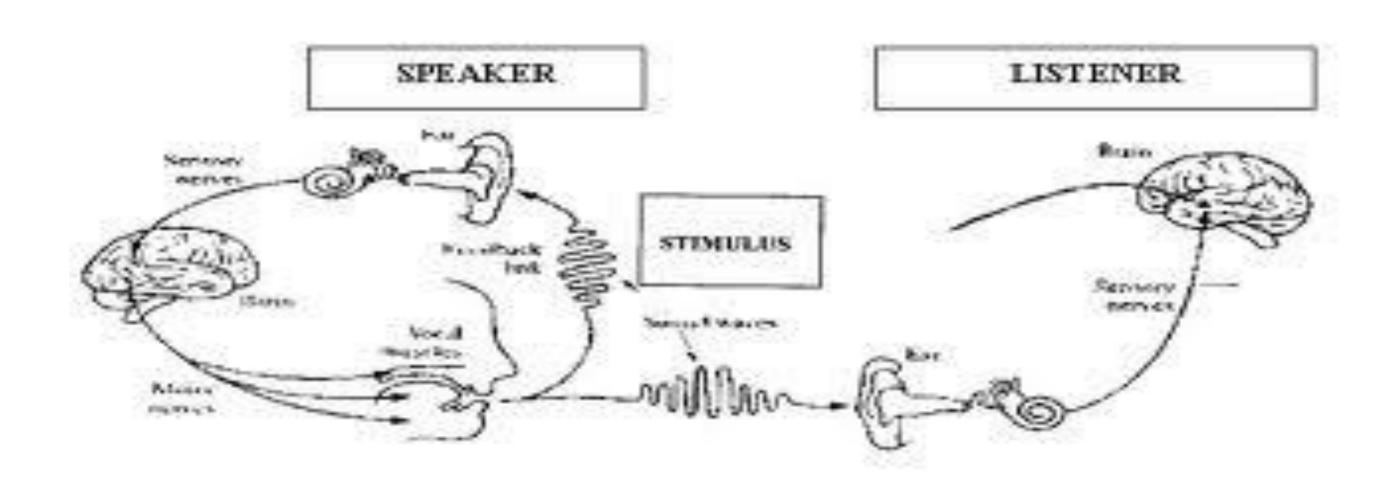
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# Exposure of Preadolescent Children to Nonnative Accents and its Gretchen Mull Effect on Linguistic Trajectory

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#### Abstract

Children and adults are often presented with nonnative-accented speech that is outside their familiar environment. The purpose of this study was to examine how exposure of preadolescent children to nonnative accents during their linguistic development increases their linguistic flexibility in adulthood. By examining the processes of speech intake, the stages of linguistic development, and the role of experience versus perception, the research clarifies what elements most significantly alter a listener's ability to interpret unfamiliar speech and during what periods a person is most developmentally available for a streamline understanding of nonnative speech.



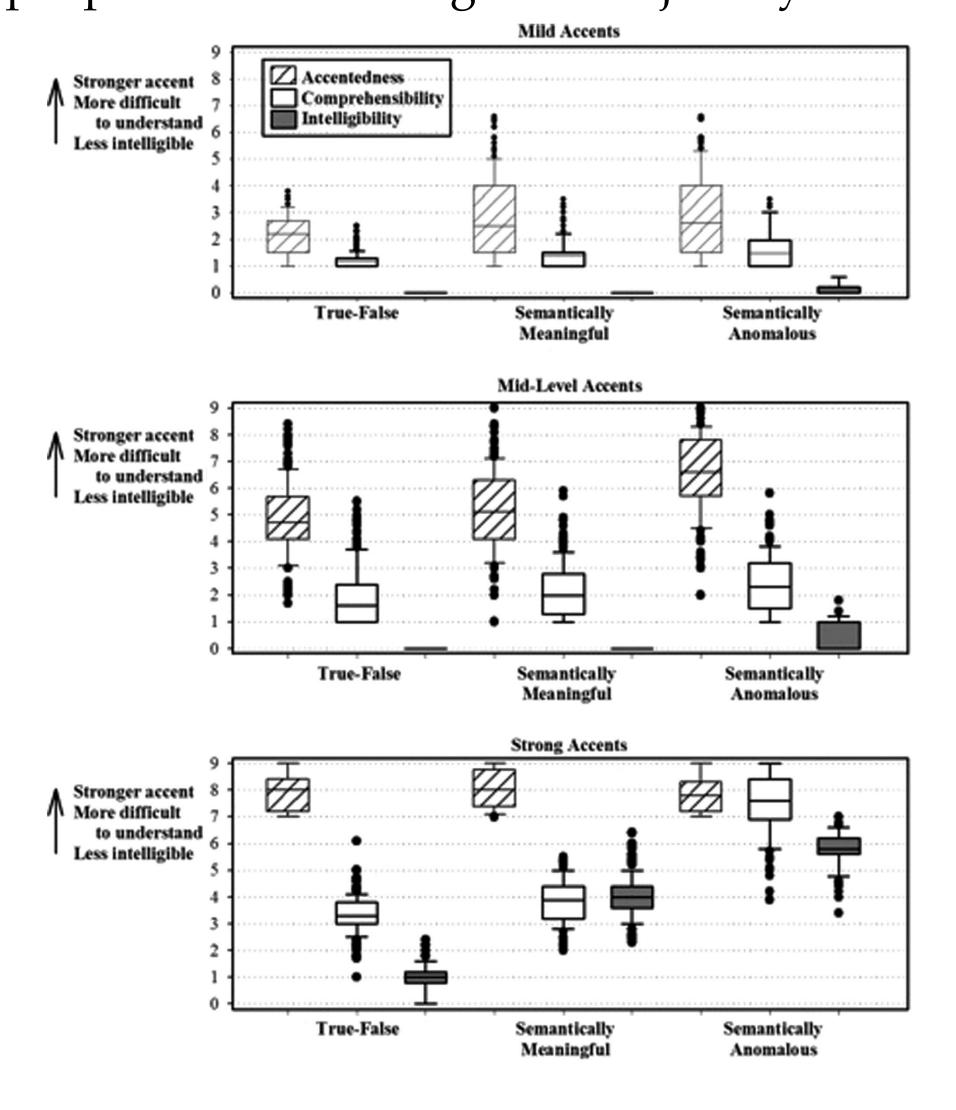
#### Main Claim

Based on the research of Idemaru and Holt and Barse-Berk et al., it is established that before their first birthday, infants transition from being language general learners to language specific learners. Full phonetic development reaches beyond native speech categories to accommodate normalization and sensitivity to phonetic cue weighting.

Exposure to nonnative accents shifts the trajectory of a preadolescent child's linguistic development by increasing familiarity to the unfamiliar accents and establishing a framework for the listener to isolate and store the essential and nonessential auditory information between the listener's accent and the nonnative accent.

## Findings

- Phonetic development starts with native speech sound categories and occurs very early in life which what allows infants to identify with their native speech. Specificity in identifying and interpreting foreign-accented speech has a much larger trajectory as development in phonetic cues that distinguish unfamiliar speech is linked to age and continues well into preadolescence.
- The perception of weight given by the speaker to vowels and consonants in relation to the listener's native accent will indicate to what extent the listener will be able to process the unfamiliar language because the listener will have been trained to align with the accent structure of their native accent.
- Extended exposure to nonnative accents increases a listener's perceptual adaption to speech variability and ability to isolate on the most significant parts of the unfamiliar speech while decreasing a listener's reliance on situational context.
- Exposure to nonnative speech increases a listener's ability to ignore linguistically irrelevant speech variations. However, heightened processing facilitates normalization where listeners retain non-essential talker-specific characteristics which allows listeners to apply stored linguistic information for future situations.
- Increased exposure to nonnative accents allows for the generalization of learning across both speaker and accent-independent variants. Within the generalization process, the perceptual magnet effect allows for language experience to warp the perceived distances between stimuli which effects listeners at multiple points in their linguistic trajectory.
- Contrasting regions of the brain are activated for listeners of familiar versus unfamiliar speech because language experience distorts the acoustic space underlying phonetic perception. Extended exposure and familiarity will allow a listener to increase the usage of the anterior region of their brain which permits for less auditory cortical activation.



## Conclusion

Although most adults have the fundamental capacity to interpret nonnative accents on a basic level, true linguistic flexibility stems from extended exposure during linguistic development and conditioning to highlight commonalities between accents.

Development of specificity of /l/ and /r/ in English-accented speech is a strong indicator of a listener's level of perception and interpretation because /l/ and /r/ require fine tuning that takes longer than most other phonetic categories.

Exposure to nonnative accents during preadolescence allows listeners to stretch their speech boundaries which sets them up for increased familiarity and a greater level of acceptance of nonnative speech as they progress to adulthood.

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