Robust perception of phonemes in complex stimulus conditions

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The McGurk effect (McGurk & MacDonaill, 1976)

Integration of sensory information is an important aspect of language. Binaural integration occurs naturally in speech perception. Kimura (1967) conjectures that REA depends on the neural structure in the auditory pathway.

The integration of vision and sound is also important. The McGurk effect (McGurk & MacDonaill, 1976) reveals important aspects of audiovisual integration.

Here we investigate the nature of McGurk effect in Dichotic Listening condition. The results indicate the occurrence of McGurk effect, suggesting that the process causing REA co-exists with the process leading to the McGurk effect.

The McGurk effect remained under Dichotic listening, in which REA was observed.

Discussion

- M. Sams (1998) also reported that REA remained even when dichotic stimuli were presented with the visual stimuli.
- Sekiyama (2003) showed in fMRI and PET research that the McGurk effect correlates with the Left superior temporalsulcus.
- The activities of M100 over the auditory cortex suggested that the primary or second auditory cortex might be responsible for REA (Alfredo Brancucci et al. 2004).
- The left STS and STG may play an important role in the McGurk effect.

These studies suggest that the McGurk effect is robust in the complex condition like Dichotic listening, coexistent with REA.

Reference
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