Effects of sound cuing on anomia in Chinese

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Introduction

Studies of phonological cuing for anomia in Indo-European languages are well documented. However, there are few studies of phonological cuing with Chinese speakers. Two studies report an effect of phonological cuing on spoken name retrieval in Cantonese (Law et al., 2008; Yeung & Law, 2010). In those studies, a training regime was devised to associate object names to the first sound of the target name using a letter-phoneme strategy. This is of interest because Cantonese is a syllable based language and does not represent sounds as graphemes or letters. Here we ask if it is possible to find an effect of phonological cuing on anomia in Cantonese without use of any orthographic cues.

Method and Results

CYT is a native Cantonese speaker with global aphasia according to scores on the Chinese Aphasia Battery (AQ=20.2). When given tests of spoken object naming he could repeat the clinician's production and was able to produce words when the initial syllable was provided. He was able to repeat phrases up to 3 syllables. Literal and semantic paraphasia were noted even when syllabic cue was given. He failed all tests of verbal fluency and responsive speech by giving no response. There was evidence of impairment to the semantic system. Phoneme matching, matching spoken words with initial consonant and identifying pictures of mouth shapes corresponding to Cantonese phonemes was within normal limits. Spontaneous naming of familiar items including personal clothing was at floor (0%). By contrast, provision of a visuo-spatial picture a phonemic cue improved naming to 100% which according to McNemar's test is significant improvement to naming ($p$>.001). Results are summarised in Figure 1.

Conclusion

Studies of aphasia in Chinese reveal remarkably similar outcomes compared with aphasia in other languages (Weekes & Chen, 1998). Cantonese speakers do not acquire an alphabetic form of their spoken language and it has been argued that awareness of phonemes is far lower than in alphabetic languages (Read et al. 1985). It is therefore interesting to observe an effect of phoneme cuing that does not depend on learning an orthographic strategy. The findings from this study and experience in speech therapy clinics in Hong Kong suggest that phonemes are salient in the Cantonese speech production system and can be used in cued naming without learning orthographic strategies. We contend that phonemes are a basic unit of lexical retrieval across language.

References

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