Mummy, that lady talks funny

Professor Catherine Best of the MARCS Institute and Dr Christine Kitamura from the School of Social Science and Psychology are investigating the role of accents in word learning among young children. The study, funded by the Australian Research Council Discovery Project, may shed light on the particular problems faced by children with developmental language difficulties.

‘Accent differences draw everyone’s attention, even toddlers who quickly notice that someone from another region “talks funny”’, says Professor Best. ‘As everyday listeners, we immediately notice accents that differ from our own, as well as noticing the occasional difficulties we have in understanding someone with a different accent. We find accents intriguing, informative, and a source of humour, scorn or frustration.’

Recognising words across variable pronunciations is crucial to language development, as all languages require that each word maintain a constant identity each time it is used, at the same time as being reliably distinct from other words. As language novices, infants and toddlers must discover that certain pronunciation differences signal distinct words – “bears” and “beers”, for example – while others reflect differences in pronouncing the same word – for example, “bears” by Australian, American or New Zealand talkers.

Professor Best’s project explores how the ability to decipher words and meanings arises in early childhood development. Infants and toddlers almost invariably learn words in their parents’ or “native” accent. This research will use four sets of developmental studies to test recognition of newly learned words that are distinctive in the native language, and those that are the same word spoken in the native accent versus another accent. A range of children will be studied, including some with autism spectrum disorder or dyslexia, which are characterised by difficulties in acquiring language.

The results may pave the way for the early diagnosis and treatment of dyslexia and autism, and help those learning English as a second language with their comprehension of the spoken word. There may be benefits, too, in improved technology for automatic speech recognition (ASR) of novel accents. While human adults adapt to regional accents relatively easily, young children and ASR systems lack their spoken language knowledge. The processes by which infants and toddlers cope with accents may light the way to ASR algorithms that are more robust to accent differences.

Project Title: Children’s generalisation and adaptation to unfamiliar regional accents reveal the path of early word learning

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