Learning to talk native: Listeners' perception of speech from three dialect areas

Dialect researchers have primarily worked with older children and adult speakers; there is virtually no research as to children's dialects under the age of three. The current research is an effort to ascertain when dialects emerge in very young children: When do children start to produce dialect-specific forms? In order to explore one aspect of this issue, a perceptual task was implemented. The listeners' ability to identify young children as to their region of origin compared to adult speakers was tested.
Our hypothesis was as follows:

Although age of speakers affects ability to perceptually identify regional dialect, with older speakers more easily identifiable, even children at the 18month to 2-year age will have identifiable regional markers.

The three dialect areas from which sample speech was taken were Long Island, New York, Memphis, Tennessee, and Vermont. The phonological markers that were targeted in the study were the low back merger and short /a/ raising. The acoustic stimuli used were the speech samples themselves, and consisted the speech of a total of nine speakers divided into three age groups (1-2yrs, 4yrs, and adults). These ages were a crucial component in this study because as children develop phonologically, their phoneme production becomes more accurate and therefore should be more easily identified by their specific region. The listeners in this experiment were native speakers of English and comprised 150 undergraduate students (18-25yrs. old). The order of speech samples was randomized. The task of the participants was to identify where they thought each speaker was from to the best of their ability. A corresponding, forced choice answer sheet was to be completed by the listeners, which also assessed their level of certainty. All 150 participants provided minimal personal information relevant to the study such as where they have lived throughout their lives, age, and gender.

The results revealed that listeners were able to identify adults more easily than children; in fact their identification of the adult speakers was almost perfect. There was also strong evidence based on the data collected that children, even at the age of two, could be identified by region. A related question was whether a listener's region of origin would affect the results. Therefore of the 150 participants, those originally from New York and Vermont were examined separately to see if they were better able to identify the speakers from their respective region. This was shown to be insignificant: the listeners' background did not give them an advantage in listening to speakers from their own area. Finally, listeners were more confident of their answers for adults rather than the children. Of those who answered correctly, listeners were more than twice as certain about the adult speakers versus the two year olds in each of the three regions.

These findings suggest that even as children begin single word acquisition, they simultaneously begin to show specific dialect features. Listeners use their knowledge of these various speech patterns to serve as identification markers for children as well as for adults.