Early word learning in bilingual children: do bilingual children apply Mutual Exclusivity in a different way than monolingual children?

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Abstract:

A fundamental question in developmental linguistics and developmental psychology is how young children learn new words. While some researchers suggest that words are primarily learned through experience, others argue that children's word-learning process is guided by a set of innate lexical biases. One of the most widely studied biases is the Mutual Exclusivity Bias (ME), which describes children's preference for just one label per concept. In other words, there is an early tendency to reject two labels per concept (for example, the avoidance of synonyms).

The disambiguation effect in ME has been demonstrated extensively in experiments requiring young monolingual children to choose between familiar and novel labels in naming unfamiliar objects. However, evidence for the ME bias within languages in bilingual children is mixed. Davidson et al (1997) found that older monolingual children (6-year olds) applied ME significantly more in tests of disambiguation than younger mono- and bilingual children (3- to 4-year olds). Interestingly, the older bilingual children also applied ME, but 'less so' than their monolingual peers. However there are other interpretations of the disambiguation effect, for example the need to fill a lexical gap, or a preference for novelty (Markman and Wachtel, 1988). Using alternative indicators of ME Davidson et al found some evidence of a stronger ME bias in the younger monolingual children in a rejection test but no differences between mono- and bilingual children in a restriction test.

In this pilot study, an alternative to the disambiguation test was devised to explore the differences in ME between 3-year-old mono- and bilingual children. The aim was to investigate the ME bias by assessing children's acceptance and use of novel labels for familiar items (a variant on Merriman and Bowman's (1989) rejection/correction effect). Specifically, the study sought to establish (a) whether bilingual children apply ME within one language, given that they can override ME across languages; and (b) any differences between mono- and bilingual children within the same age group in their willingness to use two labels for one thing. Six mono- and six bilingual children aged 2;9 - 3;6 were tested. A pre-test established that the bilingual children knew the names of familiar items in both languages. The sessions were conducted in English and consisted of playing three naming and matching games using brightly coloured pictures of twelve familiar objects and applying novel nonsense labels to three of these pictures. Indicators of ME override included the willingness to match a familiar picture to a novel label and the proportion of novel labels produced by the children in preference to standard labels for familiar items. Indicators of the ME bias included the production of standard labels instead of novel labels, a reluctance to produce novel labels and a tendency to correct the use of novel labels.

The findings of this study will be reviewed in the context of two leading accounts of word learning. If mutual exclusivity is a linguistic bias, we predict that bilingual children, just like monolingual children, will resist two labels per object in English. If, however, mutual exclusivity is a phenomenon related to children's socio-pragmatic understanding of the interlocutor's perspective, we then predict that even three-year-old bilingual children will apply two labels to one object in English more readily, since, as a result of their use of different languages with different people, they develop awareness of other people's perspective before monolingual children.