

**Age 2 toddlers’ imitation of sublexical information
has long-term effects on the encoding of novel sound forms**

Naihsin Li, Yu-Ying Chuang

Graduate Institute of Linguistics, National Taiwan University, Taipei, Taiwan

Phonetic imitation is one of the important language learning processes in which children gradually develop adult-like phonological representations by repeatedly approximating adult models. It is hypothesized that children’s individual difference in the imitation ability would be an indication of their phonological capacity, and could be predictive of their ability to encode novel sound forms. This study investigated whether age 2 toddlers’ phonetic imitation at the sublexical level (including phonemic and subphonemic) facilitates their encoding of novel forms at a later age. A group of sixteen Mandarin-speaking children were tested with a picture naming task, which elicited productions of lexical items containing oral stops (i.e. *b*, *d*, *g*). The productions were divided into self-productions and imitations. At the phonemic level, each production was given a score by rating the features of aspiration, place and manner of articulation. An improvement was observed when imitations had higher scores. At the subphonemic level, the VOT of within category production was measured and transformed into z-scores by referencing to that of adult production. An improvement was indicated by a smaller absolute z-score in imitation. Children’s encoding of novel sound forms was measured by the repetition of nonwords. It was found that toddlers at age 2 showed signs of imitation towards the adult model. Regression analyses revealed that toddlers’ ability to approximate adult model at the phonemic and subphonemic levels at age 2 could predict their encoding of novel sound forms later. The findings demonstrate that young children’s sublexically coarse and fine-grained imitation abilities can account for variations in novel sound form encoding, an ability prerequisite for word learning.