Acquisition of nonmanual adverbials in Hong Kong Sign Language

The nonmanual adverbials allow us to examine how children develop their linguistic facial behaviors (Anderson & Reilly 1998). Unfortunately, only a few studies on the acquisition of nonmanual adverbials, largely on ASL, have been conducted (Anderson & Reilly 1998, Reilly & Anderson 2002, Reilly 2006). These studies show that deaf children of deaf parents acquiring ASL as their native language master manual adverbs earlier than nonmanual adverbials which share the same meaning with the manual one. Nonmanual adverbials emerge at around age 2;0, while manual adverbs sharing the same meaning emerge five months earlier. By age 3;0, nonmanual adverbials modifying predicates become more productive. But this may not be true for late learners. This paper aims at exploring how deaf children of hearing parents who initially receive only oral input and later both sign and oral language input acquire nonmanual adverbials in Hong Kong Sign Language (HKSL).

Two experiments were conducted to investigate the acquisition of nonmanual adverbials by severely and profoundly deaf late learners who receive HKSL input in a sign bilingual programme. Experiment 1 consists of a comprehension task (i.e. a signing selection task) and a production task (i.e. a video/animation description task) where three nonmanual adverbials were examined. Experiment 2 is another comprehension task (i.e. an animation-signing matching task) that investigated six nonmanual adverbials. All tested nonmanual adverbials have manual counterparts of the same meaning. 12 deaf children aged from 5;9 to 10;2 participated in Experiment 1 while Experiment 2 involved 20 deaf children aged from 5;3 to 13;2. Based on years of exposure to HKSL, they were divided into three and six groups in Experiment 1 and 2, respectively.

Deaf children’s performance in Experiment 1 suggests that most of them have not acquired nonmanual adverbials, although the performance is better in the group of more years of exposure to HKSL. The accuracy of the oldest group having the most years of exposure to HKSL in the production and comprehension task of Experiment 1 is 50% and 66.67%, respectively. Most errors produced by deaf children are the omission of nonmanual adverbials. However, these errors are overcome when they know nonmanual adverbials must be co-articulated with the predicates. A notable increase on the correct use of nonmanual adverbials can be observed in the second group whose accuracy is 57.14% whereas the youngest group is 0%. Our deaf children also used manual adverbs to express the same meaning when nonmanual adverbials were absent. But the use of manual adverbs declined with the improvement on nonmanual adverbials. Given the different methodology in Experiment 2, the deaf children performed best in judging grammatical signings (the accuracy rates are all above 75%) but worst in refusing ungrammatical ones without nonmanual adverbials (the accuracy is only 41.67% in the oldest group with 5 years of exposure to HKSL). All these data suggest deaf late learners are not sensitive to nonmanual adverbials initially. But progress can be seen as the years of exposure increases.