The Acquisition of DP Structure by Mandarin-speaking Children with Specific Language Impairment

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1 Abstract

Within the generative framework (Tang 1990; Li 1998, 1999), the primary goal of this paper is to investigate whether or not the functional categories in the nominal phrase, namely the determiner projection (DP), the number projection (NumP) (cf. Cheng and Sybesma 1999), and the classifier projection (ClP), are available in the syntactic representation of Mandarin-speaking children with Specific Language Impairment (SLI) and to see if the functional elements emerge with differentiated paths among this population. The speech data in this paper is collected from three monolingual Mandarin-speaking children with SLI ranging in age from 5;0 to 5;11 (5;8 in average). The three children, namely Hong, Zi and Wei, are all out-patients at hospitals in Taoyuan and Taipei. Their Mean Length of Utterance (MLU) are 2.32, 2.39 and 2.80 respectively. All of them are enrolled in intervention programs. Their profiles are provided in Table 1. On the basis of their spontaneous production data and the comprehension task data in picture-naming, picture-story narrative, and sentence completing tasks, it is found that these children use bare nouns, plural personal pronouns as in (1), the [D+Cl] sequence as in (2), the [numeral+Cl] sequence as in (3), the [D+Cl+NP] sequence as in (4), the [numeral+Cl+NP] sequence as in (5), and the [D+numeral+Cl+NP] sequence as in (6) in their speech. As shown, the functional projections in the nominal domain, such as DP, NumP and ClP, are all available in the grammar of these Mandarin-speaking children with SLI. In addition, given that they only provide the combinations of nominal functional projections in the correct word order, it is concluded that their syntactic representation in the nominal domain is intact without any deficits as that of the typically-developing (TD) children. This conclusion is conformed to Cheung's (1999) finding that Mandarin-speaking children with SLI, ranging in age from 6;8 to 7;0, do not show any significant difference in relation to the TD children, ranging in age from 2;5 to 2;10, in terms of their uses of referential nominal phrases. On the other hand, this study shows that the main problem for these SLI children lies in their

mental lexicon since they have difficulty in the selection of classifiers with the following nouns, each of which has idiosyncratic semantic features. For instance, they produce errors such as *zhe-*ge shīzi* 'this lion', using the general classifier *ge*, instead of *zhèi-zhī shīzi* with specific classifier *zhī*. Their production of commission errors but not omission errors indicates that the basic syntax of classifiers has been acquired so that they use *ge* as a syntactic placeholder. This is conformed to Szeto's (1998) and Tse and Li's (2007) findings that the syntactic acquisition of classifiers is completed around 2 to 3.

2   Table and Examples

2.1   The Profiles of the Three Mandarin SLI Children

Table 1

		Hong(5;4.10)	Zi (5;9.7)	Wei (5;10.21)
Sex		M	F	M
TONI-2		102 (55%)	110 (75%)	126 (96%)
PLS	Comprehension	20 (11%)	17 (1~2%)	23 (16%)
	Oral expression	21 (25%)	15 (4%)	25 (37%)
PPVT-R		93 (32%)	75 (5%)	117 (87%)
WPPRI-R	Performance	106 (66%)	89 (23%)	100 (50%)
	Verbal	76 (5%)	53 (0.1%)	92 (30%)

TONI-2 stands for the Test of Nonverbal Intelligence- Second edition.
PLS stands for Preschool Language Scale.
PPVT-R stands for the Peabody Picture Vocabulary Test – Revised.
WPPSI-R stands for the Wechsler Preschool and Primary Scale of Intelligence-Revised.

2.2   Examples

(1)   a. *nǐ-mén*
          you-plural marker
          'you'

    b. *wǒ-mén*
        I-plural marker

        'we/us'

      c. *tā-mén*

(s)he-plural marker

‘they/them’

(2)   *zhèi-ge*
demonstrative-classifier
‘this’

(3)   *liù-zhī*
six-classifier
‘six-classifier’

(4)   *zhe-*ge shīzi*
demonstrative-classifier lion
‘this lion’

(5)   *liù-zhī shīzi*
six-classifier lion
‘six lions’

(6)   *zhèi liù-zhī shīzi*
demonstrative six-classifier lion
‘these six lions’

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