

行政院國家科學委員會專題研究計畫成果報告

單純語言障礙兒童之語言與認知能力研究 ( I )

An Investigation of the language and cognitive abilities of  
children with specific language impairment

計畫類別：個別型計畫

計畫編號：NSC 89-2411-H-002-003

執行期限：88年8月1日至89年7月31日

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**摘要**

本研究是檢驗獨特語言障礙兒童的語言特色。我們在八個月的時間內，從兩位獨特語障兒童，採集了十六小時的自發性語言樣本。語料分析的結果顯示，相較於語言控制組的兒童，我們的個案在量詞和名詞化方面的使用產能較低，同時他們也使用較多的零論元的語句。

**關鍵字：**語言習得，語言障礙

**Abstract**

This study examined the linguistic characteristics of children with specific language impairment (SLI). Speech samples from two SLI children were collected. Linguistic profiles of these two SLI children were built on three areas: noun phrase elaboration, verb phrase elaboration and clause elaboration. When compared with language-matched children, we found that our SLI subjects were less productive in the use of classifiers and nominalizations. They also used verbs without arguments more frequently.

**Keywords:** Specific language impairment, language acquisition

**Background**

Children with specific language

impairment (SLI) refer to those have unexplained difficulties in acquiring their mother tongue (Bishop 1997). Their problems are not caused by any known factors such as mental retardation, hearing impairment, social isolation or emotional disturbance. One of the hallmarks of English speaking SLI children (as well as other European languages) is their low percentages of use of grammatical morphemes such as -ed, -s, when compared with language-matched controls. Various hypotheses have been proposed to account for such deficit. The "extended optional infinitives" account, which is based on a modular view of language, suggests that SLI children suffer from a specific deficit in their underlying linguistic knowledge (Rice et al. 1995), probably on the functional category (Leonard, L. 1995). Other researchers argue that these children suffer from a capacity limitation when processing language (Tallal & Piercy. 1973; Gathercole & Baddeley 1990). Since part of this debate is formulated around the

acquisition of inflectional morphemes, language data from Chinese SLI children will bring a new perspective to the issue because inflectional morphology does not play a role in children's development of Chinese. Without the pressure of building up inflectional paradigms for verbs, what would be suffered in Chinese SLI children? How would linguistic deficits observed in Chinese SLI be accounted for by theories developed from English SLI data? Up to this point, little is known about Chinese SLI children other than they are '2 standard deviations below average in standardized language tests.' To fill up this gap, this paper reports on the linguistic characteristics of Chinese SLI children.

### Method

Sixteen spontaneous language samples were collected from two 7-year-old children, one boy and one girl, who have been clinically diagnosed as SLI. These speech samples were audio-recorded at subjects' home when research assistants paid the monthly visits. Free play were the major activity types with occasional short tests for other purposes.

Adapted from Miller's (1981) Assigning Structural Stage (ASS), three structural areas were examined: noun phrase elaboration, verb phrase elaboration and clause elaboration. They are listed in Table 1, 2 and 3.

Table 1. Noun Phrase Elaboration

determiner	這一個／上一次／第一個
pronoun	你我他
locative	上面／旁邊／裡面
proper name	麥當勞／國語課
classifier	那一個人
adjective	好多這個
quantifier	很多車子
genitive /associative nominalization	我的車／我的／ 吃飯的湯匙／ 紅的／媽媽買的／
connective	爸爸跟媽媽

Table 2. Verb Phrase Elaboration

ditransitive verb	給你一個
auxiliary / modal verb	不要吃
modifier – stative modifier – manner	跑得快/ 慢慢的走
adverb: focus intensity manner	慢慢吃／很快／通通都 要／比較小
resultative	飯飯吃光光／小老鼠 爬起來
aspect marker	狗狗趴著／媽媽在做 飯
coverb	把貼紙弄掉
locative/directio	他走到外面／他大叫

n	一聲
frequency/time	

Table 3. Clause Elaboration

verb only	然後就走了
one argument SV/VO	他走了 拿衣服
AVO	小朋友拿衣服
AOV/OAV/OV	他把衣服拿走了/衣服他拿走了/衣服拿走了
copula	他是壞人
indirect object	他送我一本書/買了一本書給我
Yes-No Question	
Wh- Question	
comparative	他比我高 / 他吃飯比我快
Subordination	他到外面唱歌/做這個很簡單/我要媽媽過來/他喜歡媽媽講故事 我拿了姊姊買的書
clausal connectives	

### Results and Discussion

Our results showed that these children have a limited use of classifiers and no use of nominalization. They displayed some use of serial verb constructions but further analysis suggested that these constructions should be treated as a verb phrase made up of a modal and a main verb. They were

also more inclined to use verbs with one or zero argument, when compared with language-matched peers. Clause connectives were rarely found even when they engaged in a longer discourse. These findings indicated that first, even without the burden of inflectional morphemes, clause embedding are still difficult for SLI children. Second, SLI children's limited use of classifiers appears to be a parallel to English SLI children's low percentage of use of grammatical morphemes, an account originally proposed by Myers (Myers et al 1998). Third, SLI children's frequent use of verbs with one or zero argument indicated that they may either suffer from a processing limitation which forces them to reduce the length of utterance or from a deficit in perspective-taking when engaged in a conversation.

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