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漢語語法時貌和詞彙時貌的習得

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漢語語法時貌和詞彙時貌的習得

The acquisition of grammatical and lexical aspect in Mandarin Chinese

中文摘要

本研究探討以漢語為母語的兒童在語法時貌和詞彙時貌方面的習得。同時，母親對兒童的言談也加以分析來探討母親對兒童的輸入語和兒童習得模式的關係。研究語料包括六個三歲到五歲的兒童與其母親的自然對話。分析的語法時貌包括完成貌「了」、經驗貌「過」、進行貌「在」和持續貌「著」。詞彙時貌則分為五類：狀態動詞、行動動詞、完成動詞、終結動詞、連續動詞。研究結果顯示在兒童與母親的言談中完成貌「了」和完成動詞/終結動詞有明顯的關連；進行貌「在」和行動動詞有明顯的關連；另外，經驗貌「過」與行動動詞，及持續貌「著」與狀態動詞都有關連。研究結果的討論包括了自然結合法則、原形解釋、及成人輸入語在語言習得扮演的角色。

關鍵字：語法時貌、詞彙時貌、語言習得

English Abstract

This study investigated Mandarin-speaking children's acquisition of grammatical and lexical aspect. In addition, maternal speech was also investigated to examine the relationship between maternal input and acquisition patterns. The data consisted of natural interactions between six children (3 to 5 years old) and their mothers. The grammatical aspect markers analyzed in the study included the perfective marker *-le*, the experiential marker *-guo*, the progressive marker *zai*, and the durative marker *-zhe*. The lexical aspect was classified into five categories: stative, activity, accomplishment, achievement and semelfactive. Strong associations were observed in both the children's and the mothers' speech between the perfective marker *-le* and accomplishment verbs/achievement verbs, between the progressive marker *zai* and activity verbs, between the experiential marker *-guo* and activity verbs, and between the durative marker *-zhe* and stative verbs. The findings were discussed in relation to the naturalness of combination principle, the prototype account, and the role of adult input in language acquisition.

Key words: grammatical aspect, lexical aspect, language acquisition

Introduction

The concept of time is one of the fundamental domains in human cognition, and is central in human language. Thus, in child language acquisition, it is crucial for children to acquire the ability to refer to time. Referring to time involves complex cognitive and linguistic skills. Cognitively, children need to develop the concept of time, including temporal relations and aspectual perspectives. Linguistically, children need to acquire the language-specific devices for encoding time, such as the grammatical markers for encoding tense and aspect.

Both tense and aspect are terms that refer to the notion of temporality. However, tense and aspect are concerned with time in quite different ways. Comrie (1976) describes tense as deictic, in that ‘tense locates the time of the situation referred to to some other time, usually to the moment of speaking’ (pp. 1-2). Thus, the moment of speaking is seen as the reference point from which time may be located prior to (past tense), simultaneous with (present tense), or subsequent to (future tense) the moment of speaking. As for the definition of aspect, Comrie states that ‘aspects are different ways of viewing the internal temporal constituency of a situation’ (p.3). That is, aspect is not concerned with relating the time of a situation to any other time point, but has more to do with the temporal contour of particular events. Therefore, aspect is non-deictic. In other words, aspect can be viewed as situational-internal, while tense is regarded as situational-external.

There are two types of aspect: grammatical aspect and inherent lexical aspect. Grammatical aspect (also called viewpoint aspect) refers to aspectual distinctions that are marked explicitly by linguistic devices, such as auxiliaries or inflections. The progressive aspect in English, and the perfective/imperfective aspect in Spanish, Russian, and Greek are examples of grammatical aspect. Inherent lexical aspect, on the other hand, refers to temporal properties inherent in the lexical items that describe the situations. For example, in English *run* is inherently durative and *jump* is inherently punctual.

Mandarin has been widely recognized as a tenseless language. That is, in the Mandarin temporal system, no grammatical morphemes are used to signal the time of a reported event relative to the time of speaking (Li & Thompson, 1981; Smith, 1997). However, Mandarin is aspect-prominent (Li & Thompson, 1981); Mandarin offers a rich set of grammatical aspect markers. These aspect markers include the perfective marker *-le*, the experiential marker *-guo*, the progressive marker *zai*, and the durative marker *-zhe*. Although Mandarin aspect markers have received much attention in the linguistic literature, only a few studies have been done to investigate children’s acquisition of these aspect markers.

Erbaugh (1978) studied four Mandarin-speaking children from ages 2 to 3, and suggested that Mandarin-speaking children acquire time/aspect in four cumulative overlapping stages. The first stage is the general boundedness stage, which occurs before age 2;4. During the stage, children focus on completion and current relevance with the perfective *-le*. The second stage, between 2;4 and 2;9, is an enhanced transitivity stage. During the stage, children often double-mark completion and result. The third stage, between 2;10 and 3;4, is a sequenced temporal relations stage. This stage is characterized by children's ability to coordinate two or more events within a sentence. The final stage occurs after 3;4, and is a stage for developing narratives and backgrounded events.

Huang (2000) investigated two three-year-old children's ability to refer to the past in mother-child conversation. It was found that the children tended to use *-le* with resultative verbs and for establishing immediate past reference. The events described often involved the children themselves as the agent, or they may use *-le* to describe the change of state of a visible object. Therefore, it appears that the children's use of the perfective marker was associated with the lexical aspect of verbs.

Li (2000) is probably the only study that was designed to directly investigate the relationship between grammatical and lexical aspect in child Mandarin. Li's study consisted of four to six year old children's comprehension, production, and imitation data. The results showed a strong association between perfective aspect and resultative/telic verbs and between imperfective aspect and process/punctual verbs. Thus, the findings demonstrated that children's use of tense-aspect markers is associated with lexical aspect. Slobin's (1985) Basic Child Grammar, which claims that Result and Process are the semantic notions with which children associate tense-aspect markers, was confirmed by the results of the study, but Bickerton's (1981) Language Bioprogram Hypothesis, which claims that the State-Process and Punctual-Nonpunctual distinctions are innately bioprogrammed, was not supported. Li suggested that the association between inherent lexical aspect and tense-aspect marking can be better accounted for by reference to patterns in the linguistic input than by invoking innate dispositions.

Although Li (2000) suggested that linguistic input may play an important role in the association between lexical and grammatical aspect in child Mandarin, the study did not examine input data. In fact, in the literature of tense-aspect acquisition, it is rare for studies to analyze the input from caretaker's speech (except for Shirai & Andersen, 1995). However, to study acquisition patterns, it is important to consider

the speech that children are exposed to. The purpose of this present project was to explore how Mandarin-speaking children acquire Mandarin grammatical and lexical aspect. In addition, maternal speech was also investigated to examine the relationship between maternal input and acquisition patterns.

Methods

The participants of this study included Mandarin-speaking children of different ages: three-year-olds, four-year-olds, and five-year-olds. Each age group included two children. In addition, the mothers of these children also participated in the study.

The children were visited in their homes. Natural mother-child conversations were audio- and video- taped to capture both the linguistic data and the contextual information. Each mother-child dyad was recorded for about three hours. The collected data were then transcribed for analysis.

The grammatical aspect markers analyzed in the study included the perfective marker *-le*, the experiential marker *-guo*, the progressive marker *zai*, and the durative marker *-zhe*.

The lexical aspect was classified into five categories:

1. Stative verbs (STA): verbs that denote undifferentiated, homogeneous static situations, e.g., *kai* 'be open'.
2. Activity verbs (ACT): verbs that denote durational situations with no natural endpoint, e.g., *you-yong* 'swim'.
3. Accomplishment verbs (ACC): verbs that denote durational situations with well-defined natural endpoints, e.g., *xie yi-feng xin* 'write a letter'.
4. Achievement verbs (ACH): verbs that denote instantaneous situations, e.g., *tiao* 'jump'.
5. Semelfactive verbs (SEM): verbs that denote punctuality but indicate repeated events when combined with progressive aspect, e.g., *zai qiao men* 'knocking at the door'.

Results and Discussion

Tables 1-4 display the use of the aspect markers '*-le*', '*zai*', '*-guo*' and '*-zhe*' in the data.

Table 1: The use of *-le* in the mother-child conversation

-le	3C	4C	5C	3M	4M	5M
ACC	42%	37%	38%	33%	21%	30%
ACH	56%	48%	58%	65%	62%	58%
ACT	1%	13%	3%	2%	15%	11%
SEM	0%	0%	0%	0%	1%	0%
STA	0%	2%	1%	0%	0%	0%

*3C: 3-year-olds; 4C: 4-year-olds; 5C: 5-year-olds; 3M: 3-year-olds' mothers;
4M: 4-year-olds' mothers; 5M: 5-year-olds' mothers

Table 2: The use of *zai* in the mother-child conversation

zai	3C	4C	5C	3M	4M	5M
ACC	9%	6%	4%	0%	0%	3%
ACH	0%	0%	0%	3%	2%	0%
ACT	81%	92%	74%	85%	86%	89%
SEM	3%	3%	9%	1%	4%	5%
STA	6%	0%	13%	5%	9%	2%

Table 3: The use of *-guo* in the mother-child conversation

-guo	3C	4C	5C	3M	4M	5M
ACC	0%	0%	0%	0%	0%	0%
ACH	0%	0%	0%	27%	3%	0%
ACT	100%	100%	100%	73%	94%	100%
SEM	0%	0%	0%	0%	0%	0%
STA	0%	0%	0%	0%	3%	0%

Table 4: The use of *-zhe* in the mother-child conversation

-zhe	3C	4C	5C	3M	4M	5M
ACC	0%	0%	0%	0%	0%	0%
ACH	0%	11%	0%	7%	11%	5%
ACT	0%	5%	0%	0%	0%	5%
SEM	0%	0%	0%	0%	0%	0%
STA	100%	84%	100%	93%	89%	90%

As seen in the tables, both the children and the mothers used the perfective marker *-le* predominantly with telic verbs (accomplishments and achievements), and they used the progressive marker *zai* mainly with activity verbs. As for *-guo*, we observed that the children and the mothers used the experiential marker *-guo* almost

exclusively with activity verbs; in addition, they used the durative marker *-zhe* predominantly with stative verbs.

The results were compatible with the ‘naturalness of combination’ principle (Comrie, 1976), which states that some aspect morphemes combine naturally with some verb types but not others: for example, perfective aspect combines naturally with punctual verbs but not stative verbs.

The results also showed that the associations between lexical aspect and grammatical aspect remained strong across the age groups of the children. The findings were consistent with Li (2000) in that the associations did not become weaker over time. The findings thus did not demonstrate the patterns predicted by the prototype account (Shirai & Andersen, 1995). The prototype account suggests that ‘initially children restrict their use of tense/aspect inflections to the prototype of the category, then gradually extend the category boundary, and eventually acquire the adult norm’ (p.759). As pointed out by Li (2000), the more absolute associations may result from language specific properties; in addition, adult input may also play a role.

In our analysis of adult input, we observed that the mothers demonstrated similar association patterns between lexical aspect and grammatical aspect. In addition, the strengths of the associations were similar in the child speech and in the maternal speech. In other words, the mothers also demonstrated strong associations between lexical aspect and grammatical aspect. Thus, the findings suggest that the patterns observed in the child data may reflect the patterns in the maternal input. However, whether the patterns observed in the mothers’ speech were characteristics of child-directed speech or norms in adult-adult speech remains to be explored. If the strong associations characterize child-directed speech, we then need to investigate when and how the mothers relax the constraints in their speech to the children and whether the children’s speech reflect such changes in the input.

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