

***When an Adjective Behaves like a Verb:  
Adjectival Verbs in Mandarin Chinese Maternal Input***

Ya-Ching Yeh, University of Connecticut, USA  
Letitia Naigles, University of Connecticut, USA

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**Abstract**

The distinction between adjectives and verbs in Mandarin Chinese is not as clear as that in English. Adjectives in Mandarin share more similarities than differences with verbs, and most of them may function as verbs. Thus, they are termed adjectival verbs, which are translated into adjectives in English.

Previous studies on Mandarin caregivers' vocabulary have focused on action verbs. Little is known about the production of adjectival verbs. The current study investigated how these similarities and differences are distributed in Mandarin-speaking mothers' adjectival verb use.

We analyzed 40 mothers' speech to children in four age groups: 14-, 20-, 26-, and 32-month-olds. All utterances that contained adjectival verbs were identified and coded for 8 Similar properties and for 2 Distinguishing properties.

Our findings were twofold: First, not all properties were evenly distributed. Utterances in the SV and Verb-alone frame appeared with the greatest frequency, and followed by Negation, V-not-V, and the aspect marker, 'le'. Utterances containing other properties were either rare or none. Second, distinguishing properties also showed an uneven distribution. Degree Adverbs were produced frequently with adjectival verbs but Reduplications for adjectival verbs did not occur.

These results indicate both the similar and distinguishing properties that appear early and frequently in maternal input. This suggests that child Mandarin learners learn simultaneously how adjectival verbs and action verbs behave alike and how they distinguish from each other. This also suggests the role of frequency in the order of acquisition of these properties.

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## Introduction

The distinction between adjectives and verbs in Mandarin Chinese is not as clear as that in English. Adjectives and verbs in English belong to two different categories respectively, and thus, they behave grammatically differently. Adjectives must co-occur with copulas while verbs need to be inflected to encode tense, aspect, and mood (see Example 1 & 2).

- (1) Apples and oranges were different. (adjective)
- (2) Apples and oranges differed. (verb)

However, in Mandarin Chinese, adjectives and verbs are hard to differentiate from each other. Adjectives in Mandarin Chinese share more similarities than differences with verbs, and most adjectives may function as verbs (Tang, 2012; Chu, 2010; Li & Thompson, 1981; Ross and Ma, 2006). That is, adjectives can appear as the predicate in a sentence. Thus, adjectives in Mandarin Chinese are termed adjectival verbs, which are translated into adjectives in English (see Examples 3 & 4).

- (3) Zhe4 hai2zhi cong1mim2  
This kid smart  
“This kid is smart.”
- (4) Pin2kuo3 hao3 tian2  
Apple very sweet  
“(The) apple is very sweet.”

Previous studies (e.g., Tardif, Shatz, & Naigles, 1997; Tardif, Gelman, & Xu, 1999) on Mandarin maternal input have focused on action verbs (e.g., tui1 ‘push’, pao3 ‘run’). These studies found that Mandarin caregivers produced more verbs types and tokens than English caregivers. However, little attention has been paid to how adjectival verbs are used in maternal speech to child Mandarin learners. Based on the Similar properties sharing with action verbs and Distinguishing properties from action verbs selected from Tang (2012), the current study investigated how these properties are distributed in Mandarin-speaking mothers’ adjectival verb uses when they talk to young children.

The eight Similar properties (a-h) and two Distinguishing properties (i-j) as well as their examples are presented as follows.

- (a) Both adjectival and action verbs can appear as the predicate in a sentence.  
Zhe4 pin2kuo3 tian2  
This apple sweet  
“This apple is sweet.”
- (b) Both adjectival and action verbs can appear alone.  
Q: Zhe4 pin2kuo3 tian2 ma1?  
This apple sweet Q-marker  
“Is this apple sweet?”  
A: Tian2  
Sweet  
“(It’s) sweet.”
- (c) Both adjectival and action verbs can be used with negation.  
Zhe4 pin2kuo3 bu4 tian2  
This apple not sweet  
“This apple is not sweet.”

- (d) Both adjectival and action verbs can appear in V-not-V form.  
 Zhe4 pin2kuo3 tian2 bu4 tian2?  
 This apple sweet not sweet  
 “Is this apple sweet?”
- (e) Both adjectival and action verbs can follow an auxiliary.  
 Ni3 yao4 xiao3hsin1  
 You must careful  
 “You must be careful.”
- (f) Both adjectival and action verbs can be used as imperatives.  
 Xiao3hsin1  
 Careful  
 “Be careful!”
- (g) Both adjectival and action verbs can be modified by **temporal/locative/scope** adverbs.  
 Ta1men2 zuo2tian1/zai4zhe4li3/dou1 hen3 kwai4le4  
 They yesterday/here/all very happy  
 “They were very happy **yesterday**.”  
 “They are very happy (when staying) **here**.”  
 “**All** of them are very happy.”
- (h) Both adjectival and action verbs can carry aspect markers/complements.  
 Feng1 ye4 hong2 le  
 Maple leaf red PFV (perfective aspect)  
 “Maple leaves turned red.”  
 Ta1 lei4 de wu2fa3 kong1zuo4  
 He tired unable work (resultative complement)  
 “He is so tired that he cannot work.”
- (i) Adjectival verbs can be modified by degree adverbs but action verbs cannot.  
 Zhe4 pin2kuo3 hen3/shi2fen1/zhe4me tian2  
 This apple very/quite/so sweet  
 “This apple is very/quite/so sweet.”
- (j) Adjectival and action verbs are different in reduplication form.  
 Adjectival verbs: AA, AABB  
 Example 1: chung4chung4 (‘heavy’)  
 Example 2: piao4piao4 liang4liang4 (‘beautiful’/‘pretty’)  
 Action verbs: A-(yi)-A, ABAB  
 Example 1: kan4kan4 (‘look’); kang4yi2kan4 (‘look’)  
 Example 2: yan2jiu4 yan2jiu4 (‘study’/‘investigate’)

## Method

### *Participants*

The participants included 40 Mandarin Chinese-speaking mothers selected from the CHILDES Mandarin corpus (MacWhinney, 2000; Zhou, 2000). All participants were native Mandarin speakers living in Nanjing, China. The transcripts included these mothers’ speech to children from one of four age groups: 14-, 20-, 26-, and 32-month-olds. There were 10 mother-child dyads in each age group. The numbers of girls and boys within each group were equal. None of the children showed a hearing impairment or developmental delay.

### Procedure

The mother-child conversation and interactions were video-recorded in each child's day care classroom. The mother and her child began semi-structured play, in which they played and talked using the contents of four boxes. The four boxes respectively contained (1) a ball, (2) a popular toy, (3) paper and crayons, and (4) a picture book with stories in Chinese. All dyads were told to explore all the four boxes in about 10 minutes.

### Transcription and Coding

The transcripts were obtained from the CHILDES Mandarin corpus (MacWhinney, 2000; Zhou, 2000). Mothers' speech was used for data analyses. Coding was restricted to utterances appearing in their spontaneous speech. Therefore, all those utterances appearing in memorized or routine phrases, such as social routines (e.g. thank you, bye-bye, and so forth), songs, poems, nursery rhymes, and story narratives were excluded from coding. All of the mothers' utterances that fit the above criteria and included adjectival verbs were coded for eight Similar properties sharing with action verbs and two Distinguishing properties from action verbs that were presented in the Introduction section. A qualified utterance may have more than one property. After coding, frequencies were counted for distribution.

### Results

The purpose of this study is to investigate how similar and distinguishing properties are distributed in Mandarin-speaking mothers' adjectival verb uses when talking to young children. The frequency distribution of similar properties in maternal input is presented in Figure 1. As Figure 1 shows, not all similar properties were evenly distributed. Utterances in the SV and Verb-alone frames appeared with the greatest frequency, and followed by Negation, V-not-V form, and Aspect marker 'le'. Other properties were produced rarely or none.

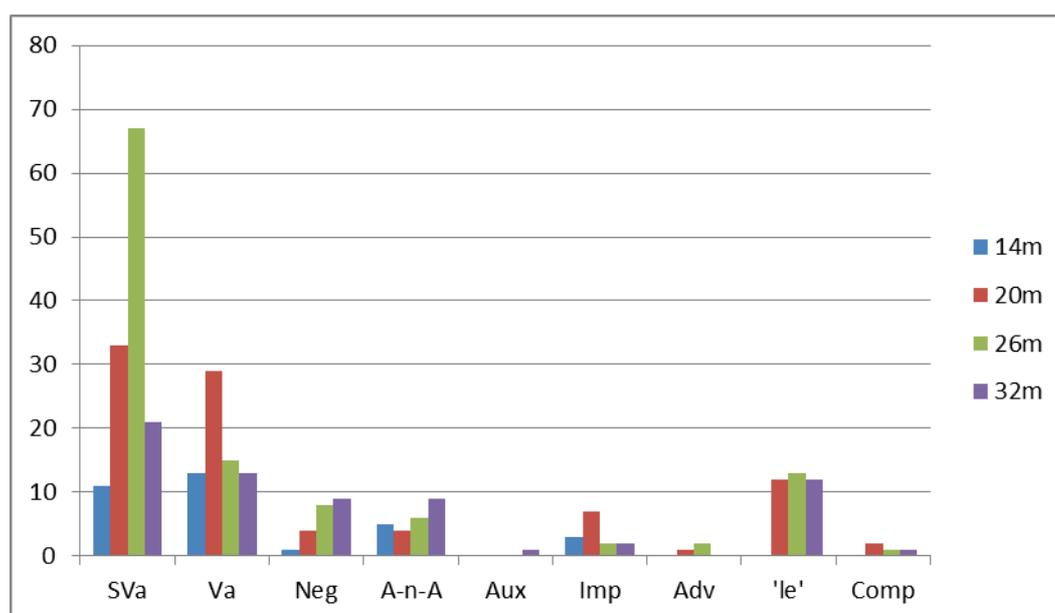


Figure 1. Frequency distribution of Similar properties in maternal adjectival verb uses. Like similar properties, distinguishing properties also showed an even distribution.

Degree Adverbs were produced frequently with adjectival verbs but Reduplications for adjectival verbs did not occur at all (see Figure 2).

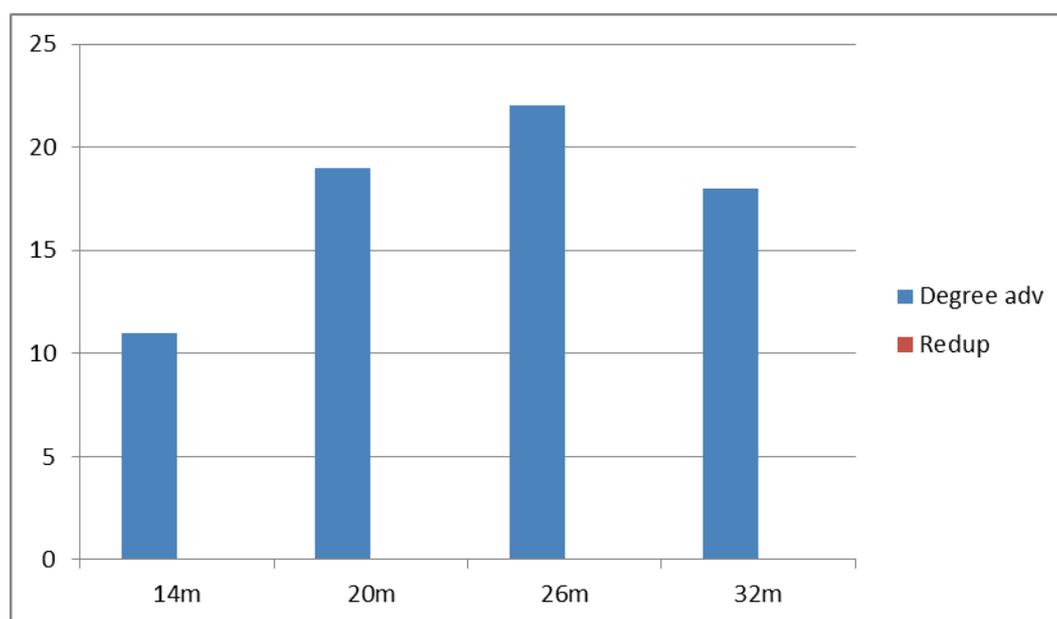


Figure 2. Frequency distribution of Distinguishing properties in maternal adjectival verb uses

## Discussion

By comparing similar and distinguishing properties in maternal adjectival verb uses, this current study revealed that Mandarin-speaking mothers produced adjectival verbs distinctively. That is to say that, these properties did not evenly occur in the maternal input simultaneously. Three Similar properties and one Distinguishing property were used early and frequently: the SV frame, Verb-alone frame, aspect marker 'le', and Degree Adverbs. This suggests that child Mandarin learners learn simultaneously how adjectival verbs and action verbs behave alike and how they distinguish from each other.

The properties that mothers used early and frequently appear to be the frames that children might acquire early in their language development (Cheng, 1986; Erbaugh, 1992). These results suggest that how mothers use adjectival verbs may play a role in the acquisition of adjectival verbs and also in the order of acquisition of these properties. To test this possibility, child production data will be needed. Further analyses shall include the frequency distribution of these properties in child adjectival verb uses. To determine whether maternal adjectival verb uses are reflected in children's acquisition, correlation analyses will be needed to see whether there is any relationship between maternal and child adjectival verb production.

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