Reflexive pronouns in Chinese-learning monolingual, bilingual, and trilingual toddlers, and their parental input

Yue Chen¹, Ziyin Mai¹, Xiaoshi Hu², Mengyao Shang¹

¹The Chinese University of Hong Kong, Sha Tin, Hong Kong. ²Tsinghua University, Beijing, China

Abstract

Reflexive pronouns in Chinese have two forms: compound reflexives (e.g., *ta-ziji* 'himself' in Mandarin) governed by binding principles in ways similar to reflexives in English, and bare reflexives (e.g., *ziji* in Mandarin, *zi6gei2* in Cantonese) functioning as local anaphors, generic pronouns or intensifiers (Wang & Pan, 2021) (examples in Figure 1). Previous studies found that English-speaking children use reflexive pronouns as a generic pronoun in addition to anaphoric use before age 5 (Wexler & Chien, 1985), and that Mandarin children adeptly produce *ziji* in simple reflexive contexts around age 2, indicating a fundamental grasp of its reflexive function at an early stage (Chen & Wu, 2010; Zhu, 2003). Existing literature has not investigated the aforementioned three fine-grained usages of bare reflexives in Chinese-learner children in naturalistic settings and examine their relations with relevant patterns in their Chinese input.

In this study, we analyzed reflexive pronouns in Mandarin and Cantonese (n = 305) produced by monolingual, bilingual and trilingual toddlers (n = 49) and their parents in naturalistic adult-child play sessions sampled longitudinally over 1.5 years (1;6-3;0, sourced from Early Additive Child Multilingual Corpus, Mai et al., in prep). Preliminary findings reveal early emergence of bare reflexives (around 2;0). Further analysis of the bare reflexives shows that 1) the anaphorical use is missing across children, which is consistent with low dosages of anaphorical use in parental input (0.03%); 2) the generic use dominates use of bare reflexives across groups (0.08%) aligning with patterns reported for English children; 3) the intensifier use, which is specific to the Chinese languages but not in English, is only produced by the monolingual and bilingual children who are learning Cantonese, Mandarin or both, and interestingly not by the bilingual and trilingual children who are acquiring English alongside Chinese, suggesting effects of multilingual input and cross-linguistic influence on production of reflexives in the early years. In-depth analysis of the linguistic and discourse contexts in which the three usages of the bare reflexives appear is in progress.

Figure 1: Examples of Three Types of Bare Reflexives in Mandarin

```
Anaphor
            erzii
                  hai
                          meng-jian
                                       le
                                              Ziji_i
                                                    zai
                                                              gen
                                                                     pengyou-men
                                                                                     wan
                  also
                          dream-see
                                       ASP
                                              self PROG with
                                                                    friend-PL
            son
                                                                                     play
            'The son also dreamed about him(self) playing with friends.' (Parental input, 2:9)
Generic
            ziji
                  shua
                          ya
            self
                          teeth
                  brush
            'Brush (my) teeth by myself.' (Amy, 2;3)
Intensifier
                  xiang
                          ziji
                                       du
           ni
                  want
                          self
                                       read
            'You want to read by yourself.' (Eason, 2;0)
```

Key References:

Wang, Y., & Pan, H. (2021). Chinese reflexives. *Oxford Research Encyclopedia of Linguistics*. Wexler, K., & Chien, Y.-C. (1985). The Development of Lexical Anaphors and Pronouns. *Child Language Development*, 24(1), 138-49.

Zhu, D. (2003). The acquisition of the Chinese reflexive "ziji": Implications for theories of acquisition. Language Acquisition, 11(1), 59-95.