Testing contexts' effects on the Mandarin reflexive anaphor *ziji*'s interpretation

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Introduction The Mandarin reflexive anaphor *ziji* allows either local or long-distance binding (LDB), as shown in (1) where *ziji* can refer either to the local subject—*Bill* or the matrix subject—*John*. There is in fact a third possibility in self-reflective contexts: if (1) is part of what one thinks to themself, *ziji* can alternatively refer to the agent of thinking, termed reflector here (Li, 1991).

(1) John$_i$ shuo Bill$_j$ chang piping **ziji**$_{i/j/\text{reflector}}$.

John say Bill often criticize self

'John$_i$ said that Bill$_j$ often criticized {him$_i$, himself$_j$, reflector}.'

Ziji's potential to refer to a reflector complicates the investigation of this anaphor's LDB properties. One such property is the blocking of LDB. For example, LDB in (1) will be blocked if the local subject *Bill* is replaced with the 1st person pronoun *wo* 'I' (Tang, 1989). This paper reports on an experiment exploring *ziji*'s interpretation in scenarios that may block LDB and permit binding by the reflector. Our findings indicate that *ziji*'s reference to a 1st person long-distance antecedent is partially blocked by an intervening 3rd person local antecedent. However, this blocking can be mitigated in a context of self-reflection where the long-distance antecedent is also the reflector.

Background There is no consensus in the literature when LDB is blocked. Tang (1989) suggests that *ziji*'s LDB potential is blocked when the LDB antecedent has a different person specification from the local antecedent. However, Xu (1993) and Pan (1997, 2001) claim that a local antecedent with a 1st/2nd person specification can block LDB by a 3rd person antecedent, but not vice versa. He and Kaiser (2016) use two-option forced-choice comprehension questions to elicit Mandarin native speakers' interpretation of *ziji*; they find that blocking is more likely when 3rd person DPs intervene, contradicting all aforementioned accounts. Considering the disputes and the fact that none of the previous studies consider the effect of reflector-binding, this research explores two questions: 1) with 1st person pronouns and 3rd person DPs, which tend to block more frequently? 2) do contexts of self-reflection invoke reflector-binding and affect *ziji*'s interpretation and how?

Experiment In order the answer the two questions, we asked native Mandarin speakers to use a 7-Point Likert Scale to evaluate *ziji*'s potential for LDB in sentences like (1), with the matrix subject and the intervening local subject adopting the person arrangements of 1st-3rd (i.e. a 1st matrix subject and a 3rd person local subject), 3rd-1st and 3rd-3rd respectively. Stimuli sentences are presented in two different contexts, oral communication vs. self-reflection. Oral communication is one of the most commonplace contexts free from effects of reflector-binding; comparing the LDB potential under all three arrangements in this context can reveal which arrangement incurs more blocking. Self-reflection is the context predicted to evoke *ziji*'s reference to the contextual reflector; comparing the blocking facts between the two contexts helps verify reflector-binding and demonstrate contextual effects. The two contexts are simulated by pictures, e.g. either showing two people conversing or one person meditating. Experiments scores in all conditions are analyzed via linear mixed-effect models. The hypothesis is that reflector-binding is activated in self-reflective contexts, and when the reflector is overtly represented as a 1st person long-distance antecedent (e.g. under the 1st-3rd arrangement), reflector-binding will be embodied in more potential for LDB.

Conclusions The LDB scores in oral communication have the ranking: 3rd-3rd (4.43) > 1st-3rd (3.72) > 3rd-1st (2.99). Compared to the 3rd-3rd arrangement, LDB blocking under the 3rd-1st arrangement (p < 0.001) is more significant than under the 1st-3rd arrangement (p = 0.078). Our results are more consistent with Xu(1993) and Pan(2001) in that intervening 1st person antecedents tend to block more frequently. Comparing the two contexts under the 1st-3rd arrangement, we find that the LDB score in self-reflection is 4.43, significantly more than the score in oral communication (p = 0.024). Our hypothesis is thus borne out that reflector-binding is invoked in self-reflective contexts, which affects *ziji*'s potential for LDB. Future LDB studies of *ziji* are advised to control for the contextual effects, especially of self-reflective contexts.

References

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