SPEAKER-ORIENTED ADVERBS *EXPECTEDLY* IMPACT REFLEXIVE RESOLUTION IN CHINESE

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Introduction Linguistic research (e.g., Speas'04) shows that speaker-oriented adverbs can express the attitude, judgment, and knowledge of the attitude holder about the proposition or event described by the subordinate clause (e.g., *John said that, as expected, Mary …*). These adverbs typically convey the ***point of view*** or ***perspective*** of the attitude holder (e.g., *John*). Our study tests whether and how speaker-oriented adverbs expressing the attitude holder's perspective impact reflexive resolution in Chinese. We look at the perspective-sensitive *ziji* ('self') and the controversial *ta-ziji* ('s/he-self') which is typically assumed to be perspective-insensitive. The results from two antecedent choice judgment experiments and a self-paced reading experiment show that speaker-oriented adverbs impact the interpretation of *ziji* and *ta-ziji*, which suggests that *both* reflexives can be perspective-sensitive. However, this impact only 'kicks in' very late, when we consider the combined results from these three experiments.

Methods Exp. 1 (N = 50) and **Exp. 2** (N = 53) are **antecedent choice judgment** experiments and used the same materials. However, Experiment 1 is a two-alternative forced choice task while Experiment 2 added a third choice, 'Ambiguous'. The factors REFLEXIVE (*ziji*/*ta-ziji*) and ADVERB (speaker-neutral/-oriented) were controlled (see (1)). Speaker-neutral adverbs (e.g., 'last week') are neutral regarding from whose perspective an event is evaluated; speaker-oriented adverbs bias the perspective of the attitude holder (e.g., *non-local* subject *Xiaoli*).

(1) Xiaoli$_{fem}$ say Xiaofang$_{fem}$ {last-week/expectedly} BA *ziji*/*ta-ziji* DE that-CL paper make-lost.
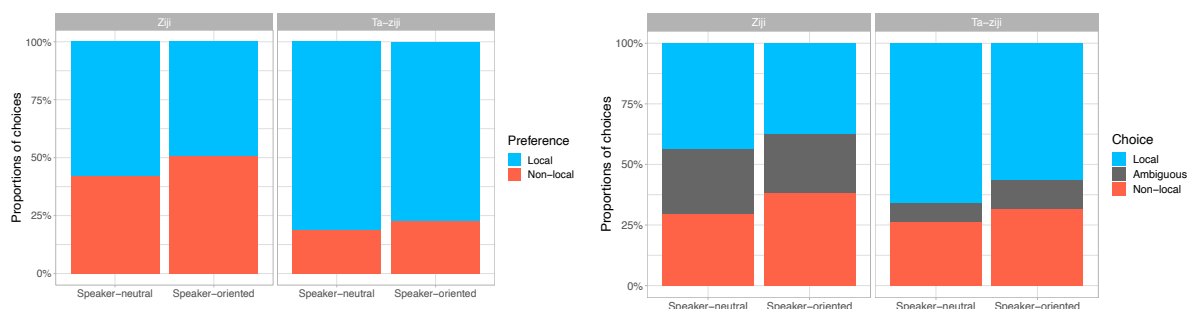
Exp. 3 (N = 52) is a **self-paced reading** experiment probing whether/when speaker-oriented adverbs impact the interpretation of *ta-ziji*. The factors ANTECEDENT (local/non-local) and ADVERB (speaker-neutral/-oriented) were controlled (see (2)). The distance of the **antecedent** is determined by the gender match between *ta$_{fem/mal}$-ziji* and the (non-)local antecedent (e.g., *Xiaoli$_{fem}$/Qianjun$_{mal}$*). The critical region is the reflexive *ta-ziji*. In Exp. 3, participants also made sentence-final decisions about who the antecedent is (e.g., 'whose paper was made lost?").

(2) a. Xiaoli$_{fem}$ say **Qianjun$_{mal}$** {last-week/expectedly} BA **ta$_{mal}$-ziji** DE … (Local binding)

    b. **Xiaoli$_{fem}$** say Qianjun$_{mal}$ {last-week/expectedly} BA **ta$_{fem}$-ziji** DE … (Non-local binding)

We used mixed effects logistic models to analyze antecedent choices and the mixed effects linear models to analyze reading times (RTs).

Antecedent choices As shown below, when the sentence has a speaker-oriented adverb, Chinese speakers are more likely to accept the non-local attitude holder as the antecedent. This ADVERB effect is only significant for *ziji* in **Exp. 1** ($p < 0.05$), despite a similar pattern for *ta-ziji*, which in fact reaches significance ($p < 0.05$) in **Exp. 2** ($p < 0.05$) with three choices.

Reading times (RTs) and sentence-final judgment Due to space, the main findings of **Exp. 3** are that, starting from the post-critical region *DE*, non-local binding in (2b) causes longer RTs than local binding in (2a) ($ps < 0.05$). The ADVERB effect is not significant. But strikingly, the sentence-final judgment (binary choice) data in Exp. 3 show a very similar pattern to Exp. 1: within the **non-local conditions (2b)**, participants are more likely to accept non-local binding with a speaker-oriented adverb (56%) than with a speaker-neutral adverb (48%) ($p < 0.05$). Combined, this suggests that speaker-oriented adverbs have a delayed effect for *ta-ziji*.