

Topic and Experiencer Both Matter: Multiple Cues in Mandarin Reflexive Resolution

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A key question concerning reflexive resolution is whether antecedent choice is constrained by structural cues (e.g., **subject**) or the integration of structural and non-structural cues (e.g., topicality, theta roles), as proposed by the **multiple-constraint approach** [1-4]. Mandarin reflexives provide a useful test case because *ziji* “self” and *ta-ziji* “him/herself” differ in their sensitivity to structural and non-structural factors, including the perspective center [5,6,7]. However, it is not known whether the **experiencer** theta-role assigned by psych verbs guides reflexive resolution. Psych verbs (e.g. *admire*, *fear*, *amaze*) express mental and cognitive states/experiences, and the **experiencer** argument seems to be a natural candidate to serve as a perspectival center. We use **experiencer** in **subject** and **object** position (ex.1a-b, **ExpStim**: *John_{EXP} fears Mary_{STIM}* vs. **StimExp**: *Mary_{STIM} frightens John_{EXP}*), and test whether *ziji* and *ta-ziji* are sensitive to antecedents’ **experiencer** status and how this interacts with topicality.

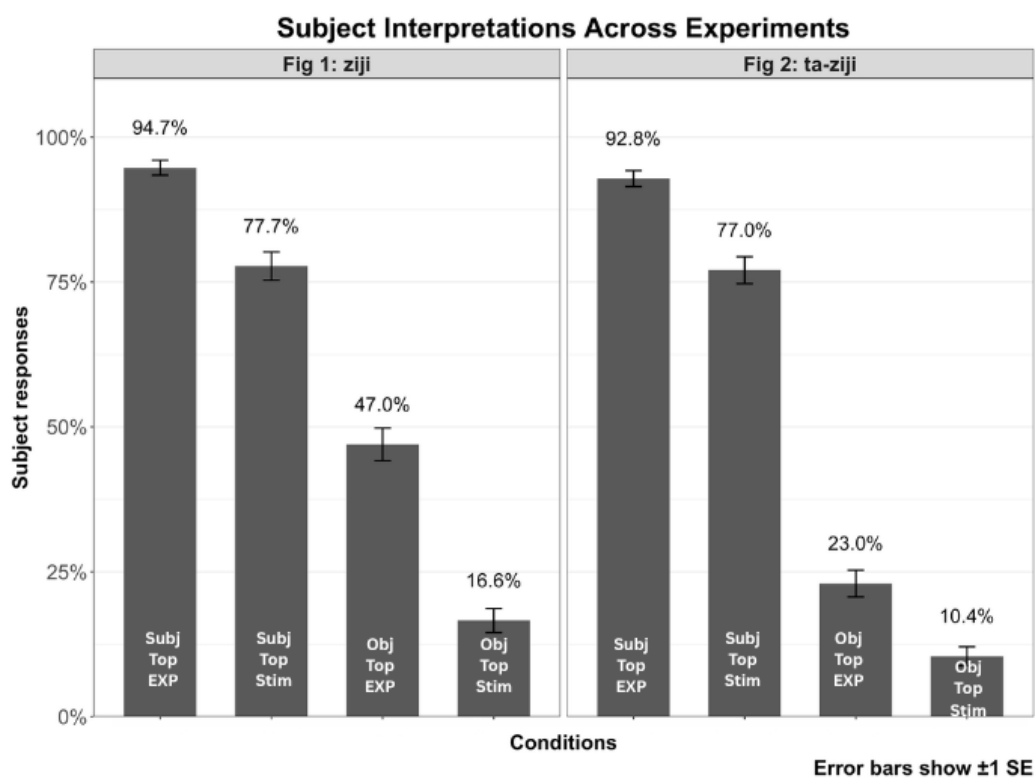
Methods. We ran two online sentence-completion studies with native Mandarin speakers, **Exp.1** on *ziji* ($N = 57$), and **Exp.2** on *ta-ziji* ($N = 65$). Both had a 2×2 design crossing Topicality (**Subj**-Topic/**Obj**-Topic) and Psych-verb Type (**ES**/**SE**). Participants completed 24 target sentence fragments with a reflexive prompt in subject position (ex.2-3, corpus data in ex.5), and 26 fillers. We analyzed whether the reflexive refers to the subject or object (data fully double-coded by 2 native Mandarin speakers). Mixed-effects logistic regression was used.

Results. In **Exp.1**, *ziji* was sensitive to both topicality and **experiencer** status (Fig.1). Participants were more likely to produce subject-referring continuations when the subject was topical rather than non-topical ($p < 0.01$) and when it was an **experiencer** rather than a **stimulus** ($p < 0.01$): Reflexive resolution is shaped not only by discourse prominence but also by thematic roles. If we regard experiencer status as associated with being the perspectival center, our results provide new evidence for the claim that *ziji* is perspective-sensitive. **Exp.2** showed similar effects for *ta-ziji* (Fig. 2), with effects of antecedent topicality ($p < 0.01$) and thematic role ($p < 0.01$). Crucially, an Exp1/2 comparison shows *ziji* has a stronger **subject** bias than *ta-ziji* ($p < 0.05$), indicating form-specific differences in cue weighting.

Conclusion. Our work offers three main insights. **First**, we show that both *ziji* and *ta-ziji* favor antecedents with **experiencer** roles, revealing a new way in which perspective-sensitivity guides reference resolution. **Second**, we find evidence for the integration of multiple competing cues, consistent with a **multiple-constraint approach** [1,2]. **Third**, cue weighting also differs across reflexive forms, with *ziji* showing a stronger **subject** bias than *ta-ziji*.

- (1a) **Experiencer–Stimulus (ES)** verbs: John_{Experiencer} fears Mary_{Stimulus}
- (1b) **Stimulus–Experiencer (SE)** verbs: John_{Stimulus} frightens Mary_{Experiencer}
- (2) Example target (sentences translated into English; below, both *Xiaoyu* and *Xiaolei* are male. See ex.(3) for Chinese and ex.(4) for more examples of psych verbs in Chinese)
- (a). **Subject as discourse topic / Experiencer**
Let's talk about Xiaoyu, he_{exp} missed Xiaolei_{stim} last year, so *ziji* / *ta-ziji*...
- (b). **Subject as discourse topic / Stimulus**
Let's talk about Xiaoyu, he_{stim} reassured Xiaolei_{exp} last year, so *ziji* / *ta-ziji*...
- (c). **Object as discourse topic / Stimulus**
Let's talk about Xiaolei, Xiaoyu_{exp} missed him_{stim} last year, so *ziji* / *ta-ziji*...
- (d). **Object as discourse topic / Experiencer**
Let's talk about Xiaolei, Xiaoyu_{stim} reassured him_{exp} last year, so *ziji* / *ta-ziji*...

Fig.1 (left) and **Fig.2** (right): Percentage of trials in which participants interpreted *ziji/ta-ziji* as referring to the subject (**Subj-Top** means **subject** as discourse topic, **Obj-Top** means **object** as discourse topic, **EXP** means **experiencer**, **Stim** means **stimulus**).



References

- [1] Kaiser et al (2009). Cognition. [2] Lyu & Kaiser (2023). Glossa Psycholinguistics. [3] Cummings & Sturt (2014). Journal of Memory and Language. [4] Zhao & Sperlich (2026). Linguistics Vanguard. [5] Hagège (1974). Bulletin de la Société de Linguistique de Paris. [6] Clements (1975). The logophoric pronoun in Ewe: Its role in discourse. [7] Charnavel, (2020). Linguistic Inquiry.

(3) Chinese version of our example item:

(a) Subject as discourse topic / Experiencer

让我们聊聊 小宇 这个人 吧, 他 去年 的 时候 想念 小磊,
let us talk Xiaoyu this-CL person SFP 3SG last-year MOD time miss Xiaolei,

所以 自己/他自己...

so self/himself...

'Let's talk about Xiaoyu, **he**_{exp} missed **Xiaolei**_{stim} last year, so *ziji* / *ta-ziji*...'

(b) Subject as discourse topic / Stimulus

让我们聊聊 小宇 这个人 吧, 他 去年 的 时候 安慰了 小磊,
let us talk Xiaoyu this-CL person SFP 3SG last-year MOD time reassure-PFV Xiaolei,

所以. 自己/他自己...

so self/himself...

'Let's talk about Xiaoyu, **he**_{stim} reassured **Xiaolei**_{exp} last year, so *ziji* / *ta-ziji*...'

(c) Object as discourse topic / Stimulus

让我们聊聊 小磊 这个人 吧, 小宇 去年 的 时候 想念 他,
let us talk Xiaolei this-CL person SFP Xiaoyu last-year MOD time miss 3SG,

所以. 自己/他自己...

so self/himself...

'Let's talk about Xiaolei, **Xiaoyu**_{exp} missed **him**_{stim} last year, so *ziji* / *ta-ziji*...'

(d) Object as discourse topic / Experiencer

让我们聊聊 小磊 这个人 吧, 小宇 去年 的 时候 安慰了 他,
let us talk Xiaolei this-CL person SFP Xiaoyu last-year MOD time reassure-PFV 3SG,

所以. 自己/他自己...

so self/himself...

'Let's talk about Xiaolei, **Xiaoyu**_{stim} reassured **him**_{exp} last year, so *ziji* / *ta-ziji*...'

(4) Additional examples of **ES** and **SE** verbs we used (note that Chinese verbs are SE/ES verbs, but their English translations may not be **ES** / **SE** verbs in English):

ES: 可怜 'pitied', 欣赏 'admired', 鄙视 'despised', **SE**: 侮辱 'insulted', 骚扰 'harassed', 激励 'stimulated'

(5) Corpus example showing *ziji* and *ta-ziji* in subject position (from Peking University CCL Online Corpus):

Ziji in subject position: 自己已经不正当了 'Self is already inappropriate.' **Ta-ziji** in subject position: 他自己已决定在未来的演讲中默想圣经 'Himself has decided to meditate on the Bible in future speeches.'