PREDICTABILITY MECHANISM OF PRONOUN INTERPRETATION IN MANDARIN

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BACKGROUND A recent study found that null and overt pronouns in Mandarin were sensitive to topicality at a similar magnitude (Cui & Hwang, 2023). For example, when the subject was fronted and more topical (e.g., *Yixin yinwei zaiyi Shiqi, suoyi…* 'Yixin because cares Shiqi, so…'), Mandarin speakers were more likely to interpret both types of pronouns as referring to the subject compared to when the subject was in a canonical position (e.g., *yinwei Yixin zaiyi Shiqi, suoyi…* 'because Yixin cares Shiqi, so…'). This could be because topical entities are more accessible and/or predictable than non-topical entities (e.g., Givón, 1983). Using the same stimuli, earlier work showed that topical subjects were indeed more predictable than non-topical subjects (Lam & Hwang, 2022). The current study investigates whether predictability underlies the effects of topicality on null and overt pronoun interpretation in Mandarin.

EXPERIMENT To see if predictability guides pronoun interpretation, we manipulated the predictability of the subject with verb semantics while controlling for topicality. In (1), both subjects are non-topical but the subject is more predictable in (1a) than (1b) (Kehler & Rhode, 2013). We also manipulated pronoun types using *jiu* 'then' (null: *Ø jiu* 'Ø then'; overt: *ta jiu* 'he/she then'). The adverb *jiu* occurs following the subject and before a predicate. Thus, when no explicit pronouns are present, *jiu* signals the presence of a null pronoun.
(1) a. yinwei Yixin zaiyi Shiqi, suoyi Ø/ta jiu… b. yinwei Zixi jinule Lili, suoyi Ø/ta jiu…
    because Yixin cares Shiqi, so Ø/ta then… because Zixi irritate-PFV Lili, so Ø/ta then…
    'Yixin cares Shiqi, so she…'   'Zixi irritated Lili, so she…'
Participants (N=56) were asked to read the prompt sentence and provide a natural continuation following either null or overt pronoun prompts. We predict that if predictability underlies the topicality effects on null and overt pronouns, Mandarin speakers will be more likely to interpret both pronouns as referring to the more topical subjects in (1a) than (1b) -- because more predictable subjects could be more topical. We analyzed whether participants interpreted the pronouns as referring to subjects or objects. Ambiguous responses and those referring to both subjects and objects were excluded from the analysis.

RESULTS We found that predictability affected both null and overt pronouns in Mandarin. However, there was an interaction between predictability and pronoun types: Overt pronoun interpretation was influenced by predictability to a greater extent than null pronouns (subject reference proportion for null pronouns: 99% vs. 81%; overt pronouns: 99% vs. 51%). Given that the topicality effects found in Cui and Hwang (2023) did not differ significantly between null and overt pronouns, we suggest that predictability may account in part for the topicality effect on the interpretation of null and overt pronouns in Mandarin, but it is not likely to be the only mechanism. While other mechanisms, such as accessibility (e.g., Ariel, 1990; Givón, 1983), could also underlie topicality effect, predictability might be a larger contributor to topicality for overt pronouns than for null pronouns.

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