

Comprehension of prosodic and syntactic focus marking in Mandarin Chinese - Data from children and adults

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Introduction

- Focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions and it can be represented by prosodic information and syntactic structure (Rooth, 1992; Krifka, 2008)
- Mandarin speakers (adults and children) can mark focus by using prosodic cues but less research has been done for understanding whether Mandarin speakers can comprehend prosodic focus marking (Yang and Chen, 2014).
- Theoretical considerations: Chinese “uses more syntax and less phonology in focus realization” (Xu, 2004)

Eye-tracking study

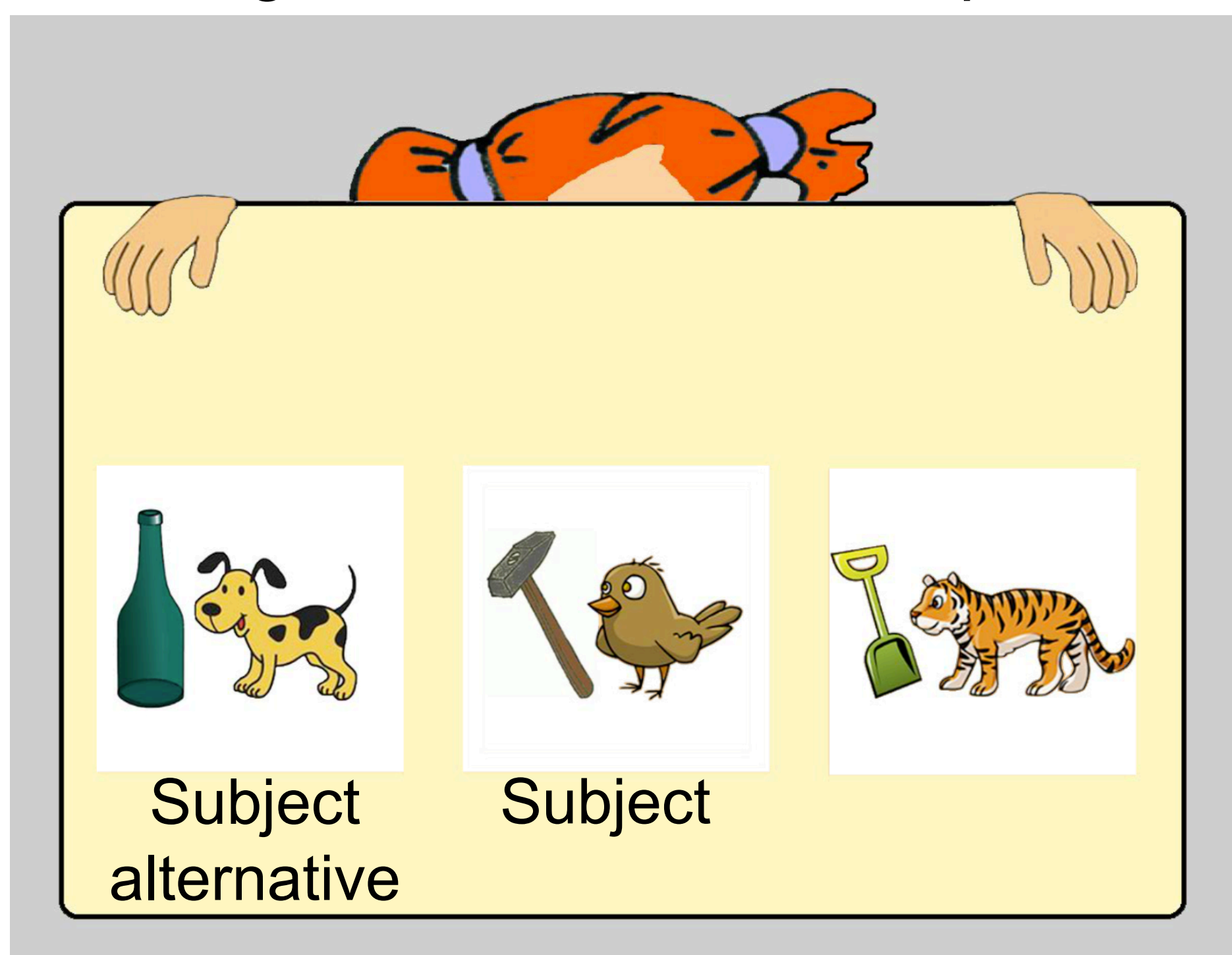
- A more sensitive and more suitable online method in need (Cutler and Swinney, 1987)
- Eye movements can be used to observe the rapid mental processes that underpin spoken language comprehension (Tanenhaus et al., 1995)
- The children’s looking patterns mirror the adults’ looking patterns, but poor performance in off-line measures for comprehension of the target sentences (Zhou et al, 2012; Höhle et al, 2016)

Method

Sentence-picture verification task (Szendrői et al., 2017)

- Participants: 56 Mandarin-speaking adults, 58 5-year-old Mandarin-speaking children (6 were excluded)
- Conditions (See below): Subject-accented, Subject-cleft, Object-pseudocleft
- Between-subject design
- Materials: 8 test trials, 8 control trials, 4 trials, 2 practice trials

Figure 1: Test trial example



Subject-accented

XIAONIAO you shueping, shi ma?
bird have bottle Aux Q
'The BIRDY_F has the bottle, is that right?'

Subject-cleft

Shi XIAONIAO you shueping, shi ma?
SHI bird have bottle Aux Q
'It is the BIRDY_F who has the bottle, is that right?'

Object-pseudocleft

Xiaoniao you de shi SHUEPING, shi ma?
bird have DE SHI bottle Aux Q
'What the birdy has is the BOTTLE_F, is that right?'

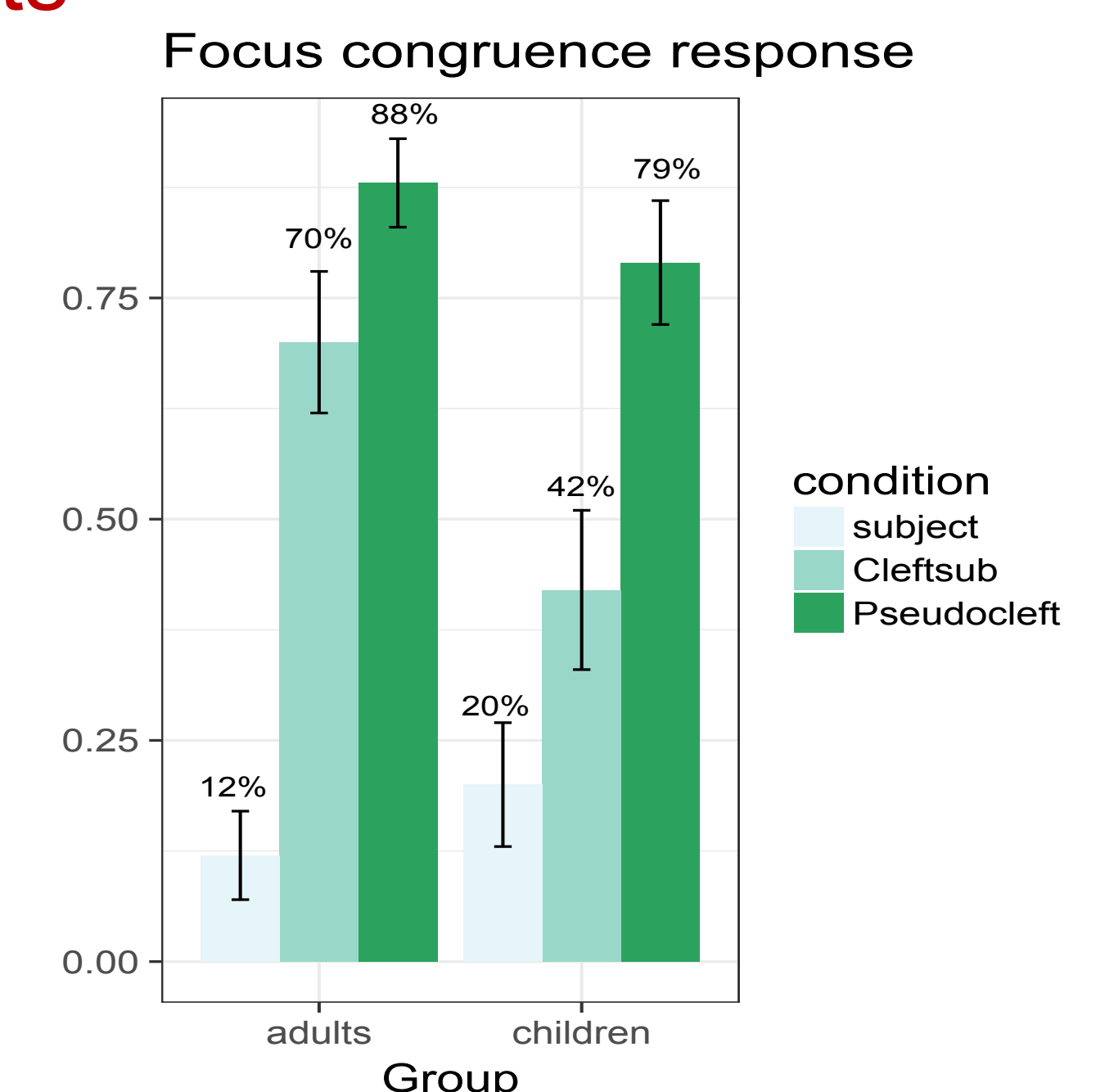
Results

Figure 2.: Focus congruence response data

- Lowest performance in the subject-accented condition & the highest in the object-pseudocleft condition

Linear Mixed Effects Models

- Group interaction: Differences between subject-accented and subject-cleft larger in adults than in children



Eye-tracking data in Mandarin Chinese

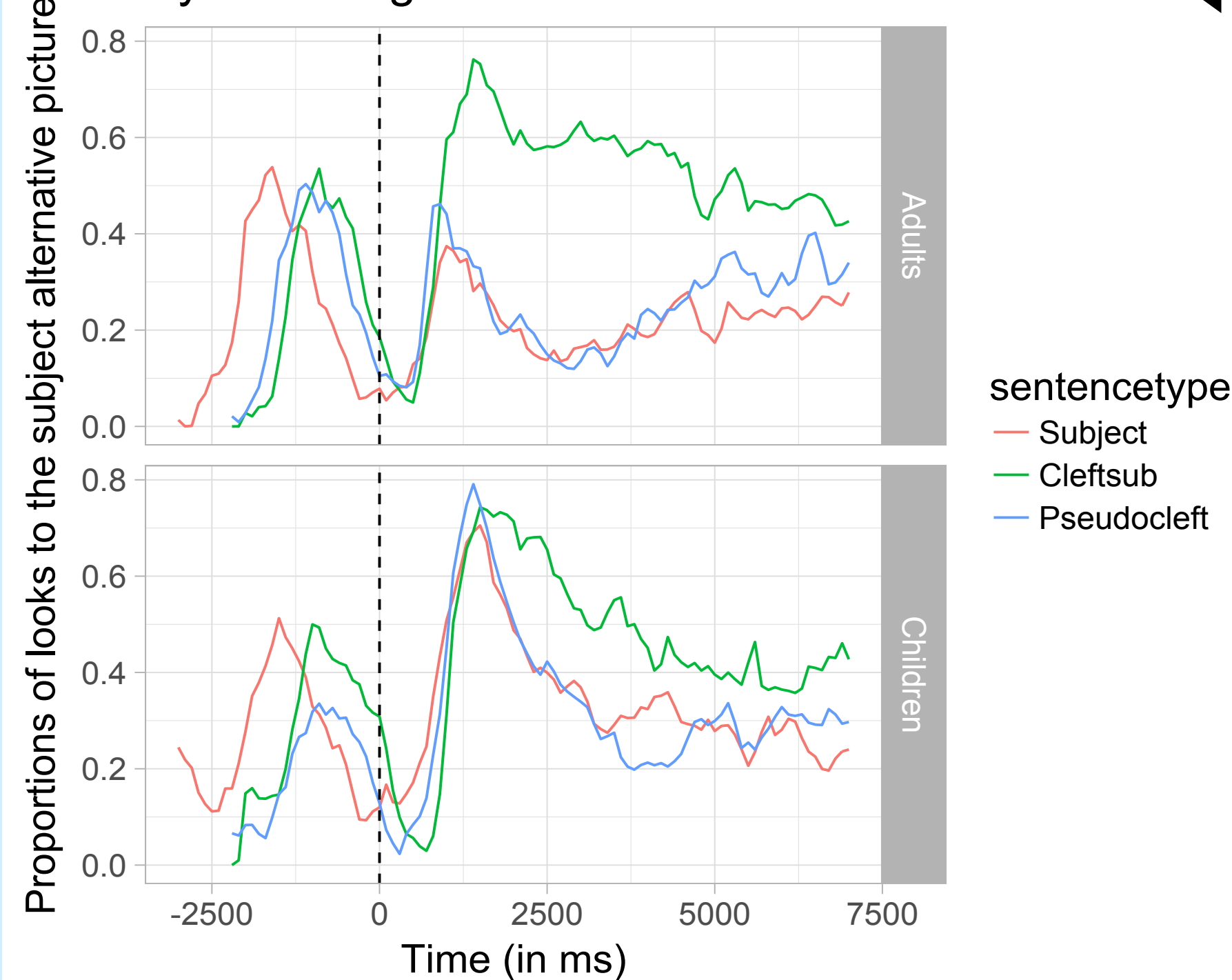


Figure 3.: Gaze data for test trials

- The children’s looking patterns are similar to the adults’ ones

Linear Mixed Effects Models

- Group interaction: The difference between subject-accented and subject-cleft is larger in adults than in children
- No differences between subject-accented and object-pseudocleft condition in both groups

Conclusions

- The accuracy data and the eye-gaze data mirror each other
- In contrast to Chen no evidence that Mandarin learners rely more on prosodic cues than adults (Chen, 1998)
- Higher reliance on syntactic than on prosodic cues to identify focus in both children and adults

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