

Mandarin speakers undergoing attrition produce more explicit referring expressions

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Abstract: Previous studies reported a preference for more explicit referring expressions among bilingual speakers (Serratrice et al., 2004). For instance, studies on L1 attrition (changes in an individual's first language due to immersion in a second language) show that speakers of null subject languages (e.g., Italian and Spanish) who are undergoing attrition tend to accept overt pronouns in contexts where monolingual speakers would prefer null pronouns (Tsimpli et al., 2004). Mandarin Chinese is a radical pro-drop language that permits both subject and object drop, and a growing number of Chinese people study, live, work, and reside abroad. Despite this, the effects of L1 attrition in Mandarin have not been adequately explored. Here we explore (1) whether bilingual native Mandarin speakers display any attrition-related changes in their use of referring expressions after exposure to English as an L2, and (2) whether the severity of attrition is affected by the amount of exposure to both L1 and L2.

In the experiment, we recruited a control group of 31 Mandarin speakers in mainland China who had never travelled abroad and two groups of bilingual native Mandarin speakers (35 each) who were residents in the UK, with varying amounts of English exposure. All participants completed a questionnaire to assess their use of and exposure to Chinese and English, then completed an experiment consisting of a picture description task in spoken Mandarin. During the task, speakers described pictures, referring to the subject or the non-subject of the previous sentence in the two-character condition (Figure 1), or re-referred to the single referent in the context in the one-character condition.

We used Bayesian mixed-effects logistic regression models to examine participants' referential choices for the subject referents in the two conditions of the picture description task. Additionally, participants' questionnaire responses on their proportion of English use in four skills (listening, speaking, reading, and writing) and English use in specific contexts were used as predictors in separate analyses. For subject referents, bilingual speakers show a preference for more explicit forms in both one- and two- character conditions compared to their more monolingual peers (Figure 2), suggesting attrition-related changes in their native language. Specifically, where more monolingual speakers preferred null pronouns, bilingual speakers tended to use overt pronouns and/or NPs (i.e., proper names) to refer to the subject referent of the preceding context sentence. For non-subject referents in the two-character condition, all speakers substantially used NPs, and there is no evidence of a difference between groups. Furthermore, we also observed an association between the degree of explicitness and language exposure to L1 and L2, suggesting that decreased use of L1 coupled with increased use of L2 results in a greater degree of attrition.

Keywords: L1 attrition, Mandarin Chinese, Referring expressions, Production

Reference

- Serratrice, L., Sorace, A., and Paoli, S. (2004). Crosslinguistic influence at the syntax-pragmatics interface: Subjects and objects in English-Italian bilingual and monolingual acquisition. *Bilingualism: Language and Cognition*, 7(3), 183-205.
- Tsimpli, I., Sorace, A., Heycock, C., and Filiaci, F. (2004). First language attrition and syntactic subjects: a study of Greek and Italian near-native speakers of English. *International Journal of Bilingualism*, 8(3), 257-277.

Appendix

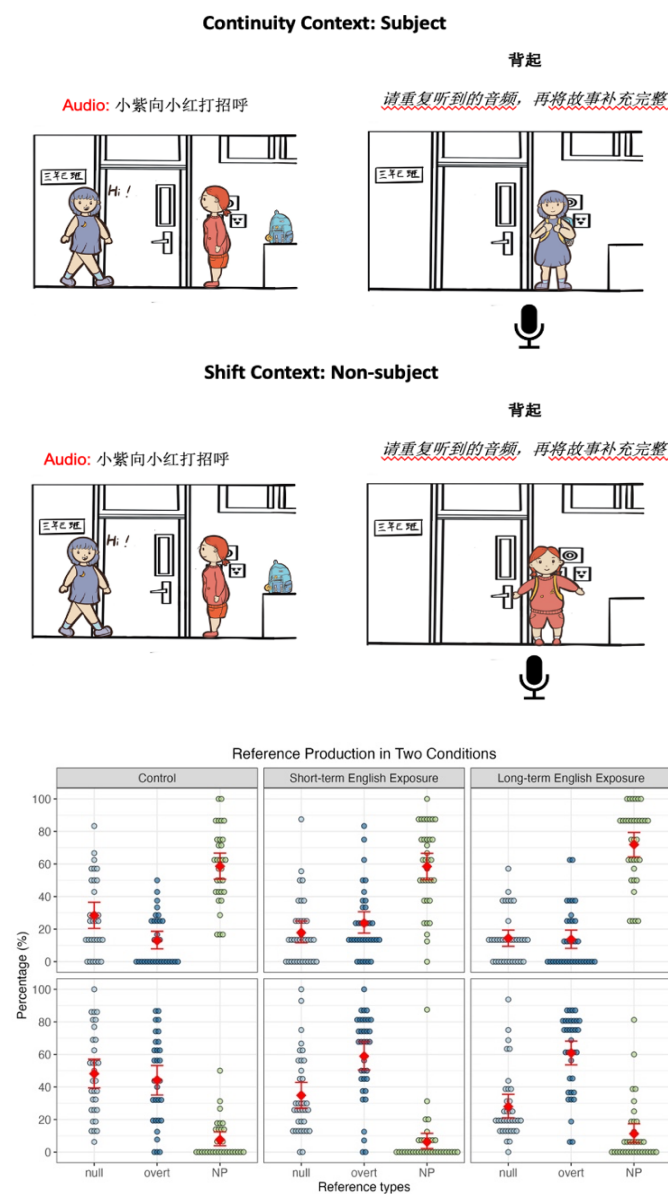


Figure 1: An example of image stimuli used in the two-character condition. In this given example, the audio description says “Xiaozi greeted Xiaohong”. Participants are directed with an instructional sentence, “Please repeat what you heard and then complete the story”, positioned right above the target picture (left). On top of that is a clue word, meaning “picked up”. In this scenario, in the subject continuity condition, we expected the participant to say (in Mandarin) something like “Xiaozi greeted Xiaohong, then null/she/Xiaozi picked up the backpack”.

Figure 2: The production of three referential forms in the one- and two-character conditions when the target referent is the subject of the previous context across three groups. Each dot corresponds to the results of one participant. The diamond shape represents the mean of by-participant percentages with error bars showing a bootstrapped 95% CI of the mean.