Mandarin speakers undergoing attrition produce more explicit referring expressions

Yajun Liu, Antonella Sorace, Kenny Smith,
School of Philosophy, Psychology and Language Sciences
University of Edinburgh, yajun.liu@ed.ac.uk

INTRODUCTION

- 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.
- Mandarin Chinese is a radical pro-drop language that permits both subject and object drop. However, the effects of L1 attrition in Mandarin have not been adequately explored.

Continuity Context: Subject

小紫向小红打了个招呼

背起

请重复听到的音频，再将故事补充完整

In this given example, the audio description says "Xiaozi [Little Purple] greeted Xiaohong [Little Red]". Participants are prompted to "Please repeat what you heard and then complete the story", positioned above text giving target sentence. Above that is a prompt word, meaning "picked up". In this scenario, we expected the participant to say (in Chinese) something like "Xiaozi greeted Xiaohong, then null/she/ Xiaozi [Little Purple] picked up the backpack".

RESEARCH QUESTIONS

- **Do bilingual Mandarin speakers undergoing attrition in their L1 Mandarin tend to be more explicit in reference, as seen in attrition in L1 Italian and Spanish?**
- **If so, is there a correlation between their attrition-related changes and their usage of L1 and L2 in their daily lives?**

METHODOLOGY

- **Questionnaire** adapted from the Language and Social Background Questionnaire (Anderson et al. 2017)
- **Picture Description Task** adapted from Arnold & Griffin (2007) and Hwang (2021)
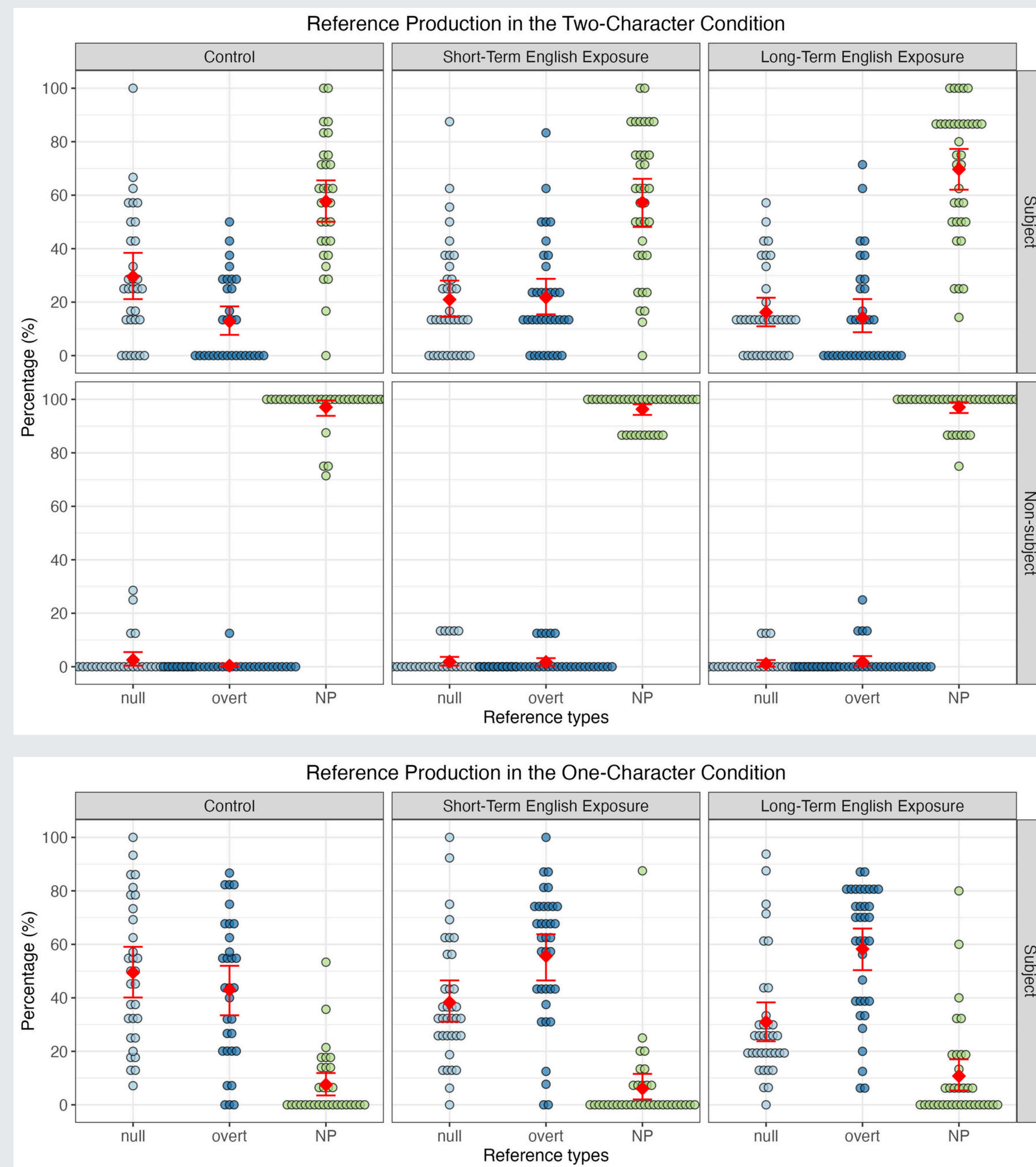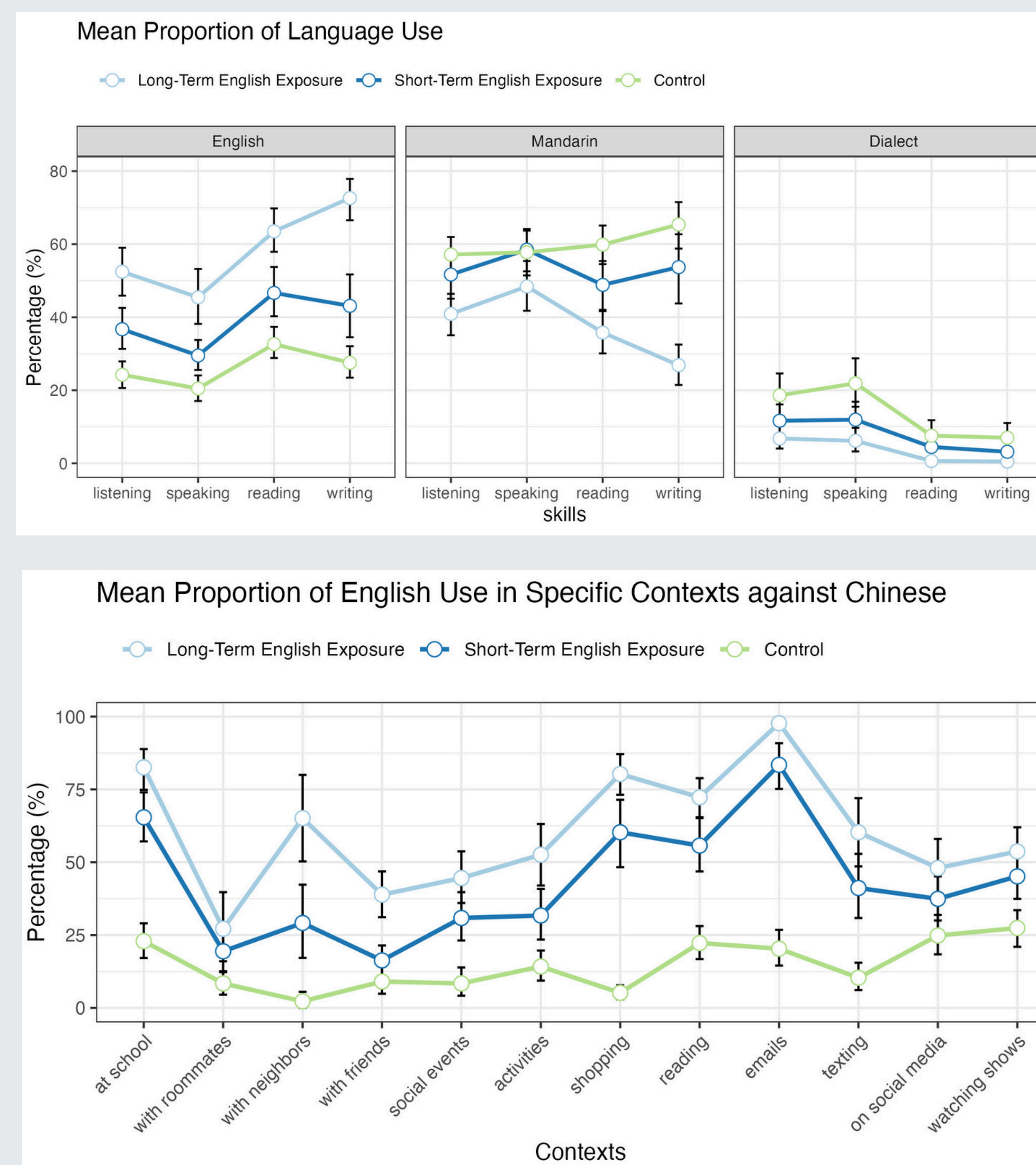
RESULTS: PART 1

(1) Reference production

Reference Production in the Two-Character Condition

| Control | Short-Term English Exposure | Long-Term English Exposure |

Percentage (%) — Reference types: null, overt, NP (Subject / Non-subject)

Reference Production in the One-Character Condition

| Control | Short-Term English Exposure | Long-Term English Exposure |

Percentage (%) — Reference types: null, overt, NP (Subject)

RESULTS: PART 2

(2) Bilingual over-explicitness and the use of L1 & L2

Mean Proportion of Language Use

Long-Term English Exposure   Short-Term English Exposure   Control

| English | Mandarin | Dialect |

skills: listening, speaking, reading, writing — Percentage (%)

Mean Proportion of English Use in Specific Contexts against Chinese

Long-Term English Exposure   Short-Term English Exposure   Control

Contexts: at school, with roommates, with neighbors, with friends, social events, activities, shopping, reading, emails, texting, on social media, watching shows — Percentage (%)

CONCLUSION

- Bilingual speakers show a preference for more explicit forms in both one- and two-character conditions.
- The two groups of more bilingual speakers demonstrate distinct preferences for explicitness in the two-character condition.
- Using more L2 (English) and less L1 (Mandarin) deepens the attrition process.

FUTURE WORK

Why does attrition result in the particular pattern of reference use that we see here?

- Cross-linguistic interference?
- Limited cognitive resources?
- Ambiguity Avoidance?

REFERENCE

[1]Anderson, J. A. E., Mak, L., Keyvani Chahi, A., & Bialystok, E. (2017). The language and social background questionnaire: Assessing degree of bilingualism in a diverse population. Behavior Research Methods, 50(1), 250–263. [2] Arnold, J. E., & Griffin, Z. M. (2007). The effect of additional characters on choice of referring expression: Everyone counts. Journal of Memory and Language, 56(4), 521–536. [3] Hwang, H. (2021). Avoidance of gender-ambiguous pronouns as a consequence of ambiguity-avoidance strategy. Discourse Processes, 58(3), 251–259.