

Referential Strategies in Chinese-English Speakers and Monolingual Chinese Speakers under Cognitive Load

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This study investigates whether cognitive load influences referential choice in Mandarin by comparing Mandarin–English bilinguals and Mandarin monolinguals. The Interface Hypothesis predicts greater vulnerability at the syntax–pragmatics interface in bilinguals, potentially resulting in more explicit referential forms under increased cognitive demands, but evidence remains limited, particularly in pro-drop languages such as Mandarin [1–3].

We compared 25 Mandarin–English bilinguals and 25 Mandarin monolinguals in a picture description task performed with and without a Spatial Negative Priming (SNP) task. The SNP task manipulated cognitive load through distractor interference and inhibitory control [4]. Referential expressions were coded as noun phrases (NPs), overt pronouns, or null pronouns and analysed using Bayesian mixed-effects logistic regression.

Across conditions, bilinguals showed a tendency to produce more explicit referential forms than monolinguals, particularly noun phrases in multi-referent contexts, broadly consistent with Accessibility Theory [2]. In the SNP task, bilinguals exhibited reduced distractor effects but larger negative priming effects, replicating previous findings on bilingual inhibitory control [4].

However, cognitive load did not reliably influence referential choice in either group. Although some trends suggested increased explicitness under specific conditions, Bayesian credible intervals largely overlapped zero. These findings suggest that differences in inhibitory control do not necessarily translate into differences in referential production, providing limited support for a strong interpretation of the Interface Hypothesis [1].

References

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Figures and Tables

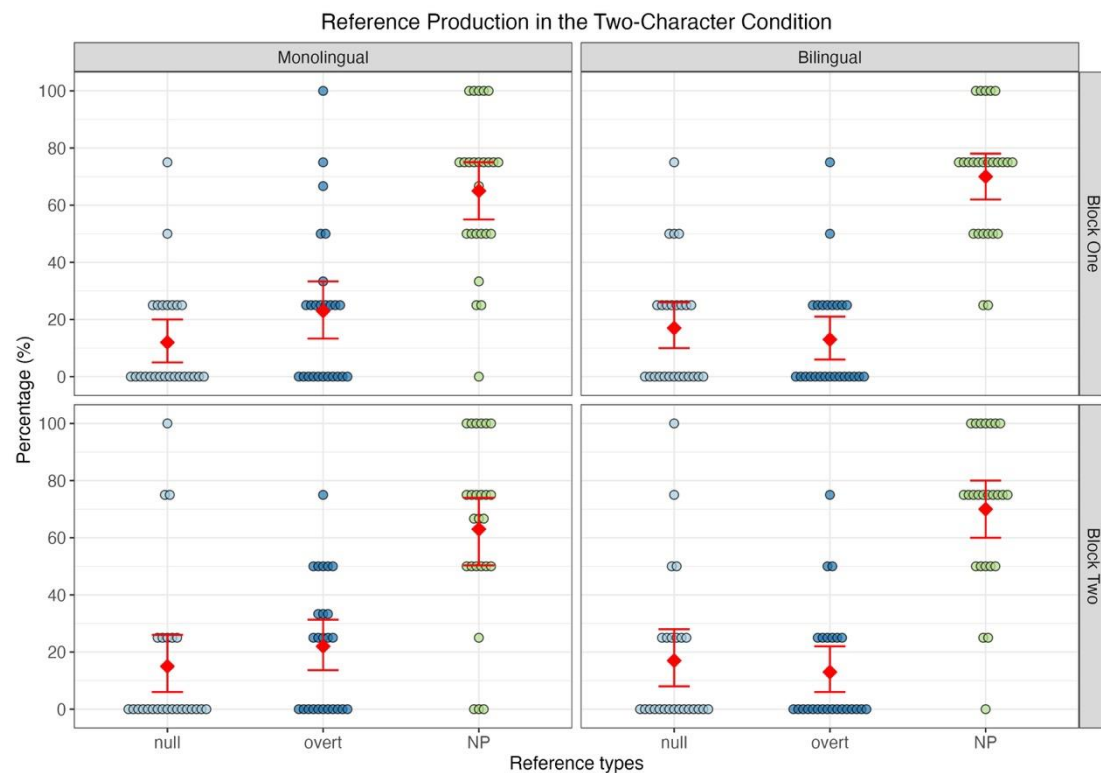


Figure 1: The production of three referential forms in the two-character context where the target referent is the subject of the preceding context. Each dot represents an individual participant’s results, and the diamond shape indicates the average percentage with error bars showing bootstrapped 95% confidence intervals.