THE PROCESSING COST OF ENRICHED COMPOSITION IN COMPLEMENT COERCION: ASPECTUAL VERBS VERSUS PSYCH VERBS IN MANDARIN CHINESE

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This study aims to examine whether *aspectual verbs* and *psych verbs*, both previously considered verbs triggering complement coercion, engender similar processing profiles. Complement coercion involves a repairing of the semantic type mismatch between an event-selecting verb and an entity-denoting noun phrase (NP) complement (e.g., *started the book*), via coercing the entity complement into an event (e.g., 'reading the book') (Pustejovsky, 1995). Such an operation enriches semantic composition and is supposed to engender interpretive cost (e.g., McElree et al., 2001). Few recent studies posited that the two types of verbs mentioned above differ in their argument selections, and thus may yield distinct processing profiles when paired with an EntityNP (Katsika et al., 2012).

With this speculation, the current study recorded self-paced reading times (RTs) of 55 Mandarin Chinese speakers to investigate the processing of entity complements preceded by three verb types: (a) *aspectual verbs*, which semantically require an eventive complement, (b) *psych verbs*, which are subject to debate whether or not they inherently take an eventive complement, and (c) *control verbs*, which select an entity complement. 63 triplets of experimental sentences were included. They were generated by three norming tests: *preference norming*, *cloze norming*, and *acceptability norming*. One example is shown below. The crucial premise for the current study is that the predictability of entity complements following aspectual and psych verbs respectively was normed to have little difference.

Prior to statistical analyses, data were cleaned by two steps mentioned in Xue et al. (2021). The remaining data were then analysed with R software. We first calculated mean RTs for each type of sentences at four critical regions: verb, complement NP, the two post-NP regions (i.e., NP+1 and NP+2), and difference-adjusted 95% mixed-effect-model-based intervals (Politzer-Ahles, 2017). The intervals indicate that when one sentence type's interval does not include another sentence type's mean, the two types are likely (but not guaranteed) to be significantly different in a mixed effect model. The results are illustrated in Fig. 1 below. The statistical analyses were conducted by performing separate linear mixed-effects models with *lme4* package (Bates et al., 2015) on the four critical regions.

The main results are that the complements NPs elicited longer RTs when following aspectual verbs than psych and control verbs, particularly at the two post-NP regions. The results confirm the processing cost of complement coercion, and more importantly, contribute evidence to constrain the mechanism of complement coercion to aspectual verbs only.

e.g., 作家(a) 开始/(b) 享受/(c) 撰写这本小说之前打开一扇窗户
zuò-jiā kāi-shǐ/xiǎng-shòu/zhuàn-xiě zhè-běn xiǎo-shuō zhī-qián dǎ-kāi yī-shàn chuāng-hù
author start enjoy write this-CL novel before open one-CL window
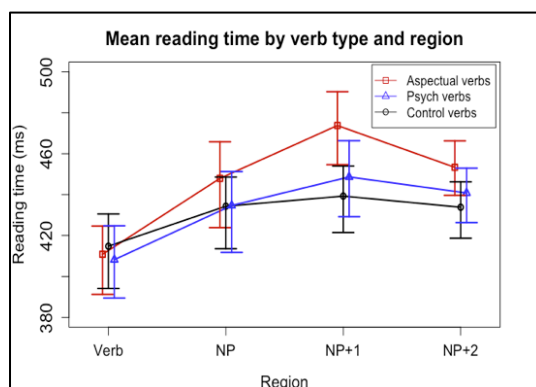'The writer opened a window before starting/enjoying/writing this novel.' (CL = Classifier)

Fig. 1 Mean RTs by verb type and region

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