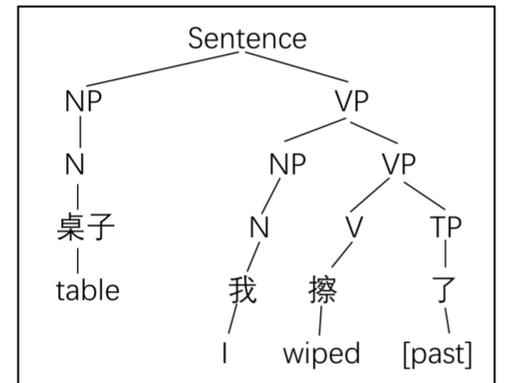
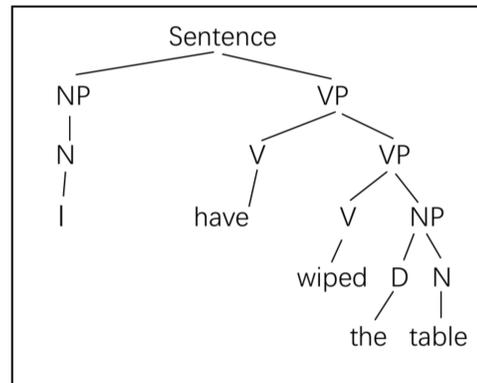


Introduction

- While English sentences are centred around the **subject**, Chinese sentences are argued to focus more on the **topic**¹ (thematic meaning) because of their differences in the strategies of constructing sentences.
- Common to **omit the subject/object** or **change the word order** without altering its meaning in Chinese. For instance, an SVO structure can be turned into an OSV structure, which results in a different word order² (see figure 1).
- Sentence structure in Chinese are more flexible than in English, which may suggest **different mechanisms** for processing and representing syntactic structure between the two languages, as in **topic-prominent** and **subject-prominent**^{2,3}.

- “I have wiped the table” in English is often “table I wiped [past]” (桌子我擦过了) in Chinese, with different syntactic structures.



(NP = Noun Phrase; VP = Verb Phrase; N = Noun; V = Verb; D = Determiner; TP = Time Phrase)

Figure 1: Syntactic Tree of the Example Sentences

- Several topic-prominent features (e.g., subject omission) are suggested to be more common in Chinese than English^{2,3}. However, these suggestions are based on subjectively selected sentence examples, which may **not** represent how these features are objectively distributed in contemporary Chinese^{2,3,4}.

Methods & Results

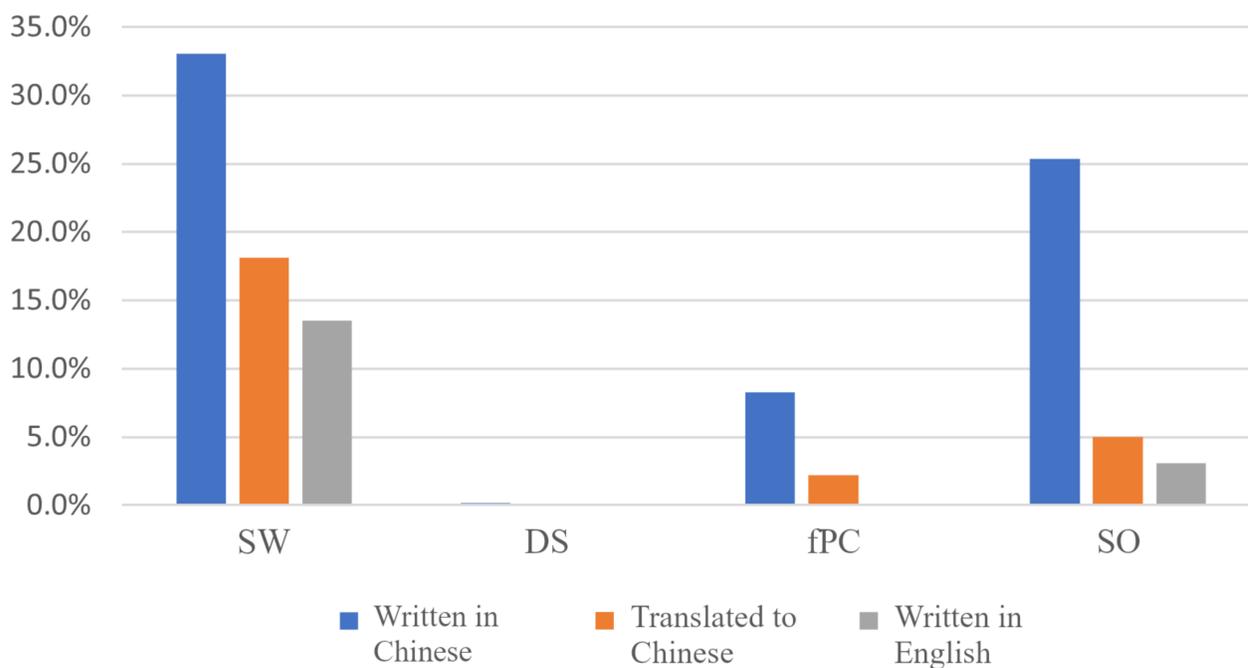


Figure 2: Percentage of the Four Features in Sentences from Different Types of Articles

- The current study examined the distributions of four key topic-prominent features in articles taught in textbooks (grade 7-12) in mainland China⁵. The features included subject switching (**SW**; switching subjects in a sentence), double subject (**DS**; two consecutive subjects), flexible passive construction (**fPC**; passives without a *be*-passive structure), and subject omission (**SO**).
- Preliminary analyses show that SW, fPC, and SO are more common in sentences extracted from original Chinese articles (N=663; SW:33%, fPC:8.3%, SO:25.3%) than in Chinese articles translated from English (N=358; SW:18.2%, fPC:2.2%, SO:5%) and some of their source English articles (N=134; SW:13.5%, fPC:0%, SO:3.1%). DS was found to be uncommon across all article types.

Discussion

- These results confirm that some but not all topic-prominent features are differentially distributed in Chinese vs. English, demonstrating that objective analysis of feature distributions in corpora can make meaningful contributions to the debate.
- Sentences on Weibo (Chinese social media) and Twitter will be scraped to conduct the analysis like above, which can suggest how speakers of mandarin and English are actually using these two languages now.
- Further researches will then focus on how these different feature distributions are represented in the brain from different aspects.

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