SYNTACTIC REPETITION DURING SIMULTANEOUS INTERPRETING AND CONSECUTIVE INTERPRETING

Qianxi Lv(Shanghai Jiao Tong University), Martin Pickering (University of Edinburgh), Holly Branigan(University of Edinburgh), Junying Liang(Zhejiang University)
lvqianxi@sjtu.edu.cn, Martin.Pickering@ed.ac.uk

During interpreting, interpreters take the source language (SL) message and encode it as faithfully as possible in the target language (TL). In some cases, they do this as they listen to the SL message unfold (simultaneous interpreting, SI); in other cases, they first listen to the source language message, and then subsequently re-express it in the TL (consecutive interpreting, CI). Understanding how people map from an utterance in one language to an utterance expressing the same meaning in another language can inform models of bilingual language production. But the processes underlying these two forms of interpreting are not well understood. We reported three experiments in which interpreters-in-training heard SL sentences in Mandarin Chinese and interpreted them into English.

Exp1 investigated syntactic relationship between the SL and TL sentences during CI and SI. We manipulated the SL utterance structures so that the experiment items included either a DO or PO clause. We found reliable cross-linguistic priming effects in both CI and SI, as more DO were produced after DO than after PO in SL structure ($p<.001$), and vice versa. Importantly, the magnitude of priming effect was higher in SI than in CI, reflected in a higher rate of SL structural repetition.

Exp2 investigated the effect of TL syntactic complexity on syntactic priming during CI and SI. We manipulated the SL structures so that the experiment items included a noun phrase either with four Pre-Nominal Modifiers (e.g., *We gave the strong, healthy and intelligent mathematics teacher a watch*, Pre-N) or four Post-Nominal Modifiers (e.g. *We gave the mathematic teacher a watch, who's very strong, healthy and intelligent,* Post-N). Post-N is relatively simpler to produce due to heavy-shifting tendency. We found the magnitude of priming effect for Pre-N construction was higher in SI and CI ($p<.001$). SI mostly retained the SL structures, whereas many Pre-N SL utterances were interpreted into the less complex Post-N in CI.

Exp3 investigated the effect of SL syntactic complexity on syntactic priming during CI and SI. We manipulated the SL structures so that one third of the experiment items included a noun phrase with two Pre-N, one third with three Pre-N and one third with four Pre-N. We found that in SI, the structural repetition rate was not affected by SL syntactic complexity ($p>.05$), but in CI, the magnitude of repetition was the lowest in the long source, followed by medium source and was the highest in short source ($p<.001$). Thus, the more complex the SL sentence was, the more likely it was interpreted into the less complex Post-N in CI.

Conclusion: During interpreting, people regenerate syntax with the tendency to repeat SL syntax due to cross-linguistic syntactic priming. But people generate syntax incrementally, and SI interpreters process segment-by-segment and thus SI production is more constrained by SL. Moreover, the processing load of segments is not affected by the overall SL or TL syntax and the structural repetition in SI is independent of SL or TL structural complexity. Conversely, CI interpreters generate the TL utterance based on the concept representation of the whole sentence. Speech reformulation is costly, and thus they tend to simplify the complex syntax. Therefore, both the SL and TL syntactic complexity affect the repetition during CI only.