Eye-voice span in the processing of high and low-frequency lexical items in sight translation

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Eye-tracking offers a great opportunity to tap into lexical processing performed by conference interpreters while sight translating (i.e. reading the source text aloud in the target language). Previous eye-tracking studies on sight translation have compared it to written translation (Jakobsen and Jensen 2009, Shreve et al. 2010) or focused on differences between professionals and interpreting trainees (Chmiel and Mazur 2013). In the current study we propose to apply a useful measure in the analysis of sight translation: eye-voice span, i.e. the delay between reading a translation unit and delivering its sight translation. The measure is similar to ear-voice span in simultaneous interpreting (i.e. the delay between hearing an interpretation unit and delivering its interpretation) and fixation-speech interval in reading (i.e. numeric difference between a word's speech and viewing times) (Inhoff et al. 2011: 547).

Our eye-tracking study involved two groups of participants: professional interpreters and interpreter trainees who sight translated sentences from their B language (English) into their A language (Polish). The sentences included critical words with manipulated frequency (high frequency vs. low frequency nouns). It was hypothesized that professionals would manifest longer eye-voice span than trainees due to their experience. Longer spans allow interpreters to reduce source language interference and better control their output. The eye-voice span data was correlated with early reading measures (first fixation duration, single fixation duration and first pass gaze duration, which are known to reflect lexical access; Rayner 1998, Juhasz and Pollatsek 2011, Roberts and Siyanova-Chanturia 2013) to look for frequency effects. Preliminary data seem to suggest that thanks to their experience, professional interpreters tend to show smaller frequency effects than trainees on early reading measures. Furthermore, as compared to trainees, professional interpreters are able to move their eyes further ahead in the sentence while producing coherent sight translation. These results lend further support to the claim that eye-tracking is a useful tool in translation process research.

References

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