

# Translation Onset Strategies and Lexical Processing in Sight Translation

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Sight translation involves the reading of text and the concomitant oral production of equivalent content in a target language. With the advent of eye-tracking and speech-analysis technologies, it has become possible to observe – in real time and under relatively natural task conditions – the temporal dynamics of this task, that is, how sight translators coordinate the processing of visible text with the articulation of corresponding content in another language. Sight translation is a much underresearched area of Translation Studies and to date, a relatively small number of studies has recorded eye movements during sight translation (Chmiel and Lijewska 2019; Chmiel and Mazur 2013; Huang 2011; Jakobsen and Jensen 2008; Korpala 2015; McDonald and Carpenter 1981; Shreve, Lacruz, and Angelone 2010). The present study of sight translation pursued two goals. One was to determine whether the recognition and translation of words occurs during temporally distinct processing phases (McDonald and Carpenter 1981) or whether reading and translation are performed concurrently during a sight translation task (Macizo and Bajo 2004). The other goal was to investigate whether temporal strategies influence the quality of translation (Christoffels and Groot 2005). To that end, two groups of interpreters – professionals and trainees – translated English sentences into Polish while their eye movements and oral production were monitored. Processing demands were manipulated by using either high- or low-frequency critical words in to-be-translated sentences, and the interval between the onset of a visible sentence and the onset of its spoken translation, the translation onset latency (TOL), was used to index a translator's strategy. Consistent with earlier findings, professionals were more effective than trainees and sight translation in the low-frequency critical word condition was more error prone and took longer than sight translation in the high-frequency condition. Strategy influenced only the fluency of spoken sentence production which contained fewer pauses when TOLs were either relatively short or long. Examinations of critical word viewing showed no effects of translation expertise on the initial viewing of words and robust effects on re-view durations. These findings show that the influence of translation strategies on performance is relatively limited, and that the recognition and translation of words occur during separate temporal processing stages. The study sheds new light on the real-life task of sight translation and contributes to our knowledge about complex processing involving reading under specific task constraints.

Word count: 383

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