

## *Pauses in syntactic complexity research*

Aysel Saricaoglu & Özkan Kilic, University of Ankara

For the majority of existing studies on syntactic complexity, the preferred method of investigation has been product-based, looking into different matters such the quality of the produced texts, complexity development over time, or the effects of various factors. While this body of research has provided considerable insight, there is scope for process-based understandings of syntactic complexity. This exploratory study reports on a process approach to the investigation of syntactic complexity. It uses keystroke logging to examine students' pausing behaviour in relation to syntactic complexity features. Thirty-four high-intermediate level L2 learners of English participated in an argumentative writing task. Their real-time text production behaviour was logged using the keystroke logging program Inputlog (Leijten & Van Waes, 2013). Students' pausing behaviour was analysed using five pausing measures: pause time, number of pauses, number of within-word pauses, number of before-word pauses, and number of before-sentence pauses. Syntactic complexity of texts was analysed automatically via Lu's (2010) automated L2 syntactic complexity analyser using global, clausal, and phrasal measures. A regression analysis was performed to find out any potential relationship between students' pausing behaviour and syntactic complexity features of their argumentative texts. Findings showed that students' pausing behaviour significantly differed in four syntactic complexity features: mean length of clause, complex T-unit ratio, coordinate phrase per T-unit, and coordinate phrase per clause. There were also significant relationships between pausing location and syntactic complexity features. Students who wrote more coordinate phrases per clause had significantly more pauses within words. Students who wrote more coordinate phrases per T-unit had significantly more pauses before words. Those with a higher complex T-unit ratio had significantly more pauses before sentences. Thanks to employing the methodology of keystroke logging and the usefulness of real-time writing data, our study has potential to shed light on the cognitive processes associated with syntactic complexity features.