**Submission Template for SLRF 2019**

*\*\*\*Please ensure that this document is completely anonymous\*\*\**

**Title (15 words max)**: Automatic activation of number in comprehension: A novel approach to form-meaning mapping

**Summary (50 words max)**:

The present study investigated whether second language learners are capable of automatically activating plural information on nouns during reading comprehension. The results of stroop-like number judgment task revealed that the second language learners did activate plural meaning during reading comprehension as a native speaker control group did.

**Abstract (350 words max)**:

There has been a long-lasting debate over whether it is possible to fully acquire morphological aspects of the target language. By “fully acquire”, it is meant that the learners can use knowledge of morphemes in the target language online similarly to native speakers of the language. To tackle this problem, the majority of the previous research applied anomaly detection paradigm focusing on number agreement errors (e.g., Jiang, 2007, Song, 2015). However, as argued by Trenkic, Mirovic, and Altman (2014), being able to detect ungrammaticality does not necessarily mean being able to use grammatical information. Therefore, the present study utilizes a rather novel approach to investigate the acquisition of plural morpheme in English, namely stroop-like judgment task, where the participants were engaged in a self-paced reading task and were asked to judge the number of words that they had been reading when prompted, as either one or two. The reaction times to the judgment were expected to be delayed when the participants judged plural nouns as one word because of the intervention of mentally activated grammatical plurality. Using this task enables us to directly tap into the form-meaning mapping of the plural morpheme and its plural meaning. Ninety-six Japanese learners of English (JLE) (mostly CEFR B1-B2) and 32 native speakers of English participated in the study. The results revealed that both groups of the participants slowed down when they judged morphologically plural nouns (e.g., *cats, dogs*) as one-word compared to judge morphologically singular nouns as one word (e.g., *cat, dog*), which suggests that the JLE succeeded in mapping plural morpheme to plurality as native English speakers did despite the fact that Japanese, the learners’ first language, does not have obligatory morphological number marking system.

References

Jiang, N. (2007). Selective integration of linguistic knowledge in adult second language learning.

*Language Learning, 57,* 1–33.

Song, Y. (2015). L2 processing of plural inflection in English. *Language Learning, 65,* 233–267.

Trenkic, D., Mirkovic, J., & Altmann, G. T. M. (2014). Real-time grammar processing by native

and non-native speakers: Constructions unique to the second language. *Bilingualism:*

*Language and Cognition, 17,* 237–257.