

Usage-based constructional approach to predicting L2 writing proficiency

Hyunwoo Kim¹ & Gyu-Ho Shin^{1,2}

¹University of Hawaii at Manoa ²East-West Center Student Affiliate

A usage-based constructional approach views language development as a gradual accumulation of abstract constructional knowledge through exposure to language in use^{[1][2][3][4]}. This study tested this account in second language (L2) acquisition by investigating the extent to which frequency of Argument Structure Constructions (ASCs) and Verb-Construction Association (VCA) predicted L2 writing proficiency. 78 argumentative essays from adult Korean-speaking learners of English^[5] were analyzed for the frequency of nine ASCs (*intransitive-unergative, intransitive-motion, intransitive-resultative, transitive, ditransitive, caused-motion, resultative, causative, and passive*) and five VCA variables^[6] (*verb-construction frequency, verb-construction frequency and direct object, association strength between verb and construction, diversity of verb and construction, and frequency of verb and construction*). The learner texts were divided into 39 higher and 39 lower proficiency groups based on native speaker ratings.

Two discriminant function analyses were conducted with the occurrence of nine ASCs and five VCA variables as predictors, respectively. The discriminant function with constructional variables predicted the original membership of proficiency with the total accuracy of 82% (74% for the lower and 89% for the higher group). Among the constructional variables, complex constructions such as *passives, transitives (with a wh-clause complement), resultatives, and caused-motions* demonstrated a strong predictive power. The discriminant function with VCA variables predicted the proficiency with the total accuracy of 72% (69% for the lower and 74% for the higher group). Among the VCA predictors, *diversity of verb and construction* exhibited the strongest prediction power.

In sum, the results demonstrated that, as L2 written proficiency increased, the learners used more complex and less frequent constructions as well as employed a variety of verb-construction combinations. These findings indicate developmental aspects of learners' knowledge of constructions in written production, and suggest that usage-based learning of constructions also applies to L2 contexts.

References

- [1] Diessel, H. (2013). Construction grammar and first language acquisition. In G. Trousdale & T. Hoffmann (Eds.), *Oxford handbook of construction grammar* (pp. 347–364). Oxford: Oxford University Press.
- [2] Ellis, N. C., O'Donnell, M. B., & Römer, U. (2013). Usage-based language: Investigating the latent structures that underpin acquisition. *Language Learning*, 63, 25–51.
- [3] Tomasello, M. (2003). *Constructing a language: a usage-based theory of language acquisition*. Cambridge, Mass.: Harvard University Press.

- [4] Goldberg, A. E. (2006). *Constructions at work: The nature of generalization in language*. Oxford: Oxford University Press.
- [5] Rhee, S. C., & Jung, C. K. (2012). Yonsei English Learner Corpus (YELC). *Proceedings of the First Yonsei English Corpus Symposium* (pp. 26–36). Yonsei University, Seoul.
- [6] Kyle, K. (2016). *Measuring syntactic development in L2 writing: Fine grained indices of syntactic complexity and usage-based indices of syntactic sophistication*. (unpublished doctoral dissertation). Georgia State University.