Implicit learning of verb argument constructions in German as a second language

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The repeated exposure to verb argument constructions (VACs) and their use in responses is suggested to result in implicit learning (Chang et al. 2000). The structural priming paradigm allows us to manipulate the input systematically. Previous evidence shows that structural priming is boosted by verb repetition (Pickering & Branigan 1998). In a series of experiments, we investigated whether learners of German as a second language (L2) are more sensitive to both structural and lexical input than native speakers of German (L1) are.

There were 48 university student participants per experiment. L2 learners formed a heterogeneous group with various first languages. They were rather proficient in German (at least B2 according to CEFR). Transitive and passive primes were presented auditorily and targets for sentence generation were displayed as word lists. Prime structure and verb repetition between primes (translation equivalents of, e.g., *The shower refreshes/cleans the building worker*) and targets (translation equivalents of, e.g., *to refresh drink sportsman*) were varied within items, whereas language (L1 vs L2) and the verb position in the word list (VNN vs NNV) were varied across experiments. Responses were coded as transitive VACs with the main verb in second position, passive VACs with the main verb in final position, or other.

L2 learners were predicted to produce fewer passive responses than L1 speakers (*complexity hypothesis*). There should be no differences in susceptibility to priming (Kantola & van Gompel 2011; Schoonbaert, Hartsuiker & Pickering 2007). However, effects of verb repetition and of verb position should be stronger than in L1 speakers (*lexicalist learning* and *lexical availability hypotheses*).

Linear mixed models revealed significant effects of structural priming and a lexical boost in all experiments. Across experiments, the overall rate of passive responses as well as the strength of the attested effects did not differ between L2 and L1 speakers. Thus, there was no difference in sensitivity to structural priming or to the lexical boost. However, there were significant interactions of priming with verb position, and groups differed in the direction of the interactions, evidencing that L1 responses tended to align with the verb position in targets (more passive VAC priming with NNV than with VNN targets) whereas L2 speakers relied on lexical availability (more passive VAC priming with VNN than with NNV targets). We conclude that L2 but not L1 speakers' implicit learning of VACs hinges on verb-specific information.

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