Nouns are more stable than Verbs: Patterns of semantic change in 19th century English

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Abstract: It has been hypothesized in the literature that nouns are acquired earlier than verbs because they are more concrete and involve fewer relations. This hypothesis also predicts that the meaning of nouns should be more stable over time and across speakers. In this paper I use Latent Semantic Analysis of a 19th century literary corpus containing works from British and American authors to test this prediction.

I examined the variability in the vector representations of frequently used nouns and verbs based on the culture of the author and the time period. The results show the nouns vary less than verbs between the two cultures and across time. Moreover, these differences still exist when the concreteness of the words is taken into account. These results are consistent with the hypothesis that the relational nature of verbs contributes to their difficulty and variability beyond its effect on the verb’s concreteness.