

Variation in constructional productivity: The case of English modal constructions

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Constructional productivity is important in usage-based construction grammar, as differences in productivity may be distinguishing features among otherwise functionally overlapping constructions. Moreover, productivity can be a locus of constructional variation. Arguably, being able to measure and thus compare constructional productivity should be extremely helpful in addressing constructional variation.

Productivity is defined as the potential for high type frequency of a schema: the higher the type frequency, the more productive the schema (Bybee 1985: 132–134; Croft & Cruse 2004: 295–300). If applied to constructional slots, high type frequency, as Shibuya (2015) points out, is reflected in the lexical richness of the constructional slot in question. Consequently, measures of lexical richness applied in the analysis of the lexical diversity of texts can also be used to gauge the productivity of a constructional slot. Drawing on Shibuya's (2015) work on constructional productivity, Jensen (2016) suggests that lexical richness-based measures of constructional productivity can also be applied in the study of variation in constructional productivity across language varieties.

This opens up a venue for learning more, at least in a usage-based construction-grammatical perspective, about an otherwise much addressed phenomenon – namely, modal constructions of English. Investigating the productivity of the main verb position in modal constructions in English could be an important contribution to the ongoing constructionist research into synchronic and diachronic variation in construction-lexeme interaction in the V-position in English modal constructions (e.g. Hilpert 2016).

In the present study, we address, drawing on corpus data, variation across user- and use-based varieties in the productivity of primary modal constructions, such as [MAY V], [CAN V], [MUST V] and [SHALL V], as well as semi-modal constructions, such as [HAVE to V] and [GOT to V], via the application of lexical richness measures to the V-slot. The study shows that modal constructions in English are by no means monolithic in terms of productivity. For instance, [MUST V] and [HAVE to V] both display variation in richness in the V-position across the nine registers of the Open American National Corpus. The latter displays the highest degree of richness in the Letters register, while the former is the richest in the Fiction register. This suggests that the two modal constructions, while overlapping semantically in that both can be used deontically to express either strong obligation or epistemically to express logical necessity, differ in terms of how productive they are across use-based varieties.

Likewise, for instance, [SHALL V] displays variation in productivity across the AmE 2006 and BrE 2006 corpora, which suggests that modal verb constructions may also display variation in productivity across lectal, or user-based, varieties (in this case American and British English).

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