P[NP-&-NP] – [PP]-&-[PP] variation: A unified account

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In Spanish, the coordination of prepositional complements with the structure P[NP-&-NP] (e.g. *para flauta y quinteto de vientos* 'for flute and woodwind quintet') stands in variation with the structure, [PP]-&-[PP], i.e. *preposition doubling* (e.g. *para los obreros y para la gerencia* 'for the workers and for the management'). The present study provides a unified quantitative and formal analysis by combining the use of corpus and constructed data to account for the factors that condition the variation of these two structures.

While little to no prior research has been done with quantitative methods, formal analyses find various asymmetries attributed to the blocking of syntactic processes such as the availability of distributive readings or pronominal Case asymmetries in P[NP-&-NP] structures as in (1).

(1)   Para ti y yo/*(para) mí
        'for you and (for) me'

In these generativist accounts, such asymmetries have previously been accounted for via *last-resort* mechanisms forcing a syntactic configuration to *converge* (Camacho, 2003; González-Vergara & Labré, 2010). In functional accounts of variation, Haspelmath (1999, 2007) proposes that individual prepositions' lexical semantics and level of grammaticalization are the principal predictors of these structures in French meaning that more grammaticalized prepositions that also have a grammatical function such as Case marking (e.g. *à* 'to') are more likely to become routinized and, hence, favor preposition doubling. As *last-resort* mechanisms are more costly than adding more functional content, a quantitative analysis should support the notion that [PP]-&-[PP] is favored with more grammaticalized prepositions unless the speaker has a specific purpose such as forming a specific set in discourse. Furthermore, by adapting Keller's (1994) Maxims of Action and constraints on merging syntactic constituents in a derivation (Citko, 2008), it is seen that notions of syntactic economy as well as frequency and grammaticalization work together in influencing speakers' choice of one structure as opposed to another.

This study analyzes 1407 tokens of three Spanish prepositions in coordination, *a* 'to'*, para* 'for' and *entre* 'between', taken from the *Corpus del español* (Davies, 2002-) in both of the two structures ([PP]-&-[PP] and P[NP-&-NP]) and analyzes them in a binomial regression done via GOLDVARB X (Sankoff, Tagliamonte, & Smith, 2005). Significant independent variables were: (1) the individual prepositions themselves, (2) semantic-relatedness (operationalized as a having a set-subset, possessive and/or group interpretation) and (3) the structure of NP conjuncts (bare/full NP or pronoun). Results suggest that semantically related conjuncts favor the doubled structure while non-doubled structures are favored with semantically distinct conjuncts. Furthermore, the level of functional and lexical content of individual prepositions suggests a continuum in which more grammaticalized prepositions such as *a* favor the doubling while more 'lexical' prepositions like *entre* disfavor it.

Apart from the empirical contribution of presenting a variationist analysis of this phenomenon, this study underscores the importance of including quantitative data to support a formal analysis of variable phenomena. Overall, the results demonstrate that analyzing linguistic variation from one perspective may not fully explain the phenomenon at hand and that drawing from multiple perspectives may better account for variation.

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