

## Word order flexibility across types of argument realizations and argument structures

Studies in word order typology have predominantly focused on transitive constructions with lexical subjects and objects (e.g. Dryer 1991; Dryer 1992). Embracing a gradient approach to word order preferences (e.g. Futrell et al. 2015; Guzmán Naranjo and Becker 2018; Levshina 2019), this talk focuses on two additional parameters that allow to better capture word order preferences within and across languages. Building on Levshina (2019), we examine the realization of arguments (pronominal, lexical, clausal), as well the argument structure of the verb (e.g. intransitive, transitive etc.) This allows us to assess to what extent word order flexibility holds across different realizations of arguments and argument structures, and to what extent this interacts with the position and realization of another argument. To do so, we use the Universal Dependencies, version 2.4 (Nivre et al. 2019), including data of 83 languages.

Selected results include the following crosslinguistically robust patterns for subjects: The preference to precede the verb decreases for different realizations from pronominal > lexical > clausal. Also, the verb-preceding tendency is the strongest for clauses that are transitive > intransitive > intransitive + indirect object. Transitive verbs having the strongest overall preference for verb-preceding subjects, this preference is more dependent on the position of the direct object than e.g. the indirect object in other argument structures. Another example to illustrate the need for a more fine-grained distinction of order preferences concerns OV/VO orders. Our results indicate that there is a relation between the position of the subject and the relative position of the direct object in transitive constructions: The clauses in which lexical direct objects follow the verb have a higher proportion of subjects preceding the verb than those clauses in which the lexical direct object precedes the verb. For pronominal objects, this effect is much weaker. The position of indirect object, lexical or pronominal, on the other hand, does not relate to the position of the subject.

Those types of interactions let us gain a better understanding of the degrees of word order flexibility in individual languages. In addition, including more argument and construction types instead of restricting word order patterns to lexical arguments in transitive clauses shows and confirms stable crosslinguistic trends that can be accounted for by cognitive preferences such as shorter forms (old information) preceding longer forms (new information) (e.g. Hawkins 1994; Hawkins 2014). However, the fact that we see a different positional interaction between subjects and direct objects on the one hand and indirect objects on the other points towards the need for additional explanations along the lines of different semantic properties and discourse functions of S, A, P, and other arguments which can lead to different preferences in their lexical realizations and orders (e.g. Du Bois 1987; Du Bois 2003; Haig and Schnell 2016).

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