From SOV to SVO: In search of cognitive forces driving the historical change from Subject-Object-Verb to Subject-Verb-Object in main clauses of Dutch and German

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In modern Dutch and German, main clauses have Subject-Verb-Object as basic word order (“Verb-second”, V2) but subordinate clauses have Subject-Object-Verb (“Verb-final”, Vf). In older forms of both languages, standard word order was SOV in all clause types. According to recent suggestions, perceptual/cognitive processing factors may have contributed to this historical development. Golden-Meadow et al. (PNAS, 2008) suggest SOV is the natural order of human languages generally, including signed languages. This raises the question why many languages have SVO as default order (e.g. English). Gibson et al. (Psych.Sci, in press) propose a perceptual explanation based on “language users’ sensitivity to the possibility of noise corrupting the linguistic signal.” E.g., when in “girl kicks boy” (SVO) one of the nouns is lost due to noise, the listener can still reconstruct one thematic role: actor or patient; but in “girl boy kicks” (SOV), such a deletion renders both thematic roles unrecoverable.

Although the noisy-channel theory suggests a perceptual force that may have driven an historical SOV-to-SVO development uniformly within all clause types of a language, it does not account for the fact that, in Dutch/German, this development affected main clauses exclusively. An extensive corpus study into frequencies of SVO/SOV orders in spoken and written Dutch and German (four treebanks; Kempen-Harbusch, Procs. DGfS 2012) points to a driving force that affects main and subordinate clauses differently. In each treebank, the number of main clauses approximates the number of subordinate clauses (with a slight preponderance of the latter); hence, the a priori probabilities for a verbform to occur in V2 vs. Vf position are nearly equal. For each individual verbform, we calculated the percentage of its V2 occurrences (=“%V2”) and its total frequency (TF=V2+Vf occurrences). Unexpectedly, all treebanks revealed positive correlations between TF and %V2.
Our interpretation: Due to high availability of the concepts they express and/or high baseline activation, high-TF verbforms are more likely than low-TF verbforms

(1) to enter the incremental grammatical encoding process for a new sentence at an early time, while the main clause is being formulated, and

(2) to be ready for immediate release into that clause, thus pressing for early placement there.

Hence, main clauses will undergo a stronger bias toward early verb placement and feature SVO more readily than subordinate clauses. Quod erat explanandum.

Word count (MS Word, not including author names and affiliations): 400.