## Information structure and word order change: verb-first and verb-second in Icelandic

We present an account for the diachrony of Icelandic clause structure, focusing on changes in how information structure is encoded syntactically. Our claims are based on a series of corpus investigations using IcePaHC (Wallenberg et al. 2011). We examine verb position, the position of topics and the behaviour of a small set of 'discourse adverbs' (DAs), which gives us insights into the left periphery and midfield of the clause. In this context, we put forward an account for the diachrony of verb-first (V1) and verb-second (V2) in Icelandic, making a theoretical contribution to previous work (Platzack 1985; Sigurðsson 1990; Butt et al. 2014) and contributing to wider discussions on V1/V2 in Germanic and beyond (e.g. Axel 2007, Hinterhölzl & Petrova 2010, Jouitteau 2010).

V2 is robustly attested in Old Icelandic matrix clauses. The only deviation from V2 are V1 structures, e.g. (1). This contrasts with other early Germanic languages where V3 and V-later structures are also attested (Kiparsky 1995; Walkden 2015).

(1) Pórir hann þá eigi að stefna til gatnanna. dare.PRS he.NOM then NEG to go.INF to paths.DEF 'He then dares not make for the paths.' (1250, Sturlunga.445.2015)

Using the architecture of Lexical-Functional Grammar (LFG) – where constituency and functional information are handled at separate levels – we can neatly capture the restricted possibilities for verb position in Old Icelandic by assuming that I is an obligatory functional category, a fixed structural position for finiteness. Thus, V2 and V1 sentences are both rooted in I; the only difference is that for V2 SpecIP is occupied, see (2), for V1 it is not, see (3), where SpecIP is absent via LFG's principle of Economy of Expression (Bresnan et al. 2016).



Our account for V1, with an 'empty' specifier position, is similar to previous proposals (e.g. Rögnvaldsson & Thráinsson 1990) but contra other accounts which assume that the finite verb is in C in V1 declaratives (e.g. Sigurðsson 1990 and Franco 2008). The latter are motivated by the assumption that SpecIP is a unique subject position, within a framework where subjects are defined via position. In LFG, subjects are captured at f-structure and need not be associated with a fixed structural position (Dalrymple 2001). Moreover, this view of subjects is well-suited to historical Icelandic data, where subjects are not associated with a unique position, as we show.

V2 is robustly attested throughout the Icelandic diachrony, with V1 still an option in the modern stage (Butt et al. 2014). Therefore we assume that the c(onstituency)-structure of Icelandic remains stable over time. However, V1 decreases in frequency over time. This is connected with changes in the way information structure is encoded syntactically, i.e. via structural position. Within LFG, we can capture this change in terms of a change in the mapping between c-structure and a separate information-structural dimension (i-structure, see King 1997).

In Old Icelandic, topics can be clause-initial (in SpecIP) but also frequently occur in the postfinite domain, e.g. (1) and (4).

(4) Pá hafði hann hálft annað hundrað skipa. then have.PST he.NOM half other hundred ships.GEN 'Then he had half of another hundred ships.' (1275, Morkin.268)

Our corpus findings indicate that topics increasingly target SpecIP over time, and thus V2 increases at the expense of V1. We interpret this as SpecIP becoming more firmly associated with topics, which has consequences for the information-structural mappings for the rest of the clause. Now that topics in SpecIP are clearly demarcated from the rest of the clause via the finite verb in I, I can function as an information-structural boundary separating topic and comment. This is in line with

the proposal by Hinterhölzl & Petrova (2010) for Old High German.

Moreover, the changes concerning SpecIP also tie in with other changes in the midfield. In Old Icelandic, a small set of temporal-spatial adverbs ('DAs') such as  $b\acute{a}$  'then' and bar 'there' not only functioned as discourse linkers, see (4), but also as discourse partitioners separating topic from focus in the midfield, e.g. (5) (cf. van Kemenade & Los 2006 on Early English).

(5) Piggja þau þar ágærar gjafir.
receive.PRS they.NOM there excellent gifts
'They receive there excellent gifts.' (1350, Finnbogi.661.2086)

Our corpus findings show that DAs strikingly decrease in frequency in the midfield over time. This we relate to the trade-off between DAs and I in terms of the encoding of information structure. With topics now firmly associated with SpecIP, and I as an information-structural boundary, midfield DAs in their discourse-partitioner function are no longer motivated.

In sum, based on quantitative corpus evidence we show how various syntactic changes in Icelandic can be accounted for within LFG by assuming that the constituency structure remains stable over time, while the associations between structural position and information structure change.

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