The acceptability of subject-initial V3 in Icelandic adverbial clauses

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## 1 Introduction

Haegeman (2003) identified two types of adverbial clauses (ACs) which exhibit distinctive properties in their internal and external syntax: central adverbial clauses (CACs) and peripheral adverbial clauses (PACs). Essentially, CACs are more closely related to the host clause than PACs both semantically and syntactically. In terms of their internal syntax, CACs resist main clause phenomena (MCPs) such as argument fronting while PACs permit some of them. Frey (2012) identified a third type of ACs – non-integrated adverbial clauses (NACs). They are argued to be fully independent from the host clause, can perform a separate speech act and allow a wider range of MCPs than PACs and CACs do. This distinction was observed in causal af-því-að-clauses in Icelandic (Angantýsson & Jędrzejowski, 2023) (see also Angantýsson and Jonas 2016).

In term of finite verb position, Icelandic is a symmetric V2-language, i.e. the finite verb usually holds the second position both in matrix and embedded clauses, in comparison to asymmetric V2-languages such as German and Mainland Scandinavian languages, in which case the finite verb takes the second position in main clauses whereas it generally takes the final position in subordinate clauses in German and third position (preceded by sentence adverbs) in Mainland Scandinavian languages. However, there are quite well documented exceptions in the literature (see e.g. Angantýsson 2007; Thráinsson 2010; Viðarsson 2019). The sentence in (1) illustrates that an adverb can precede the finite verb in some embedded clauses in Icelandic, with proper prosodic adjustments.

(1) Það er einmitt það sem við **ekki kunnum** skýringar á, hvað hefur skeð. it is exactly it that we NEG know explanation on, what has happened 'That's exactly what we are lacking explanation of, what has happened.' (*Bylgjan*, 2013-12-03, *Barkarson*, *Steingrímsson*, and *Hafsteinsdóttir* 2022)

Furthermore, it was observed in Angantýsson (2020) that sentence types that prohibit embedded topicalization are more likely to accept V3 in Icelandic. Based on this and Haegeman's observations, one might postulate that different ACs may behave differently with regard to subject-initial V3 in Icelandic. Given that subject-initial V3 is less acceptable in complement clauses than in relative clauses, we hypothesized that such V3 orders are least restricted in the most deeply embedded clause type, i.e. CACs.

The current paper reports on the results obtained from an online questionnaire investigating the acceptability of the subject-initial V3 in different types of Icelandic ACs. Results from the acceptability judgment data suggest that the NACs, being more "matrix-like", indeed received lower overall rating than the other two types. However, very little difference was observed between CACs and PACs.

# 2 Methodology

The current research is based on quantitative methods and data was collected through an online survey where participants evaluate sentences that contain grammatical variables according to how natural they think the sentences are, on a 7-point Likert scale from -3 up to +3 (Likert, 1932). The semantic category consists of 6 levels: causal, concessive, conditional, purpose, result and temporal clauses. The syntactic category consists of 3 levels: CAC, PAC and NAC. Both V2 and V3 orders are tested in the study. A total of 120 unique sentences was tested in the survey. Statistical analyses were performed to see whether there is any correlation between the variables and whether the differences between them are statistically significant.

#### 3 Results

A total of 407 people participated in the survey and each of them judged 20 test sentences. In total, there were 8,140 measurements of the test sentences.

The results from the survey show that sentences with the V2 construction generally received a more positive judgment from the participants than sentences with the V3 construction (cf. figures 1 and 2).

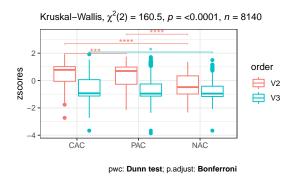


Figure 1: Acceptability of V2 and V3 by the syntactic types.

Figure 2: Acceptability of V3 by the semantic types.

With the V3 construction, the difference in participants' judgments across the different syntactic categories seems to be very small (cf. figure 1). This is true both between NACs and PACs and between CACs and PACs, where the boxes appear to completely overlap. There seems to be a small difference between CACs and NACs and this difference is statistically significant (p = 0.0217).

Furthermore, several semantic categories showed differences in participants' judgments towards V3 (cf. figure 2). Although the difference is not great between them, it is statistically significant ( $\chi^2$  (5, N=4070) = 47.47, p < 0.0001). Most semantic categories were given negative responses from the participants with V3 word order, with all boxes and medians below Z-score of 0 (cf. figure 2). When looking at the average Z-scores, the purpose and concessive clauses received better average scores, which are -0.531 and -0.495 respectively.

#### 4 Conclusion

Overall, sentences with the V2 construction received a more positive evaluation from the participants than sentences with V3, either for sentences in different semantic categories or in different syntactic categories. When looking only at sentences with the subject-initial V3 construction, there

seems to be a difference in the participants' evaluations between different semantic categories and syntactic categories, although the difference is not large and is only statistically significant between certain categories. On the other hand, although the difference between syntactic categories is quite small, the results did show consistency with our hypothesis. Sentences with CACs in V3 order indeed received better judgment than sentences with PACs while sentences with NACs received worse judgment than the other two types.

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