## Stylistic Fronting and information structure in Icelandic: insights from prosody and diachrony

Hannah Booth, Tina Bögel, Christin Beck & Nicole Dehé

University of Konstanz

The phenomenon of Stylistic Fronting (SF) in Icelandic has attracted lots of attention in the literature since its early treatment by Maling (1980). Though definitions of SF vary, it can be characterized broadly as the fronting of elements to the prefield which are ordinarily postverbal, e.g., nonfinite verbs, verbal particles, or negation; see (1), taken from Thráinsson (2007, 353).

(1)	a.	Þetta er	mál [ser	n rætt	hefur	verið].	(pass.ptcp-V)	
		DEM be.PRS issue REL discuss.PASS.PTCP have.PRS be.PST.PTCP 'This is the issue which has been discussed.'						
	b.	Þetta er	mál [ser	n <b>upp</b> hefur	komið].		(PTCL-V)	
		DEM be.PRS	s issue REI	ssue REL up have.PRS come.PST.PTCP				
	'This is the issue which has come up.'							
	c.	Þetta er	mál [ser	n <b>ekki</b> hefur	verið	rætt].	(NEG-V)	
		DEM be.PRS	issue REI	NEG have.PRS	be.PST.PTCP	discuss.PASS.PTCP		

'This is the issue which has not been discussed.'

Many accounts of SF, particularly the early ones, are purely syntactic and argue that SF serves a structural role, filling the prefield in contexts where there is no obvious candidate to occupy that position, e.g., a subject (Maling 1980, Holmberg 2000). However, others have argued that SF has information-structural effects. Hrafnbjargarson (2004) claims that SF can indicate contrastive focus (see also Molnár 2010), while Egerland (2013) proposes that SF is a backgrounding strategy. In addition, recent diachronic work on Icelandic has shown that the association between syntactic positions and information structure changes over time, with particular changes concerning the prefield, i.e., the position targeted by SF (Booth and Schätzle 2019). Only a limited number of proposals have examined the prosody of SF, where it has been shown that SF is conditioned by prosodic factors, specifically syllable count and the prosodic contour of the material surrounding the landing site (Wood 2011).

As such, recent studies indicate a connection between SF and information structure on the one hand, and between SF and prosody on the other. However, an investigation which examines the interaction between SF, information structure and prosody together is still lacking. By examining both its information-structural and prosodic properties, as well as taking into account the diachronic situation, such a study has the potential to shed new light on the nature of factors influencing SF, particularly taking into account insights from work on the prosody-information structure interface in Icelandic (e.g., Dehé 2009).

In this paper, we present ongoing work which examines SF in present-day Icelandic using data from the *Alþingisumræður* corpus (Parliament Speech Corpus, PSC)<sup>1</sup>. The PSC is a corpus of spoken Icelandic and contains 20 hours of discussions from the Icelandic Parliament, recorded in 2004 and 2005. The data is intended to reflect natural and mostly unplanned spoken Icelandic under formal conditions. We focus on embedded clauses, since SF is known to be particularly common in this environment. We automatically extracted embedded clauses with SF (n=349) via our own Python script. The script searched for clauses containing any C-element directly followed by an SF-candidate, i.e., a negation marker (*ekki, eigi*), a non-finite verb (infinitive or participle), an adjective, or a verbal particle, immediately followed by the finite verb (V2). Subsequently, we mapped the extracted clauses to the transcriptions in the corpus which provide information about the time at which the clause was uttered in the corresponding recordings. Similarly, we extracted embedded clauses where a potential SF-candidate occurs post-verbally and the constituent in the prefield does not qualify as SF, to serve as a control dataset (n=1226).

<sup>&</sup>lt;sup>1</sup>http://www.malfong.is/index.php?pg=althingi&lang=en

For the prosodic analysis, we restricted ourselves to clauses introduced by sem (relative clauses) in otherwise syntactically non-complex constructions (excluding e.g., clauses which contain a further level of embedding), thus reducing prosodic variation. Within this data set, we only focussed on disyllabic participles and *ekki* (leaving other SF-candidates for future research), again to reduce variation, but also to enable a detailed prosodic comparison of any pitch accents on the SF element. These restrictions, necessary for a sound prosodic analysis, reduced our data set of SF constructions to 24 cases. In addition, we also prosodically analyzed a comparable subset of the control group of non-SF-constructions, specifically those with disyllabic constituents occupying the prefield (n=20).

As mentioned, it has been claimed that SF is a contrastive focus strategy, at least in certain contexts (Hrafnbjargarson 2004, Molnár 2010). Previous literature showed that a constituent carrying contrastive focus is prosodically strong, typically associated with a H<sup>\*</sup> (or: L+H<sup>\*</sup>) pitch accent, with the peak aligned in the stressed syllable (Dehé 2006). Moreover, narrow focus occurring early (i.e., non-final) in a sentence also has a L+H<sup>\*</sup> accent in Icelandic, with the peak aligned early (i.e., in the stressed syllable), as compared to a L<sup>\*</sup>+H prenuclear accent (Dehé 2010). To determine whether SF indicates contrastive focus, we measured the pitch excursion of the SF elements and compared them with the pitch excursion on the elements occurring in the prefield in the non-SF-environments in the control data, as a larger pitch excursion on the SF element would support the contrastive focus hypothesis. To this end, we extracted F0 data points from *sem*, the disyllabic SF/non-SF element in the prefield, and the following verbal complex. In the next step, we transformed all F0 measurements into semitones and measured the difference between adjacent semitones, thus normalizing and remodelling the pitch to allow for a prosodic comparison, even given a great variety of speakers.

Our findings do not support the claim that SF is a contrastive focus strategy. While both SF and non-SF elements can carry a pitch accent, the excursion on the SF element is generally less pronounced (but not significantly so) in comparison to the non-SF prefield elements (1.5 semitones smaller on average). These findings were confirmed by a statistical analysis of the semitone differences using an lmer model with the SF/non-SF distinction as fixed factor and items as random factor (p > 0.05). If an accent occurs, this accent is best analyzed as a prenuclear accent. The prosodic evidence in the form of accent analysis and pitch excursion therefore does not support the assumption that SF is a contrastive focus strategy.

An alternative information-structural account has been put forward by Egerland (2013), who claims for Icelandic that SF is a backgrounding strategy. Specifically, the SF element is moved out of the 'focus domain', and thus does not receive a topical or focal reading. Rather, it is interpreted as 'contextlinked' in a broad sense and receives a background interpretation. Examining the prosodic properties of SF indeed throws up observations which seem to be compatible with the backgrounding claim. As mentioned, SF elements are mostly unaccented or have a prenuclear accent. Note that Icelandic does not necessarily deaccent given information (Nolan and Jónsdóttir 2001, Dehé 2009), thus it is not unexpected to have a prenuclear accent associated with a given (or backgrounded) element, and prenuclear accents may be present for rhythmical reasons. In our data, there are only a few exceptions to this pattern, which all involve *ekki* as the SF-element. It is thus well possible that *ekki*-fronting is a more diverse phenomenon, which is not necessarily always SF. For example, *ekki* may be fronted (just like prepositional phrases may be fronted) to create some kind of contrast, and *ekki* may also be contrastive in constituent negation (e.g., Jónsson 1996, Thráinsson 2007).

Moreover, we supplement our investigation with diachronic insights. Despite the great synchronic interest in SF, it has gained little attention in terms of its history. It has been recently shown, however, that in earlier stages of the language SF was much less restricted in the contexts in which it could apply compared to the modern stage, occurring commonly in clauses with a topical subject (Booth 2018), contra the 'Subject Gap Condition' assumed for modern Icelandic (Maling 1980). As such, the present-day manifestation of SF appears to be a remnant of a more generalized fronting phenomenon.

Furthermore, we argue that this more generalized fronting phenomenon fits with the backgrounding claim. This is in line with recent work which has argued that the prefield in Icelandic has changed over

time from a position which predominantly hosts background information to one which is increasingly associated with topics (Booth and Schätzle 2019). Assuming this connection also accounts for the ongoing decreasing frequency of SF over time, as previously observed (Hróarsdóttir 1998, Rögnvaldsson 1996). With subject topics increasingly targeting the prefield, the number of sentences with a postfinite topic are decreasing and SF is becoming restricted to clauses which lack a subject topic altogether, hence the 'Subject Gap Condition' (Maling 1980). In essence, SF would appear to be undergoing a gradual transition from being primarily information-structurally motivated to more dominantly structural.

As our next steps, we intend to widen this study, specifically looking at a broader range of SF elements as well as any possible differences between SF in (different types of) embedded clauses versus matrix clauses. Additionally, we intend to compare the prosodic properties of SF in present-day Icelandic with related topicless structures, i.e., V1 impersonals and presentationals, as well as variants of these with expletive  $pa\delta$  in the prefield. Our account will be formulated within the formalism of LFG, making use of the prosody-syntax interface developed in Bögel (2015), as well as the correspondences between c-structure and i-structure previously suggested for the history of Icelandic (Booth and Schätzle 2019).

## References

- Bögel, Tina. 2015. The Syntax-Prosody Interface in Lexical Functional Grammar. Ph. D.thesis, University of Konstanz.
- Booth, Hannah. 2018. Clause Structure and Expletives: Syntactic Change in Icelandic. Ph. D.thesis, University of Manchester.
- Booth, Hannah and Schätzle, Christin. 2019. The syntactic encoding of information structure in the history of Icelandic. In Miriam Butt, Tracy Holloway King and Ida Toivonen (eds.), Proceedings of the LFG'19 Conference, pages 69–89, Stanford, CA: CSLI Publications.
- Dehé, Nicole. 2006. Some notes on the focus-prosody relation and phrasing in Icelandic. In Gösta Bruce and Merle Horns (eds.), Nordic Prosody - Proceedings of the IXth Conference, pages 47–56, Frankfurt/Berlin/New York: Peter Lang.
- Dehé, Nicole. 2010. The nature and use of Icelandic prenuclear and nuclear pitch accents: Evidence from F0 alignment and syllable/segment duration. Nordic Journal of Linguistics 33(1), 31–65.
- Dehé, Nicole. 2009. An intonational grammar for Icelandic. Nordic Journal of Linguistics 32(1), 5–34.
- Egerland, Verner. 2013. Fronting, background, focus: A comparative study of Sardinian and Icelandic. Lingua 136, 63–76.
- Holmberg, Anders. 2000. Scandinavian stylistic fronting: How any category can become an expletive. Linguistic Inquiry 31(3), 445–483.
- Hrafnbjargarson, Gunnar Hrafn. 2004. Stylistic fronting. Studia Linguistica 58(2), 88–134.
- Hróarsdóttir, Þorbjörg. 1998. Setningafræðilegar Breytingar á 19. Old: þróun þriggja málbreytinga. Reykjavík: Málvísindastofnun Háskóla Íslands.
- Jónsson, Jóhannes G. 1996. Clausal Architecture and Case in Icelandic. Ph. D.thesis, Department of Linguistics, University of Massachusetts Amherst.
- Maling, Joan. 1980. Inversion in embedded clauses in Modern Icelandic. *Íslenskt mál og almenn mál*fræði 2, 175–193.
- Molnár, Valéria. 2010. Stylistic Fronting and discourse. Tampa Papers in Linguistics 1, 30–61.
- Nolan, Francis and Jónsdóttir, Hildur. 2001. Accentuation patterns in Icelandic. In Wim A. van Dommelen and Thorstein Fretheim (eds.), Nordic Prosody - Proceedings of the VIIIth Conference, pages 187–198, Frankfurt/Berlin/New York: Peter Lang.
- Rögnvaldsson, Eiríkur. 1996. Word order variation in the VP in Old Icelandic. Working Papers in Scandinavian Syntax 58, 55–86.
- Thráinsson, Höskuldur. 2007. The syntax of Icelandic. Cambridge University Press.
- Wood, Jim. 2011. Stylistic Fronting in spoken Icelandic relatives. Nordic Journal of Linguistics 34(1), 29–60.