Chapter 5

Narration and clause-internal adverbs: An information-structural watershed in Old Icelandic

Hannah Booth

Ghent University

Various discourse functions have been attributed to temporal/spatial adverbs in Early Germanic narrative texts, especially in Early West Germanic. By contrast, the role of such adverbs in Early North Germanic has been neglected, despite there being a rich attestation of saga narratives, ripe for studying such phenomena. In this paper, I investigate the behaviour of clause-internal $p\acute{a}$ (lit. 'then'), par (lit. 'there') and $n\acute{u}$ (lit. 'now') in relation to discourse in Old Icelandic saga narratives. I show that these adverbs serve as an "information-structural watershed" (Krivonosov 1977, Grosz 2016), segmenting the clause into discourse domains, and show how this function can be modelled within Lexical Functional Grammar (Kaplan & Bresnan 1982, Bresnan et al. 2016). I also show that, diachronically, these adverbs are virtually in complementary distribution with the clause-initial expletive $pa\emph{o}$, a later development which takes over some of the discourse function previously served by the clause-internal adverbs.

1 Introduction

Narratives as a genre bring their own specific stylistic characteristics which have been shown to interact with the expression of information structure in various ways (e.g. Carroll & Lambert 2003, Dimroth et al. 2010, Riester 2015). As one type of narrative, the Old Icelandic sagas have long been recognised by literary historians for their unique style and special rhetorical devices (e.g. Clover 1974, Ólason 2004, Phelpstead 2017), but so far their discourse-related properties have only



been scarcely investigated within theoretical linguistics (e.g. Hróarsdóttir 2009, Booth & Beck 2021). As such, their great potential to shed light on phenomena at the syntax-discourse interface remains largely untapped.

In this paper, I contribute to this area via an investigation of a small set of light adverbs ($b\acute{a}$, lit. 'then'; bar, lit. 'there'; $n\acute{u}$, lit. 'now') which regularly appear clause-internally in Old Icelandic, especially in verb-initial clauses, e.g. (1).¹

(1) a. Sótti Ormur þá Sturlu að þessu máli og fóru pursued Ormur.nom þá Sturla.acc at this.dat matter.dat and went þá margar orðsendingar millum þeirra Orms og þá many.nom messages.nom between they.gen Ormur.gen and Sturlu...

Sturla.GEN

- 'Ormur pursued Sturla in this matter and there went many messages between them...' [IcePaHC: 1250, Sturlunga.396.269–270]
- b. Sátu þeir þar við er lengra fóru til. Var þar skipað sat they.Nom þar ptcl rel further went to was þar matched saman þeim sem jafnsterkastir voru...
 together they.Dat rel equally.strongest.nom were 'Those who had come from further off would stay near by. They were matched together according to their strength...'

[IcePaHC: 1310, Grettir.162–163]

c. Söðull var undir kviði niðri á hesti Grettis saddle.nom was under belly.dat lower.dat on horse.dat Grettir.gen en í burt malurinn. Fer hann **nú** til leitar og fann and away knapsack.nom goes he.nom nú to search.gen and found eigi. Sér hann **nú** hvar maður gengur.

NEG sees he.nom nú where man.nom goes

'Grettir's horse had got its saddle twisted round under its belly and the knapsack had gone, so he went to look for it, but couldn't find it. He sees a man walking by.' [IcePaHC: 1310, Grettir.237–240]

The characteristic presence of these elements in the Old Icelandic sagas has been previously noted (cf. Clover 1974: 71; Faarlund 1990: 71), but the precise discourse properties of such clauses have not been previously investigated. On the basis of corpus data from IcePaHC (Wallenberg et al. 2011) and MIcePaHC (Ingason

¹Throughout the paper, I gloss the respective adverbs simply as ÞÁ, ÞAR, and NÚ to reflect the fact that, in clause-internal position, they often undergo some semantic weakening.

2020), I claim that the clause-internal adverbs serve a specific discourse function, segmenting the clause into discourse domains, thus acting as an "information-structural watershed" (cf. Krivonosov 1977, Grosz 2016 on Modern German and van Kemenade & Los 2006 on Old English). I show how this specific function of clause-internal adverbs can be modelled within the parallel architecture of Lexical Functional Grammar (Kaplan & Bresnan 1982, Bresnan et al. 2016, Dalrymple et al. 2019), in which different types of linguistic information are represented at independent, interacting dimensions. I also examine the diachronic status of these clause-internal adverbs, showing that, across the history of Icelandic, they are virtually in complementary distribution with the clause-initial expletive *það*, which represents a later development (cf. Hróarsdóttir 1998, Rögnvaldsson 2002, Booth 2018, 2019, 2020). I relate this to a broader change whereby Icelandic gradually shifts its structural specification of discourse functions from the postfinite domain to the clause-initial position over time.

The paper proceeds as follows. In Section 2, I review previous work on adverbs and discourse in Early Germanic, especially in Early West Germanic where the bulk of previous research has been conducted, which serves as a backdrop to my investigation of Old Icelandic. Section 3 presents the corpus findings with respect to the frequency and distribution of clause-internal $p\dot{a}/par/n\dot{u}$, and how this relates to the broader mapping correspondences between position and information structure in the postfinite domain. Section 4 outlines how the findings can be theoretically modelled within Lexical Functional Grammar and Section 5 presents some findings with respect to the diachrony of clause-internal adverbs in relation to broader changes in the grammar. Section 6 concludes the paper.

2 Adverbs, position and discourse in Early Germanic

Previous work on Early Germanic, in particular West Germanic (Old English, Old High German, Old Saxon), has highlighted the fact that certain temporal/spatial adverbs often serve particular discourse functions, especially in narratives (e.g. Foster 1975, Enkvist 1986, Enkvist & Wårvik 1987, van Kemenade & Los 2006, Trips & Fuß 2009, Wårvik 2013, Cichosz 2022). Crucially, some studies have highlighted the fact that the precise discourse functions of such adverbs vary by position (e.g. van Kemenade & Los 2006, Axel 2007, Donhauser & Petrova 2009, van Kemenade & Milićev 2011, Petrova 2011, van Kemenade & Links 2020, Catasso et al. 2021), with important differences between clause-initial adverbs and clause-internal adverbs, as I now discuss.

2.1 Clause-initial adverbs

Various authors have claimed for Old English that <code>ba/bonne</code> (lit. 'then'), when occurring in the clause-initial position, marks a sequence of actions/events which represent the main line of the narrative ("foregrounding") (Foster 1975, Enkvist 1986, Enkvist & Wårvik 1987, Wårvik 2013, Cichosz 2022). An example of a continuous narrative whereby the main storyline is carried forward by repeated use of clause-initial <code>ba</code> is shown in (2).

(2) Old English:

He sæde þæt he æt sumum cirre wolde fandian hu longe þæt land norþryhte læge, obbe hwæðer ænig mon be norðan þæm westenne bude. Þa for he norþryhte be þæm lande; let him ealne weg þæt weste land on ðæt steorbord & þa widsæ on ðæt bæcbord þrie dagas. Þa wæs he swa feor norb swa þa hwælhuntan firrest faraþ. Þa for he þa giet norþryhte swa feor swa he meahte on bæm obrum brim dagum gesiglan. Pa beag bæt land bær eastryhte, obbe seo sæ in on ðæt lond, he nysse wæðer buton he wisse ðæt he ðær bad westanwindes & hwon norþan & siglde ða east be lande swa swa he meahte on feower dagum gesiglan. Pa sceolde he ðær bidan ryhtnorbanwindes, for ðæm bæt land beag bær subryhte, obbe seo sæ in on ðæt land, he nysse hwæber. Þa siglde he bonan suðryhte be lande swa swa he mehte on fif dagum gesiglan. Da læg þær an micel ea up in on þæt land. 'He said that at one occasion he wanted to find out how far that land extended northwards, or whether any man lived north of the wilderness. Then he travelled northwards along the coast; keeping all the way the waste land on the starboard and the open sea on the portside for three days. Then he was as far north as the whalehunters go furthest. Then he travelled still northwards as far as he could sail in another three days. Then the land turned east, or the sea into the land, he didn't know which, but he knew that he there waited for a wind from the west and somewhat from the north and sailed then east along the coast as far as he could sail in four days. Then he had to wait for a due north wind, because that land turned there directly to south, or the sea into the land, he didn't know which. Then he sailed from there southwards along the coast as far as he could sail in five days. Then there was a large river reaching up into the land. [Or 1:1.14.5.226-235];

(Enkvist & Wårvik 1987: 234, as cited in Trips & Fuß 2009: 179–180)

Others have focussed on the discourse continuity/discourse-linking effect of clause-initial *ba/bonne* (e.g. Los 2000, van Kemenade & Los 2006, Trips & Fuß

2009). Trips & Fuß (2009), for instance, argue that clause-initial pa/ponne function as discourse-anchoring temporal anaphors, which they relate to the fact that pa/ponne derive from former demonstratives (cf. Proto-Germanic *TO-), and thus were always anaphoric/deictic in relation to something previously mentioned.

Similar observations have been made for certain clause-initial elements in Gothic (Klein 1994a) and Old Saxon (Linde 2009). Klein (1994a) claims that Gothic par-uh (lit. 'there' + uh) and pan-uh (lit. 'there' + uh) function as "discourse articulators" which indicate narrative continuity, albeit associated with a change of grammatical subject. For Old Saxon, Linde (2009) observes that clause-initial tho (lit. 'then') and other adverbs such as so (lit. 'so') and nu (lit. 'now') have a similar function, signalling the continuation of the narration and guaranteeing progress in discourse.

2.2 Clause-internal adverbs

At the same time, a series of studies have shown that, when occurring clause-internally, such adverbs have a rather different function. Donhauser & Petrova (2009), for instance, examine the properties of clause-initial and clause-internal *tho* (lit. 'then') in Old High German and observe a clear difference: While clause-initial *tho* refers to a time span already established in the preceding section, as shown in (3a), clause-internal *tho* refers to a novel, indefinite time interval introduced as the topic time (cf. Klein 1994b) of a new episode, e.g. (3b) (see also the discussion in Petrova 2011).

(3) Old High German:

a. tho uuas man in hierusalem
then was man in Jerusalem
'A man lived in Jerusalem at that time'
Latin: homo erat in hierusalem [T 37, 23]; (Petrova 2011: 219)

b. uaas thó giuuortan in anderemo sambaztag
was then become in another Sabbath
'It happened on another Sabbath'
Latin: Factum est in alio sabbatum autem [T 37, 23]; (Petrova 2011: 219)

Tying this in with the position of the finite verb, Petrova (2011: 224) argues that, in cases of clause-internal *tho*, a verb-initial (V1) structure is triggered by the novelty of the time interval referred to by *tho*, in line with the fact that V1 declaratives more generally are used to introduce a new situation (cf. Hinterhölzl & Petrova 2010).

The special status of clause-internal *tho* and its close relation to V1 in Old High German is also observed by Axel (2007, 2009). Axel (2007: 156, 167) states that "most" Old High German V1 declaratives contain a clause-internal *tho* as "a very characteristic lexical feature". In such contexts, she observes, *tho* often has very weak semantics, as evidenced by the fact that it occurs with an additional temporal adverbial in the same clause, e.g. (4). Axel suggests that, in such contexts, *tho* serves as a narrative-emphatic particle, belonging to the broader, residual system of sentence particles exhibited in early Old High German texts, which is a vestige from an earlier period before the generalisation of verb-second (Axel 2007: 169–170, Axel 2009: 35–36).

(4) Old High German:

inti uuas tho giheilit/ ira tohter fon dero ziti/ and was тно healed her daughter from that hour 'and her daughter was healed from that hour' Latin: & sanata est/filia illus ex illa hora/ [Т 273,31]; (Axel 2007: 156)

The discourse function of clause-internal adverbs has also been highlighted for Old English in work by van Kemenade and colleagues (van Kemenade & Los 2006, van Kemenade et al. 2008, van Kemenade 2009, van Kemenade & Milićev 2011, van Kemenade & Links 2020). The central claim is that, in subordinate clauses, clause-internal *þa/ponne* ('then') functions as a "discourse partitioner", separating presupposed, given information from new, focussed informa-

(5) [utterance PRESUPPOSITION - pa/ponne - FOCUS]

tion, cf. (5) (adapted from van Kemenade et al. 2008: 10).

The evidence for this claim comes from a series of quantitative corpus findings. For instance, van Kemenade & Los (2006: 232) observe that pronominal subjects in the postfinite domain occur overwhelmingly to the left of pa/ponne, e.g. (6); additionally, pronominal objects also regularly appear in this position, as in the example in (6).

(6) Old English:

forpæm he wenð pæt [he] [hi] **ponne** ealle hæbbe because he knows that he them then all have 'because he know that he then had them all' [coboeth, Bo: 24.56.16.1031]; (van Kemenade et al. 2008: 12)

By contrast, indefinite nominal subjects are preferred to the right of *þa/þonne* (van Kemenade & Los 2006: 237), e.g. (7); van Kemenade et al. (2008: 13) find

that indefinite NPs introducing new discourse entities do not occur to the left of ba/bonne in their data.

(7) Old English:

Gif **ðonne** [hwelc mon] forbireð his synna if then any many forebears his sins 'If anyone then refrains from his sins'

[cocura, CP: 37.265.1.1719]; (van Kemenade et al. 2008: 13)

Definite nominal subjects can occur to the left or right of *þa/ponne* but, as van Kemenade et al. (2008: 13) observe, definite nominals occurring in the left position are +anaphoric. Via a statistical analysis, van Kemenade et al. (2008: 19) find that the most important trigger for a nominal to occur in the position to the left of *þa/ponne* is the presence of an antecedent in the previous discourse. The overall findings in these studies are related in van Kemenade & Los (2006: 233) to a broader claim that Old English is discourse-configurational (cf. É. Kiss 1995), in other words a language with designated structural positions for discourse functions such as topic and focus. This is reminiscent of work on modern German, where it has been argued that clause-internal discourse particles segment the postfinite domain into (aboutness) topic and focus fields (Krivonosov 1977, revisited by Grosz 2016), e.g. (8).

(8) Modern German:

Dann hat $[Riko]_{TOPIC}$ ja $[eine\ Frau]_{FOCUS}$ geküsst then has Riko PTCL a woman kissed 'Then Riko has kissed a woman' (Grosz 2016: 338)

Elsewhere in Early West Germanic, Old High German/Old Saxon *tho* has also been claimed to serve an information-structural function, namely marking topicality in a specific verb-third construction of the form XP-*tho*-V (Axel 2007: 224–225, Catasso et al. 2021), e.g. (9).

(9) a. Old High German:

sie **tho** antalengitun imo. neín they do answered him.dat no 'They said to him: "No".' Latin *Responderunt ei: non* [T. 337]; (Catasso et al. 2021: 2)

b. Old Saxon:

Petrus thô gimahalde [...]
Peter тно said
'Peter said [...].' [Hel. XXXVIII, 3136]; (Catasso et al. 2021: 2)

Catasso et al. (2021) observe that the clause-initial constituent in constructions like (9) is usually a pronominal shift topic, and they thus argue that *tho* is a topic marker in such contexts. Axel (2007: 225) similarly states that *tho* signals a change in topic in such contexts.

2.3 Summary

In sum, there is a good deal of work on Early West Germanic which has highlighted the special status of clause-internal adverbs in terms of their discourse functions. By comparison, the behaviour of clause-internal adverbs in Early North Germanic has generally been neglected, with only a few sparse references to their frequent occurrence in Old Norse/Icelandic texts. For instance, Clover (1974: 71) observes that there is "repeated interposition" of temporal/spatial adverbs in Icelandic translations of *chansons de geste* where the Old French original has none. Similarly, Faarlund (1990: 71), in relation to Old Norse texts more broadly, states that the adverb *par* "often" occurs immediately after the finite verb, providing the examples in (10).

(10) Old Norse/Icelandic:

- a. Konungs skuggsjá

 Pá kemr þar elldur af því jarni
 then comes ÞAR fire.NOM from that.DAT iron.DAT
 'Then fire comes from that iron.'
- b. Óláfs saga Tryggvasonar

 Ok varð þar mikit mannfall

 and was ÞAR great.NOM man.fall.NOM

 'And there was a great loss of men'
- c. Óláfs saga Tryggvasonar

 **Kemr **par mikill fjǫldi manna

 comes par great.nom multitude.nom men.gen

 'There are many men coming' (Faarlund 1990: 71)

Nevertheless, the precise behaviour of clause-internal adverbs in Old Norse/Ice-landic, and the broader discourse-related properties of such clauses, has not been closely examined. In this paper, I address this gap in the existing literature on the morpho-syntax-discourse interface in Early Germanic.

3 Old Icelandic þá, þar and nú

In this section, I examine the distribution and properties of three temporal/spatial adverbs in Old Icelandic saga narratives, namely $p\acute{a}$ (lit. 'then'), par (lit. 'there') and $n\acute{u}$ (lit. 'now'). It is possible that there are other adverbs which fall into a class with these, but these three appear to be the most representative and most frequent clause-internally. The claims are made on the basis of a series of corpus investigations using IcePaHC (Wallenberg et al. 2011) and MIcePaHC (Ingason 2020). For IcePaHC, I restrict myself specifically to sagas dated to the period 1150–1450. For MIcePaHC, I examine all texts dated to 1450 (all texts in the corpus represent saga narratives). Combined, this yields a total of 46 texts and 134,239 sentence tokens. I will refer to both corpora together as (M)IcePaHC.

3.1 Distribution of bá, bar and nú

All three adverbs occur both clause-initially, e.g. (11), and clause-internally, e.g. (12).

(11) a. *Pá* gekk út kerling ein og hafði ullkamb í then went out woman.Nom one.Nom and had wool.comb.Acc in hendi.

hand.рат

'Then a certain woman went out and (she) had a wool comb in her hand.' [MIcePaHC: 1390, Graenlendingath.55–56]

b. *Par* sökk og niður lík Porvalds...
there sank also down corpse.nom Porvaldur.gen
'There also the corpse of Porvaldur sank...'

[MIcePaHC: 1300, Njals.742]

c. **Nú** komu þeir til Grænlands og eru með Eiríki now came they.Nom to Greenland.GEN and are with Eiríkur.DAT rauða um veturinn.

red.dat in winter.acc.def

'Now they came to Greenland and (they) are with Eiríkur the Red for the winter.' [MIcePaHC: 1305, Eiríks.845–846]

 $^{^2{\}rm From}$ the IcePaHC saga texts I removed 1350. BandamennM and 1350. Finnbogi since these are duplicated in MIcePaHC.

Hannah Booth

(12) a. Segir Ólafur þá ætlan sína...
says Ólafur.nom þá opinion...cc his.acc
'Ólafur says his opinion...' [MIcePaHC: 1275, Laxdaela.1179]

b. Vésteinn gengur þar til húss...
Vésteinn.Nom goes ÞAR to house.GEN

'Vésteinn goes to the house...' (MIcePaHC: 1400, Gisla.511)

c. Fóru þeir **nú** sína leið. went they.nom nú their.acc way.acc

'They went on their way.' [MIcePaHC: 1250, Egils.4036]

In the (M)IcePaHC data, clause-initial $p\acute{a}/par/n\acute{u}$ occurs at a frequency of 12.4% in matrix declarative V2 clauses and 4.1% in subordinate declarative V2 clauses, see Table 1. Assuming that clause-initial $p\acute{a}/par/n\acute{u}$ serve a discourse-linking function and mark a sequence of events on the main line of the narrative just as they do elsewhere in Early Germanic (see Section 2), it is not surprising that the phenomenon is more common in matrix clauses, since subordinate clauses typically present presupposed, backgrounded information (e.g. Hooper & Thompson 1973, Quirk et al. 1985, Matsuda 1998, Matić et al. 2014) and as such are less likely to express events on the main storyline.

Table 1: Frequency of clause-initial $p\acute{a}/par/n\acute{u}$ in V2 matrix and subordinate declaratives in (M)IcePaHC saga narratives, 1210–1450

	matrix	subordinate
initial þá/þar/nú	10,276	1,738
all V2	82,687	42,256
% initial þá/þar/nú	12.4%	4.1%

Interestingly, if one isolates separately (i) subordinate clauses which are either non-conjunct clauses or initial conjunct clauses and (ii) subordinate clauses which are non-initial conjunct clauses, clause-initial $p\acute{a}/par/n\acute{u}$ are more frequent in non-initial conjunct clauses than in their non-conjunct/first conjunct counterparts, see Table 2. Some examples of the relevant non-initial conjunct clauses with clause-initial $p\acute{a}/par/n\acute{u}$ are provided in (13).

(13) a. *En svo var djúpið mikið að það var* and so was deep.water.nom.def great.nom that it.nom was

jafnskjótt er hann kom til grunna og [þá var þrotið immediately that he.nom came to bottom.gen and then was failed örendi hans].
breath.nom he.gen

'And the deep water was so great that immediately he came to the bottom and then his breath failed.' [IcePaHC: 1210, Jartein.789]

- b. Svo er sagt að Háls Fjörleifarson gerði bú að so is said that Háls.nom Fjörleifarson.nom made home.acc at Tjörnum í Ljósavatnsskarði og [þar gerðist vinátta Tjarnir.dat in Ljósavatnsskarð.dat and there became friendship.nom mikil í millum og Eysteins í Rauðaskriðu]. great.nom between also Eysteinn.gen in Rauðaskriða.dat 'So it is said that Háls Fjörleifarson set up home at Tjarnir in Ljósavatnsskarð there became a great friendship between (him and) Eysteinn in Rauðaskriða.' [MIcePaHC: 1400, Reykdaela.74]
- c. Gerðist nú rómur mikill að því að eytt
 became now applause.nom great.nom because come.to.nothing
 væri vígsmálinu og [nú væri vörn
 was.sbjv manslaughter.case.dat.def and now was.sbjv defence.nom
 framar en sókn].

more than prosecution.NOM

'There was now great applause because the manslaughter case had come to nothing and now there would be more deference than prosecution.'

[MIcePaHC: 1300, Njals.9017]

This pattern, whereby a syntactic phenomenon which is overall more frequent in matrix than subordinate clauses is unusually frequent in subordinate clauses

Table 2: Frequency of clause-initial $p\acute{a}/par/n\acute{u}$ in V2 non-conjunct/first conjunct and non-initial conjunct subordinate declaratives in (M)IcePaHC saga narratives, 1210–1450

	non-/first conjunct	non-initial conjunct
initial þá/þar/nú	1,588	132
all V2	38,483	1,466
% initial þá/þar/nú	4.1%	9.0%

(14)

(which are non-initial conjuncts), has been observed for another discourse-related phenomenon in Old Icelandic (Booth & Beck 2021). Booth & Beck (2021: 23) find that narrative inversion, a special type of V1 which features a topical subject in the postfinite position, is robustly attested in subordinate clauses which are non-initial conjuncts, despite the fact that it is virtually unattested in subordinate clauses which are either not coordinated or first conjuncts. The examples which Booth & Beck (2021) provide are given here in (14).

segir Urðarköttur,

"bví að eg

eg,"

a. "Eigi veit

- NEG know I.nom says Urðarköttur.nom because I.nom am á fá skyn]" ungur og [kann eg young.Nom and know I.Nom on few.Acc understanding.Acc "I do not know", says Urðarköttur, "because I am young and I do not have much knowledge"' [IcePaHC: 1350, Finnbogi.631.351]; (as cited in Booth & Beck 2021: 23) b. Þú skalt... og mæla síðan þessum orðum við vou.nom shall and sav then these.DAT words.DAT with konunginn, að eg leiði hér eftir mér einn svein. **Tog** king.ACC.DEF that I.NOM lead here after I.DAT one.ACC boy.ACC and kalla eg bar öngan mann...] I.NOM PAR no.ACC man.ACC call
 - after me a certain boy and I call there no man...'
 [IcePaHC: 1260, Jomsvikingar.1091]; (as cited in Booth & Beck 2021: 23)

'You should...and then say these words with the king that I lead here

Booth & Beck (2021: 25) offer an explanation for the occurrence of narrative inversion in subordinate non-initial conjuncts on the basis that narrative inversion is a marker of topic anaphoricity, such that it is only motivated in contexts where there is a directly preceding subordinate clause with its own topic as a potential antecedent. On the assumption that clause-initial $p\acute{a}/par/n\acute{u}$ serve a discourse-linking function and mark a sequence of events, a similar line of reasoning is a likely explanation for their higher frequency in subordinate non-initial conjuncts compared to their non-conjunct/first conjunct counterparts.

With respect to clause-internal $b\acute{a}/bar/n\acute{u}$, I examine their frequency across four environments, (i) V2 clauses with an overt subject, (ii) V2 clauses with an unexpressed subject, (iii) V1 clauses with an overt subject, and (iv) V1 clauses with

an unexpressed subject.³ The results for the two V2 environments are shown in Table 3, and for the two V1 environments in Table 4. In all four environments, clause-internal $b\dot{a}/bar/n\dot{u}$ occur more frequently in matrix compared to subordinate clauses. Strikingly there are no examples of V2 subordinate clauses which have an unexpressed subject and also a clause-internal $b\dot{a}/bar/n\dot{u}$, see Table 3. Comparing V2 and V1 environments, clause-internal $b\dot{a}/bar/n\dot{u}$ are a lot more frequent in V1 clauses, and are particularly frequent in matrix V1 clauses with an overt subject (28.5%, see Table 4) and even more frequent in those with an unexpressed subject (34.4%, see Table 4). This is quantitative evidence which confirms the claim in Faarlund (1990: 71), that these adverbs "often" occur immediately after the finite verb in such contexts (see Section 2). More broadly, the relative commonness of the phenomenon in V1 declaratives specifically is in line with Axel's observations for Old High German, where she claims that the presence of clause-internal *tho* is a "very characteristic lexical feature" (Axel 2007: 167) (see discussion in Section 2).

Table 3: Frequency of clause-internal $b\acute{a}/par/n\acute{u}$ in V2 declaratives in (M)IcePaHC saga narratives, 1210–1450

	overt subject		unexpressed subject	
	matrix	subordinate	matrix	subordinate
internal þá/þar/nú	5,385	941	29	0
all V2	82,687	42,256	245	371
% internal þá/þar/nú	6.5%	2.2%	11.8%	0.0%

Table 4: Frequency of clause-internal $p\acute{a}/par/n\acute{u}$ in V1 declaratives in (M)IcePaHC saga narratives, 1210–1450

	overt subject		unexpressed subject	
	matrix	subordinate	matrix	subordinate
internal þá/þar/nú	4,311	38	145	12
all V1	15,135	827	422	341
% internal þá/þar/nú	28.5%	4.6%	34.4%	3.5%

³I operationalise "clause-internal" in this context to mean either directly after the finite verb or one constituent later than the finite verb, and not the last constituent in the clause.

Strikingly, there are cases where more than one of the adverbs $(\frac{\dot{p}a}{\dot{p}ar}/nu)$ occur clause-internally and adjacent to one another, e.g. (15).

a. Og um daginn gerðist mæði mikil á þeim.
and in day.ACC.DEF became exhaustion.NOM great.NOM to they.DAT

Porgils var þó miklu hraustastur um

Porgils.NOM was though much.DAT strongest.NOM in

allt. Tekur þá nú að þyrsta mjög.

everything.ACC begins ÞÁ NÚ to get.thirsty very

'And in the day a great exhaustion came upon them. Þorgils, though, was much the strongest. He begins to get very thirsty.'

[MIcePAHC: 1400, Floamanna.1313–1315]

b. En er tíðindi bessi spyrjast fer Þorkell but when news.nom this.nom is.reported goes Porkell.nom to fund Þórarins og leitar þangað ráða meeting.ACC Pórarinn.GEN and seeks thither counsel.GEN and meðferðar. Hann segir: "Vera má nú þá að hún intercession.gen he.nom says be may nú þá that she.nom segi Ástríður að hann hafi eigi til engis says.sbjv Ástríður.nom that he.nom had.sbjv neg to nothing.gen risið á legginn."

risen to leg.ACC.DEF

'But when this news is reported, Þorkell goes to meet Þórarinn and seeks there counsel and intercession. He says: "It may be that she says, Ástríður, that he didn't get up for nothing."

[MIcePaHC: 1350, Viga.538-539]

- c. Og þegar minnkar dirfð þeirra við þetta. Og nema and soon diminishes courage.Nom they.gen with this.acc and take þeir að þjóna felmtinum. Snerist þar nú skjótt they.nom to serve fear.dat.def turns þar nú quickly staðfestin í hræslu. steadfastness.nom.def in dread.dat 'And soon their courage diminishes with this. And they take to serve their fear. The steadfastness quickly turns to dread.'
 - [IcePaHC: 1300, Alexander.901–903]
- d. *Nú skal=tu þangað fara og reyna vini þína* now shall=you.Nom thither go and try friends.Acc your.Acc

fyrir því að nú vættir mig að menn séu forkunnar because now expect I.ACC that men.NOM are.SBJV remarkably margir er lengi hefir dvalist. Mun nú þar vera fjölmennt. many.NOM REL long have stayed may NÚ ÞAR be crowded.NOM 'Now you shall go there and try your friends because now I expect that there are remarkably many men who have stayed there for long. It may be crowded.' [MIcePaHC: 1300, Heidarviga.1166–1167]

- e. Porgils var forstjóri fyrir búi í Torgum, þá er Porgils.nom was leader.nom for farmstead.dat at Torgar.dat when Pórolfur var eigi heima; hafði Þorgils þá þar ráð Pórolfur.nom was neg home had Þorgils.nom þá þar authority.acc 'Thorgils was the leader of the farmstead at Torgar when Þórolfur was not at home; Þorgils had the authority there.' [MIcePaHC: 1250, Egils.515]
- f. Snorri góði kom þá að með flokk sinn. Var Snorri.nom chief.nom came þá PTCL with company.acc his.acc was **þar þá** Skafti í liði með honom...

 PAR ÞÁ Skafti.nom in troop.dat with he.dat

 'Chief Snorri came with his company. Also in the troop with him was Skafti...' [MIcePaHC: 1300, Njals.9384–9385]

The examples in (15) illustrate that all combinations and orders of two adverbs are attested in the (M)IcePaHC data ($p\acute{a}$ $n\acute{u}$, $n\acute{u}$ $p\acute{a}$, par $n\acute{u}$, $n\acute{u}$ par, $p\acute{a}$ par, par $p\acute{a}$). The examples which feature $p\acute{a}$ $n\acute{u}$ (lit. 'then now') and $n\acute{u}$ $p\acute{a}$ (lit. 'now then'), in (15a) and (15b) respectively, are particularly striking, as the literal meanings of the two adverbs present a temporal contradiction. I take the attestation of sequences of clause-internal adverbs such as in (15a) and (15b) to indicate that such adverbs have grammaticalised to some extent and undergone some semantic weakening/bleaching. Next, I investigate the information-structural properties of clauses with clause-internal $p\acute{a}/par/n\acute{u}$.

3.2 Mapping syntax to information structure in the postfinite domain

Any study of the syntax-information structure interface must first outline one's terminology and understanding of key information-structural concepts. In this paper, "topic" will be understood as roughly equivalent to "aboutness topic", i.e. the entity about which information is expressed (cf. "sentence topic", Reinhart 1981). In this context, the diagnostic tests provided by Götze et al. (2007: 165) can be used to identify the aboutness topic of an utterance, see (16).

- (16) An NP X is the aboutness topic of a sentence S containing X if:
 - a. S would be a natural continuation to the announcement *Let me tell you something about X*
 - b. S would be a good answer to the question *What about X?*
 - S could be naturally transformed into the sentence
 Concerning X, S'
 where S' differs from S only insofar as X has been replaced by a suitable pronoun

Within the category of (aboutness) topic, I recognise different types of topic. One way of distinguishing between different subtypes of topic is to consider specifically the relation between a current topic and the topic of the immediately preceding utterance, i.e. the topic transition (see e.g. Daneš 1974 and "Centering Theory" in Grosz et al. 1995). In this paper, I recognise three subtypes of topic in this way, as defined in (17).

- (17) 1. CONTINUING TOPIC: current topic is co-referential with the topic of immediately preceding utterance
 - Helen arrived in Utrecht. **She** went directly to her favourite café in the city centre.
 - 2. SHIFT TOPIC: current topic is not co-referential with the topic of previous utterance
 - Helen gave a book to Julie for her birthday. **The book** was a new collection of recipes by Mary Berry.
 - 3. SUBSECTIONAL TOPIC: current topic is an element of a previously introduced set of entities
 - Helen and Julie were discussing their plans for the weekend. **Julie** wanted to go for a bike ride.

Type 1 in (17), CONTINUING TOPIC, equates to what is elsewhere defined as "familiar topics" (e.g. Frascarelli & Hinterhölzl 2007). In Type 3, SUBSECTIONAL TOPIC, the current topic constitutes a subset of a set of entities introduced in the previous discourse (cf. Hendriks 1996: 86); in this sense, it is roughly equatable with the notion of "contrastive topic", i.e. a topic which creates oppositional pairs with respect to other topics (cf. Frascarelli & Hinterhölzl 2007, Krifka 2007).

Another information-structural notion which will be relevant for this paper is information focus, as defined in (18) (cf. Reinhart 1981, Vallduví 1992, Götze et al. 2007).

- (18) Information focus: the part of the utterance which provides the new and missing information which is most relevant to the current discourse and serves to develop the discourse
 - Q:Where did you go in the Easter holidays? A: We went to Italy.

To investigate the correspondence between syntax and information structure with respect to bá/bar/nú, I first extract matrix clauses with clause-internal bá/bar/ nú and different types of nominative-marked subject in the postfinite domain (pronominal subject, proper name subject, nominal subject with definiteness marking, nominal subject without definiteness marking, quantified subject). I then examine the positional distribution of the different subject types with respect to bá/bar/nú.4 An important detail to note is that, in Old Icelandic, the distinction between nominals with definiteness marking and nominals without definiteness marking does not map directly onto the distinction between semantically definite and semantically indefinite nominals, since definiteness marking was not fully obligatory with common nouns in Old Icelandic (Leiss 2000, 2007, Börjars et al. 2016). Thus, while all of the definite-marked nominals are expected to be semantically definite, the nominals without definite marking will not all be semantically indefinite, but may also include some semantically definite nominals. Since semantic definiteness is not annotated in the (M)IcePaHC data, it is not possible to extract semantically definite versus indefinite nominals and so I rely instead on the presence/absence of definiteness marking as a proxy, combined with manual examination of the examples in context.

The (M)IcePaHC data indicate that the five different types of subject show distinct and rather strong preferences in terms of their position with respect to clause-internal $p\dot{a}/par/n\dot{u}$, see Table 5. Pronominal subjects, proper name subjects and definite-marked nominal subjects all favour the position to the left of $p\dot{a}/par/n\dot{u}$, while nominal subjects without definiteness marking and quantified subjects favour the position to the right of the adverb. Next, I examine the relation between position and information structure for each of the five subject types.

⁴(M)IcePaHC also tags some non-nominative-marked arguments (typically experiencer arguments) as subjects, following the standard analysis of such arguments in Modern Icelandic as grammatical subjects (e.g. Zaenen et al. 1985). I exclude clauses annotated with such non-nominative subjects from this investigation of Old Icelandic, as it remains an ongoing debate to what extent non-nominative experiencer arguments already qualify as grammatical subjects at this early stage of the language (e.g. Barðdal & Eythórsson 2003, 2009, Barðdal et al. 2012, Schätzle et al. 2015, Schätzle 2018).

Table 5: Position of different types of (nominative-marked) subject rela-
tive to clause-internal $\frac{\dot{p}a}{\dot{p}ar}/n\dot{u}$ in matrix declaratives in (M)IcePaHC
saga narratives, 1210–1450

	V–suвj–þá/þar/nú		V-þá/þar/nú-subj	
	n	%	n	%
pronominal subject	3,297	99.3%	22	0.7%
proper name subject	859	75.6%	277	24.4%
nominal subject _{+DEF}	78	94.0%	5	6.0 %
nominal subject_DEF	275	21.9%	979	78.1%
quantified subject	10	2.5%	395	97.5%

3.2.1 Pronominal subjects

With respect to pronominal subjects, those that occur to the left of $b\acute{a}/bar/n\acute{u}$ (the vast majority, see Table 5) are generally continuing topics, e.g. (19).

- (19) a. Svo eignaðist Haraldur konungur Naumdælafylki og
 so acquired Haraldur.nom king.nom Naumdælir.county.acc and
 Hálogaland; setti [hann] þar menn yfir ríki sitt.
 Hálogaland set he.nom þar men.acc over kingdom.acc his.acc
 'So King Haraldur acquired Naumdælir county and Hálogaland; he
 installed men over his kingdom.' [MIcePaHC: 1250, Egils.63]
 - b. Maður heitir Ólafur og er Höskuldsson og er man.nom is.called Ólafur.nom and is Höskuldsson.nom and is [hann] nú frægstur maður einnhver.
 he.nom nú most.famous.nom man.nom anywhere
 'There is a man called Ólafur, son of Höskuldur and he is the most famous man around.' [MIcePaHC: 1275, Laxdaela.1467–1468]

Of the 22 pronominal subjects which occur to the right of $p\acute{a}/par/n\acute{u}$, 12 are instances of a dummy pronoun which is co-referential with a clausal argument later in the sentence, e.g. (20).⁵

⁵The dummy *það* is annotated in the (M)IcePaHC data as a subject, and so is included here, even though it is widely assumed that it does not qualify as a grammatical subject in Icelandic (e.g. Thráinsson 1979: 480–481; Platzack 1983; Maling 1988). Whatever the status of dummy *það* in Old Icelandic, I still include it here as an instructive example of an element which is neither a topic nor a focus.

(20) a. Er **nú** [það]_i ætlan þeirra bræðra [að venda til is NÚ it.NOM intention.NOM they.GEN brothers.GEN to turn to hefnda við Helga Harðbeinsson því að hann veitti avenge with Helgi.DAT Harðbeinsson.DAT because he.DAT dealt Bolla banasár]_i.

Bolli.dat death.blow.acc

'It is the intention of the brothers to turn to attack in vengeance Helgi Harðbeinsson because he dealt Bolli his fatal blow.'

[MIcePaHC: 1275, Laxdaela.4401]

b. Verður nú [það]i af ráðið [að brullaup skal vera að becomes nú it.nom decided that wedding.nom shall be at Helgafelli að sex vikum sumars]i.
Helgafell.dat at six weeks.dat summer.gen
'It is decided that the wedding shall be held at Helgafell in the sixth week of summer.' [MIcePaHC: 1275, Laxdaela.4913]

At the same time, dummy pronouns which co-occur with a clausal argument can also occur to the left of $b\acute{a}/bar/n\acute{u}$, e.g. (21).

Fór $[ba\delta]_i$ ba ví δa héruð [hversu ólíkir (21)umbeir went it.nom ÞÁ widely around district.Acc how unlike.nom they.nom mönnum vera í sínum framferðum];. Var [það]; bóttu flestum seemed most.dat men.dat be in their.dat procedures.dat was it.nom **þá** þegar vitra manna mál [að hvergi mundi vera ÞÁ soon wise.gen men.gen talk.nom that nowhere would be til að leita en þar],... more.likely.nom to to search than there

'It went widely around the district how unlike most men they seemed to be in their procedures. It soon became the talk of wise men that nowhere would be more likely to search than there...'

[IcePaHC: 1210, Thorlakur.114-115]

The properties of \$\int \textit{\partial} a\textit{\partial}\$ in contexts where it co-occurs with a clausal argument in Old Icelandic were examined by Booth (2018, 2019). Booth found that, unlike in certain present-day Germanic languages like German, where the parallel pronoun \$e\$ is often assumed to mark the clausal argument as a topic (see Berman et al. 1998 and further references there), in early Icelandic the clausal argument in such contexts expresses discourse-new, non-topical information (Booth 2018:

chapter 7, Booth 2019). 6 Thus, the dummy pronoun in Old Icelandic does not merit a topical analysis.

Of the remaining 10 examples of pronominal subjects which occur to the right of $b\acute{a}/bar/n\acute{u}$, 9 involve misannotations and one involves Stylistic Fronting (cf. Maling 1990) of a nonfinite verb form to the prefield, shown here in (22).

(22) Porkell mælti: "Liðið er nú það. Gangi konur út úr Þorkell.nom said passed is nú that.nom goes.sbjv women.nom out of búðinni og viljum vér leita mannsins." booth.dat.def and wish we.nom search man.gen.def 'Porkell said: "That is passed. Let the women go out of the booth and we want to search for the man."

[MIcePaHC: 1350, Hallfredarmodruvallabok.1079-1081]

It remains an open debate as to whether Stylistic Fronting in Modern Icelandic is purely syntactic, without pragmatic effects (cf. Maling 1990, Holmberg 2000), or whether it contributes information-structural effects such as contrastive focus (cf. Hrafnbjargarson 2004) or backgrounding (cf. Egerland 2013). With respect to Old Icelandic, the picture is even more unclear, given that the phenomenon has not been studied in detail; in a preliminary survey, Booth (2018: chapter 4) showed that the syntactic constraints on Stylistic Fronting were much less restricted in early stages of Icelandic, and that Stylistic Fronting today may represent a remnant of a more general fronting process. As such, it is hard to say anything specific about this example with respect to Stylistic Fronting and the position of the pronominal subject. I simply note that it is another exception to the general preference for pronominal subjects to occur to the left of $\frac{b\acute{a}}{par}/n\acute{u}$.

3.2.2 Proper name subjects

In the (M)IcePaHC data, proper name subjects show an overall preference for the position to the left of $p\acute{a}/par/n\acute{u}$, but nevertheless occur to the right of $p\acute{a}/par/n\acute{u}$ in roughly a quarter of cases (see Table 5). Those proper name subjects which occur to the left of $p\acute{a}/par/n\acute{u}$ are generally either continuing topics, e.g. (23a), or shift topics, e.g. (23b).

⁶In contrast to the traditional view on German *es*, Fuß & Hinterhölzl (2023: 44–45) point out that, while it can co-occur with a clausal argument which denotes a given situation, it can also occur with a clausal argument which introduces a new situation. This suggests that the relationship between such pronouns and information structure in Germanic is more complex than standardly assumed.

(23) a. Preceding context: Ólafur asked Gunnar to take care of himself and said that he had many ill-wishers "because you are now the most famous man in all the land". Gunnar thanked him for the gifts and counsel and rode home.

Situr [Gunnar] **nú** heima nokkura hríð og er kyrrt. sits Gunnar.nom nú home some.acc time.acc and is quiet.nom 'Gunnar sits at home for some time and things are quiet.'

[MIcePaHC: 1300, Njals.14809]

b. Preceding context: The King replies and says that he will never again accept hospitality from Pórólfur.

Gekk [Þórólfur] **þá** í brott og bjóst síðan til went Þórólfur.Nom Þá away and prepared then to heimferðar.

home.journey.gen

'Þórólfur went away and prepared to travel home.'

[MIcePaHC: 1250, Egils.624-625]

By contrast, proper name subjects which occur to the right of $p\acute{a}/par/n\acute{u}$ show different information-structural properties and fall into two broad types. Firstly, many of the examples involve a proper name subject which is in information focus, e.g. (24).

(24) a. Preceding context: Reginbald and Hercules go into battle against one another.

Samson merkismaður bar hans djarflega fram Samson.nom he.gen standardbearer.gen carried boldly merkið og hjó á báðar hendur og stökk standard.ACC.DEF and struck at both.ACC hands.ACC and sprang allt undan honum en í mót honum kom nú everything.NOM under he.DAT and towards he.DAT came NÚ [Balabán] með merki Erkiles...

Balabán.nom with standard.acc Hercules.gen

'Samson, his standardbearer, carried the standard boldly forth and struck at both hands and everything sprang from under him and towards him came Balabán with Hercules' standard...'

[IcePaHC: 1450, Vilhjalmur.81.1629–1632]

b. Preceding context: And after that Gunnar, Karl, Svarthöfði and Ögmundur set off for home. There were two Eastmen besides Gunnar, and Karl was with the sixth man.

Og er þeir komu ofan á hólana fyrir sunnan and when they.Nom came up on hills.Acc.def before south Brimnessá og til dælar þeirrar er ofan er og suður er Brimnessá.Acc and to valley.Gen that.Gen rel up is and south is frá ánni þá spretta þar upp fyrir þeim þrír from river.dat.def then spring there up before they.def three.Nom tigir manna og var þar [Ljótólfur].

'And when they came to the top of the hills to south of Brimnessá and to the valley that is above and south of the river, there sprang up before them thirty of man and there was Ljótólfur.'

[MIcePaHC: 1450, Svarfdaela.3915-3916]

c. Preceding context: Vémundur, Porkell, Pórodður and Hánefur engage in battle with Hrói and his entourage.

Og nú kemur **þar** [Áskell] við þrjá tigu manna and now comes þar Áskell.nom with three.acc tens.acc men.gen og vildi sætta þá. and wished reconcile they.acc

'And now comes Áskell with thirty men and wanted to reconcile them.' [MIcePaHC: 1400, Reykdaela.2478–2479]

Secondly, proper name subjects which occur to the right of $p\acute{a}/par/n\acute{u}$ can be subsectional topics. This is illustrated in the continuous passage in (25), which relays the activities of Hallur and Pórólfur, and three proper name subjects which are subsectional topics occur to the right of $p\acute{a}/par/n\acute{u}$.

(25) Preceding context: One evening Hallur and Pórólfur came ashore and were to divide their catch. Hallur wanted to both divide and choose, because he thought himself to be the better man. Pórólfur didn't want to lose his share and did not hold back in his words. They exchanged some words and each insisted on their way.

Þrífur **þá** [Hallur] upp höggjárn er lá hjá honum og grasps þá Hallur.nom up hewing.iron.acc rel lay by he.dat and vill færa í höfuð Þórólfi. Nú hlaupa menn wishes strike to head.Acc Pórólfur.DAT now run men. NOM in between og stöðva Hall en hann var hinn they.gen and restrain Hallur.acc and he.nom was Def.nom óðasti á leið komið að og gat þó engu most.stubborn.nom and could though nothing.DAT on way.ACC come at

fengi bνί sinni og ekki varð beirra skipt. Réðst **nú** this.DAT time.DAT and NEG became catch.NOM they.GEN divided went NÚ á brott um kveldið en Hallur [Þórólfur] tók einn Pórólfur.nom away in evening.ACC.DEF but Hallur.nom took one.ACC upp fang bað er beir áttu báðir bví að bá up catch.ACC THAT.ACC REL they.NOM had both.NOM because then kenndi að ríkismunar. Fær **nú** [Hallur] recognised to power.difference.gen gets nú Hallur.nom himself.dat í stað Þórólfs á skipið. man.ACC in place.ACC Þórólfur.GEN on ship.ACC.DEF

'Hallur (not Þórólfur) picks up the hewing iron which lay by him and wishes to strike at Þórólfur's head. Now men run between them and restrain Hallur and he was the most stubborn man but could not get his way this time and their catch was not divided. Þórólfur (not Hallur) left in the evening but Hallur himself took up the catch which they had both had because he was recognised to be more powerful. Hallur (not Þórólfur) gets himself another man to replace Þórólfur on the ship.'

[MIcePaHC: 1275, Laxdaela.6721-6727]

Further examples of proper name subjects which are subsectional topics occurring to the right of $b\hat{a}/bar/n\hat{u}$ are shown in (26).

- (26) a. Eftir það skiljast þeir konungur og Kjartan með after that.ACC part they.NOM king.NOM and Kjartan.NOM with miklum kærleik. Gengur þá [Kjartan] út á skip. great.DAT love.DAT goes ÞÁ Kjartan.NOM out to ship.ACC 'After that, the King and Kjartan part with great love. Kjartan (not the King) goes out to the ship.' [MIcePaHC: 1275, Laxdaela.3167–3168]
 - b. Síðan gerðist Þórólfur handgenginn konungi ok gekk þar í then became Pórólfr.nom retained.nom king.dat and went par in hirðlög. en Berðlu-Kári ok Eyvindur lambi. company.laws.acc but Berðlu-Kári.nom and Eyvindr.nom Lamb.nom hans, fóru suðr með skip bat, er Þórólfr SON.NOM he.GEN went south with ship.ACC that.ACC REL Þórólfur.NOM hafði norðr haft. Fór þá [Kári] heim til búa had north had went þá Kári. Nom home to homestead. GEN his. GEN ok beir Evvindur báðir. and they.nom Eyvindur.nom both.nom

'Then Þórólfur became a retainer to the king and joined his followers

by law but Berðlu-Kári and Eyvindur Lamb, his son, went south with the ship which Þórólfur had had in the north. Kári went back to his homestead, and Eyvindur too.' [MIcePaHC: 1250, Egils.5432–5434]

3.2.3 Nominal subjects with definite marking

Definite-marked nominal subjects occur overwhelmingly to the left of $p\acute{a}/par/n\acute{u}$ in the (M)IcePaHC data, see Table 5, and are generally shift topics, e.g. (27).

(27) a. Previous context: But Ásgerðr, who was married to Þórólfr
Skalla-Grímsson, was then with Arinbirn, his cousin. She and Þórólf had
one young daughter, whose name was Þórdís,...
...ok var [mærin] þar með móður sinni.
and was maiden.Nom.def þar with mother.dat her.dat
'...and the maiden was with her mother.'

[IcePaHC: 1250, Thetubrot.29]

b. Previous context: Porgils awakes and thinks what he will have there, and now he remembers that he gave Pór a certain calf a long time ago. Porgils tells this to Póreyja...

...og var [þetta] **þá** gamall uxi...
and was this.nom þá old.nom ox.nom

"...and this (calf) was an old ox..." [MIcePaHC: 1400, Floamanna.1025]

The 5 examples of definite-marked nominal subjects which occur to the right of $p\acute{a}/par/n\acute{u}$ involve proximal demonstratives which occur as the subject of "happen" predicates, e.g. (28a), or proximal demonstratives which co-occur with and are co-referential with a clausal argument later in the sentence, e.g. (28b) and (28c).

(28) a. *Og nú fyrir sakir vinsælda hans og hann var* and now for sakes.ACC popularity.GEN he.GEN and he.NOM was sínum mönnum ástfólginn, þá játtu þeir þessu, að his.DAT men.DAT beloved.NOM then agreed they.NOM this.DAT that konungur skyldi ráða, og fór **nú** [þetta] fram. king.NOM should decide and went Nú this.NOM forth 'And now because of his popularity and because he was beloved of his men, they agreed that the king should decide, and this was done.' [IcePaHC: 1260, Jomsvikingar.61–62]

- b. Réðst nú [þetta]i [að þeir Þorsteinn og Lambi decided nú this.nom that they.nom Þorsteinn.nom and Lambi.nom skulu ráðast með Þorgísli til ferðar]i... should set-forth with Þorgísl.dat to journey.gen
 'It is decided that Þorsteinn and Lambi should set off with Þorgísl on the journey...' [MIcePaHC: 1275, Laxdaela.4435]
- c. Fór **nú** [þetta]_i fram [að Ólöf var gefin Þórði]_i...
 went nú this.nom forth that Ólöf.nom was given Þórður...'

 'Things proceeded such that Ólöf was given to Þórður...'

 [MIcePaHC: 1400, Thordar.1882]

In these contexts, the proximal demonstrative appears to be an alternative dummy pronoun, alongside $pa\delta$, cf. (20) and (21) above. In addition to examples like (28), there are also examples in the (M)IcePaHC data where petta as a dummy pronoun precedes pa/par/nu, e.g. (29). This mirrors the behaviour of the dummy pronoun $pa\delta$, which can also appear to the left or right of pa/par/nu, cf. (20) and (21) above.

(29) Fór [þetta]_i þá fram [að grið voru sett með went this ÞÁ forth that settlements.NOM were established with mönnum þar til að hver kæmi til síns heima]_i.

men.DAT there to that each.NOM came.SBJV to his.GEN home.GEN

'Things proceeded such that settlements were established with the men so that each would go to his home.' [MIcePaHC: 1300, Eyrbyggja.2596]

3.2.4 Nominal subjects without definite marking

Nominal subjects without definite marking generally prefer the position to the right of $p\acute{a}/par/n\acute{u}$, see Table 5, where they are typically in information focus, e.g. (30).

(30) a. Previous context: But as soon as she saw the church at Skálaholt, she felt herself become more comfortable than she had previously ever been in her pain. She came there some nights before the church day...

En þar var þá [fjölmenni mikið]...
but there was þá crowd.nom great.nom

'But there was a great crowd there...' [IcePaHC: 1210, Jartein.680]

b. Previous context: Porleifur shot from a bow and he was very likely to wound but nothing came of Jósteinn's shots and Porleifur was able to hurt him. Deacon Pórður Símonarson held the shield for Porleifur. Var þar [harður bardagi]...
was þar hard.nom battle.nom
'There was a hard battle...' [IcePaHC: 1250, Sturlunga.391.123]

However, there are also examples where such a nominal subject without definite marking occurs to the left of the adverb, see Table 5. Such examples fall into two broad types. Firstly, there are contexts where the subject is an occupation noun which is semantically definite though not morphologically marked for definiteness. Such subjects can be continuing topics, e.g. (31a) or shift topics, e.g. (31b), but they can also be subsectional topics, e.g. (32). In particular, the examples in (32) show that subsectional topics can appear to the left of $p\acute{a}/par/n\acute{u}$ as well as to the right, cf. (25) and (26) above.

- (31) a. Preceding context: The king went north to Trondheim in the autumn. Then Pórólfur asks for leave to travel north to Halogaland to visit the gifts he had received in the summer from Bárður, his kinsman. The king grants that and gives him a message and token that Pórólfur should have all the property that Bárður gave him, letting it be known that the gift was made on the King's advice and that he wants it to be left so.

 Gerir [konungur] þá Pórólf lendan mann...

 makes king.nom þá Pórólfur.acc landed.acc man.acc

 'The king makes Pórólfur a landholder...' [MIcePaHC: 1250, Egils.353]
 - b. Preceding context: Grettir fights with Skeggi, and Grettir strikes his head with an axe.

 Féll [húskarl] þá dauður til jarðar.

 fell man.servant.nom þá dead.nom to ground.GEN

 'The man servant (= Skeggi) fell dead to the ground.'

 [IcePaHC: 1310, Grettir.273]
- (32)a. Og nú ganga beir í braut af stefnunni, konungur they.NOM away from meeting.DAT.DEF king.NOM and now go og nú eftir bað var jarl bar með honum og jarl, and earl.nom and now after that.ACC was earl.nom PAR with he.DAT nokkora hríð í mikilli sæmd. some.Acc time.Acc in great.DAT honour.DAT 'And now they depart from the meeting, the King and the Earl, and now after that the Earl was with him for some time in great honour.' [IcePaHC: 1260, Jomsvikingar.299-300]

b. Preceding context: A farmer and Pormóður are in conversation with one another.

Snýr [bóndi] **þá** utar eftir hlöðunni...
turns farmer.nom þá outside after storehouse.dat.def 'The farmer turns back towards the storehouse...

[MIcePaHC: 1305, Fostbraedra.3301]

The second broad group of subjects which are annotated as nominals which lack definiteness marking in the (M)IcePaHC data and which can occur to the left of $b\dot{a}/bar/n\dot{u}$ are impersonal pronouns, e.g. (33).

- (33) a. Riðu [menn] þá heim af þinginu...
 rode men.nom þá home from assembly.dat.def
 'People rode home from the assembly...' [IcePaHC: 1310, Grettir.1411]
 - b. Previous context: One autumn, Urðarköttur went out each evening and wouldn't come in before the night was late.
 Vita [menn] nú eigi hvað hann gerir.
 knew men.nom nú neg what he.nom does

'People didn't know what he was doing.'

[MIcePaHC: 1350, Finnboga.310]

However, this is not the only position available to impersonal pronouns; they can also occur to the right of $p\acute{a}/par/n\acute{u}$, e.g. (34).

(34) a. ...og fóru **þá** [menn] meðal þeirra og voru þá grið sett. and went Þá men.Νοм among they.GEN and was Þá truces.Noм set 'and people went among them and there were set truces.'

[IcePaHC: 1250, Sturlunga.436.1665-1666]

b. Gjöra **nú** [menn] mikinn róm að máli Barða... make Nú men.Nom great.ACC noise.ACC at case.DAT Barði.GEN 'People make a lot of noise about Barði's case...'

[MIcePaHC: 1300, Heidarviga.1080]

3.2.5 Quantified subjects

Quantified subjects, which cannot generally be topical (e.g. Frey 2004), overwhelmingly favour the position to the right of $p\acute{a}/par/n\acute{u}$, see Table 5 and the examples in (35).

(35) a. "Það munu þá [sumir menn] mæla," segir Höskuldur, that.ACC will ÞÁ some.NOM men.NOM say says Höskuldur.NOM "að eg flýi þaðan fyrir hræðslu sakir og vil eg that I.NOM flee.sBJV thence for fear.GEN sakes.ACC and will I.NOM það eigi." that.ACC NEG

"Some men will say," says Höskuldur, "that I am fleeing from there for fear's sake, and I don't want that." [MIcePaHC: 1300, Njals.6602]

b. Eru nú [fáir slíkir menn] í yðvarri ætt sem are nú few.nom such.nom men.nom in your.dat generation as Bolli er.
 Bolli.nom is.

'There are few men of your generation who are such as Bolli is.'
[MIcePaHC: 1275, Laxdaela.10072]

Nevertheless, there are 10 examples in the (M)IcePaHC data where a quantified subject precedes $p\acute{a}/par/n\acute{u}$ in the postfinite domain, see Table 5. On closer inspection, these either involve misannotations or a quantified subject which broadly translates as 'people' (impersonal pronoun), e.g. (36).⁷

(36) a. Preceding context: The King calls a meeting at Eyrar and urges the local people to convert. Local farmers prepare to do battle with the King rather than convert. The King scares the farmers and they surrender to him.

...og var [margt fólk] þá skírt. and was much.nom people.nom þá baptised

'...and many people were baptised' [MIcePaHC: 1275, Laxdaela.2890]

b. Preceding context: There was a man called Þórólfur who lived under Spákonufell. He had a fortuneteller, Þórdís, who was mentioned earlier. Þóttust margir þar traust mikið eiga er seemed many.NOM ÞAR confidence.NOM much.NOM have where hún var. she.NOM was

'Many seemed to have much confidence wherever she was.'

[MIcePaHC: 1350, Kormaks.1636]

 $^{^7}$ I do not rule out the possibility that quantified subjects in the different positions relative to $p\dot{a}/par/n\dot{u}$ have potentially distinct information-structural characteristics, since quantified noun phrases can have partitive or existential readings (see e.g. Jónsson 2002: 79 on Modern Icelandic). However, the number of examples with a quantified subject to the left of $p\dot{a}/par/n\dot{u}$ (which are not misannotated) are too few to draw any meaningful conclusions here.

3.2.6 Summary

In sum, on the basis of the (M)IcePaHC data, the correspondence between syntax and information structure in the postfinite domain can be schematised as in (37). (37) shows a mixed picture, whereby certain information-structure roles are associated with a single position (e.g. information foci, right of $p\acute{a}/par/n\acute{u}$; continuing/shift topics, left of $p\acute{a}/par/n\acute{u}$) whereas others, such as subsectional topics, can appear freely in either position. The finding for subsectional topics is particularly striking, as they can occur both in the position associated with continuing/shift topics, and also in the position associated with information focus. One explanation for this behaviour could be that subsectional topics, which roughly equate to the notion of contrastive topics, are often assumed to involve a combination of topic and focus (Krifka 2007: 267). The finding that both dummy pronouns and impersonal pronouns are not restricted in terms of their position with respect to $p\acute{a}/par/n\acute{u}$ is also interesting, since these elements are neither straightforwardly analysable as topic nor focus in information-structural terms.

(37)
$$V_{\text{finite}} - \left\{ \begin{array}{c} \text{continuing topic} \\ \text{shift topic} \\ \\ \text{subsectional topic} \\ \text{dummy pronoun} \\ \text{impersonal pronoun} \end{array} \right\} - \frac{b\acute{a}}{bar}/n\acute{u} - \left\{ \begin{array}{c} \text{information focus} \\ \\ \text{subsectional topic} \\ \\ \text{dummy pronoun} \\ \\ \text{impersonal pronoun} \end{array} \right\}$$

Overall, clause-internal *þá/þar/nú* serve an information-structural watershed function in the postfinite domain in Old Icelandic (cf. Krivonosov 1977, Grosz 2016 on modern German; van Kemenade & Los 2006, van Kemenade et al. 2008, van Kemenade 2009, van Kemenade & Milićev 2011, van Kemenade & Links 2020 on Old English). However, this effect appears to be rather subtle in Old Icelandic. Whereas in modern German clause-internal discourse particles have been argued to partition topic and focus (cf. (8) above), and in Old English clause-internal adverbs have been argued to separate presupposition from focus (cf. (5) above), in Old Icelandic the watershed function appears to apply specifically to information focus and particular subtypes of topic. In the next section, I explore how these subtle correspondences between position and information structure can be modelled within Lexical Functional Grammar.

4 An LFG approach

4.1 The LFG architecture

Lexical Functional Grammar (LFG, Kaplan & Bresnan 1982, Bresnan et al. 2016, Dalrymple et al. 2019) is a "declarative" approach to grammar (cf. Levine & Meurers 2006, Sells 2021). This means that LFG does not commit to any procedural mechanism for deriving linguistic representations, and that all information in the model is simultaneously present in parallel ("model-theoretic" approach, cf. Pullum & Scholz 2001). Different types of linguistic information are represented at independent dimensions which are related to each other within an overall projection architecture, see Figure 1. Each dimension differs in terms of its formal representation and must satisfy certain constraints. The core components of syntactic representation are c(onstituent)-structure, which captures information about category and constituency, and f(unctional)-structure, which captures abstract functional information. A third dimension which is relevant to this paper is i(nformation)-structure.

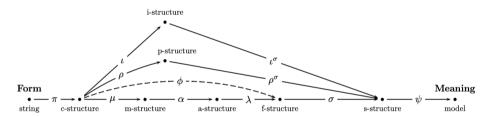


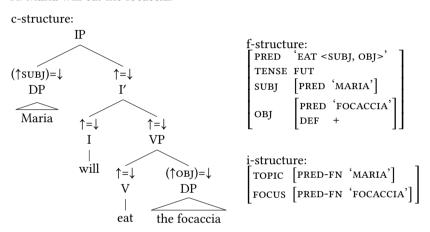
Figure 1: Parallel projection architecture of LFG (Asudeh 2006: 369)

LFG's c-structure is represented as a tree diagram, while f-structure and i-structure are represented as attribute-value matrices. An example c-structure/f-structure/i-structure triad for Modern English is shown in (38). The abstract functional information represented at f-structure includes grammatical functions (GFs), e.g. SUBJ(ect) and OBJ(ect), as well as grammatical features, e.g. Tense and DEF(initeness). A special type of functional feature is PRED, which is a pointer into the semantics of a predicate, takes a semantic form as its value, and captures the argument(s) (if any) a predicate requires in terms of grammatical function. i-structure represents information-structural information such as the discourse functions TOPIC and FOCUS.⁸ Since i-structure is an underdeveloped part of the

⁸The pred-fn notation in the i-structure in (38), as opposed to the standard pred feature from f-structure, indicates that instead of projecting the entire pred feature, including its argument structure, only the basic meaning of the pred is projected to i-structure (cf. Kaplan & Maxwell 1996, King 1997, Butt et al. 2016).

LFG architecture, it remains an open question as to what precise discourse function should be captured here (see e.g. Dalrymple et al. 2019: chapter 10, Zaenen 2023). In this paper, I will assume that specific subtypes of topic (e.g. continuing topics/shift topics/subsectional topics) and focus (e.g. information foci) are represented as distinct discourse functions at i-structure.

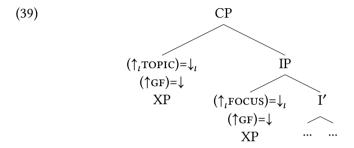
(38) Q: What will Maria eat? A: Maria will eat the focaccia.



Within LFG's projection architecture, see Figure 1, all linguistic dimensions are present in parallel and a number of functions map between the various dimensions. With respect to the correspondence between c-structure and f-structure, I uncontroversially assume that this is formally handled via the correspondence function ϕ , whereby c-structure nodes are related to f-structures (Bresnan et al. 2016, Dalrymple et al. 2019). In a language like English where grammatical functions (e.g. subject, object) are structurally specified, functional annotation on specific c-structure positions exclusively associate a position with a specific grammatical function at f-structure, see (38). In the c-structure tree in (38), \downarrow and \uparrow are metavariables over f-structure variables and serve to relate every node in the c-structure to its corresponding f-structure. \downarrow denotes the f-structure corresponding to that node itself, and \uparrow denotes the f-structure corresponding to that node itself, and \uparrow denotes the f-structure corresponding to that node to the subj function of the maximal f-structure; the annotation on the complement of V relates that node to the obj function.

⁹Additionally, two c-structure nodes in a mother-daughter relation may correspond to the same f-structure, in which case they are annotated as ↑=↓: this indicates that the functional information associated with a given node is the same as the functional information associated with that node's mother node.

In a language like English, discourse functions such as TOPIC and FOCUS are not generally associated with fixed positions but are expressed via e.g. prosody. However, many languages exhibit "discourse configurationality" (cf. Vilkuna 1989, É. Kiss 1995), where discourse functions are associated with specific positions. In LFG, this can be modelled by annotations which exclusively associate certain c-structure positions with discourse functions at i-structure, e.g. (39); the arrows annotated with ι indicate projection to i-structure, and GF stands for any grammatical function (e.g. SUBJ, OBJ). ¹⁰



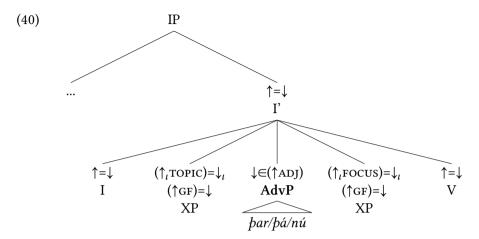
4.2 Modelling the information-structural watershed

The relevant question in the context of this paper is how the information-structural watershed function of clause-internal $par/p\acute{a}/n\acute{u}$ in Old Icelandic can be modelled within LFG. For Old Icelandic, I model the postfinite domain in terms of a flat structure within I', see the c-structure in (40), following previous accounts of Icelandic clause structure within LFG, including Old Icelandic (Sells 2001, 2005, Booth & Schätzle 2019, Booth 2021). One possibility for capturing the information-structural partitioning of the postfinite domain, and the watershed function of clause-internal $par/p\acute{a}/n\acute{u}$, is to assume discourse configurationality (see Section 4.1), whereby the position to the left of $par/p\acute{a}/n\acute{u}$ is uniquely associated with TOPIC at i-structure, and the position to the right of $par/p\acute{a}/n\acute{u}$ with FOCUs. This possibility is shown in (40).

 $^{^{10}}$ In this paper, I follow Butt & King (1997) in assuming a model where i-structure projects from c-structure as defined by the function ι , which can be considered as a parallel to the ϕ function which relates c-structure nodes to f-structures. This is in line with Asudeh (2006), see again Figure 1. For a different proposal, see Dalrymple et al. (2019) who present a model where i-structure instead projects from s-structure.

¹¹In (40) the adverb position bears the annotation ↓∈(↑ADJ), which specifies that the f-structure contributed by the adverb is a member of a set of values for the grammatical function ADJ(unct) in the maximal f-structure; this allows for multiple adjuncts in a clause.

¹²A similar discourse-configurational approach is employed by Mahowald (2011) in LFG in relation to the Old English postfinite domain and *þa/þonne*, based on the findings by van Kemenade & Los (2006) (see Section 2).



However, capturing the syntax-information structure correspondence in the postfinite domain in terms of dedicated topic and focus positions on either side of $par/p\acute{a}/n\acute{u}$ is unsatisfactory in many ways, given the findings from the (M)IcePaHC data outlined in Section 3. Firstly, the position to the left of $par/p\acute{a}/n\acute{u}$ is not an exclusive topic position, since it can also host elements which cannot be construed as topics, such as dummy pronouns and impersonal pronouns, see (37) above. Secondly, the position to the right of $par/p\acute{a}/n\acute{u}$ is not an exclusive focus domain, but can also host subsectional topics, and again dummy pronouns and impersonal pronouns which cannot either be construed as foci. As such, an alternative to straightforward discourse configurationality as in (40) appears to be motivated in this context.

The alternative I suggest in this paper takes advantage of the fact that LFG provides for alternative ways of expressing ordering dependencies, besides strictly c-structure relations. One such alternative which has been developed and applied in various contexts is f(unctional)-precedence, which essentially constrains the ordering of c-structure constituents in terms of the f-structures they map onto, (cf. Bresnan 1984, Kaplan 1987, Kaplan & Zaenen 1989). f-precedence is formally defined as in (41).

(41) f-precedence

 f_1 f-precedes f_2 if and only if all c-structure nodes corresponding to f_1 precede all c-structure notes corresponding to f_2

(Dalrymple et al. 2001: ex. (11))

For example, Zaenen & Kaplan (1995: 229–230) employ f-precedence in verb-final West Germanic varieties (e.g. Zürich German), where verbs in infinitival constructions cannot precede their nominal arguments, but where the verb and its

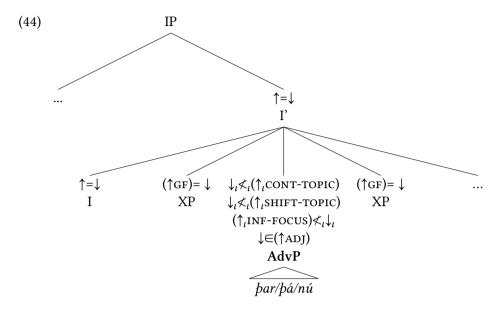
nominal arguments do not necessarily have to be adjacent. In such contexts, Zaenen & Kaplan (1995: 230) employ the c-structure rule in (42), where the V node is associated with an f-precedence constraint which states that the f-structure associated with the V node cannot f-precede its mother node's nominal grammatical functions (NGF), i.e. the nominal arguments of the particular verb.

$$(42) \qquad V' \longrightarrow V \\ \downarrow \not <_f (\uparrow \text{ NGF})$$
 (Zaenen & Kaplan 1995: 230)

In order to model the mapping between syntax and information structure in the Old Icelandic postfinite domain, and the specific watershed function of clause-internal $\frac{par}{p\acute{a}}/n\acute{u}$, I suggest a potential i-structure parallel to f-precedence, which I call i-precedence. i-precedence essentially allows one to constrain the ordering of c-structure constituents in terms of the i-structures they map onto, and can be defined as in (43) (cf. the definition for f-precedence in (41) above).

(43) i-precedence ι_1 i-precedes ι_2 if and only if all c-structure nodes corresponding to ι_1 precede all c-structure notes corresponding to ι_2

I specify three i-precedence constraints on the position which hosts $bar/b\acute{a}/n\acute{u}$, see (44). The first i-precedence constraint $-\downarrow_{l} \not<_{l} (\uparrow_{l} \text{CONT-TOPIC})$ – states that the i-structure associated with the daughter node (i.e. associated with $bar/p\acute{a}/n\acute{u}$) does not i-precede the mother node's CONT(inuing)-TOPIC at i-structure, i.e. the clause's CONT(inuing)-TOPIC. This prevents continuing topics from occurring in the postfinite domain to the right of $bar/p\acute{a}/n\acute{u}$, as is the generalisation borne out from the (M)IcePaHC data, see (37) above. Likewise, the second i-precedence constraint $-\downarrow_{l} \not<_{l} (\uparrow_{l} \text{SHIFT-TOPIC})$ – prevents shift topics from occurring to the right of $bar/p\acute{a}/n\acute{u}$, another generalisation from the (M)IcePaHC data, see again (37). The third i-precedence constraint on the clause-internal adverb position – $(\uparrow_{l} \text{INF-FOCUS}) \not<_{l} \downarrow_{l}$ – states that the mother node's INF(ormation)-Focus at i-structure, i.e. the INF(ormation)-Focus of the overall clause, cannot i-precede the daughter node (i.e. the position of $bar/p\acute{a}/n\acute{u}$). This thus prevents information-foci from occurring in the postfinite domain to the left of $bar/p\acute{a}/n\acute{u}$, as indicated by the (M)IcePaHC data, see (37).



i-precedence, as a parallel to LFG's f-precedence, thus allows one to model the subtle information-structural watershed function of $par/p\acute{a}/n\acute{u}$, which is more nuanced than standard discourse configurationality. The three i-structure constraints specify ordering restrictions specifically for continuing topics, shift topics and information foci relative to $par/p\acute{a}/n\acute{u}$, but leave the position of other types of topic (e.g. subsectional/contrastive topics), and constituents which are neither topics nor foci (e.g. dummy pronouns and impersonal pronouns) underspecified with respect to $par/p\acute{a}/n\acute{u}$, as borne out in the (M)IcePaHC data, see (37). In addition, these three i-precedence constraints are all relative to the I' node in terms of their domain of application (cf. Zaenen & Kaplan 1995, "relativized f-precedence"). The constraints thus specify orderings in the postfinite domain, but crucially still allow for various types of topic or foci to appear in the clause-initial prefinite position (prefield), as is attested in Old Icelandic (cf. the findings in Booth 2021).

5 Diachronic developments

Although clause-internal $par/p\acute{a}/n\acute{u}$ have been acknowledged to be a dominant feature of Old Icelandic in the previous literature (e.g. Faarlund 1990: 71), their status in later stages of Icelandic has not been addressed in specific detail. For Modern Icelandic, Thráinsson (2007: 38–39) states that place and time adverbs, including $par/p\acute{a}/n\acute{u}$, typically occur either in the prefield or in a position after

the verb phrase, but cannot occur in a clause-internal position immediately after the finite verb, providing the data in (45).

(45) Modern Icelandic:

- a. Par/þá/nú hefur Jón lokið þessu. there/then/now has Jón.Nom finished this.DAT 'There/then/now Jón has finished this.'
- b. Jón hefur lokið þessu þar/þá/nú. Jón.nom has finished this.dat there/then/now.'
 'Jón has finished this there/then/now.'
- c. * Jón hefur þar/þá/nú lokið þessu. Jón.nom has there/then/now finished this.dat Intended: 'Jón has there/then/now finished this.'

(Thráinsson 2007: 39)

However, Thráinsson (2007: 40) also states that, when used as a "discourse particle", presumably bleached of its temporal semantics, $n\acute{u}$ typically occurs clause-internally and cannot occur in the prefield, providing the data in (46). Thráinsson (2007) does not, however, discuss the status of par or $p\acute{a}$ in this context.

(46) Modern Icelandic:

- a. Jón hefur nú lokið þessu. Jón.nom has ptcl finished this.dat 'Well, Jón has finished this.'
- b. * **Nú** hefur Jón lokið þessu.

 PTCL has Jón.Nom finished this.DAT

 Intended: 'Well, Jón has finished this.' (Thráinsson 2007: 40)

At the same time, the dedicated study of $n\acute{u}$ as a particle in Modern Icelandic spontaneous conversation by Hilmisdóttir (2010) presents a rather different picture. Hilmisdóttir (2010: 276–277) observes that, while $n\acute{u}$ as a particle can occur clause-internally (see (46)), it in fact shows a very strong tendency to occur in the prefield (93% of all instances, compared to just 6% clause-internally), apparently going against the data from Thráinsson (2007: 40).

When one examines the full diachronic sweep of the data in IcePaHC, which spans 1150–2008 (all text types), it is clear that the relative frequency of clause-internal $par/p\acute{a}/n\acute{u}$ decreases over the course of the history of Icelandic, though it remains a possibility in the latest period (1901–2008), see Table 6. Note that the

period 1751–1900 contains the text $Hellismanna\ saga$, which alone provides 153 examples with clause-internal $par/p\acute{a}/n\acute{u}$. This text is a "newly written" 19th century saga which aims to reproduce an earlier saga style and is a known outlier in this subsection of the corpus with respect to syntactic properties (cf. Schätzle & Booth 2019). The data for the period 1551–1749 also comes with an important caveat, since this subsection of IcePaHC contains a lot of translation texts and for the most part text types other than narratives, which dominate in the other periods (cf. Booth 2018: chapter 1). These caveats aside, the key finding in Table 6 is that, by the latest period (1901–2008), the frequency of clause-internal $par/p\acute{a}/n\acute{u}$ has dramatically declined compared to the previous centuries.

Table 6: Frequency of clause-internal <i>þar/þá/nú</i> across all matrix declar
atives in IcePaHC (all text types, 1150-2008)

	clause	-internal þar/þá/nú	all matrix declaratives	
	n	%		
1150-1350	1,385	10.5%	13,321	
1351-1550	1,272	11.4%	11,205	
1551-1750	561	6.5%	8,590	
1751-1900	747	8.6%	8,645	
1901-2008	249	2.9%	8522	

Taking a narrower view, Booth (2018: 260) observed the high frequency of clause-internal $par/p\acute{a}/n\acute{u}$ specifically in V1 presentational constructions in early stages of Icelandic, citing the examples in (47) (cf. also the corpus study in Booth & Schätzle 2019).

- (47) Early Icelandic (Booth 2018: 260):
 - a. *Voru þar tvö skip í búnaði.*were ÞAR two.NOM ships.NOM in preparation.DAT
 'There were two ships in the preparations.'

[IcePaHC: 1250, Sturlunga.408.710]

b. Verður **nú** mannfall ógurligt.
becomes nú man.loss.nom terrible.nom

'There comes to be a terrible loss of men.'

[IcePaHC: 1480, Jarlmann.381]

c. Kom þá veður á móti þeim.
came Þá wind.Nom towards they.DAT
'There came wind towards them.'

(Supplementary manual data: [1250, Eirik.9.2])

Presentational constructions are a well known example of a clause which lacks a topic-comment articulation ("thetic", cf. Sasse 1987). In such clauses, which lack a topic, the clause-internal adverb occurs immediately after the finite verb, and before the subject which is in information focus. In this sense, $\frac{par}{p\acute{a}/n\acute{u}}$ serve to "close off" the topic domain in such contexts, and thus can be viewed as markers of a topicless clause.

Strikingly, this very function of signalling a topicless construction in presentational constructions has also been attributed to the prefield expletive $\dot{p}a\dot{\delta}$ (e.g. Rögnvaldsson & Thráinsson 1990: 29, Sells 2005, Sigurðsson 2007: 145), which represents a later development in the language (Hróarsdóttir 1998, Rögnvaldsson 2002, Booth 2018, 2019, 2020), e.g. (48).

- (48) a. 19th Century Icelandic:
 - **Pað** rísu upp tveir nýir kaupmenn. EXPL stoop up two.nom new.nom merchants.nom

'There stood up two new merchants.' [IcePaHC: 1888, Grimur.126]

b. Modern Icelandic:

Pað komu nokkrir vopnaðir menn af næstu bæjum...

EXPL came some.Nom armed.nom men.nom from next.dat farms.dat 'There came some armed men from the nearby farms...'

[IcePaHC: 2008, Ofsi.634]

Another investigation of the full diachronic sweep of IcePaHC reveals that, in presentational constructions, clause-internal $par/p\acute{a}/n\acute{u}$ are virtually in complementary distribution with the prefield expletive $pa\check{o}$, see Table 7. Once the expletive becomes established in presentationals, clause-internal $par/p\acute{a}/n\acute{u}$ are scarcely attested (n=3). I interpret these results to suggest that, in presentationals, the role of marking a thetic, topicless construction shifts diachronically from clause-internal $par/p\acute{a}/n\acute{u}$ to clause-initial (prefield) $pa\check{o}$.

This diachronic finding is further supported by Modern Icelandic data provided and discussed by Rögnvaldsson (1982: 78–79), shown here in (49). For presentationals, a V2 clause with expletive $pa\delta$ in the prefield is possible (49a), as is a V1 clause with clause-internal $p\delta$ (49b), provided other pragmatic conditions for V1 declaratives are fulfilled. However, a V1 clause without the clause-internal adverb is ruled out (49c), indicating that either a clause-internal adverb

	V-þá/þar/nú-suвj		expl-V-subj		expl-V-þá/þar/nú-subj	
	n	%	n	%	n	%
1150-1350	22	100.0%	0	0.0%	0	0.0%
1351-1550	22	81.5%	5	18.5%	0	0.0%
1551-1749	24	85.7%	4	14.3%	0	0.0%
1750-1900	17	32.1%	35	66.0%	1	1.9%
1901-2008	1	1.1%	86	96.6%	2	2.2%
all	86	39.3%	130	59.4%	3	1.4%

Table 7: Distribution of presentational constructions over three configurations in IcePaHC (all text types, 1150–2008)

(e.g. $par/p\acute{a}/n\acute{u}$) or the prefield expletive is required to render a thetic clause well-formed.

(49) Modern Icelandic:

- a. Pað kóm einhver maður til mín. EXPL came some.NOM man.NOM to I.GEN 'Some man came to me.'
- b. Kóm **þá** einhver maður til mín. came ÞÁ some.NOM man.NOM to I.GEN 'Some man came to me.'
- c. * Kóm einhver maður til mín.
 came some.Nom man.Nom to I.GEN
 Intended: 'Some man came to me.' (Rögnvaldsson 1982: 79)

I suggest that the rise of the prefield expletive $ba\delta$ in presentationals and attendant decrease in V1 presentationals with clause-internal bar/ba/nu, as indicated in Table 7, reflects a broader change whereby Icelandic gradually shifts its structural specification of discourse functions from the postfinite domain to the prefield over time. Indeed, the fact that clause-internal bar/ba/nu has decreased in frequency in matrix declaratives in general, beyond specifically presentationals (see Table 6), indicates a wider change in the mapping between clause structure and information structure, likely connected with recent observations that topics are becoming increasingly firmly associated with the prefield in Icelandic (see previous work by Booth et al. 2017 and Booth & Beck 2021).

6 Conclusion

In this paper I have shown that, in Old Icelandic saga narratives, clause-internal adverbs (specifically $\frac{\partial a}{\partial n}$) act as an information-structural watershed in the postfinite domain, contributing to the structural encoding of different types of information-structure roles in a highly specialised way. This phenomenon is in line with other Germanic varieties (e.g. Old English, Modern German), where similar effects have been observed in the postfinite domain, and suggests that the role of adverbs in the structural management of information structure is a relatively common phenomenon, at least within Germanic, and one which deserves more attention both empirically and theoretically. The need for further crosslinguistic research in this area is especially strong given the findings for Old Icelandic presented here, which indicate a complex system whereby the watershed adverbs are sensitive to different subtypes of topics and foci, and at the same time irrelevant for content which is neither topical or in focus. I argued that this nuanced and complex system calls for an alternative model other than straightforward discourse configurationality with designated topic and focus positions, and showed that the LFG architecture and in particular the notion of i-precedence can offer such an alternative. More broadly, the paper serves as a showcase for the rich empirical and theoretical insights which can be gained from the investigation of the morphosyntax-discourse interface in historical narrative texts, and in particular Old Icelandic saga narratives, which offer ample opportunities for future research in this area.

Abbreviations

ACC	accusative	NGF	nominal grammatical function
ADJ	adjunct	NOM	nominative
CONT-TOPIC	continuing topic	PTCL	particle
DAT	dative	REL	relativiser
DEF	definite	SBJV	subjunctive
EXPL	expletive	subj	subject
GEN	genitive	V	verb
GF	grammatical function	V1	verb-initial
INF-FOCUS	information focus	V2	verb-second
NEG	negation		

References

- Asudeh, Ash. 2006. Direct compositionality and the architecture of LFG. In Miriam Butt, Mary Dalrymple & Tracy Holloway King (eds.), *Intelligent linguistic architectures: Variations on themes by Ronald M. Kaplan*, 363–387. Stanford, CA: CSLI Publications.
- Axel, Katrin. 2007. Studies on Old High German syntax: Left sentence periphery, verb placement and verb-second. Amsterdam: Benjamins.
- Axel, Katrin. 2009. The verb-second property in Old High German: Different ways of filling the prefield. In Roland Hinterhölzl & Svetlana Petrova (eds.), *Information structure and language change: New approaches to word order variation in Germanic*, 17–44. Berlin: De Gruyter. DOI: 10.1515/9783110216110.1.17.
- Barðdal, Jóhanna & Thórhallur Eythórsson. 2003. The change that never happened: The story of oblique subjects. *Journal of Linguistics* 39(3). 439–472. DOI: 10.1017/S002222670300207X.
- Barðdal, Jóhanna & Thórhallur Eythórsson. 2009. The origin of the oblique subject construction: An Indo-European comparison. In Vit Bubenik, John Hewson & Sarah Rose (eds.), *Grammatical change in Indo-European languages*, 179–193. Amsterdam: Benjamins. DOI: 10.1075/cilt.305.
- Barðdal, Jóhanna, Thomas Smitherman, Valgerður Bjarnadóttir, Serena Danesi, Gard B. Jenset & Barbara McGillivray. 2012. Reconstructing constructional semantics: The dative subject construction in Old Norse-Icelandic, Latin, Ancient Greek, Old Russian and Old Lithuanian. *Studies in Language* 36(3). 511–547. DOI: 10.1075/sl.36.3.03bar.
- Berman, Judith, Stefanie Dipper, Christian Fortmann & Jonas Kuhn. 1998. Argument clauses and correlative es in German deriving discourse properties in a unification analysis. In Miriam Butt & Tracy Holloway King (eds.), Proceedings of the LFG '98 Conference, University of Queensland, Brisbane. Stanford, CA: CSLI Publications.
- Booth, Hannah. 2018. *Clause structure and expletives: Syntactic change in Icelandic.* Manchester: University of Manchester. (Doctoral dissertation).
- Booth, Hannah. 2019. Cataphora, expletives and impersonal constructions in the history of Icelandic. *Nordic Journal of Linguistics* 42(2). 139–164. DOI: 10.1017/S0332586519000143.
- Booth, Hannah. 2020. Expletives in Icelandic: A corpus study. In Bridget Drinka (ed.), *Historical Linguistics 2017: Selected papers from the 23rd International Conference on Historical Linguistics, San Antonio, Texas, 31 July–4 August 2017,* 363–384. Amsterdam: Benjamins. DOI: 10.1075/cilt.350.17boo.

- Booth, Hannah. 2021. Revisiting the configurationality issue in Old Icelandic. *Glossa: A journal of general linguistics* 6(1). 130. DOI: 10.16995/glossa.5804.
- Booth, Hannah & Christin Beck. 2021. Verb-second and verb-first in the history of Icelandic. *Journal of Historical Syntax* 5(28). 1–53. DOI: 10.18148/hs/2021. v5i28.112.
- Booth, Hannah & Christin Schätzle. 2019. The syntactic encoding of information structure in the history of Icelandic. In Miriam Butt, Tracy Holloway King & Ida Toivonen (eds.), *Proceedings of the LFG'19 conference, Australian National University*, 69–89. Stanford, CA: CSLI Publications.
- Booth, Hannah, Christin Schätzle, Kersti Börjars & Miriam Butt. 2017. Dative subjects and the rise of positional licensing in Icelandic. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of the LFG'17 Conference, University of Konstanz*, 104–124. Stanford, CA: CSLI Publications.
- Börjars, Kersti, Pauline Harries & Nigel Vincent. 2016. Growing syntax: The development of a DP in North Germanic. *Language* 91(1). e1–e37. DOI: 10.1353/lan.2016.0002.
- Bresnan, Joan. 1984. Bound anaphora on functional structures. Presented at the Tenth Annual Meeting of the Berkeley Linguistics Society.
- Bresnan, Joan, Ash Asudeh, Ida Toivonen & Stephen Wechsler. 2016. *Lexical-functional syntax*. 2nd edn. Oxford: Blackwell. DOI: 10.1002/9781119105664.
- Butt, Miriam, Farhat Jabeen & Tina Bögel. 2016. Verb cluster internal wh-phrases in Urdu: Prosody, syntax and semantics/pragmatics. *Linguistic Analysis* 40(3–4). 445–487.
- Butt, Miriam & Tracy Holloway King. 1997. Null elements in discourse structure. In Karumuri V. Subbarao (ed.), *Papers from the NULLS seminar*, 1–23. Delhi: Motilal Banarsidass.
- Carroll, Mary & Monique Lambert. 2003. Information structure in narratives and the role of grammaticised knowledge: A study of adult French and German learners of English. In Christine Dimroth & Marianne Starren (eds.), *Information structure and the dynamics of language acquisition*, 267–287. Amsterdam: Benjamins. DOI: 10.1075/sibil.26.13car.
- Catasso, Nicholas, Marco Coniglio, Chiara De Bastiani & Eric Fuß. 2021. *He then said...*: (Understudied) deviations from V2 in early Germanic. *Journal of Historical Syntax* 5(16-25). 1–39. DOI: 10.18148/hs/2021.v5i17-26.55.
- Cichosz, Anna. 2022. Old English V-initial and *pa*-VS main clauses: Independent constructions or allostructions? *Constructions and Frames* 14(2). 301–336. DOI: 10.1075/cf.21002.cic.
- Clover, Carol J. 1974. Scene in saga composition. *Arkiv för nordisk filologi* 89. 57–83. DOI: 10.7591/9781501740510.

- Dalrymple, Mary, Ronald M. Kaplan & Tracy Holloway King. 2001. Weak crossover and the absence of traces. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of the LFG'01 Conference*, 66–82. Stanford, CA: CSLI Publications.
- Dalrymple, Mary, John J. Lowe & Louise Mycock. 2019. *The Oxford reference guide to Lexical Functional Grammar*. Oxford: Oxford University Press. DOI: 10.1093/oso/9780198733300.001.0001.
- Daneš, Frantisek. 1974. Functional sentence perspective and the organization of the text. In Frantisek Daneš (ed.), *Papers on functional sentence perspective*, 106–128. The Hague: Mouton. DOI: 10.1515/9783111676524.106.
- Dimroth, Christine, Cecilia Andorno, Sandra Benazzo & Josje Verhagen. 2010. Given claims about new topics: How Romance and Germanic speakers link changed and maintained information in narrative discourse. *Journal of Pragmatics* 42(12). 3328–3344. DOI: 10.1016/j.pragma.2010.05.009.
- Donhauser, Karin & Svetlana Petrova. 2009. Die Rolle des Adverbs tho bei der Generalisierung von Verbzweit im Deutschen. In Monika Dannerer, Peter Mauser, Hannes Scheutz & Andreas E. Weiss (eds.), Gesprochen—geschrieben—gedichtet: Variation und Transformation von Sprache, 11–24. Berlin: Erich Schmidt.
- É. Kiss, Katalin (ed.). 1995. *Discourse configurational languages*. Oxford: Oxford University Press.
- Egerland, Verner. 2013. Fronting, background, focus: A comparative study of Sardinian and Icelandic. *Lingua* 136. 63–76. DOI: 10.1016/j.lingua.2013.07.011.
- Enkvist, Nils Erik. 1986. More about the textual functions of the Old English adverbial *þa*. In Dieter Kastovsky & Aleksander Szwedek (eds.), *Linguistics across historical and geographical boundaries: In honour of Jacek Fisiak on the occasion of his fiftieth birthday*, vol. 1, 301–310. Berlin: De Gruyter. DOI: 10.1515/9783110856132.301.
- Enkvist, Nils Erik & Brita Wårvik. 1987. Old english *tha*, temporal chains and narrative structure. In Anna Giacalone Ramat, Onofrio Carruba & Giuliano Bernin (eds.), *Papers from the 7th International Conference on Historical Linguistics*, 221–237. Amsterdam: Benjamins. DOI: 10.1075/cilt.48.17enk.
- Faarlund, Jan Terje. 1990. *Syntactic change: Toward a theory of historical syntax*, vol. 50 (Trends in Linguistics. Studies and Monographs [TiLSM]). Berlin: De Gruyter. DOI: 10.1515/9783110854947.
- Foster, Robert. 1975. The use of *Pa* in Old and Middle English narratives. *Neuphilologische Mitteilungen* 76(3). 404–414.

- Frascarelli, Mara & Roland Hinterhölzl. 2007. Types of topics in German and Italian. In Susanne Winkler & Kerstin Schwabe (eds.), *On information structure, meaning and form*, 87–116. Amsterdam: Benjamins. DOI: 10.1075/la.100.
- Frey, Werner. 2004. A medial topic position for German. *Linguistische Berichte* 198. 153–190.
- Fuß, Eric & Roland Hinterhölzl. 2023. On the historical development of pronouns referring to situations: The rise of pre-finite 'expletives' in German. *Journal of Historical Syntax* 7(2). 1–54. DOI: 10.18148/hs/2023.v7i2.162.
- Götze, Michael, Thomas Weskott, Cornelia Endriss, Ines Fiedler, Stefan Hinterwimmer, Svetlana Petrova, Anne Schwarz, Stavros Skopeteas & Ruben Stoel. 2007. Information structure. In Steffi Dipper, Michael Götze & Stavros Skopeteas (eds.), Information structure in cross-linguistic corpora: Annotation guidelines for phonology, morphology, syntax, semantics, and information structure, 147–187. Potsdam: Universitätsverlag Potsdam.
- Grosz, Barbara J., Scott Weinstein & Aravind K. Joshi. 1995. Centering: A framework for modeling the local coherence of discourse. *Computational Linguistics* 21. 203–225.
- Grosz, Patrick G. 2016. Information structure and discourse particles. In Caroline Féry & Shinichiro Ishihara (eds.), *The Oxford handbook of information structure*, 336–358. Oxford: Oxford University Press. DOI: 10.1093/oxfordhb/9780199642670.013.36.
- Hendriks, Herman. 1996. Information packaging: From cards to boxes. In Teresa Galloway & Justin Spence (eds.), *Proceedings of the 6th Semantics and Linguistic Theory Conference (SALT VI)*, vol. 6, 75–92. Ithaca, NY: Cornell University. DOI: 10.3765/salt.v6i0.2765.
- Hilmisdóttir, Helga. 2010. The present moment as an interactional resource: The case of *nú* and *núna* in Icelandic conversation. *Nordic Journal of Linguistics* 33(3). 269–298. DOI: 10.1017/S0332586510000211.
- Hinterhölzl, Roland & Svetlana Petrova. 2010. From V1 to V2 in West Germanic. *Lingua* 120(2). 315–328. DOI: 10.1016/j.lingua.2008.10.007.
- Holmberg, Anders. 2000. Scandinavian stylistic fronting: How any category can become an expletive. *Linguistic Inquiry* 31(3). 445–483. DOI: 10.1162/002438900554406.
- Hooper, Joan B. & Sandra A. Thompson. 1973. On the applicability of root transformations. *Linguistic Inquiry* 4(4). 465–497.
- Hrafnbjargarson, Gunnar Hrafn. 2004. Stylistic fronting. *Studia Linguistica* 58(2). 88–134. DOI: 10.1111/j.0039-3193.2004.00111.x.
- Hróarsdóttir, Thorbjörg. 1998. *Setningafræðilegar Breytingar á 19. Öld: Þróun þriggja málbreytinga*. Reykjavík: Málvísindastofnun Háskóla Íslands.

- Hróarsdóttir, Thorbjörg. 2009. OV languages: Expressions of cues. In Roland Hinterhölzl & Svetlana Petrova (eds.), *Information structure and language change: New approaches to word order variation in Germanic*, 67–90. Berlin: De Gruyter. DOI: 10.1515/9783110216110.1.67.
- Ingason, Anton Karl. 2020. Machine-Parsed IcePaHC, version 0.1. https://github.com/antonkarl/micepahc.
- Jónsson, Jóhannes Gísli. 2002. S-adverbs in Icelandic and the feature theory of adverbs. *Leeds Working Papers in Linguistics and Phonetics* 9. 73–89.
- Kaplan, Ron & Joan Bresnan. 1982. Lexical-Functional Grammar: A formal theory for grammatical representation. In Joan Bresnan (ed.), *The mental representation of grammatical relations*, 173–281. Cambridge, MA: MIT Press.
- Kaplan, Ronald M. 1987. Three seductions of computational psycholinguistics.In P. Whitelock, M. M. Wood, H. L. Somers, R. Johnson & P. Bennett (eds.),Linguistic theory and computer applications, 149–188. London: Academic Press.
- Kaplan, Ronald M. & John T. Maxwell. 1996. *Grammar writer's workbench*. Technical report, Xerox PARC.
- Kaplan, Ronald M. & Annie Zaenen. 1989. Long-distance dependencies, constituent structure, and functional uncertainty. In Mark R. Baltin & Anthony S. Kroch (eds.), Alternative conceptions of phrase structure. Chicago, IL: University of Chicago Press.
- van Kemenade, Ans & Bettelou Los. 2006. Discourse adverbs and clausal syntax in Old and Middle English. In Ans van Kemenade & Bettelou Los (eds.), *The handbook of the history of English*, 224–248. Oxford: Wiley Blackwell. DOI: 10.1002/9780470757048.ch10.
- van Kemenade, Ans, Tanja Milićev & R. Harald Baayen. 2008. The balance between syntax and discourse in Old English. In Maurizio Gotti, Marina Dossena & Richard Dury (eds.), English Historical Linguistics 2006: Selected papers from the fourteenth International Conference on English Historical Linguistics (ICEHL 14), Bergamo, 21–25 August 2006, 3–21. Amsterdam: Benjamins. DOI: 10.1075/cilt.295.04kem.
- van Kemenade, Ans. 2009. Discourse relations and word order change. In Roland Hinterhölzl & Svetlana Petrova (eds.), *Information structure and language change: New approaches to word order variation in Germanic*, 91–120. Berlin: De Gruyter. DOI: 10.1515/9783110216110.1.91.
- van Kemenade, Ans & Tanja Milićev. 2011. Syntax and discourse in Old and Middle English word order. In Dianne Jonas, John Whitman & Andrew Garrett (eds.), *Grammatical change: Origins, nature, outcomes*, 239–255. Oxford: Oxford University Press. DOI: 10.1093/acprof:oso/9780199582624.003.0012.

- van Kemenade, Ans & Meta Links. 2020. Discourse particles in early English: Clause structure, pragmatics and discourse management. *Glossa: A journal of general linguistics* 5(1). DOI: 10.5334/gjgl.1020.
- King, Tracy Holloway. 1997. Focus domains and information-structure. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of the LFG'97 Conference*. Stanford, CA: CSLI Publications.
- Klein, Jared S. 1994a. Gothic *paruh*, *panuh* and *-(u)h pan. Indogermanische Forschungen* 99. 253–276. DOI: 10.1515/9783110243406.253.
- Klein, Wolfgang. 1994b. *Time in language*. London: Routledge. DOI: 10.4324/9781315003801.
- Krifka, Manfred. 2007. Basic notions of information structure. In Caroline Féry & Manfred Krifka (eds.), *Interdisciplinary studies on information structure*, 13–56. Potsdam: Universitätsverlag Potsdam. DOI: 10.1556/aling.55.2008.3-4.2.
- Krivonosov, Aleksej. 1977. Deutsche Modalpartikeln im System der unflektierten Wortklassen. In Harald Weydt (ed.), *Aspekte der Modalpartikeln: Studien zur deutschen Abtönung*, 176–216. Tübingen: Niemeyer.
- Leiss, Elisabeth. 2000. Artikel und Aspekt: Die grammatischen Muster von Definitheit, vol. 55 (Studia Linguistica Germanica). Berlin: De Gruyter. DOI: 10.1515/9783110825961.
- Leiss, Elisabeth. 2007. Covert patterns of definiteness/indefiniteness and aspectuality in Old Icelandic, Gothic, and Old High German. In Elisabeth Stark, Elisabeth Leiss & Werner Abraham (eds.), *Nominal determination: Typology, context constraints, and historical emergence*, 73–102. Amsterdam: Benjamins. DOI: 10.1075/slcs.89.
- Levine, Robert & Detmar Meurers. 2006. Declarative models of syntax. In Keith Brown (ed.), *Encyclopedia of language and linguistics*, 2nd edn., vol. 3, 377–384. Oxford: Elsevier. DOI: 10.1016/B0-08-044854-2/01960-X.
- Linde, Sonja. 2009. Aspects of word order and information structure in Old Saxon. In Roland Hinterhölzl & Svetlana Petrova (eds.), *Information structure and language change: New approaches to word order variation in Germanic*, 367–389. Berlin: De Gruyter. DOI: 10.1515/9783110216110.3.367.
- Los, Bettelou. 2000. *Onginnan/beginnan* with bare and *to*-infinitive in Ælfric. In Olga Fischer, Anette Rosenbach & Dieter Stein (eds.), *Pathways of change: Grammaticalization in English*, 251–274. Amsterdam: Benjamins.
- Mahowald, Kyle. 2011. *An LFG approach to Old English constituent order*. Oxford: University of Oxford. (MA thesis).
- Maling, Joan. 1988. Variations on a theme: Existential sentences in Swedish and Icelandic. *McGill Working Papers in Linguistics: Special Issue on Comparative Germanic Syntax* 6(1). 168–191.

- Maling, Joan. 1990. Inversion in embedded clauses in Modern Icelandic. In Joan Maling & Annie Zaenen (eds.), *Syntax and semantics: Modern Icelandic syntax*, 71–91. San Diego, CA: Academic Press. DOI: 10.1163/9789004373235_004.
- Matić, Dejan, Rik Van Gijn & Robert D. Van Valin Jr. 2014. Information structure and reference tracking in complex sentences. In Rik van Gijn, Jeremy Hammond, Dejan Matić, Saskia van Putten & Ana Vilacy Galucio (eds.), *Information structure and reference tracking in complex sentences*, 1–42. Amsterdam: Benjamins. DOI: 10.1075/tsl.105.01mat.
- Matsuda, Kenjirô. 1998. On the conservatism of embedded clauses. In Monika S. Schmid, Jennifer R. Austin & Dieter Stein (eds.), *Historical Linguistics 1997: Selected papers from the 13th International Conference on Historical Linguistics, Düsseldorf, 10–17 August 1997,* 255–268. Amsterdam: Benjamins. DOI: 10.1075/cilt.164.18mat.
- Ólason, Vésteinn. 2004. Family sagas. In Rory McTurk (ed.), *A companion to Old Norse-Icelandic literature and culture*, 101–118. Oxford: Wiley Blackwell. DOI: 10.1002/9780470996867.ch7.
- Petrova, Svetlana. 2011. Modeling word order variation in discourse: On the pragmatic properties of VS order in Old High German. *Oslo Studies in Language* 3(3). 209–228. DOI: 10.5617/osla.46.
- Phelpstead, Carl. 2017. Time. In Ármann Jakobsson & Sverrir Jakobsson (eds.), The Routledge research companion to the medieval Icelandic sagas, 187–197. London: Routledge.
- Platzack, Christer. 1983. Existential sentences in English, German, Icelandic and Swedish. In Fred Karlsson (ed.), *Papers from the 7th Scandinavian Conference of Linguistics*, 80–100. Helsinki: Department of General Linguistics, University of Helsinki.
- Pullum, Geoffrey K. & Barbara C. Scholz. 2001. On the distinction between model-theoretic and generative-enumerative syntactic frameworks. In Philippe de Groote, Glyn Morrill & Christian Retoré (eds.), Logical aspects of computational linguistics, 17–43. Berlin, Heidelberg: Springer. DOI: 10.1007/3-540-48199-0_2.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech & Jan Svartvik. 1985. *A comprehensive grammar of the English language*. London: Longman.
- Reinhart, Tanya. 1981. Pragmatics and linguistics: An analysis of sentence topics. *Philosophica* 27(1). 53–94. DOI: 10.21825/philosophica.82606.
- Riester, Arndt. 2015. Analyzing questions under discussion and information structure in a Balinese narrative. In *Proceedings of the Second International Workshop on Information Structure of Austronesian Languages*, 1–26. Tokyo: Research Institute for Languages, Cultures of Asia & Africa (ILCAA).

- Rögnvaldsson, Eiríkur. 1982. *Um orðaröð og færslur í íslensku*. Reykjavík: University of Iceland. (MA thesis).
- Rögnvaldsson, Eiríkur. 2002. ÞAÐ í fornu máli og síðar. Íslenskt mál 24. 7–30.
- Rögnvaldsson, Eiríkur & Höskuldur Thráinsson. 1990. On Icelandic word order once more. In Joan Maling & Annie Zaenen (eds.), *Syntax and semantics: Modern Icelandic syntax*, 3–40. San Diego, CA: Academic Press. DOI: 10 . 1163 / 9789004373235 002.
- Sasse, Hans-Jürgen. 1987. The thetic/categorical distinction revisited. *Linguistics* 25(3). 511–80. DOI: 10.1515/ling.1987.25.3.511.
- Schätzle, Christin. 2018. *Dative subjects: Historical change visualized.* Konstanz: University of Konstanz. (Doctoral dissertation).
- Schätzle, Christin & Hannah Booth. 2019. DiaHClust: An iterative hierarchical clustering approach for identifying stages in language change. In *Proceedings of the 1st International Workshop on Computational Approaches to Historical Language Change*, 126–135. Florence, Italy: Association for Computational Linguistics.
- Schätzle, Christin, Miriam Butt & Kristina Kotcheva. 2015. The diachrony of dative subjects and the middle in Icelandic: A corpus study. In Miriam Butt & Tracy Holoway King (eds.), *Proceedings of the LFG'15 conference, Tokyo, Japan, 18–20 July 2015,* 357–377. Stanford, CA: CSLI Publications.
- Sells, Peter. 2001. *Structure, alignment and optimality in Swedish.* Stanford, CA: CSLI Publications.
- Sells, Peter. 2005. The peripherality of the Icelandic expletive. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of the LFG'05 Conference*, 408–428. Stanford, CA: CSLI Publications.
- Sells, Peter. 2021. The view from declarative syntax. In Nicholas Allott, Terje Lohndal & Georges Rey (eds.), *A companion to Chomsky*, 243–266. Oxford: Wiley Blackwell. DOI: 10.1002/9781119598732.ch16.
- Sigurðsson, Halldór Ármann. 2007. Argument features, clausal structure and the computation. In Tammoy Bhattachayra, Eric Reuland & Giorgos Spathas (eds.), *Argument structure*, 121–158. Amsterdam: Benjamins. DOI: 10.1075/la.108.10sig.
- Thráinsson, Höskuldur. 1979. *On complementation in Icelandic*. New York: Garland.
- Thráinsson, Höskuldur. 2007. *The syntax of Icelandic*. Cambridge: Cambridge University Press. DOI: 10.1017/CBO9780511619441.
- Trips, Carola & Eric Fuß. 2009. The syntax and semantics of the temporal anaphor "then" in Old and Middle English. In Artemis Alexiadou, Jorge Hankamer, Thomas McFadden, Justin Nuger & Florian Schäfer (eds.), Advances in com-

- *parative Germanic syntax*, 171–196. Amsterdam: Benjamins. DOI: 10.1075/la. 141.08the.
- Vallduví, Enric. 1992. The informational component. New York: Garland Press.
- Vilkuna, Maria. 1989. *Free word order in Finnish: Its syntax and discourse functions.* Helsinki: Suomalaisen Kirjallisuuden Seura [Finnish Literature Society].
- Wallenberg, Joel C., Anton Karl Ingason, Einar Freyr Sigurðsson & Eiríkur Rögnvaldsson. 2011. *Icelandic Parsed Historical Corpus (IcePaHC) 0.9.* Version 0.9. DOI: 10.21248/jlcl.26.2011.153. http://linguist.is/icelandic_treebank/Icelandic_Parsed_Historical_Corpus_(IcePaHC).
- Wårvik, Brita. 2013. Participant continuity and narrative structure: Defining discourse marker functions in Old English. *Folia Linguistica Historica* 47(34). 209–242. DOI: 10.1515/flih.2013.008.
- Zaenen, Annie. 2023. Information structure. In Mary Dalrymple (ed.), *Handbook of Lexical Functional Grammar* (Empirically Oriented Theoretical Morphology and Syntax 13), 823–853. Berlin: Language Science Press. DOI: 10.5281/zenodo. 10185972.
- Zaenen, Annie & Ronald M. Kaplan. 1995. Formal devices for linguistic generalizations: West Germanic word order in LFG. In Mary Dalrymple, Ronald M. Kaplan & Annie Zaenen (eds.), *Formal issues in lexical-functional grammar*, 215–239. Stanford, CA: CSLI Publications.
- Zaenen, Annie, Joan Maling & Höskuldur Thráinsson. 1985. Case and grammatical functions: The Icelandic passive. *Natural Language and Linguistic Theory* 3(4). 441–483. DOI: 10.1007/BF00133285.