

Chapter 4

Discourse structure and the reorganisation of the Icelandic aspectual system

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Icelandic is commonly considered a conservative language. While this claim holds true for its morphology, especially in the broader Germanic perspective, one area that has undergone considerable changes since the 16th century is the mapping between syntax and discourse structure. In this paper, I will argue that otherwise puzzling facts from the history of the language can be better understood if one takes this shift in discourse structuring as fundamental. While most research to date has focused on a limited set of syntactic phenomena, I bring new data to bear on this question: the emergence of two aspectual markers, the *búinn*-perfect and the *vera að*-progressive. I trace the shift in discourse structure alongside the emergence of innovative aspectual markers in two corpora of historical Icelandic (**IcePaHC**, Walenberg et al. 2011, and **Íslenskt textasafn**, Stofnun Árna Magnússonar í íslenskum fræðum 2023). I show that what seem to be abrupt changes in the corpus record no longer seem so abrupt when considered in the larger context of this shift from a bounded to an unbounded system. Rather, the loss of topic-time anchors like *pá* ‘then’ paved the way for the emergence of new ways of construing events (Los 2012) during the 16th–18th centuries, a period of variability reflected in the corpus dataset by travelogues and memoirs that combine more archaic and innovative characteristics.

1 Introduction

Icelandic, despite its well-known morphosyntactic conservatism (cf. Friðriksson 2011; Rögnvaldsson & Helgadóttir 2011), has undergone considerable changes in



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the mapping between clause and information structure since the early modern period (1540 onwards).¹ To date, scholarly work in this area has focused on the syntactic reflexes of these changes (Rögnvaldsson 1995, 2002, Booth & Beck 2021). In this paper, I focus on a topic that has received little attention in the diachronic literature on Icelandic: the emergence of periphrastic aspectual constructions, the *búinn*-perfect and the *vera að*-progressive. I will argue that the trajectories of these periphrastic constructions can be understood within the context of this fundamental shift in mapping between form and discourse structure. The diachrony of Icelandic exhibits a shift from a predominantly ‘bounded’ system for expressing narrative to a predominantly ‘unbounded’ one (see Petré 2010, 2014, Los 2012, Bech 2014, Fanego 2024 on a similar shift in the history of English).

Drawing on corpora of historical Icelandic, I show that between 1540–1850 (what I define as the early modern period)² the perfect construction *búinn* and the dedicated progressive construction formed with *vera að* ‘be to’ went from once marginal constructions to integral parts of the aspectual oppositions encoded in Icelandic grammar. Both are attested in earlier Icelandic, not having yet acquired their modern aspectual meanings. More broadly, I argue that these changes can be subsumed under a shift from a bounded to unbounded system.

I argue that this shift in boundedness is reflected in a change in grounding strategies in the construing of narrative sequences. This includes the marking of episodic boundaries in narratives and the way in which information-structural notions are tracked overtly in the syntax. In this paper, I focus on the early modern period of Icelandic, which I take to begin with the New Testament translation by Oddur Gottskálksson (completed in 1540) and to end with the publication of what may be considered the first modern Icelandic novel, *Piltur og stúlka* ‘Boy and Girl’, published in 1850 (Bernharðsson 2017, 2018).

This paper is structured as follows. First, this introductory section continues with background information on the corpora used. Next, in Section 2, I discuss the grammaticalisation of the *búinn*-perfect and the dedicated *vera að*-progressive: Section 2.1 begins with the schema I assume for grammaticalisation in context, Section 2.2 discusses the emergence of the *búinn*-perfect, Section 2.3 discusses the emergence of the *vera að*-progressive. Section 3 continues with a discussion of discourse traditions (historical registers): 3.1 introduces the term

¹This period is demarcated by the publication of Oddur Gottskálksson’s translation of the New Testament into Icelandic (Ottósson 1990).

²Note that terminology surrounding the periodisation of Icelandic is used inconsistently in the literature, with some authors including early 20th century (Svavarsdóttir et al. 2014), while others such as Brendel (2023) refer roughly to the period spanning the 16th to 19th centuries.

and 3.2 situates the texts used in this study within their respective discourse traditions. Section 4 then proceeds with a discussion of the shift from boundedness to unboundedness, which is the primary claim of this paper: 4.1 provides the motivation behind this approach and 4.2 discusses the literature in this area in more detail. I then argue that Old(er) Icelandic (prior to 1540) represents a predominantly bounded system (4.2.1), that 17th and 18th century Icelandic has an intermediate system (4.2.2) and that modern Icelandic (post 1850) ought to be considered unbounded (4.2.3). In Section 5, I delve into this decrease in bounded strategies: 5.1 discusses work on Old English in this regard, in order to set the stage for the Icelandic data in comparison. Section 5.2 then provides statistical corpus evidence to support my claim that Icelandic underwent a shift in boundedness during this period: this evidence includes a general increase in temporal subordinate clauses (5.2.1), that the rise of the subordinator *þegar* is negatively correlated with the decline of the topic-time adverbial *þá* (5.2.2), that the requirement for overt temporal adverbials in the left periphery becomes less strict (5.2.3) and finally that the adverbials associated with *búinn* and *PROG* (5.2.4) as well as their relative timing support this view as well (5.2.5). Section 6 concludes with a summary of my findings and a reflection on implications for future work on the diachrony of Icelandic as well as diachronic typology more generally.

Throughout the paper, I draw my data³ primarily from two corpora:

1. **IcePaHC** (Wallenberg et al. 2011) \approx 1 million words. Timeframe: 1150-2008, with diverse genre distribution. Parsed in Penn treebank format.⁴
2. **Íslenskt textasafn** (Stofnun Árna Magnússonar í íslenskum fræðum 2023). I utilise two components of this corpus: (i) the 16th-18th century subcorpus which consists of more substantial material than that available in IcePaHC for this time period \approx 421.000 words, outlined in Table 1,⁵ and (ii) I make use of *Ritmálssafn Orðabókar Háskólans*, the archive of written language for the dictionary of Icelandic compiled at the University of Iceland, which contains 2.5 million example sentences of 700.000 header words.⁶

³The data and scripts are available via https://github.com/jordanchark/discourse_narration.

⁴Version 0.9. More information on IcePaHC can be found at <https://github.com/antonkarl/icecorpus>.

⁵The texts *Nikulás Klím*, *Nýja testamentið* and *Ævisaga síra Jóns* are present in IcePaHC in much smaller excerpts.

⁶This corpus can also be accessed at <https://ritmalssafn.arnastofnun.is/>

Table 1: Íslenskt textasafn, 16-18th century subcorpus. Translator in parentheses. Count is total words present in documents provided by the corpus editors.

Title	Author	Year	Words
Einfalt matreiðsluvasakver	Marta María Stephensen	1800	16,592
Nikulás Klím	Holberg, Ludvig (Jón Ólafsson)	1745	23,332
Nýja testamentið	(Oddur Gottskálksson)	1540	189,692
Stuttur siðalærdómur	Campe, J.H (Guðlaugur Sveinsson)	1799	36,773
Uppkast til forsagna	Eggert Ólafsson	1767	35,242
Vídalinspostilla	Jón Þorkelsson Vídalín	1718-20	156,497
Ævisaga síra Jóns	Jón Steingrímsson	1791	107,926

2 Emergence of a new perfect and progressive

Modern Icelandic exhibits a tripartite system for aspectual distinctions: inchoative, progressive and completive. This system is comprised of periphrastic constructions which embed an infinitival phrase. By the end of the early modern period, this system is well established. Evidence for this comes from grammatical descriptions of this period, as for example by Jón Magnússon under the heading *De Verbis Auxiliariibus* in his *Grammatica Islandica* (written 1737-1738) (Jónsson 1933). The headings below are taken from this text, translated from Latin:⁷

(1) These all distinguish the present

- a. *Ég tek nú til að gjöra*
I take now to to do
'I now begin to do.'
- b. *Ég er farinn að gjöra.*
I am gone to do
'I began doing.'
- c. *Ég er að gjöra.*
I am to do
'I am doing.'

(Jónsson 1933: 130)

⁷Spelling is adapted to modern orthography. The list is not complete as Magnússon's account also includes modal expressions, which are not relevant for the purposes of this paper.

(2) These signify the imperfect past

a. *Ég fór að gjöra.*

I went to do

‘I began doing.’

b. *Ég var að gjöra.*

I was to do

‘I was doing.’

(Jónsson 1933: 130)

(3) These indicate the perfect

a. *Ég er búinn að gjöra.*

I am búinn to do

‘I have done.’

b. *Ég hef gjört.*

I have done

‘I have done.’

(Jónsson 1933: 130)

(4) These indicate the pluperfect

a. *Ég hafði gjört.*

I had done

‘I had done.’

b. *Ég var buinn að gjöra.*

I was BÚINN to do

‘I had done.’

(Jónsson 1933: 130)

As we see here, by the mid-18th century the primary tripartite oppositions are considered to be integral enough to the language for Jón to include all of their forms in the paradigm.⁸

Prior to this, the paradigm of aspectual distinctions made available by the grammar is arguably incomplete (cf. Árnason 1977). By this I mean that the distinctions made overtly are asymmetrical. First, prior to 1550, marking of inchoative aspect is already established, marked by an infinitival phrase embedded under the verb *taka* ‘take’. However, a completive aspect and progressive aspect do not emerge until later. These will be the focus of this paper. I begin with the diachrony of the progressive construction with *vera að*.

⁸His description also makes clear that Icelandic of this period had competing forms for the inchoative: one formed by *taka* ‘take’ along with an infinitive and the other formed by the participle *farinn* ‘gone’ in conjunction with an infinitival phrase.

2.1 Incidental variation

In what follows, I argue for the role of what I term incidental variation. Incidental privileging contexts in diachrony have also been termed *beachheads* (Givón 1979, Aldai 2002). Such an approach is pursued by Petré (2016) in his account of the diachrony of the English progressive. I would like to suggest that changing frequencies of environments that themselves privilege usages in question were responsible for the seemingly rapid rise in frequency in the diachrony of Icelandic for both *búinn* and the progressive. The focalised progressive and anterior *búinn* serve similar text-structuring purposes – the prevalence of privileging contexts should correlate with dimensions of textual organisation.

It has long been recognised by scholars that grammaticalisation happens in context (Diewald 2002, Heine 2002). That is, ambiguities arise in particular contextual configurations, leading to the possibility of an alternation between two expressions at this juncture, which eventually can give rise to the cementing of new semantic meaning emerging from contextually-dependent inferences. Schematically, this can be represented as follows (Heine et al. 1991):⁹

- (5) Increased frequency → Context-dependent implicature becomes more salient → Ambiguity (Bridging contexts) → Reanalysis (Switch contexts) → Generalisation

In the following subsections, I argue for the importance of temporal subordinate contexts in the conventionalisation of the two aspectual constructions which are the focus of this paper: *búinn* and *PROG*. I begin by examining the emergence of *búinn* in 2.2, followed by *PROG* in 2.3.

2.2 Emergence of BÚINN

Modern Icelandic has two constructions that have a number of properties typically ascribed to perfects (Jónsson 1992, Thráinsson 2017): *búinn* ‘finish’ and *hafa* ‘have’. All primary perfect readings contain the *hafa* perfect (experiential, resultative, universal, cf. McCawley 1971, Comrie 1976) and are already found in the earliest written Icelandic sources (Nygaard 1905, Pollak 1930). The past participle *búinn* is derived from the verb *búa* ‘reside, prepare, adorn’ and does not acquire an anterior, perfect-like meaning until the 17th century (Thráinsson 2017). Prior to the 17th century, *búinn* predominantly has a ‘prepared’ reading. The example

⁹In the system proposed by Heine et al. (1991), bridging contexts allow ambiguity between conservative and innovative meanings, whereas switch contexts only permit an innovative reading.

below, for instance, cannot have anterior reference (i.e. receive a perfect-type reading).¹⁰

- (6) *En er Egill var búinn og byr gaf þá siglir hann í haf.*
 and when Egill was BÚINN and wind gave then sails he to sea
 ‘And when Egill was prepared and there was wind, he sailed to sea.’
 [1250.THETUBROT.NAR-SAG.74]¹¹

My claim is that the later anterior reading is due to the underspecification of *búinn* (cf. Rosemeyer & Grossman, 2017 on a similar diachronic path in Spanish). Preparedness is a context-dependent notion which bleeds together with completeness (an example of “type coercion”; Pustejovsky 1998). This is illustrated for historical Icelandic in (7) (14th century) where it is apparent that a net which is prepared for fishing implies a complete or finished net.

- (7) *Ok er búið var netit, þá fara Æsir til árinna ok kasta neti*
 and when BÚINN was the:net, then go Æsir to the:river and throw net
í forsinn
 into the:waterfall
 ‘And when the net was finished, the Æsir went to the river and threw the net into the waterfall.’
 (Sigurðardóttir et al. (ONP): Jónsson, 1931: 69,
 English from Sturluson 1995)¹²

In early stages of Icelandic *búinn* is often used to add emphasis to a temporal sequence, adding some punch to the narrative by highlighting the sequential relationship between two eventualities (for a diachronic trajectory with similar characteristics, see Rosemeyer & Grossman 2017). Clauses involving *búinn* are typically complement-less, though not exclusively so. In my investigation of the *Fornrit* corpus (Stofnun Árna Magnússonar í íslenskum fræðum 2023), out of

¹⁰The adjectival meaning of the participle outside of this construction also shifts from predominantly having a ‘prepared’ reading to meaning ‘complete’ after the grammaticalisation of the infinitival construction (Árnason 1977).

¹¹Examples sourced from IcePaHC are given with metadata information in the format: Year.Text.Genre-Subgenre.TokenID.

¹²ONP (Sigurðardóttir et al. 2024) is a digital dictionary of Old Norse prose and can be accessed at <https://onp.ku.dk/onp/onp.php>.

1591 tokens, 46 of them are infinitival.¹³ These have a future-oriented prepared-type reading. By contrast, in my extended dataset ranging from the 16th to 19th centuries, when this conventionalisation was ongoing, upwards of 80% of *búinn* tokens have infinitival complements.

- (8) *En er Haraldur konungur var búinn að stíga á hest sinn þá*
and when Haraldur king was BÚINN to mount on horse his then
bað hann kalla til sín Áka búanda.
asked he call to him Áki farmer
‘When King Harald was ready to (about to) mount his horse, he asked for Áki the farmer to be called to him.’

(Heimskringla, cited in *Fornrit* corpus:
Stofnun Árna Magnússonar í íslenskum fræðum 2023)

In temporal subordinate contexts expressing a sequence between “event time” (E) and “reference time” (R) (E-R-S, as per Reichenbach 1947), it would typically be under-informative to overtly express the event description for which one is preparing, assuming that the following main clause asserts such an event. In other words, overtly expressing that an event that was an imminent occurrence (cf. Eckardt 2006: 91–127 on *be going to*) at some past interval did indeed become instantiated is under-informative (on Gricean assumptions; Holvoet 2014).

Below in (9), we see a prototypical early anterior usage of *búinn*, highlighting a relationship between two events, e_1 strictly preceding e_2 .

- (9) *Þegar ég var nú búinn að tala við Jón yngra úti kom ég inn*
when I was now BÚINN to speak with Jón younger outside came I in
aftur í kirkjuna
again into the:church
‘When I was finished speaking/had spoken with John junior outside I came into the church again.’ [1659.PISLARSAGA.BIO-AUT.56]

I assume that innovative speakers took advantage of the underspecification of *búinn* as well as analogy with related expressions (relating to the present) and began to combine *búinn* with infinitival complements. Hearers, in turn, were left to make sense of the utterance, interpreting pluperfect *búinn* constructions as

¹³The *Fornrit* corpus is part of the *Íslenskt textasafn* corpus, additional available for search at <https://malheildir.arnastofnun.is/>. The corpus consists of approximately 1.5 million words (Stofnun Árna Magnússonar í íslenskum fræðum 2023, Rögnvaldsson & Helgadóttir 2011).

expressing that the event description associated with this infinitival complement is informative relative to the discourse context (cf. Rosemeyer & Grossman 2017 for an analysis of a Spanish construction along similar lines). To be more precise, I am assuming a mechanism along the lines of Eckardt (2009)'s principle of Avoid Pragmatic Overload.¹⁴

One way of resolving informativity with regard to the discourse context here is to interpret the event description of the infinitival complement not as expressing a prospective, yet uninstantiated event but rather, highlighting the relationship between two instantiated eventualities. This results in the construction involving the participle *búinn* alongside the infinitive being reanalysed. The hearer can reason that what is relevant is the temporal interval associated with the result state of the event described by the infinitive, which brings about a new state of affairs (cf. Rosemeyer & Grossman 2017). In other words, asserting the existence of this state has immediate consequences for what can happen afterwards (cf. Wide 2002 on *búinn* in modern Icelandic discourse).

The question remains, however, of what constituted the system-internal motivation for the emergence of this marker, if Icelandic already had a canonical means of marking the perfect (i.e. with *hafa* 'have'). It seems to me that a key component of such a system-internal motivation is the considerable overlap between the *hafa*-perfect and the simple past that could be observed in Old Icelandic. In narrative texts, Old Icelandic is also known for considerable tense alternations between present and past for stylistic effect (Nygaard 1905, Heusler 1921). I take it that these facts led speakers of Icelandic to innovate a new marker for the purposes of highlighting the relationship between two events, i.e. the "perfect-in-the-past" reading (Comrie 1976). The canonical *hafa*-perfect, compatible with adverbs that specify Reichenbachian event time (i.e. "past-in-the-past" reading: Comrie 1976) and overlapping in use with the simple past, would have constituted a functional motivation for innovation.¹⁵ This fact should be considered in light

¹⁴Eckardt (2009: 14) defines this principle as follows: "The utterance under a conservative interpretation will trigger presuppositions that the hearer can not easily accommodate or refute. The hearer has three options: S/he can (a) be uncharitable and refuse to interpret the utterance at all, or (b) face the pragmatic overload and attempt to reconceptualize the world such that the presupposition makes sense and is consistent, or (c) hypothesize a new meaning for parts of the utterance, notably the item that gave rise to the problematic presupposition. Option (c) will allow the hearer to Avoid the Pragmatic Overload."

¹⁵The canonical *hafa* perfect has an inferential flavour in older as well as modern stages of the language, which pertains to the "source of information" (Lieberman 1990). This differentiates it from the simple past. However, it could also pave the way for a form to emerge that has a *current relevance* function (Comrie 1976: 52). A "past-in-the-past" reading can be seen as closer to a past perfective or remote past (Salkie 1989). That pluperfects can themselves incorporate a degree of current relevance is discussed in Wada (1995: 102–103) and Lee (2017: 72).

of the emerging system for overtly marking aspectual distinctions; Old Icelandic already used *taka* ‘take’ as an inchoative marker (Nordling 1928, Holm 1958). As I have discussed, at this stage we also see early focalised, aspectual usages of the progressive. I would like to propose that this constituted system-internal analogical motivation to complete this paradigm with a completive, an option that the chance reanalysis of the *búinn* construction made possible.

These facts ought to, in turn, be considered in the context of inter-clausal relations being somewhat in flux during the transitional period of Early Modern Icelandic, which I draw attention to later on in this paper (Section 5.2). I take it that the tighter integration of adverbial clauses at this point in time had its part, too, in encouraging the explicit marking of temporal overlap, a hallmark of unbounded narrative.

While *búinn* is still young and/or not yet established, one finds a number of strategies in Icelandic for the expression of completive aspect. Constructions involving the past participle are often used to designate time in the place of subordinate clauses (Hauksson & Óskarsson 1994: 399). The past participle can also be found as part of a *dativus ablativus*, which is a feature of learned style in Icelandic of the medieval period (*ibid.*). The latter is illustrated below in (10).

- (10) *Og strax honum uppgengnum, þremur stykkjum*
 and immediately he.DAT up:go:PTCP.PST.DAT three.DAT pieces.DAT
affýrðum og kveðjum orðnum, afdró
 off:fire.PTCP.PST.DAT and farewells:DAT become.PTCP.PST.DAT off:threw
hann sinn ysta kyrtil og gekk svo til káhyttu.
 he his outermost cloak and went so to cabin
 ‘When he was come on board and three pieces of cannon had been fired,
 and the greetings were ended, he threw off his outermost tunic and went
 down into the cabin.’ (Ólafsson 1908: 111)¹⁶

These alternative strategies all reflect the situation at this point in the diachrony of the language in which no formal distinction is made between a stative, adjectival, reading of past participles and that of an eventive passive, as shown below in (11a). Kress (1982) argues that pressure to fill in this paradigm was a factor in the grammaticalisation of *búinn*, as it makes this distinction overt, as shown in (11b).

¹⁶Translation from Ólafsson (2017: 203–204).

- (11) a. *Þeir voru ráðnir.*
 they were hired
 ‘They were hired.’ (eventive or stative possible, cf. *Sie waren/wurden angestellt*) (Kress 1982)
- b. *Það er búíð að ráða þá.*
 it is BÚINN to hire them
 ‘They were/have been hired.’ (eventive only) (Kress 1982)

Crucial for the purposes of this paper is the role of context-dependent inferences for the rise of the modern, completive meaning of *búinn*. This modern usage arises in the language of those born shortly after 1550 (established by an investigation of writings by authors in and around this period by Árnason 1977). Early anterior readings of *búinn* are found predominantly in temporal subordinate contexts: these act as *switch* contexts (Heine 2002), as the older meaning is typically ruled out given the main clause that follows. The importance of past-marked, temporal subordinate contexts for the establishment of the construction is clear when one investigates the proportion of *búinn* tokens which appear in a subordinate clause expressing temporal sequentiality (which I term *SuB* in the plot below). This is shown in Tables 2 and 3 for the 17th and 18th century respectively.¹⁷

Table 2: Frequency of *búinn* perfect in subordinate clauses expressing temporal sequentiality (18th century, *Íslenskt textasafn*)

Source	Century	SuB	Count	Total	Proportion
(pislarsaga)	17	0	14	16	0.88
(pislarsaga)	17	1	2	16	0.12
(Rms-sitot-17)	17	0	59	70	0.84
(Rms-sitot-17)	17	1	11	70	0.16

This point is further illustrated in Figure 1, which displays the distribution in IcePaHC by clause type and century. We see that, while the innovative construction emerges in past-marked subordinate clauses, it subsequently gains ground in present-marked main clauses in the 19th century. Finally, Figure 2 illustrates

¹⁷Here, 0 indicates the absence of the property, whereas 1 indicates its presence. More information on the texts can be found at <https://corpus.arnastofnun.is/leit.pl?info=2>. Rms-sitot designates examples that originate from *Ritmálssafn Orðabókar Háskólans*, the archive of written language for the dictionary of Icelandic compiled at the University of Iceland. This corpus can be queried independently at <https://ritmalssafn.arnastofnun.is/>.

Table 3: Frequency of *búinn* perfect in subordinate clauses expressing temporal sequentiality (18th century, *Íslenskt textasafn*)

Source	Century	SuB	Count	Total	Proportion
(ÆVISAGAN)	18	0	74	91	0.81
(ÆVISAGAN)	18	1	17	91	0.19
(campsid)	18	0	6	11	0.55
(campsid)	18	1	5	11	0.45
(eggbrud)	18	0	19	20	0.95
(eggbrud)	18	1	1	20	0.05
(klim)	18	0	13	28	0.46
(klim)	18	1	15	28	0.54
(martam)	18	0	11	18	0.61
(martam)	18	1	7	18	0.39
(Rms-sitot-18)	18	0	148	166	0.89
(Rms-sitot-18)	18	1	18	166	0.11

the time course of propagation for the *búinn* construction. Relative frequency is given in percentage of total words. It remains somewhat marginal until the early 19th century, never exceeding 0.5% relative frequency except for in one instance (*klim*), after which point many texts in IcePaHC either closely approach or surpass this threshold.

In Figure 3 and Figure 4, we see the proportion of *búinn* constructions (*búinn* followed by an infinitive) in the IcePaHC corpus relative to all perfect environments, that is in competition with *hafa*. The tokens are sorted by clause type: IP-MAT designates matrix clauses and IP-SUB designates subordinate clauses. The importance of past-marked subordinate clauses early on in the diffusion of the construction is apparent from these plots, as well.

2.3 The progressive in Icelandic: Diachrony

The Icelandic progressive conforms to a cross-linguistically established trajectory, emerging from a locative (Bybee et al. 1994) e.g. *vera að kirkju* ‘be at church’, *vera að smíðum* ‘be at building’ (Benediktsson 2002). Bybee et al. (1994: 129) observe within their typological dataset a tendency for progressive markers to originate from source constructions that are locative expressions of some kind. The authors write that such locatives are “probably ‘be in the place of verbing’ or ‘be

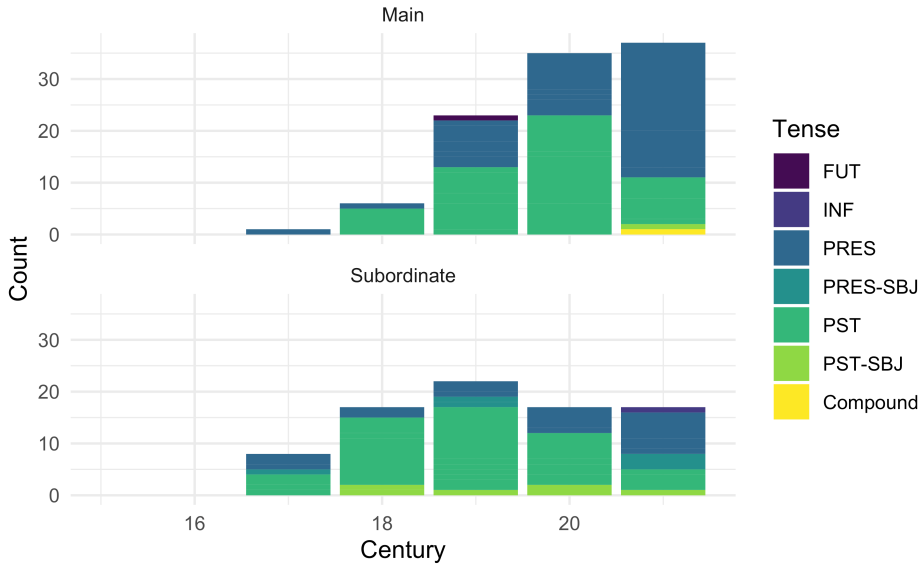


Figure 1: Clause type/Tense by Century in IcePaHC

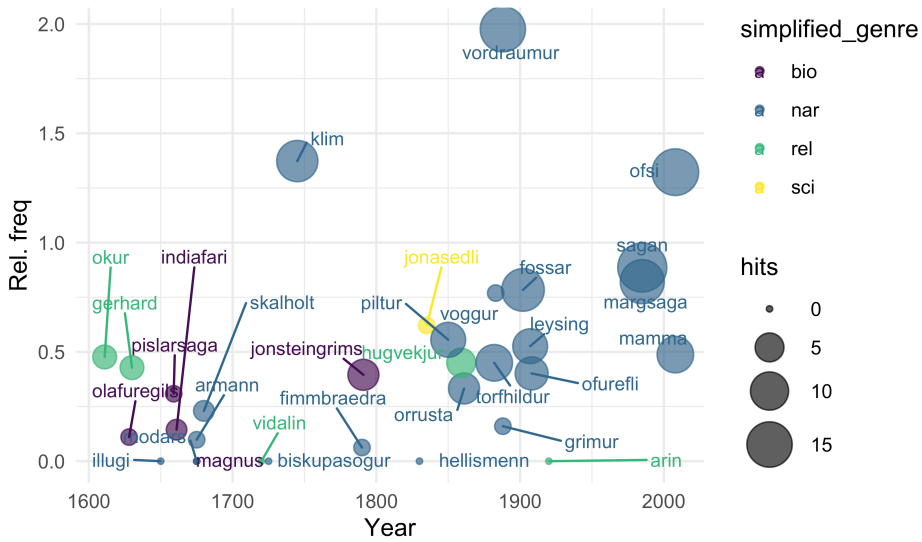
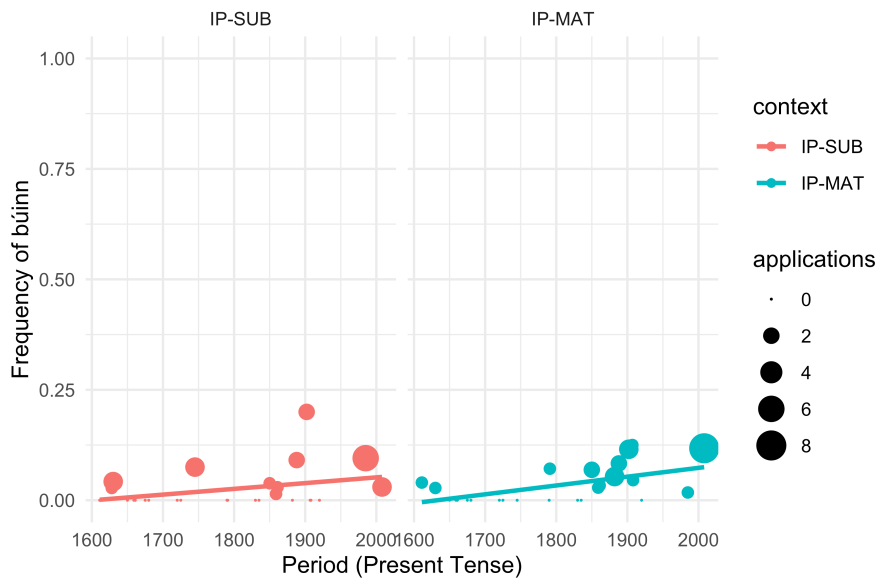
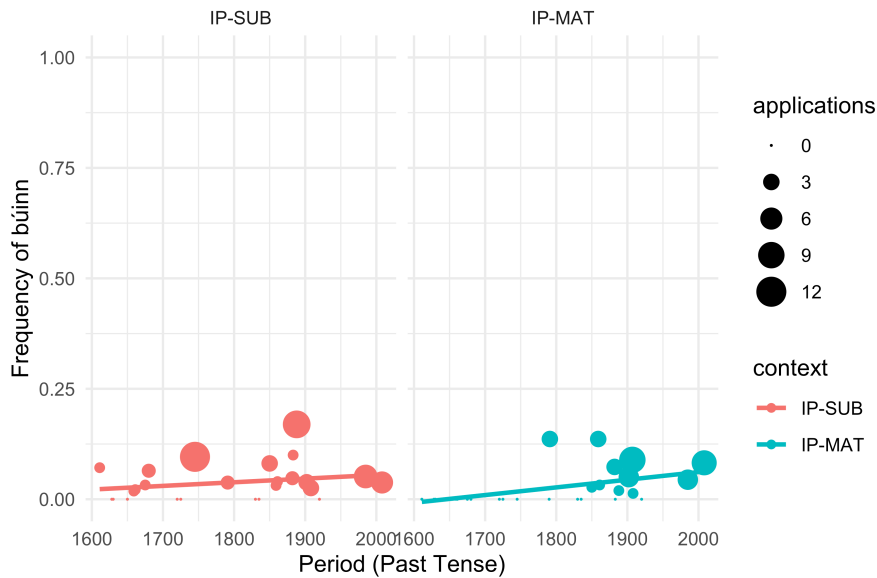


Figure 2: Time course of relative frequency of *búinn*+infinitive by text in IcePaHC, per 100 words. The anterior reanalysis occurs ca. 1600.



at verbing” (ibid. 130).¹⁸ This function then seems to have undergone metaphorical or metonymic extension, whereby the spatial concept of location within an activity is extended to the temporal domain.

The Icelandic progressive construction combines the copula *vera* ‘to be’ accompanied by double *að*, which functions as a preposition and infinitival marker. These fall together starting in the 14th century (ibid.).¹⁹ Progressive readings provide an *internal perspective* of an event (Landman 1992). This corresponds to ongoingness, since the bounds of an event’s inception or culmination are not taken into account.²⁰

Bertinetto (2000) propose two fundamental types of readings for progressive constructions across Germanic and Romance: focalised and durative. The focalised type is characterised predominantly by the presence of a focalisation instant, which provides a vantage point (*As X occurred, I was Y-ing*): the event’s ongoingness is viewed through a singular focal point. Durative progressives, by contrast, are evaluated relative to a larger temporal interval and are therefore often associated with adverbial phrases such as *during, until, and since* (Killie 2008: 76).

An early example of an Icelandic progressive which is plausibly, though not definitively, focalised is shown below in (12). The wider context provides a singular focalisation point through which this event may be viewed, namely the man picking up a bundle of cloth. However, the focal point for this could also be the more specific timeframe given by ‘when they were setting up the choir area’ (*er þeir tjölduðu sönghúsið*).²¹

- (12) *Menn voru að tjalda kirkju á einhverjum bæ.*
 people were to decorate church at some farm
 ‘People were decorating a church (with cloth) at some farm...’ (But when they were setting up the choir area, a man picked up a bundle of cloth from the floor near the altar...) [1210, JARTEIN-REL.SAG.2553]

Literature on the diachronic development of progressives cross-linguistically often assumes a progression from durative to focalised readings (Bertinetto 2000,

¹⁸That such a construction involves a copula is also cross-linguistically common, which is perhaps not surprising given the semantic import of copular predication.

¹⁹An anonymous reviewer asks whether this is due to phonological or, alternatively, phonetic fast-speech effects. As discussed by Benediktsson (2002), it is not entirely clear what the cause is. In any case, the doubled form is older (ibid.).

²⁰An additional resource regarding the development of the progressive is Nordling (1928). Its status in modern Icelandic is discussed comprehensively in Jóhannsdóttir (2011).

²¹The verb *tjölduðu* is past tense. It refers to the practice of decorating the walls of a church with cloth (Kern 2019: 27).

Bertinetto et al. 2000). Looking at Germanic in particular, Killie (2014) (see also Killie 2008) provides a quantitative investigation of the progressive in the diachrony of English through the Helsinki Corpus. The results in Killie (2014) demonstrate that, despite the fact that focalised progressives are more frequent than duratives in all time periods (Old, Middle and Early Modern English), one can observe an increase in the prevalence of focalised readings from one period to the next. This dataset is thus somewhat inconclusive: it is amenable to the proposal that duratives constitute an earlier stage, but this stage would have preceded the evidence in the corpus record. On the other hand, it remains possible that focalised and durative usages existed alongside one another from the earliest stages.²²

As for the progression in the history of Icelandic, I carried out a preliminary corpus investigation focusing especially on the transitional stage of reanalysis. To do so, I investigated the portion of *Íslenskt textasafn* (16-18th century sub-corpus) which includes the 16th century New Testament translation of Oddur Gottskálksson. This investigation was further supplemented by an assessment of the Old Icelandic examples discussed by Benediktsson (2002) in his article on the development of the periphrasis. We begin with the latter.

As we see below in Table 4, Old Icelandic differs from Old English in that durative examples are most common, with focalised usages coming in second. There are also a handful of indeterminate usages, which are somewhat ambiguous between durative and focalised. They do not clearly provide either a singular or multiple focal frame. Habitual usages are also represented in this corpus, as in Old English (cf. Killie 2008).

Moving now to the New Testament translation examples, I could find seven focalised usages, as opposed to one durative usage and two stative habitual usages. In (13), a focalised example is provided. The progressive construction *en á meðan þeir voru að búa til* ‘but while it was being prepared’ sets up a focal frame for what follows.

- (13) *Og er hann hungraði, vildi hann matar neyta. En á meðan*
 and as he hungered wanted he food consume but when
þeir voru að búa til, leið yfir hann brjósthöfgi og sá
 they were to prepare came over him breast:drowsiness and saw

²²A further complication is presented by the fact that in the Old English period include other usages, which appear to be non-aspectual. These include what Killie (2008) terms *narrative* progressives, which mark points of narrative climax for emphatic effect, as well as *stative* progressives, which denote “feelings, eternal truths, habits”. Habitual progressives resemble the latter and are classified separately by Killie (2008).

Table 4: Classification of progressive reading types in Old Icelandic examples listed by Benediktsson (2002)

Classification	Number of examples
Durative	15
Focal	10
Indeterminate (Indet)	8
Stative habitual	3

himininn opinn og ofan fara að sér disk nokkurn mikinn svo
the:sky open and from.above go to himself disc some great so
sem línlak í fjórum hyrningum upp bundinn.
as linen:sheet in four corners up bound

‘He became hungry and wanted something to eat; but while it was being prepared, he fell into a trance, and saw that the heavens were open, and that something like a great sail was descending, let down by its four corners towards the earth.’

(Acts 10; Nýja testamenti Odds, Íslenskt textasafn: Stofnun Árna Magnússonar í íslenskum fræðum 2023)²³

Below in (14), a durative example is shown. As opposed to the focalised example above, there is no singular focal point through which the progressive-marked eventuality is viewed. Instead, the event in question (*þeir voru að tala um alla þá hluti sem við höfðu borið* ‘they were talking about all those things that had taken place’) is viewed as “relative to a larger interval” (Bertinetto 2000: 527). In this instance, the larger interval in question is the journey from Jerusalem to Emmaus.

- (14) *Og sjá, að tveir af þeim gengu á þann sama dag til nokkurs*
and behold, that two of them went on that same day to some
kaupþúns það er var frá Jerúsalem rúms sextigi skeiða, hvert
village DEM.N REL was from Jerusalem about sixty measures which
eð Emmahus var að nafni. Og þeir voru að tala um alla þá
COMP Emmahus was by name and they were to talk about all those
hluti sem við höfðu borið. Og það skeði þá þeir ræddust
things which had occurred and it happened when they conversed

²³Translation from the Open English Bible (OEB Team 2022).

við og spurðust á sín í millum að sjálfur Jesús
and asked themselves between that himself Jesus
nálægist þá og gekk jafnframt þeim.
approached them and went alongside them

‘It happened that very day that two of the disciples were going to a village called Emmaus, which was about seven miles from Jerusalem, talking together, as they went, about all that had just taken place. While they were talking about these things and discussing them, Jesus himself came up and went on their way with them.’

(Luke 24; Nýja testamenti Odds, Íslenskt textasafn: Stofnun Árna Magnússonar í íslenskum fræðum 2023)²⁴

In conclusion, the corpus investigation at hand reveals that the development of the progressive periphrasis in Icelandic does not neatly fit the path described by Bertinetto. Rather, it more closely resembles what Killie describes for the diachrony of English, in the sense that durative, focalised, as well as stative, non-aspectual usages are represented in the earliest stage of the corpus. Moving forward a couple of centuries to the 1540 New Testament translation, it can be seen that focalised usages predominate, in contrast to the earlier texts discussed by Benediktsson (2002). Further investigation is needed into the details of this trajectory, but we can nevertheless establish that focalised usages became more entrenched in the language in the 16th century and beyond.

The IcePaHC corpus was queried for the progressive construction. Given the form of the construction, there is potential for false positives: combinations of the copula and infinitival marker show up in other environments (e.g. *Það er að segja* ‘that is to say’). It was therefore necessary to manually sort out valid instances: I manually tagged tokens which could receive a focalised interpretation. The results are displayed in Figure 5 (clause type and tense by century) and Figure 6 showing the timecourse of propagation.

As in the case of *búinn*, *PROG* remains relatively infrequent until the early 19th century. Focusing on our period of interest, what stands out is the higher frequency of subordinate instances in the 16th and 17th centuries. Though numerically the difference is not large, I would like to argue that these subordinate instances are especially important for the establishment of the focalised usage. This is due to the fact that temporal subordinate clauses provide the appropriate frame for focalisation. In summary, we see that, despite the presence of modern-like focalised usages of the *PROG* construction as early as the 13th century, it does not become established in the language until much later.

²⁴Translation from the Open English Bible (OEB Team 2022).

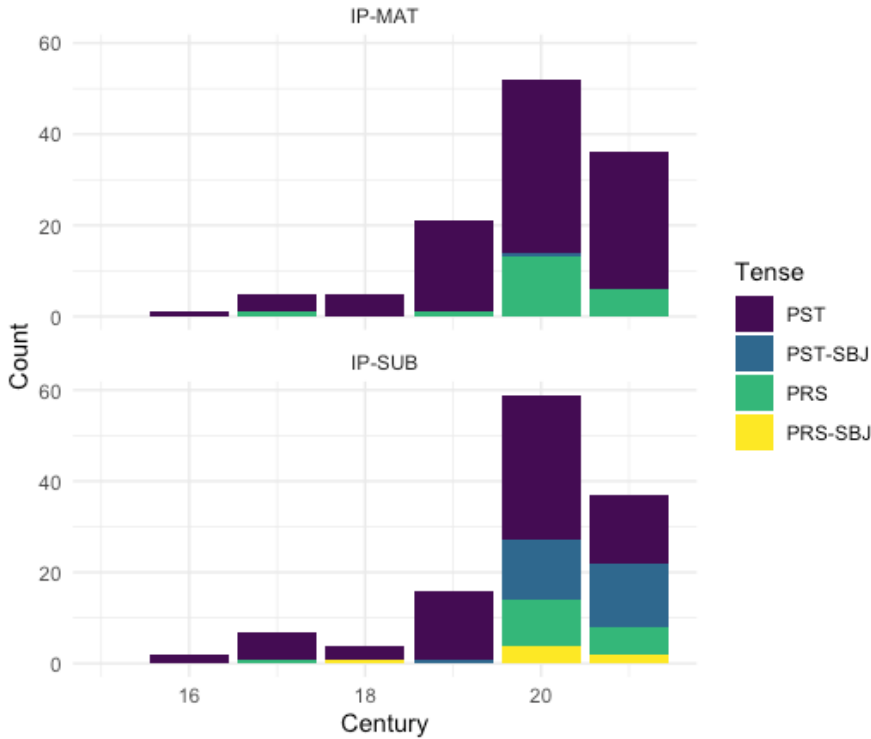


Figure 5: Clause type/Tense by Century in IcePaHC

To better understand the status of the progressive in the early modern period, I also examined attested examples of the construction in the New Testament translation by Oddur Gottskálksson (1514–1556) in *Íslenskt textasafn*. Oddur, while a user of the focalised construction, does not use it in some instances where it would be obligatory in modern Icelandic. Helgason (1929: 135–136), for instance, writes that Oddur uses the progressive “not quite as much as would be done today”. Later authors represented in this corpus, such as Jón Ólafsson úr Grunnavík (*Nikulás Klím*) and Jón Steingrímsson (*Ævisaga Jóns prófasts Steingrímssonar*) in the 18th century, both have a progressive in their grammar with a division of labour which resembles the modern usage. Future research is necessary in order to map out the diffusion of the progressive construction in the language, on the path towards obligatoriness in focalised instances. A classification of progressive instances in IcePaHC (manually tagged) broadly supports this view, as shown in Figure 7.²⁵

²⁵Note that only unambiguously focalised cases were counted, so the 13th century example discussed in Figure 12 is not classified as such.

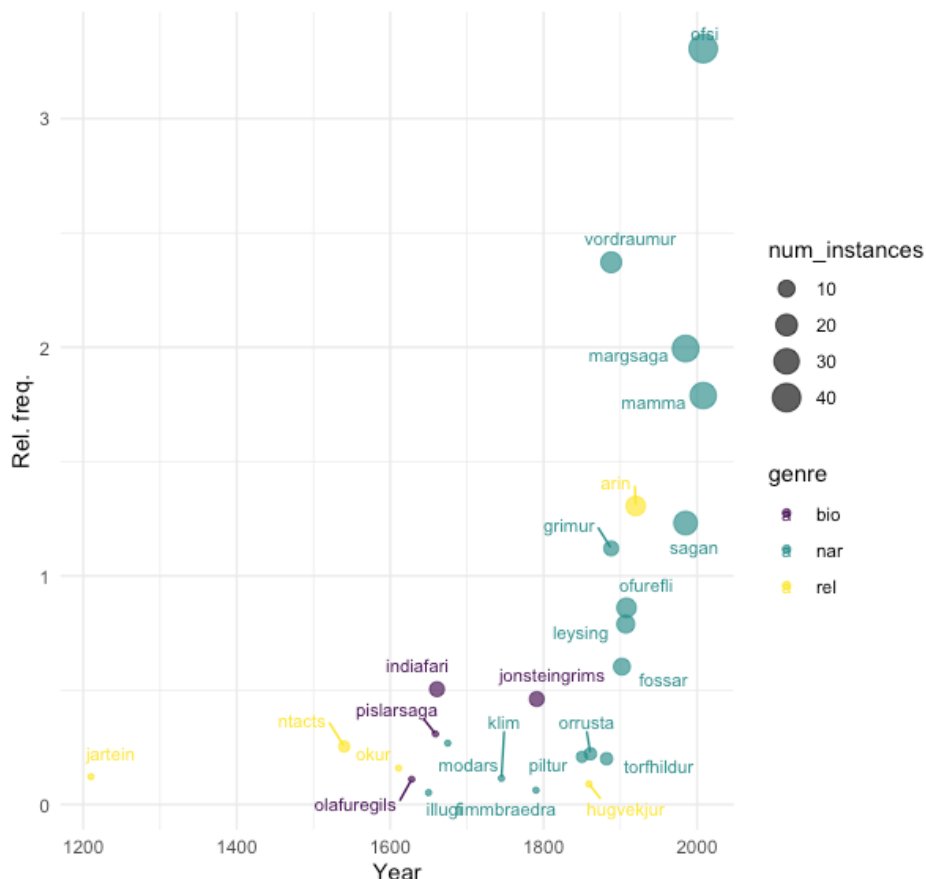


Figure 6: Time course of *búinn*. Relative frequency over time in IcePaHC (by text)

3 Tracing discourse traditions in the Icelandic context

In the following section, I argue that a shift in conventionalised strategies for structuring events and their overlap in narrative can be traced through the prominent discourse traditions of the early modern Icelandic period and that this shift is represented in our corpus evidence of the grammar of the language. Section 3.1 introduces the term *discourse tradition*. Section 3.2 discusses the outset for our investigation, the saga style narrative prominent in the corpus of Old Icelandic prior to 1540. Section 3.3 discusses the 17th and 18th century memoirs and travelogues which are an intermediate stage, I argue, with regard to the question of

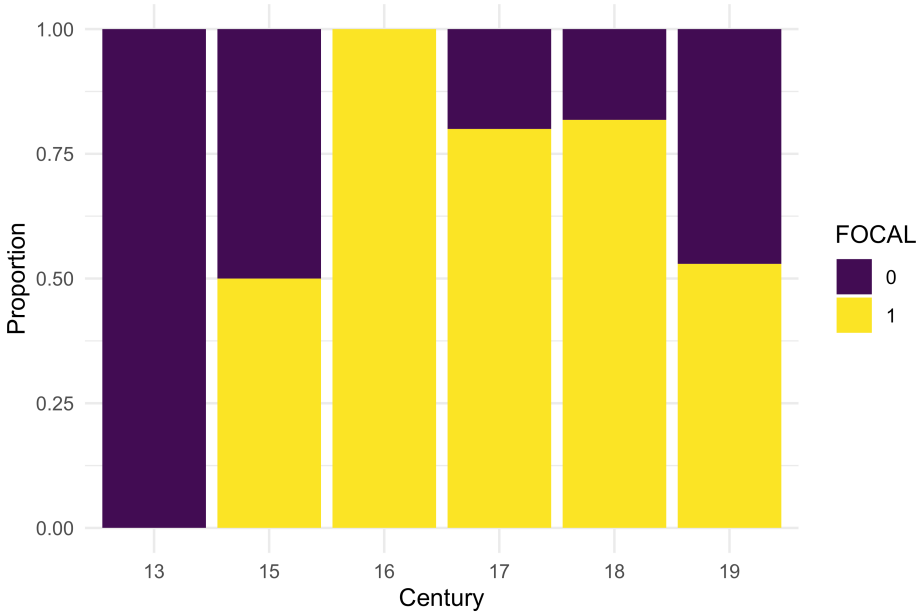


Figure 7: Progressives in IcePaHC prior to 1900 classified according to *focalisation* (n=68)

boundedness. Finally, Section 3.4 discusses the relationship between narrative traditions and orality.

3.1 On discourse traditions

Linguistic form has conventionalised associations with situations of language use, associations which are themselves always subject to change – these are what Koch (1987) calls *discourse traditions* (henceforth: DT).²⁶ As Kabatek (2022) spells out, changes can occur from within a certain discourse tradition and spread to others from there. The notion of DT as proposed by Kabatek (2022) is somewhat more expansive than the view espoused by Labov (1972: 123) who conceives of changes as either originating *from below* (common vernacular) or *from above* (prestige varieties). In the DT framework, language diachrony is modeled as consisting of developments parallel to one another temporally but differing in the degree to which they are conventionally tied to situations of language use.²⁷

²⁶This discourse tradition model effectively adds a diachronic dimension to the notion of “register”, which can be defined as “those aspects of socially recurring intra-individual variation that are influenced by situational and functional settings” (Lüdeling et al. 2022: 3).

²⁷Kabatek (2022) assumes a continuum of situations from communicative distance to communicative immediacy (Koch & Oesterreicher 1985).

In what follows, I will advance the claim that discourse traditions surrounding Icelandic narratives, specifically how speakers construe events and their overlap in written language, underwent a shift between the 16th century and today.

A prominent discourse tradition of the Old Icelandic period is termed *saga*-style, as it is exemplified by style found in the *Íslendingasögur* ('Sagas of the Icelanders'). This style has a number of characteristics pertaining to the mapping between grammar and discourse structure: it is described by Hauksson & Óskarsson (1994) as being 'common' (*alþýðustíll*); 'learned' (*lærður*) characteristics are not prevalent.²⁸ The representation of events in *saga* style narrative is iconic: events are described in the order in which they occur. Relations between events are left largely underspecified. Thus, on the whole, texts of this sort are dominated by relatively brief matrix clauses, strung together paratactically (e.g. with the coordinating conjunctions *ok* 'and', *en* 'but', or non-coordinating, e.g. *þá* 'then', *nú* 'now', *síðan* 'since').

The way in which word order transformations map onto pragmatic functions resembles modern Icelandic, but there are some differences (Holm 1958, Hauksson & Óskarsson 1994). Two ways in which the older system differs from the modern one are with regard to the frequency of V1 and with regard to stylistic fronting (movement of constituents to the left periphery which otherwise are base generated in the post-finite domain). Booth & Beck (2021) link both of these changes to the emerging status of a dedicated subject position. The authors (*ibid.*) also observe, in the IcePaHC corpus, a temporally concomitant decrease of non-subject initial V2 clauses – on the whole, it becomes increasingly dispreferred for subject topics to appear post-finitely: their corpus evidence (from IcePaHC) points to a period of considerable intertextual variation around 1600, in which religious and biographical texts, as opposed to narratives, pattern in the opposite direction, which then gives way to a constant decrease in frequency.

For concreteness, I assume that both the progressive and the *búinn* perfect are first reanalysed prior to or at the early stages of the shift in boundedness. The circumstances that allowed for reanalysis (or supported the subsequent early entrenchment of the novel constructions) are independent of the shift in boundedness.

What is the relationship between changes in the language system on the one hand, and changes in norms surrounding narrative on the other?²⁹ Language-specific properties have been shown to influence the way events are conceptualised and subsequently expressed linguistically: there exists experimental ev-

²⁸'Common' refers to the language of the common people.

²⁹Thanks are due to an anonymous reviewer for prompting me to elaborate on this point.

idence for this in production/comprehension from monolinguals (von Stutterheim & Nüse 2003) as well as in acquisition (Carroll & Lambert 2003, Flecken et al. 2013). That is to say, if there exists a conventionally coded (grammaticalised option) distinction in a given language, it is more likely to be used than if only alternative, less conventionalised means, are available. Such work is couched within Slobin's (1994) "thinking for speaking" hypothesis, which adopts the perspective that linguistic variation in terms of what is conventionally coded and that which is not serves as a kind of interface between the level of abstract conceptualisation and linguistic production (Levelt 1993). While "macro-planning" (ibid.) refers to the process where speakers determine what it is they want to say, "micro-planning" involves, among other things, the decisions a speaker makes in terms of intra- as well as inter-clausal relations, such as the use of referring expressions and whether to use coordinating or subordinating discourse relations (Asher & Vieu 2005).

There is, on the whole, considerable converging evidence regarding language-specific properties and their consequences for information packaging from cross-linguistic comparison in monolinguals (e.g. Starren 2017), acquisition (e.g. Schmiedtová et al. 2011), bilingualism (e.g. Daller et al. 2011) and in historical-typological research (Starren 2017). To summarise: the available evidence in the literature appears to support a view according to which language-specific properties, defined by which conceptual distinctions receive conventional encoding, result in a given language's propensity for bounded or unbounded construals.

As touched on above, I assume that certain discourse traditions can become conventionally associated with certain linguistic co-occurrence patterns (Kabatek 2022) (lexical and grammatical), which I assume occurs via a process of entrenchment (as conceived of by e.g. Schmid 2015). Saga style carries with it conventionalised associations to co-occurrence patterns of lexical, grammatical and structural characteristics.³⁰ Discussing the structure of the Icelandic family saga, Andersson (1967: 33) writes: "There is no such thing as a digression [...] All the episodes are linked in a sequence leading up to the climax or leading down from it. This is a fundamental rule and is the key to saga economy". The highly paratactic nature of saga style is characterised by relatively minimal temporal backtracking or divergence from the main narrative storyline: "even with the most artless story-telling in the paractic style, however, there will always be greater or lesser degrees of syntactic divagation from the straight line of

³⁰As pointed out by an anonymous reviewer, saga style is typically conceived of as a written norm, which is partially what enabled the revival of some of its characteristics in modern Icelandic narrative style.

narrative events” (Amory 1980: 392). Such divergences, in narrative generally, serve evaluative functions (cf. Labov & Waletzky 1967: 26–35) and as argued by Amory (1980), saga writers used a number of stylistic devices to insert their evaluation into the narrative despite being “notoriously non-committal about their opinions” (Amory 1980: 394). The paratactic style is well-suited for such non-committal, minimally evaluated narrative.

“Saga style” refers here to what is termed “popular style” and typically contrasted with “learned style”, the latter abounding with Latinate characteristics (Nygaard 1905, Kristjánsson 1985, Hauksson & Óskarsson 1994, Smári 1920). Latinate characteristics, as touched upon earlier on in this paper, include the appositive use of present participles and absolute constructions (*dativus ablativus*), both of which represent devices for communicating temporal sequentiality and overlap, with these specific grammatical devices presumably being favoured due to translation influence (cf. Brendel 2023). This distinction between learned characteristics on the one hand and popular ones on the other thus provides an avenue for characterising the predominant discourse traditions in Icelandic prior to the 16th century. Already at this stage, we observe divergences between these traditions in the way in which events are structured. This seems to be shaped by the available grammatical means; translation influences led to the use of constructions which were presumably less frequent/conventionalised in the spoken vernacular but rendered more salient due to the influence of Latin, which in turn could impact the subsequent development of the language (within this particular discourse tradition and beyond, cf. Wagner et al. 2013 on scribes as agents of language change).

Our picture of the diachronic developments of a language are inevitably skewed by available corpus evidence. For Icelandic, the evidence furnished for different periods is shaped by dominant discourse traditions including the influence of conceptual orality/writtenness (cf. Koch & Oesterreicher 1985). The prevalence of aspectual expressions is, for instance, often tied to narratives in contrast with expository texts (Ragnarsdóttir et al. 2002). Overall, I think the corpus evidence has to be carefully considered in tandem with the socio-historical processes that shape discourse traditions.

The diachrony of Icelandic provides a powerful case study for the role of emerging norms and cultural processes in shaping discourse traditions. The modern literary standard begins to take shape in the 19th century with a concentrated effort to bring the language closer to the narrative style of the sagas (Bernharðsson 2017, 2018). Having now given some background on the norms surrounding written narratives for Icelandic, I now proceed to discuss narrative structure in more detail. This lays the groundwork for the discussion in Section 4, where I

argue that Icelandic displays a shift towards unboundedness between the 16th and 19th centuries.

3.2 On narrative structure

Narratives can be segmented into episodes, which are a level of textual organisation situated between the smaller sentence-level and larger discourse-level (van Dijk 1976, Enkvist & Wårvik 1987, Fleischman 1990). These episodes are characterised by thematic or temporal coherence and episode transitions thus correspond to transitions of location, participants, perspective, among others. Episode transitions are commonly marked linguistically (Brinton 1996, Wårvik 1995): for instance by spatial or temporal adverbials or tense alternations.

Narratives in the saga style have a formulaic structure, often linked to their oral origins (Hauksson & Óskarsson 1994). Narrative episodes often begin, for instance, with formulaic introductions and scene setting, which then transitions into the description of a series of events (Clover 1974). Tense alternations are very common: past tense alternates with historical present, the latter giving the sense of the primary focus of the narrative episode coming more clearly into focus (Fleischman 1985).

The way in which episode boundaries are marked overtly relates to the notion of grounding (Hopper 1979). The foreground is, most basically speaking, comprised of those events which comprise the main storyline – everything else is background. On the whole, one can distinguish between the linguistic expressions most associated with backgrounding and foregrounding, though these are non-deterministic correlations (Brinton 1996: 49). Adverbial clauses, the primary environment of interest, are frame setters (Talmy 1978) – they signal continuity in a “temporal line” (Fleischman 1985).

The two expressions in question, *búinn* and *PROG*, pattern with other imperfective elements in that they communicate temporal overlap and serve to reorient the reader to the narrative timeline (Fludernik 2012). They are backgrounded in the sense that they do not advance this timeline but rather have the function of providing “guideposts” for the reader (Chafe 1984). However, they differ from prototypically backgrounded elements in that they can provide new information (Reinhart 1984, Fleischman 1985) and are therefore well-suited to beginning a novel narrative episode. In the case of progressives, their focalised usage most clearly has this function, setting up a new temporal frame, which establishes a new topic time (in the sense of Klein 1994) as a vantage point through which

subsequent events are viewed (see e.g. the example in 23).³¹ Likewise, the *búinn*-perfect often functions as a frame-setting strategy where it appears in temporal adverbial clauses, which typically serve to bring the reader up to date, setting the stage for what can subsequently occur (see e.g. 21).

3.3 17th and 18th century memoirs and travelogues

Travelogues and memoirs of the 17th-18th century combine so-called *lærður stíll* ‘learned style’ and *alþýðustíll* ‘common/popular style’ (Hauksson & Óskarsson 1994).³² These texts contain dialogues and indirect speech reminiscent of earlier styles, specifically saga writing. Direct event descriptions are often paratactic and iconic. Characteristics associated with the learned style are also present, however, including expository passages (usually interpreting events described) with high levels of subordination (*ibid.*). These travelogues and memoirs additionally exhibit influence from Low German and Danish due to language contact. This influence has been under-researched and is not well understood, though it is undeniably strongly present in texts of this genre at all linguistic levels (e.g. syntax and lexicon) (Ottósson 1990, Hauksson & Óskarsson 1994, Sigmundsson 1998).

It is precisely these texts, as far as our corpus dataset is concerned, that constitute the bridge between saga-style narratives and the emerging modern literary standard, as, for instance, reflected in Jón Thoroddsen’s novels (Bernharðsson 2018). These texts are also the first in the corpus to exhibit frequencies of *PROG* and *búinn* which exceed 0.25% (overall relative frequency).

3.4 Adverbial clauses and orality

As we move forward, we will see that as the predominant narrative style changes, there is a consequent shift from a mainly iconic, strictly chronological representation of events to other new strategies for construing event sequentiality as reflected in clause structure, namely overt grounding by means of (predominantly preposed) temporal adverbial clauses. Contrasting the two poles, hypotaxis is less dependent on the inference of causal and temporal relations, as these are now expressed. Saga style is quite sparse in these terms. Haiman (1985: 39–71) claims that there can be a kind of trade-off between linear order and other mechanisms

³¹This is in accordance with the definition of frame setters given in Krifka (2008: 270): “the frame setter indicates that the information actually provided is restricted to the particular dimension specified.” Focalised progressives (e.g. in *when*-clauses) restrict the following clause on the temporal dimension.

³²Texts in IcePaHC with such characteristics include: *Nikulás Klím, Ævisaga Jóns Ólafssonar Indíafara*, *Reisubók séra Ólafs Egilssonar* and *Píslarsaga Jóns Magnússonar*.

which convey the way in which clauses relate to one another. This is roughly the line of analysis which I pursue here. In a predominantly unbounded system, the functional domain previously occupied by local anchoring adverbials (by means of tail-linking: Los 2012) gives way to new strategies: backgrounded, temporal clauses situate events within a global topic time.³³

Wårvik (1995) and Brinton (1996) posit that an analogous shift in OE – from main clause constructions to subordinate *whan* clauses – constitutes such a shift.³⁴ Brinton (1996: 179) argues that an increase in subordination reflects the higher degree of “integration” reflected in (conceptually) written language, thus correlating with a degree of plannedness (cf. “thinking for writing” in the terms of Slobin 2003).

Corpus work on register variation broadly supports this general view but the picture is not straightforward: adverbial subordination is characteristic of written expository registers in PDE, however, it also correlates with the “interactive” dimension of oral communication (Biber & Conrad 2005). Walkden (2021) investigates the ratio of hypotaxis to parataxis in IcePaHC. He finds that saga texts exhibit most parataxis on average. Religious and non-fiction texts exhibit the highest degree of hypotaxis, especially in the 17th-19th centuries.

4 From boundedness to unboundedness

4.1 Motivation behind approach

The main idea behind the approach pursued in this paper is as follows: A fundamental shift in mapping between clause and discourse/information structure occurred in the diachrony of Icelandic, with consequences for the expression of aspect. To date, scholarly work in this area has focused on the syntactic reflexes of these changes (Holmberg 2000, Sigurðsson 2018, Hróarsdóttir 2000, Booth 2018, Booth & Beck 2021). In what follows, I will show that the emergence of *búinn* and *PROG* was a consequence this broader shift in mapping to clause structure.

The syntactic reflexes of this shift are often discussed together in the literature, especially in reference to the relationship between the pre-finite position and subjecthood (Jónsson 1992, Barðdal & Eythórsson 2003, Booth & Beck 2021).

³³The bounded/unbounded distinction as conceived of by Carroll & Lambert (2003) must be conceived of as a gradient of preferred ways in which to structure narrative. It is not absolute nor is it assumed that all situations of language use behave identically in terms of preference for boundedness.

³⁴Middle English *whan* corresponds to PDE *when*.

These include a decrease in *Stylistic Fronting* (when, in clauses with a gap, non-subject XPs are fronted to the pre-finite position) (Holmberg 2000), a decrease in V1 declaratives (Sigurðsson 2018, Booth & Beck 2021), as well a decrease in argument drop, accompanied by an increase in the expletive element *það* (Rögnvaldsson 1995, 2002, Booth 2018). Booth (2021) argues that this shift can be understood at least partially in terms of the emergence of SpecIP as a dedicated subject position; the inflection point for this change is determined to be between 1500-1700 (based on IcePaHC).

What is novel in the present approach is its ability to explain otherwise puzzling facts, such as the time course of propagation of these aspectual constructions. I argue that these can be better understood if one takes the shift in discourse structuring as fundamental. This shift led to fertile ground for emerging aspectual constructions to conventionalise.

How can the shift be characterised more broadly, moving beyond the syntactic phenomena more often discussed? My claim is that the shift in mapping between form and discourse structure in the history of Icelandic represents, more broadly, a shift from a predominantly “bounded” system for expressing narrative to a predominantly “unbounded” one (for related work on the diachrony of English (Petré 2010, 2014, Los 2012, Fanego 2024).

4.2 (Un)Boundedness

What is the notion of “boundedness” that I use here? von Stutterheim et al. (2012, 2002) propose, on the basis of psycholinguistic experiments, an account of how the grammatical system can constrain how events are expressed in narratives: Bounded language invokes a series of completed events strung together one after the other in a sequence, while unbounded language views events in terms of their co-articulation within an overarching topic-time. Bounded construals thus broadly correspond to perfective/telic eventualities and unbounded ones to imperfective/atelic (Kupersmitt 2015).

Contrasting modern day English and German, the former seems to prefer unbounded construals, and the latter bounded ones, for constructing narrative sequences (von Stutterheim & Lambert 2005, Berman & Slobin 1994). There are other linguistic reflexes of boundedness which are discussed in this literature (von Stutterheim & Lambert 2005, Kupersmitt 2015): German, for instance, makes heavy use of topic-time adverbials and scene-setting on the left periphery which allows for anaphoric continuity. On the other hand, English makes little use of such topic-time adverbials, instead the determination of topic-time

is often context-dependent and there is more focus on overtly marking the co-articulation of events within the interval provided by topic-time.

Older Germanic more closely resembles modern German than English. The linguistic reflexes present in these languages include heavy use of topic-time adverbials and word order transformations for anaphoricity/discontinuity (Los 2012). The bounded-unbounded transition in the history of English is reflected in the loss of these topic-time adverbials, and the loss of V2 (*ibid.*).³⁵ An increase in the frequency of aspectual constructions could be observed: the progressive *BE - ende*, the ingressive aspectual verb *beginnan* (Petré 2010, Los 2000). Alongside these latter changes one also observes an increase in preposed *whan*-clauses (Brinton 1996: 169–172). The relevance of work on English for the Icelandic data is discussed later in this paper (Section 5.1.1). We turn now to the data from successive stages of Icelandic, demonstrating the language’s shift from a bounded to unbounded system.

4.2.1 Old Icelandic as a bounded system

In this section, I argue that Old(er) Icelandic (prior to 1540) is a language which exhibits a strong preference for bounded construals, in the sense of von Steutterheim et al. (2002). In order to discuss the ways in which this is reflected in the grammar, I begin by describing the basic characteristics of Old Icelandic grammar. Icelandic is at all stages a strictly V2 language. The question of what may be considered the basic or unmarked word order in Old(er) Icelandic is not entirely straightforward, as SVO and SOV co-exist for many centuries (Sigurðsson 1988, Rögnvaldsson 1994, 1995, 1996) – the latter only disappears entirely in the 19th century (Hróarsdóttir 2000). Icelandic at all stages makes heavy use of transformations for pragmatic purposes, including operations such as topicalisation, extraposition, and verb-initial orders (Faarlund 1990, Booth 2021). Old(er) Icelandic can, in fact, be considered to have Topic-Verb-Subject word order (Nielsen 2017).

Verb-first orders are used for discourse cohesion in order to express anaphoric continuity (Booth & Beck 2021), often termed “Narrative Inversion” (Platzack 1985). In narrative sequences, this results in continuity along the main line of narration.³⁶ Additionally, there is an argument to be made that the pragmatic

³⁵Note, however, that there are alternative perspectives on the loss of V2, e.g. Haeberli (2002) who reduces the change to a consequence of a loss of inflectional morphology or Speyer (2010) who proposes a primary role for prosodic factors. I thank an anonymous reviewer for making this point.

³⁶On the relationship between narration and topic anaphoricity in the diachrony of Icelandic, see Booth & Beck (2021: 20). Relatedly, Kinn et al. (2016) discuss the connection between V1 and null subjects.

effect of V1 is preserved even when the surface word exhibits V2; this is the case in the presence of the coordinating conjunction *ok*³⁷ (which may also resemble an adverbial, see Nielsen 2017) as well as the adverbial *þá*. For the purposes of this paper, I treat V1 clauses as parallel to those introduced with *ok* and *þá* as far as their relationship to the main narrative line is concerned: they are foregrounded and move the narrative timeline forward temporally (Enders 2001, Donhauser et al. 2006).³⁸

Further evidence for the status of Old(er) Icelandic as having been predominantly bounded comes from Leiss (2000) who discusses V1 as covertly signaling aspectual value: perfectivity. Leiss builds on previous literature (e.g. Rieger 1968, Kossuth 1980) which develops the view that V1 is used to convey successive events, such as in battle descriptions found so commonly in the saga literature. Leiss (2000: 95) argues that certain syntactic contexts can coerce a perfective interpretation where the underlying verb is ambiguous (“aspectually polysemous” in her terms). These contexts include: V1, historical present, proximity to definite articles and the presence of perfective adverbials (cf. Richardson 1995).

The following passages are taken from *Finnboga saga ramma* (mid-14th century, present in IcePaHC) and serve to illustrate the core characteristics of saga-style narrative. The passage below sets the scene for what is to come: a tail-linked topic-time adverbial *um sumarið* ‘during the summer’ provides a local anchor for what follows. The second sentence is V1, maintaining that the event directly succeeds the one in the first sentence. Here, a perfective interpretation is most natural for the verb phrases in both sentences, though one is in historical present and the other is past-marked V1, in accordance with Leiss’ claims.

- (15) *Um sumarið býr Bergur skip sitt og ætluðu þau að sigla.*

during summer prepare Bergur ship his and intended they to sail

Lætur Finnbogi flytja varnað þeirra til skips.

lets Finnbogi move goods their to ship

‘During the summer, Bergur prepared his ship and they intended to sail.

Finnbogi had their goods moved to the ship.’

[1350, FINNBOGI.NAR-SAG, 1851-4]

The passage which follows is similar in structure; the adverbial phrase *og er Bergur er búinn* ‘and when Bergur is ready’ establishes a local topic-time. This is followed by a V2/V1 alternation in the next two sentences, indicating a shift in

³⁷Old Icelandic *ok* corresponds to modern Icelandic *og*.

³⁸For work on discourse adverbs with similar function in the diachrony of English, see van Kemenade & Los (2006). For Old High German, see Trips & Fuß (2009).

subject-topics. The concluding V1 sentence is most naturally construed perfectively: their riding has a concrete endpoint.

- (16) *Og er Bergur er búinn ríða þeir Finnbogi og Þorkell með honum.*
 and when Bergur is BÚINN ride they Finnbogi and Þorkell with him
Hrafn hinn litli fór og með nokkura klyfjahesta. Ríða þeir þar
 Hrafn the little went and with some pack:horses Ride they there
til er þeir koma mjög svo vestur af hálsinum Hrútafjarðarhálsi.
 until when they come very so west off the:ridge Hrútafjarðarháls
 ‘And when Bergur is ready, they, Finnbogi and Þorkell, ride with him.
 Hrafn the little went and [took] with him some pack horses. They ride
 there until they come very far west off the ridge of Hrútafjarðarháls.’
 [1350, FINNBOGI.NAR-SAG, 1855-7]

A few passages later, following an exchange in direct speech, the storyline continues in a typical manner with the local topic-time anchor *þá* ‘then’ followed by a chain of perfective events marked in past tense, expressed paratactically with the coordinating conjunction *og* ‘and’.

- (17) *Þá hljópu fram tveir menn með vopnum og tóku hestana og*
 then jumped out two men with weapons and took the:horses and
leiddu upp undir brekkuna.
 led up under the:slope
 ‘Then two men jumped out with weapons, took the horses, and led them
 up under the slope.’
 [1350, FINNBOGI.NAR-SAG.1863]

In sum, we have seen that narrative in the saga style exhibits the characteristics of a bounded system: Tail-linking (use of local topic-time adverbials at each discourse turn, cf. Los 2012) is prominent; sequences of events are construed perfectively as though in a continuous chain of self-contained events which move the timeline forward.³⁹

4.2.2 17th–18th century Icelandic as an intermediate system

In Section 3.3, I introduced the linguistic characteristics of 17th and 18th century memoirs and travelogues, which I argue constitute an intermediate stage in Icelandic’s shift from a predominantly bounded to a predominantly unbounded system. To illustrate this, I draw on some passages from the memoir of Jón Ólafsson

³⁹‘Prominent’ is a relative term; the decrease in tail-linking is discussed in quantitative terms in 5.2.3 below.

Indíafari (1661) (Ólafsson 1908) and the *Nikulás Klím* translation by Jón Ólafsson of Grunnavík (1745) (Holberg 1948).⁴⁰ We begin with an excerpt from Jón Ólafsson *Indíafari*: a scene-setting passage which establishes a global topic time (a Saturday in 1617 in Copenhagen). Notable in this passage is the use of extensive hypotaxis as well as the use of the progressive in the final sentence *og voru að spássera þar um grundirnar* ‘and were strolling around the fields...’, which does not move the global topic-time forward.

- (18) *Einn tíma bar svo við 1617 um sumarið, á einum*
 one time happened so in 1617 during the:summer, on one
torgdægi sem var laugardag, að einn maður, Jens að nafni, sá eð
 market:day which was Saturday, that one man, Jens by name, who rel
var nýgiftur einnri frómri dándiskvinnu og bjó í Litla
 was newly:married a.DAT pious lady and lived in Little
Ferjustræti í Kaupinhafn, var út genginn fyrir borgina um
 Ferry:street in Copenhagen, was out walked outside the.city through
Vesturport með einum frómum borgara og voru að spássera þar
 West:gate with a distinguished citizen and were to stroll there
um grundirnar, sem bændurnir skyldu fram um fara, þeir
 around the:fields, which the:farmers should forward around go, they
eð áttu heima uppá landsbyggðinni
 who lived up:in the:countryside
 ‘One market day, a Saturday, in the summer of 1617, it happened that a
 man, by name Jens, who had recently married an excellent lady and lived
 in Lille Færgestræde in Copenhagen, had left the town by the Western
 Gate with a worthy citizen. They were taking a walk on the plain crossed
 twice a week by the farmers who live in the neighbourhood, on their way
 to the market-place in the town.’ (Ólafsson 1908: 38)⁴¹

The above passage continues as shown in (19), exhibiting both unbounded and bounded characteristics. The passage begins with an inchoative construction *upphóf að* ‘began to’, situating the event of Jens pelting the farmers with horse dung within the global topic-time of their stroll around the fields. A sequence of bounded events begins once it is specified that a certain farmer is struck by Jens’ insults: *En með því að hann mjög svo kenndi undan hans áköstum* ‘Now as he was hurt by the pelting...’. This is the moment of inception for the farmer to react, establishing a new topic-time at which the farmer jumps forth to attack Jens.

⁴⁰ A large excerpt of the Klím text is present in the *Textasafn* corpus, including pages 1–251.

⁴¹ Translation from Ólafsson (2017: 95)

- (19) *Þessi ungi borgari, Jens að nafni, upphóf eftir gamalli*
 DEM.NOM.M young citizen, Jens by name, began according_to old
venju að grýta bændurna með hestaperum, þar til þessi drukkni
 custom to mock the:farmers with horse:dung until this drunk
bóndi varð fyrir hans kasti, hrópi og spottyrðum. En með
 farmer became for his throws shouts and insults but with
 því að hann mjög svo kenndi undan hans áköstum og þar með
 DEM.DAT.N that he very so felt from his attacks and with that
illa sveið hans hæðni, og var í þessu óaflátsamur og með engu
 badly stung his scorn and was in this unyielding and with no
móti hirti um hins annars borgarans umtölur né afletjan,
 way heeded of DEM:GEN other:GEN citizen:GEN words nor distraction
hljóp úr vagninum með ryðugan korða, sem bændur plaga
 jumped out.of.the:cart with rusty sword.M which farmers tend
þar án bals liggja láta, og strax hann með honum í
 there without sheath lie let and immediately he with he.DAT
gegn nísti.
 against struck

‘The young citizen, Jens, according to his time-honoured custom, set to pelting the farmers with horse-dung, and finally the drunken farmer became the object of his aim and taunts. Now as he was hurt by the pelting, and at the same time smarted sorely under the taunts, with which the other moreover continued to ply him, paying no heed to the advice and dissuasion of his fellow-townsmen, the farmer leapt down from his cart with a rusty sword such as farmers use to have lying in their carts without a sheath; ran him through with it...’ (Ólafsson 1908: 39)⁴²

The narrative continues with a series of bounded events reminiscent of saga style. A series of perfective events are construed in sequence, moving forward the narrative timeline: The farmer leapt, Jens fell dead, the news is carried into the city, Jens’ body is collected and buried at St. Nicholas cemetery. The alternation between V1 and V2 in the passage in (20) resembles saga texts: An anaphoric subject topic is maintained across the V1 clauses and V2 is used to signal a shift in this topic (*Hljóp svo ... Hinn féll ...*). These events take place in a bounded sequence each moving forward the local topic time.

⁴²Translation due to Ólafsson (2017: 95–96)

- (20) *Hljóp svo á sinn vagn og burt keyrði. Hinn féll þar strax*
 jumped then on his cart and away drove DEM.M fell there immediately
dauður niður til jarðar. Borgarinn hinn annar bar þessi tíðindi
 dead down to ground the:citizen DEM.M other brought these news
í borgina. Var hann svo sóttur og inn fluttur og að morgni
 into the:city was he then fetched and in brought and at morning
greftaður uppá Sankti Nikulás kirkjugarði.
 buried up:on Saint Nicholas cemetery
 ‘He leapt on to his cart again and drove away. Jens at once fell dead. The
 other citizen carried this news into the city, and the body was fetched
 and conveyed within, and buried the next morning in St Nicholas’
 churchyard.’ (Ólafsson 1908: 39)⁴³

Next, in (21) below, we turn to Nikulás Klím and examine a passage which describes the protagonist being medically investigated by a tree – the story is science-fiction and takes place in an underworld of sorts.

- (21) *Meðan eg á þessa lund talaðe við sjálfann mig í einrúmi, geck*
 while I in this manner spoke to self me in alone, walked
ein eik inn til mín, sem hafðe einn triangel (þríhyrning) í
 ART.INDF oak.F in to me, who had a triangle (tri:corner) in
hendinne. Eik þesse beraðe minn handlegg og brjóst; sló hún
 the.hand oak.F this touched my forearm and chest; struck she
rjett lagliga miðæðina með verkfære þessu, og þegar hún
 precisely properly the:middle:vein with tool this, and when she
hafðe látið rennanockut blóð, so mikið sem henni sýndest þurfa, þá
 had let flow some blood as much as her seemed to.need then
batt hún til arminn aptur með eigi minni lagvirkne. Þá hún var
 tied she up the:arm again with not less skill when she was
þannin búin að útrjetta sitt erinde, og hafðe skoðat blóðit
 thus BÚINN to accomplish her task and had examined the:blood
þegiande og forundrande, geck hún aptr sinn veg í burt.
 silently and wondering went she back her way out
 ‘While I mused on the strange things I had witnessed, a tree came into
 my cell, with an instrument resembling a lancet in his hand. It stripped
 one of my arms, and made a puncture in the median vein. When he had
 taken from me as much blood as he deemed sufficient, he bound up the

⁴³Translation from Ólafsson (2017: 96)

wound with great dexterity. He then examined my blood with much attention, and departed silently, with an expression of wonder.’

(Holberg 1948: 29–30)^{44,45}

From the perspective of boundedness, this passage begins with the establishment of a global topic-time, namely that which occurs while the narrator is busy musing on what they had witnessed thus far. The entrance of the tree and its subsequent actions constitute events on the main timeline, situated within this global topic-time. Temporal subordinate clauses beginning with *þegar* and *þá* are used to situate events within the topic-time, without moving forward the global narrative timeline. This sequence of events is then summarised with a *búinn* construction, the material embedded under which is backgrounded in relation to the main timeline. Its function is to recapitulate the relation between this sequence of events and what comes after: having done his job, the tree is now in a position to leave. The passage above in (21) is followed by a sequence of expository passages detailing the circumstances which led to him being investigated in this strange new world, reflecting on his understanding of the workings of this society. In the passage below, the *búinn* construction is used twice, again in order to summarise the sequence of events up until this point: the protagonist emphasises that had he not learned the subterranean language, his opinion would be quite different.

- (22) *Þetta styrkte enn fremur meiningu mína, sem eg hafðe*
 DEM.NOM.N strengthened even further belief my which I had
feingið um fávitsku fólks þessa. Enn epter þat eg var
 received about foolishness people.GEN DEM.GEN but after that I was
búinn at læra underjarðarmálit, og allt var búit at
 BÚINN to learn the:underground:language and everything was BÚINN to
segja mier, þa snerest allt mitt forackt í forundran.
 tell me, then turned all my contempt into wonder

‘This circumstance by no means weakened the opinion which I had for some time entertained, that these people were shallow and foolish. But my judgment proved to be too hasty. When I was better enabled to judge of what passed about me, by acquaintance with the subterranean languages, my contempt was changed to admiration.’

(Holberg 1948: 30)⁴⁶

⁴⁴Translation by John Gierlow sourced at Project Gutenberg (Holberg 1845). Page numbers are absent since reference is made to the digital edition.

⁴⁵It should be mentioned that the noun *eik* ‘oak’ is feminine and thus glossed as such. In the subsequent discussion, I refer to the tree as “it”, following English convention.

⁴⁶Translation from Holberg (1845)

In summary, travelogues and memoirs such as *Nikulás Klím* and *Æfisaga Jóns Indíafara* clearly exhibit both bounded and unbounded characteristics. The authors make use of unbounded strategies such as *búinn* and *PROG* alongside adopting stylistic characteristics favouring bounded construals from the earlier saga style.

4.2.3 Modern Icelandic as unbounded

In this subsection, I examine an excerpt from the novel *Piltur og stúlka*, written by Jón Thoroddsen and published in 1850 (Thoroddsen 1850). The novel was highly influential at its time of publication; Bernharðsson (2018) argues that it was an important ingredient in the establishment of a new linguistic standard in the 19th century. I therefore consider it to be at the dividing line between early modern and modern Icelandic.⁴⁷

- (23) *Það var eitt kvöld nokkru eftir miðjan vetur, að þær Sigríður*
it was one evening sometime after mid winter that they Sigríður
og Guðrún sátu tvær einar í stofu. Veður var fagurt,
and Guðrún sat two alone in living_room. Weather was beautiful
sólin var að setjast, og kvöldroðanum kastaði á gluggana og
the:sun was to set and the:evening:glow cast onto windows and
inn um stofuna.
in through the:living_room
'One evening, not long after mid-winter, Sigríð and Guðrún were sitting
alone together in the living-room. The weather was fine, the sun was just
setting, and the evening-red fell upon the windows and the floor of the
room.'
(Thoroddsen 1850)⁴⁸

In passage (23), we observe little in the way of tail-linking adverbials. Instead, the hallmarks of an unbounded narrative are present. A topic-time is first established via the scene-setting construction at the inception of the paragraph, during which other events are ongoing. The narrative continues as follows:

- (24) *Guðrún sat á stóli út við gluggann og var að sauma og*
Guðrún sat on chair out by the:window and was to sew and
þagði; sá, sem þá hefði séð hana og tekið eftir
was_quiet; DEM, which then have.SBJ seen her and notice

⁴⁷The novel exhibits some archaisms which go back to older narrative styles, e.g. OV word order (Bernharðsson 2018). Nonetheless, it is in my view a representative example of narrative at this stage in the language.

⁴⁸Translation due to Arthur Reeves (Thoroddsen & Reeves 1890: 164)

brosunum, sem voru að smáflögra um munnvikin á henni, og
 the:smiles which were to flutter around mouth:corners on her and
séð hvernig spékopparnir á kinnunum á henni ýmist voru að
 seen how the:dimples on the:cheeks on her either were to
myndast eða hverfa.
 form or disappear

‘Gudrun sat silently sewing in a chair by the window. Whoever could have seen her then and observed the smile which played (*was fluttering*) upon her lips, and the dimples in her cheeks, as they came and vanished (*were coming and vanishing*).’ (Thoroddsen 1850)^{49,50}

In example (24) above, progressive constructions are prominent *voru að smáflögra* ‘were fluttering’ and *voru að myndast eða hverfa* ‘were forming or disappearing’. These describe unbounded events within the global topic-time, as established by the expletive construction at the onset of the narrative episode (this one evening after mid-winter). The narrative continues with Sigríður singing lullabies to baby Sigrún, giving way to the following passages:

- (25) *En er Sigrún litla var sofnuð, lagði hún hana hægt í*
 but when Sigrún little was asleep laid she her slowly into
legubekkin og lítinn kotta undir höfuðið og breiddi svuntuna sína
 the:crib and little pillow under the:head and spread the:bib hers
ofan á hana, en settist sjálf út við gluggann allskammt
 on onto her, and sit_down herself out by the:window all:close
frá Guðrúnu og horfði um hríð út.
 from Guðrún and watched for.a while out
 ‘And when little Sigrún was fast asleep, Sigríður laid her gently on the couch with a small pillow beneath her head, spread her apron over her, and then seating herself a short distance from Guðrún, looked out the window for a time.’ Thoroddsen (1850)⁵¹

The passage above begins with a backgrounded adverbial clause resituating the following events on the main narrative timeline. The text continues:

⁴⁹Translation from (Thoroddsen & Reeves 1890: 164)

⁵⁰My additions to highlight where the progressive is used; the translator did not always reflect it in the English.

⁵¹Translation due to Thoroddsen & Reeves (1890: 166)

- (26) *Allt var kyrrt á strætum bæjarins; dálitill snjófölví var yfir all was quiet on streets the.GEN:town a_little snow:paleness was over jörðunni; veðrið var hreint og heiðríkt, og sólin var þegar the:ground; the.weather was clear and fair and the:sun was already sigin, og sló blóðrauðum geislum um allan vestursjóinn; jökulinn set and cast blood.red rays about all the:west:sea; the:glacier hillti upp; fiskibátarnir voru að koma að, sumir að lenda, en sumir visible; the:fishing:boats were to arrive some to land but some voru komnir inn fyrir eyjarnar og skriðu fagurlega í were arrived further in.front.of the:islands and glided beautifully in logninu. the:calm*

‘Everything was quiet on the town’s streets; a little snow covered the earth; the weather was clear and fair, the sun had already set, casting blood-red rays across the entire western sea; the glacier stood visibly tall; the fishing boats were coming in, some approaching to anchor, and others navigated the calm waters near the islands gliding beautifully in the calm winds.’ (Thoroddsen 1850)⁵²

The above excerpt situates a number of atelically construed events within a global topic-time: the sun’s rays, the sight of the glacier, the arrival and anchoring of fishing boats. We again see the progressive used to describe such events: (the fishing boats) *voru að koma að, sumir voru að lenda, sumir voru komnir inn fyrir eyjarnar* ‘were arriving, some anchoring, others had made it past the islands’.⁵³

This section has served to illustrate the predominance of unbounded strategies found in the novel *Piltur og stúlka*, which I take to be representative of narrative structure for Icelandic of this period. In the following section, I demonstrate that a decrease in bounded strategies can be observed in corpora for the time period in question.

5 Decrease in bounded strategies

This section is structured as follows: in Section 5.1, I discuss the clear parallels between the shift in boundedness in the diachrony of English to the Icelandic

⁵²Translation due to Thoroddsen & Reeves (1890: 166)

⁵³An anonymous reviewer points out that this sort of descriptive passage, outside of the main narrative, may represent one of the innovations of the emerging genre of *novel* (Fludernik 2003). The reviewer points out that Dutch, a language with an emergent progressive construction, does not use it in passages such as this one.

case. Section 5.2 then draws on corpus evidence to substantiate similar claims for Icelandic.

5.1 Comparison to English

In this section, I draw on evidence regarding a shift in the frequency of temporal adverbials as a proxy for the shift in boundedness. This analytical move has precedent in the literature on Old English, a language which is not only closely related to Old Icelandic but also parallels it closely in this regard. In the following two subsections, I discuss the parallels with Old English in more detail, focusing first on the topic-time adverbials *þa* (OE) and *þá* (OI) in 5.1.1 and on the parallels between the rise of a dedicated progressive marker in both languages in 5.1.2.

5.1.1 Contrasting OE *þa* and OI *þá*

Just as Old Icelandic has the multi-functional adverbial item *þá*, so too did Old English have the item *þa*: both could be used as local discourse anchors, as subordinating conjunctions or as resumptive items (Brinton 1996, Enkvist & Wårvik 1987).

In Old and Middle English, *þa* had a specific role in narrative episodes: the demarcation of incipient narrative episodes (Enkvist & Wårvik 1987, Wårvik 1995). Interestingly for the present purposes, this functional domain was later overtaken by other expressions in the Middle English period – I contend that analyses of this development are highly relevant for understanding what happened in the transitional period that Early Modern Icelandic finds itself in.

As mentioned above in Section 4.2, a number of changes pertaining to the mapping between clause and information structure in historical Icelandic have been tied to the emergence of a dedicated subject position (Booth & Beck 2021). This is the case for historical English as well, as discussed by Fludernik (1995) who shows that the functional domain previously occupied by *þa* gives way to a number of competing expressions, among them *And when NP+VP* constructions.

Wårvik (1995), too, investigates the role of *þa* and *when* in Middle English. As is the case in Old Icelandic, which has both *þá* and *þegar*, the two may co-occur. Wårvik shows that there is individual variation among others with regard to their preference for parataxis as opposed to temporal subordinate clauses: A decrease in the former corresponds to an increase in the latter.

Brinton (1996) looks specifically at the development of the discourse function of the inception of narrative episodes in Middle English in texts by Malory and Chaucer. She shows that, in the Middle English period, preposed *when*-clauses

become the predominant means of doing so. Brinton (1996) also discusses the status of these clauses in terms of grounding: She shows that in earlier Chaucer as well as later Malory, events described in these clauses are more backgrounded. They express given information, which is off the main narrative timeline.

Finally, Enkvist & Wårvik (1987) discusses the status of *when*-clauses in Middle English. The authors conclude that their status as foregrounded or backgrounded depends on whether or not they can be interpreted as advancing the narrative timeline. This is the case when *when* is to be interpreted as ‘after’ rather than ‘while’ and the event it embeds is new, focused information that receives a perfective construal (Fleischman 1985: 876). In contrast, the embedded event can receive an imperfective construal which is backgrounded on account of containing given information, conveying temporal simultaneity.

In sum, Brinton (1996), Wårvik (1995) and Enkvist & Wårvik (1987) describe the linguistic system of Middle English as one with a tendency for increased backgrounding. Concretely, this is reflected in the gradual demise of *þa* as a foregrounding topic-time adverbial. The functional domain occupied by *þa* in earlier stages of the language – the marking of the inception of narrative episodes – becomes overtaken by backgrounded adverbial clauses with the subordinator *when* by late Middle English. We will see later on, in Section 5.2, that Icelandic *þá* underwent a similar fate, and like shown in Wårvik (1995), its demise correlates with the rise of preposed clauses containing *þegar* ‘when’.

5.1.2 The rise of the progressive

Petré (2016) discusses the rise of the dedicated progressive construction *be V-ing* in the history of English. His line of argumentation will broadly be adopted here and it can be summarised as follows: A change in frequency of associated environments (“co-texts”) can be critical in the conventionalisation (semanticisation) of an emerging meaning. Petré argues that the progressive construction became semanticized in its focalised usage (where it is largely obligatory in PDE) as a result of a more general increase of backgrounded adverbial clauses. This increased frequency is, in turn, a consequence of a broader shift in grounding strategies. Past-marked, temporal subordinate contexts embedded under the subordinating conjunction *when* are of special importance to the conventionalisation of this focalised usage. These contexts allow a shift in meaning from the present participle form merely expressing an ongoing state to a state which is ongoing at a particular focal point. Subordinate clauses are crucial here as they provide the time frame at which this focalisation can occur – this then becomes part of the expression’s conventional meaning that spreads to main clause contexts.

5.1.3 Summary: Decline of bounded strategies in the history of English

Petré (2010) and Los (2012) discuss the decline of bounded construals in the history of English. Both authors argue that Old English had a more transparent correspondence between syntactic transformations and information-structural functions. This argumentation is based upon a number of empirical observations:

1. Topic-time adverbials, used to re-establish the topic time with each discourse transition, lose prominence (see also Los et al. 2023). Clause-initial *þa* as a topic-time anchor decreases from 36.1% to 15.4% in early ME and 11.3% in late ME (Westergaard 2009: 93).
2. Environments which favour unbounded construals show a concomitant rise in frequency: Dedicated progressive marking (Killie 2008, 2014), *gin-nan*-class (*onginnan*, *beginnan*) with infinitival complements (Petré 2010: 468) begin as perfectivisers but acquire an inchoative usage late in the OE period (Los 2000: 269–271), are subsequently subject to semantic bleaching and further conventionalisation into the Middle English period (Brinton 1988, Funke 1922, Mossé 1938).

The relation of the latter two environments to unboundedness has to do with their meaning: Inchoative constructions focus on the onset of a new event, which has close pragmatic ties to the ongoingness of said event. Petré (2010) argues that *ginnan* expressions replaced the functional domain of *weorðan* ‘become’ in ME – the latter focusing instead on the state transition. This, Petre argues, reflects a greater flexibility in ME and afterwards with regard to framing events in an unbounded manner. Similarly, progressives directly focus event ongoingness and are thus fundamentally imperfective, they can be considered the “present counterpart” of inchoatives (Carroll et al. 2004).

5.2 Statistical corpus evidence

As outlined in the previous section, the trajectory for the diachrony of English, for which a shift from a bounded to unbounded system has been proposed, resembles Icelandic very strongly. Here, I propose that an independent case can be made for Icelandic on the basis of similar argumentation and empirical evidence. Concretely, I argue for the following on the basis of corpus evidence:

1. There is an overall trend towards a higher frequency of backgrounded temporal subordinate clauses, as discourse traditions shift.

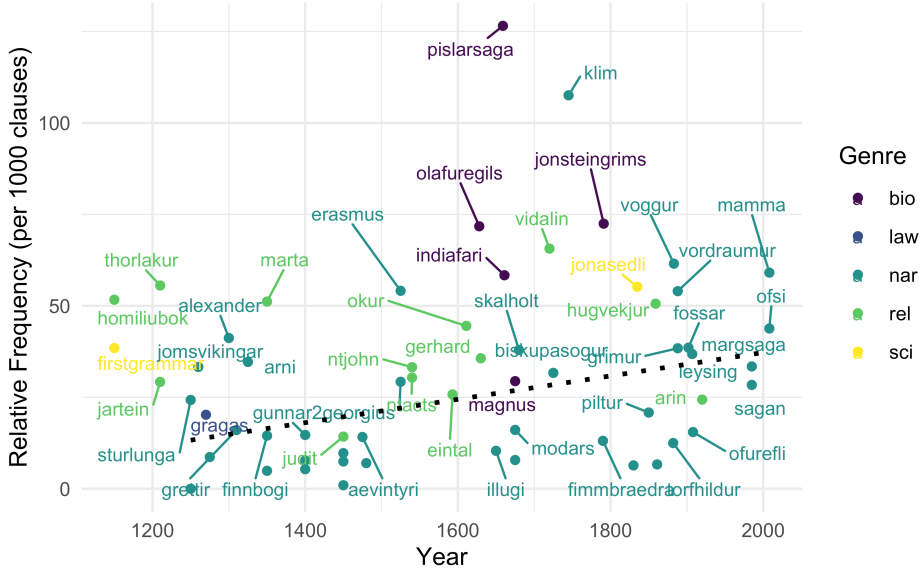
2. There is a strong correlation between a decrease in foregrounded, iconic narration strategies (including verb-initial and *þá*-verb-subject structures) and those which rely more heavily on temporal backshifting and back-grounding.
3. The decrease in bounded strategies is further reflected in the tail-linking requirement: global establishment of topic-time no longer necessitates strict tail-linking. This can be seen in the decrease of adjunct-initial main clauses relative to other possible configurations.
4. Both *búinn* and *PROG* rise rapidly in frequency during the early modern period, going from marginal constructions to integral parts of the grammar. I argue that this rise in frequency should be tied to the increased preference for unbounded construals in the language. For both constructions, temporal subordinate contexts are of special importance, as argued in Section 1. This gives rise to two main predictions concerning both constructions: (a) they should show an association with unbounded adverbials and (b) their increased frequency should be correlated by-text.

In the following subsections, I show the empirical evidence that backs up the above claims. (1) is substantiated in 5.2.1, (2) is shown in 5.2.2, (3) is shown in 5.2.3 and the two claims in (4) are argued for with data in 5.2.4 and 5.2.5 respectively. Finally, 5.2.6 discusses an additional construction associated with the loss of boundedness, the decline of the present participle.

5.2.1 Increase in temporal subordinate clauses

Temporal subordinate clauses in IcePaHC were extracted via two separate queries. The first query targets prepositional phrases headed by *þegar* ‘when’ or *nær* ‘when’ which in turn immediately dominate an adverbial clause, itself immediately dominating a subordinate clause. The second query targeted temporal subordinate clauses introduced by *er* (an all-purpose relativiser), *þá er* (lit. ‘at the time that’; typical way of forming a temporal subordinate clause in Old Icelandic), as well as *þá* or *nær* (both meaning ‘when’). This is done by targeting what are coded as relative clauses in the corpus, which immediately dominate a subordinate clause, then embedding an adverbial phrase. The results were collated in order to yield a total relative frequency per 1000 clauses. The results were collated in order to yield a total relative frequency per 1000 clauses. These results are plotted in Figure 8. I looked at narrative texts specifically for the time period from 1540 to 1900 and compared a statistical model including YEAR as a

predictor to one without (an F-test using the `anova` function in R) which revealed that this increase is statistically significant ($p = 0.017$).



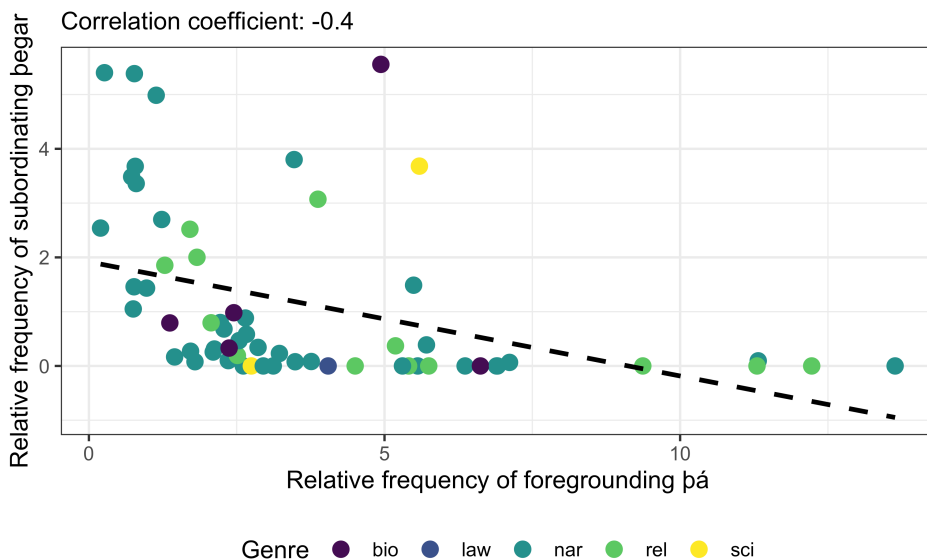


Figure 9: Correlation of foregrounding *pá* and subordinating *þegar* in IcePaHC. Pearson's coefficient: -0.4, $p < 0.002$

2019), which is intertwined with a change in subordinating strategies more generally.

Temporal subordinate clauses, which prior to the 16th century involved complementiser doubling, e.g. *pá er* 'then REL' and *þegar er* 'when REL', emerge both in new variants, e.g. *þegar að* 'when COMPL' as well as without a complementiser or relativiser (Helgason 1929). In modern Icelandic written language, temporal subordinate clauses involve bare *þegar*. I take it that this change involves a tighter integration of the subordinate clause, as these changes are parallel to a decline in the sort of correlative constructions one finds in older texts to express the same sorts of temporal relations.

Kiparsky (1995) argues for the view that in Old Indo-European languages, what appear to be subordinate clauses should be analysed as instances of adjunction rather than true subordination. This explains, among other facts, why resumptive adverbials seem to show up in environments without there being, strictly speaking, an antecedent clause, such as clause-initially. Such an environment is illustrated below in (27). On Kiparsky's analysis, this development is then effectively a transition from broadly paratactic to hypotactic systems.

- (27) *Síðan varð hörð atlaga með þeim. Þá mællte Ólafur at hans menn
 then became hard attack with them. Then said Ólafur that his men
 skyldu hlífa sér undir skjöldum, meðan þeir skyti spjótum ok
 should protect themselves under shields, while they shot spears and
 örur...*
 arrows
 ‘Later they were attacked hard. Olaf said that his men should seek cover
 under the shields while the enemy shot spears and arrows at them..’
 [Ólafs saga helga 24:44 cited in Meklenborg Nilsen 2020: 28]

It seems reasonable to me to tie these temporal resumptive uses to correlative relative clauses, such as the following cited in Wagener (2017: 229). What they both have in common is their exploitation of the left periphery as an anaphoric position.

- (28) *Þá ræðu er næst heyrða ec yður sægia um kaupmanna
 that speech REL next heard I you say about merchant:GEN.PL
 iðrott þá var hon með glæggara froðleic fram flutt
 profession then was she with more:intelligent wisdom performed
 isvorum en í spurning
 in_answers than in question
 ‘The statement that I heard you make about the mercantile profession
 was uttered with more wisdom in the answer than in the question.’
 [Konungs skuggsjá 38.18, cited in/translation due to Wagener]*

Meklenborg Nilsen (2020: 29) discusses the difference between Older Indo-European languages and their modern counterparts in this respect: in the modern languages, only resumptives can occur between fronted adverbials and the finite verb, whereas in the older languages a number of other elements could appear in place of the resumptive. Clause-external adverbials in the older languages required that the resumptive be a full phrase in order to satisfy V2, but this is no longer the case in the modern languages, where resumptives are integrated and can fulfill V2 as they originate in the left periphery. Meklenborg Nilsen (2020) takes this as evidence for the increased integration of the adverbial clause, which is accompanied by syntactic reanalysis of the resumptive.

Early Modern Icelandic thus represents an intermediate period where there is potential for ambiguity between hypotaxis and parataxis, embedding and adjunction. More conclusive evidence of this increased integration having played a role in Icelandic of the 16th to 19th centuries comes from a shift from double

complementation strategies for temporal subordination, often involving extrapolation (Sapp 2019, Wallenberg 2016), to the predominance of bare *þegar* for this purpose in the modern language.

My corpus investigation in IcePaHC shows that *þegar* wins out over *þá er/þá* by 1900, with the preceding period reflecting considerable genre variation. This is shown in Figure 10 below: The overall proportion of *þegar* rarely exceeds 50% prior to 1600, while by 1850 alternative temporal subordination strategies have all but disappeared.

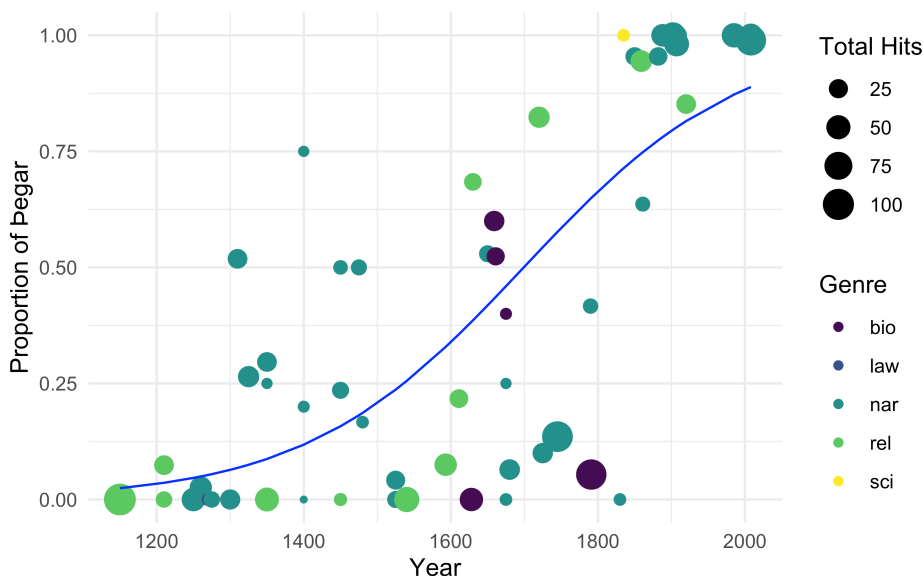


Figure 10: Subordinating *þegar* as opposed to subordinating *þá er/þá* in IcePaHC

The frequencies of the expressions relative to one another show that the conjunctivisation is less advanced with *þá* ‘then’ than *síðan* ‘since’ and *þegar* ‘when’ (Bjerre 1935). This is tied to the fact that *þá* is a determinative temporal adverb in contrast with the others: “The demonstrative force in *þá* is then a hindrance for its development into a conjunction” (Bjerre 1935: 156). According to Bjerre, *er* has a tendency to disappear after all three, but this happens most clearly with *þegar* and least with *þá er*. The *er* in *þegar er* is perceived as pleonastic and is thus ellided easily, whereas the relativiser function of *er* in *þá er* is supported by the determinative component of *þá* (Bjerre 1935). This shows that the conjunctivisation there is less developed.

Why is *þá* poorly suited for unbounded construals then? *þá* is rare in temporal clauses following a determinative correlate. With few exceptions, *þá er* does not occur in temporal clauses after definite temporal expressions (Bjerre 1935). This is not solely due to the fact that *þá* in combination with a previous temporal expression would be pleonastic, since *þá er* does indeed occur in connection with temporal expressions in the main clause. However, this happens nearly exclusively in those cases where the connection between the temporal expression and the adverbial clause is relatively loose or the latter can be considered as somewhat freestanding (ibid.). On the whole, it appears that *þegar* emerged as the best available candidate for an all-purpose subordinating conjunction.

5.2.3 Decrease in tail-linking

To investigate the role of discourse anchoring, I use adjunct-initial V2 clauses as a proxy – the vast majority of these involve temporal anchors (Booth & Beck 2021). Here I report on a regression analysis carried out to investigate the proportion of adjunct-initial clauses over time; I build on the discussion in Booth & Beck (2021: 35), but I make use of a different periodisation than discussed there. A binomial mixed-effects model was fitted in R (R Core Team 2023) using the `lme4` package (Bates et al. 2015) with a term for YEAR (centred and scaled) and GENRE, as well as a random effect for TEXT. The model is specified as follows, including data from all genres for the time period 1540–1900:⁵⁴

(29) `cbind(successes, failures) ~ scaled_Year + Genre + (1 | Text)`

The model specified above reveals that the overall decrease of non-subject-initial V2 clauses (as a proportion of possible matrix clause configurations), while descriptively present, is not statistically significant ($\beta = -0.3640$, $p = 0.1192$). As observed by Booth & Beck (2021), biographies, religious and scientific texts pattern differently from narrative ones. However, for the given periodisation there is a decrease in all genres except for scientific texts. Of all genres, only narrative texts exhibit a statistically significant decrease for this period ($\beta = -0.4921$, $p = 0.00448$).

5.2.4 Frequency of associated adverbials

The patterning of the phenomena in question with unbounded construals can be shown by examining the relative frequency of adverbials which pattern alongside them (cf. Petré 2010). Both phenomena collocate most commonly with no

⁵⁴This is a bit broader than the 1850 mark so as to not exclude otherwise valuable data.

adverbial, which suggests that they pattern with unbounded construals. As far as overt adverbials go, *búinn* is predominantly associated with temporal subordinate clauses introduced either by *þegar* or *þá (er)*, both compatible with imperfective construals. Perhaps better evidence for the lack of boundedness is that the two constructions do not collocate with bounding adverbials (e.g. *after*, *at X time*, cf. Petré 2010: 474). *PROG* also collocates with *þegar* and *þá (er)*, however, the most dominant adverbial is *meðan* ‘while’, clearly associated with ongoingness. In Tables 5, 6 and 7 below, *þá-s* designates subordinating *þá* (often, but not always accompanied by the relativiser *er*), while *þá-t* represents *þá* in its use as a topic-time anchor (clause-initial or clause-medial).

Table 5: Collocating adverbials for *búinn* IcePAHC until 1900 (n=90)

Adv	Percentage
none	69.10
<i>þegar</i> ‘when’	11.16
<i>þá-s</i> ‘when’	10.73
<i>eftir</i> ‘after’	3.43
<i>þá-t</i> ‘then’	2.15
<i>fyrir</i> ‘before’	1.29
<i>nær</i> ‘when’	0.86
<i>er</i> ‘when’	0.43
<i>sem</i> ‘as/when’	0.43
<i>þangað til</i> ‘until’	0.43

5.2.5 Timing of changes

As displayed in Figure 11, the correlation between the relative frequency of *búinn* and *PROG* over time is moderate (0.61) and statistically significant. This supports the argument that the two changes were bolstered by the same underlying factor, the shift in boundedness. On the whole, this perspective provides insight into the time course of propagation for both innovations, which is otherwise puzzling: Why did the constructions stay relatively marginal before seeing a jump in frequency from the early 19th century onwards? My proposal is that the establishment of a predominantly unbounded system had to occur first. The chain of causality I would like to propose is as follows. The expressions in question

Table 6: Collocating adverbials for *búinn* in *Textasafn* 16th-18th centuries (n=215)

Adv	Percentage
none	36.67
<i>þá-s</i> ‘when’	12.22
<i>nú</i> ‘now’	11.11
<i>þegar</i> ‘when’	11.11
<i>eftir</i> ‘after’	7.78
<i>er</i> ‘when’	3.33
<i>nær</i> ‘when’	3.33
<i>fyrir</i> ‘before’	2.22
<i>svo</i> ‘then’	2.22
<i>þá-t</i> ‘then’	2.22
<i>allareíðu</i> ‘already’	1.11
<i>eftir</i> ‘after’	1.11
<i>fyrst</i> ‘first’	1.11
<i>inn til þess</i> ‘until’	1.11
<i>jafnskjótt og</i> ‘as soon as’	1.11
<i>as</i>	
<i>nú</i> ‘now’	1.11
<i>oft</i> ‘often’	1.11

Table 7: Collocating adverbials for *PROG* in IcePAHC until 1920 (n=114)

Adv	Percentage
none	74.56
<i>meðan</i> ‘while’	7.89
<i>þegar</i> ‘when’	6.14
<i>þá-s</i> ‘when’	3.51
<i>þá-t</i> ‘then’	3.51
<i>er</i> ‘when’	2.63
<i>í þessu</i> ‘at this/that moment’	0.88
<i>nú</i> ‘now’	0.88

could become available via chance reanalysis.⁵⁵ Their subsequent conventionalisation, leading to the well-developed aspectual system exhibited by modern Icelandic, was favoured by other ongoing structural developments in the language, i.e. tense indeterminacy, inter-clausal relations in flux. Regarding the latter, alongside the increased integration of adverbial subclauses, speakers had expressions available for explicitly marking event phase transitions.

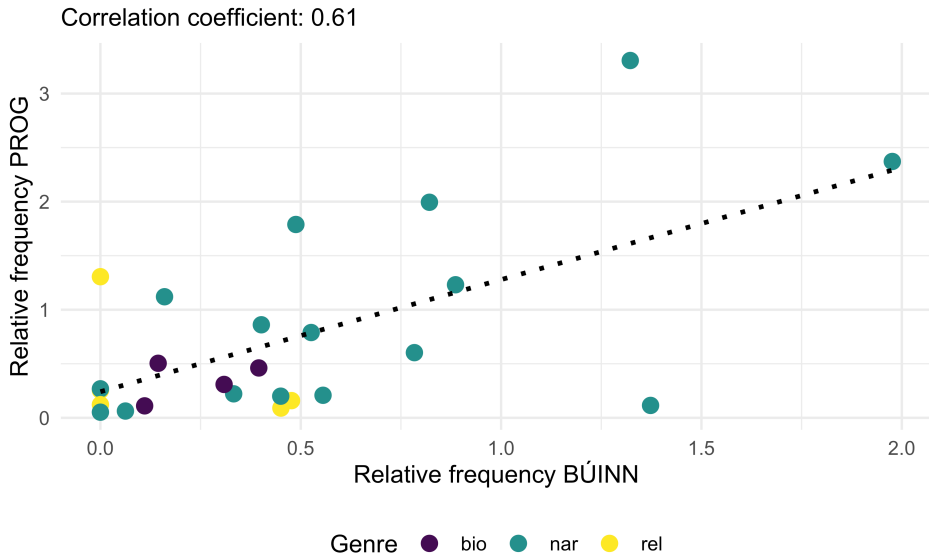


Figure 11: Correlation of relative frequency of *búinn* and *PROG* by text/year. Pearson's coefficient: 0.586, $p < 0.003$

5.2.6 Additional construction associated with the loss of boundedness: Present participle

Constructions involving the present participle often used to designate time in the place of subordinate clauses (Hauksson & Óskarsson 1994). This is accompanied by a decline in dative absolute constructions. Both are considered features of the *learned style* of medieval Icelandic, but are less prominent in modern Icelandic narrative style (*ibid.*). The example below in (30) exemplifies both of these: *að morgni* 'at morning.DAT' is an absolute, while *komandi* 'coming' is a present participle. The example is from *Indíafari*, which, as previously mentioned, exhibits features of bounded as well as unbounded narrative. The phrase

⁵⁵I thank an anonymous reviewer for requesting I expand on this point.

as a whole *að morgni komandi* ‘at (the) morning coming’ (in other words, when morning arrives) is used in place of a subordinate clause indicating temporal sequentiality.

- (30) *Þessi lofaði að morgni komandi þar upp á honum*
 DEM.M promised at morning.DAT come.PTCP.PRS there up to him
andsvar að gefa.
 answer to give
 ‘The steward promised to give him an answer the following morning.’
 (Ólafsson 1908: 262)⁵⁶

The loss of prominence of the present participle in this function occurs alongside the increase of *búinn* especially. I would like to propose that this is due to the novel expression overtaking this functional domain across discourse traditions. Texts with a relative frequency of 2% or above are not represented in the corpus after 1900. This is shown in Figure 12. The texts with the highest relative frequency of the construction are predominantly translations with considerable Latinate influence, e.g. *Marta* and *Ectorssaga*.⁵⁷

6 Conclusion

The seemingly abrupt rise in frequency of both *búinn* and *PROG*, starting in the 18th century, is difficult to explain without recourse to a shift in mapping between clause and discourse structure. In this article, I argue that this shift paved the way for these unbounded aspectual constructions to gain sufficient frequency in order to be propelled to conventionalisation.

To summarise, I have argued for the following:

1. Icelandic exhibits a shift in preference for predominantly bounded to predominantly unbounded strategies for structuring narrative during the early modern period (1540–1850).
2. This shift in boundedness is reflected in both a higher frequency of backgrounded temporal clauses as well as a concomitant decrease in foregrounding strategies, most notably clauses starting with the topic-time adverbial *þá* followed by the finite verb.

⁵⁶Translation sourced from Ólafsson (2017: 83)

⁵⁷See <https://github.com/antonkarl/icecorpus/blob/master/info> for more information on the source texts in the corpus.

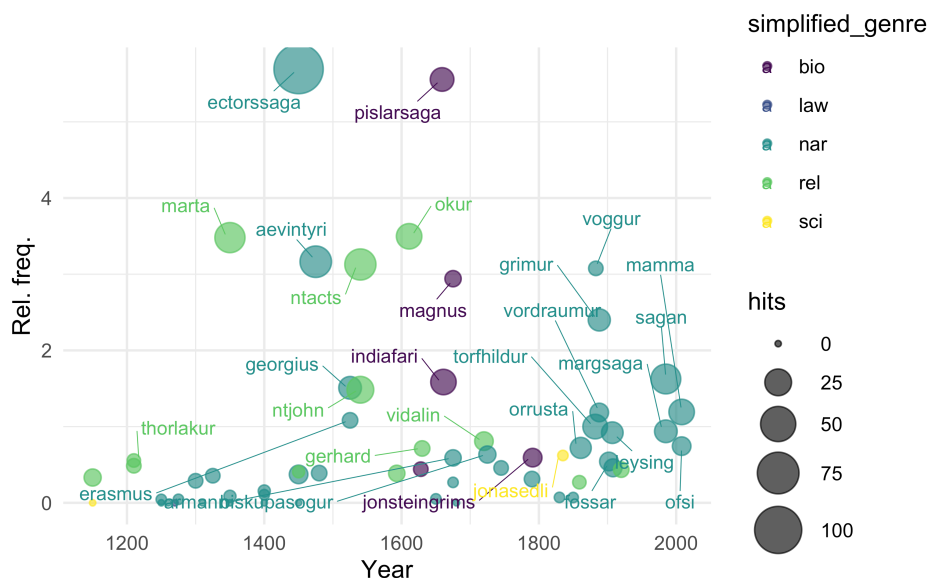


Figure 12: Present participle (-andi) in IcePaHC over the centuries

- Two periphrastic aspectual constructions, *búinn* and *PROG* went from being relatively marginal to being integral parts of the aspectual oppositions made by Icelandic grammar. I show that an increased availability in unbounded construals favoured this change, as backgrounded temporal clauses are important for the conventionalisation of their meaning. This can moreover be seen in the time course of the changes in question and the fact that they are highly correlated.

Alongside the aspectual constructions which are the focus of this paper, a number of other changes occurred in the history of Icelandic pertaining to the mapping between syntax/semantics and discourse structure, which I take to be compatible with this perspective (Booth 2021). Most prominently discussed among these changes in the literature on Icelandic diachrony is the rise of a dedicated subject position, which has furthermore been tied to the shift from optionally SOV to obligatorily SVO (Rögnvaldsson 1996, Hróarsdóttir 2000) and the decline of verb-first declaratives (Booth & Beck 2021). I leave it to future research to spell out the relationship between these changes in more detail.

Before concluding, a few words are in order about the implications of this paper for diachronic typology. The notion of boundedness is conceived of as a typological one in the literature (von Stutterheim & Lambert 2005, von Stutterheim &

Nüse 2003) and there is as of yet little research which explicitly discusses the diachronic component, i.e. the switching of systems from predominantly bounded to unbounded or vice-versa.⁵⁸ My discussion in the paper can be related to the work of Bhat (1999), who proposes that languages can be classified as tense-, aspect- or mood-prominent. In my understanding of the literature on boundedness (Carroll & Lambert 2003, Carroll et al. 2004, von Stutterheim & Nüse 2003, von Stutterheim & Lambert 2005, von Stutterheim et al. 2002), bounded structures correspond, broadly speaking, to tense prominence and unbounded to aspect prominence. Bhat (1999: 179) discusses his typological findings in the context of Hopper (1979) on grounding, writing that “languages appear to select a verbal form that belongs to their most prominent verbal category for encoding the foregrounded material”. In a tense-prominent language like Kannada, this would be the simple (narrative) past, whereas in aspect-prominent languages, like Russian, it is the perfective form. A shift in prominence would thus be expected to correspond to a change in preferred strategies for narrative grounding. This is also why I take it that boundedness and prominence are tightly related.

A number of diachronic studies relate their findings to Bhat’s (1999) notion of prominence. The diachrony of Hebrew, for instance, is widely considered to have undergone a shift from aspect prominence to tense prominence between the Biblical and Tannaitic periods (Penner 2015: 74–81). An entirely unrelated language, Basque, has been claimed to have undergone a shift from tense-prominence to aspect prominence, including the emergence of a dedicated progressive form (Martínez-Areta 2022). A further point of comparison are the notions of satellite- and verb-framed languages (Talmy 1985); see Fanego (2024) for a recent discussion that ties a boundedness shift in historical English to that literature.

On the whole, I hope that this paper can provide a lasting contribution to this emerging empirical literature regarding the relationship between linguistic structure and the encoding of discourse structure.

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⁵⁸I thank an anonymous reviewer for bringing up this point.

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Abbreviations

ACC	Accusative	M	Masculine
ADV	Adverbial	N	Neuter
ART	Article	NAR	Narrative (genre)
BIO	Biographical texts (genre)	NOM	Nominative
COMP	Complementiser	OE	Old English
DAT	Dative	OI	Old Icelandic
DEM	Demonstrative	PDE	Present-day English
DT	Discourse tradition	PROG	Progressive (aspect)
F	Feminine	PRS	Present
FOCAL	Focalised (progressive reading)	PST	Past
GEN	Genitive	PTCP	Participle
IcePaHC	Icelandic Parsed Historical Corpus	REL	Religious texts (genre) OR Relativiser (glossing)
INDET	Indeterminate (reading type)	SCI	Scientific texts (genre)
IP-MAT	Matrix clause (IcePaHC tagset)	SuB	Subordinate clause
IP-SUB	Subordinate clause (IcePaHC tagset)		expressing temporal sequentiality
LAW	Legal texts (genre)		

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Appendix

Table 8: Classification of examples from Benediktsson (2002)

Source	Example	Classification
Njáls saga, ch. 11	hann [Þorvaldur] var at at hlaða skútuna	Indet
Biskupa sögur, Jarteinabók Þorláks biskups helga, AM 645 4° A	MeN voro at. at tialda kirkio...	Durative
Íslendingasaga of Sturla Þórðarson	Einarr la ísarvm. oc var helgí. prestr. Scelivngs son at græða hann.	Durative
Bósa saga, ch. 8	...ok véru þeir allan dag upp at brjóta...	Durative
Bjarnar saga	Þorfinnr...kvað hann [Ásgrim] vera at	Focal
Hítðælakappa, ch. 34	telja silfr	
Icelandic Book of Homilies	fyr óvinom sinom. oc þeim [er] at voro at pína hann.	Durative
Book of Homilies	En epter dagmól var hon at ver-alldlego verke...	Stative habitual
Book of Miracles, 1st Miracle	...at þeim þore travt at aeínom dege mynde verþa.	Stative habitual
Book of Miracles, 33rd Miracle	þa var til at hogva biargit. Af oxanom. Oc veret at mikiN hlvt dags	Durative
Auðunar þætta vestfíryka Morkinskinna (Ed. 1932: 185)	Einn dag er aleið varit gec Sveinn konungr...	Focal
Haralds saga hins hárfagra, ch. 8	Þeir hofðu verit at þrjú sumur at gera haug einn	Durative
Eyrbyggja saga, ch. 37	...en þeir Arnkell voro þa at at gera annat hlassit	Focal
Jómsvíkinga saga, ch. 8	En ec þottvmz vppe æga vef en þat var lín vefr...	Indet
Þiðriks saga af Bern, ch. 273	...oc erv þeir at allan dagin at taka hæstin oc geta æigi tekit	Durative
Örvar Odds saga	váru þeir þá at at herklæðaz...	Indet
Hákonar saga Hákonarsonar, ch. 236	voro þa Varbelger at at taka af þa lag sem efter voro brvarinnar	Indet

Table 9: Classification of examples from Benediktsson (2002) (continued)

Source	Example	Classification
Borgils saga skarða, in Sturlunga saga	...ok váru menn at, at kasta steinum í stofuvegginn	Durative
Egils saga einhenda ok Ásmundar berserkjabana, ch. 5	Kerling var at at renna mjólk	Durative
Finnboga saga hins ramma, ch. 24	Finnbogi var epter oc hrafn hinn litle hía honom...	Durative
Stjórn, ch. 183	...þiat hann ottaðiz at hann mvndi æigi na at briota	Indet
Codex Wormianus, Prologue to four grammatical treatises	...þvi verðr spvrt hverr kvað þa er fra liðr enn æigi hversv lengi var at verit	Stative habitual
Fóstbræðra saga, ch. 8	hann var at byrgja kviadyrrnar	Focal
Hrafnkels saga Freysgoða, 3. Kap	en konur váru at mjólka	Durative
Grettis saga, ch. 17	Haflíði fór til þeira skipverja þar sem þeir váru at ausa, ok mælti	Focal
Reykðæla saga ok Víga-Skútu, ch. 27	hann var at ok smíðaði skot um skála	Durative
Droplaugarsona saga, ch. 3	Skútu- þeir foru brott (ok) þangat sem þeir uoru at ok gerdu hlauss(in)	Indet
Ragnars saga loðbrókar, ch. 16	Ok er hann var at at reka flottann...	Focal
Völsunga saga, ch. 8	Ok er þeir voru at tyrfa hauginn...	Focal
Morkinskinna, CCI 6	...oc taca nv oc havGva <s> is fvr scipom sinom oc er þeir voro at þa mælti [maþr]...	Focal
Morkinskinna, CCI 6	...oc er þar ál lang vm baggann oc torsott at leysa oc er hann lengi at...	Indet

Table 10: Temporal subordinate clauses by text (IcePaHC)

	text	year	t.T	total_rT	relative_frequency	Genre
1	ntacts	1540	1185	36	30.38	rel
2	ntjohn	1540	1685	56	33.23	rel
3	eintal	1593	1552	40	25.77	rel
4	okur	1611	629	28	44.52	rel
5	olafuregils	1628	906	65	71.74	bio
6	gerhard	1630	701	25	35.66	rel
7	illugi	1650	1929	20	10.37	nar
8	pislarsaga	1659	324	41	126.54	bio
9	indiafari	1661	1388	81	58.36	bio
10	armann	1675	1018	8	7.86	nar
11	magnus	1675	204	6	29.41	bio
12	modars	1675	373	6	16.09	nar
13	skalholt	1680	870	33	37.93	nar
14	vidalin	1720	1112	73	65.65	rel
15	biskupasogur	1725	1105	35	31.67	nar
16	klim	1745	874	94	107.55	nar
17	fimmbraedra	1790	1603	21	13.10	nar
18	jonsteingrims	1791	1518	110	72.46	bio
19	hellismenn	1830	1411	9	6.38	nar
20	jonasedli	1835	163	9	55.21	sci
21	piltur	1850	1440	30	20.83	nar
22	hugvekjur	1859	1107	56	50.59	rel
23	orrusta	1861	1804	12	6.65	nar
24	torfhildur	1882	2000	25	12.50	nar
25	voggur	1883	130	8	61.54	nar
26	grimur	1888	625	24	38.40	nar
27	vordraumur	1888	759	41	54.02	nar
28	fossar	1902	1659	64	38.58	nar
29	leysing	1907	1520	56	36.84	nar
30	ofurefli	1908	1743	27	15.49	nar
31	arin	1920	1149	28	24.37	rel
32	margsaga	1985	1705	57	33.43	nar
33	sagan	1985	2008	57	28.39	nar
34	mamma	2008	1845	109	59.08	nar
35	ofsi	2008	1210	53	43.80	nar

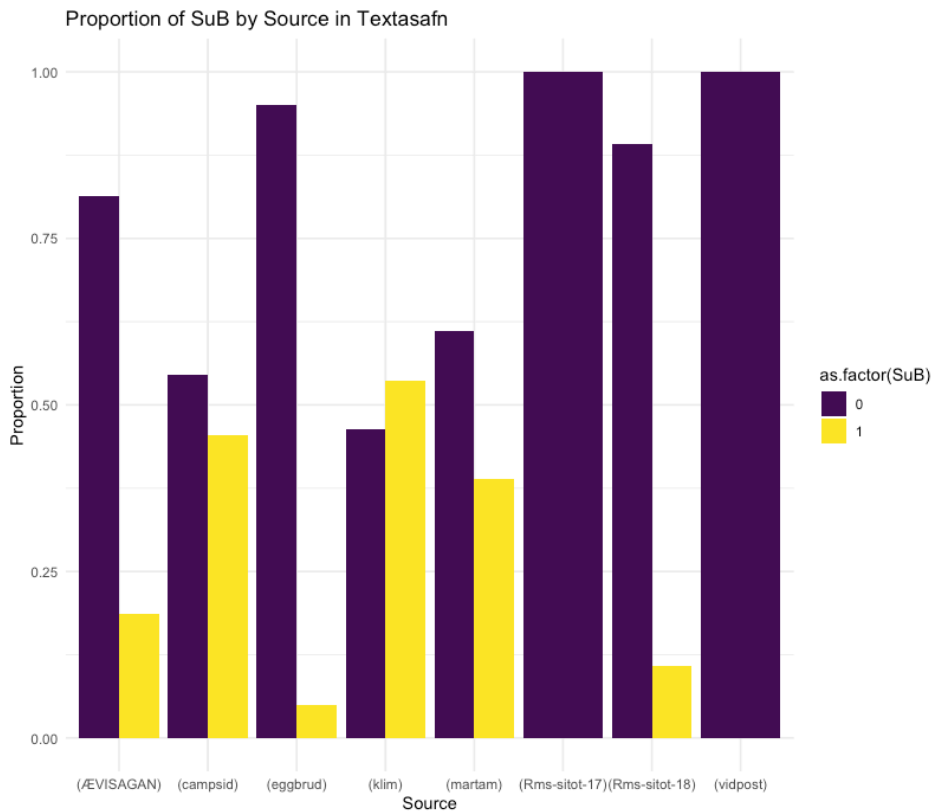


Figure 13: Prevalence of subordinate clauses expressing temporal sequentiality (*SuB*) in *Íslenskt textasafn* (16th-18th century subcorpus)