Syncope of long *ī in Old Norse nouns

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1 Introduction

Anyone who is studying the historical developments of one or more languages is accustomed to observing the loss of unstressed short vowels. All attested Germanic languages are well known for having undergone a considerable amount of such vowel losses. The old North Germanic languages, whose best attested variant is Old Norse, are often used to exemplify such vowel loss, because these languages have the fortunate property of being attested both before and after these vowel losses took place. In the early Scandinavian Runic inscriptions, we find words such as *-gastiR* 'guest', *laukaR* 'leek', and *maguR* 'son', words which in the classical Old Norse period appear as *gestr*, *laukr*, and *mogr*, all with syncope of the short unstressed vowel.

A somewhat less intuitive process is the loss of *long* unstressed vowels. This is a less obvious process not only because it is harder to imagine how a sound with considerable duration can eventually completely disappear, but also because Old Norse in general is known for preserving original long vowels. Words which in the early Runic inscriptions have long vowels, such as $r\bar{u}n\bar{o}R$ 'runes', $raisid\bar{o}ka$ 'I raised', $swest\bar{e}r$ 'sister', and $f\bar{a}hid\bar{e}$ 'painted', ² do all appear with a vowel in Old Norse: $r\acute{u}nar$, reistak, systir and $f\acute{a}\delta i$.

Yet as noted by Sievers (1878: 66), von Bahder (1880: 84), and Bugge (1885: 213), original long vowels appear, at least in some circumstances, to undergo complete syncope in Old Norse, although each of the three offered their own descriptive rule for explaining such vowel loss.

One long vowel that seems to undergo syncope in Old Norse is $*\bar{\imath}$. In this paper, I put forward a very simple rule accounting for the loss of this vowel: Long $*\bar{\imath}$

- 1. -gastir appears on the Gallehus horn, the Berga stone, the Myklebostad stone, the Sunde stone, the Nydam axe handle, and possibly on the Einang stone (Krause & Jankuhn 1966, Stoklund 1994). laukar appears on the Fløksand scraper, the Års bracteate, the Skrydstrup bracteate, the Börringe bracteate, and the Schonen bracteate (Krause & Jankuhn 1966). magur appears on the Sparlösa stone (Jungner & Svärdström 1940–70).
- rūnōR appears on the Eikeland fibula, the Järsberg stone, and the Tjurkö bracteate (Krause & Jankuhn 1966, Grønvik 1987). raisidōka appears on the Ellestad stone, swestēr on the Opedal stone (cf. Krause 1971: 52, 89; Syrrett 1994: 227 ff.; Nedoma 2005: 166), and fāhidē on the Halskov bracteate (Krause & Jankuhn 1966).

syncopates in an open unstressed syllable. The evidence for this process is given in sections 2 and 3, followed by a less certain case in section 4.3 Yet some scholars have explicitly rejected that a long *ī undergoes syncope in Old Norse, whereas others implicitly reject it by offering alternative explanations for the cases that seemingly support the regularity of such syncope. These alternative accounts are discussed in section 5, where I show that they have severe shortcomings. Section 6 concludes the paper.

2 Syncope of long *ī in Germanic īni-abstracts

2.1 īni-abstracts in Proto-Germanic

Germanic verbs can be grouped in two main categories: strong verbs and weak verbs, also called primary verbs and secondary verbs. The weak or secondary verbs are derived from other words, and these verbs are characterized by forming their past tense forms with a dental suffix. A typical example is the Old English noun *lufu* 'love', from which a weak verb *luftan* 'to love' is derived, which has a past tense *luftode* 'loved'.

The Germanic weak verbs are grouped in three main classes. The first of these classes consists mainly of causative-iteratives and denominal verbs, formed by adding a palatal suffix -(i)j- to the root. An example from Proto-Germanic is *laus-a- 'free', from which a causative *laus-ijan- 'to free' is derived. Abstracts can be formed from Germanic verbs with a deverbal feminine suffix *-ni-. When formed from weak verbs of the first class, this suffix takes on the form *- \bar{i} ni-, as in *laus-ijan- 'to free' \rightarrow *laus-īni- 'liberation' (cf. Krahe 1967: 117 f., 246 ff.).

2.2 īni-abstracts in East Germanic

īni-abstracts from first class weak verbs are particularly well and clearly attested in Gothic (von der Gabelentz & Loebe 1846: 63, 115; Casaretto 2004: 340 ff.), as illustrated in (1) below.4

(1) daupjan	'baptize'	\rightarrow	daupeins	'baptism'
gōljan	'greet'	\rightarrow	gōleins	'greeting'
hauhjan	'elevate'	\rightarrow	hauheins	'elevation'
hazjan	'praise'	\rightarrow	hazeins	'praise'

- 3. For reasons of space, this paper will only treat the evidence present in nouns. Additional evidence for this rule from adjectives and adverbs will be presented elsewhere.
- 4. In Gothic, the spelling $\langle ei \rangle$ indicates a long vowel $\bar{\iota}$ (Braune 2004a: 37).

laisjan	'teach'	\rightarrow	laiseins	'teaching'
mērjan	'proclaim'	\rightarrow	mēreins	'proclaiming'
nasjan	'save'	\rightarrow	naseins	'salvation'
skeirjan	'explain'	\rightarrow	skeireins	'explanation'
sōkjan	'seek'	\rightarrow	sōkeins	'investigation'

2.3 īni-abstracts in West Germanic

In West Germanic, on the other hand, the feminine *īni*-abstracts have merged with other feminine noun classes. In Old High German and Old Saxon, the original *īni*abstracts inflect as feminine *īn*-stems (Gallée 1910: 206 f.; Braune 2004b: 212 f.), whereas in Old English, they inflect as feminine *injō*-stems (Brunner 1965: 209). In Old Frisian, the simplification of unstressed geminate -nn- to -n- (cf. van Helten 1890: 121) makes it impossible to discern whether the original *īni*-abstracts (Ahlson 1960: 10 ff.) inflect as *īni*-stems or *injō*-stems.

2.4 ini-abstracts in North Germanic

The *īni*-abstracts are well attested in North Germanic. The list in (2) constitutes all attested *īni*-abstracts from first class weak verbs in Old Norse. The Old Swedish forms are listed in (3), Old Danish in (4), and Old Gutnish in (5).⁵

(2) eyða	'waste'	\rightarrow	auðn	'wasteland'
fǿra	'bring'	\rightarrow	fórn	'offering'
greiða	'arrange'	\rightarrow	grein ⁶	'arrangement'
heyra	'hear'	\rightarrow	heyrn	'hearing'
leggja	'lay'	\rightarrow	lǫgn	'net'
leysa	'free'	\rightarrow	lausn	'liberation'
neyta	'use'	\rightarrow	nautn	'use'
nýsa	'pry'	\rightarrow	njósn	'news'
skíra	'cleanse'	\rightarrow	skírn	'cleansing'
spyrja	'ask'	\rightarrow	spurn	'report'
stýra	'steer'	\rightarrow	stjórn	'steering'

- 5. The Old Norse forms are collected by Torp (1909: xlv f.). For the actual attestations, cf. Cleasby 1874, Fritzner 1886–96, Larsson 1891, Egilsson 1931, Holtsmark 1955, and ONP. The Old Swedish forms are collected by Olson 1916: 456 f., and include forms from both Old Swedish and Middle Swedish (cf. Noreen 1904: 2 ff.). For the actual attestations, cf. Schlyter 1877 and Söderwall 1884-1918. The Old Danish forms are those I could find in Lund 1877, and the Old Gutnish forms those I could find in Pipping 1905–07.
- 6. For the loss of * δ in * $grei\delta n > grein$, cf. Bugge 1885: 212 and Noreen 1923: 215 f.

þeysa	'rush'	\rightarrow	þausn	'ruckus'
verja	'defend'	\rightarrow	vǫrn	'defense'
<i>øgja</i>	'scare'	\rightarrow	ógn	'threat' ⁷
(3) ālæggia	'prescribe'	\rightarrow	ālæghn	'tax'
idha	'do'	\rightarrow	idhn	'occupation'
$l\bar{y}sa$	'announce'	\rightarrow	$l\bar{y}sn$	'announcement'
lēsa	'free'	\rightarrow	lōsn	'liberation'
væria	'defend'	\rightarrow	værn, varn	'defense'
<i>ōdha</i>	'waste'	\rightarrow	<i>ōdhn</i>	'wasteland'
(4) løsæ	'free'	\rightarrow	lōsn	'liberation, bowel movement'
væriæ	'defend'	\rightarrow	værn	'defense'
(5) loysa	'free'	\rightarrow	lausn	'liberation'

No distinction is made in the singular between original \bar{o} -stems and *i*-stems for feminine nouns in Old Norse (Noreen 1923: 265). The i-stem declension of the original *īni*-abstracts is nevertheless guaranteed by the plural ending -ir, which is the only attested plural ending for these abstracts in the oldest Old Norse manuscripts (fórnir, greinir, and ógnir; cf. Larsson 1891, Holtsmark 1955). Taking the Old Norse forms at face value, the Proto-Norse endings of these abstracts will be reconstructed as *laus- $\bar{i}n$ -u (nom. sg.), *laus- $\bar{i}n$ - $\bar{o}R$ (gen. sg.), and *laus- $\bar{i}n$ - $\bar{i}R$ (nom. pl), but note that nothing in the following will rest on the choice of these endings.

Unlike Gothic, where more than 60 cases of *īni*-abstracts from first class weak

^{7.} Torp (1909: xly f.) does not include *bausn* from *beysa*, even though *bausn* appears in both Cleasby's and Fritzner's dictionaries (Cleasby 1874: 731; Fritzner 1886-96 III: 1011). Torp does, however, include fýsn 'desire' from fýsa 'desire'. This is probably based on the lemma fýsn in Fritzner (1886– 96 I: 526), which itself is based on the once occurring (fysn) in manuscript AM 303 4° (Munch & Unger 1847: 113; Jónsson 1902–03: 2355). Since this manuscript was written by the Icelandic copyist Ásgeir Jónsson at the end of the 17th century (Munch & Unger 1847: ix f.; Jónsson 1902–03: ix), the form fysn is strictly speaking a Modern Icelandic form. The word fysn is otherwise well attested in Middle Icelandic (ONP, cf. Noreen 1923: 8), Modern Icelandic (Árnason 2002: 412), and Modern Norwegian (Hellevik 1966– III: 1164), but is unattested in Old Norse (cf. ONP). Torp (loc. cit.) also includes freistn 'temptation' from freista 'tempt'. This is again probably based on the lemma freistn in Fritzner (1886–96 I: 483), which itself is based on the plural form freistnir in Barlaam and Josaphat's saga (Keyser & Unger 1851: 198, 201; Rindal 1981: 18618, 22811). In reality, however, freistnir is the plural of the frequent īn-stem freistni (Noreen 1923: 282). Finally, Torp (loc. cit.) lists lækn 'cure, healing'. As above, this seems to be based on the lemma lækn in Fritzner (1886–96 II: 590), which itself is based on the once occurring gen. sg. læknar in the Kringla manuscripts (Jónsson 1893–1900: 134°), written by Ásgeir Jónsson (op. cit.: ii). The form *læknar* is, however, best taken as the gen. sg. of the *īn*-stem *lækni* (op. cit.: 134; cf. Noreen 1923: 282).

verbs are attested, the North Germanic languages do not exhibit more than sixteen. As there are no indications that *īni*-abstracts could be productively formed in the Old Norse period, 8 I conclude that they are all inherited from the proto-language.

2.5 Syncope of *ī and a nom. sg. in -in

Perhaps the most obvious property of the *īni*-abstracts in Old Norse is that there is no reflex of the original long vowel $*\bar{i}$, not in the nom. sg. forms listed in (2), nor in any of the other case forms: nom. sg. fórn – gen. sg. fórnar – nom. pl. fórnir (Larsson 1891). By the Proto-Norse rules of syncope, however, a short oral vowel in a final syllable will syncopate and leave a nasal vowel in the preceding syllable behind, regardless of its length. The f. nom. sg. adjective *sand-īn-u 'sandy' thus shows up in Old Norse as sendin (Meissner 1910: 23²⁶), and the m. acc. sg. noun *him-in-a 'heaven' as Old Norse himin (Larsson 1891, Holtsmark 1955). As noted already by von Bahder (1880: 84) and Bugge (1885: 213), the regular nom. sg. of *īni*-abstracts in Old Norse should therefore be $*sk\bar{\imath}r-\bar{\imath}n-u > *skirin$ with a preserved unstressed -i-, instead of the actually attested skirn 'cleansing'.

What is unfortunately typically ignored in the discussion of Old Norse *īni*-abstracts is that this regular outcome is actually securely attested. The nom. sg. *hauR-īn-u 'hearing' (cf. Gothic -hauseins 'hearing') is attested in Old Norse as heyrin-, as it appears in the compounds heyrin-kunnr, heyrin-kunnigr 'hearing-known', i.e. 'known from hearing', and hevrin-orð 'hearing-word', i.e. 'testimony of hearing'. The oldest attestations of these words are given in the footnote.9

- 8. Signs of productivity would be if *īni*-abstracts could be formed from first class weak verbs that themselves are loanwords, such as byrða 'embroider', býta 'exchange', byxa 'jump', eygja 'see', klingja 'ring', krenkja 'hurt', mella 'shut', pynda 'extort', skenkja 'serve drink', skifa 'slice', snæða 'eat', and tæra 'consume' (cf. de Vries 1962). No such examples exist. This is in contrast with ingōabstracts, which are productively formed from such loanwords in Old Norse: byting, byxing, pynding, skenking, snæðing, and tæring (ONP, Heggstad et al. 2008).
- 9. Royal decree DN II 5 (from 1224): Qllum monnum man þat hér heyrinkunt vera, at fiskin í Djúpvík lá at fornu til konungsdómsins oll. 'To all men let it here be known from hearing [it], that all fish catch in Djupvik previously belonged to the kingdom.' (DN II: 6, Hødnebø 1960: 30 f.)

Bible translation Stjórn AM 228 fol (from ca. 1300–1325): En ef annarligr maðr sá er eigi er kominn af ætt Ísraels sókir til af fjárlægum londum þik at dyrka í þessum stað fyrir þá skyld at hann hafi kannast viðr þitt háleita nafn, sem hvervitna man heyrinkunnigt verða, þá mant þú [...]. 'And if a foreigner who is not of the people of Israel visits from distant lands to worship you in this place because he has learned of your sublime name, as it may be known everywhere from hearing [it], then you may [...].' (Unger 1862: xi, 567.)

Law book Grágás Konungsbók §237 (from ca. 1250): Ef maðr mælir við mann afheyranda, ok er kostr at sókja til ins þriðja alþingis þaðan frá er hann fregn, ok sókja hvárt er hann vill við tylftarkvið eða við **heyrinorð** fimm manna landeiganda þeirra er réttir sé í kviðum, hvárts mælt var

2.6 Syncope of *\overline{1}\) in unstressed open syllables

As seen in the previous section, the expected base form in -in appears in heyrin-, regularly developed from *haur-īn-u. 10 Other īni-abstracts, however, as well as the non-compounded forms of heyrn 'hearing', decline only with -n- in all forms, exemplified in (6) below with the attested paradigmatic forms of forn 'offering' and heyrn in the oldest Old Norse manuscripts (Larsson 1891; Holtsmark 1955).

(6)	Nom. sg.	fórn	heyrn
	Acc. sg.	fórn	heyrn
	Dat. sg.	fórn	heyrn
	Gen. sg.	fórnar	heyrnar
	Nom. pl.	fórnir	
	Acc. pl.	fórnir	
	Dat. pl.	fórnum	
	Gen. pl.		

Taking all these forms at face value, i.e. accepting that both heyrin- and heyrnar are regular developments, it seems reasonable to assume with von Bahder (1880: 84) and Bugge (1885: 213) that *ī has regularly syncopated in forms such as gen. sg. heyrnar and nom. pl. *fórnir* from Proto-Norse *hauRīnōR and *fōrīnīR, and that the syncopated stem forms heyrn- and fórn- have subsequently been generalized throughout the paradigm.

With respect to the exact formulation of the rule triggering syncope of long *ī, von Bahder and Bugge offer similar proposals. von Bahder suggests that the $*\bar{i}$ is lost before a syllable with secondary stress, whereas Bugge claims that $*\bar{i}$ is lost before a syllable whose vowel does not undergo syncope. The latter formulation appears more or less unchanged in Noreen 1923, the main reference work for Old Norse grammar, where it is said that an *i in a penultimate syllable syncopates if the vowel in the ultimate syllable does not (1923: 132, 136 f.).

fyrir ollum saman eða sér hverjum þeirra, ok skulu þeir at dómi leggja þat undir þegnskap sinn at beir heyrðu þat mál ór hans munni. 'If a man speaks [offensively] of someone who is not hearing it, then there is opportunity to prosecute up till the third general assembly from when he learns of it, and to prosecute in whichever way he wants – either with a tribunal of twelve men or with the testimony of five landowners who are eligible to be in a tribunal, whether it was spoken in front of all of them together or each one of them separately, and they shall swear by their honor at the court that they heard those words from his mouth.' (Finsen 1852: 182, Kålund 1900: 30.)

10. It is of course possible that the form heyrin- in the compounds mentioned above goes back to a proper i-stem formation *hauR- $\bar{l}n$ -i- or even to a formation *hauR- $\bar{l}n$ -a-, since \bar{o} -stems regularly used *-a- as its connecting vowel when serving as the first element in compounds (cf. Krahe 1967: 19 f.). This has, however, no bearing on the discussion above, since *hauR-īn-u, *hauR-īn-i, and *haur-īn-a would all regularly give heyrin in Old Norse.

The traditional problem with describing rules of syncope based on the placement of secondary stress is that secondary stress itself is typically determined by where syncope occurs (see footnote 11 for an example). The reasoning is in other words circular. In Bugge's and Noreen's formulation of the rule, the issue of "look-ahead" arises, since at the time when the original long $*\bar{\imath}$ is prone to undergo syncope, it cannot "look ahead" in time to see if the vowel in the following syllable might undergo syncope as well. Although their formulation can serve as a practical description of synchronic Old Norse paradigms, it cannot serve as a description of what actually took place at the time of syncope prior to Old Norse. In sum, basing the syncope of $*\bar{\imath}$ on these properties of the vowel in the following syllable has little to recommend it, since these properties are either not demonstrable (as with secondary stress) or not present (as with future syncope).

In their place, I suggest a much simpler rule that only takes into account what can be observed at the time of syncope. After the early loss of short vowels in absolute final position (nom. sg. *haurīnu > *haurīn), an unstressed long *ī will undergo syncope in an open syllable. By this rule, the original nom. sg. *haurīn will retain the vowel and come out as Old Norse heyrin-, whereas the gen. sg. *haurīnōr and nom. pl. *fōrīnīr, where *ī finds itself in an open syllable, will syncopate the vowel and give Old Norse heyrnar and fórnir. 11

3 Syncope of long *ī in *alīnō- 'ell'

The Germanic word for 'ell' is attested in Gothic as a feminine \bar{o} -stem *aleina* in Matthew 6:27 (Snædal 1998: 3): *huas* [...] *mag anaaukan ana wahstu seinana aleina aina*? 'Who may add one ell to their stature?' The Gothic form unambiguously reflects a Proto-Germanic form * $al\bar{n}$ \bar{o} -, which in turn reflects a pre-Germanic form

11. As should be clear from this formulation of the rule, it will make a different prediction from Bugge's and Noreen's rule only when *ī finds itself in a closed syllable. In both *haurīnōr > heyrnar and * $f\bar{o}r\bar{n}\bar{n}R > f\bar{o}rnir$ the * \bar{i} is in an open syllable, but the * \bar{i} is also in a penultimate syllable before a syllable whose vowel does not syncopate. Both formulations of the rule for syncope of $*\bar{\imath}$ will make the same predictions here, although only Bugge's and Noreen's formulation suffers from the lookahead problem discussed above. An interesting example showing that Bugge's and Noreen's formulation is in fact inaccurate comes from the adjective *gulbīna- 'golden'. Its m. dat. sg. form in Old Norse is gullnum with syncope, but the gen. pl. form is gullinna without syncope. The only property distinguishing the two forms is that the *ī found itself in an open syllable in gullnum, and consequently underwent syncope, but found itself in a closed syllable in gullinna, and as a result did not undergo syncope. From Bugge's and Noreen's rule, both forms should exhibit syncope of *ī. In order to explain such cases, Noreen (1923: 137) adds an extra stipulation, according to which the vowel $*\bar{i}$ would be unstressed and prone to syncope in the form leading to gullnum, but would have secondary stress and resist syncope in gullinna, an explanation that is clearly tailored around the observed outcome of these forms, with no independent justification. The adjective *gulbīna-, as well as other adjectives and adverbs, will for reasons of space be treated in a separate paper.

*olīnā-. This form is identical to the securely reconstructed Proto-Celtic form *olīnā-'ell'. 12 The West Germanic forms for 'ell' are given in (7) below:

(7) Language	Nom. sg.	Gen. sg.
Old High German	elina	elino 13
Old Saxon	elina	14
Old English	elin	elne 15
Old Frisian	elne	elne 16

The North Germanic forms are given in (8):

(8) Language	Nom. sg.	Gen. sg.
Old Norse	alin	alnar ¹⁷
Old Swedish	alin	alnar 18
Old Danish	alnæ	19
Old Gutnish	eln	*elnar ²⁰

- 12. Thurneysen 1946: 47; Jackson 1967: 296; Vendryes 1959-: U-18; Schrijver 1995: 259; Falileyev 2000: 53; Matasović 2009: 297.
- 13. Karg-Gasterstädt & Frings 1952– III: 263; Seebold 2001–08 I: 113, II: 252; Schützeichel 2004 II: 422.
- 14. Gallée 1894: 284: Wadstein 1899:7318.
- 15. The Old English nom. sg. is typically given as eln (Bosworth 1882–98: 247; Hall 1960: 104; Borden 1982: 358). Despite Campbell's claim that the original non-syncopated form is unattested (1959: 160), it is in fact attested in the nom. sg. (elin) in the Leiden glosses (Leiden Rijksuniversiteit Vossianus Lat. 4° 69 from the 8th century; see Hessels 1906: 17²⁸; Sauer 1917: 63; Ker 1957: 478; Bergmann & Stricker 2005 II: 811 ff.) and in the Reichenau glosses (Karlsruhe Badische Landesbibliothek Aug. CXXXV from the 9th century; see Kluge 1902: 1326; Leydecker 1911: 80; Meritt 1945: 52; Ker 1957: 478; Bergmann & Stricker 2005 II: 682 f.), and also in the first element (hellen-) of the compound (hellenboga) 'elbow' in the scratched Bede glosses (British Museum Cotton Tiberius C. ii from the 8th-10th century; see Meritt 1933: 318²⁸⁶; Meritt 1945: xi; Ker 1957: 261).
- 16. von Richthofen 1840: 704; Hofmann & Popkema 2008: 118.
- 17. The disyllabic base form alin is guaranteed by the meter in Eilífr Goðrúnarson's Þórsdrápa from the 10th century (Jónsson 1912–15 A I: 151: Egilsson 1931: 96: Kuhn 1983: 293), where it appears in the kenning alin-munnr 'mouth of the lower arm' (i.e. 'hand') in a position where the meter requires a disyllabic sequence with an open first syllable (Sievers 1893: 99 f.). The first handwritten attestation of alin is in St. Olaf's saga from the latter half of the 13th century: En veita honum [...] penning [...] bann er tíu væri fyr alin vaðmáls. 'And to pay him one penny of the kind that there are ten of for one ell of wadmal' (Johnsen & Helgason 1941: 3705, 881 f.). The nom. sg. alin is furthermore supported by Modern Icelandic alin (Árnason 2002: 25) and the disyllabic tone of Modern Norwegian alin/alen (Skulerud 1918: 90, 97). The gen. sg. alnar is first attested in the law book Grágás Konungsbók §181 (from ca. 1250): [...] þá skal hlið vera á garði alnar ok faðms mikit [...]. 'Then there shall be an opening in the fence one ell and one fathom big' (Finsen 1852: 91; Kålund 1900: 30). The gen. pl. alna is attested already in the 12th century (Larsson 1891).
- 18. Schlyter 1877: 21; Noreen 1904: 299. The disyllabic form alin is also supported by the disyllabic tone of Modern Swedish alen (Sjöstedt 1979-99 I: 6).
- 19. The Old Danish form alnæ is used indiscriminately for all cases and numbers. It represents the original gen. pl. form (Brøndum-Nielsen III: 78).
- 20. Säve 1859: 51, 81; Söderberg 1879: 8 f.; Pipping 1905–07: 18. The gen. sg. of eln is not attested in Old Gutnish, but it can be surely reconstructed as *elnar based on the attested acc. pl. elnar, since

The Old Norse and Old Swedish forms alin – alnar constitute direct confirmation of the claim in section 2.6 that Proto-Norse long *7 syncopates in unstressed open syllables. Just as the form alin cannot be anything but the regular retention of the *iin a final syllable after the loss of the final vowel (*alīnu > alin just as *haurīnu > hevrin-), the form alnar cannot be anything but the regular syncope of the same long $*\bar{i}$ in an unstressed open syllable.

4 Possible syncope of long *ī in *druhttīna- 'ruler'

There are only two Germanic languages which retain original unstressed long vowels as long - these are Gothic and Old High German. The Proto-Germanic word *druhtīna- 'ruler' is not attested in Gothic, but it is very well attested in Old High German, chiefly because this Germanic word was often used as a word for the Christian god in the North-West Germanic languages. In most dictionaries and grammars of Old High German, this word is traditionally listed with a long unstressed *ī*, i.e. as *truhtīn* (e.g. Seebold 2001–08 I: 298, II: 866; Braune 2004b; 389; and others). The West Germanic forms of this word are given in table (9) below, followed by the North Germanic forms in table (10):

(9)	Language	Nom. sg.	Nom. pl.
	Old High German	truht Ĭ n	truht i na ²¹
	Old Saxon	drohtin	22
	Old English	dryhtin	dryhtnas ²³
	Old Frisian	drochten	24
(10)	Language	Nom. sg.	Nom. pl.
(10)	Language Old Norse	Nom. sg. dróttinn	Nom. pl. dróttnar
(10)			
(10)	Old Norse	dróttinn	dróttnar

the gen. sg. and acc. pl. of feminine \bar{o} -stems are identical in Germanic. Modern Gutnish is still sg. eln – pl. elnar (Gustavson 1918–40: 9).

- 21. Heffner 1961: 152; Seebold 2001–08 I: 298, II: 866 f.; Schützeichel 2004 X: 70 f.
- 22. Wadstein 1899: 178; Sehrt 1966: 84 ff.
- 23. The nom. sg. dryhtin with -i- is based on the Northumbrian spelling (dryctin) in Cædmon's hymn (Dobbie 1942: 105) from the early 8th century (Ker 1957: 38 f.). The plural dryhtnas appears among other places in the Salisbury Psalter (Sisam & Sisam 1959: 306).
- 24. von Richthofen 1840: 693 f.; Hofmann & Popkema 2008: 108.
- 25. Collin & Schlyter 1827: 6, 104; Peterson 2006.
- 26. Jacobsen & Moltke 1942: 642.
- 27. Pipping 1905-07: 17.

42.

The paradigmatically attested forms of Old Norse *dróttinn* in the oldest Icelandic and Norwegian manuscripts are given in (11) below (Larsson 1891, Holtsmark 1955).

(11)	Nom. sg.	dróttinn
	Acc. sg.	dróttin
	Dat. sg.	dróttni
	Gen. sg.	dróttins
	Nom. pl.	dróttnar
	Acc. pl.	
	Dat. pl	dróttnum
	Gen. pl.	dróttna

The declination of *dróttinn* in table (11) agrees with what we have seen for the declination of *alin* in section 3. The unstressed vowel appears as -i- in a final syllable (*dróttinn*, *dróttins*), and is syncopated in an open unstressed syllable (*dróttni*, *dróttnar*, *dróttnum*, *dróttna*). If the Proto-Germanic form of this word had a long unstressed $*\bar{\imath}$, **druhtīna*-, then the declination in Old Norse is another piece of evidence that long $*\bar{\imath}$ syncopates in open unstressed syllables in Old Norse.

It is not obvious to me, however, that the dictionaries and grammars of Old High German are justified in marking the vowel of *truht*in as long. Despite being exceptionally well attested, this word is never marked with a long vowel in the old glosses and fragmentary texts (Heffner 1961: 152), or in any glosses at all (Schützeichel 2004 X: 70 f.). The main sources for evidence of long vowels in Old High German are the Alemannic Benedict rule and Notker manuscripts (cf. Braune 2004b: 16). Despite its abundance in these texts, *truht*in is never marked with a long vowel here either (Masser 2002: 352; Sehrt & Legner 1955: 513). Most crucially, however, this word appears in the Notker texts as *truhten*, with lowering of the unstressed vowel to *e*, a process that only occurs with unstressed *short i* in Notker's Alemannic dialect (Braune 1876: 148 f.).

Although the diphthongization in the early Modern High German form *Trechtein* (cf. Schmeller 1872: 645; Grimm & Grimm 1854–1972 XIII: 1574 f.) indicates that the unstressed i must have been long at some point in some dialects, the complete lack of evidence for a long $\bar{\imath}$ in Old High German lends more support to a Proto-Germanic reconstruction *druhtina- with a short *i. If my reservations against positing an original long * $\bar{\imath}$ in this word are justified, then Old Norse drottinn - drottnar is not a genuine example of syncope of * $\bar{\imath}$.

5 Alternative accounts

As mentioned already in the introduction, several scholars have explicitly rejected the possibility that long $*\bar{i}$ is able to undergo complete syncope in the transition from Proto-Norse to Old Norse (Walde 1900: 195; van Helten 1909:142; Bibire 1975: 187 f.), and the list of such scholars only grows when one includes those who are unwilling to accept a long *ī in the Proto-Norse forms of the words discussed in this paper. Needless to say, alternative accounts must necessarily be provided in order to explain the syncopated Old Norse forms. This section will briefly address these accounts, and show why these proposals are unsatisfactory.

5.1 īni-abstracts

Several scholars have suggested that Proto-Norse abstracts from first class weak verbs were not formed with *-īni-, but rather with *-ni- directly on the verbal root, as in * $f\bar{o}rijan$ - 'bring' \rightarrow * $f\bar{o}r$ -ni- 'offering' and *hauRijan- 'hear' \rightarrow *hauR-ni- 'hearing' (Walde 1900: 195; Bibire 1975: 187 f.; Grønvik 1998: 60). Supporting evidence for this claim is sought in the Gothic form sōkns 'inquiry; controversy', which exists in addition to the *īni*-abstract *sōkeins* (see section 2.2). Given these Gothic forms, Proto-Germanic could apparently form abstracts from first class weak verbs with either *-ni- or *-īni-, which opens up the possibility that North Germanic in fact employed only the variant *-ni- in these abstracts (Grønvik 1998: 60).

This argument rests, however, on the premise that the Proto-Germanic verb *sōkijanis a secondary verb (see section 2.1). Unlike secondary verbs, though, the past forms of *sōkijan- are formed from an Indo-European participle in *-to- directly on the verbal root (* $s\bar{a}g$ -to-> * $s\bar{a}k$ -to-> Proto-Germanic * $s\bar{o}hta$ -), which elsewhere in Germanic is a telltale sign of a primary verb.²⁸ In addition to this, comparative evidence for the verbal root *sāg- in other Indo-European languages indicates that the proto-language formed a primary present *sāg-ié- (Rix 2001: 520), which develops regularly to Germanic *sōkijan- (cf. Casaretto 2004: 334). The Proto-Germanic abstract *sōk-ni- is therefore an example of *ni*-abstracts from primary verbs, which are regularly formed with the suffix *-ni- directly on the verbal root, as in *seh**-an- 'see' \rightarrow *seg**-ni- 'vision', *wes-an-'be' \rightarrow *wez-ni- 'nourishment' (loc.cit.), and *tīh-an- 'show' \rightarrow *tig-ni- 'sign'.

A further complication of the suggestion that Proto-Norse formed abstracts from first class weak verbs with *-ni- directly on the root is that it cannot explain Old Norse heyrin-, which clearly goes back to a regular formation *haur-īni- (see section 2.5).

^{28.} These include Proto-Germanic *wurk-ijan- - *wurh-ta- 'work', *bank-ijan- - *banh-ta- 'think', *bug-jan- - *buh-ta- 'buy', *wal-dan- - *wul-þa- 'rule', *ōg-an- - *ōh-ta- 'fear', *wit-an- -*wis-sa- 'know', *kal-an- - *kal-da- 'become cold', and many others.

If anything, then, Proto-Norse must have known abstracts in both *-ni- and *-īni- from first class weak verbs (*hauR-ni- as well as *hauR-īni-), a solution that cannot be considered particularly economical.

5.2 *alīnō- 'ell'

The correspondence between Gothic *aleina* on the one hand and Old Norse alin - alnar on the other seems to be a clear sign of syncope of $*\bar{\imath}$ in Old Norse. Yet many scholars have been unwilling to accept that the Old Norse forms can go back to $*al\bar{\imath}n\bar{o}$ - with a long $*\bar{\imath}$. Many suggestions have been made in the literature as alternative explanations for this phenomenon.

One approach has been to reject the very existence of Gothic *aleina* in the first place, by suggesting that it is simply a scribal error for *alina (Uhlenbeck 1900: 10; Kluge 1924: 117; Weiss 2009: 169). If so, then all the attested Germanic forms can be traced back to a Proto-Germanic form *alinō- with a short *i instead. This approach suffers from a severe methodological problem in that there is nothing about the Gothic form itself that justifies an amendment to *alina. When compared with the Proto-Celtic form *olīnā- (see section 3), the Gothic form aleina is in fact highly expected, since it matches the Proto-Celtic form. The only rationale behind correcting the Gothic word is that it does not easily agree with a theory of vowel syncope in a different branch of Germanic, which can hardly be called a sound philological methodology for manuscript corrections.

Another approach has been to reconstruct two separate forms for Proto-Germanic: one proto-form $*al\bar{\imath}n\bar{o}$ -, giving Gothic *aleina*, and another proto-form $*alin\bar{o}$ -, giving Old Norse alin - alnar (Feist 1939: 35; Pokorny 1959–69 I: 307; Krahe 1967: 107; Casaretto 2004: 321). Reconstructing more than one stem form for a single word in Proto-Germanic is for obvious reasons not economical, and should be entertained only when no other solution seems feasible.

Yet another proposal is given by Roethe (1919: 790 ff.). He claims that there is a general tendency in the Germanic languages to displace the secondary stress one syllable to the right when the main stress is on a short syllable. The default stress pattern $/\dot{x}$ \dot{x} x/ thus remains when the initial syllable is long, $/\dot{-}$ \dot{x} x/, but shifts when the initial syllable is short, $/\dot{-}$ x \dot{x} . As a result, *á $l\bar{n}$ ō- with a short first syllable would move its secondary stress rightwards to *á $l\bar{n}$ nō-. Crucially, the loss of secondary stress on the * $\bar{\imath}$ is claimed to be the reason for its weakening and loss. The main problem with this theory is that it agrees rather poorly with the general rules of vowel loss in North-West Germanic. As can be seen especially clearly with Old English data, it is precisely the vowels that by this theory do *not* have secondary stress that are retained, whereas the vowels that do have secondary stress are lost, as in the n. nom./acc. pl.

forms * $h\acute{a}ub\grave{u}du > h\bar{e}afdu$ 'heads', * $w\acute{o}rd\grave{u} > word$ 'words', and * $w\acute{e}r\bar{o}d\grave{u} > werod$ 'troops' (Campbell 1959: 116, 227; Brunner 1965: 199; Bammesberger 1979: 137).

5.3 Occam's razor

As seen in this section, alternative explanations for the apparent syncope of long *iin Old Norse nouns have been provided. Even though each explanation on its own suffers from severe shortcomings, it is also important to point out that alternative explanations for *īni*-abstracts and *alīnō- must both be true for the regularity of *ī*syncope to be false. As it is clearly uneconomical to offer an independent account of the lack of a surface realization of *i in every case one encounters it, it is preferable to posit a single rule stating that *i syncopates in unstressed open syllables, a generalization which to my knowledge has no counterexamples.

6 Conclusion

This paper has shown that a long unstressed *i regularly syncopates in an open syllable in the transition from Proto-Norse to Old Norse. By this rule, Proto-Norse * $hauR\bar{i}n - hauR\bar{i}n\bar{o}R$ 'hearing' and * $al\bar{i}n - al\bar{i}n\bar{o}R$ 'ell' come out as heyrin - heyrnarand alin – alnar in Old Norse. Alternative explanations offered in the literature, such as Old Norse hevrnar and alnar going back to Proto-Norse *haurnor and *alinor instead, have been shown to be uneconomical, as they cannot explain forms that clearly go back to forms with a long *ī, such as Old Norse heyrin- and Gothic aleina.

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