THE RUNIC FRISIAN VOWEL SYSTEM [1]
THE EARLIEST HISTORY OF FRISIAN AND PROTO-INSULAR NORTH FRISIAN

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Abstract

This article offers a phonological analysis of the vowel system of Runic Frisian (6th-9th c.) in stressed syllables. By using the most reliable attestations and taking them at face value, a vowel system emerges that can be the ancestor of all the later attested Frisian varieties, including the rather deviating Insular North Frisian dialects. The position of PGerm. $*\bar{e}^1$ remains unclear due to scarcity of the data. In the short vowel system, the most outstanding features are the separation of fronted PGerm. *a from PGerm. *e (as is also the case in Old English). The most outstanding outcome in the long vowel system is the development of PGerm. *ai. Current reconstructions treat its monophthongisation as one process, contemporaneous with or even preceding the monophthongisation of PGerm. *au. This analysis proposes an early date of monophthongisation of PGerm. *ai in velar contexts and of PGerm. *au, and a later date of monophthongisation of PGerm. *ai in other contexts. The emigration of Frisians to the North Frisian islands in the 7th/8th century is positioned between those two stages. This reconstruction solves a long-standing problem in the historical phonology of Frisian, most prominent in the developments in Insular North Frisian and reconciles the main-stream opinions with a chronology of events as proposed by Hofmann (1964).

1. Introduction

The earliest stages of most Germanic languages are attested in runic inscriptions, the oldest ones from Scandinavia dating from the 2nd century AD. The Frisian runic material comprises a set of runic inscriptions from the Frisian regions alongside a few inscriptions from other regions that are commonly considered to be of Frisian origin, dating back to the period between the 6th and the 9th century. The most recent overviews of this Frisian runic corpus are given by Looijenga (1996, 1997, 2003) and earlier by Quak (1990). The inscriptions are regularly considered in historical phonological studies of early Frisian. To the

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best of my knowledge, the only attempt at a comprehensive analysis of the vowel system in this early form of Frisian was made so far by Miedema (1974).[2]

In this article, I intend to present a synchronic reconstruction of the vowel system of stressed syllables in this early form of Frisian, which I will call Runic Frisian. The article is in that respect comparable to the work by Findell (2009a, 2012a) on the continental West Germanic runes (Proto-High German) and earlier work on the Early Runic language by Krause (1971:55–101) and Nielsen (2000). The vowels of the unstressed syllables of Runic Frisian have been discussed earlier by Nielsen (1984a, 1984b, 1994, 2000) and Nedoma (2007).

The vowel system of Old Frisian – attested only since the 13th century – has been the subject of several reconstructions, for instance by Siebs (1901: 1364–1371; in a pre-phonological era) and Hofmann (1964). Summaries of these treatments are found in Boutkan (2001: 616–619), Århammar (2001a) and Versloot (2001: 767–769).[3] Hofmann (1964) reconstructs the long vowel systems in various branches of Frisian using both Old Frisian and modern dialectal evidence. He signalises a profound contrast between the reconstructed long vowel systems of Proto-Insular-North Frisian on the one hand and of the other dialect groups on the other. Insular North Frisian is the result of a migration from the southern Frisian areas to the north in the 7th and 8th century (Århammar 2001b), overlapping with the time of attestation of Runic Frisian. The main contrast between these reconstructed long vowel systems comes from the developments of PGerm. $*ai$, $*\bar{o} + i$-mutation, $*\bar{e}^1$ and $*\bar{e}^2$: in Insular North Frisian $*\bar{o} + i$-mutation merges with $*\bar{e}^2$ but $*\bar{e}^1$ merges with $*ai$. In the rest of Frisian $*\bar{e}^1$ merges with $*\bar{e}^2$ and $*\bar{o} + i$-mutation, while the product of PGerm. $*ai$ (and $*au + i$-mutation) was a separate phoneme. Following a thorough structuralist

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[2] Miedema drew on the then current treatments of the order of sound changes, working towards an interpretation of the *Britsum* inscription. My approach will follow a reverse path. Miedema's results will not be systematically commented upon in this article.

[3] The vocalic system presented in Spenter (1968: 39, 150, 272) for Old West Frisian represents a reconstruction artefact, with several later phonemic splits back-projected into earlier synchronic contrasts. Bremmer (2009: 44) offers a deviating picture of the system and its origins, separating the product of $*\bar{e}^2$ from $*\bar{e}^1$, while postulating the merger of PGerm. $*\bar{e}^1$ with the product of PGerm. *ai*, a development that is in fact only found in Insular North Frisian.

analysis, Hofmann proposed that *i*-mutation preceded monophthongisation, followed by delabialisation and subsequently monophthongisation of PGerm. *ai* and *au* (Hofmann 1964: 182–185). In his view, Proto-Insular North Frisian had *i*-mutation, but no delabialisation or monophthongisation yet. This hypothesis has so far not been acknowledged by other scholars, who place monophthongisation before *i*-mutation and delabialisation (cf. Versloot 2001: 767–768, Nielsen 2001: 515,516). Nielsen's main counterarguments are: "(1) the early runic Fr. attestation of *ā* < Gmc. *au*. […] and (2) the fact that Gmc. *ai* has two reflexes distributed on virtually the same words in all Fr. dialects, which suggests that the phonemic split must be Common Fr. […]". An analysis of the Runic Frisian inscriptions may shed some more light on the open questions mentioned above. I will return to Hofmann's hypothesis in § 4.3 and in the concluding section.

Twenty runic inscriptions are known which are in one way or another linked to Friesland and Frisian (Looijenga 2003). Three of them, *Kantens, Hantum* and *Midlum*, give no useful readings. That leaves us with 17 inscriptions. According to the current interpretations, these inscriptions contain 48 words or morphemes of compound(name)s with a vowel in (secondary) stressed syllables that received some form of interpretation. These 48 vowels are written with 12 different runes, including two digraphs. The ᛗ (**e**) is the most frequent rune, with 9 occurrences in stressed syllables, while the ᛂ –rune (**ǎ**) and the two digraphs **ai** and **iu** appear only once. The oldest inscription is dated to the 5th century (*Kantens*, without interpretation), while most inscriptions come from the 8th or even the early 9th century. The aim of this study is to analyse the runic inscriptions in order to reconstruct the vowel system of Runic Frisian in roughly the 7th and 8th century.

2. Methodological Remarks

This article is based on the runic corpus as presented in Looijenga (1997) and (2003). Looijenga (1997: 175,176) discusses briefly the composition criteria of the corpus. She seems to stick to the geographical origin as the most outstanding (but not only) criterion. Nielsen (1996) on the other hand underlines that the geographical origin is often the only argument. Even when he casts doubts, he is not explicit about the consequences for the interpretation of the corpus. For some of the items he seems to consider import from Scandinavia (Nielsen

1996: 124). Nielsen stresses that some inscriptions are considered 'Frisian' even if they do not contain explicitly Anglo-Frisian runes. As there are only two or three specifically Anglo-Frisian vowels that come into play, it is no surprise that they do not appear in every inscription from the Frisian regions. Nielsen's argument that the *Rasquert* inscription does not contain "linguistic features that could, with any degree of certainty, be associated with Old Frisian" suggests that it possibly has to be excluded from the corpus, but he again does not make this conclusion explicit (1996:127). Moreover, such line of argumentation seems circular and incorrect to me: Frisian from the 7th or 8th century does not have to match Frisian from the 14th century: runic evidence from earlier time should help us gain some understanding of how actually Frisian looked like around 700, rather than confirm that it matched late-mediaeval Old Frisian. Nor does Page's contribution in the same volume with his conclusion that for the Frisian runic inscriptions "[s]o little is certain or even probable; so much is at best possible but more likely doubtful" (Page 1996:131) bring us any further. If we were to follow these approaches, any analysis of the runic findings from the Frisian regions would be useless (cf. Looijenga 2003:118,119). Differences between otherwise reconstructed forms or later Frisian forms and runic evidence shall not primarily be ascribed to inscription errors, mistakes or failed readings.[4]

Therefore, I stick to the geographical principle as the dominant criterion (cf. also § 4.4) and rely basically on Looijenga's legends (not always on her interpretations) as they are based on physical re-examination of almost all the objects. In contrast to Quak (1990), who leaves most readings open, Looijenga is less reluctant to offer an interpretation to the often obscure texts. I adopt – mostly – the interpretations given by Looijenga, with a few exceptions. All the material is discussed in detail in § 3.[5] The overall picture turns out to be remarkably homogeneous and although not always matching later Old Fri-

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[4] A typical example of such reasoning away the evidence offered by Old High German manuscripts can be found in Braune & Helm (1950: 36) "Diese *e* statt *ei* ist einfach als orthographische nachlässigkeit zu betrachten […]" (underlined by APV).

[5] I checked one object myself, the Oostum comb, especially the reading of the first part: **aib** or **ælb**. Many thanks to Tineke Looijenga for establishing the contact to the Groninger Museum and to the curator of the museum, Egge Knol, for presenting the object.

sian, it is historically sound and corresponds to PGerm. or North-Sea Germanic phonemic contrasts. A composition of random errors could much less likely produce such a coherent picture.

As Runic Frisian represents a language stage between the reconstructed Proto-Germanic and the attested forms of Old Frisian from the 13th c. onwards, the interpretations must fit in with the transition from one stage to the other. Following Nielsen's (2000: 236ff) conclusion that the language of the pre-600 Early Runic inscriptions represents a form of late-common North-West Germanic, one may even claim that Runic Frisian is anchored between two attested – although sometimes scantily – historical language stages: Early Runic and Old Frisian. Some characteristics of (Proto-)Old Frisian can only be revealed indirectly through comparison of the modern Frisian dialects. Especially the Insular North Frisian dialects, which go back to a split in the Frisian family tree in the 7th or 8th century, can shed light on problematic issues in the reconstruction of the language history. Therefore, it may be expected that Runic Frisian either retains archaic forms that we can observe in Early Runic, or stays in line with the oldest forms of (reconstructed) Old Frisian, or shows a stage that links North-West Germanic to Old Frisian. Any other interpretation can only imply that Runic Frisian was not the direct ancestor of Old Frisian. Only unambiguous inscriptions can lead to a reconstruction that deviates from a linear interpolation between Early Runic and Old Frisian. Ambiguous cases should first of all be fitted in with existing interpretations and reconstructions.[6] I realise that any new, clear inscription may – given the limited amount of evidence – overthrow some of the conclusions of this study.

The legend of the runes partly depends on the changes in the language, such as the fronting of PGerm. /a/ > /æ/ (cf. Parsons 1996). At the same time, the runic evidence should help us to reconstruct the language changes. However, an equation with two unknown variables

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[6] A very intriguing fact in Runic Frisian is the appearance of the -*u* ending in the nom./acc. sg. of masculine *a*-stems, as in the name *Æniwulufu* or the words *kombu* /*kambu* 'comb'. This ending is not the expected regular development obtained through the comparative method, as none of the Old-West Germanic languages shows any trace of it. It fully complies, however, with the assumption of Runic Frisian being an intermediate stage between Early Runic (with –*a(z)*) and Old Frisian (with –Ø).

cannot be solved. As my aim was a synchronic reconstruction of early-mediaeval Frisian, I start off with the assumption that one character represented one phoneme, using one fixed transliteration per runic character.[7] Outliers are subsequently considered with regard to the date of the inscription. Keeping the phonemic value constant turns out to give coherent results. Working along these lines, I conclude that changes in Runic Frisian – if at all – are rather reflected by different spellings.[8]

Prior to the analysis proper, a few remarks on the technicalities and spelling conventions are in order. The transliterations of runic characters are given in bold face. In the transliterations of the runes and transcriptions of Old Germanic languages, the sign <æ> is used for a fronted, open vowel, phonetically [ɛ:] (rather than [æ:]). In the phonemic and phonetic transcriptions, the character [æ] is to be interpreted as in the IPA. This leads to perhaps somewhat ambiguous correspondences, such as: ᚠ = **æ** = [ɛ], next to ᚢ , ᚲ = **ä** = [æ].

Section three offers an overview of the material and the reading and interpretation of the legends. Section four aggregates the interpretations into a synchronic phoneme system (§ 4.1) and links the Runic Frisian phonemes to the P(W)Germ. origins (§ 4.2). The development of PGerm. *ai* needs some special attention (§ 4.3). The position of inscriptions found or kept in Great-Britain is discussed in § 4.4. The conclusion section (§ 5) discusses the implications of the reconstruction for Hofmann's theory about monophthongisation and *i*-mutation in Frisian.

3. The Runic characters and their sound value

In this section, I will present the phonological interpretation of the runic vocalic characters. In order to trace synchronic patterns in Runic Frisian, I start from the runic characters, to find out which sound value and phoneme could be depicted by it. Each sub-section has the following structure: <transliteration of the runic character, the rune>; number of corpus tokens with this vowel. Problematic instances are discussed

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[7] A parallel approach is applied by Nedoma (2007: 300).
[8] While Nielsen (1996) seems to express only doubts, Nielsen (2000) in his analysis of Early Runic inscriptions from Scandinavia operates on the same principles as outlined here, with remarkable and consistent results.

in more detail.

< i, | > (n = 6/7)

short vowel: **(jisu)hi[l]du** (*Westeremden A*) 'Gisehild' (PN ♀) < PGerm. **hildjō-*. Nedoma (2007: 301,304) gives arguments to read the rune as an **l** and insert an additional **i**: **(jisu)h[i]ldu**.

long vowels: **hiwi** (*Wijnaldum B*) 'spouse' < PGerm. **hīwī-* ; **i** (*Britsum*) 'yew' < PGerm. **īwa-* (acc.sg.); **(adu)jislu** (*Westeremden A*) 'Audgisl' (PN ♂) < PGerm. **gīsla-* ; **jisu(h[i]ldu)** (*Westeremden A*) 'Gisehild' (PN ♀) < PGerm. **gīsjō-*. **iwi** (*Westeremden B*) 'yew' < PGerm. **īwi* (loc. sg.?); **mi** (*Britsum*) 'me' < PGerm. **miz/mez*. Ringe (2006:290) reconstructs PGerm. **miz*, but e.g. Krahe & Meid (1969:52) give both **miz* and **mez*. Old Frisian has a long /i:/: *mī*.

When we take the reading **(jisu)h[i]ldu**, this rune uniquely represents PGerm. **ī* or a lengthened PGerm. *i/e* in **mi** 'me' < **miz/mez*.

< e, ᛗ > (n = 9)

short vowels: **me** (*Ferwerd*) 'me' < PGerm. **miz/mez*. It should be noted that the interpretation goes back to Looijenga (2003: 303), who reads a bind rune **me**, where Quak (1990: 362) and Nedoma (2007: 320) read the **m** as part of the following sequence: **muræ**; **ded** (*Hoogebeintum*), **deda** (*Oostum*), **[d]eda** (*Amay*) 'did' (3rd sg. prt.) < PGerm. **dedō*. The singular form **ded(a)** is interpreted as a short sound. Old English, Old Saxon and Old High German all have short vowels here (Ringe 2006:263). In later varieties of Frisian, levelling took place in favour of the long vowel from the plural. The Wangeroogic form *daid* points to PGerm. **ē¹*, the Insular North-Frisian forms to **ē²*, e.g. Fering-Öömrang *ded*. The fact that this levelling is different for various dialect groups, fits the hypothesis that this levelling postdates the year 800. *Amay* can also be interpreted as a PN **eda** (Quak 1990: 360, Nedoma 2007: 316), Mod. WFries. *Yde*. It may go back to PGerm. **Aidō-*. The etymology of PGerm. **Haiþ-* (PN ♂) by Looijenga is questionable. It builds on the assumption of an early drop of initial *h*, which is not common in Old Frisian;[9] **ek** (*Rasquert*) 'I' < PGerm. **ek(a)*; **beret** (*Britsum*) 'carry' (imperative pl.) < PGerm. **beriþ*; **me(þ)** (*Westeremden A*) 'with' < PWGerm. **miþi* < PGerm. **meþi*. In Old Frisian, the spelling *mith* is the dominant form in the oldest sources. The preposition has an adverbial counterpart *methe* < PGerm. **meþa* (Philippa & e.a. 2003: "met", "mee").

long vowels: **wela[n]d** (*Schweindorf*) 'Weland' (PN ♂) < PGerm. **wēla-*

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[9] Looijenga's reference to the Walloon environment of the finding is an anachronism for two major reasons: 1) when the object only landed there through trade contacts, any language contact influence is out of the question, 2) at that time, the /h/ was not mute yet in French (Allières 1988: 40–41); cf. Nedoma (2007: 316–317).

handu- (Looijenga 2013); **edæ(-boda)** (*Arum*). In the interpretation as OF *ēth* < PGerm. *aiþa-* 'oath' the **e** represents a PGerm. *ai*. By some it is interpreted as the Old Frisian adverbial particle *et* 'return', with a short vowel. Nedoma (2007: 313–318) dismisses the current readings of 'oath' and 'return-' and reads *Ēdæ*, a feminine PN < PGerm. *Aidō-*. The same PGerm. vowel was suggested for *Amay*.

The runic character **e** appears for both PGerm. *i* and *e*, being in (almost) complete opposition to **i**, that marks the historically long vowel /i:/. The form **me** 'me' in *Ferwerd* is interpreted as short here, but for this and the relation to **i**, cf. the discussion in 4.1. The most secure instance of **e** as a case where it represents a long vowel is **wela[n]d** with PGerm. *$ē^2$* (Krause 1971: 67). This PGerm. sound appears as a relatively closed vowel *ē* in Old Frisian. Several interpretations also suggest **e** < PGerm. *ai*. Altogether, the **e** is well secured as the representation of short PGerm. *i* and *e*. In the form **wela[n]d** it represents a relatively closed /e:/-sound. Its use for PGerm. *ai* is insecure.

< æ, ᚨ > (n = 4)

long vowels: **æni(wulufu)** (*Folkestone*) 'Aunwulf' (PN ♂) < PGerm. *auni-*. The name is attested three times in the Proto-High German rune corpus, two times with **au**, once with **ao** (Findell 2012b: 50–51); **umædit** (*Rasquert*) 'not-mad'(?) < PGerm. *maiðið-*, supposedly from a PGerm. verb *maiðjan* 'to make mad'. A participle/adjective *gemæded* is indeed attested in Old English. The word is related to Gothic *gamaiþs* 'weak, frail'. In Old Frisian, a form *une mede* is found once in Unia (Sytsema 2012), according to Hofmann & Popkema (2008) with a long vowel *unemēde*, and an alledged meaning 'unangenehm, unerwünscht ?'[10] It may correspond to the Frisian substratum word *meet* 'ill', attested in 18th century North Hollandish (de Vaan 2013); **æ** (*Britsum*) 'always' < PGerm. *aiw-*. It is supposed to represent OF *ā* 'ever, always'. There are a few instances of OF *ē* 'ever' (Hofmann & Popkema 2008:307). Given the varying application of *i*-mutation in the Germanic languages in this word (cf. Icelandic *æ* ~ *álltaf* 'ever', *ævi* 'life(time)' or English *ay* – *ever*), I interpret this instance as an *i*-mutated variant of monophthongised PGerm. *ai*. Miedema (1974: 120–121) reads it as **a** here, ascribing the archaic use of the *ansuz*/*æsc*-rune to a foreign rune master; **æw-/aw-/æl /aludu** (*Bernsterburen*). The technical reading is so doubtful (Looijenga & Knol 1990: 231) and the possible interpretations are so diverse that I cannot draw any conclusions from it.

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[10] In the text edition (Sytsema 2012) an emendation is suggested to *mode* (leaving out *une*), following Steller (1926: 20).

The old *ansuz* or, in the Anglo-Frisian interpretation, *æsc*-rune is used for long vowels but never for fronted PWGerm. *a* or *ā. It represents or may represent (in the case of the more unclear interpretations) PGerm. *au* or *ai* with i-mutation. In Old Frisian, the product of *i*-mutation of PGerm. *ai* and *au* coalesced with the regular product of PGerm. *ai* (when not *ā*).

< ä, ᚹ, ᚴ > (n = 5)

This non-classical *futhark* rune only appears in *Britsum* and *Wester-emden B*. For that reason, these inscriptions may both be interpreted as relatively late (> 750). The value of this rune has been widely debated. Quak (1990: 361) and Seebold (1990: 423) suggest to take the two variants together. They link them to the older yew-rune. Looijenga (1997: 73–76) gives an overview of the attestation of the yew-rune and concludes that it was probably a combination of *i* and *j*. On the other hand, Antonsen (1975:2–5) gives an interesting structural analysis of the Proto-Germanic long vowel system, concluding that the yew-rune denotes *æ*. Looijenga (1997: 183), however, does not see the link between the Old Frisian instances and the yew-rune and deduces the Frisian rune(s) from a younger futhark alphabet. Given the phonotactics of Germanic languages, it can only be a vowel (cf. Quak 1990: 364). As both *Britsum* and *Westeremden B* are quite difficult to interpret and because of the crucial role of PGerm. *ai* in the development of Frisian, ample attention is paid to the interpretation of the words in the discussion of the attestations.

> short vowels: **þän** (*Britsum*) 'this' < PGerm. *þanō- (acc.sg.). In the position before *n*, one might expect Runic Frisian *þõn(e), Old Frisian *thon(ne) as in Old English *þone*.[11] Old Frisian, however, has only *then(n)e* and incidental *than(n)e* and *thin(n)e*.[12] Note that also Old English has a variant *þane*, *þæne.* The rounding of the vowel was blocked potentially by paradigmatic analogy with other forms with a short PGerm. *a*, e.g. Old Frisian *thet* (nom./acc.sg. neuter)*, thes* (gen.sg. neuter and masculine) < PGerm. *þat, *þas*, cf. Old English *þæt, þæs* (Krahe & Meid 1969: 62,63);

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[11] In manuscript F, the form *thone* is actually attested twice, alongside the regular *thene*. Sjölin (1970: 236, 270) considers these two instances as misspellings of *thene, which is reasonable, given the incidental appearance of the form and the close resemblance of <e> and <o> in the older writing systems.

[12] The form *than(ne)* is a dialectal feature of the north-eastern part of the Old West Frisian dialectal area, whereas *thine* is found in the western part. Both forms are only minor variants, attested alongside *then(n)e*.

bäräd (*Britsum*) 'prepares' < PGerm. **biraidiþ*. In an alternative reading, it would contain PGerm. **ē²*. I interpret the vowel as short.[13] In fact, the word is attested in Late-Old Frisian as *biret* (Sipma 1933: nr. 50). In the 3rd sg. prs. a short vowel can be expected, cf. Old Frisian *slēpa ~ slept* 'to sleep'. The shortening product of PGerm. **ai* with and without *i*-mutation can be *a* in Old Frisian (de Vaan, 2011: 309), but there are quite some alternating pairs with both *a* and *e*.[14] Another option is that the word should be read differently, i.e. as deriving from the verb *birēda* 'to council', suggested by Looijenga (1997: 186) as an alternative reading. As both the **ä** in the initial syllable and the **d** in final position seem rather unusual, the word may need still some other interpretation; **ämluþ** (*Westeremden B*) 'stays' < PGerm. **amlōþ* from a verb **amlōn*, Old Norse *am(b)la*. Before *m*, one could expect /ɔ/. According to Ásgeir Blöndal Magnússon (1989), this verb has no cognates in any West-Germanic language. However, there is an Old High German adjective *emiz* 'resistant'.[15] Also the vowel **u** in the ending is unexpected: Old Frisian has /a/ here. Altogether the interpretation of this word is problematic.[16]

long vowels: **hämu** (*Westeremden B*) 'home' < PGerm. **haimō* (loc.sg.). The reading **hämu** is technically not very complicated. It is found in a string **õphämuji…** The phonotactics of Frisian suggest word boundaries between **p-h** and between **u-j**, just as in **adujislu** < **Auda-gīsla-*. For the sequence **hämu**, there are no other candidates than the Old Frisian word *hēm* 'home'.[17] The form **hämu* fits an instrumental in -*u* as attested in Old Saxon and Old High German < PGerm. **ō*, here used in a locative function (cf. Krahe & Meid 1969: 7,11); **äh** (*Westeremden B*) 'owes' < PGerm. **aih-*. The string **wimo[b** or **d]ähþusă** is technically not problematic to read (cf. the photograph available in the Frisian Language Database).[18] The phono-

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[13] In fact, that also seems to be the interpretation by Looijenga (1997: 186).

[14] E.g. in *lēda* 'to lead' < **laidjan*, R₁ has only *lat*, B₁ *let*, B₂ *lat(h)*, H₂ *let*, U-SkRa *let(h)*, but J has *lat* > Mod. WFr. *laat* < **latt.* The abbreviations refer to various Old Frisian manuscripts, cf. Hofmann/Popkema 2008.

[15] cf. http://www.runenprojekt.uni-kiel.de/abfragen/wortmaterial3.asp?wklasse=S
                                                        &wordno=810

[16] This item will be discussed more widely in my study on unaccented vowels in Runic Frisian, currently in preparation.

[17] Looijenga's (1997: 183) account of the historical phonological development is not adequate. She transliterates the runic character with **æ** "which would reflect a fronted *æ* in *hǣm < hām <* Gmc **haim-* 'home', an intermediary stage towards OFris **ē* in *hēm* […]". However, there is no fronting of Proto-Frisian *ā* from PGerm. **ai*. Such a fronting is suggested in a recent theory put forward by Kortlandt (2008), but this theory cannot be correct, cf. § 4.3.

[18] http://tdb.fryske-akademy.eu/tdb/index-en.html#

tactics of Old Frisian suggest a word boundary between **h** and **þ**. The character before the **ä** can be both **b** and **d**. The reading 'Wīmōd owes this' makes sense. The Old Frisian dictionary (Hofmann & Popkema 2008) gives no words with the structure *b/dVch*, except for *bāch* 'bow' or the past tense singular of 'to bow', in both instances with PGerm. *au*, which would not fit the other instances with PGerm. *au* (cf. under <a, ᚠ >) and does not make much sense.

In **þän** and potentially also in **bäräd** the **ä** represents a short sound that later evolved into OF /e/: *thenne, beret.* At that time, it was distinct from words with PGerm. *i* and *e*. [19] The two instances with long vowels, **hämu** and **äh**, contain the product of PGerm. *ai* without *i*-mutation in velar contexts before *h* and *-Cu*, where *ā* is expected in Old Frisian (de Vaan, 2011).

< ă, ᚽ > (n = 1)

This innovative rune appears twice and in the same inscription, *Westeremden B*. Once it appears in an unstressed syllable **þusă**, and once in the string **jibăda**. Looijenga (2003: 313) links the word to OS *gibada* F –ō-stem, 'Zuversicht/confidence' (Tiefenbach 2010) with the stress on *–bad*. Seebold (1990: 421) considers another etymology, where the stress falls on *gib-*, assuming a relation to:

- ON *gipta* (Mod. Icel. *gifta*): however, this word is not the result of syncope < *gifaða*, cf. Gothic *fra-gifts* 'engagement' < PGerm. *gifti-* (Philippa & e.a. 2003) and thus cannot be a cognate of *jibada*;
- OE *gifeþe*: this word turns out to be an adjective derived from the verb *gifan*, 'to give' (Bosworth & Toller 1898).

The conclusion is that **jibăda** is a cognate of Old Saxon *gibada*, with stress on the **ă**.

< a, ᚠ > (n = 7)

<u>short vowels</u>: **habuku** (*Oostum*) 'Hauke' (PN ♀/♂?) < PGerm. *haƀuk-*. As I interpret **aib** in the same inscription as the subject, I opt for the interpretation for **habuku** as a feminine dat.sg; **ka[m]bu** (*Oostum*) 'comb' < PGerm. *kamba-* (acc.sg.); **[a]le** (*Westeremden B*) 'grow' (3rd sg.opt.) < PGerm. *alai*; **hada** (*Harlingen*) PN? < PGerm. *haþu-/haða-* (?) are suggested alongside forms with PGerm. *ai*. The form is rather inconclusive.

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[19] We are probably dealing here with a vowel between /e/ and /a/, that appears as OF /e/ or /a/ in various conditions and dialects, cf. fn. 14, and Siebs (1901: 1183-85, 1230), also Hoekstra & Tichelaar [forthcoming].

<u>long vowels</u>: **skano(modu)** (*Skanomodu*) PN ♀/♂? < PGerm. *skaun-. Old Frisian has only the adjective *skēne* 'beautiful' with *i*-mutation; **katæ** (*Hamwic*) 'knucklebone' < PGerm. *kautō- Old Frisian *kāte*; **adu(jislu)** (*Westeremden A*) 'Audgisl' < PGerm. *Auda-. Nedoma (2007: 305–310) discusses the possibility that the instance of **adu-** in the name **adujislu** could also represent *Adu- or *A[n]du-. In the former case, one would expect fronting and hence ***ädu-** (Bremmer 2009: 29), as fronting is already present in the word **þän** OF *thenne*. *Andu- is a possible reading, but then one would expect the rounding to /o/. However, as Nedoma mentions, there are various Germanic parallels to *Audagīslaz but hardly to *Andagīslaz.

As a short vowel, it represents non-fronted PGerm. *a, once also before a nasal, where it alternates with <õ> in the same word: **kabu** (*Oostum*) ~ **kõbu** (*Toornwerd*). As a long vowel, it only stands for monophthongised PGerm. *au, such as in **skano-** 'beautiful' < PGerm. *skaun- (*Skanomodu*). There are no clear instances where it would represent PGerm. *ai, the diphthong the rune derives its Anglo-Saxon name from: *āc*-rune.

< õ, ᚠ > (n = 5)

<u>short vowels</u>: **kõ[m]bu** (*Toornwerd*) 'comb' < PGerm. *kamba- (nom.sg.); **(edæ-)bõda** (*Arum*) 'messenger' < PGerm. *buðō-[20]. **õka** (*Rasquert*) 'Okke' (PN ♂) < PGerm. *ukō-; **õp** (*Westeremden B*) 'on' < PGerm. *up-. The word is spelled with **u** in the same inscription, cf. Old Frisian *up*. Classical-Old Frisian texts have an alternation *up – oppa* with *a*-mutation. In the runic text we see the simplex form, which is not expected to show *a*-mutation.

<u>long vowel</u>: **õk** (*Westeremden B*) 'also' < PGerm. *auk. This **õk** for Old Frisian *āk* < PGerm. *auk is remarkable, given three other fairly secure instances with <a, ᚠ > for PGerm. *au.

As a short vowel this rune represents either an open PGerm. *u or a rounded PGerm. *a before a nasal. The latter is the 'classical' context for this rune, as its Proto-Germanic name is *ansuz*-rune. Despite the transliteration **õ**, the nasality is no longer part of the phonemic value of this runic sign. The split of PGerm. *u into /u/ and /o/ is consistently reflected in the spelling (cf. <u>), while it is not for PGerm. *i/e (cf. § 4.1). The phonological space between /u/ and /a/ was filled from two sides in Frisian: the lowering of /u/ > [o] through *a*-mutation but not

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[20] The common interpretation is 'messenger'. Nedoma (2007: 318–320) offers an alternative interpretation as a PN, which does not affect the phonological analysis.

before /n/ and the rounding of /a/ > [ɔ] before nasals. The double-spelling **ka[m]bu** ~ **kõ[m]bu** illustrates the open quality of the latter. The phonetic contrast between [o] and [ɔ] lacked phonological status in Runic Frisian because PGerm. *u + nasal was always /u/ in Proto-Frisian while [ɔ] only appeared before a nasal (Buccini 1995: 23; cf. for a further discussion and references Versloot 2014: 26–28). The /a:/ < PGerm. *au was phonetically also somewhat rounded, as is demonstrated by the realisation /o:/ in neighbouring Old Dutch, an alternating <a> ~ <o> in Old Saxon, as well as by the fact that it became /o:/, /u:/ or /u.a/ in modern East and North Frisian (cf Århammar 2001a: 748). This may be an explanation for the use of **õ** in **õk** (instead of ***ak**).

<div align="center">

< o, ⚚ > (n = 2)

</div>

<u>long vowel</u>: **(skano)modu** (*Skanomodu*), **(wi)mod** (*Westeremden B*) 'PN ♂ (♀?)' < PGerm. *mōð-.

This rune appears twice in the same word as part of a name: PGerm. *mōð- 'courage'. These two attestations offer no ground to assume a transition to *ö* (so Looijenga 2003: 314), not to mention delabialisation to *ē*.

<div align="center">

< u, ∩ > (n = 6)

</div>

<u>short vowels</u>: **(æni)wulufu** (*Folkestone*) 'Aunwulf' (PN ♂) < PGerm. *wulfa- ; **þusă** (*Westeremden B*) 'this'. The word is used in a sense: 'W. owes this', hence an accusative singular. No accusative singular form in Old Frisian has the vowel /u/. On the Jelling stone, the form **þusi** is found, while Old English has forms spelled with <y> (Campbell 1977: 293). Such forms are not attested in Old Frisian. It would be interesting, if indeed Runic Frisian **þusă** reflected */þys:a/ with a fronted vowel. The use of **u** to spell a /y/ would imply that delabialisation had not taken place yet. A form **þyss-* produces an Old Frisian form *thess-*, which is indeed attested in the oldest texts from ca. 1300 in the codices *Unia* (Sytsema 2012) and *Riustringen* (Boutkan 1996). The other texts have mostly *thiss-* (Bremmer 2009: 55), but there may be other sources of this alternation in Old Frisian. A form **þyss-* is in line with Hofmann's theory that delabialisation postdates the colonisation of the North Frisian islands in the 7th/8th century, following the observation that delabialisation of i-mutated /u(:)/ produced different outcomes in Insular North-Frisian and the rest of Frisian; **up** (*Westeremden B*) 'on' < PGerm. *up- (cf. **õp** in a previous sub-section).

<u>long vowels</u>: **þu** (*Bernsterburen*) 'you' < PGerm. *þū. **duna** (*Westeremden B*) 'dune, hill' < PGerm. *dūnō-; **Uræ** 'Ure' PN (♂ / ♀?), unclear etymology. The vowel might just as well be short (Nedoma 2007: 320–321).

This runic character represents a PGerm. *u or *$\bar{u}$ that remained unaltered in Old Frisian. It may have been used for fronted /y/ as well.

<div align="center">

< ai, ᚨᛁ > (n = 1)
</div>

This diphthong appears only once in what is probably a PN: **aib** on the comb from Oostum. For this word, there are two current interpretations: **ælb** and **aib**. The former is given by e.g. Düwel & Tempel (1968: 364) and Quak (1990). Looijenga (2003) reads it as **aib**. According to Quak, *$Ælb$ is an unprecedented personal name. Düwel and Tempel explicitly mention the reading *Aib*, but discard it because a diphthong /ai/ would not fit into Frisian. This seems to be a matter of anachronistic reasoning to me: the phonological shape of 13th century Old Frisian may be indicative, but never decisive for the interpretation of the language system 500 years earlier. The decisive point is a brief stroke that is found between an ᚨ and an ᛁ . If it belongs to the first element, it turns the ᚨ into an ᚫ , but if it goes together with the second element (i.e. attaches to ᛁ) it results in ᛂ . The stroke is indeed very much between them and (nearly) touches both characters. However, in my opinion it is slightly more to the ᚨ and hence I read ᚨᛁ as **ai**.

The next step is the interpretation of the form. The personal name *Aib* may have a parallel in Runic High German **aebi** (*Schwangau*) and might find a confirmation in the Middle Frisian (1491) name *Ēb* (Oosterhout 1960: 14). This leads me to the interpretation of a PGerm. *ai. The High German instance suggests a *ja*-stem *$Aibja$- where *–ja* is preserved as word final *-i* (Findell 2009a: 97 after Looijenga 2003). Looijenga mentions the option of an *i*-stem as well, which fits better in the sense that it combines the evidence from Old Frisian and Old High German: loss of the *i* in Frisian after a long root, its preservation in Proto-Old High German.[21] In both the Frisian and the German name, we are dealing with PGerm. *ai + *i*-mutation which did not undergo monophthongisation yet.

Another interpretation was suggested by A. Quak (personal communication) who mentioned that *Aib* could be the Frisian form of a

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[21] In Old High German, PGerm. short *–i* is lost after heavy syllables. The *Schwangau* inscription is dated to the 6th century (Findell 2009b: 137), which is more than 150 years earlier than Old High German. As the apocope of PGerm. short *–i* was possibly not yet implemented at this early stage, the Proto-Old High German *aebi* may have been the regular form of the 6th century.

name that is attested as *Agibo* in Old High German, with North-Sea Germanic *ai-* < *agi-* as in Old Frisian *flaile* 'flail' < PGerm. *flagila-* < Latin *flagellum* (Philippa & e.a. 2003). The German name is supposedly a hypocoristic short-form of e.g. *Agibald*. Such hypocoristic names are regularly *n*-stems in Frisian (ending in *–a*, Modern West Frisian *-e*), just as the Old High German form *Agibo* itself. This would correspond to Runic Frisian *Aiba or *Eiba.[22]

Altogether, the interpretation of this name is surrounded by doubts and competing interpretations could be offered. In this paper I will operate with what seems to be the most likely interpretation to me, i.e. the name *Aib* as derived from PGerm. *Aibiz (cf. further § 4.3). In the concluding section I will discuss the consequences of the interpretation where *Aib* (or even *Ælb*) does not contain a PGerm. *ai.

< iu, ᛁᚾ > (n = 1)
This diphthong appears in the form **kius** (*Bernsterburen*) 'choose (you)' and represents PGerm. *eu with i-mutation.

4. The Vowel System of Runic Frisian (stressed syllables)

4.1. Vowel systems
Despite the doubts about several inscriptions, there are a number of tendencies for which various interpretations support each other. First of all, three characters are used nearly exclusively for long vowels: **i** /iː/, **æ** /ɛː/, **o** /oː/. Three runes are used for long and short variants of (roughly) one quality: **u**, **a** and **e**. I assume that **e** /e/~/eː/ was a relatively closed mid-open vowel, because it was used for PGerm. short /i/ and /e/ and for PGerm. *ē² which was fairly closed, given its further developments in Frisian. PGerm. had an /e/ and an /i/ sound inherited from Indo-European, but they were partly redistributed through phonological conditioning (Campbell 1977: 42–44). The tendency to follow phonological conditioning differs per Germanic dialect, shows traces of lexical diffusion and is affected by levelling from related forms in a paradigm with different vowels in the ending. The use of **e** in **ek** and **meþ** could suggest that the mentioned redistribution of

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[22] Typical examples of such names in present-day Frisian are: *Abe, Ate, Anne, Yde, Obbe, Okke*. The last one may be attested in the Runic Frisian *Rasquert* inscription as **oka**.

PGerm. *i* and *e* had led to the loss of a phonemic contrast between the two vowels. However, Old Frisian consistently distinguishes between PGerm. *i* and *e* (with some redistribution, cf. Siebs 1901: 1189–1197), which means that the contrast cannot have been lost in Runic Frisian. If short /i/ sounded like [ɪ], rather than [i], it may have been more distinct from long /i:/ than from short /e/. The Runic Frisian corpus uses **i** consistently for long /i:/. Based on this limited corpus, I conclude that Runic Frisian **e** was used for both /ɪ/ and /e/ (and /e:/), staying in contrast with Runic Frisian **i** used for /i:/.[23]

The **u** represents the closed, rounded vowels /u/ and /u:/. The **a** was probably of a somewhat rounded quality [ɑ(:)]. It appears as a short vowel from non-fronted PGerm. *a*, but could incidentally also appear for the phonologically somewhat unclear allophone of /a/ before a nasal (**ka[m]bu**). The monophthong from PGerm. *au* was of a similar quality. Unfortunately we do not have a word with PGerm. *ē¹* before a nasal. The possible interpretation of **þusă** as /þys:a/ and its potential implication for a series of fronted, rounded vowels (/y/, /ø/), is not further considered in the table.

Most remarkable from the comparison with classical Old Frisian is that 1) fronted PGerm. *a* and /æ/ < shortened PGerm. *ai* had not yet merged with /e/ (the former also distinct in Old English), and that 2) the monophthongised product of PGerm. *ai* in a velar context, i.e. Runic Frisian **ä**, was distinguished from Runic Frisian **a** /a:/ < PGerm. *au*, with which it merged in Old Frisian. This results in the following system of short and long vowels:

short vowels		examples	
/e,ɪ/ ᛗ	/u/ ᚢ	**deda - meþ**	**up**
/æ/ ᚨ ,ᛈ	/ɔ/ ᚠ	**þän**	**boda**
	/a/ ᚠ		**habuku**

Table 1. Short vowel system of Runic Frisian

long vowels		examples	
/i:/ ᛁ	/u:/ ᚢ	**hiwi**	**þu**
/e:/ ᛗ	/o:/ ᛟ	**wel**(a[n]d)	(skano)**modu**
/ɛ:/ ᚠ	/a:/ ᚠ(ᚠ)	**æni**(wulufu)	**skano**(modu)
	/æ:/ ᛈ ,ᚨ		**äh**

Table 2. Long vowel system of Runic Frisian

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[23] In Table 1 they are presented as one, based on the spelling.

There are three instances of words that appear twice and with different spellings. The word 'on' appears once as **up** and once as **õp** in the same inscription (*Westeremden B*). I have no explanation for it. The implications of the pair **ka[m]bu~kõ[m]bu**, roughly from the same time and region, have been discussed already. The word 'me' appears possibly twice, once with <e> (6th – 7th c.) and once with <i> (c. 800?). Both instances fit a reading with a dative singular: 'for/to me'. Assuming that Looijenga is right in her reading of the *Ferwerd* inscription, the oldest form would be *me* as in Old English. This was subsequently lengthened in word final position (cf. Campbell 1977: 48) and then raised to /iː/, in the same way as Old Frisian *kū* developed from **kō* (Siebs 1901: 1224). If all these interpretations fit, the corpus would attest to a chronological development: **mez* > **me/*mē* (Runic Frisian: **me**) > **mī* (Runic Frisian **mi**). As such, it makes sense, but the interpretation of the *Ferwerd* inscription is crucial.

The long vowel system in Runic Frisian had a complex set of 4 open and half-open central and front vowels: /eː/ ~ /ɛː/ ~ /æː/ ~ /aː/.[24] In Old Frisian, /æː/ ~ /aː/ would merge in every attested variety of Frisian into /aː/. The /eː/ < PGerm. **ē²* remained separated in all dialects, except from later West Frisian and Riustringen Frisian, which had more widespread mergers of /eː/ and /ɛː/. As regards to PGerm. **ē¹*, crucial information is missing.

4.2. *From PGerm. to Runic Frisian*

The relation of the proposed Runic Frisian system to the PGerm. vowel system is presented in Table 3 (p. 54). The '+' and '–' mark the presence or absence of *i*-mutation:

Unfortunately, we have no clear instances testifying to PGerm. **ē¹*, especially in the non-nasal context. That position is quite crucial as it would otherwise show the main difference between Proto-Insular North Frisian, being a consequence of early emigration from the 7th/8th century, and the other Frisian dialects (Hofmann 1964). The status of PGerm. **ai* is discussed in § 4.3.

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[24] Such a system is not imaginary. Present-day Danish and older Mainland North Frisian show similar inventories.

Proto-Germanic	Runic Frisian		
short vowels			
i	>	/e,i/	A phonemic contrast, which was partly allophon-
e			ic in PWGerm., is not graphematically expressed in Runic Frisian.
a	>	/æ/ ~ /a/ ~ /ɔ/	This allophonic split is rendered in Runic Frisian.
u	>	/ɔ/ ~ /u/	Contrary to the mid and closed front vowels, the split of PGerm. /u/ is graphematically attested.
long vowels			
ī	>	/i:/	
ē²	>	/e:/	
ē¹	>	?	No secure data available.
ō-	>	/o:/	
ū-	>	/u:/	
eu+	>	/iu/	There is no attestation to PGerm. *eu before a mid- or open vowel.
au-	>	/a:/ *[ɑ:]	Here we can assume a dark ā; cf. the discussion in § 3 <õ>.
au+	>	/ɛ:/	This sound merges with the regular development of PGerm. *ai in non-velar contexts.
ai (various)	>	/æ:/, /ɛ:/, /ai/	Cf. the discussion of PGerm. *ai in 4.3.

Table 3. The development of PGerm. vowels in Runic Frisian

4.3. *The development of PGerm. *ai*

The development of PGerm. *ai is not unambiguous, despite the potentially 8 attestations. Old Frisian shows a split development of PGerm. *ai in velar and non-velar contexts: in a velar context, Old Frisian has /a:/, in other instances /ɛ:/. The velar element can be the following consonant or the vowel of the next syllable (de Vaan 2011). The /ɛ:/was also the result of PGerm. *au with *i*-mutation, while the /a:/ < PGerm. *ai merged with the non-mutated /a:/ < PGerm. *au in Old Frisian. In most Frisian dialects, these sounds were separated from PGerm. *ē¹and *ē². The former as opposed to the latter is not securely attested.

   Especially before consonant clusters, one finds short /a/ < PGerm. *ai (de Vaan, de 2011: 309–312), which may alternate with forms with /ɛ/. The form **bäräd** may represent such a development from PGerm. *biraidiþ 'prepares' (cf. the discussion of this word in § 3). Words with such a shortened PGerm. *ai* are also found in the North Frisian dialects and as substratum words in Holland; the best example

is Dutch *ladder* 'ladder', Wangeroogic East Frisian *láder*, Insular North Frisian (Sylt) *lađer* (all short /a/). This implies that this shortening must antedate the colonisation of the North Frisian islands and the beginning of the Franconisation of Holland in the 9th century (de Vaan 2012: 80).

Table 4 presents the developments of PGerm. *ai, *au* and *ē* in Runic Frisian. The number of (at least likely) attestations is given in brackets. The grey rows refer to cases where no reliable attestations are available.

Proto-Germanic	velar context	*i*-mutation	Runic Frisian	Old Frisian
au	-	-	/a:/ **katæ** (3)	/a:/
ai	+	-	/æ:/ **äh** (2)	/a:/
au	-	+	/ɛ:/ **æni**(wulufu) (1)	/ɛ:/
ai	+	+	/ɛ:/ **æ** (1)	/ɛ:/
ai	-	+	/ai//ɛ:/ **aib, umædit** (2)	/ɛ:/
ai	-	-	/e:/? **edæ** (?)	/ɛ:/
ē[1]	+/-	+/-	?	/e:/ (Proto-Ins. North Frisian: /ɛ:/)
ē[2]	+/-	+/-	/e:/ **wel**(a[n]d) (1)	/e:/

Table 4. The diverging developments of PGerm. *ai*, *au* and *ē* in Runic Frisian

PGerm. *ai* in velar contexts without *i*-mutation becomes /æ:/ and does not (yet) merge with Runic Frisian *ā* < PGerm. *au*.[25] The *i*-mutated instances of Runic Frisian /a:/ and /æ:/ developed into /ɛ:/.

For the development of PGerm. *ai* in a non-velar context without *i*-mutation and for PGerm. *ē[1]* the data are inconclusive. In Old Frisian (apart from Insular North Frisian), these two PGerm. phonemes remain separated. The only two possible attestations to PGerm. *ai* in a

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[25] The only inscription that contains both a word with PGerm. *au* and PGerm. *ai* + velar is *Westeremden B*: **äh** (OF *āch*) vs. **õk** (OF *āk*), where /a:/ < PGerm. *au* is rendered not with ᚠ but with ᚠ. However, both sounds are positively distinguished here in spelling.

non-velar context without *i*-mutation show the same vowel as the word with PGerm. *$\bar{e}^2$*: **e**, which I reconstructed as a rather closed vowel. Especially for **edæ** (*Arum*) the origin in PGerm. *ai is taken into account in various interpretations. Altogether, I consider the status of both PGerm. *$\bar{e}^1$ and PGerm. *ai in a non-velar context without i-mutation unsolved at this moment.

The development of PGerm. *ai in a non-velar context with *i*-mutation is most remarkable. The most intruiging case is **aib**, preserving the old diphthong. Being dated to the 8th or even 9th century, the retention of the diphthong is later than generally assumed. The other candidate for this group is **umædit**. If it indeed represents a word with PGerm. *ai + *i*-mutation, then we find this PGerm. sound represented by Runic Frisian /ai/ and /ɛ:/.

The development of PGerm. *ai can be summarised in a tabular form as in table 5:

	'velar'	'non-velar'
i-mutation	/ɛ:/	/ai/ ~ /ɛ:/
no *i*-mutation	/æ:/	/e:/ ?

Table 5. Summary of the development of PGerm. *ai

For PGerm. *au and for PGerm. *ai in a velar context, monophthongisation to /a:/ and /æ:/ took place before 800, but they did not yet merge into one /a:/ as in Old Frisian. In the remaining contexts, the monophthongisation was apparently later and, given the alternation of **aib** and **umædit**, still on its way in the 8th c. It was apparently late in words with *i*-mutation, a case of phonologically conditioned lexical diffusion.[26] The new monophthong /ɛ:/< PGerm. *ai did not merge with the monophthong from PGerm. *ai in velar contexts. The position of PGerm. *$\bar{e}^1$ remains unclear. Also for PGerm. *ai in non-velar context and without *i*-mutation we have no secure examples.

These conclusions are surprisingly in line with Hofmann's hypothesis that *i*-mutation preceded monophthongisation of PGerm. *ai. Hofmann (1964) also suggested that PGerm. *ai and *au monophthongised at the same time, but this is not confirmed by evidence from Run-

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[26] The phonological context of *i*-mutation is the same as the one that triggered the preservation of a diphthong in Dutch.

ic Frisian.[27] The monophthongisation of PGerm. *ai* has been recently discussed by Kortlandt (2008: 270–271) who assumes a common Anglo-Frisian monophthongisation of PGerm. *ai* to *ā* on the Continent, before the 5th century. De Vaan (2011) detects the phonological conditioning for the split of PGerm. *ai* in Old Frisian *ā* and *ē*, following Kortlandt's ideas about the chronology on the main points (de Vaan 2011: 313). Unfortunately, Kortlandt's hypothesis neglects attested evidence, such as the runic inscription from *Caistor-by-Norwich*, dated to 425-475. It reads **raïhan** '(of a) roe' (Looijenga 2003: 139) with the original PGerm. **ai*. This is direct counter-evidence to Kortlandt's hypothesis that the monophthongs already came into being on the Continent before 400. Both Looijenga (1997: 33, 74) and Page (2006: 18, 229) consider a Scandinavian origin of the inscription, because of the single-barred **h**. However, Page makes it clear that the single-barred **h** is also found in other inscriptions from England, such as *Watchfield*. On account of the original location, the inscription from Caistor-by-Norwich is by default affiliated with the Anglo-Saxon language. Moreover, the Scandinavian provenance is explicitly unlikely for the reason outlined in Table 6, depicting the attestations of the verb *faihan* 'to do' with PGerm. **ai* before /h/, relatively well attested in Early Runic from Scandinavia:

inscription	*faih-/fāh*	date
114. Vetteland	**faihido**	middle 4th c.
19. Einang	**faihido**	2nd half 4th c.
76. Rö	**fahido**	ca. 400
125. Åsum	**fahi**	end 5th - end 6th c.
122. Väsby	**f[a]hidu**	end 5th - end 6th c.
64. Noleby	**fahi**	late 6th c.

Table 6. The development of PGerm. **ai* in velar context in Early Runic, numbering and dates after Krause (1971)

The data clearly indicate that in the position before *h*, PGerm. *ai* had already been monophthongised in Early Runic since c. 400. An inscription from c. 450 reading **raïhan** is therefore unlikely to be of

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[27] Note that e.g. also in Old High German, the (partial) monophthongisation of PGerm. **ai* and **au* took place in different periods (Braune & Reiffenstein 2004: 44, 47).

Scandinavian origin. Taking the Anglo-Saxon and the Runic Frisian evidence into consideration, both the date ("before 400") and the place ("on the Continent") of the monophthongisation of PGerm. *ai* in Kortlandt's interpretation have to be revised, probably with severe consequences for his whole theory.[28]

4.4. *The Frisian inscriptions from England*

In § 2, I mentioned the geographical criterion as the guiding principle in determining the corpus of Frisian runic inscriptions. Given the fact that two inscriptions were physically found in Great Britain (*Hamwic* and *Folkestone*), and a third one is at least preserved there (*Skanomodu*), the consequences of this geographical principle for the composition of the corpus and hence the reconstructed vowel system need to be considered. The reasons to identify these three inscriptions as Frisian are the following (Quak 1990: 359):

1. the presence of **u** in unstressed syllables, representing PGerm. *-az* : -**wulufu** < *wulfaz* (*Folkestone*) and -**modu** (*Skanomodu*);
2. monophthongs for PGerm. *au*: **katæ** (*Hamwic*), **skano-** (*Skanomodu*) and **æni-** (*Folkestone*)

Phonologically, they fit nicely into the Frisian pattern, but one has to beware of circular reasoning: especially the second criterion is a back-projection in time from a much later period. As I have argued in Versloot (2014), older geographical configurations may become totally invisible in later stages of the development of a language. Note that the oldest Anglo-Saxon corpus of runic inscriptions does not attest positively to the retention of PGerm. *au* as a diphthong (Looijenga 1997: 162–174). Therefore, it cannot be excluded beforehand that at least in some Proto-Anglo-Saxon dialects, PGerm. *au* developed into a monophthong *ā*, just as in Frisian.[29]

The *Skanomodu* solidus may have come from East Friesland with king Georg III (Looijenga 2003: 308), but *Folkestone* and *Hamwic*

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[28] I intend to discuss the question of the monophthongisation of PGerm. *ai* in a wider Germanic context in a separate publication, which will include the dating of the whole process, based on the oldest linguistic evidence, mostly from runic inscriptions.

[29] In Versloot (2014), I illustrate, e.g., that the sharp division in the word *bridge/brêge* between English with assibilation and Frisian without assibilation of the *g*, becomes totally diffuse when taking into consideration onomastic data.

were actually found in England. Apart from the question what it would mean for the history of English, if the latter two were considered to be Anglo-Saxon inscriptions, we have to consider the consequences for the reconstructed vowel system of Runic Frisian. The development PGerm. *au > ā (**a**) is otherwise attested in *Westeremden A*: **adu-** < *aud-* and eventually by the *Skanomodu*-solidus. Excluding *Folkestone* from the Frisian corpus would mean that there is no attestation anymore for monophthongisation and *i*-mutation of PGerm. *au*. The early dating (< 600) of PGerm. *au* in Frisian then relies on *Skanomodu* only. The merger of the product of monophthongisation and *i*-mutation of PGerm. *au* with the monophthong from PGerm. *ai* is then also no longer confirmed for this early period. In every later variety of Frisian, this is, however, the case and this merger would also be assumed when relying on reconstructions only.

By way of conclusion, one may say that the exclusion of the inscriptions from England, especially the local findings *Folkestone* and *Hamwic*, would not change the reconstructed vowel systems. However, it would mean a substantial weakening of the evidence and for PGerm. *au* + *i*-mutation even the loss of evidence. The *Folkestone* inscription does not provide a picture differing from the reconstructed vowel systems, it rather confirms it.

5. Conclusions

As was to be expected from earlier research, the split of PGerm. *a* into /æ/~/a/~/ɔ/ had already been completed by the time of Runic Frisian. We find this split also in Insular North Frisian, which branch got isolated through emigration in the 7th/8th century. None of these allophones had as yet merged with the adjacent phonemes /e/ and /o/. A potential peculiarity in the Runic Frisian 'spelling system' is the use of **e** for both short /i/ and /e/.

The monophthongisation of PGerm. *au* was completed in the earliest attestations of Runic Frisian and resulted most likely in a velarised, 'dark' /a:/, [ɑ:]. The monophthongisation of PGerm. *ai* was only on its way in the discussed time frame. In velar contexts, it was completed and produced an open monophthong /æ:/ that was still separated from the /a:/ < PGerm. *au*. The shortening to /a/ (or rather /æ/) can be placed in the same period, given its appearance in Insular North Frisian and substratum words in Holland. In non-velar contexts,

PGerm. *ai* was still a diphthong by the beginning of the period, which follows from the fact that the assumed attestation in **aib** is from around 800. The 7th/8th century colonists of the North Frisian islands probably brought this diphthong with them in their language: *bām* ~ *æh* ~ *stain* < PGerm. *baum-* ~ *aih-* ~ *stain-* 'tree, owes, stone'. Only in the course of the 8th century, the PGerm. *ai* became a monophthong and it seems that the condition that contributed to the preservation of the diphthong in Dutch, an *i*-mutation factor, created the most reluctant context also in Runic Frisian, as might be illustrated by **aib** < PGerm. *aibi-*. The element **æni-** confirms the implementation of the *i*-mutation, which is generally dated to the period before 800, cf. Buccini (1995: 32–33), who dates it to the late 6th/early 7th c. This is before the completion of the monophthongisation of PGerm. *ai* in non-velar contexts. For the rest, there is no positive evidence of *i*-mutation in the corpus, but the spelling **þusă** for potential */þys:a/ may be a reverse indication of the existence of palatal, not-delabialised vowels in the 8th century. Gysseling (1962:18) mentions the oldest evidences of delabialisation of *i*-mutated *ō* fom 793 (late 8th century) in the name *Hredgaerus* with *hrēd-* < *hrōd-* and in the name *Suetan* < *swōti-* 'sweet' in the 9th century.

   All this means that two parts of Hofmann's hypothesis could hold: 1) the *i*-mutation of long vowels was older than the monophthongisation of PGerm. *ai* > /ɛ:/ and 2) the colonists of the North Frisian islands in the 7th/8th c. went there with in their language the diphthong *ai* and with mutated but not yet delabialised vowels. This results in the following chronology for the development of PGerm. *ai* and *au* and the processes of *i*-mutation and delabialisation:

1a)   < ca. 600: monophthongisation of PGerm. *au* > /a:/ (= [ɑ:])
1b)   < ca. 600: monophthongisation of PGerm. *ai* in velar contexts > /æ:/
          (=[a:])
2)   late 6th / early 7th century: *i*-mutation; /a:/ and /æ:/ + *i*-mutation
          > /ɛ:/
------ 7th / 8th century: colonisation of the North Frisian islands by Frisians ------
3a)   8th / 9th century: delabialisation of *i*-mutated long vowels /ø:/ and /y:/
3b)   8th/9th century: monophthongisation of the remaining /ai/

Coming back to Nielsen's arguments against Hofmann's reconstructed chronology, we may conclude that the outcome of this analysis recon-

ciles both points of view. Nielsen's opinion that the monophthongisation of PGerm. *au* was older than the other processes is confirmed, just as his claim that the specific lexical distribution of OF /a:/ < PGerm. *ai* in velar contexts must antedate the migration of Frisians to the North Frisian islands. Crucial for the interpretation is the split of monophthongisation of PGerm. *ai* into two stages which are separated by circa 200 years. This has a parallel in the East-Nordic languages, where an early monophthongisation to /a:/ around 400 (cf. Table 6 in § 4.3) was followed by a monophthongisation to /e:/ only in the 10th century (Haugen 1982:200). Not only could one come to this conclusion by a comparative reconstruction (as Hofmann did for some part), but this split may also be supported by the form **aib** in the *Oostum* inscription. Even if another interpretation of *Oostum* is preferred, this reconstruction can still hold, but then solely as a hypothesis that reconciles a structuralist analysis of Insular North Frisian with other runic finds, such as the *Skanomodu*-text and inscriptions from Scandinavia (showing the potential chronological split of two stages of monophthongisation of PGerm. *ai*) and England (with **raïhan** testifying to a much later monophthongisation in Proto-Old English than in Kortlandt's theory). To conclude, the presented evidence and argumentation imply that the attested Runic Frisian can be the direct ancestor of all Frisian dialects, including the Insular North Frisian dialects.

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