



UvA-DARE (Digital Academic Repository)

Mith frethe to wasane 'To be in Peace'

Remnants of the Instrumental and Locative Case in Thirteenth and Fourteenth Century Old Frisian

Versloot, A.P.

Published in:

Filologia germanica = Germanic philology

[Link to publication](#)

Citation for published version (APA):

Versloot, A. P. (2017). *Mith frethe to wasane 'To be in Peace': Remnants of the Instrumental and Locative Case in Thirteenth and Fourteenth Century Old Frisian*. *Filologia germanica = Germanic philology*, 9, 201-230.

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (<http://dare.uva.nl>)

FILOLOGIA GERMANICA – GERMANIC PHILOLOGY

Publicazione patrocinata e finanziata dall'Associazione Italiana di Filologia Germanica

This publication is supported and funded by the Associazione Italiana di Filologia Germanica

Comitato di Redazione / Editorial Board

Patrizia Lendinara (Università di Palermo) – Direttore responsabile / Editor-in-chief

Verio Santoro (Università di Salerno) – Presidente dell'AIFG / Chairman of AIFG

Marina Buzzoni (Università Ca' Foscari Venezia) – Consigliere dell'AIFG / Councillor of AIFG

Letizia Vezzosi (Università di Firenze) – Consigliere dell'AIFG / Councillor of AIFG

Comitato Scientifico / Scientific Committee

Letizia Vezzosi (Università di Firenze) – Coordinatore / Coordinator

Rolf H. Bremmer Jr (Universiteit Leiden)

Concetta Giliberto (Università di Palermo)

Patrizia Lendinara (Università of Palermo)

Martti Mäkinen (Hanken Svenska handelshögskolan, Helsingfors)

La rivista si avvale di un sistema di refereeing anonimo. I contributi proposti per la pubblicazione, una volta selezionati dal Comitato Scientifico, vengono sottoposti al giudizio di almeno due revisori anonimi, italiani e/o stranieri, scelti sulla base di specifiche competenze disciplinari. Ogni anno vengono pubblicati i nomi dei revisori che hanno collaborato alla valutazione dei contributi del numero precedente. Per il numero 8 (2016) hanno svolto questa funzione: la Prof. Maria Grazia Cammarota (Bergamo); la Prof. Maria Rita Digilio (Siena), il Prof. em. Dr. Wolfgang Haubrichs (Saarbrücken), la Dr. Elke Krotz (Vienna), la Prof. Dr. Claudine Moulin (Trier), il PD Dr. Norbert Kössinger (Vienna) e il Prof. Verio Santoro (Salerno).

After being selected by the Scientific Committee, the articles submitted for publication are peer-reviewed by at least two anonymous referees chosen among Italian and/or foreign scholars on the basis of their specific field of expertise. Every year the names of the referees who have collaborated on the previous issue are published. The following scholars have acted as referees for issue no. 8 (2016): Prof. Maria Grazia Cammarota (Bergamo); Prof. Maria Rita Digilio (Siena), Prof. em. Dr. Wolfgang Haubrichs (Saarbrücken), Dr. Elke Krotz (Vienna), Prof. Dr. Claudine Moulin (Trier), PD Dr. Norbert Kössinger (Vienna), Prof. Verio Santoro (Salerno).

Redazione / Editorial Office:

Prof. em. Patrizia Lendinara – Dipartimento Culture e Società – Università di Palermo – Viale delle Scienze, Edificio n. 15 – 90128 Palermo

Email: <patrizia.lendinara@unipa.it> / <patrizia.lendinara2@gmail.com>

Sito web / Web Site: <<http://www.aifg.it/filologia-germanica---germanic-philology>>

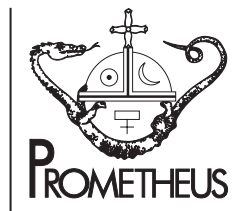
Profilo Facebook / Facebook Profile: <<http://www.facebook.com/FilolGermGermPhilol>>

ASSOCIAZIONE ITALIANA DI FILOLOGIA GERMANICA

FILOLOGIA GERMANICA
—
GERMANIC PHILOLOGY

9
2017

Le lingue del Mare del Nord
The North Sea Languages



ISBN 978-88-8220-233-0
ISSN 2036-8992

Registrazione del Tribunale di Trento in data 22 novembre 2009 numero 1398
Per acquisti, abbonamenti, numeri arretrati: <damiana.rigamonti@libero.it>

Copyright © 2017 by Prometheus
Via S. Veniero 2 – 20148 Milano (Italy)
<www.prometheuseditrice.it>

INDICE / CONTENTS

ROLF H. BREMMER JR Language contact in medieval Frisia: Middle Low German spelling interferences in Old East Frisian manuscripts	1
VALERIA DI CLEMENTE <i>Dit siin .24. tekene der doot die Ypocras met hem dede grauen</i> e la ricezione della <i>Capsula eburnea</i> in nederlandese medio	19
DANIELA FRUSCIONE The Kentish-Frisian legal vocabulary	45
CONCETTA GILIBERTO Kidnapping the Frisian	67
PATRIZIA LENDINARA Old English <i>lida</i> and the sailors of the North Sea	79
ANDREA MAINI The relationship between early Old Nordic <i>*bākn</i> ‘fire beacon’, pre-Old Frisian <i>*bākən</i> ‘id.’ and Germanic <i>*baugō-</i> , <i>*baukkaz</i> ‘ring’	109
CHIARA SEMPLICINI Reassessing morphological restructuring over time: The case of Dutch	135
ROSELLA TINABURRI Pronoun inflection in North Sea Germanic languages: The da- tive-accusative levelling in the first and second person singular	159

MICHIEL DE VAAN Frisian substrate versus internal change in Western Dutch	179
ARJEN P. VERSLOOT <i>Mith frethe to wasane</i> ‘to be in peace’: Remnants of the instrumental case in thirteenth and fourteenth century Old Frisian	201
LETIZIA VEZZOSI Magic involvement: The codification of possession in Middle Dutch healing recipes and charms	231
ELENCO DEGLI AUTORI / LIST OF CONTRIBUTORS	257
VOLUMI PRECEDENTI / PREVIOUS VOLUMES	261

ARJEN P. VERSLOOT

MITH FRETHE TO WASANE ‘TO BE IN PEACE’:
REMNANTS OF THE INSTRUMENTAL AND LOCATIVE
CASE IN THIRTEENTH AND FOURTEENTH CENTURY
OLD FRISIAN

The case system in Old Frisian is commonly described as including four cases: nom., gen., dat., acc. Only a few lexical or onomastic relics are said to attest to the former existence of an instrumental and a locative case. Closer scrutiny, however, shows that a morphologically distinct instrumental and locative case were fairly consistently applied in some declensional classes, at least in some dialects of Old Frisian (c. 1250-1400). Traces are in particular found in texts from the Ems Frisian region, but are also attested in Codex Unia, reflecting Old West Frisian. The instrumental ending was PFri *-u < PIE *-oh₁, throughout (nearly) all declensional classes, a uniformity typical for a case with a low frequency. The origin of the PFri locative ending *-i, restricted to the masculine *a*-stems, remains unclear. The reconstructed distribution of case endings found for the earliest stages of Old Frisian largely parallels the situation in ninth century Old Saxon.

1. Introduction

1.1. The traditional approach

The general understanding of the instrumental and locative case in the Old Germanic languages, such as Old Frisian (OFri), is that the “locative and instrumental have collapsed with the dative ending”.¹ Historical grammars describe traces of an instrumental case for Old Saxon (OS) and Old High Ger-

¹ Rolf H. Bremmer Jr, *An Introduction to Old Frisian: History, Grammar, Reader, Glossary*, Amsterdam 2009, p. 60; in a similar vein H. Krahe / W. Meid, *Germanische Sprachwissenschaft*, II: *Formenlehre*, Berlin 1969, p. 7; Don Ringe, *A Linguistic History of English*, I: *From Proto-Indo-European to Proto-Germanic*, New York 2006, pp. 268-269; and Wolfram Euler, *Das Westgermanische: Von der Herausbildung im 3. bis zur Aufgliederung im 7. Jahrhundert – Analyse und Rekonstruktion*, Berlin 2013, p. 67.

man and more rudimentarily for Old English (OE).² Two endings are found: *-u* and *-i*. The former is the undisputed continuation of the Proto-Germanic (PGmc) **-ō* < Proto-Indo-European (PIE) **-oh₁* in at least the *a*- and *ō*-stems, while the origin of *-i* is less clear. Overviews of Proto-Germanic paradigms reconstruct a separate instrumental case but no locative. It is assumed that the dative and locative had already merged into a single case in Proto-Germanic, sometimes by phonological convergence, sometimes by generalising one of them as the functional dative.

The current grammars of Old Frisian describe some scarce evidence of the earlier existence of the instrumental and the locative. Bremmer states that “[t]he instrumental case is no longer productive, but lives on in a limited number of petrified combinations. Occasionally, traces of a locative case are found.”³ The neuter demonstrative pronoun *thiu*, which appears with certain prepositions, is a relic of the instrumental,⁴ e.g. *bithiu* ‘because’, *eftar thiu* ‘for that reason’ (Codex Unia).⁵ Bremmer further mentions the interpretation of some dative forms as semantic instrumentals⁶ and claims that traces of “a locative ending **-i* are preserved in some forms, e.g., *thin(d)ze* [...] and often in place-names, e.g., *Wetsens* (beside *Wetsinge*): the **-i* has caused palatalization of *-ng-*”.⁷ Forms with palatalization were already mentioned by van Helten, who describes them as “instrum.-(local)end.”⁸ He also mentions original loc-

² Don Ringe / Anne Taylor, *A Linguistic History of English, II: The Development of Old English*, New York 2014, p. 375.

³ Bremmer, *An Introduction*, p. 53. According to Bremmer (*ibid.*, p. 43, probably after W.L. van Helten, *Altostfriesische Grammatik*, Leeuwarden 1890, p. 134) traces of the instrumental are found in *hlī* ‘cover, protection’ and *knī* ‘knee’. My own analysis of the word ‘knee’ in the earliest Old Frisian sources shows no special locative forms.

⁴ *Ibid.*, p. 54.

⁵ This is the only trace of the instrumental mentioned by Theodor Siebs (Theodor Siebs, “Geschichte der friesischen Sprache”, in Hermann Paul (ed.), *Grundriss der germanischen Philologie*, 2. verb. und verm. Aufl., I, Strassburg 1901, pp. 1152-1464). Locative forms in *-i* are invoked to explain the fronted vowels in *sen-* ‘son’ (*ibid.*, p. 1344), but for an alternative interpretation of these vowels see Arjen P. Versloot, *Mechanisms of Language Change: Vowel Reduction in 15th Century West Frisian*, Utrecht 2008, pp. 35 and 113-114.

⁶ Bremmer, *An Introduction*, p. 100. See also *ibid.* § 2.3.1.

⁷ *Ibid.*, p. 60.

⁸ Van Helten, *Altostfriesische Grammatik*, p. 125. See *ibid.* § 2.2. He also assumes a widespread dative form *-i* from the earlier instrumental or locative to account for instances with word-internal *e* < PGmc **a* and *ē* < PGmc **ai*. For better explanations to account for it, see Bremmer, *An Introduction*, p. 29; Arjen P. Versloot, “The development of Old Frisian unstressed *u* in the Ns of feminine *ō*-stems”, in Anne Bannink / Wim Honselaar (eds.), *From*

ative forms in the strong adjective declension: dat. sg. masculine/neuter *-e* < instr./loc. **-ī* (in his view etymologically a locative).⁹

To sum up, Proto-Frisian may have had an instrumental case, just as Old Saxon, Old High German and Old English. The instrumental was already marginal and declining in the latter three languages and is therefore not expected to have been notably present in Old Frisian, which is, after all, first attested in the thirteenth century. A separate locative case is not reconstructed for Proto-Germanic. It is mostly assumed that the formal instrumental could fulfil locative functions as well¹⁰ and at the same time that some of the dative and instrumental endings in Old Germanic continue Proto-Indo-European formal locative endings.

This article discusses a series of forms in Old Frisian which support the view that in the earliest attestations of Old Frisian an instrumental and locative case existed more than rudimentarily in various declensional classes in the singular. Some of these forms have hitherto not received any specific attention. It will be suggested that the situation in thirteenth-century Old Frisian showed traces of an advanced, but not concluded stage of the loss of a functional and formally (partly) distinctive instrumental and a locative case.¹¹

1.2. *The instrumental and locative in Old English and Old Saxon*

Old Saxon and Old High German are the two West Germanic languages most consistently described in the handbooks with a distinct instrumental case in various declensional classes. The first part of this section will concentrate on Old Saxon as the closest neighbour of Frisian. Instrumental morphology is found in the following categories.¹² The *(j)a-*, *i-* and *u-*stems have an instru-

Variation to Iconicity, Festschrift for Olga Fischer, Amsterdam 2016, pp. 377-392, at 388 and Michiel de Vaan, "West-Germanic **ai* in Frisian", in Guus Kroonen *et al.* (eds.), 'Thi Timit Lof'. *Festschrift für Arend Quak zum 65. Geburtstag* (= *Amsterdamer Beiträge zur älteren Germanistik* 67), Amsterdam 2011, pp. 301-314.

⁹ Van Helten, *Altostfriesische Grammatik*, p. 166.

¹⁰ Ringe / Taylor, *A Linguistic History*, p. 380.

¹¹ Some peculiar instances of words ending in *-em /-um*, normally the dative plural ending, have been identified as singular or dual instrumental forms (Dirk Boutkan, "Another Old Frisian "Instrumental Singular" in *-um*?", *Neophilologus* 83 (1999), pp. 421-426; Alfred Bammesberger, "*-um* (> *-on*) as marker of the instrumental singular in Old English and Old Frisian", *Neophilologus* 85 (2001), pp. 287-290) but remain separated from the instances in the current article.

¹² Roland Schuhmann, *Einführung in das Altsächsische* (Unterrichtsmaterialien), Jena:

mental case form in *-(i)u*, which also appears in adjectives. In the feminine \bar{o} -stems, the instrumental form replaced the original dative ending entirely. It seems to be a common development in Runic Frisian,¹³ Old Saxon, Old High German and Old Norse to use the instrumental form in the regular dative function in the feminine \bar{o} -stems.¹⁴ For the pronouns, remnants are found in the masculine and neuter demonstrative pronoun (*thiu*) and in the interrogative pronoun ‘how’: *hwō* = PGmc instrumental, *hwī* = PGmc locative and *hwiu* = analogical formation. The distinct instrumental forms are used with certain verbs to express the means or aim of an action and after certain prepositions, such as *an* ‘at’ and *mid* ‘with’.

A distinctive locative form *-i* (< PGmc $*-\bar{i}$) is only attested in place-names, such as *Thribirgi*. Various scholars disagree strongly about the origin of the ending *-i* in instrumental and locative forms.¹⁵ Place names following the prepositions *fan* or *to* which normally govern the dative can also appear without an ending, e.g. *to themo āsteron hūs* (in the eastern house). The endingless forms are likely to continue an earlier $*-u$ (< PGmc $*-\bar{o}$). The development of PGmc $-\bar{i}$ differs from that of PGmc $*-\bar{o}$ in Old Saxon; the latter was lost after heavy syllables, although with many exceptions such as in the ending of the instr. sg. of *a*-stems.¹⁶

<https://www.academia.edu/1739714/Einführung_in_das_Altsächsische>, 2011-. Many examples adduced in the grammars (Johan H. Gallée, *Altsächsische Grammatik*, 3. Aufl. mit Berichtigung und Literaturnachtr. von Heinrich Tiefenbach, Tübingen 1993; W. Braune / E.A. Ebbinghaus, *Abriss der althochdeutschen Grammatik: mit Berücksichtigung des Altsächsischen*, 11. Aufl., Tübingen 1959; Schuhmann, *Einführung*) are not actually attested in Heinrich Tiefenbach’s full-corpus dictionary (*Altsächsisches Handwörterbuch = A Concise Old Saxon Dictionary*, Berlin 2010) but are reconstructions.

¹³ Runic Frisian refers to the actually attested runic inscriptions from the fifth until the ninth century. The term Proto-Frisian (PFri) is used to refer to the (largely) unattested Frisian language as it was in the seventh century, prior to the emigration of Frisians to the North Frisian Islands (Arjen P. Versloot, “The Runic Frisian vowel system: The earliest history of Frisian and Proto-Insular North Frisian”, *Amsterdamer Beiträge zur älteren Germanistik* 72 (2014), pp. 35-62, and *id.*, “Unstressed vowels in Runic Frisian. The history of Frisian in the light of the Germanic ‘Auslautgesetze’”, *Us Wurk* 65 (2016), pp. 1-39).

¹⁴ Dirk Boutkan, *The Germanic “Auslautgesetze”*, Amsterdam / Atlanta, GA 1995, p. 228 and Versloot, “The development of Old Frisian”, p. 382.

¹⁵ Van Helten, *Altostfriesische Grammatik*, p. 194; Gallée, *Altsächsische Grammatik*, p. 89; Krahe / Meid, *Germanische Sprachwissenschaft*, pp. 11, 63, 72; Boutkan, *The Germanic “Auslautgesetze”*, p. 337; Richard M. Hogg / Robert D. Fulk, *A Grammar of Old English*, II: *Morphology*, Chichester 2011, p. 194; Ringe / Taylor, *A Linguistic History*, p. 379.

¹⁶ Boutkan, *The Germanic “Auslautgesetze”*, pp. 186, 228, 309, 382.

I assume that the Old Saxon endings were distributed as follows. The instrumental was fairly consistently marked by the ending *-u* in most declensional classes and in the adjectives. It competed with the original instrumental ending *-i* in the *i*-stems and spread into this class at the cost of the former, as shown by contaminated forms such as *hugiu* 'mind', next to *hugi* (compare also the pronoun *thiu*). The ending *-u* also frequently resisted regular phonological apocope after a heavy syllable in the *a*-stems. The ending *-i* with a locative meaning can be found in the *a*-stems, but only in place-names.

In Old English, a distinct instrumental ending *-e*, attested as *-i* in some of the earliest texts, is only found in the masculine and neuter sg. of strong adjectives in early Old English.¹⁷ A few *a*-stem and *ō*-stem nouns in Anglian texts exhibit the ending *-i*. Some of them have an instrumental meaning, other rather a locative one.¹⁸ Hogg and Fulk¹⁹ claim that they formally derive from an original locative form. Old English attests also to a couple of endingless locatives, especially with the word *hām* < PGmc **haimu*, which parallel the endingless forms in Old Saxon.²⁰ Old English had two instrumental forms for the demonstrative pronouns: *þȳ* and *þon* < **þan*.²¹

	<i>a</i> -stems instr.	<i>a</i> -stems loc.	dem. pron. instr.	interr. pron. instr.	adjective instr.
OS	<i>-u</i>	<i>-i, -Ø < *-u</i>	<i>thiu</i>	<i>hwō, hwī, hwiu</i>	<i>-u</i>
OE	<i>-i</i>	<i>-i, -Ø < *-u</i>	<i>þȳ, þon</i>	<i>hwȳ/hwī, hū</i>	<i>-e < -i</i>

Table 1: Instrumental and locative endings in Old Saxon and Old English

Table 1 summarises the evidence for the instrumental and locative case in the masculine/neuter *a*-stems, the pronouns and adjectives in Old Saxon and Old English. Apart from the fact that the instrumental is more established in Old Saxon than in Old English, there are also clear differences in the inflections. In Old Saxon, the instrumental ending *-u* is widespread in the *a*-, *ō*- and *ī*-stem nouns, as well as in the pronominal and adjectival inflection. The

¹⁷ Hogg / Fulk, *A Grammar*, p. 151; Ringe / Taylor, *A Linguistic History*, p. 7.

¹⁸ *Ibid.*, pp. 374-375, in particular examples at 379.

¹⁹ Hogg / Fulk, *A Grammar*, p. 17.

²⁰ Ringe / Taylor, *A Linguistic History*, p. 380.

²¹ See A. Campbell, *Old English Grammar*, Oxford 1959, § 708, note 4; Hogg / Fulk, *A Grammar*, p. 194.

ending *-i* appears exclusively in the locative function, where it competes with endless forms that seem to point towards a pre-Old Saxon ending **-u*, regularly lost after heavy syllables. The ending *-i* is the more common one in Old English locatives and instrumentals, while evidence for the pre-Old English ending **-u* is only indirectly found in the form of some endless locatives.²²

1.3. From Proto-Germanic to Old Frisian

A system of fairly uniform case endings across genders and stem classes has been reconstructed for Proto-Indo-European. The Proto-Indo-European instrumental was marked by the laryngeal **-h₁*, while the locative had the ending **-i-* or zero.²³ These two endings fused with various vocalic stem suffixes in Pre-Germanic: the laryngeals disappeared but caused lengthening of the preceding vowels, while the **-i-* formed diphthongs with them, as in the following example of the PIE *o*-stems and *i*-stems:

instr.	PIE <i>*-o-h₁</i>	> Proto-Gmc <i>*-ō</i>
instr.	PIE <i>*-i-h₁</i>	> Proto-Gmc <i>*-ī</i>
loc.	PIE <i>*-o-i</i>	> Proto-Gmc <i>*-ai</i>
loc.	PIE <i>*-ē-i</i>	> Proto-Gmc <i>*-ēi</i> ²⁴

The consistent case marking of Proto-Indo-European grew into unsystematic inflections in Proto-Germanic. Subsequently, the case system in Old Germanic languages and in Old Frisian in particular was strongly influenced by the application of the so-called *Auslautgesetze*, a set of phonological reduction processes that led to a large-scale fusion and often syncope or apocope of phonologically complex endings in Proto-Germanic. In order to judge potential instrumental and locative endings, one first has to consider what these forms would look like in Old Frisian if no analogical levelling or morphological innovation had taken place. Table 2 shows the reconstructed Proto-Germanic endings for the accusative, dative/locative and instrumental singular. The information is taken from Boutkan and Ringe.²⁵ It is generally assumed that the Old Germanic dative continues either the original dative or locative.²⁶

²² But see note 35.

²³ Ringe / Taylor, *A Linguistic History*, p. 41.

²⁴ Boutkan, *The Germanic "Auslautgesetze"*, pp. 167, 170, 236, 240.

²⁵ *Ibid.*; and Ringe, *A Linguistic History*, pp. 269-274.

²⁶ Krahe / Meid, *Germanische Sprachwissenschaft*, p. 7; Ringe, *A Linguistic History*, p. 200.

PGmc	<i>a</i> -stems	\bar{o} -stems	<i>i</i> -stems	<i>u</i> -stems	root nouns
acc.	- \tilde{a}	- $\tilde{\bar{o}}$	- \tilde{i}	- \tilde{u}	- \tilde{u}
dat./loc.	- <i>ai</i> / $\bar{o}i$	- $\bar{o}i$	- $\bar{e}i$	- $\bar{e}u$ / <i>awi</i>	- <i>i</i>
instr.	- \bar{o}	- \bar{o}	- \bar{i}	- \bar{u}	- \bar{e} ?

Table 2: The reconstructed origin of the accusative, dative, locative and instrumental endings in Proto-Germanic

For the *a*- and \bar{o} -stems, the original dative and locative endings led to PFri *-*a*, OFri -*e*. There are indications that the dat. sg. of the \bar{o} -stems was replaced by the instrumental ending in Proto-Frisian (see § 1.2). PGmc *- \bar{o} and *- \bar{u} became PFri *-*u*, which later disappeared after a heavy syllable or appeared as -*e* after light syllables in Old Frisian. A similar syllable-weight dependent development is found for the short vowels in the acc. sg. of the *i*-, *u*-stems and root nouns. The dative and instrumental of the *i*-stems are expected to merge through the regular phonological developments in PFri *-*i*, which causes *i*-mutation and palatalization of preceding velar consonants where possible. Both *-*awi* and *- $\bar{e}u$ (> PWGmc *- $\bar{a}u$) are supposed to produce the PFri/OFri endings *- \bar{a}/a in the dative/locative of the *u*-stems, while the Old Frisian instrumental ending in this class is expected to show the aforementioned syllable weight distribution of -*e* and - \emptyset < PFri *-*u*. In the root nouns, the final *-*i* of the dative singular is expected to disappear. The instrumental ending *- \bar{e} is only based on an extrapolation from Proto-Indo-European, but in the root nouns, “no distinctive instrumental forms are attested in any [Germanic] daughter [language]”.²⁷

The expected situation in Old Frisian is shown in Table 3. It is not very distinctive because of the merger of PFri *-*i*, *-*u* and *-*a* in Old Frisian -*e*.

OFri	<i>a</i> -stems	\bar{o} -stems	<i>i</i> -stems	<i>u</i> -stems	root nouns
acc.	- \emptyset	- <i>e</i>	- $\emptyset(+)/-e+$	- $\emptyset/-e$	- \emptyset
dat.	- <i>e</i>	- <i>e</i>	- <i>e+</i>	- <i>a</i>	- \emptyset
instr.	- $\emptyset/-e$	- $\emptyset/-e$	- <i>e+</i>	- $\emptyset/-e$	- <i>e</i>

Table 3: The expected accusative, dative and instrumental endings in Old Frisian from the reconstructed Proto-German in Table 2. Legend: ‘+’ means *i*-mutation and palatalization effects; ‘/’ separates heavy syllable from light syllable

²⁷ Ringe / Taylor, *A Linguistic History*, p. 117.

The ending *-u* affected the development of PGmc **a* and **ai* in Frisian. When followed by **-u/-ū*, they tend to develop into OFri *a* and *ā*, but otherwise into *e* and *ē*, e.g.: OFri *stapel* ‘scaffold’ < PGmc **stapula-*, *āthom* ‘brother-in-law’ < PGmc **aiþuma-* vs. *bek* ‘back’ < PGmc **baka-*, *bēn* ‘leg, bone’ < PGmc **baina-*.²⁸

The evidence from Table 3 shows the potential instrumental forms in Old Frisian in the nominal inflection. Heavy syllable *a*-stems may show a contrast between an endingless instrumental vs. the ending *-e* in the original dative, because the instr. sg. ending *-u* should disappear after heavy syllables. The *-u* was retained after heavy syllables in the *a*-stems in Old Saxon, perhaps for morphological reasons. This *-u* would in Old Frisian appear as *-e*, making the OFri dat. sg. in *-e* not only functionally but also formally the successor of the dative, instrumental and locative cases. The former *-u* may have left traces in the root vowel in words with PGmc **a* or **ai*, differing from the dat. sg. No formal alternations are expected in the *ō*-stems.

In the *i*-stems, a formal fusion between the dative and instrumental is expected from the Proto-Germanic period, but the Old Saxon data suggest that the ending *-u* was levelled from other vocalic stems to the *i*-stems as well, which could lead to endingless instrumental forms after heavy syllables and missing *i*-mutation. A contrast between the instrumental and the dative is potentially most conspicuous in the *u*-stems: an instrumental is expected to show the ending **-e* or **-Ø*, contrasting with the dative ending *-a*. Based on Ringe’s reconstruction (see above), one could expect the contrast between an endingless dat. sg. vs. the ending *-e* in the instrumental in the root nouns.

This reconstruction suggests that no separate locative forms are to be expected, but in § 1.1 and § 1.2 it was mentioned that various Old Germanic languages, including Old Frisian, do show (reflexes of) a PWGmc **-ī* in a locative or instrumental function.

1.4. *The Runic Frisian evidence*

The Runic Frisian attestations include a couple of forms, which can be interpreted as dative, instrumental or locative cases.²⁹ The Westeremden B inscription may contain two adverbial phrases. The first one is **op hamu** ‘at (the)

²⁸ De Vaan, “West-Germanic **ai*”; Versloot, “The development of Old Frisian”, p. 387.

²⁹ For an extensive discussion with references to earlier scholarship of the endings in unstressed syllables, see Arjen P. Versloot, “Unstressed vowels”.

home(stead)': there is a preposition and the most likely case from an Old Frisian perspective is the dat. sg. The ending of *hāmu* is formally rather an old instrumental case in a dative/locative function *hāmu* < PGmc **haimō* with monophthongization of PGmc **ai* before a back vowel > PFri **ā* > OFri *ā*. Another potential adverbial phrase in Westeremden B is *iwi* '(near the) yew', a noun with a presumable locative meaning. The form *īwi* with the ending *-i* resembles the Old Saxon and Old English locatives in *-i*. The word is not preceded by a preposition, which implies that the locative case was a morpho-semantic category in its own right.

Westeremden A contains the phrase *mep Jisuh[i]ldu* 'with J. (PN)', potentially a dative or an instrumental case. It is a historical instrumental form, but, as mentioned before, it seems to be a common development of Runic Frisian, Old Saxon, Old High German and Old Norse to use the instrumental form as the regular dative form in the feminine *ō*-stems.

To sum up, the instr. sg. ending *-u* appears both in a syntactic instrumental (*Jisuh[i]ldu*) and a locative context (*hāmu*). A locative in *-i*, parallel to the forms in Old English and in particular Old Saxon, may be present in the Runic Frisian data as well (*īwi*).

2. Old Frisian evidence

The following sections present evidence for the instrumental and locative for lemmas from various declensional classes. Most of the examples presented here have so far not been noted in the descriptions of Old Frisian. The reason for this is probably the minimal contrast between historical instrumental and locative forms on the one hand, and dative forms on the other, mostly only *-e* vs. *-Ø*. In many texts traditionally labelled as 'Old Frisian', the allomorphic alternation between *-e*, *-Ø* and *-a*, is pretty common, although not *at random*. In such a constellation, the interpretation of forms with *-e* vs. *-Ø* seems meaningless. A separate analysis of the oldest attestations as 'real' Old Frisian,³⁰ where phonological reduction was an exception rather than a common phenomenon,³¹ reveals many morphological details of Old Frisian. The core of this Old Frisian corpus is made up by the manuscripts R₁, R₂, B_{1/2},

³⁰ Arjen P. Versloot, "Why Old Frisian is still quite old", *Folia Linguistica Historica* 25 (2004), pp. 253-304.

³¹ Van Helten, *Altostfriesische Grammatik*, pp. 49-53 and Versloot, *Mechanisms of Language, passim*.

E₁, H_{1/2} and the older parts of Codex Unia (U), especially the Older *Skeltena-riucht*, but also some others, such as *Haet is riocht* and the 17 Statutes and 24 Landlaws.³²

This article presents some interesting contrasts. For all lemmas, irrespective of the declensional class, one is dealing with a situation that there are often too few instances of one lemma in one text to make a solid case. The presented evidence is therefore in a way the result of ‘cherry picking’, which poses the question to what extent an instrumental and locative case were actually present in the language beyond these identified instances, which may have been no more than a handful of petrified collocations. Therefore, the results of a full coverage of all potentially relevant forms in a section from manuscript E₁ will be presented in § 2.3, in order to see the actual scope of the instrumental and locative forms.

2.1. Formal and functional traces of the instrumental in Old Frisian

2.1.1. Frethe ‘peace’, light syllable u-stem

The oldest text layers (pre-1350) of Unia contain 5 dative forms in *-a*, following the preposition *t(h)i* ‘to’: *fretha*. The acc. sg. is always *frethe* (with one exception *fretha*) < PFri **frethu* (Rüstring Old Frisian *fretho*). The texts contain 4 instances of *mith* [...] *frethe*. An accusative interpretation is, however, excluded, because the preposition *mith* consistently governs a dative in other instances.³³ Semantically, the preposition *mith* renders the instrumental adequately. *Frethe* fits the expected instrumental form: OFri *frethe* < PFri **frethu* < PGmc **fripū*.

³² R₁ (W.J. Buma, *De eerste Riustringer codex*, 's-Gravenhage 1961), R₂ (*id.*, *Het tweede Rüstringer handschrift*, 's-Gravenhage 1954), B_{1/2} (*id.*, *Die Brokmer Rechtshandschriften*, 's-Gravenhage 1949), E₁ (P. Sipma, *De eerste Emsinger Codex*, 's-Gravenhage 1943), H_{1/2} (Jelle Hoekstra, *De eerste en de tweede Hunsinger codex*, 's-Gravenhage 1950), U (Johanneke Sytsema, *Diplomatic Edition Codex Unia*, 2012-: <<http://tdb.fryske-akademy.eu/tdb/index-unia-en.html#>>; Walther Steller, *Das altwestfriesische Schulzenrecht*, Breslau 1926). See further Bremmer, *An Introduction*, pp. 13-14, 119-125. For the dating of the texts in Unia, see Versloot, *Mechanisms of Language*, pp. 70-75.

³³ Bremmer, *An Introduction*, p. 101.

light syllable masculine <i>u</i> -stems			
acc. sg.	<i>frethe</i>	(<i>fretha</i>)	n = 27 : 1
dat. sg.	<i>fretha</i>		n = 5
instr. sg.	<i>frethe</i>		n = 4

Table 4: Instrumental forms in *frethe* ‘peace’ in Unia; the contrast between dative and instrumental is beyond mere chance³⁴

The collocation *mit(h) [...] frethe/-a* is not attested in H, E₁ or B. In R₁, one finds once: *and mith fretha nawet bi kanna* (and not provide the peace [money]), a clear dative form.

2.1.2. Hond/hand ‘hand’, heavy syllable *u*-stem

The heavy syllable feminine *u*-stem *hond/hand* shows separate endingless forms in the singular in H and E₁: *mith sinre hond* (with his hand) against otherwise *te/an honda* (7 examples each and 1x *hond* in the dat. sg. in E₁). In B, R and U, only *hond/hand* is used in the dat. sg. and there are no traces of an archaic dative form in *-a*. The endingless forms can be interpreted as original instrumental forms, generalised to the dative, supported by identical nom. acc. sg. forms.³⁵

2.1.3. Wald ‘power’, heavy syllable *i*-stem

The *i*-stems are phonologically not expected to show separate instrumentals, but the Old Saxon evidence, with e.g. dat. sg. *krafti*, instr. sg. *craftu*, shows that the instrumental ending *-u* could be generalised to the *i*-stems as well.

³⁴ Fisher’s Exact Test for the contrast dat. sg. 5x *-a*, instr. sg. 4x *-e*: $p < 0.01$.

³⁵ Old English shows a similar contrast: the preposition *mid* is often followed by an endingless form *hond/hand*: from 50% in early-OE until 17% in late-OE, a receding feature. Unambiguous datives, e.g. after the preposition *tō*, always end in *-a* (late OE *-e*). Contrary to Old Frisian, the dative form ousted the instrumental form in Old English. This contrast is not observed in current descriptions of Old English, such as Campbell, *Old English*, or Hogg / Fulk, *A Grammar*. A dat. sg. of *hand* is attested only twice in Old Saxon (*Heliand*): C, M line 185 *hand: mid is suiðron hand* (with his right hand) against C, M line 2989 *at (h)endi* (at hand). The alternation between *-Ø* and *-i* fits the distribution in Old Frisian, given the fact that the dat. sg. of *u*-stems has the ending *-i* < PGmc **-ēu* in Old Saxon.

A reflex of an instrumental in a heavy syllable *i*-stem is found in the word *wald* ‘power’ in B₁ and B₂. An instrumental form *wald* appears 11 times in B₁ and B₂ (the texts are not always parallel) in collocations with *mith*. The dative shows the fairly rare alternation between *welde*, with expected *i*-mutation, and *wald*. The latter form looks like the levelled form from the instr., supported as well by the identical nom. acc. sg., a pattern that was also observed in *hand/hond*. This levelling process proceeded over time, as witnessed by the article headings in B₂, which were later added to the law articles, with only the dat. sg. forms *wald*. The dat. sg. form *welde* is otherwise found in E₃. All other Old Frisian sources have only the form *wald* in the dat. sg. function, which can be interpreted as an analogical formation.³⁶

B ₁		heavy syllable feminine <i>i</i> -stems	
acc. sg.	<i>wald</i>		n = 5
dat. sg.	<i>welde</i>	<i>wald</i>	n = 2 : 2
instr. sg.	<i>wald</i>		n = 4

Table 5: Instrumental forms in *wald* ‘peace’ in B₁

2.1.4. *Āth/ēth* ‘oath’, heavy syllable *a*-stem

Only *Codex Unia* contains some instances of <ath-> = *āth*- ‘oath’ for otherwise *ēth* in Old Frisian. The word has PGmc **ai* and the forms with *ā* remind of the Runic Frisian form *hāmu* < PGmc **haimō* in the dative/locative function with monophthongization of **ai* > PFri **ā* > OFri *ā* before a back vowel. The root form <ath-> appears in the following instances in *Unia*:

³⁶ The dat. sg. goes back to PWGmc **waldī*, while the nom. acc. form comes from PWGmc **waldi*. The fronting and *i*-mutation of PGmc **a* were strongly inhibited before *-ld* (and after *w-*) and the *i*-mutation was more successful when the *i*-mutation factor was a long vowel than a short one. Note that one of the two instances of *welde* in B₁ is preceded by the preposition *inna* ‘within’, which can trigger a locative form in PFri **-i* (see § 2.2), which leads to the same OFri form *welde*. The dat. sg. of *wald* in Old Saxon is *gi/eueldi*, *giuualde* (4x) and once *gi/euuald*: C, M line 5264: *fan is uuerodes geuuald* (of his people’s power). The preposition *fan* is described as a trigger for the instrumental case (Schuhmann, *Einführung*, p. 79).

Attestations in Unia	Paradigm	PWGmc
[...] <i>truch sines enine ath</i> [...] (by his own oath)	acc. sg.	* <i>aīpa</i>
[...] <i>mit ene athe</i> [...] (with an oath) (2x)	instr. sg.	* <i>aīpū</i>
[...] <i>thisse xxxvi athan to lesane</i> [...] (to release these 36 oaths)	acc. pl.	* <i>aīpōz</i>

Table 6: <ath-> in Unia

The plural form shows the later replacement of OFri *-ar* (originally the nom. pl. ending) by *-an* in Old West Frisian. Apart from this, three out of four instances are found in contexts where OFri *ā* can be expected as the root vowel. The ending *-e* in *mith ene āthe* can be the analogical dat. sg. ending. It should, however, be noted that Old Saxon retains the instr. sg. ending *-u* in the *a*-stems also after a heavy syllable. The *-e* in *āthe* may continue such a morphologically retained PFri instr. ending **-u* as well. At the same time, also the form *mith* [...] *ēthe* is widely attested in the same Unia text. The allomorph *āth-* may therefore formally be derived from the earlier instr. sg. PWGmc **aīpū* and the nom. pl. **aīpōr*. Synchronically the form *āth* seems a free phonological variant of the more common *ēth-* in late thirteenth century Old West Frisian.

2.1.5. Bōk ‘book’, heavy syllable root noun

Ringe reconstructed a potential instrumental ending **-ē* in the root nouns, but mentioned that no such forms were attested in any Old Germanic language. Despite this observation, E₁ shows a remarkable alternation: *mith boke* ‘with book’ (1x) vs. *an there/andere boc* ‘in the book’ (2x), with potentially *bōke* < *PGmc **bōkē* against *bōk* < PGmc **bōki*. E₁ is the only text that has an alternation in one manuscript. The phrase *andere boc* is also found twice in H, *an there asek bok* once in R₂, while Unia has once *mith boke*. This means that the total evidence of seven relevant forms in Old Frisian fits a potentially old dative-instrumental contrast. Note that the nom. acc. sg. is always endingless (H: 1x, U: 7x). The *-e* in the dative is otherwise explained as the result of a gender shift to the neuter,³⁷ which indeed takes place later in Frisian, but without any unambiguous proof of it in ‘real’ Old Frisian.

³⁷ Van Helten, *Altostfriesische Grammatik*, p. 158.

2.1.6. *Adjectives*

The masculine/neuter dat. sg. ending of strong adjectives in Old Frisian is *-e*, not **-um*. Old English preserves an opposition between the dat. sg *-um* and an instr. *-e* ending.³⁸ Apparently, the instrumental ending replaced the historical dative ending in Old Frisian.³⁹

2.1.7. *Pronouns*

Three pronominal forms have been interpreted as instrumental forms. In the fixed collocations *bi/efter/til/with thiu*, the form *thiu* matches the instrumental in Old Saxon. Van Helten assumes that *thiu* is an extension of an original **þī* with the nominal instrumental ending *-u*. A reduced form *-te* < **þī* may be found in R₁ *theste* ‘even’ (+ comparative) and H₂ *en te līke* ‘even more similar’, just as in e.g. *mithe* ‘with the’, *ete* ‘at the’.⁴⁰

The interrogative pronoun shows the form *hū* ‘how’ in Old Frisian, a historical instrumental; **hwī* is not attested in Frisian.

The common dat. sg. masculine/neuter and dat. pl. form *tha* of the demonstrative pronoun instead of the incidental *tham* is sometimes interpreted as a historical instrumental form. Siebs⁴¹ assumes that *tha* is the original dative form and the result of the loss of the final *-m* in unstressed positions, but *tha* may also represent **þan* with the *n*-apocope, which can be reconstructed for Old Frisian on the basis of the Old English instrumental form *þon*. Another possible interpretation of the Old Frisian dat. sg. article *tha* is to assume an original instr. sg. form **þā*, linked to the Gothic *þē-* (compare Old Norse *-þá* in *ennþá* ‘even’ + comparative), with retention of PWGmc **ā* < PGmc **ǣ*.⁴²

³⁸ Hogg / Fulk, *A Grammar*, p. 151

³⁹ R₁ has rather *-a* (Dirk Boutkan, *A Concise Grammar of the Old Frisian Dialect of the First Riustring Manuscript*, Odense 1996, p. 78), which also sometimes appears in other manuscripts (Van Helten, *Altostfriesische Grammatik*, pp. 164-166). Its origin is unclear. Bremer, *An Introduction*, p. 65 mentions only *-e*.

⁴⁰ Van Helten, *Altostfriesische Grammatik*, pp. 192, 194.

⁴¹ Siebs, “Geschichte der friesischen Sprache”, p. 1356.

⁴² Krahe / Meid, *Germanische Sprachwissenschaft*, p. 60. See for the complicated origin of the dat. sg. forms also Boutkan, *The Germanic “Auslautgesetze”*, pp. 301-305; for Old English also Hogg / Fulk, *A Grammar*, p. 194.

2.1.8. Conclusions

Old Frisian shows a separate instrumental form in the singular of nouns with a morpho-syntactic distribution in the texts beyond chance for two nouns in the *u*-stems (*frethe* U, *hond* H, E₁) and additionally in the *i*-stems (*wald* B) and perhaps even the root nouns (*bōk* E₁, H, U). The root vowel alternation in the masculine *a*-stem *ēth*- ~ *āth*- ‘oath’ in Unia can be explained from an earlier contrast between a separate dative and instrumental form. In *hond* and *wald*, the endless instrumental form fully replaced the dative form in the language of manuscripts that do no longer show a paradigmatic contrast. All the instances of instrumentals mentioned above are preceded by the preposition *mith*. To what extent these instances represent petrified collocations, rather than an active use of a separate case form, will be analysed in § 2.3.

There are a few instances with a plain instrumental interpretation for word forms that are formally indistinguishable from regular datives, such as: “*thet hit nahwedder froste ne hungere ne na nena unideva dathe ne urfari*” (that it [the child] would neither perish with frost nor with hunger nor ever with any other horrible death) (R₁) which was rephrased in U with a preposition: “*that hit an froste ner an hungere naut ne urfare*”. Other such examples can be found in E₁, and H.

Adjectives and pronouns show some vestiges of an earlier instrumental, but synchronically the dative and instrumental have merged, in various instances with the historical instrumental form as the current ‘dative’ form. Especially in the pronouns, conclusions are difficult to achieve.

2.2. Formal and functional traces of the locative in Old Frisian

In the Ems Old Frisian texts E₁ and B, a series of forms with a palatalised final velar or unexpected *i*-mutation can be found in the dat. sg, such as *a betse* (on the back) or *bi like pende* (by an equal pawn).⁴³ These forms testify to a former PFri ending *-*i*.

Altogether, there are 10 examples, spread over five different lemmas: *bek* ‘back’, *kening* ‘king’, *lond* ‘land’, *thing* ‘court(session)’, *pond* ‘pawn’. All but *pende*, which appears in B_{1,2}, are found in E₁. Five out of the eight instances in E₁ are preceded by the preposition *a* or *and* ‘in, on’, one by *inna* ‘within’

⁴³ Van Helten, *Altostfriesische Grammatik*, p. 125.

< *inn* + *a*. The Old Frisian dictionary⁴⁴ treats *a*, *an* and *and(e)* as three different lemmas, but the analysis of E₁ shows that these are three allomorphs of one preposition: *an(d)* appears before a definite article, such as in: *anda fiarda monathe* (in the fourth month), *an* before a vowel and *a* in any other construction, such as *a lende* ‘on land’.⁴⁵ Parallel to the close link between the preposition *mith* and the instrumental, the forms in PFri *-*i* are linked to the prepositions *a(n)/inna*, which can be interpreted as marking the locative. All the attested nouns with explicit locative features are *a*-stems and the aforementioned examples are restricted to Ems Old Frisian. In two instances, we are dealing with semantically motivated datives, e.g.: “truch thet hia cristen vrde anta [=and tha] suther keninze [...] heregch vrde.” (because they became Christian and subordinate to the southern king). See for a further discussion of these two semantically motivated instances § 2.3.2.

Semantical locatives in the form of formal datives can be found in R₁ 9:5: “[...] therpe ieftha felda, houi [ief]tha huse.” ([in] the village or the field, the farm or the house). The parallel text in Unia reads: “an thorpe and an felda”, with the preposition that is associated with the locative, here with the dative forms: *thorpe* and *felda*. Theoretically, the form <therpe> in R₁ could be the result of a PFri locative form **pærpi* < PWGmc **porpī*, but a more likely interpretation is ‘dental mutation’ by the following -*r*, compare Modern East Frisian *Täärp*, seventeenth century Wurst-Frisian *Tärpe* < **therp-*, Modern West Frisian *terp*.⁴⁶

Another isolated potential locative form is found in the Old *Skeltenariucht* in U: *an hande*. Unia shows no longer a contrast between the instrumental *hand* and a dative form **handa*, but attests to the generalization of the instrumental form as the general dative/instrumental, which is also the nom. acc. sg. form. It is therefore remarkable that the noun has an ending -*e* exactly in combination with the preposition *an*: “thet ma hit muge an hande luka” (that one may hide it in the hand). The absence of dative forms in -*a* makes an interpretation as an early instance of phonological weakening -*a* > -*e* unlikely. The lack of *i*-mutation (**hende*) can be ascribed to the blocking environment of

⁴⁴ Dietrich Hofmann / Anne T. Popkema, *Altfriesisches Handwörterbuch*, Heidelberg 2008.

⁴⁵ The string “and liuda thinze” (in a public court session), appears after an enumeration with six times the conjunction *and* ‘and’.

⁴⁶ Jarich Hoekstra, “Dental mutation (‘Dentalumlaut’) in Frisian and other languages on the North Sea littoral”, *NOWELE: North-Western European Language Evolution* 50-51 (2007), pp. 43-62.

the following nasal (but note E₁ (*a*)*lende*) or as a result of intra-paradigmatic analogy.

These examples illustrate the following:

1. Old Frisian shows the remnants of a semantic locative case, where the locative meaning could be expressed by case without an additional preposition;
2. The locative meaning is otherwise preferably expressed with the preposition *a(n)*;
3. Distinctive morphological forms are attested in E₁ and possibly in B (*pende*), and U (*hande*).

The locative forms in PFri **-i* are paralleled in Old Saxon. Old English also has forms in *-i* but there they seem to appear in an instrumental meaning as well. The Old English instances lack *i*-mutation, while the Frisian ones are clearly marked by the impact of **-i* both on the preceding root vowel and consonant. Apart from these traces, a separate locative form, PFri **-i*, nearly only attested in the *a*-stems, merged formally with the PFri dative **-æ* in the OFri ending *-e*.

2.3. *The instrumental and locative in the First Emsinger Codex*

The previous sections show that potential instrumentals may follow the preposition *mith* and potential locatives the preposition *a(n)*. Instrumentals and locatives can incidentally be purely semantically motivated. The question is: do these instances represent a handful of petrified idiomatic collocations or do they attest to a more or less vital existence of the instrumental and locative case in early Old Frisian? In order to obtain an impression of the distribution of such forms in the language, a section of *c.* 5,700 words of the First Emsinger Codex, comprising the first five texts⁴⁷ was checked on all singular dative forms (including potential instr. and loc. forms). There are no indications for further diversification in the plural. These sections were selected because they are the only ones that contain the locative forms mentioned by van Helten. The *a priori* hypothesis is that these texts present a morphologically archaic form of Old Frisian. In total 245 relevant forms were found.

⁴⁷ *Fia-oath*, Introduction, 17 Statutes, 24 Landlaws and some miscellanea, Sipma, *De eerste Emsinger*, pp. 55-74.

2.3.1. Instrumental

In the *a*-stems, (*j*)*ō*-stems and *i*-stems, the preposition *mith* is always followed by the normal dative form, which ends in *-e*.⁴⁸ In the sentence “Sa scelma thet al twibete beta” (so he will compensate with a double fine for everything), *twibete* can be translated as ‘with a double fine’. Also in the phrase “Huersama wif nede nimth” (Wherever one ‘takes’ a woman with force) (5x in slightly different wording), an instrumental interpretation is appropriate (nom. sg. *nēd* attested in E₁). Parallels to the contrast *welde* ~ *wald* (as found in B) are not attested for E₁, e.g. “mit enere glandere gledi” (with a glowing coal) (4 negative examples).

In the *n*-stems, every oblique case ends in *-a* and this does not differ after the preposition *mith*. For the root nouns and *r*-stems, there are only feminine examples and they tend to vacillate between *-Ø* and *-e* in the dative singular in Old Frisian (including E₁) anyway, which relativises the observed contrast between *mith bōke* and *andere bōk*.⁴⁹

For the feminine *u*-stems, the excerpted text fragments contain 5 relevant tokens of *hond* ‘hand’: 2x “mith sinre ferra hond” (with his right hand), against 3 tokens *te/a honda*. There are no other positive or negative examples. For the masculine, the text contains three instances with the dat. sg. in *-a*: 2x *under/te* [...] *fretha*, once *to monegerde forda* (in Münster). In the phrase “Thet scel [...] al wesa [e]frethe and ebete” (all that shall be without peace money and compensation), where *e-* expresses the negation (‘without’), an adverbial instrumental interpretation (in Bremmer’s terminology) is possible, matching the instances of *mith frethe* in Unia. The Riustring form *efrethe* is an argument against this interpretation, because there **-o* (**efretho*) < PGmc **-ū* would be expected.

Finally, there is the phrase “[...] and umbe thingade thinze” (and [with] uncondemned court procedure) with an adverbial instrumental interpretation and a form that attests to PFri **-i*. Forms of *thing* without palatalization are attested in the same text in the nom. sg. and pl. (< PFri **thingə*/**thingu*). A locative *thinze* following the prepositions *inna*, *a(n)* is found three times and

⁴⁸ The single exception is an instance of “mit tuialdere beta” (with a double fine) in the twelfth Landlaw, next to “mit tuialdere bete” with the expected ending *-e* in the nineteenth Landlaw.

⁴⁹ E.g. E₁: “ande neil thiustera nacht” (in the pitch-dark night), next to “anda thire neil thiustera nachte”.

also for *umbethingade thinze* a locative interpretation is possible: ‘in/at an unconducted court procedure’.

To sum up, E₁ confirms the existence of a special endingless instrumental form for the feminine *u*-stems < PGmc *-ū. One may be dealing with a single idiomatised collocation “mith sinre (ferra) hond”, but there is no counterevidence from other attested *u*-stem lemmas. The form *thinze* has its origins in the locative and it was used either in the instrumental or in the locative meaning. For the rest, the formal dative fulfilled the instrumental function, both following *mith* and in the semantic meaning. The semantic instrumental *nede* ‘with force’ (nom. sg. *nēd*, a feminine *i*-stem) contrasts clearly with the formal endingless *wald*-instrumentals in B.

2.3.2. Locative

Traces of a PGmc *-ī are found in words governed by the preposition *a(n)* (5x), by *inna*⁵⁰ (1x) and appear twice as potential semantic datives or instrumentals. The forms show either palatalization of the final velar consonant (*thinze* < PGmc **þingī*, *betse* < PGmc **bakī*) or mutation of the root vowel (*lende* < PGmc **landī*). Such forms appear exclusively in the fragments of the 17 Statutes or later additions to it (which maybe echo the word choice of the core text). All lemmas are *a*-stems: *betse* (*bek*) ‘back’, *keninze* (*kening*) ‘king’, *lende* (*lond*) ‘land’ and *thinze* (*thing*) ‘thing’. A couple of tokens ending in *-k* or *-g* in the same texts are ‘real’ datives and do not show palatalization, such as *tha kenenghe riuchta* (to compensate (to) the king), with the ending OFri *-e* < PFri *-æ < PGmc *-ai.

The text of the 17 Statutes contains two more *a*-stem nouns which potentially could show *i*-mutation of the root vowel after *a(n)*: “a wrpene warue” (at a called meeting) and “a fria stoel” (on a free chair), without an ending. The former looks like a normal dative, although it should be noted that the context /war/ is a blocking environment for fronting of PGmc *a*,⁵¹ a phonetic tendency that also surfaced during the process of *i*-mutation of *a*. The endingless form *stoel* is reminiscent of the endingless forms in the locative meaning (< PWGmc *-ū), mentioned for Old Saxon and Old English. The text of the 17 Statutes in E₁ contains another such example with *wald*, a feminine *i*-stem, instead of a dative **welde* in *andes kenenges wald* (in the power

⁵⁰ Compare also OFri *oppa* ‘on’, Danish *på* < *upp á*.

⁵¹ Bremmer, *An Introduction*, p. 29.

of the king). Interestingly, the preposition *an* can govern the instrumental in Old Saxon. The phrase *a fria stoel* has many parallels in other manuscripts with final *-e*, e.g. H, R₁: “a(n) fria stole” and a spelling error with <el> for <le> cannot be entirely excluded.⁵² A comprehensive analysis of all masculine *a*-stem nouns in the Old *Skeltenariucht* (U) revealed one more ending-less dative singular form: *an tha kampstal* (at the fighting place), again with the preposition *a(n)*.

Two semantically ambiguous instances of locative forms are: “[...] anta suther keninze hendsegch and heregch vrde” (and became subjected to the southern king) – where *anta* is the conjunction *ande* + dat. sg. article *tha* – and the earlier mentioned “umbethingade thinze” (with [means]/at [location] an unconducted court procedure). Both phrases also have a directional aspect and a locative interpretation is possible. An intriguing fact is that both instances of formal locatives in semantically ambiguous contexts in E₁ are preceded by the conjunction *and*, which is sometimes homophonous with the preposition *a(n)*, exactly the trigger for the locative. This could be interpreted as an instance of priming.

Altogether, the instances of a locative, at least in the fragments of and related to the 17 Statutes in E₁, exhibit a fairly consistent application of special morphological forms for the locative in the *a*-stems. The preposition *a(n)* triggers this locative. The ending fluctuates between the continuation of PGmc **-ī* > OFri *-e* with palatalization of the final consonant or mutation of the root vowel where possible and **-ū* > OFri *-Ø* after a heavy syllable: PWGmc **bakī* > *betse*, **landī* > *lende* vs. **stōlū* > *stoel*, **waldū* > *wald*.

2.3.3. Synopsis

A summary of the use of dative, instrumental and locative morphology in the first 5 texts of the First Emsingo Codex is given in Table 7.

⁵² The word *stōl* does not show any other form deviating from the basic pattern dat. *-e*, nom. acc. *-Ø* in any of the other archaic Old Frisian texts. The few other instances of ending-less dat. sg. *a*-stems in the oldest texts mentioned by van Helten, *Altostfriesische Grammatik*, p. 127 either end in a vowel or are disyllabic, contexts that are more susceptible to apocope.

decl. class	<i>a/an</i>					<i>mith</i>			other prep			semantic		
	-	-a	-e	-e-	-e+	-	-a	-e	-	-a	-e	dat. -e	instr. -e	loc.* -e+
<i>a</i>	1		9	9	5			37	1	2	60	4		2
<i>o/i-f</i>	2		3				1	15			17		6	
<i>u</i>		3				2				5			1	
cons.m			9								3	3		
cons.f	3		1					1	1					

Table 7: The dative, instrumental and locative in the First Emsingo Codex, text 1-5

Legend:

excluding roots ending in a vowel: *fīa*, *sē*, *knī*; all *n*-stems end in *-a*

‘-e +’ = root shows *i*-mutation and/or palatalisation of the root final velar

‘-e -’ = root explicitly lacks *i*-mutation and/or palatalisation of the root final velar

* = can be interpreted as a dative and instrumental as well (see discussion)

dark grey = default dative ending;

light grey = analogical *a*-stem dat. ending in masc. and neutr. consonantal nouns (*t*-& *s*-stems, root nouns)

bold type face = (potential) historical instrumental and locative endings

A number of patterns turn out to be fairly consistent and statistically significant (see the Appendix). First, there is a clear trace of the use of a locative in *-e* < PFri **-i*, causing *i*-mutation of the root vowel and palatalization of the root final *-k* or *-g* in the *a*-stems. The locative followed the prepositions *a(n)*, *inna* or was semantically motivated. Out of 24 tokens of *a*-stems following the preposition *a(n)*, 5 show explicit traces of a locative ending, while 9 other instances can also be interpreted as such, but overlap with regular dative forms. These locative forms are concentrated in the 17 Statutes and fragments directly related to it, suggesting that this pattern was restricted to a specific idiolect, assumingly reflecting an older stage of the language.

Another class still exhibiting special case endings were the *u*-stems: the text shows endingless instrumental forms in heavy syllables and – if *efrethe* is indeed an instrumental form – with the ending *-e* (instead of *-a*) in the light syllable stems < PFri **-u*. The alternation between *-∅* and *-e* in the dat./instr./

loc. of feminine consonantal stems is random, although there may be a parallel in other texts for an instrumental *bōke* ‘book’ < PFri **bōkæ* < PGerm **bōkē* next to the dative *bōk* < PFri **bōki*.

The instrumental followed the preposition *mith* or was semantically motivated. Traces of endlingless heavy syllables (hence formally historical instrumentals) are also found in the locative context, governed by *a(n)*, which finds a parallel in Old Saxon.

The locative pattern is unique for E_1 , but traces of the instrumental are also attested in other manuscripts.

3. Synthesis

3.1. Formal aspects and the Proto-Germanic and Proto-Frisian evidence

The total evidence for original instrumental and locative forms in Old Frisian is shown in Table 8.

	<i>mith</i>	<i>a(n)</i>	other
PFri - <i>u</i>	<i>a</i> -stem: <i>āthe</i> (U) <i>i</i> -stem: <i>wald</i> (B) <i>u</i> -stem: <i>hond</i> (E_1 , H), <i>frethe</i> (U)	<i>a</i> -stem: <i>kampstal</i> (U), <i>stōl</i> (E_1) <i>i</i> -stem: <i>wald</i> (E_1)	
PFri - <i>i</i>		<i>a</i> -stem: <i>betse</i> (E_1), <i>keninze</i> (E_1), <i>lende</i> (E_1), <i>thinze</i> (E_1) <i>u</i> -stem: <i>hande</i> (U)	<i>a</i> -stem: <i>pende</i> (B)
PFri *- <i>æ</i>	root noun: <i>bōke</i> (E_1 , U)		

Table 8: Synopsis of the evidence for instrumental and locative forms in Old Frisian

The preposition *mith* is always (except for *bōke*) found with traces of the historical instrumental ending **u*, while the preposition *a(n)*, typical for the locative case, is found with traces of both historical *-*i* and *-*u*. A ‘confusion’ between PFri *-*u* and *-*i* in the locative function is already attested in Runic Frisian: loc. *hāmu*, *īwi*, instr. *Jisuh[i]ldu*. Both Old English and Old Saxon attest to the same double marking in the locative function.

The adjectival dat. sg. ending *-e* can go back to **-u*, as in Old Saxon, or to **-i* as in Old English. The parallelism in the nouns and demonstrative pronouns between Old Saxon and Old Frisian (*thiu*, against OE *þy*) may point in the direction of **-u*, but this cannot be determined with certainty.

It seems that in Old Frisian, Old Saxon and Old English, there was a profound confusion between two endings which are traditionally associated with an instrumental and a locative case. There was an inherited instrumental in PWGmc **-ū* in the *a-*, *o-* and *u-*stems, and the handbooks mention a spontaneous overlap between the dative and the locative in these classes. The PWGmc ending **-ī* was found in the dative, instrumental and locative in the *i-*stems and finally the interrogative pronoun had the forms **hwī* and **hwū*, of which the former was apparently a historical locative and the latter the instrumental, but with widespread confusion of meaning and contamination of the forms. The semantic overlap between the two cases can also be illustrated by the expression *froste* 'by frost' in R (see § 2.1.8) representing an instrumental meaning, which is rendered by *an froste* in U, with the preposition that can otherwise trigger a locative. Another example of the possible confusion is the fact that both the Old Saxon prepositions *mid* 'with' and *an* 'at' govern the instrumental, just as OFri *mith*, while OFri *a(n)* governs specific locative forms in E₁.

The endingless locatives in Old Saxon, Old English and Old Frisian from PWGmc **-ū* indicate that the locative did not automatically disappear and merge with the dative, but that the instrumental and locative could be expressed with the same ending, distinctive from the dative. For this instr./loc., there were two candidates in PWGmc: **-ū* and **-ī*. It is typical for receding or low frequency endings to be harmonised throughout the declensional classes in favour of a so-called 'super stable marker'.⁵³ In pre-Old English, the ending *-i* took most of the instrumental and locative functions. In Old Saxon, the *-u* was reintroduced from the light syllable stems and the adjectival inflection exclusively in the instrumental function, in particular in the type-frequent *a-*stems, expanding into the *i-*stems. But endingless instrumentals with $-\emptyset < *-u$ in *i-* and *u-*stems can also be found in Old Saxon: *hand* and *giuuald* and in Old English *hand* (see fn. 35 & 36) as well as in Old Frisian. This leads to the following, somewhat generalising picture:

⁵³ Wolfgang U. Wurzel, *Inflectional Morphology and Naturalness*, Dordrecht / Boston 1989, p. 135. Good examples are the gen. and dat. pl. which are uniform in Old Frisian, Old English and Old Norse throughout the declensional classes: *-a*, *-um*, or the *-s* marker in English, where the entire morphology was 'receding' and the super stable marker *-s* remained: as a plural marker, a genitive marker and a verbal ending.

	<i>a</i> -st. instr.	<i>a</i> -st. loc.	<i>i</i> -& <i>u</i> -st. instr.	pron. dem. instr.	adj. instr.
OS	<i>-u</i>	<i>-i</i> ; $-\emptyset < *{-u}$	<i>-u</i> , $-\emptyset < *{-u}$	<i>thiu</i>	<i>-u</i>
OFri	<i>-e < *{-u}</i>	<i>-e < *{-i}</i> ; $-\emptyset < *{-u}$	<i>-e</i> , $-\emptyset < *{-u}$	<i>thiu</i>	<i>-e < *{-u}(?)</i>
OE	<i>-i</i>	<i>-i</i> ; $-\emptyset < *{-u}$	$-\emptyset < *{-u}$	<i>þȳ, þon</i>	<i>-e < -i</i>

Table 9: Instrumental and locative endings in Old Saxon, Old Frisian and Old English

The distribution of endings and relic forms in Old Frisian resembles Old Saxon in nearly every point (Table 9), assuming that the ending *-e* in the synchronic dat. sg. of the *a*-stems indeed can go back to a restored instrumental ending **-u* after heavy syllables, such as in *āthe*.

3.2. Functional evidence

The instrumental and locative forms appear with a variety of lemmas, in different syntactic configurations. Evidence for instrumentals are found in 4 or 5 different lemmas (*ēth*, *wald*, *hond*, *frethe* and perhaps *bōk*), for the locative in 6 different lemmas in E_1 (*kening*, *thing*, *bek*, *land*, *stoel*, *wald*) and possibly three more in B and U (*pende*, *hand*, *kampstal*). This implies that they were clearly more than petrified collocations.

The instrumental is fairly consistently governed by the preposition *mith* in the analysed sections of E_1 if we assume that the instrumental ending **-u* was analogically restored in the *a*-stems in Pre-Old Frisian, as it was in Old Saxon. Locatives were preceded by the preposition *a(n)* or *inna*. An argument in favour of a productive, functional status of the two case forms in the earliest stages of Old Frisian is also the fact that their use can also be triggered by the semantic context, such as in *nēde* (instr.) ‘by force’.

4. Discussion and conclusion

Did Old Frisian have special instrumental and locative cases? The answer is: definitely not in the way it had a genitive, dative and accusative (next to the nominative). First of all, in the *a*- and \bar{o} - stem paradigms, the dative, locative and instrumental merged through phonological and morphological develop-

ments into the OFri *-e*, apart from the scarce endless instances with lost **-u* after heavy syllables. The root vowel of the dat. sg. *āthe* ‘oath’ in Unia echoes an earlier PFri **āthu* < PGmc **aiþō*. The *u*-stems show the most firm evidence, which is for *hond* confirmed by data from Old English and Old Saxon.

A remarkable syntactic limitation is that the instances of instrumentals and locatives hardly ever appear with a determiner. If any determiner appears that can show case morphology, it has the dative form, as in: “mit sinre ferra hond” (with his right hand). A phrase such as **mith thiu athe* (with the oath), with the instrumental form of the article, is never found.⁵⁴

In the merger of the dative and instrumental, it was in many instances the instrumental form that succeeded. Not only in the *ō*-stems, where a complete replacement of the dative by the instrumental can be assumed, but also in the feminine *u*-stems, *i*-stems and in the adjectival inflection a dominance of original instrumental endings was observed. In Unia, B and R, the endless instrumental *hond/hand* had entirely replaced the dative form in *-a* and a similar pattern is found for *wald*. This does not have to come as a surprise, because *mith* was (one of) the most frequent prepositions with a dative, instrumental or locative in Old Frisian, followed by *a(n)*, the trigger for the locative case (Figure 1).

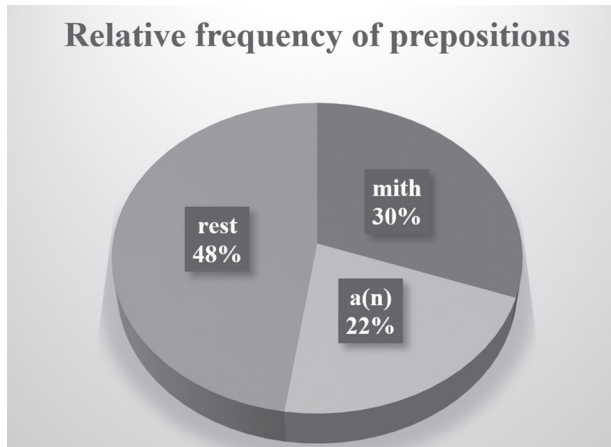


Figure 1: Relative frequency of prepositions used with the dative, instrumental or locative in the first five sections of E_1 .

⁵⁴ There is once *mithe vnriuchta rauue* (with the illegal loot) instead of **mitha* in E_1 ; *mithe* < **mith thī* or a misspelling for **-tha*, the normal dative form.

Among the attested evidence of Old Frisian, only the author of the E₁-version of the 17 Statutes was still an active user of special locative forms continuing PWGmc *-ī, as far as we can see only in the *a*-stems. The scribe may have been one of the last speakers in a limited part of the language area to use these forms. He could also use formal instrumental forms in this context (*stoel, wald*), a pattern that is found in Old Saxon and Old English as well.

The loss of the instrumental and locative in Old Frisian finds a parallel in the decline of the dative in present-day Norwegian, which provides the opportunity to study such a change in real time, without the restrictions of limited historical data. In present-day Norwegian, the dative appears only in some dialects, with a declining trend. Its use is not supported by the standard language. Already in the earliest recordings of the dialects from the middle of the nineteenth century, the dative was found in only a part of the language area and its decline has not yet been entirely completed in the early twenty-first century. In a detailed study of the use of the dative in the dialect of speakers from Midøya i Romsdal (on the north-western coast) it is shown that the dative is (nearly) absent in the language of speakers born after 1970.⁵⁵ All speakers, even the oldest one in the historical sample who was born in 1878, always alternate the dative with analogical forms from the nom./acc. sg. The Midøya data also show that the case form is used one generation longer when triggered by a preposition than when syntactically or semantically required. So, the case of the dative in Norwegian illustrates four relevant facts about the loss of a grammatical case category:

1. The process can easily cover more than two centuries for a language as a whole;
2. The receding case category alternates repeatedly with competing forms in the speech of individual language users in contexts where the case is expected, long before the final steep decline in its use;
3. The final transition towards the loss of the case category takes one or two generations within one speech community (local dialect);
4. The vanishing case category is most persistent in the collocations with a preposition.

⁵⁵ Helge Sandøy, “Dativen i vekst og fall – men ikkje som relik”, in Lars-Erik Edlund *et al.* (eds.), *Studier i dialektologi och sociolingvistik: Föredrag vid Nionde nordiska dialektologkonferensen i Uppsala 18-20 augusti 2010*, Uppsala 2011, pp. 259-268, at 263-266.

The manifestations of the instrumental and locative in Old Frisian in the late-thirteenth and fourteenth century match the final stages of such a development as seen for the dative in Norwegian. In some Old Frisian dialects, the decline of the instrumental and locative may have started perhaps even less than one century before the attestations. The strongest evidence for the retention of an instrumental case in Old Frisian comes from the Ems region with the manuscripts E₁, B and H, but also Old West Frisian (Unia) has various traces of it. An explicit locative case is most explicitly attested in the *a*-stems in the 17 Statutes in E₁. This text seems to be written by a language user who applied both an instrumental and a locative case fairly consistently yet, especially in combination with the prepositions *mith* and *a(n)* (see Appendix). This fits the pattern found in the last generation of Norwegian active dative users before the final collapse.

Appendix: Statistical Tests

Despite the small number of attestations, some of the contrasts in E₁ are statistically significant in a Fisher's Exact Test (<http://vassarstats.net/tab2x2.html>). A conservative interpretation of forms has been applied, *i.e.* ambiguous forms are not counted as instrumentals or locatives when another interpretation was also possible and the countings for the locative are not restricted to the 17 Statutes only.

<i>u</i> -stem	instr.	dat./ loc.	<i>a</i> -stem: -k/-g	loc.	other	<i>a</i> -stem	loc.	other
-Ø	2	0	PFri *-i	5	2	PFri *-i	5	2
-a	0	8	other	1	7	Other	19	104
p= 0.02			p=0.03			p = 0.002		

Table A: without *efrethe*

Table B: instr./loc. and
dat./loc. counted as
'other'

Table C: instr./loc. and
dat./loc. and -e as dat.

Instrumental: Table A shows the contrast between the endless instrumental in heavy syllable nouns and the ending *-a* in the dative and (potential) locative, following *a(n)* in the first five texts of E₁. The word *efrethe*, which

can be interpreted as an instrumental of a light syllable noun, but might be an adverb as well, is not included.

Locative: Table B shows the contrast between *a*-stem nouns with a stem coda /k/ or /g/ showing the reflexes of a PFri locative *-i, i.e. palatalization, and such nouns without palatalization in the first five texts of E₁. Two instances that can either be interpreted as locatives or as a functional dative and instrumental are counted as non-locatives.

Locative: Table C shows the distribution of specific locative forms in all *a*-stem words in the first five texts of E₁. The two ambiguous forms mentioned in Table B and the nouns in -e which cannot show traces of palatalization or *i*-mutation are counted as 'normal' datives.

Finally, in the text of the 17 Statutes: 95% (n = 43) of the 32 dative/instrumental and 11 locative forms comply with the grammar: dat. = -e, locative = -e + palatalization/*i*-mutation, when interpreting all five formally ambiguous or indecisive forms as locatives. The only two exceptions are *a fria stoel*, with a possible instrumental ending, and *a wrpene warue*, where the context /wVr/ is a blocking environment for *i*-mutation.

BIBLIOGRAPHY

- Alfred Bammesberger, “-um (> -on) as marker of the instrumental singular in Old English and Old Frisian”, *Neophilologus* 85 (2001), pp. 287-290.
- Dirk Boutkan, *The Germanic “Auslautgesetze”*, Amsterdam / Atlanta, GA 1995.
- Dirk Boutkan, *A Concise Grammar of the Old Frisian Dialect of the First Riustring Manuscript*, Odense 1996.
- Dirk Boutkan, “Another Old Frisian “Instrumental Singular” in -um?”, *Neophilologus* 83 (1999), pp. 421-426.
- W. Braune / E.A. Ebbinghaus, *Abriss der althochdeutschen Grammatik: mit Berücksichtigung des Altsächsischen*, 11. Aufl., Tübingen 1959.
- Rolf H. Bremmer Jr, *An Introduction to Old Frisian: History, Grammar, Reader, Glossary*, Amsterdam 2009.
- W.J. Buma, *Die Brokmer Rechtshandschriften*, 's-Gravenhage 1949 (Oudfrieze Taalen Rechtsbronnen, 5).
- W.J. Buma, *Het tweede Rüstringer handschrift*, 's-Gravenhage 1954 (Oudfrieze Taalen Rechtsbronnen, 8).
- W.J. Buma, *De eerste Riustringer codex*, 's-Gravenhage 1961 (Oudfrieze Taalen Rechtsbronnen, 11).

- A. CAMPBELL, *Old English Grammar*, Oxford 1959.
- Wolfram EULER, *Das Westgermanische: Von der Herausbildung im 3. bis zur Aufgliederung im 7. Jahrhundert – Analyse und Rekonstruktion*, Berlin 2013.
- Johan H. GALLÉE, *Altsächsische Grammatik*, 3. Aufl. mit Bericht. und Literaturnachtr. von Heinrich Tiefenbach, Tübingen 1993.
- Willem L. VAN HELTEN, *Altostfriesische Grammatik*, Leeuwarden 1890.
- Jelle HOEKSTRA, *De eerste en de tweede Hunsinger codex*, 's-Gravenhage 1950 (Oudfriesse Taal- en Rechtsbronnen, 6).
- Jarich HOEKSTRA, "Dental mutation ('Dentalumlaut') in Frisian and other languages on the North Sea littoral", *NOWELE: North-Western European Language Evolution* 50-51 (2007), pp. 43-62.
- Dietrich HOFMANN / Anne T. POPKEMA, *Altfriesisches Handwörterbuch*, Heidelberg 2008.
- Richard M. HOGG / Robert D. FULK, *A Grammar of Old English*, II: *Morphology*, Chichester 2011.
- H. KRAHE / W. MEID, *Germanische Sprachwissenschaft*, II: *Formenlehre*, Berlin 1969.
- Don RINGE, *A Linguistic History of English*, I: *From Proto-Indo-European to Proto-Germanic*, New York 2006.
- Don RINGE / Anne TAYLOR, *A Linguistic History of English*, II: *The Development of Old English*, New York 2014.
- Helge SANDØY, "Dativen i vekst og fall – men ikkje som relik", in Lars-Erik Edlund et al. (eds.), *Studier i dialektologi och sociolingvistik: Föredrag vid Nionde nordiska dialektologkonferensen i Uppsala 18-20 augusti 2010*, Uppsala 2011, pp. 259-268.
- Roland SCHUHMAN, *Einführung in das Altsächsische (Unterrichtsmaterialien)*, Jena: <https://www.academia.edu/1739714/Einführung_in_das_Altsächsische>, 2011-.
- Theodor SIEBS, "Geschichte der friesischen Sprache", in Hermann Paul (ed.), *Grundriss der germanischen Philologie*, 2. verb. und verm. Aufl., I, Strassburg 1901, pp. 1152-1464.
- P. SIPMA, *De eerste Emsinger Codex*, 's-Gravenhage 1943 (Oudfriesse Taal- en Rechtsbronnen, 4).
- Walther STELLER, *Das altwestfriesische Schulzenrecht*, Breslau 1926.
- Johanneke SYTSEMA, *Diplomatic Edition Codex Unia*, 2012-: <<http://tdb.fryske-akademie.eu/tdb/index-unia-en.html#>>.
- Heinrich TIEFENBACH, *Altsächsisches Handwörterbuch = A Concise Old Saxon Dictionary*, Berlin 2010.

- Michiel DE VAAN, “West-Germanic *ai in Frisian”, in Guus Kroonen *et al.* (eds.), ‘*Thi Timit Lof*’. *Festschrift für Arend Quak zum 65. Geburtstag* (= *Amsterdamer Beiträge zur älteren Germanistik* 67), Amsterdam 2011, pp. 301-314.
- Arjen P. VERSLOOT, “Why Old Frisian is still quite old”, *Folia Linguistica Historica* 25 (2004), pp. 253-304.
- Arjen P. VERSLOOT, *Mechanisms of Language Change: Vowel Reduction in 15th Century West Frisian*, Utrecht 2008.
- Arjen P. VERSLOOT, “The Runic Frisian vowel system: The earliest history of Frisian and Proto-Insular North Frisian”, *Amsterdamer Beiträge zur älteren Germanistik* 72 (2014), pp. 35-62.
- Arjen P. VERSLOOT, “The development of Old Frisian unstressed -u in the Ns of feminine *ō*-stems”, in Anne Bannink / Wim Honselaar (eds.), *From Variation to Iconicity, Festschrift for Olga Fischer on the Occasion of her 65th Birthday*, Amsterdam 2016, pp. 377-392.
- Arjen P. VERSLOOT, “Unstressed vowels in Runic Frisian. The history of Frisian in the light of the Germanic ‘Auslautgesetze’”, *Us Wurk* 65 (2016), pp. 1-39.
- Wolfgang U. WURZEL, *Inflectional Morphology and Naturalness*, Dordrecht / Boston 1989.