UvA-DARE (Digital Academic Repository)

Historical Dialectology: West Frisian in Seven Centuries

Versloot, A.

DOI

[10.1007/978-3-030-02438-3_147](https://doi.org/10.1007/978-3-030-02438-3_147)

[10.1007/978-3-319-73400-2_147-1](https://doi.org/10.1007/978-3-319-73400-2_147-1)

Publication date

2020

Document Version

Final published version

Published in

Handbook of the Changing World Language Map

License

Article 25fa Dutch Copyright Act

[Link to publication](#)

Citation for published version (APA):

Versloot, A. (2020). Historical Dialectology: West Frisian in Seven Centuries. In S. D. Brun, & R. Kehrein (Eds.), *Handbook of the Changing World Language Map* (Vol. 1, pp. 405-442). Springer. https://doi.org/10.1007/978-3-030-02438-3_147, https://doi.org/10.1007/978-3-319-73400-2_147-1

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 (<https://dare.uva.nl>)

Historical Dialectology: West Frisian in Seven Centuries

23

Arjen Versloot

Contents

1	Introduction	406
1.1	Informants	408
1.2	Age of Dialects	409
1.3	The Source and Directions of Changes in Dialects	410
1.4	The (Lacking) Availability of Information on Older Dialects	411
1.5	Contradictions in the Estimation of Dialect Change	412
1.6	Seven Centuries of West Frisian Dialects	413
2	Map Series	415
2.1	Case 1 “Saturday”	415
2.2	Case 2 “What” (Pronoun)	418
2.3	Case 3 “Flesh/Meat” (Noun)	419
2.4	Case 4 Past Tense and Past Participle of “to Buy”	420
2.5	Case 5 “Come” (Past Participle)	421
2.6	Case 6 “To Have” Paradigm: Vowel and Consonant Reshuffling	424
2.7	Case 7 “Receive(s)” Second and Third Person Singular of <i>krije</i>	428
2.8	Case 8 “Goose: Geese”	428
2.9	Case 9 “Days” (Plural)	430
2.10	Case 10 “House(s)/DIM/at Home”	432
3	Interpretations	434
3.1	Sources of Change	436
3.2	Archaic Dialects?	437
4	Conclusions	438
	References	439

A. Versloot (✉)

Faculty of Humanities, University of Amsterdam, Amsterdam, The Netherlands

e-mail: a.p.versloot@uva.nl

Abstract

Descriptions of late nineteenth-century Germanic dialects suggest or even explicitly claim that they were shaped in the Late Middle Ages or the Early Modern period. This implies that nineteenth-century dialects represented a language that had been nearly frozen for at least 300 years. The presumed stable character of the dialects was deliberately confirmed in the twentieth century by selecting old and conservative informants.

This archaic perception of the nineteenth-century dialects is difficult to verify due to the lack of reliable dialectal data from the preceding centuries. West Frisian seems to be a sole exception to this. A moderate but fairly continuous flow of Frisian texts since ca. 1400, written in a language that did not develop a standardized form until the nineteenth century, opens a window on 600 years of language history. A series of ten case studies from various linguistic domains shows an ongoing dynamism over the centuries and no sign of early “frozen” dialects. The changes are either the result of language contact with Dutch or language internal pressure, and the geographical sources and directions of change reflect the shifting configurations in economy and demography through the centuries.

Keywords

Dialectology · Methodology · Historical dialects · West Frisian

1 Introduction

Dialectology started off as a serious branch of research in the late nineteenth century. Keystones in the description of West European languages are Georg Wenker's *Sprachatlas des Deutschen Reichs* (since 1876) and Jules Gilliéron and Édmond Édmont's *Atlas linguistique de la France* (since 1897). That does not imply that there was no interest in dialects earlier. For English see, for example, Wakelin (1977, pp. 34–46) with many references to pre-nineteenth-century descriptions of dialectal variation of English and for pre-Wenker dialectology of German, see Löffler (1980, pp. 11–29). Well known are the translations of the *Parable of the Prodigal Son* which were made in various parts of the French Empire in the early nineteenth century on request of Charles-Étienne Coquebert de Montbret; this was the first recording of the local dialect in many places (see, e.g., Bakker and Kruijsen 2007). Interest in language varieties was also found in Schmeller's *Bavarian Grammar* (1821) and in Firnenich's *Germaniens Völkerstimmen* (1846) to mention only a few.

The dialectology of linguistic variants spoken in the present-day state of the Netherlands, including West Frisian, begins in the second half of the nineteenth century. Winkler's (1874a, b) *Dialecticon* continues the concept of the translation of the *Parable of the Prodigal Son* in the dialects for various localities in northern Germany, southern Denmark, the Netherlands, and Belgium. It is soon followed by the surveys from the Geographical Society (*Aardrijkskundig Genootschap*) in 1879 and 1895, which have a counterpart in Dutch-speaking Belgium in the *Enquête Willems* from 1886 (Van der Sijs 2011, pp. 8–10). The interest in Frisian dialects was

already evident at an earlier date but was restricted to the more exotic variants of the small towns of Hindeloopen, Molkwerum, and Workum and the islands of Terschelling and Schiermonnikoog. Especially recognized at that time was Joost Halbertsma who gathered data from these dialects (Miedema 1983; Steenmeijer-Wielenga 1972; Halbertsma 1981). An important source for the Frisian dialects from the nineteenth century is Theodor Siebs' dialectal notes in his dissertation *Zur Geschichte der englisch-friesischen Sprache*, collected in 1886 (Siebs 1889; Hoekema 1970). Figure 1 shows the geographical spread of traditional language varieties in the province of Fryslân and marks the localities from which nineteenth-

Fig. 1 The traditional linguistic division of Fryslân in the nineteenth century and the locations of the informants in the three nineteenth-century surveys, two by the Aardrijkskundig Genootschap and the material from Theodor Siebs (see text). Three places only incidentally mentioned in Siebs are not included. Winkler (1874a) provides translations in varieties of Frisian for the dialectus communis, Workum, Hindeloopen, Molkwerum, Schiermonnikoog, West-Terschelling, and Oost-Terschelling (Lies)

century dialect data are available. West Frisian received a detailed dialectological treatment in Jan Jelles Hof's *Friesche dialect-geographie* (Hof 1933); the book presents a wealth of data and is still considered the classical description of West Frisian dialects. The data from his notes which were not published in his book are included in Hof et al. (2001). West Frisian was also included in large-scale Dutch-Flemish enterprises such as the *Reeks Nederlandse Dialectatlassen* (Boelens and Van der Woude 1955) and the FAND (Phonology), MAND (Morphology) (Goeman et al. 1980), and SAND (Syntax) (Barbiers and Lambertus 2008) projects from the 1980s and 1990s of the twentieth century. Special written surveys were issued between 1978 and 1996 for work on the Dictionary of the Frisian Language (Van der Veen 1978).

Many of these projects were inspired by the conviction that the dialects were if not destined to die out at least about to change rapidly, so, for example, in Winkler (1874a, p. 13), Ehrentaut and Versloot (1996, p. 18), and Van der Veen (2001, p. 114). One should realize that the nineteenth century was at least as dynamic as the twentieth. The French Revolution marks the end of the Ancient Regime with its political and economic organization that often continues mediaeval structures. It takes place in a world that is still depending on horses as the fastest means of transport and communication. In 1900, Europe was covered with thousands of kilometers of railways, the first cars were driving on the streets, and the main cities of Europe had been transformed by the Industrial Revolution, bringing about huge demographic shifts and changes in lifestyle (Dijk 1994).

1.1 Informants

An implicit assumption of the studies seems to have been that the dialects represented the language of the past, which could easily be interpreted as stable and conservative opposed to the “modern times” of the late nineteenth century. This approach is operationalized in the course of the twentieth century. Where Wenker relies on school children and teachers as his informants, later projects develop the concept of the NORM-speaker: Nonmobile Older Rural Males. This NORM is supposed to be the source of the original, undisturbed dialect. Löffler (1980, p. 47) defines this “base dialect” (“Grundmundart”) as the “locality specific language, not disturbed by any external influences” (“die durch keine äußeren Einflüsse verfälschte ortsspezifische Sprache”), found among the oldest villagers (compare also De Vogelaer and Heeringa 2011, pp. 1–2).

The effect of asking NORMs in the twentieth century is that the age of birth of the first informants in Wenker's survey, ca. 1870–1880, was similar to that of the older informants in the middle of the twentieth century, when many regional surveys were conducted (see <https://www.regionalsprache.de/>). The result is a “frozen” image of the dialects, that is, the late nineteenth-century dialect is deliberately confirmed during the next century. One of the explicit aims of the F/M/SAND projects was to record the archaic dialects, using informants preferably born in the 1920s. The average age of the informants for the MAND/FAND for Frisian is 60, with a year of

the recordings around 1988, given an average year of birth of ca. 1928. The result was slow dialect change as 100 years of dialect research (ca. 1880–1980) covers only 50 years of actual change (years of birth 1870–1920).

1.2 Age of Dialects

This development brings us to the question how “old” the dialects, as first attested in the late nineteenth century, actually are. The widespread conviction that dialects are particularly archaic is mentioned as a “common stereotype” (“ein gängiges Stereotyp”) in a public-oriented atlas of Swiss dialects (Christen et al. 2010, p. 27). The authors do not contest the archaic nature of dialects but mention additionally that there are also many innovative features. Any absolute dating is, however, not given.

The *Dialectatlas van het Nederlands* (Van der Sijs 2011, p. 8), presenting the Dutch dialects to a wider audience, states that the regional languages and dialects are much older than Standard Dutch and that the fragmented linguistic situation with differences at the level of every individual village represents the “original” state of affairs. This formulation can easily lead to an interpretation of “the regional languages and dialects more or less as we know them from dialect surveys.” This notion is supported by explicit mentioning that the growing importance of the Dutch standard language in the twentieth century leads to “major changes” (“grote veranderingen”) in the dialects in the twentieth century (Van der Sijs 2011, p. 29), which implies a greater stability and continuity in the times before. This impression is confirmed by one of the rare mentions of older dialect configurations in the atlas, viz., the map of the historical development of schwa-apocope. This development is said to have already reached its final stage in the fourteenth century, without many changes between ca. 1400 and the twentieth century (Van der Sijs 2011, p. 63). The overall impression from the atlas is that *the* dialects (as we know them) are old, continuing a state of affairs that may go back to the Late Middle Ages and only eroding under the pressure of the standard language since the twentieth century.

Goossens (1977, p. 75) in his textbook on dialectology mentions the overlap between nineteenth- and twentieth-century dialect boundaries in Germany with late mediaeval territories, although he puts the comment into perspective by pointing to the extreme political fragmentation of Germany at that time. That fragmentation will nearly always provide a matching boundary for an isogloss. In East German dialects, a link is established between nineteenth- and twentieth-century dialectal configurations and mediaeval colonization routes (Goossens 1977, p. 139). The nineteenth-century idea that early mediaeval tribal distributions are still reflected in the course of isoglosses is generally dismissed in later scholarship (Goossens 1977, p. 135; Van der Sijs 2011, p. 57).

In Löffler (1980, p. 141) one can read about the age of the dialect borders and the dialect-geographical configurations in a merely one page section. In referencing earlier scholarship, the maximum age of dialect boundaries is estimated at 300 years, while new configurations are expected to show some influence within at least

50 years. Explicit, absolute dating of boundaries of dialect features is altogether rare in the literature.

Only one chapter (Debus 1983) is devoted to historical changes in the 1600 pages handbook of dialectology (*Dialektologie: ein Handbuch*) (Besch et al. 1982, 1983). The rest of the handbook is concerned with aspects of dialects as a more or less timeless or static phenomenon, where discussions about changes seem to take place in a time vacuum. Most of the examples discussed by Debus (1983, pp. 937–939, 945) refer to developments that are dated to the Middle Ages or an Early Modern period (until ca. 1600); only incidentally are references made to changes in later times. A more explicit statement, which is in line with the impression that arises from previous sources, is found in a book on Norwegian dialects, where it is stated that “most of the dialect formation took place in the time between ca. 1350 and 1600” (Jahr 1990, p. 8). This is a reconfirmation of a similar statement by Bandle (2012, p. 114).

A more continuous flow of changes between the Middle Ages and the nineteenth and twentieth centuries’ shape of the dialects is posited by Hogg (2008, pp. 369–370), who states that in order to gain an impression of the shape of the dialects in the early Modern English period, we have to “[...] pool our resources about the situation in Middle English and the situation in the present-day language in order to ascertain the likely state of affairs in the intervening period. [...] [I]t is during this period that a number of dialect distinctions emerge which are highly salient in the present-day language.” Hogg mentions a couple of changes dated to the period between the sixteenth and the eighteenth century.

The overall impression is that many dialectologists claim that the German, Dutch, and Norwegian dialects received their shape somewhere in the Late Middle Ages and Early Modern period. These dialects were more or less preserved until the late nineteenth century and have since “deteriorated” due to a growing impact of the standard language. Only incidentally, we read about ongoing changes from the Middle Ages to the nineteenth century, which marks the beginning of dialect descriptions and surveys.

1.3 The Source and Directions of Changes in Dialects

The assumed stability of centuries before the nineteenth century is placed in contrast to the changes observed over the last 100 years, which are easily interpreted (in fact mostly are) as an approach to the standard language and hence detached from earlier changes in the dialects which led to the well-known isoglosses in dialectological studies.

It is certainly true that the dynamic formation and change of dialects in the geographical dimension as we must assume from earlier centuries is no longer observable in the periods of the dialect surveys, even when we forget about the deliberate “frozen” results. The dialect formation processes of the past (pre-1850) no longer apply in most countries because dialects are no longer used in a wider geographical and social context. The function of dialects has been more and more

limited to the language of villagers communicating with each other or even within the households. Such a development turns every dialect speech community into a communicative island. This trend already started in the nineteenth century, with the spread of the knowledge of the standard languages through nationwide education. According to Winkler (1874b, p. 85 as translated by the author):

In the later 17th and the 18th century, the Amsterdam dialect began to deteriorate and nowadays, in the last half of the 19th century, only half of the (real) Amsterdam inhabitants still speak *amsterdam-ish*. The busy interaction with countrymen and foreigners, the improved education and the multiple reading, and above all the fashion, which rejects all that is original or an inheritance of our ancestors, has made it from the old *amsterdam-ish* what it is today.

Still, by the end of the twentieth century, the idea of evolving dialects was revived with the concept of *Regiolect*, “in its widest sense, it includes all varieties that are neither traditional dialect nor clearly standard language” (De Vogelaer and Heeringa 2011, p. 1). The regiolects supposedly replace the traditional dialects, as witnessed in the so-called dialect renaissance from the late twentieth century (pop music, theater, TV series). However, the “dialect renaissance” has not put a hold on the continuous full language shift from anything that is nonstandard to a variety that is part of the standard language (Van der Sijs 2011, p. 30).

Exceptions to the loss of dialects are found in countries like Norway or German-speaking Switzerland, where dialects are still used in the public domain. Norway seems to show the growth of *regiolects* in the true sense (Stausland Johnsen 2015) just as Belgium, where the so-called *Tussentaal* “in-between-language” resembles indeed the concept of the *regiolect* as something different from both the standard language (both in form and in sphere of social application) and the classical dialects (De Caluwe and Van Renterghem 2011).

1.4 The (Lacking) Availability of Information on Older Dialects

If one wants to confirm or contest the idea that the late nineteenth-century dialects represent a form of speech that was fairly stable over at least the three centuries before it, one needs historical material to verify such claims. A series of compatible data over longer periods is the exception (Gluth et al. 1982, p. 496). The problem is the scarce availability of dialectal material from that period. For the Low Countries, the rise of the standard language in its written forms can be dated to the sixteenth and seventeenth century, as a spoken variety did not arise before the nineteenth century. Similar dates are given for the rise of standard English: “... at the end of the seventeenth century most of the surviving orthographical variations had been given up,” while “the eighteenth century saw a movement towards ‘fixing the pronunciation’” (Wakelin 1977, p. 27), and the same holds for most other linguistic areas in Europe. The dialect-like sources from those centuries are very often considered unreliable.

The language in mediaeval sources, predating the early modern standardization tendencies, is definitely different from modern dialects, although similarities between modern dialects and such older language stages are frequently stressed (for Swiss German, see Christen et al. (2010, p. 27) and König (2001, p. 161); see McMahon and Maguire (2012, p. 154) for a quantification of similarities and differences between modern dialects and mediaeval language forms of English). The lack of similarity between the nineteenth-century dialects and the language in the late mediaeval written texts is often not interpreted in a way that the dialects evolved over the centuries from the attested mediaeval forms to obtain their nineteenth-century shape then. Various scholars are concerned to point out that also the written language of the Middle Ages does not reflect the spoken language of those days, implying that the spoken mediaeval dialects would come much closer to the well-known nineteenth-century shape of the dialects. According to Heinrichs (1961, p. 99 in Taeger 1981, p. 415), there are few to no dialectal texts from the Middle Ages. A linguistic gap between written and spoken language is already postulated for thirteenth-century Dutch (Van der Sijs 2011, p. 29). Sonderegger (1961 in Taeger 1981, p. 414) claims that the language we mostly see in the Old High German sources comes close to a Latin-inspired scribal language, far removed from the spoken language of those days. Besch (1967) introduced the concept of late mediaeval *Schreiblandschaften* (“scribal regions”), representing supraregional tendencies in the form of chancery or literary standards, which obscure the view on the “real base dialect.” A similar view underlies the concept of the late Old English West Saxon written standard or earlier Mercian impact on written Kentish (DeCamp 1958). A more nuanced analysis of the amount of levelling in the thirteenth-century chancery language of Holland can be found in Rem (2003).

Incidental dialect texts from earlier times (Hindeloopen 1679 in de Boer 1950, p. 11 and Dalarna 1693/1702 in Ringmar and Steensland 2011) can easily be taken as evidence for the continuity of dialects, given the undeniable overlap in features with the nineteenth and twentieth centuries varieties. However, it should be kept in mind that dialects such as the Frisian dialect of Hindeloopen or the Swedish dialect of Dalarna are not middle-of-the-road varieties but languages outstanding for their deviating (and indeed in many respects archaic) character. This is exactly the reason why they attracted attention in earlier times. The differences between earlier attestations of the dialects and later versions of them are sometimes ascribed to poor notations or the influence from the written language that people were used to (see, e.g., the language of Dirck Jansz from the Bildt region (Jansz and Gerbenzon 1960); for Norway, Berg et al. (2018, pp. 190–193)).

1.5 Contradictions in the Estimation of Dialect Change

The above situation creates the following picture. The Marburg school of dialect geography reconstructed the formation of dialect boundaries as a highly dynamic event, which was ascribed to travel contacts and communities of speakers within administrative and state units identified as configurations from the Late Middle Ages

and Early Modern period. These territorial configurations are said to have been stable over ca. 400 years, providing a sustainable context for the formation of the dialects (König 2001, pp. 140–143). Some dialect features may be even older; however, in the view of various scholars, they are hidden from our view by supraregional more or less standardized varieties that were supposedly in use as early as the Early Middle Ages. Such a written standard, a runic *Koine*, disconnected from the spoken language, has even been assumed for the early runic inscriptions from Scandinavia but can be dismissed (Nielsen 2000, p. 58,376); compare also Damsma and Versloot (2015) for the identification of dialectal variation in early runic language sources.

If indeed the dialects as found in the late nineteenth century reflect such old territorial configurations, their dynamic formative processes must have come to a halt at some point, and the early modern dialects were more or less preserved until the late nineteenth century. The general opinion among scholars seems to be that since then the dialects only “deteriorated” with the growing impact of the standard languages. This suggests a strong contrast between the highly dynamic processes occurring in the Middle Ages against an assumed stability over the following centuries. The assumed stability of the nineteenth-century dialects was enhanced by the artificial “freezing” of the dialect observations in the twentieth century, preferring informants who confirmed the language of the earliest, nineteenth-century dialect studies and labelling all changes as recent “pollution” of the “original,” hence “old,” language by the standard languages. This situation overrates the stability and archaism of the *base dialect* and contrasts with the statement by Löffler (1980, p. 150) that the dialect-geographical map image can only be interpreted as a frozen picture of a constant movement.

It is against this problematic context for the study and interpretation on the history of dialects that I want to introduce and assess the West Frisian linguistic evidence from ca. 1300 until 2000.

1.6 Seven Centuries of West Frisian Dialects

The West Frisian language sources, covering a period from the late thirteenth century to the present, may represent a remarkable exception to the scarcity and assumed unreliability of pre-nineteenth-century dialect data. It offers a view on the actually spoken language and enables us to assess the reality of spoken dialects over an almost continuous timespan between 1300 and 2000, albeit with different levels of resolution.

West Frisian was never a dominant written language: its spelling system witnesses the dominance of Latin and since ca. 1400 of Dutch. The earliest texts until ca. 1400 are law texts, written in a language that is called Old Frisian. Circa 1200 charters and deeds from the period 1378–1544 and a couple of younger law texts are the bulk of Middle Frisian. The lack of a central court or chancery before 1498 ensured that the linguistic data from the fifteenth century show a highly consistent geographical and temporal spread of linguistic features. This is done by linking the

charters to a given locality through their content or authorship and using this locality as a basis for mapping the linguistic data (Versloot 2008, pp. 28–33). Where Frisian was the dominant vernacular (next to Latin) before 1498, it lost its position as a written language after 1500. The result was that any potential tendency toward standardization was stopped. Some features in the late fifteenth-century incunabulum *Dat Freeske Landriucht* “the Frisian Land Law” show a direction toward standardization (Nijdam et al. 2012). The sixteenth century is the poorest period, with charters until 1544 and for the rest only a couple of letters and private notes and a collection of proverbs from one author. They form the transition to Early Modern Frisian, the period from ca. 1550 to 1800 (Versloot 2004).

Later authors of Frisian worked in scribal isolation. The monumental work of the seventeenth-century poet Gysbert Japicx remained without much impact on authors of plays, almanacs, or verses on special, mostly private occasions during the rest of the seventeenth and eighteenth century. This is contrary to the important position assigned to Japicx by nineteenth- and twentieth-century literature scholars (Oppewal et al. 2006, p. 40). By default, I used the place of birth of a given author to plot the linguistic data on the map, although some authors rather represent the dialect of the region they moved to at a later date, as evinced by the use of specific dialect features. The map position of 32 authors is briefly explained in the older version of the Frisian language corpus, still accessible on: <https://fryske-akademy.nl/tdbport/resources/help/geotabel.E.html> (May 26, 2018). They represent 86% of all currently mappable data in the corpus. It is only in the early nineteenth century that a beginning Frisian writing tradition is established leading to a decline of dialectologically interpretable sources. The beginning of Modern West Frisian literature is traditionally associated with the first edition of Halbertsma’s *De Lape Koer fen Gabe Skroor* (Halbertsma et al. 1822). This gap is not too long, and since the end of the nineteenth century, as mentioned above, a continuous flow of dialectal information is available.

West Frisian seems to be unique in the combination of more or less continuous linguistic data over seven centuries, written without impact from a standard language. Some of the attestations in the 1879 survey of the Geographical Society use the then newly established standard language. This remained, fortunately, an exception. West Frisian is also one of the rare instances in Europe, where post-nineteenth-century changes are not only the result of adjustments to the standard language. The Frisian standard language remains thus far without much impact on the spoken language (which is not the same as “none”), and Frisian is still used in communication beyond the direct family and neighborhood. This situation accounts for continuous shifts, as well as changes and levelling in and among the dialects. Of course, Frisian shows the impact from Dutch since its earliest recordings, but it remains a linguistically separate system. The map series shows various instances of influence from Dutch that do not lead to a full merger of the two languages in a particular case, such as Mod.Fris. *fleis* “meat” < early Modern Dutch *vleisch*, Mod.Dutch *vlees*; Mod.Fris. *kocht* [kox̥t] “bought,” Mod.Dutch *gekocht* [xəkox̥t]; and Mod.Fris. *wat* [vɔt] “what,” Mod.Dutch [vɔt]. Influences from Dutch are in a way comparable to the impact of English on present-day West European languages, albeit that the intensity may be somewhat higher in the Frisian-Dutch case.

The Frisian sources indicate that the present shape of the dialects had not been established by the end of the Middle Ages. The sources attest to a continuous change, with many dialectal contrasts being of only temporary nature and an intermediate geographical expression of an ongoing language change, that soon after covers the entire region. It also shows the difference between dialects that were isolated and detached from the rest of the language area already early in their history (Hindeloopen, Schiermonnikoog) and the “main stream” dialects that are in continuous contact with each other and in a continuous flow of change. The data also show that various developments are nonlinear and crooked. The most bizarre example in that respect is probably the past participle of the verb “to come,” Old Frisian *komen* *[komən]. Modern Frisian *kommen* [komən] turns out to be historically completely unrelated (see text associated with Case 5).

The following section will present ten cases with dialect maps, covering various centuries, showing features from lexicon, morphology, and phonology.

2 Map Series

This section presents ten case studies of various diachronic cross sections of diatopic changes in West Frisian (Table 1). The items cover various linguistic domains over longer periods.

2.1 Case 1 “Saturday”

Old and Middle Frisian. Just like Old English, which has both *sætern-dæg* and *sunnan-æfen*, Old Frisian had two words to mark the day before Sunday: *saterdei* and *sunna-ēvend*. The latter is attested in the oldest manuscript, B (Old East Frisian, ca. 1280), while *saterdei* appears in the oldest West Frisian sources, also from the late thirteenth century. Bosworth and Toller (1898) suggest a difference in meaning, but the later geographical distributions across the Germanic languages show that these two lexemes are – at least nowadays – so-called *Raumsynonym*-s (König 2001, pp. 186–189). Modern Frisian attestations from all dialects show that *sunna-ēvend* must have been common in all Frisian varieties from the earliest history of Frisian (Siebs 1889, p. 178). In the Middle Frisian charters (and other fifteenth-century sources of West Frisian), almost always only the continuation of *sunna-ēvend* is found, except for one charter from 1443 (Fig. 2a). The form underwent a remarkable phonological transformation: *sunnaēvend* > *sənēwend* > *snjond* (with accent shift from the *ē* to the *w*). The various spellings in the charters show that the actual phonetic realization may have varied, such as [jo:] <snjond>, [joːw] <snjound>, [jɔːw] <snjawn>, and *[jœːw] > [jæːw] <snjewnd>.

Early Modern Frisian. In the Early Modern period, the continuations of <snjo(u)nd> dominate the dialectal landscape (the blue symbols in Fig. 2b). In the periphery, one may observe two deviating forms. The form *sneæn* seems to continue the form *snjewnd* in the charters in the same northeastern region. In the

Table 1 Case studies

Item	Linguistic domain	Period	Comment
<i>sneon</i> – <i>saterdei</i> “Saturday”	Lexicon	1300–2000	Competing Old Frisian lemmas
<i>wat</i> – <i>het</i> “what”	Lexicon	1700–1850	Dutch loanword
<i>flesk</i> – <i>fleis</i> “flesh, meat”	Lexicon	1550–1950	Dutch loanword
<i>koft</i> – <i>kocht</i> “bought (p.p.)”	Verbal morphology: irregular past participle	1400–2000	Multiple Dutch loan allomorphs
<i>kommen</i> “come (p.p.)”	Verbal morphology: irregular past participle	1300–2000	Multiple language internally and contact-induced shifts
<i>hawwe</i> : <i>a-e</i> , <i>w-b</i> “to have”	Verbal morphology: root vowel and consonant alternations	1700–2000	Multiple language internally induced shifts
<i>krijet</i> – <i>krijt</i> “to get”	Verbal morphology: root alternations	1550–2000	Multiple language internally and contact-induced shifts
<i>goes</i> – <i>guozzen</i> “goose – geese”	Nominal morphology: irregular plural	1600–2000	Multiple language internally and contact-induced shifts
<i>dagen</i> – <i>deagen</i> “days”	Nominal morphology: irregular plural	1400–1900	Multiple language internally and contact-induced shifts
<i>hûs</i> – <i>huzen/húske</i> / <i>thús</i> “house(s)/DIM/at home”	Phonology	1550–2000	(Ir)regular sound change

southwest, the forms *sneeuond* and *snieoun* (in the legend under *sneon(d)*) continue a form without accent shift, hence, from Old West Frisian **snēwend*. There are no traces of *saterdei*, but note that the region with such forms in the nineteenth and twentieth centuries is poorly represented in the data from the Early Modern period.

The Nineteenth and Twentieth Centuries. The form *saterdei* (re)appears in the nineteenth century (Fig. 2c). A farmer-poet from the central region uses both words alternately in 1828, and the word emerges in the eastern part of the province in later sources from that century. The pair “Saturday – Sunday” is phonetically close in Frisian [sn(j)ǝ·ən] and [snĕ·m] and leads easily to confusion among second language speakers, which were numerous in the eastern and southeastern peat and wasteland cultivation areas in the nineteenth century. The (north)eastern pronunciation with *[snĕ·ən] for Saturday (see the previous paragraph) may have been even more confusing, facilitating the introduction of the loan translation *saterdei* from neighboring regions (Du. *zaterdag*). Given the scarcity of the data, it is not excluded that the form *saterdei* has always been in use since the Middle Ages in the southeast portion of the province.

The form *saterdei* spread rapidly in the following years (Fig. 2d), but then its spread came to a halt, being perceived as dialectally marked in present-day speech.

Fig. 2 “Saturday” (a) Middle Frisian, (b) Early Modern Frisian, (c) (re)introduction of *saterdei* in the nineteenth century, (d) “Saturday” in the twentieth century, (e) distribution of *saterdei* and *sneon* in 2016 from informants born in or after 1978. (Data from the Language Survey 2016; Stefan et al. 2015)

The form with the preserved *-j-* (*snjeon*), which existed earlier, may be inspired by the written language in the 1937 survey. The spread of the form *saterdei* in the late twentieth-century FAND (not shown), based on speakers born in the years before the Second World War, is similar to the one from the Kapteyn survey from 1937 in Fig. 2d. Figure 2e, based on information from speakers born in 1978 or later, shows that very little has changed since, as can be seen from the bright dots, which have been projected against the background of Fig. 2d. The map also illustrates the dialect mixture, taking place in the cities and larger towns. The successors of earlier *sneeuond* and *snieoun* were only found in the southwest portion in the nineteenth century and tend to disappear in the twentieth century. In the FAND, only the dialect of Hindeloopen attests to *sniend*.

2.2 Case 2 “What” (Pronoun)

The pronoun “what” is *hwet* in Old Frisian, but Old West Frisian, in particular, has a specific development here to *hot*, *hat*, and *haet*. The form *hot* seems more northern and is somewhat older. At the beginning of the Early Modern period, the form *het* < *hæt* < *hāt* is the dominant form, with incidental attestations to *hat* and *hot*. Figure 3a shows that it remained dominant until the middle of the eighteenth century. In only 50 years, it was entirely replaced by the Dutch loanword *wat* in most dialects. Figure 3b shows the situation in the second half of the eighteenth century, where *het* was pushed to the ultimate southwestern and northeastern corners. The dialectal contrast in the northeast was short-lived. The form *het* (*hat*) survived only as a dialectal peculiarity of the southwestern dialects of Hindeloopen and Molkwerum.

Fig. 3 “What” (a) Transition from *het* to *wat* in the late eighteenth century, (b) distribution of *het* and *wat* in the late eighteenth century

2.3 Case 3 “Flesh/Meat” (Noun)

Old and Middle Frisian. The common noun for “meat” in Modern West Frisian is *fleis*, related to Dutch *vlees* and English *flesh* from PGmc. **flaisk*-. Old West Frisian had *flask*. In the late fifteenth and early sixteenth centuries, the word appears as *flaesck*, *flaasch*, in compounds, *flasck*-, *flaeschhouwer* “butcher.” The Dutch form in those days is *fleis(c/k)*, *vleis(ch)*.

The Seventeenth and Eighteenth Centuries. The seventeenth century shows alternatively *flasck*, *flaesck/k*, and *flesck* (cubes in Fig. 4a). In the eighteenth century (circles in Fig. 4a), there are nearly only forms that attest to /flesk/ (*vlesch*, *flesck*, etc.). The modern form *fleis* appears for the first time in a text from Heerenveen printed in 1765.

The Nineteenth and Twentieth Centuries. The modern form *fleis* spreads in the course of the nineteenth and twentieth centuries (Fig. 4b, c). In the adjacent Low Saxon dialects, the form was *fleis*. In the Friso-Dutch dialects of the old

Fig. 4 “Meat/flesh” (a) between 1550 and 1800, (b) distribution of *fleis* and *flesk* in the late nineteenth century, (c) distribution of *fleis* and *flesk* in the early twentieth century

cities, also known as Town Frisian (but fundamentally Dutch; for the spread of these language varieties, see Fig. 1), the form *fleis(ch)* was current since the sixteenth century. Whether the instances of *fleisk* are contaminations of *fleis* and *flesk* or represent a regular development of *flesk/flêsk* is difficult to judge. Nowadays, the archaic form has become entirely obsolete in the West Frisian standard language and its dialects, excluding Hindeloopen *flesk*, West-Terschelling *fleisk*, and Schiermonnikoog *fla(a)sk*. The latter two dialects are hardly spoken anymore.

2.4 Case 4 Past Tense and Past Participle of “to Buy”

Middle Frisian. Old Frisian had two different lemmas for “to buy” and to “sell”: *kāpia* and *sella*. *Kāpia* was a regular, weak verb: past participle and past tense *kāpad(e)*. Middle Dutch had *kopen* and *verkopen*, with an irregular past tense and past participle *(ge)kocht*, in Holland *(ge)koft*. Triggered by contact with speakers of Dutch in the trading centers of the Frisian cities, the word *sella* was replaced by the Middle Frisian loan translation *forkaepia* (Fig. 5a). With these changes came the irregular past tense forms *forkoft*, which proves the particularly Hollandish origin of the form (Fig. 5b). Parallel to this morphological borrowing, regular past participles of the type of Middle Frisian *(for)kaepet* tended to lose their final *-t*. This development started off in the south as can be seen in Fig. 5b (dark blue sections of the pie charts).

The Sixteenth, Seventeenth, and Eighteenth Centuries. Data from the sixteenth and seventeenth centuries are very scarce and show only two points from the northwest, with a continuation of the competition between weak, historical, and innovative, irregular forms. Data from the middle of the eighteenth century show that the original regular weak form was restricted to the southwest. The late eighteenth century also witnesses the introduction of the form *kocht*, which is a new loan from Standard Dutch *(ge)kocht*, replacing the earlier specifically Hollandish form *koft*. Its first appearance in the northeast can be an effect of the date of the sources, rather than of geographical relevance (Fig. 5c).

The Nineteenth and Twentieth Centuries. In the 100 years between Fig. 5c, d, the Standard Dutch-based form *kocht* (Dutch *gekocht*) spread rapidly, replacing the Hollandish dialectal form *koft*. The form *koft* appears only incidentally in 1886 and reappeared on Schiermonnikoog in the late twentieth century in the deliberately archaizing recordings of the MAND. The historical weak form *keape* remains present in the south, albeit mostly alongside the irregular, borrowed form *kocht*. The former, morphologically regular form receives support from system internal pressure; the latter, irregular form is supported by the contact with Dutch. Many of the maps in this chapter show rapid shifts and the elimination of minority forms. It is interesting to see how the competition between two variants with different types of backing in the grammar can be so long-lasting. The impact from the two sources (“Dutch” and “internal system”) have apparently reached some kind of an equilibrium.

Fig. 5 “To buy” (a) Replacement of *sella* “to sell” by *forkaepia* in the late fifteenth century; (b) the rise of *koft* 1480–1540; (c) *keape*, *koft*, and *kocht* in the sixteenth to eighteenth centuries; (d) *keape*, *koft*, and *kocht* in the nineteenth and twentieth centuries

2.5 Case 5 “Come” (Past Participle)

The Fourteenth and Fifteenth Centuries. The past participle of the verb “to come” has a mutated vowel in the earliest Old East Frisian texts: *kemen* from a Proto-Frisian < **gikumin*. The oldest text from West Friesland (late thirteenth century) attests to an unmutated form *komen*. Charters from the first half of the fifteenth century from the northeast confirm the original existence of the mutated form also in West Frisian (Fig. 6a): *kem(m)en*, *kammen* (in the map included under *kemmen*). The form *kom(m)en* may be an analogical levelling from the infinitive or influenced by Middle Dutch. After 1470, *kommen* is the only form until the early sixteenth century.

The Sixteenth and Seventeenth Centuries. A reduced form *komn* is attested for the first time in 1506, next to dominant *kommen* (1502). The reduced form was morphologically enhanced by the addition of an extra /d/ (first attestation of *komd*

Fig. 6 (a) The past participle of *komme* “to come” in the fifteenth century, (b) *komen* 1570–1670, (c) *komen* 1700–1870, (d) *komen* 1871–1895

1535). In the period 1570–1670, there is a nearly random mixture of forms (Fig. 6b). The form *komd* seems to be somewhat preferred in the north, but there is definitely no strict boundary.

The Eighteenth and Early Nineteenth Centuries. After a gap in the sources between 1666 and 1701, *komd* is nearly the only form attested. A new *kôm* appears for the first time in 1707, probably in the southeast, and again 1779 (as *kaom* *[ka:m]) from the northeast. The form *komd* was the dominant form at least until the middle of the nineteenth century (Fig. 6c).

The Late Nineteenth and Twentieth Centuries. Data from the late nineteenth century witness a remarkable comeback of the form *komen*, next to a clear establishment of the *kaam*, *kôm* forms (Fig. 6d). The origin of the form *komen* can be sought in a combined influence from Dutch and Town Frisian. It is not a continuation of the late mediaeval form. The spread of the form *komen* continues in the twentieth century (Fig. 7a, b).

Fig. 7 *kommen* by informants (a) *1900–1930, (b) *1940–1967, (c) increase from A to B

Figure 7c shows the expansion of *kommen* between the two generations of Fig. 7a, b for the regions where the interpolated average use of *kommen* is more than 30%. The absolute spread of *kommen* is shown in the same map with a green circle. The map shows that *kommen* penetrated the southwest and southeast of the province.

Synopsis. The past participle of *komme* “to come” has undergone at least three transformations during the last 700 years (Table 2). The earliest Old Frisian form *kemen* with the historically expected *i*-mutation is captured in the earliest charters from the northeast, being a late adopter of linguistic innovations.

The form was uniformly *kommen* for more than half a century, when *komn* arose. This non-salient past participle form was replaced either by adding the marker *-d* from the weak verbs (*komd*) or by applying the so-called A-B-B-ablaut schema, common in the historical ablaut classes 2: *komme* – *kôm/kaam* – *kôm/kaam*. The latter form was productive in the eastern and southeastern dialects. The weak form *komd* remained dominant for almost two centuries, only to be replaced by a newly created strong form *kommen* which was borrowed from Friso-Dutch (*Town Frisian*)

Table 2 Schematic depiction of the changes in the past participle of *komme* “to come” in West Frisian over the last 700 years

	<1470	1470–1570	1570–1670	1670–1870	1886–1895	>1940
<i>NE</i>	<i>kemen</i>	<i>komen</i>	<i>kommen-komn-komd</i>	<i>komd</i> (<i>kām</i>)	<i>komd</i> (<i>kām</i>)	<i>kommen – kām</i>
<i>SE</i>	<i>komen</i>	<i>komen</i>	?	<i>kôm</i>	<i>kôm</i>	<i>kommen – kôm</i>
<i>NW</i>	<i>komen</i>	<i>komen</i>	<i>kommen-komn-komd</i>	<i>komd</i>	<i>kommen</i>	<i>kommen</i>
<i>SW</i>	<i>komen</i>	<i>komen</i>	<i>kommen-komn-komd</i>	<i>komd</i>	<i>komd</i>	<i>kommen – komd</i>

in the cities (see Fig. 1). This form spread rapidly and eliminated first the form *komd* from its last refuge in the southwest in less than 100 years and continues its expansion into the eastern regions, creating a nearly homogeneous distribution of *kommen*, 500 years after this was the case earlier in the history of West Frisian.

2.6 Case 6 “To Have” Paradigm: Vowel and Consonant Reshuffling

Old and Middle Frisian. The present tense paradigm of “to have” appears in Old West Frisian as *habba* (inf.), *habbe – habbath* (1st sg., pl.), 3rd sg. *heweth*, *havit*. The verb has the root vowel *-e-* throughout the present tense in Old East Frisian. The alternation of root vowels is historically fairly complex and related to the verb’s origin in the Germanic third weak class (Heinzle 2014). The fifteenth century sees mostly *haet* in the third person singular, which was subsequently palatalized and shortened to *het*, although the form *hat* is sometimes also found. In the course of the history, we see a contrast between the vowel of the second and third person singular of the present tense on the one hand and the infinitive and other present tense forms on the other.

Modern Frisian. The result of the vocalic changes was a paradigm with seemingly “a-e-alternation” but brought about by entirely different pathways than in German strong verbs. Parallel to the word “what,” with which the third person was homophonous, there are attestations to *hat* in the northern part of the province in the sixteenth and early seventeenth centuries. However, during the seventeenth century, the *habbe – hab – hest/het*-schema becomes the single pattern in West Frisian. Things start changing in the course of the eighteenth century. The vowel *-e-* is levelled throughout the present tense paradigm in the southwest – possibly supported by the Dutch form *hebben* – while the first traces of a general root vowel *-a-* are found to the east (Fig. 8a, b). In the nineteenth century, the root vowel *-e-* slowly spreads further direction northeast in the infinitive and other forms of the present tense, while at the same time, large-scale levelling of the *-a-* to the second and third person takes place (Fig. 8c, d).

Fig. 8 The root vowel in the second and third person singular present tense and in the rest of the present tense and infinitive forms in the eighteenth century (a, b) and in the nineteenth century (c, d)

The results are three competing paradigm schemas: an original A-E-schema (*habbe* – *het*) and two-levelled schemas, E-E (*hebbe* – *het*) and A-A (*habbe* – *hat*). A map for the period 1600–1750 is not shown, because the schema A-E is nearly ubiquitous. The E-E-schema is found for the first time in Hindeloopen in the late seventeenth century (in nearby Workum one finds *habbe* in 1681). Figure 9 shows the presence of E-E in the wider southwest, while the A-A-schema is developing in the center of the province in the eighteenth century. In the nineteenth century, the E-E-schema spreads from the southwest and the A-A-schema toward the east. The historical A-E-schema is pushed back to the extreme northeast and, surprisingly, to the zone between the E-E and the A-A-zones.

Entirely independent of the development of the root vowel, there are major changes in the word's consonants (Fig. 10). The consonant *-b-* is weakened to *-w-* fairly rapidly around the middle of the eighteenth century in a northwestern and

Fig. 9 The paradigm of “to have” in (a) the second half of the eighteenth and (b) the nineteenth century

Fig. 10 Consonantism of “to have” in (a) the eighteenth and (b) the nineteenth century

central region. The same development takes place in Town Frisian and some dialects in North Holland (especially those bordering the Zuiderzee). Another development is the loss of /b/ or /v/ in the first person and a general truncation of the plural form to *ha* [ha] or *he* [he] (not further distinguished in this approach). It is widespread but most prominent in the southwest in the eighteenth century. Its dominant locus shifts to the northeast in the nineteenth century, for which I cannot see a clear reason. The forms with de *w*-sound spread rapidly; the forms with *-b-* are pushed back to the southern half of the province.

The vowel alternation in the paradigm is further reduced in the twentieth century. The archaic pattern A-E is only found once among the informants of the MAND in the extreme northeast (Fig. 11a, b). The E-E and A-A-zones form

Fig. 11 The verb “to have” in the twentieth century (a, b) MAND, (c, d) according to the FA-survey 1993 for two generations

two adjacent blocks, dividing the language area in two. The *b*-consonantism is more and more losing ground: the *habba* variant becomes rare (mostly short *ha*, with a new side form *har* (Veenstra 1989), while the southern form *hebbe* is supported by Dutch (*hebben*). The short form is expansive in the east but note that short forms are also very common as prosodic variants throughout the rest of the region.

Figure 11c, d shows the ongoing shift in the paradigmatic vowel alternation in the twentieth century. The left-hand map, showing the pattern in speakers born before 1925, shows a clear overlap with the MAND data in Fig. 11a, b, with speakers of a similar age. In the speech of the younger generations, there is a spread of the E-E-pattern in the northwest, against a retreat in the southeast. The most remarkable in these developments may be the entirely independent geographical directions and distributions of the vocalic and consonantal alternations.

2.7 Case 7 “Receive(s)” Second and Third Person Singular of *krije*

Some trends are very gradual and linear. The change in the second and third person singular of the verb *krije* “to receive, to get, to obtain” serves as an example of such a development. The present tense verb forms were Old Frisian *krigia* (infinitive), *kriga(s)t* second and third person singular, and *krigiath* plural. The forms with palatalized *-g-* are found since ca. 1480: *krije*, *krye*. In the early modern paradigm, the *-g-* was also present in the past tense and the past participle *krige(n)*. Analogical pressure in the singular paradigm created a new form for the third singular: *krijt*. (The examples are from the more frequent third person. The map, however, was based on data from both persons.) The forms *kriget* and *krijt* are in competition in the northwest and center of the province in the sixteenth and seventeenth centuries. In the eighteenth century, the form *krijt* became the only form in the northwest and started spreading into the periphery. In the twentieth century, the form *kriget* was pushed to the periphery of the province (Fig. 12a).

The restructuring in the present tense comes together with a reform of the past tense creating a strong paradigm, infinitive *krije* – *krijt*, past tense *kriich*, past participle *krigen* (cf. Dutch *krijgen* – *krijgt*; *keeg*; *gekrege*), against a weak class 2 paradigm *krije* – *kriget*; *krige*; *krige*. The spread of the forms does not entirely coincide (of course), and in the eastern regions, one can observe mixed paradigms, often *krije* – *krijt*; *krige*; *krigen* (Fig. 12b). Altogether, the restructuring is very slow and diffuse (compared to the dynamic changes in *keapje*).

2.8 Case 8 “Goose: Geese”

From the Sixteenth Until the Nineteenth Century. The noun “goose” is a so-called Proto-Germanic root noun, which means that it had an *i*-mutated plural form in Old Frisian (as well as in Old English): sg. *gōs*, pl. *gēs*. It is only incidentally found in Middle Frisian sources (*ghees* Sn.Rb).

Figure 13a shows real singulars and first elements of compounds under the heading “singular,” juxtaposed to the plural forms. Some seventeenth-century sources attest to the result of what is called *local markedness*, where the relatively frequent plural form *gies* supersedes the singular form – which runs contrary to the common direction of analogical levelling of irregular forms (Tiersma 1982). A similar development can be observed in Modern Icelandic: singular *gæs*, plural *gæsir* (with a new plural ending), cf. Danish singular *gås*, plural *gæs*. In the 1666 source, the instances of *gies* are found in the singular, while *goes-* is only found in the compound *goeseplom* “goose feather.” In the 1614 source, the form *gâns-* is only used once in the compound *gantscheyen* “goose eggs.” The levelling from the plural to the singular created a uniform paradigm for the singular and plural, which was functionally imbalanced. This difference was resolved by the introduction of a loanword from Dutch *gans*, with a regular plural *ganzen* (note the years of attestation in the map).

Fig. 12 (a) The gradual spread of the form *krijt* between 1550 and 1990. (b) Paradigms of *krije* in the late twentieth century

The result of this development can be seen in the nineteenth century (Fig. 13b). In the southwest, the forms for the singular and plural are *gâns* [gɔ̃:s] – *gânzen* [gɔ̃:zən], in the northeast the archaic paradigm with *goes* – *gies* was still in use, and the intermediate zone was dominated by *goes* [guəs] – *guozzen* [gwozən]. The alternation [uə] and [wo] is a common morpho-phonological pattern in West Frisian (Tiersma 1999, pp. 17–20). Figure 13b shows that the Dutch loan form was occasionally also used further to the east, especially in the singular.

The Nineteenth and Twentieth Centuries. According to Hof (1933, p. 137), the form *gies* was only sporadically used in the extreme northeast in the 1920s. The singular forms are illustrated by the results from the survey by Kapteyn (1937). Apart from *gâns* and *goes*, the hybrid forms *goas* (= *gâns* with elimination of the nasal) and *gûns* (= *goes* with insertion of the nasal) are mentioned in the data. The form *goas* was already mentioned in the nineteenth century. The form *gûns* was also found by Hof. A more fundamental development is a second instance of the local markedness effect where the singular *goes* [guəs] is replaced by the new singular form *guos* [gwos], which was reanalyzed from the plural form *guozzen*. In this case, the singular-plural contrast is retained (contrary to the seventeenth-century development), and in fact, the paradigm becomes entirely regular. This development is concentrated in the east. The regional distribution of the dominant patterns is based on Hof and Kapteyn together (Figure 13c). Figure 13d shows the distribution among older speakers in the late twentieth century. The hybrid forms were not mentioned there, but we see a remarkable paradigmatic mixture of the two base forms *gâns* and *goes* in the northeast and the south with a singular *gâns* but a plural *guozzen*. This pattern is already observable in the nineteenth century (Fig. 13b). Peripheral Frisian dialects in the east, adjacent to the Low Saxon-speaking regions, opt entirely for the Dutch-based forms. The situation in the southeast seems particularly volatile (compare Fig. 13c, d).

Fig. 13 Singular and plural of “goose” in (a) the seventeenth to eighteenth centuries, (b) the late nineteenth century; *goes* includes incidental *goas*, *guos*. (c) Singular of “goose” in the early twentieth century. (d) Singular and plural of “goose” in the late twentieth century

2.9 Case 9 “Days” (Plural)

Old and Middle Frisian. The plural of Old Frisian *dei* “day” is in Old West Frisian *degan* in the nominative and accusative, *degena* in the genitive, and *degum* in the dative. Due to vowel harmony caused by an *-a* in the unstressed syllable, the root vowel of the nominative and accusative turned into *-a-* in many parts of the region in the fourteenth century, while some regions were less affected. Figure 14a shows the geographical distribution of vowel harmony in the better attested phonologically parallel example of *wessa(n)/wassa(n)* “to be/being.” At the same time, the vowel quality in the unstressed syllable was reduced to [ə], creating the Middle Frisian paradigm nominative and accusative *dagen*, genitive *degena*, and dative *degum/–en*. The case system survived into Middle Frisian until the end of the fifteenth century. After 1490, the distribution of the root vowel *-a-* and *-e-* no longer correlates with the (historical) case, and /a/ becomes the dominant vowel (Fig. 14b). At the same time,

Fig. 14 (a) Vowel harmony in “to be” the fifteenth century, (b) the levelling of the root vowel throughout the plural paradigm of “days” in Middle Frisian

this vowel /a/ was lengthened in open syllable since ca. 1430 to /a:/. The lengthening is earlier in the west than in the east. The early lengthened /a/ merged with the Old Frisian /a:/ and became /ɛ:/ in the late fifteenth/early sixteenth centuries. It is mostly spelled <ae>. Otherwise it remained /a:/. Figure 15a shows the concentration of the /a:/ in the east (blue), of the fronted /ɛ:/ (written <ae>) toward the west (light brown), while the remainders of the forms with short /ɛ/ are concentrated in the southwest (brown).

The Seventeenth and Eighteenth Centuries. The forms with /ɛ/ < Middle Frisian *degen* and /ɛ:/ < Middle Frisian *dāgen* became further intertwined due to the general tendency (at least since the sixteenth century) to shorten vowels in disyllabic words, such as plurals. For example, compare *laam* – *lammen* “lamb (s),” which could turn *dāgen* into *dægen*. Western forms with /ɛ/ in the Early Modern period can therefore go back either to Middle Frisian *degen* or *dāgen*(!). The /ɛ:/ developed into /ɪ.ə/ in the seventeenth century. The Early Modern period shows three divisions, which correspond etymologically more or less to the Middle Frisian division: /a:/ (*dagen*) in the east; /ɪ.ə/ (*deagen*), alternating with /ɛ/ (*deggen*) in the west; and only /ɛ/ in the extreme southwestern town of Hindeloopen (Fig. 15b). The sixteenth-century northeastern form <deggen> can be interpreted as a relic of the /ɛ/ region in the northeast (see Fig. 14a).

The Nineteenth and Twentieth Centuries. The data from the late nineteenth century attest to a drastic change in the geographical distribution (Fig. 15c). The form with /a:/ has become dominant on the mainland. This may be due to support from the parallel form in Dutch: *dagen*. Hindeloopen sticks to *deggen* and the information from the island of Terschelling is ambiguous as to whether it continues *deagen* or *deggen*. For the rest of the province, the form *deagen* is only mentioned once in Workum for the early nineteenth century. In the late nineteenth century, it is already replaced there by *dagen*. This change is basically also the

Fig. 15 The plural of “day” in (a) Middle Frisian, (b) the seventeenth and eighteenth centuries. “/ɛ/” = /ɛ:/; “/e/” = /e/, (c) the nineteenth century

situation found in the late twentieth-century survey of the MAND. Both Terschelling and Hindeloopen have *dêgen* (with /ɛ:/), which is most likely the continuation of Middle Frisian *degen*.

2.10 Case 10 “House(s)/DIM/at Home”

The word “house” is Old Frisian *hūs*. This vowel quality is often preserved in West Frisian, such as in *mūs* [mu:s] “mouse,” *lûd* [lu:t] “loud,” or *dûke* [dukə] “to dive.” In other contexts, the vowel is palatalized, especially before *-n*: *tún* [tyn] “garden” and *dún* [dyn] “dune.” Especially in the context before *-s*, there is some mixture, compare *mūs* [mu:s] “mouse” ~ *ús* [ys] “us” < OF *mūs*, *ūs*. These examples illustrate a correlation between shortening and palatalization. This can very well be observed in the forms of the word for “house.” The base form is *hūs* [hu:s], but the plural is mostly *huzen* [hyzn] and the diminutive (DIM) *húske* [hyskə] “small house,” both with a short vowel. Compounds mostly use the palatalized form, such as in *húsbaas*

Fig. 16 (a) Palatalization in the simplex “house” between 1550 and 1720, (b, c) vocalism of “house” in simplex and derivations/compounds in the seventeenth (1720) and eighteenth (1720–1800) century

[hysba:s] “landlord.” Palatalization (and later diphthongization) is a general development in Dutch, for example, *huis* [hœ:ys] and *tuin* [tœ:yn]. See also Hof (1933, pp. 198–269) for an extensive discussion of the palatalization of OF *û* in West Frisian.

The Seventeenth and Eighteenth Centuries. In the seventeenth and eighteenth century, the word for “house” appears with spellings such as *hoes*, *huwz*, and *hous* which are interpreted as [hu:s], while *huus*, *houys*, and *huys* are considered to render [hy:s]. Figure 16a shows that spellings suggesting palatalization popped up everywhere in the province but especially in the southwest and northeast. This geographical pattern turns out to be consistent also in the nineteenth and twentieth centuries.

Figure 16 shows the complex variation in the seventeenth and eighteenth centuries. The left parts of the circles visualize the vowels in the simplex; the right parts of the circle show the development in the plural, diminutive, and other compounded

Fig. 17 (a) Vocalism of “house” in simplex and derivations/compounds in the nineteenth century. (b) Vocalism of “house” in simplex and derivations/compounds in the twentieth century

and derived forms (such as *thûs* “at home”), which tend to have a [y] in the modern language. A trend toward a split development in these two categories is already visible from the beginning, but the contrast is enhanced in the course of time. A curious development toward [ø] is found in the southwest in the eighteenth century (e.g., plural <hussen>).

The Nineteenth and Twentieth Centuries. The nineteenth and twentieth centuries show somewhat more consistent results, with three base patterns: [y:]~[y], [u:]~[u], and [u:]~[y]. The last is dominant and also applied in Standard Frisian. The palatalized vowels are used in the southwest and on the islands, while the back vowel is dominant in the southeast. In the sixteenth, nineteenth, and twentieth centuries, there is some presence of the [y:] in the northeast, although in different localities. The palatalized vowel spreads rapidly from the southwest in the course of the twentieth century, which leads to an elimination of the paradigmatic root vowel alternation (Fig. 17a, b).

3 Interpretations

When viewing the series of case studies in the previous section, one can conclude that West Frisian dialects as they appear in recent dialectological surveys are not fairly stable language varieties from the sixteenth century, which had been preserved nearly unaltered into the late nineteenth century. Apart from that overall answer, it will be worthwhile to see, whether this small sample can tell us something more: where and when do changes occur in time and place, and are some dialects more archaic than others?

The sample is too small for final answers, but the sample may at least give directions for further extensive evaluations. Note that there is no agreement among

Table 3 Locus of innovations in time and place, in relation to the linguistic domains and influence from Dutch. Innovations with grayish bold face in the “region” column managed to spread over (nearly) the entire province in their time (some have been superseded by later developments). Italics means that the form is the preferred form in the West Frisian standard language

	Locus of the innovation in time	Locus of the innovation in place	Linguistic domain	Dutch
“Saturday”: <i>saterdei</i>	Nineteenth century	East	Lexicon	Yes
“What”: <i>wat</i>	Eighteenth century	<i>Southeast</i>	Lexicon	Yes
“Flesh/meat”: <i>fleis</i>	Eighteenth/ nineteenth century	<i>Southeast</i>	Lexicon	Yes
“To sell”: † <i>sella</i>	Fifteenth century	<i>Cities</i>	Lexicon	Yes
“To buy”: <i>kof</i>	Sixteenth century	<i>Cities</i>	Verbal morphology	Yes
“To buy”: <i>kocht</i>	Nineteenth century	Northeast (?)	Verbal morphology	Yes
“Come” (p.p.): <i>kommen</i> (I)	Fifteenth century	West	Verbal morphology	Yes
“Come” (p.p.): <i>komd</i>	Sixteenth century	North	Verbal morphology	No
“Come” (p.p.): <i>kaam/kôm</i>	Eighteenth (?) century	East	Verbal morphology	No
“Come” (p.p.): <i>kommen</i> (II)	Nineteenth century	<i>Cities/northwest</i>	Verbal morphology	Yes
“To have”: <i>e-e</i> - schema	Seventeenth/ eighteenth century	Southwest	Verbal morphology	Yes
“To have”: <i>a-a</i> - schema	Eighteenth century	<i>East</i>	Verbal morphology	No
“To have”: consonantism	Eighteenth century	<i>Northwest</i>	Verbal morphology	Yes
“To receive” (paradigm)	Sixteenth/ seventeenth century	Northwest	Verbal morphology	Yes
“goes”: <i>gies</i> = sg	Seventeenth century	Northwest	Nominal morphology	No
“goes” (pl.): <i>guozzen</i>	Nineteenth century	<i>Northwest</i>	Nominal morphology	No
“goes” (sg.): <i>guos</i>	Twentieth century	East	Nominal morphology	No
“goes”: <i>gâns,-zen</i>	Eighteenth century	Southwest	Lexicon	Yes
“days” (pl.): <i>daegen</i> > <i>deagen</i>	Fifteenth century	West	Morpho- phonology	No
“days” (pl.): <i>dagen</i>	Fifteenth century	<i>(North)east</i>	Morpho- phonology	No/ yes
“house” (sg.): /y:/	Sixteenth century	Southwest	Morpho- phonology	Yes
“house” (pl.): /y/	Seventeenth century	<i>Southwest</i>	Morpho- phonology	Yes

dialectologists about the number and type of features that should be used for a proper evaluation of dialect differences and changes. The main division of German dialects is based on the expression of the High German Consonant Shift only (König 2001, p. 147), and the main division of West Frisian is based on just five phonological features (Hof 1933, pp. 13–24, 35–42). Other approaches build on possibly large number of features, such as Nerbonne (2009) for German or Van der Veen (1986) for West Frisian. We will simply take the case studies at face value to see whether any tentative trend can be found.

3.1 Sources of Change

Table 3 lists all the changes in the ten case studies, when they arose for the first time and in which part of Fryslân, to which linguistic domain they belong, and whether they reflect influence from Dutch, varieties of Dutch, or Low Saxon, labelled under “Dutch.” Because most case studies include various innovations, there are 21 rows in the table, instead of 10.

The map series do not show an overall dominance of sources of changes, which take place in every century of the studied timeframe. Contact with Dutch plays a major role in many instances, but its impact is varied: from mere loanwords (*wat*) to structural similarity (*krije-krijt-kriich-krigen*) or support of local forms (*dagen*). Contact does not always lead to a full overlap with Dutch, as the *krije*-example (Dutch *krijgen-krijgt-kreeg-gekrege*) and the *fleis*-example (Dutch *vlees*) show. So even after including such “Dutchisms,” Frisian retains its distinct linguistic profile in many instances.

Closer scrutiny reveals a couple of patterns when it comes to specific features, periods, and regions. Lexical innovations always refer to influence from Dutch or Low Saxon, which is obvious. Four out of five take place in the eighteenth century or later, which may point to an increased impact from Dutch over the centuries. The three lexical innovations from the east and southeast (*fleis*, *saterdei*, and *wat*) are potentially Low Saxon but are all three supported by Dutch and Town Frisian as well. Especially in the southeast, there was quite a mixture of people in the process of cultivating the peat and wasteland areas leading to various contact phenomena in the language (Dyk 2011). Independent influence from Low Saxon, including potential influence from Low Saxon Groningen in the east, is absent in the sample.

A second pattern concerns the relation between region and period: in the current sample, innovations from the northwest (the region with the cities and their Dutch-based Town Frisian) and the southwest (the region geographically closest to Holland) are on average overrepresented in the fifteenth to seventeenth century, while innovations from the east are more prominent in the period from the eighteenth to twentieth century. This corresponds with the relative importance of the old cities in the Late Middle Ages and the lively contacts between the towns in the southwest of the province with Holland in the maritime economy of the Dutch Golden Age. The later centuries saw a growth of population in the east, together with a decline of economic activities in the old cities and coastal towns. Town Frisian lost its social

prestige in the course of the nineteenth and early twentieth centuries. Innovations from the north and east are altogether rare.

A third pattern concerns the correlation between region and the influence from Dutch. When we exclude lexical innovations, which are per definition from Dutch or Low Saxon, we observe that 8 out of 11 innovations whose origin lie in the west reflect a direct or indirect impact from Dutch. Five out of six non-lexical innovations from the (north)east represent language internal innovations in the morphology and morpho-phonology (such as the past participle forms *komd* and *kaam/kôm* or the innovative singular form *guos* from the plural *guozzen*).

All in all, it seems that the south (both the southwest and the southeast), where Frisian is/was geographically or in terms of travel connections in close contact with Dutch, seems to be the soft spot for external influence. This impression is confirmed by Hof (1933, p. 29). There was, additionally, the impact from Dutch/Town Frisian through the historical cities, concentrated in the northwest of the province, until the early twentieth century. The demographic expansion of Frisian into the east and southeast of the province in the eighteenth and nineteenth century, leading to a much more balanced distribution of people away from the primary contact zones with Dutch, brings about a more balanced geographical locus for linguistic innovations, with more space for language internal developments. Finally, it has to be reiterated that all the observed patterns are only based on a small set of examples and cannot be more than tentative.

3.2 Archaic Dialects?

When the geographical distribution of dialectal features is not very old, i.e., cannot be dated to the sixteenth century or even earlier, it may be that specific varieties are archaic representing relics of earlier larger regions. Some twentieth-century dialects show undisputable strong similarities with the shape they have in earlier sources, such as Elfdalian (Sweden) around the year 1700 (Ringmar and Steensland 2011) or North Frisian dialects around the year 1600 (Ziesemer 1922; Smith 2012).

A West Frisian dialect that is commonly perceived as archaic and is relatively well documented in history is the dialect of the small city of Hindeloopen (de Boer 1950). The dialect is not by default comprehensible to speakers of the common West Frisian dialect. It is compared in Table 4 to the dialect of Achtkarspelen (east in Fryslân), which is part of the dialect continuum of West Frisian and mutually intelligible with West Frisian spoken in other parts of the province, albeit it the strongest outlier in the continuum (Van der Veen 1986). Table 4 lists for the features in the case studies, which of the present-day forms used in those two parts of the province is the most archaic one. In the case of “what,” e.g., the Hindeloopen dialect has the continuation of the Old Frisian form as *het*, while the Achtkarspelen participated in the introduction of Dutch *wat*. In some instances, both have an innovative form, as in *komd* and *kaam*, which superseded earlier late fifteenth-century *kommen*, which itself was an innovation.

Table 4 Comparison of the levels of archaism of the dialect of Hindeloopen (H) and Achtkarspelen (A) for the ten case studies in this chapter

	Hindeloopen	Achtkarspelen	Archaic dialect
“Saturday”	<i>snien</i> = variant	<i>saterdei</i> = innovative/variant	H(?)
“What”	<i>het</i> = archaism	<i>wat</i> = 18th c. innovative	H
“Flesh/meat”	<i>flesk</i> = archaism	<i>fleis</i> = 19th c. innovative	H
“To buy”	<i>kaipe</i> (weak) = archaism	<i>kocht</i> = innovative	H
“Come” (p.p.)	<i>komd</i> = 17th c. innovation	<i>kaam</i> = 18th c. innovation	–
“To have” (paradigm present tense)	<i>hebbe</i> – <i>het</i> = 16th c. innovation	<i>hawwe</i> – <i>hat</i> = 20th c. innovation	–
“To receive” (paradigm)	<i>krije</i> = moderately innovative	<i>krije</i> = archaic	A
“Goes” (sg./pl.)	<i>gâns</i> = 17th c. loanword	<i>guos</i> = 19th c. phonological modification of the archaic form <i>goes</i>	A
“Days”	<i>deggen</i> = variant	<i>dagen</i> = variant	–
“house”	<i>hús</i> – <i>huzen</i> = 16th c. innovation	<i>hús</i> – <i>hûzen</i> = archaism	A

The table shows that the dialect of Hindeloopen is not outstandingly more archaic than the Achtkarspelen dialect. The archaisms of Achtkarspelen are probably not perceived as such, because they match with (the more archaic form of) the standard language and the dialect is part of the main dialect continuum of West Frisian. So, even when the Hindeloopen dialect comprises a lot of archaisms compared to the common dialect, it also shows a lot of innovations that do not appear in the common dialect or at least not in the entire dialect continuum and/or are not part of the West Frisian standard language. Dahl (2015, pp. 228–229) discusses a similar case in Swedish dialects, where the dialects which retain many archaisms compared to the standard language exhibit a lot of innovations at the same time. However, the innovations in Hindeloopen (in this sample of case studies) are of a fairly early date, and we may hypothesize that the similarities between the seventeenth- and twentieth-century versions of the dialect of Hindeloopen are stronger than for the Achtkarspelen dialect.

4 Conclusions

The map series are entirely in line with the statement that any dialect map can only be interpreted as a frozen picture of a constant movement. The maps show that the changes in the West Frisian dialects did not come to a halt in the sixteenth century. The boundaries were hardly ever stable and continue their dynamism into the twentieth century. The changes are also not restricted to some shifts over a couple of kilometers, but in various examples, one can see a completely different

distribution of forms from century to century. The changes are definitely not slower in the eighteenth and nineteenth century than in the fifteenth and sixteenth century. This means that the language of the oldest generations is not an echo of two or three centuries ago but merely the local or idiolectal manifestation of a supra-local vernacular of one generation earlier (Goeman 2000).

To sum up, Frisian seems to be one of the few languages (if not the only one) that can offer a detailed reconstruction of geographical shifts in dialect features since the Late Middle Ages, when the language was typologically still comparable to late Old English. The resulting picture does not lend support to the suggestion that the late nineteenth- and early twentieth-century dialects of the oldest generations are in any form particularly “old” (i.e., received their major shape not later than the Early Modern period). The Frisian dialects of the late twentieth century differ as much from the dialects in the late nineteenth century as these differ from those in the late eighteenth century, etc. In the case of Frisian, where the vernacular remains a supra-local means of communication up till the present day, the shifts of variants remains highly dynamic. For language areas where dialects lose their social function, the recent developments are indeed of a profound different nature, eventually leading to dialect death. Seemingly “archaic” dialects are first of all *different* and geographically isolated, rather than profoundly more archaic: while they may preserve archaic features no longer found in the majority of dialects, they show various local innovations at the same time.

Publisher’s note: Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

References

- Bakker, F., & Kruijsen, J. (2007). *Het Limburgs onder Napoleon: achttien Limburgse en Rijnlandse dialectvertalingen van “De verloren zoon” uit 1806–1807: met uitgebreide besprekingen van het Maastrichts en Venloos uit 1807 en contemporaine correspondentie over dit oudste dialectonderzoek aan Maas en Rijn*. Utrecht: Gopher.
- Bandle, O. (2012). *Die Gliederung des Nordgermanischen* (Reprint der Erstauflage (1973) mit einer Einführung von Kurt Braunmüller. Beiträge Zur Nordischen Philologie 47). Tübingen: A. Francke Verlag.
- Barbiers, S., & Lambertus, C. J. (2008). *Syntactische atlas van de Nederlandse dialecten = SAND*. Amsterdam: Amsterdam University Press.
- Berg, I., Bugge, E., Røyneland, U., & Sandøy, H. (2018). Kapittel 3: Geografisk og sosial variasjon. In B. Mæhlum (Ed.), *Norsk språkhistorie. II. Praksis* (pp. 163–256). Oslo: Novus Forlag.
- Besch, W. (1967). *Sprachlandschaften und Sprachausgleich im 15. Jahrhundert* (Studien zur Erforschung der spätmittelhochdeutschen Schreibdialekte und zur Entstehung der neuhochdeutschen Schriftsprache). München: Francke.
- Besch, W., Knoop, U., Putschke, W., & Wiegand, H. E. (1982). *Dialektologie: ein Handbuch zur deutschen und allgemeinen Dialektforschung*, 1. Halbband (Handbücher zur Sprach- und Kommunikationswissenschaft 1, Vol. 1). Berlin: de Gruyter.
- Besch, W., Knoop, U., Putschke, W., & Wiegand, H. E. (1983). *Dialektologie: ein Handbuch zur deutschen und allgemeinen Dialektforschung*, 2. Halbband (Handbücher zur Sprach- und Kommunikationswissenschaft 1, Vol. 2). Berlin: de Gruyter.

- Boelens, K., & van der Woude, G. (1955). *Dialect-atlas van Friesland* (Nederlandse en Friese dialecten). Antwerpen: De Sikkel.
- de Boer, B. (1950). *Studie over het dialect van Hindeloopen*. Assen: Van Gorcum.
- Bosworth, J., & Toller, T. N. (1898). *An Anglo-Saxon dictionary; based on the manuscript collections of the late Joseph Bosworth*. Oxford: Clarendon Press. <http://www.bosworthtoller.com/>
- Christen, H., Glaser, E., & Friedli, M. (2010). *Kleiner Sprachatlas der deutschen Schweiz*. Frauenfeld: Huber Frauenfeld.
- Dahl, Ö. (2015). *Grammaticalization in the North: Noun phrase morphosyntax in Scandinavian vernaculars* (Studies in diversity linguistics). Berlin: Language Science Press. <http://langsci-press.org/catalog/book/73>
- Damsma, L., & Versloot, A. P. (2015). Vowel epenthesis in early Germanic runic inscriptions. *Futhark: International Journal of Runic Studies*, 6, 21–64.
- De Caluwe, J., & Van Renterghem, E. (2011). Regiolectisering en de opkomst van tussentaal in Vlaanderen. *Taal en Tongval*, 63(1), 61–77. <https://doi.org/10.5117/TET2011.1.DECA>.
- De Vogelaer, G., & Heeringa, W. (2011). Regiolectisering: impulsen voor verder onderzoek. *Taal en Tongval*, 63(1), 1–11. <https://doi.org/10.5117/TET2011.1.DEVO>.
- Debus, F. (1983). Dialektgebiete in älterer Zeit: Probleme und Ergebnisse ihrer Rekonstruktion. In W. Besch, U. Knoop, W. Putschke, & H. E. Wiegand (Eds.), *Dialektologie: ein Handbuch zur deutschen und allgemeinen Dialektforschung*, 2. Halbband. (Handbücher zur Sprach- und Kommunikationswissenschaft 1, Vol. 2, pp. 930–960). Berlin: de Gruyter.
- DeCamp, D. (1958). The genesis of the old English dialects: A new hypothesis. *Language*, 34(2), 232–244.
- van Dijk, H. (1994). *De modernisering van Europa: twee eeuwen maatschappijgeschiedenis*. Utrecht: Het Spectrum.
- Dyk, S. (2011). Palatalization of the glide in Frisian raising diphthongs as a case of shift. *ESUKA – JEFUL*, 2–1, 125–139.
- Ehrentraut, H. G., & Versloot, A. P. (1996). *Mittheilungen aus der Sprache der Wangeroger*. Ljouwert: Fryske Akademy/Ostfriesische Landschaft.
- Firmenich-Richartz, J. M. (1846). *Germaniens Völkerstimmen: Sammlung der deutschen Mundarten in Dichtungen, Sagen, Märchen, Volksliedern u.s.w.* (3 Vols.). Berlin: Schlesinger.
- Gluth, K., Lompa, M., & Smolka, H.-H. (1982). Verfahren dialektologischer Karteninterpretation und ihre Reichweite. In W. Besch, U. Knoop, W. Putschke, & H. E. Wiegand (Eds.), *Dialektologie: ein Handbuch zur deutschen und allgemeinen Dialektforschung*, 1. Halbband (Handbücher zur Sprach- und Kommunikationswissenschaft 1, Vol. 1, pp. 485–500). Berlin: de Gruyter.
- Goeman, T. (2000). Naast NORMs ook MYSFs in het veranderende dialectlandschap en het regiolect. In H. Bennis, H. Ryckeboer, & J. Stroop (Eds.), *De toekomst van de variatielinguïstiek: bundel artikelen aangeboden aan Jo Daan bij gelegenheid van haar negentigste verjaardag*. Gent: Universiteit Gent, Vakgroep Nederlandse Taalkunde; P.J. Meertens-Instituut. http://www.meertens.knaw.nl/jo_daan/05Goeman.pdf
- Goeman, A. C. M., Tældeman, J., & van Reenen, P. (1980). *MAND database*. <http://www.meertens.knaw.nl/mand/database/>
- Goossens, J. (1977). *Deutsche Dialektologie*. Berlin: W. de Gruyter.
- Halbertsma, J. H. (1981). *LEXICON FRISICUM A-D*. Grins, ms.
- Halbertsma, J. H., Halbertsma, T. H., & Halbertsma, E. H. (1822). *De Lape Koer fen Gabe Skroor*. Deventer: De Lange.
- Heinrichs, H.M. (1961). “Wye grois dan dyn andait eff andacht is ...”: Überlegungen zur Frage der sprachlichen Grundschrift im Mittelalter. *Zeitschrift für Mundartenforschung* 28, 97–153.
- Heinze, M. M. (2014). Die schwachen Verben der dritten Klasse im Altfriesischen – eine Spurensuche. *Amsterdamer Beiträge zur älteren Germanistik*, 73(1), 145–184. https://doi.org/10.1163/9789401211918_007.
- Hoekema, T. (1970). Siebs’ forgotten optekeningen (1886) en de fonology. In Y. Poortinga, J. J. Spahr van der Hoek, & T. Hoekema (Eds.), *Flecht op ‘e koai: Stúdzjes oanbean oan prof. dr. W. J. Buma ta syn sechsrichste jierdei* (pp. 193–199). Grins: Wolters-Noordhoff.
- Hof, J. J. (1933). *Friesche Dialectgeographie*. Gravenhagen: Nijhoff.

- Hof, J. J., van der Veen, K. F., Versloot, A. P., & Rypma, W. (2001). *Dialektgeografyske oantekens fan J. J. Hof*. Ljouwert: Fryske akademy.
- Hogg, R. M. (2008). English in Britain. In R. M. Hogg & D. Denison (Eds.), *A history of the English language* (pp. 352–383). Cambridge, UK: Cambridge University Press.
- Jahr, E. H. (1990). *Den Store dialektboka*. Oslo: Novus.
- Jansz, D., & Gerbenzon, P. (1960). *Het aantekeningenboek van Dirck Jansz*. Met inleidingen van J.A. Faber [and others] ... en met registers ... en een woordenlijst ... uitgegeven door P. Gerbenzon. Grins: Frysk Ynstitút oan de R.U. to Grins.
- König, W. (2001). *Dtv-Atlas Deutsche Sprache*. München: Deutscher Taschenbuch Verlag.
- Löffler, H. (1980). *Probleme der Dialektologie: eine Einführung*. Darmstadt: Wiss. Buchgesellsch.
- McMahon, A. M. S., & Maguire, W. (2012). Quantitative historical dialectology. In D. Denison, R. Bermúdez-Otero, C. McCully, & E. Moore (Eds.), *Analysing older English* (pp. 140–158). Cambridge, UK: Cambridge University Press.
- Miedema, H. T. J. (1983). Het molkwerums dialect van A. Heeroma's woordenlijst uit 1856 en van een eeuw later. *Taal en tongval*, 35, 72–75.
- Nerbonne, J. (2009). Data-driven dialectology. *Language and Linguistics Compass*, 3(1), 175–198.
- Nielsen, H. F. (2000). *The early runic language of Scandinavia: Studies in Germanic dialect geography*. Heidelberg: C. Winter.
- Nijdam, H., Versloot, A. P., & Meijering, H. D. (2012). Kodeks Siccama. Spoaren fan in ferdwûn Aldwestfrysk rjochtshânskrift. *Us Wurk*, 61(1–2), 1–56.
- Oppewal, T., Meerburg, B. G., Krol, J., & Steenmeijer-Wielenga, T. (2006). *Zolang de wind van de wolken waait: geschiedenis van de Friese literatuur*. Amsterdam: Bert Bakker.
- Rem, M. (2003). *De taal van de klerken uit de Hollandse grafelijke kanselarij (1300–1340): naar een lokaliseringsprocedure voor het veertiende-eeuws Middel Nederlands*. Amsterdam: Stichting Neerlandistiek VU.
- Ringmar, M., & Steensland, L. (2011). Johan Eenbergs två uppsatser om dalmålet: JE-1693 och JE-1702 Bilaga till *Rapport från Öder rådstemning om övdalska*, Andra konferensen om älvdalska. Lund. <http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-155282>
- Schmeller, J. A. (1821). *Die Mundarten Bayern's grammatisch dargestellt*. Beygegeben ist eine Sammlung von Mundart-Proben, d. i. kleinen Erzählungen ... in den verschiedenen Dialekten des Königreichs. München: Karl Thienemann.
- Siebs, T. (1889). *Zur Geschichte der Englisch-friesischen Sprache*. Halle a/d Saale: Max Niemeyer. <http://www.archive.org/details/zurgeschiedede00siebgoog>
- Smith, N. (2012). Nordstrand North Frisian: A puzzling problem in dialect geography. In H. van der Liet & M. Norde (Eds.), *Language for its own sake: Essays on language and literature offered to Harry Perridon* (pp. 395–412). Amsterdam: Scandinavisch Instituut.
- Stausland Johnsen, S. (2015). Dialect change in South-East Norway and the role of attitude in diffusion. *Journal of SocioLinguistics*, 19(5), 612–642. <https://doi.org/10.1111/josl.12156>.
- Steenmeijer-Wielenga, T. (1972). *Ds. J. S. Bakker en het Westerschellingers: Terschellinger gedichten van J.S. Bakker (1802–1863) met de woordenlijst die hij voor J.H. Halbertsma heeft ingevuld*. Ljouwert: Fryske Akademy.
- Stefan, N., Klinkenberg, E., & Versloot, A. P. (2015). Frisian sociological language survey goes linguistic: Introduction to a new research component. In H. Brand, E. Hoekstra, J. Spoelstra, & H. van de Velde (Eds.), *Philologia Frisica Anno 2014*. Lêzings fan it tweintichste Frysk Filologekongres fan de Fryske Akademy op 10. 11 en 12 desimber 2014, pp. 240–257. Fryske Akademy; Afûk.
- Taeger, B. (1981). Das Straubinger ›Heliand‹-Fragment, *Philologische Untersuchungen II: (Fortsetzung). Beiträge zur Geschichte der deutschen Sprache und Literatur* (PBB) 1981(103) (pp. 402–424).
- Tiersma, P. M. (1982). Local and general markedness. *Language*, 58(4), 832–849.
- Tiersma, P. M. (1999). *Frisian reference grammar*. Ljouwert: Fryske Akademy.
- Van der Sijs, N. (Ed.). (2011). *Dialectatlas van het Nederlands*. Amsterdam: Bert Bakker.
- Van der Veen, K. F. (1978). Skriftlike enkêts Fryske Akademy 1978–1996. Ljouwert, ms.
- Van der Veen, K. F. (1986). Yndieling en relative ôfstân fan Fryske plattelânsdialekten. *Philologia Frisica anno 1984*, 10–60.

- Van der Veen, K. F. (2001). West Frisian dialectology and dialects. In H. H. Munske (Ed.), *Handbuch des Friesischen/Handbook of Frisian Studies* (pp. 98–115). Tübingen: Max Niemeyer.
- Veenstra, D. H. (1989). /D/-Rotasisme yn it Frysk, Fonetyske en fonologyske aspekten fan de oergong ynterfokalyske /d/ > /t/. *Tydskrift foar Fryske Taalkunde*, 5, 41–67.
- Versloot, A. P. (2004). Why old Frisian is still quite old. *Folia Linguistica Historica*, 25(1–2), 253–304. <https://doi.org/10.1515/flih.2004.25.1-2.253>.
- Versloot, A. P. (2008). *Mechanisms of language change: Vowel reduction in 15th century West Frisian*. Utrecht: LOT. <http://www.lotpublications.nl/mechanisms-of-language-change-mechanisms-of-language-change-vowel-reduction-in-15th-century-west-frisian>
- Wakelin, M. F. (1977). *English dialects an introduction*. London: Athlone Press.
- Winkler, J. (1874a). *Algemeen Nederduitsch en Friesch Dialecticon* (Vol. I). Gravenhage: Martinus Nijhoff. http://www.dbnl.org/tekst/wink007alge01_01/
- Winkler, J. (1874b). *Algemeen Nederduitsch en Friesch Dialecticon* (Vol. II). Gravenhage: Martinus Nijhoff. http://www.dbnl.org/tekst/wink007alge02_01/
- Ziesemer, W. (1922). Nordfriesischer Katechismus in Strander und Föhringer Mundart. *Niederdetusches Jahrbuch*, 48, 53–74.