Old Saxon and Middle Low German Adverbs of Degree: A Case of Diachronic Discontinuity?

Lourens Visser

University of Groningen

Middle Low German is generally considered to be a direct successor to Old Saxon. However, later dialects, including Middle Low German, differ from Old Saxon with respect to a number of features, which is unexpected under a direct succession relationship. To account for the presence of such features, some scholars attribute them to High German influence on Middle Low German (Wolff 1934, Stiles 1995, Stiles 2013). Others, however, hypothesize that written Old Saxon (which provides the basis for the comparison) was an artificial grapholect that reflected Old English and Franconian conventions rather than a genuine spoken language (Collitz 1901, Rooth 1973, Doane 1991:45–46). This paper further contributes to this discussion by examining the systems of degree adverbs in Old Saxon and Middle Low German. Based on data from different corpora, it is shown that the system in Old Saxon resembles the one in Old English, while the Middle Low German system is comparable to the systems in Middle High German and Early Middle Dutch. It is concluded that an explanation based solely on language contact is problematic, and that the grapholect hypothesis has more explanatory power.[*]

Keywords: Historical linguistics, Germanic linguistics, intensification, corpus linguistics, dialect contact

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1. Introduction.

Middle Low German is generally considered to be a successor of Old Saxon (see, among others, Fulk 2018:29). One of the criteria used to define language succession is continuity: Linguistic forms and their patterns of use found in the older language are expected to appear, perhaps with some modification, in its successor(s). In the case of Old Saxon and Middle Low German, continuity has been a problematic issue, as Old Saxon generally has more North Sea Germanic innovations than Middle Low German (see section 2.3 for details). How some of these differences can be best accounted for is somewhat disputed. On the one hand, some scholars hypothesize that the differences between Old Saxon and the later dialects, including Middle Low German, are due to the influence of High German on the latter (Wolff 1934, Stiles 1995, Stiles 2013). On the other hand, others have questioned whether written Old Saxon, which serves as the basis for comparison, ever reflected an actual spoken language; instead, it was an artificial grapholect influenced by Old English and Franconian conventions. This explains the odd mixture of features not found in later dialects (Collitz 1901, Rooth 1973, Doane 1991:45–46).

The goal of this paper is to evaluate the two hypotheses on the basis of the system of degree adverbs in Old Saxon and Middle Low German, which has not yet been considered in the context of this debate. More specifically, I focus on adverbs of high degree (boosters), which strengthen a statement (such as *very, exceedingly*), and adverbs of absolute degree (maximizers), which indicate that a quality is wholly present (such as *completely, fully*). I examine individual adverbs in Old Saxon and Middle Low German as well as their usage patterns and show that there are substantial differences between the two languages. This presents a potential problem for continuity: If the system of degree adverbs in written Old Saxon is a direct predecessor of the Middle Low German system, then common Old Saxon degree adverbs should appear in Middle Low German, possibly with a specialized usage. However, upon a closer examination, degree adverbs in Old Saxon and Middle Low German in fact provide support for the grapholect hypothesis: I show that, while both hypotheses have their problems, the system in Old Saxon does appear to reflect an artificial poetic register rather than actual spoken language.

This paper is structured in the following way: Section 2 provides an overview of both Old Saxon and Middle Low German that focuses on their history and dialects. I also discuss the available corpus data for the two languages (sections 2.1 and 2.2), followed by a discussion of the continuity between the two (section 2.3). For the sake of comparison, the same section also contains an overview of adverbs of degree more generally, including data from Old English and Old and Middle High German (section 2.4). Section 3 presents the methodology and the corpora used for the analysis, and section 4 provides a description of the adverbs of degree in both Old Saxon and Middle Low German, and the history of these adverbs. Finally, section 5 addresses the central problem regarding the degree of continuity between the two languages and evaluates the two hypotheses.

2. Background.

2.1. Old Saxon.

Old Saxon is a West Germanic language attested from the 9th century until around 1050. It sits at the intersection between North Sea Germanic and Continental West Germanic, sharing features with both. Old Saxon is commonly described as having no unique innovations of its own (Nielsen 1981:255) and is perhaps best defined in the negative: "not High German, nor Frisian, nor Dutch" (Stiles 2013:20). The term *Old Saxon* is generally favored over *Old Low German*, because the latter term is also sometimes used to include Old Dutch as well as Old Saxon to contrast these languages with Old High German, as neither of them participated in the High German Consonant Shift (Krogh 1996:83–84). *Old Saxon* is therefore a more specific term. The language is commonly associated with the Saxon tribes, who likely originated in present-day Holstein and were part of a shared culture and dialect continuum with the Angles and the Frisians (Krogh 1996:109–110, Peters 2012:446). This continuum was subsequently broken with the departure of the Anglo-Saxons to Great Britain in the 5th century (Krogh 1996:109). In the 6th and 7th centuries, the Saxons migrated southward and dominated various Continental West Germanic tribes in later Westphalia, Eastphalia, and Angria (Peters 2012:446). Following a series of wars with the Franks between 772 and 804, the Saxons were ultimately subjugated by Charlemagne and were made to convert to Christianity (Krogh 1996:107–108, Peters 2012:448).

The Old Saxon language is primarily known from the *Heliand*, a gospel harmony written in Germanic alliterative verse composed in the first half of the 9th century, which places it not long after the subjugation period. This text survives in two more or less complete manuscripts: the *Monacensis* (M) from the second half of the 9th century (Doane 1991:44) and the *Cotton Caligula A. VII* (C) likely produced in England or at least by an Anglo-Saxon scribe, an assessment based primarily on paleographical evidence (Priebsch 1925:35). Additionally, there are four surviving fragments (Cathey 2002:22–24, Schmid 2006), indicating that the text was quite widespread. The most notable of these fragments is the *Straubing* fragment (S), which is the manuscript with the most North Sea Germanic features including ones that appear to resemble Old Frisian (Nielsen 1988, Klein 1990, Versloot & Adamczyk 2017).[1]

Outside of the *Heliand*, a number of smaller Old Saxon fragments survive. The most notable of these is a poetic version of *Genesis* that is slightly newer. This text survives in three separate fragments written in essentially the same dialect as the *Heliand* (Doane 1991:45). Additionally, *Genesis* famously survives in an Old English translation known as *Genesis B* (615 lines) that is rather crudely inserted into *Genesis A* (an unrelated poem). It also fully overlaps with Fragment 1 (26 lines), but its narrative does not reach the contents of Fragments 2 or 3 (the three Old Saxon fragments contain 330 lines when combined).[2] The existence of both *Heliand C* and *Genesis B* attests to a connection between the Old English and Old Saxon textual traditions, though the exact circumstances in which these manuscripts were produced remain speculative. A number of nonliterary fragments also survive, the longest of which is the 11th-century *Freckenhorster Heberegister* from north-

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[1] For example, nonumlauted Proto-Germanic ⁺*eu* frequently appears in *Heliand* S as *ia*, as opposed to *io* in C and M, and ⁺*au* is often reflected as *â*, as opposed to *ô* (Nielsen 1988:256, 265, Klein 1990:202–203). These developments are shared with Old Frisian, but the similarities may be superficial (Nielsen 1988:265, Klein 1990:218–220). See Nielsen 1988 and Klein 1990 for an overview and evaluation of the linguistic features of this fragment. Versloot & Adamczyk (2017:145) hypothesize that its language represents an early stage of Eastphalian instead.

[2] For an elaborate comparison between the two versions, see Doane 1991:55–64.

eastern Westphalia (Klein 1990:201), though none of them contain any adverbs of degree.[3]

While the different manuscripts show great orthographic variation, it is unclear if these represent dialectal variation or influence from other scribal traditions: As Fulk (2018:29) states, it is impossible to establish distinct dialects for Old Saxon. Yet, a distinction between west and east has been observed for the nonliterary fragments (Versloot & Adamczyk 2017). The largest part of the Old Saxon fragments comes from the southwest, mainly Essen and Werden (Versloot & Adamczyk 2017:128).

The Old Saxon written language contains a mixture of North Sea Germanic and Continental West Germanic features, but interpretations of what exactly this implies differ. Collitz (1901:133–134) argues that this combination of features in the *Heliand* points to it having been written in an artificial literary language akin to Homeric Greek, one that is derived from early Germanic epic poetry. For example, Old Saxon's 1st person singular preterite indicative form of *kunnan* 'to know' is the Franconian form *konsta*, with a retained nasal before the spirant -*s*-, in addition to other forms with the sound combination -*nst*- (Collitz 1901:130–131). However, Collitz (1901:131) points out that in other words nasals are generally lost before spirants, as in Old English and Old Frisian (see section 2.3)—an unusual combination of features not found in any later dialect; moreover, no later dialect possesses a reflex of *konsta* while also showing evidence of nasal deletion in relevant contexts.[4] He further argues that the fact that smaller Old Saxon fragments are written using a similar mix of features shows that the language was not created extemporaneously (for example, by having a speaker of one dialect copy a text written in another and blending the two), as the variation is consistent. For example, the Franconian form *bigonsta* 'began' (with a retained nasal) is attested alongside *othra* 'other' (with a deleted nasal) in the *Essen Confession* (Collitz 1901:133).

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[3] For an overview of the Old Saxon corpus, see Krogh 1996:111–138.

[4] *Konsta* coincides with Middle Dutch *conste* (VMNW 2015, S.V. *connen*) but differs from Middle Low German *künde*, *konde* (never +*konste*), based on the REN 2019. Old High German generally has *konda*, but an isolated *konsti* is found in *Otfrid*, based on the *Old German Reference Corpus* (Donhauser et al. 2018).

This view is broadly shared by Doane (1991:45), who points to the fact that *Genesis* was written in a mostly identical dialect to argue that "there seems to have been for a brief time an artificial language for alliterative poetry that was used by at least two poets." However, Doane (1991:45–46) speculates that this grapholect was developed under the influence of Franconian scribal traditions and Old English poetry, leading to a language that was widely understood at the time, which Doane describes as "idealized Saxon speech" (p. 45).

It is conceivable that contact with Old English occurred in monasteries, because Anglo-Saxon scribes were active in German monasteries in the 8th and 9th centuries, particularly in the Rhineland, Hesse, and Thuringia (see McKitterick 1989), which may have influenced the Old Saxon written language. Rooth (1973:238–244) argues that genuine North Sea Germanic phonological outcomes and inflectional endings are often obscured by Franconian orthography (including hypercorrect substitutions of Franconian <uo> for <o> in *Heliand* C), and he states that the language of the *Heliand* was born in a Franconian cultural environment. The mixed character of Old Saxon would thus be more a product of Franconian orthographic influence. The scribal influence from both Old English and Franconian allow for the interpretation of written Old Saxon as a literary grapholect.

Others, however, do not presuppose that written Old Saxon was an artificial language; instead, they attribute the mixture of forms to prolonged influence from High German, where the more North Sea Germanic features have been gradually replaced by Continental ones (Wolff 1934:154, Stiles 1995:202, Braunmüller 2007:32, Stiles 2013:20). The exact timing of this influence has been a matter of some debate. According to Stiles (2013:20), it predates the written record and continues throughout the Middle Ages and into modern times. This influence should therefore already be present to a degree in Old Saxon, it should continue during the transition to Middle Low German, and it should continue to affect the development of Middle Low German.

In contrast, Krogh (1996:403–404) argues that Old Saxon's position between Continental and North Sea Germanic is as old as the common West Germanic period, and that influence from High German only began after the subjugation of the Saxons. Versloot & Adamczyk (2017:126) also argue for early linguistic stability, pointing to Old Saxon's lack of early unique innovations as evidence. However, Peters (2012:447)

considers it likely that dialect mixing with Continental West Germanic languages occurred when the Saxons migrated southward and dominated the other tribes. Regardless, it is generally agreed that the underlying structure of Old Saxon comes from North Sea Germanic (or from a transitional dialect) and that it was subsequently subject to High German/Franconian influence (Wolff 1934, Rooth 1973, Doane 1991:45, Krogh 1996:403–404, Krogh 2013, Stiles 2013). This approach gives rise to the other hypothesis considered here, namely, that the apparent lack of continuity between Old Saxon and Middle Low German is due to the influence of High German that continued to affect the developmentary trajectory of Low German.

2.2. Middle Low German.
Middle Low German is considered to be the successor to Old Saxon, at least as far as the spoken language is concerned. Its attestation period begins around 1200, following a hiatus of around 150 years after the last Old Saxon fragments, and ends around 1650 (Peters 2000:1420). Compared to Old Saxon, Middle Low German has expanded northward, toward the northwest, and eastward into Slavic territories (*Ostsiedlung*), but it lost some territory in the southeast (Peters 2000:1409–1410, 1415–1418; Peters 2012:454).[5] Like other Middle Germanic languages, Middle Low German is characterized by a reduction of unstressed vowels, which also led to a reduction of the inflectional morphology when contrasted with Old Saxon. Section 2.3 further discusses the continuity between the two.

Unlike Old Saxon, Middle Low German clearly comes in a variety of dialects. The following groups are traditionally distinguished, based on Lasch 1974:13–20: Westphalian, Eastphalian, North Low Saxon, Brandenburgish & East Anhaltish (South Markish).[6] Due to the nature of the language of the *Heliand*, as described in section 2.1, it is difficult to determine which Middle Low German dialect is expected to show the greatest continuity with it. Versloot & Adamczyk (2017:146) claim that the language of the *Heliand* represents a south-western variety of Old

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[5] The exact borders of the Middle Low German territory are somewhat unclear. See Peters 2012:454–455 for details.

[6] The ReN 2019 makes additional subdivisions for these dialects.

Saxon, but if it is, in fact, a literary grapholect, such a question may be moot.

The written version of Middle Low German, however, does not continue the Old Saxon orthographic conventions (Peters 2000:1409). By 1370, Middle Low German had become the lingua franca of the Hanseatic League, which marks the beginning of a classical period and coincides with the written language becoming more conventionalized. The dialect of Lübeck (North Low Saxon mixed with features from other dialects) became the dominant dialect during this period (Peters 2000:1414–1415; Peters 2012:453). Preclassical Middle Low German texts are perhaps the most accurate reflection of the spoken language, postdating influence from a potential Old Saxon literary grapholect and predating the Lübeck conventions. At the beginning of the 16th century, a shift began toward High German as the main written language, which was completed around 1650 and which coincides with the decline of the Hanseatic League (Sodmann 2000:1505–1506, 1509). This shift occurred across all domains, though at different times (see Sodmann 2000).

The dialect that was most often used for writing shifted multiple times during the Middle Low German period. In the 13th century, this was Eastphalian, but by the 14th century, Westphalian and North Low Saxon dialects had become more prominent due to the emergence of religious literature in these areas (Cordes 1983:352). During the 15th century, the center shifted firmly to Lübeck and the northeast in general (Cordes 1983:352), and most Middle Low German texts are from this period due to the prominence of the Hanseatic League (Meier & Möhn 2000:1471). As Middle Low German writing declined during the 17th century, it was the north that held on to it the longest (Cordes 1983:352). See Cordes 1983 for an overview of the Middle Low German corpus in general and Meier & Möhn 2000 for an overview of the classical period specifically.

2.3. The Loss of North Sea Germanic Features in Middle Low German.

As mentioned in the introduction, Old Saxon shows more North Sea Germanic innovations than Middle Low German, which poses a potential problem for linguistic continuity between the two languages. This apparent lack of continuity is often explained as further influence from High German (see Stiles 2013); but it could also arise because written Old Saxon was an artificial language that did not reflect actual speech.

When discussing potential High German influence, it is important to note that language contact in the medieval period fundamentally differs from language contact in modern times, as full bilingualism is thought to have been comparatively rare (Braunmüller 2007:27). As such, receptive multilingualism was the norm, and the absence of standard languages meant that dialect mixing was likely considerably more common (Braunmüller 2007:32). The contact between Low German and High German in this period is therefore best described as dialect contact, as used by Trudgill (1986:1–2), rather than language contact. The latter generally involves bilingualism, while the former describes contact between varieties that are at least partially mutually intelligible (1986:1–2). A common pattern in dialect contact is LEVELING—a process in which marked features tend to be lost over time—which can apply to phonology, morphology, and the lexicon (Kerswill & Williams 2011:88). One important concept here is SALIENCE, as those features that are strongly regionally marked or stigmatized are typically avoided (Trudgill 1986:11, Kerswill & Williams 2011:89).[7] Which features are considered salient is primarily determined by sociolinguistic factors (that is, stigma and prestige) rather than linguistic ones (such as phonetic distance; Kerswill & Williams 2011:105–106). When applied to the contact situation between Low German and High German, this principle could account for the apparent loss of North Sea Germanic features in Middle Low German in favor of more Continental ones that are also present in High German and Dutch. Three North Sea Germanic features relevant for this comparison are discussed in detail below:[8]

(i)   deletion of nasals before spirants;
(ii)   uniform plural ending in verbs;
(iii)   absence of a separate reflexive pronoun.

Like Old English and Old Frisian, Old Saxon shows deletion of nasals before spirants followed by compensatory lengthening of the preceding vowel. This can be seen in table 1 below, where the forms in these languages are contrasted with their counterparts in Proto-Germanic

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[7] See Kerswill & Williams 2011 for an overview of the concept of salience.

[8] For a more detailed overview, see Stiles 2013 and Nielsen 1981.

and Old High German, though this change is not entirely consistent.[9] In contrast, these nasals are generally present in Middle Low German, although there are exceptions here as well. For example, *uns* is generally found in place of Old Saxon *ûs* 'us' (Stiles 2013:19), but Lasch (1974:215) notes that *ûs* still occurs, particularly in early preclassical texts and that it is completely absent in South Markish.[10] The presence of these nasals in Middle Low German could be explained as restoration by assuming that the resulting elongated vowels were still nasalized in Old Saxon after the deletion of the nasal consonant, which could have triggered said restoration (Stiles 2013:20). This restoration process, however, would not have been regular: First, even after restoration, a number of Middle Low German forms still contain no nasal in these positions. Some of these forms are shared with Middle Dutch, as shown in table 1. Second, restoration did not affect all the forms of the same word. For example, the Middle Low German word for 'goose' often appears as *gôs*, but the plural is often *gense* (Lasch 1974:143). The word for 'goose' is not attested in Old Saxon in either the singular or the plural. Note that a loss of nasals before Proto-Germanic [+]*h* is found in all Germanic languages, as can be seen in the 1st person singular preterite indicative form of Old High German *denken* 'to think', which is *dâhta* (Braune 2018:168), but this predates the North Sea Germanic development. The unexpected forms in table 1 are in boldface.[11]

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[9] More examples of Old Saxon and Middle Low German pre-spirant nasal loss can be found in Krogh 1996:230–232.

[10] Non-nominative forms without Proto-Germanic [+]*-n-* appear 103 times out of 2,053 in the ReN 2019.

[11] The Proto-Germanic forms are based on Kroonen 2013.

Proto-Germanic	Old Saxon	Middle Low German	Middle Dutch	Old English	Old Frisian	Old High German	Gloss
⁺*uns(e)*	*ûs*	*uns, ûs*	*ons*	*ûs*	*ûs*	*uns*	'us'
⁺*anþara-*	*ôðar*	*ander*	*ander*	*ôþer*	*ôther*	*andar*	'other'
⁺*tanþ-*	**tand**[12]	*tant*	*tant*	*tôþ*	*tôth*	*zan*	'tooth'
⁺*sunþera-*	*sûðar*	**sûder**	**sûder**	*sûþor*	*sûther*	*sundar*[13]	'south'
⁺*samþu-*	*sâft, sâfti*	**sachte**	**sachte**	*sôfte, sêfte*	*seft*	*samft, samfti*	'soft'
⁺*fîmfe*	*fîf*	**vîf**	**vîf**	*fîf*	*fîf*	*fîmf*	'five'

Table 1. The loss of the etymological ⁺-*n*- before spirants
compared between different West Germanic languages.

The next North Sea Germanic feature that sets apart written Old Saxon and Middle Low German is the so-called UNITY PLURAL (*Einheitsplural*)—a uniform ending in plural forms of verbs. In Old Saxon this ending is -*að* (compare Old English -*aþ*, Old Frisian -*ath*) for all three persons in the present indicative (Gallée 1993:246). Note that a unity plural is also found in Middle Low German, but it looks very different. Broadly speaking, in western dialects this ending is -*et*, while in eastern ones it is -*en* (Lasch 1974:226–227). The ending -*et* corresponds to Old Saxon -*að*; the ending -*en* becomes more prominent during the classical period due to influence from the Lübeck variety (Peters 2000:1414). Crucially, forms ending in -*n* are not attested in any of the Old Saxon texts; instead, the endings -*ad* and -*ed* are used interchangeably, based on data from the Old German Reference Corpus (Donhauser et al. 2018). Examples from the *Freckenhorster Heberegister* include *harad* (29) and *hared* 'hear' (24); in the *Gernroder Predigt*, there are examples including *sprekad* 'speak' (5.7.3) and *hebbed* 'have'

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[12] Note that Old Saxon *tand* cannot be a native form, since the expected outcome would be ⁺*tôð*. It is also restricted to a single attestation in the *Heliand* in the dative plural form *tandon*, based on data from the *Old German Reference Corpus* (Donhauser et al. 2018).

[13] Note that Modern German uses *Süd*, which must be a borrowing from either Dutch or Low German (DWB 1971, s.v. *Süd*).

(5.10.18). [14] By contrast, Old High German maintains three distinct endings: *-emês/-ên*, *-et*, *-ent* for 1st, 2nd, and 3rd person, respectively (Braune 2018:356), and Middle Low German *-en* bears resemblance to the 1st person singular form.[15]

Finally, the absence of a separate reflexive pronoun is another North Sea Germanic feature (Nielsen 1981:114) exhibited by Old Saxon. In relevant contexts, written Old Saxon exclusively uses 3rd person personal pronouns in place of reflexives (Gallée 1993:237), as shown by an example from the *Heliand*, in 1a (though an isolated High German *sih* is found in the *Essener Evangelienglossen*; Krogh 1996:325). [16] By contrast, Middle Low German does have a separate reflexive, *sik* (or *sick*; Lasch 1974:213), as shown by an example from Westphalian Middle Low German, in 1b.

(1) a. that he   **ina**   obar   thesan
     that he-NOM.SG HE-ACC.SG across this-M.ACC.SG

     middilgard   mârean   scolda
     middle-earth-ACC.SG proclaim-INF must-3SG.PRET.IND

     'That he had to proclaim himself across this middle-earth.'   (853)

   b. vnde dat he   **sick** vake myt   gode
     and   that he-NOM.SG REFL often with God-DAT.SG

     vereenyghe
     connect-3SG.PRES.SBJV

     'And that he may often connect himself with God.'
                           (Veghe Predigten 1492, 12vb,35-12vb,36)

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[14] Note that this text also displays Proto-Germanic $^{+}au > â$, as is also the case in *Heliand* S (Klein 1990:202).

[15] These Old High German endings are the ones found in strong verbs in *Tatian*, but other texts can show different endings; see Braune 2018:356 for details.

[16] Unless stated otherwise, quotations from the *Heliand* and *Genesis* are based on the diplomatic edition by Behaghel & Taeger (1996).

Stiles (2013:20) and Wolff (1934:139) use the Middle Low German reflexive *sik/sick* as an example of High German influence, which must have occurred during the transition from Old Saxon to Middle Low German. Note, however, that this requires an explanation as to how Old High German *sih* or Middle High German *sich* had its final consonant replaced with the etymologically correct *-k* (compare Gothic *sik*), especially considering that Middle Dutch straightforwardly borrowed the High German form *sich* (Krogh 1996:323–326). Krogh (1996:326–327) argues instead that the reflexive pronoun *sik* may have been preserved in Eastphalian Old Saxon and is therefore a native form. This view is supported by the observation that the accusative forms of 1st and 2nd person singular personal pronouns *mik* and *thik/dik*, which are derived in a similar way, also show a final *-k* where High German has a final *-(c)h*. Both Old Saxon and Middle Low German use their respective pronoun forms inconsistently, and they often have the dative forms *mî* and *thî/dî* in place of expected accusatives.[17] The forms with final *-k* also tend to be common in Eastphalian, though Peters (2012:453) notes that this is not always reflected in writing in Middle Low German. The downfall of the accusative forms *mik* and *thik* has been given as the reason for the loss of the reflexive [+]*sik* in Old Saxon, since it would no longer fit with the other forms (Wolff 1934:139). If [+]*sik* were only preserved in a part of the Old Saxon language area, its usage may have been suppressed in writing (Krogh 1996:326).

These differences between Old Saxon and Middle Low German place the latter closer to the Continental West Germanic languages than the former. The question remains whether High German influence alone can truly account for all of these discrepancies. Alternatively, they could also indicate that the Old Saxon literary language may not be a direct predecessor of Middle Low German. One angle that has not yet been

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[17] Based on data from the Old German Reference Corpus (Donhauser et al. 2018), the accusative *mik* appears four times in *Heliand* and twice in minor fragments out of 50 1st person accusatives, and *thik* occurs eight times in *Heliand* out of 51 2nd person accusatives and once as *thic*. In the Low German part of the ReN 2019, *mik* (and other variants with final *-k*) occurs 212 times out of 4,436 1st person accusatives, and *dik* (and variants) 104 times out of 2,738 2nd person accusatives.

considered is continuity between the adverbs of degree in Old Saxon and Middle Low German, which may provide further insights in this matter.

2.4. Adverbs of Degree.

To investigate a potential lack of continuity between Old Saxon and Middle Low German using the data from degree adverbs, let me first discuss degree adverbs in general—their usage patterns and how they tend to change over time. Individual adverbs of degree come with their own restrictions on usage, which include syntactic ones, such as sensitivity to the lexical category of the modified phrase, and semantic ones, such as sensitivity to negative or positive polarity (see Klein 1998:8–14, 71, 85, among others). The former is illustrated in 2, which shows that this restriction is subject to crosslinguistic variation: English *very* can combine with adjectives, as in 2a, but not with verbs, as in 2b (Klein 1998:12–13), while German *sehr* 'very' can combine with both, as in 2c,d. However, *sehr* cannot combine with comparative adjectives, while *viel* 'much' can, as shown in 2e.

(2) a. I am very happy.
    b. *I appreciate it very

    c. Ich   bin   sehr   froh.
       I-NOM.SG be-1SG.PRES.IND very happy
       'I am very happy.'

    d. Ich   schätze   es   sehr.
       I-NOM.SG appreciate-1SG.PRES.IND it-ACC.SG very much
       'I appreciate it very much.'

    e. Paul ist   viel/*sehr   dicker
       Paul be-3SG.PRES.IND much/*very fat-CMPR

       als   seine   Frau.
       than his-F.NOM.SG wife
       'Paul is much fatter than his wife.'   (Löbner 1990:150)

    The semantic restriction—adverbs' sensitivity to polarity—is illustrated in 3. *Polarity* in this context refers to both polarity of the environment (that is, whether or not the sentence is negated) and the

inherent polarity of the modified phrase.[18] Examples of adverbs that display sensitivity to each type of polarity are given in 3a,b and 3c,d, respectively.

(3) a. John is rather confident.
    b. *John is not rather confident.
    c. John is a little rude.
    d. *John is a little polite.

Sensitivity to inherent polarity is likely due to the original lexical meaning of the adverb in question (Klein 1998:79). It is also noteworthy that sensitivity to different types of polarity does not always play out as a hard restriction; it can also be a tendency.

As stated in the introduction, the present study focuses on two types of adverbs of degree: adverbs of high degree (boosters), which are those that strengthen a statement (for example, *very*, *exceedingly*), and adverbs of absolute degree (maximizers), which indicate that a quality is wholly present (for example, *completely*, *fully*). One clear difference between the two types of adverbs is that the latter require closed-scale adjectives and adverbs (that is, endpoint-oriented modifiers), as in 4a, while the former require open-scale ones (that is, those without an endpoint; Kennedy & McNally 2005), as in 4b.

(4) a. The door is ??very/fully **open**.
    b. The door is very/*fully **large**.

Klein (1998) and Van Os (1988) make an additional distinction between high degree and extremely high degree adverbs. Additionally, one can distinguish adverbs of low degree (downtoners), which weaken a statement (for example, *hardly*, *somewhat*). These additional distinctions are less relevant for this analysis.

The semantics of degree adverbs is generally likely to change over time, and these changes tend to follow a particular grammaticalization pattern. Specifically, degree adverbs first tend to expand in usage (that is, they become capable of modifying a wider variety of categories), while their lexical meaning is bleached over time (Klein 1998:25–26, Lorenz

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[18] A list of criteria to judge inherent polarity can be found in Klein 1998:72.

2002:144, Hopper & Traugott 2003:104). Afterwards, they become restricted to a specialized usage as new adverbs of degree emerge (Bolinger 1972:18). Thus, at any given point in time, different adverbs show different degrees of grammaticalization (Bolinger 1972:22, Lorenz 2002:145). An example of a highly specialized adverb is *veel* 'much' in Dutch: In Middle Dutch, as *vēle*, it was capable of modifying a wide variety of categories, but now it is restricted to comparatives and comparative-like constructions (Visser & Hoeksema 2022:204–205, 212). This development path is similar to the one of *viel* in Modern German.

It has generally been observed for High German (Van Os 1988), English (Stoffel 1901), and Dutch (Hoeksema 2011) that the number of adverbs of degree began to increase in the Early Modern period, while before then their number was fairly stable. This stability is illustrated by the situation in Old and Middle High German, as shown in table 2 below. The table provides an estimation of the relative distribution of five adverbs of high degree per century in percentages, along with the total number of attestations for each century. The numbers are based on data from the *Old German Reference Corpus* (Donhauser et al. 2018) and the ReM (Wegera et al. 2016), including both annotated and unannotated data (see section 3.2). For Middle High German *vile*, only instances in which it modified adjectives and adverbs were included, as its status as a verb modifier can be ambiguous (see section 4.1).

Adverb	Translation	Century						
		8th	9th	10th	11th	12th	13th	14th
filu/vile	'much, very'	25.00	54.48	60.00	63.28	75.97	72.91	59.50
harto/harte	'very, firmly'	0	33.74	40.00	35.94	17.91	13.03	20.46
sêro/sêre	'very, sorely'	0	.70	0	.78	5.51	13.12	19.71
mihhil/michel	'much'	0	.70	0	0	.62	.95	.32
drâto/drâte	'very, quickly'	75.00	10.37	0	0	0	0	0
Attestations		4	569	5	128	3,233	3,270	1,857

Table 2. Relative distribution of five adverbs of high degree
per century in percentages.

The adverb *filu/vile* 'much, very' remains the most dominant adverb of high degree throughout the Old and Middle High German periods, and *harto/harte* 'firmly, very' remains the second most frequent one, though note that data from the 8th and 10th centuries are scarce. The largest

changes are the increase in usage of *sêre* 'very, sorely', which begins after 1150, and the decline in usage of *drâto* 'very, quickly' as an adverb of degree (though *drâte* remains in use in Middle High German with the meaning 'quickly'; Lexer 1992, S.V. *drâte*).[19] In Old English, *swîþe* 'very, strongly, quickly' is the most dominant adverb of high degree followed by *ful* 'fully, very' (Méndez-Naya 2003).[20] Usage of *swîþe* continues throughout the Middle English period, though it is overtaken by *ful* around 1250 as the more dominant adverb (Méndez-Naya 2003:386). Usage of *swîþe* begins to decline after 1350, though examples are still found until 1525 (Méndez-Naya 2003:379, Mustanoja & Van Gelderen 2016:325–330). While in the medieval period, English is known for having been subject to considerable outside influence, it still displays a certain stability in its system of adverbs of degree. As such, at least a similar extent of continuity would be expected between Old Saxon and Middle Low German, if the latter is a direct successor to the former. The usage of Old English *swîþe* and High German *filu*/*vile*, *harto*/*harte*, and *sêro*/*sêre* is discussed in more detail in section 4, in relation to their Old Saxon and Middle Low German counterparts.

Using the observations on degree adverbs outlined above—in particular, on how they tend to change over time—the present study seeks to account for the apparent lack of continuity between Old Saxon and Middle Low German. As stated in the introduction, two hypotheses are examined: This apparent lack of continuity is due to i) High German influence on Middle Low German or ii) the artificiality of written Old Saxon. The basic premise is based on how language continuity is understood: If the system of adverbs of degree in written Old Saxon is a direct predecessor of the Middle Low German system, there should be a

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[19] *Drâte* 'quickly' is found 192 times in the ReM (Wegera et al. 2016), and only as a verb modifier, mainly with those verbs that denote motion, such as *gân* 'to go' (18x), *komen* 'to come' (18x), and *îlen* 'to hurry' (12x). In Old High German, *drâto* is also found with adjectives such as *mihhil* 'big' (5x), based on data from the *Old German Reference Corpus* (Donhauser et al. 2018).

[20] This paper uses a regularized system to mark vowel length for all languages despite the conventions that might exist for any individual language: A circumflex marks a vowel that was long during the Old Germanic period, while a macron marks a vowel that underwent open-syllable lengthening. Hence, Middle Low German *sêre* 'very' and *vēle* 'much, very'.

direct line from the former to the latter, and common Old Saxon adverbs of degree should still appear in Middle Low German, possibly with a specialized usage. Also, any variation in the use of degree adverbs should be similar to variation observed in English and High German discussed above. An overview of the adverbs included in the analysis is given in section 3.2 below. While adverbs of degree on their own are not enough to make definitive claims about the nature of written Old Saxon, they do provide new insights into the continuity between the two languages.

3. Method.

The list of corpora used for the analysis can be found in table 3. The *Old German Reference Corpus* (Donhauser et al. 2018) contains a complete record of Old High German and Old Saxon, while the ReN (2019) contains a selection of Middle Low German material. The latter also includes Rhinelandic material, but this was not included in the analysis.[21] The corpora listed in table 3 were searched for Old Saxon and Middle Low German adverbs. High German and Old English data were also collected from the corpora and are included for reference.

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[21] Rhinelandic material from the 13th century was analyzed by Visser & Hoeksema (2022) as part of Early Middle Dutch. It was not included because the unity plural (see section 2.3) is usually seen as the main isogloss separating Middle Low German and Middle Dutch (Marynissen & Janssens 2012:85). Rhinelandic has the endings *-en*, *-et*, and *-en* for 1st, 2nd, and 3rd person, respectively, based on data from the ReN 2019. This places it on the Middle Dutch side.

Corpus	Tokens
Old German Reference Corpus (Donhauser et al. 2018)	Old Saxon: 85,590[22] Old High German: 357,593
Reference Corpus Middle Low German/Low Rhenish (ReN Team 2019)	Middle Low German: 1,179,378 Rhinelandic: 88,812
Reference Corpus of Middle High German (Wegera et al. 2016)	Middle High German: 2,172,960
The York-Toronto-Helsinki Parsed Corpus of Old English Prose (Taylor et al. 2003)	Old English: 1.5 million
The York-Helsinki parsed corpus of Old English poetry (Pintzuk & Plug 2001)	Old English: 71,490

Table 3. The corpora used for the analysis
along with the number of tokens for each language.

The adverbs included in the analysis are presented in table 4. The Old Saxon list is based on the *Heliand* and *Genesis*, as adverbs of degree are not attested outside of these texts. Four marginal adverbs were excluded: *fasto* 'firmly, very', *firinun* 'very', *thurhfremid* 'completely', and *unmet* 'immensely', as they were attested with very few tokens, and the status of *fasto* as an adverb of degree is unclear.[23] The Middle Low German list includes all the adverbs listed for Old Saxon as well as those adverbs that allow for a comparison with Middle Dutch, Middle High German, and Middle English.

Degree	Old Saxon	Middle Low German
High	*swîðo, sêro, tulgo* 'very' *hardo* 'very, frimly' *filu* 'much, very'	*swinde* 'strongly' *sêre* 'very' *harde* 'very, firmly' *vēle* 'much, very' *ûtermâte* 'exceedingly' *grôtlîk* 'greatly'
Absolute	*garo* 'fully'	*gār, gans* 'fully'

Table 4. The adverbs of degree included in the analysis
for both languages.

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[22] This count excludes the *Wachtendonck Psalter*, since it is considered to be Old Low Franconian/Old Dutch.

[23] See Goering 2021 on *unmet* and its cognates.

The following information was collected for each token: adverb degree, the modified phrase, and the polarity of the environment. For the modified phrase, its lexical category, corpus frequency of the lemma, its Modern English translation, and its inherent polarity were included. When recording the lexical category of the modified phrase, adjectives and adverbs were further subdivided into positives, comparatives, superlatives, and those modified by the equivalent of *too*. Tokens where the modified phrase was another adverb of degree were treated as a separate category. Both the adverb and its modified phrase were recorded in their original spelling and in a normalized spelling based on the normalization used in the respective corpus. Meta information such as the text, context, lines, century, dialect, and writer (if known) was also recorded.

For Old Saxon, all information was collected manually. For Middle Low German and Middle High German, this was done using a script written in R (R Core Team 2020) to read files generated by the corpora's Grid Exporter because of the larger corpus size. It finds the modified phrase by looking for the nearest eligible word within the clause starting with the word directly to the adverb's right. Other adverbs directly to its left were excluded to prevent two adverbs from potentially modifying each other; auxiliary verbs and other function words were also excluded. A similar script was used for Old English. These scripts were unable to find the English translation or the inherent polarity of the modified phrase, as this information was not directly included in the corpora. For adverbs with a small number of attestations, this information was collected manually, and faulty information was corrected when necessary. For those with a large number of attestations, this was done only for entries with a pair frequency of 5 or greater for Middle Low German and Middle High German combined. For entries from Middle Low German texts of which the corpus contains multiple different versions, only the occurrence from the oldest version was included in the analysis, unless either the adverb or the modified phrase differed between versions.[24] In the latter case, the occurrences from both versions were included.

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[24] Two different recording of *Flos unde Blankeflos* (the Stockholm and Helmstedt manuscripts) contained overlapping entries, and the same was true for three different Bible translations (the Lübeck, Cologne, and Halberstadt Bibles).

Afterwards, the usage of each of the adverbs listed in table 4 was analyzed, and cognates between Old Saxon and Middle Low German were compared. The different adverbs from the two languages are listed in section 4. The analysis was based on a total of 1,284 database entries (132 for Old Saxon and 1,152 for Middle Low German). Additional comparisons were made with other Germanic languages, most notably High German, English, and Dutch when appropriate. When possible, the adverbs' histories were also outlined.

4. Results.

4.1. Adverbs of High Degree.

Table 5 shows the distribution of categories for the adverbs of high degree in Old Saxon, and table 6 does the same for Middle Low German, which is necessary in order to explore potential differences in usage between the two languages. These adverbs are discussed individually below.

Adverb	Total	Adj.Pos	Adv	Verb	Ptc	PP
swîðo	84	32	18	12	10	12
filu	14	3	0	10	1	0
hardo	12	1	0	6	2	3
tulgo	10	6	4	0	0	0
sêro	4	1	0	2	1	0

Table 5. The distribution of categories
for the adverbs of high degree in Old Saxon.

Adverb	Total	Adj. Pos	Adj. Comp	Adj. Sup	Adj. Too	Adv	Adv. Deg	Verb	Ptc	PP
sêre	432	134	0	0	0	15	1	203	79	0
vēle	299	149	24	8	6	84	15	3	3	7
ûtermâte	52	33	0	0	0	3	13	0	3	0
harde	43	23	0	0	0	13	7	0	0	0
grôtlîk	14	0	0	0	0	0	0	9	5	0
swinde	2	0	0	0	0	0	0	2	0	0

Table 6. The distribution of categories
for the annotated adverbs of high degree in Middle Low German.

The most commonly used Old Saxon adverb of high degree is *swîðo* 'very', which resembles Old English *swîþe*, as described in section 2.4. Old Frisian also uses *swîthe*, though it is relatively infrequent compared to other adverbs of high degree, based on data from the *Corpus Old Frisian* (Van de Poel 2019).[25] At the same time, its expected Old High German cognate [+]*swindo* is not attested, and the same holds true for Middle High German. It is also not found in Middle Dutch as an adverb of degree, but an isolated example is found in the Old Low Franconian *Wachtendonck Psalter* in the form *suitho* (Quak 1981:167), which also displays a loss of the etymological [+]*-n-*.[26] Its Gothic cognate, *swinþs* 'strong', is exclusively attested as an adjective. It is therefore likely that usage of this adverb is a feature of North Sea Germanic.

As is shown in table 5, *swîðo* is most often attested modifying adjectives, adverbs, verbs, prepositional phrases, and participles. Méndez-Naya (2003) documented the usage of *swîþe* in Old and Middle English, and the distribution of categories is similar to Old Saxon. In total, Old and Middle English *swîþe* modifies adjectives and adverbs 708 times, verbs 318 times, and participles 105 times (Méndez-Naya 2003:380). This similarity in usage is illustrated in 5; 5a comes from the *Heliand* and 5b from the Old English *History of the Holy Rood-Tree*.

(5) a. Thô uuarð   im   is   hugi
       then become-3SG.PRET.IND he-DAT.SG his heart-NOM.SG

       suîðo blîði   an is   briostun
       very   joyous in his breast-DAT.PL
       'Then his heart became very joyous to him in his chest.'

                                                                                   (473–474)

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[25] The *Corpus Old Frisian* (Van de Poel 2019) contains four unique instances of *swîthe* against twenty instances of *sêre* as an adverb of degree for example. *Swîthe* is found with adjectives and verbs.

[26] It is possible that this word survives as an adverb of degree in eastern dialects of Modern Dutch in the form *swiet* (see Weynen 1998:180–181). Note that the form *suitho* is found in Lipsius's word list and not in one of the surviving Psalms, and it appears as a gloss for Latin *nimis* 'very much, exceedingly' (Quak 1981:167). See Quak (1981) for an overview and edition of the *Wachtendonck Psalter*.

b. þa   wearð   he   swiðe bliðe   on his
   then   become-3SG.PRET.IND   he-NOM.SG   very   joyous   in   his

   mode
   mind-DAT.SG
   'Then he became very joyous in his mind.'

                                   (LS_5_[InventCrossNap]:38.30)

All attestations of Old Saxon *swîðo* modifying prepositional phrases occur as part of the fixed collocation *swîðo an sorgun* 'very much in sorrows', which appears once in *Genesis* and eleven times in the *Heliand*. While this usage is not listed by Méndez-Naya, instances can be found in the Old English corpora that show *swîþe* modifying similar prepositional phrases, as illustrated in 6, in which the example from the *Heliand* in 6a can be compared with the example from *Ælfric's Catholic Homily for Martinmas* in 6b.

(6) a. uuas   im   iro   hêrron
       be-3SG.PRET.IND   they-DAT.PL   their   Lord-GEN.SG

       dôð   suîðo   an sorgun
       death-NOM.SG   very much   in   sorrow-DAT.PL
       'Their Lord's death was very sorrowful to them.'   (2801–2802)

   b. sume   eac geomerodon   swiðe
      some-NOM.PL   also mourn-3PL.PRET.IND   very much

      on mode[27]
      in   spirit-DAT.SG
      'Some also mourned very much in spirit.'

                                   (ÆCHom_II,_39.1:293.170.6644)

There are two instances in which *swîðo* appears in the comparative, and both instances are with verbs: *farwirkian* 'to sin' and *haldan* 'to hold'.

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[27] The Old English example is less straightforward than the Old Saxon one, as *swiðe* 'very much' could also be seen as modifying *geomerodon* 'mourned' in 6b, though metrically the caesura falls after the latter, marking off *swiðe on mode* 'very much in spirit' as a single half-line, which makes it more likely that this is a complete phrase.

Unlike *swîðo* in Old Saxon, *swinde* (with restored *-n-*) is quite rare in Middle Low German. The corpus contains two instances of it being used adverbially, and these are shown in example 7.

(7) a. Den   duuel   he   dar swinde
     DET.M.ACC.SG devil-ACC.SG he-NOM.SG there strongly

     bant
     tie up-3SG.PRET.IND
     'There he strongly tied up the devil'
          (*Zeno, Helmstedter Sammelhs*., 11v,02, Eastphalian)

  b. don schrey   sy   swinde sere
     then scream-3SG.PRET.IND   she-NOM.SG strongly very
     'Then she screamed very strongly.'
          (*Berliner Stadtbuch*, 21a,27-21a,28, South Markish)

However, in both cases it is unlikely that a degree meaning was intended. *Binden* 'to tie up' is not clearly gradable, and so a manner adverbial reading could be assumed: 'to tie up tightly'. In the case of *schrîen* 'to scream', one might entertain the translation 'very loudly', which is essentially equivalent to 'scream very strongly'. In both cases, *swinde* modifies a verb, which is less common in Old Saxon. Clearer examples are given in Schiller & Lüben 1878 (*Mittelniederdeutsches Wörterbuch*, S.V. *swinde*), as they list sentences that contain *swinde vast* 'very firm', *swynde grot* 'very big', and *swynde vruchten* 'to fear very much'. However, these are not found in the corpus, which indicates that it was a marginal adverb of high degree at best.

A peculiar adverb of high degree in Old Saxon is *tulgo* 'very', which is found only with adjectives and adverbs. It is most likely a cognate of Gothic *tulgus* 'firm'. This adverb is also attested once in Mercian Old English in the form *tulge*, along with adjectival variants such as *tylig* and *tylg* 'eager', and it is thus considered a Mercian archaism (Vleeskruyer 1953:33). *Tulgo* is found seven times in the *Heliand* when combining M and C, though there are three instances in which *tulgo* is used in place of *swîðo* in S, as was first reported by Korhammer (1980:87). Compare the following lines from Bischoff's (1979) transcription of *Heliand* S with the diplomatic edition based on M and C (Behaghel & Taeger 1996) in 8.

(8) a. S: endi an br̄ef   scriuun'   tulgo niudlica
     MC: endi an brêf   scriƀun   suîðo niudlîco
         and   on letter-ACC.SG write-3PL.PRET.IND very   eagerly

     S: nomana   gihuilikne
     MC: namono   gihuilican
         name-GEN.PL   each-ACC.SG
         'And eagerly wrote each of the names on a letter' (352–353)

  b. S: ek   scal   iu
     MC: ic   scal   eu,
         I-NOM.SG   must-1SG.PRES.IND you-DAT.PL

         quað
         speak-3SG.PRET.IND

     S: liau..a   thing
     MC: he,   lioƀara   thing,
         he-NOM.SG dear-CMPR-N.ACC.SG thing-ACC.SG

         tulgo   uuárlica
         suîðo   uuârlîco
         very   truly

     S: uuillian   seggian
     MC: uuilleon   seggean
         desired-ACC.SG say-INF
         '"I must", (spoke he), "tell you, very truly, a dearer and
         desired thing"'   (397–398)

  c. S: unt(..)t thar   uueros   ástan   tulgo
     MC: antthat thar   uueros   ôstan   suîðo
         until   there man-NOM.PL from the east very

     S: glauuue'   guman   g(.)ngan camun·
     MC: glauua   gumon   gangan quâmun
         wise-M.NOM.PL man-NOM.PL go-INF   come-3PL.PRET.IND

S:	thríe		ti	theru	thiadu
MC:	threa		te	thero	thiodu
	three-M.NOM.PL		to	DET.F.DAT.SG	people-DAT.SG

'Until three men, very wise men, came going there from the east to the people' (541–543)

The data in 8 imply that the two may have been perceived as interchangeable at least by the scribe of S. No trace of this adverb is found in Middle Low German.

According to Fritz (2006:144), Old Saxon *filu* 'very, much' is one of the oldest adverbs of high degree, along with *hardo*. However, only *filu* is found in Gothic where it is used as a gloss for Greek *sphódra* 'very' (Carlson 2012:297) or for *líān* 'very', as in *sleidjái filu* 'very fierce'. It is also frequently found with *máis* 'more' in Gothic (10x), based on data from *Project Wulfila* (2021). This finding could indicate that the tendency of *filu* to modify comparatives in later languages was generalized from this collocation. It is also used in Old English in the form *fela*, often as an intensifying prefix (see Méndez-Naya 2021). It is found 15 times in the corpora, but never as an independent adverb of degree and never with comparatives; likewise, *fēle* remains rare in the Middle English period (Mustanoja & Van Gelderen 2016:319). As mentioned in section 2.4, compared to other adverbs of high degree, this adverb is especially frequent in Old High German, where it is attested 393 times.

In Old Saxon, *filu* is notably less common than *swîðo*, as it is found only 14 times, and it commonly modifies verbs. In these instances, it is often difficult to separate the usage of *filu* as an adverb of degree from its usage as an adverb of frequency meaning 'much', and the translation provided by the corpus was relied upon. For example, it is unclear if *filu gornoda* should be translated as 'strongly mourned' or as 'much mourned'. Examples in which *filu* modifies adjectives are clearer. In two such cases, *filu* is used as a prefix in the formation *filuwîs* 'very wise' as in Old English, and it occurs once as an independent adverb with the adjective *langsam* 'long lasting, eternal'. All attestations are from the *Heliand*.

In Middle Low German, instances in which *vēle* modified *mannich* 'many' and *mêr* 'more' were excluded, because in these cases its meaning tends to be more quantificational. Unlike Old Saxon *filu*, *vēle*

most commonly modifies adjectives in the annotated subset of the data. During the Middle Low German period, *vēle* also acquires another usage, namely, as a modifier of comparatives and related constructions, which is also found in Early Middle Dutch, for example. This would later become the specialized usage of this adverb (Visser & Hoeksema 2022:222), as mentioned in section 2.4. Notably, Old High German *filu* also had this usage: It is attested with comparatives six times. In Middle Low German, *vēle* is not attested with comparatives until the first half of the 15th century, which is different from both Dutch and High German, though it is only scarcely attested before this period. It should be noted that *vēle* never becomes as dominant relative to its competitors as its High German counterpart (see table 2 for details on High German).

As also pointed out in Visser & Hoeksema (2022:222), *sêro* 'sorely, very' is a fairly marginal adverb in Old Saxon, being attested only four times. The clearest example is with the adjective *bitengi* 'oppressive'. In other examples, it appears with the participle *antgoldan* 'atoned' and with the verbs *hreuwan* 'to mourn' (with the comparative *sêrur*) and *biwôpian* 'to deplore', and so its status as an adverb of degree is ambiguous, as *sêro* could also be translated as 'sorely' in these instances. These examples suggest at least a strong association with negative words. According to Fritz (2006:144), the usage of *sêro* as an adverb of high degree originated from phrases such as *sêre wunt* 'sorely wounded', and its meaning generalized as early as Middle High German; this exact collocation was suggested by Fritz and is not attested in either Old Saxon or Old High German (*sêro* is found only four times in Old High German and only with verbs). It is not uncommon for adverbs of high degree to derive from negative words, in which case they show a preference for modifying negative words in the early stages of grammaticalization (Lorenz 2002:144–145). A parallel example from Modern English is *terribly*, which predominantly combines with negative words, although combinations with positive words are still found (see Lorenz 2002:144–145). By contrast, the Modern German successor to *sêro*, *sehr* 'very', can be used with any adjective to convey "half-hearted intensification" (Claudi 2006:365). This indicates that it is at a further stage of delexicalization than English *terribly* and so has completely lost its semantic value.

Out of all instances of *sêre* in the Middle Low German corpus, 432 were annotated. Already in 13th-century Middle Low German, *sêre* was

the most dominant adverb of high degree. As outlined in section 2.4, its Middle High German counterpart shows a rapid increase in use beginning in the 12th century, though it never becomes as dominant there as it does in Middle Low German. In fact, the frequency of *sêre* in Middle Low German is closer to the frequency of its counterpart in 13th-century Middle Dutch than in High German: It is attested 783 times against 423 attestations of *harde* and only 144 attestations of *vēle* (Visser & Hoeksema 2022:212). This increase in the usage of *sêre* can thus be considered a characteristic of the Middle Germanic languages on the continent, though it is more prominent in Middle Low German and Middle Dutch than in Middle High German. The distribution of categories generally resembles Early Middle Dutch (see Visser & Hoeksema 2022:212), where there is also a clear preference for verbs, adjectives, and participles. As in Old Saxon, *sêre* has a preference for negative phrases, in which it appears 240 times.

In Old Saxon, *hardo* 'very, firmly' is attested modifying the same categories as *filu* and *sêro*, but it is also found with the prepositional phrases *an thînumu hugi* 'in your mind' (2x) and *umbi is herte* 'around his heart' (1x). Like *sêro*, *hardo* prefers negative phrases (eight out of twelve attestations), which could be explained by the fact that the adjective *hard*, from which it is derived, can also have negative meaning 'difficult' (Behaghel & Taeger 1996:274).

The distribution of *harde* in Middle Low German differs from *hardo* in Old Saxon, as it exclusively modifies adjectives and adverbs in the former. Its use is also different in Middle Dutch, where it also combines predominantly with adjectives, although it is still occasionally attested with verbs there (Visser & Hoeksema 2022:212), and it can still modify verbs in both Old and Middle High German as well. In Middle High German, the most common verbs modified by *harte* are *erkomen* 'to frighten' and *vürhten* 'to fear', both of which are also found with *harto* in Old High German as *irqueman* 'to be astonished' and *forhten* 'to fear'. Furthermore, its preference for inherent polarity in Middle Low German is inverted compared to Old Saxon, as *harde* is attested with positive phrases 40 times out of 43. It also prefers positive phrases in Middle Dutch (Visser & Hoeksema 2022:212) and Old High German.

Middle Low German uses *grôtlîk* 'greatly' as a verb modifier. It appears for the first time in the 15th century, while its counterparts in Middle Dutch and Middle High German, *grôtelike* and *grôzlîche*,

respectively, are both found as early as the 13th century. Another adverb of high degree that emerges during the Middle Low German period is *ûtermâte* 'exceedingly' (compare Middle Dutch *ûtermâten* 'exceedingly' and Middle High German *ûzer mâze* 'exceedingly'). When viewed diachronically, it is first attested three times in the second half of the 13th century and then disappears; then it reappears in the 15th century and remains in use throughout the 16th century. It is the only adverb of degree analyzed here that displays such a pattern.

4.2. Absolute Degree.
Similar to tables 5 and 6, table 7 displays the distribution of categories for the adverbs of absolute degree in Middle Low German, and these are discussed below, along with Old Saxon *garo* 'fully'.

Adverb	Total	Adj.Pos	Adv	Adv.Deg	Verb	Ptc
gār	222	100	91	21	5	5
gans	88	35	24	29	0	0

Table 7. The distribution of categories
for the adverbs of absolute degree in Middle Low German.

The only well-attested adverb of absolute degree in Old Saxon is *garo*, and it is exclusively used to modify verbs of perception. It is attested once in *Genesis* and eight times in the *Heliand*, and only with the verbs *witan* 'to know' (7x), *kunnan* 'to known' (1x), and *afsebbian* 'to notice' (1x). A similar usage is also observed for its Old English cognate *ġearwe*: Out of 87 attestations in both Old English corpora combined, the three most commonly modified words are *witan* 'to know' (57x), *cunnan* 'to know' (18x), and *ġemunan* 'to remember' (3x). In contrast, such constructions with perception verbs are not found in Old High German. The similarity between Old Saxon and Old English is shown in example 9: 9a comes from *Genesis* and 9b from *Ælfric's Lives of Saints*.

(9) a. Kain   […]   quað   that hie
       Cain-NOM.SG […]   speak-3SG.PRET.IND   that he-NOM.SG

       uuisse   garoo
       know-3SG.PRET.SBJV   fully
       'Cain spoke that he may have fully known'   (645)

    b. Heo   cwæð,   ic   wat
       she-NOM.SG   speak-3SG.PRET.IND   I-NOM.SG   know-1SG.PRES.IND

       geare
       fully
       'She spoke: "I fully know"'   (ÆLS_[Æthelthryth]:49.4174)

The Old Saxon usage of *garo* is not continued in Middle Low German, as it is never found with the three verbs mentioned above. Instead, it is mainly found with adjectives and adverbs, as shown in table 7.[28] The most commonly modified adjectives and adverbs are open-scale ones: *wol* 'well' (39x), *balde* 'boldly' (18x), *grôt* 'big' (15x), which are generally incompatible with absolute modifiers (Kennedy & McNally 2005). This distribution of *garo* suggests that it may be closer to an adverb of high degree instead. A similar pattern can be observed in Middle High German, when it is used as an adjective modifier.[29] Due to the reduction of unstressed vowels, the Middle Low German adverb has become identical in form with its associated adjective *gār* 'ready' derived from Old Saxon *garu* 'ready', though it seems unlikely that its new usage also comes from Old Saxon. Its usage differs from Middle English *yāre* 'fully', whose usage continues from Old English and which also acquired the meaning 'readily, eagerly', according to the Middle English Dictionary (MED 2001, S.V. *yāre* adv.)—likely from the associated adjective meaning 'ready' that had the same form (MED 2001,

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[28] Modified adjectives sometimes appear embedded in noun phrases, as in *gǎr ein starcker man* 'a very strong man' found in the Hamburg printing *Kǒninck Laurin* (ca. 1560; 55r,25).

[29] The three adjectives in Middle High German most commonly modified by *gare* are *schœne* 'beautiful', *guot* 'good', and *hôh* 'high', all of which are open-scale adjectives. As in Middle Low German, adjectives are sometimes found embedded in noun phrases or prepositional phrases.

S.V. *yāre* adj.). A usage of *yāre* as an adjective modifier is not listed by the MED (2001, S.V. *yāre* adv.).

One Middle Low German adverb that can unequivocally be attributed to High German influence is *gans* 'fully', as its final consonant is affected by the High German Consonant Shift. This word apparently spread from High German to Low German, Dutch, and Frisian, and then from Low German to North Germanic (Kroonen 2013, S.V. +*ganta-*). It is first attested in South Markish in the second half of the 14th century, but it is mainly used in the 15th and 16th centuries. A selection was annotated. While its lexical meaning 'whole' implies *gans* is an adverb of absolute degree, the most frequently modified words are open-scale adverbs, such as *sêre* 'very', *wol* 'well', *gērne* 'eagerly'. This is a pattern similar to *gār*, though *gans* is less frequent. Perhaps its usage is similar to *ganz* in Modern German, where it functions as an adverb of high degree when modifying negative adjectives and as one of low degree when modifying positive ones (Claudi 2006:366).

5. Discussion.

Overall, the system of degree adverbs in Old Saxon appears to be quite similar to the one in Old English. This applies both to the type of adverbs that are used and how they are used, as shown in section 4. In contrast, the systems of Old Saxon and Middle Low German differ substantially: The latter is more similar to Dutch and High German than the former, which is also largely true when it comes to the features discussed in section 2.3. As such, the behavior of adverbs of degree can confidently be added to the list of features that set Middle Low German apart from Old Saxon. The differences between the systems of degree adverbs in the two languages are also far greater than between the systems in Old and Middle High German or even in Old and Middle English. In fact, there is comparatively little that unites them, with the possible exception of the early usage of *sêro* in Old Saxon. Particularly, the near-complete disappearance of the most frequent high degree modifier *swîðo* is unusual, as the most frequent high degree modifier in High German, *filu/vile* 'much, very', remains dominant throughout the medieval period, as shown in table 2. Such radical decline of *swîðo* is not paralleled in Old English, where *swîþe* remains in use for a longer period of time, though it would eventually decline there as well, as outlined in section 2.4.

The question remains how these discrepancies can be best accounted for. As stated earlier, this paper evaluates two main hypotheses, based on the data from degree adverbs: The apparent lack of continuity between Old Saxon and Middle Low German is due either to prolonged influence from High German or to the artificiality of the Old Saxon literary language. In the following sections, each hypothesis is examined in light of the data presented so far.

5.1. Hypothesis 1: High German Influence.

According to the first hypothesis, the apparent lack of continuity between the systems of degree adverbs in Old Saxon and Middle Low German is due to High German influence on the latter. The main argument in favor of this hypothesis comes from the erosion of North Sea Germanic features in Middle Low German. Its system of degree adverbs broadly shows convergence with High German, and these changes fit the broader trend of eliminating North Sea Germanic features, as discussed in section 2.3. It is notable that the Old Saxon adverbs *swîðo* and *tulgo*, both of which likely belong to the North Sea Germanic lexicon and do not have equivalents in High German or most varieties of Dutch, are the ones that declined the most. Perhaps their decline can be attributed to convergence in the form of dialect leveling, as they could have been perceived as salient dialect markers and therefore avoided (Kerswill & Williams 2011, Trudgill 1986:11). However, further research on adverbs of degree in a contact situation would have to be undertaken to evaluate how likely it is for a high frequency adverb such as *swîðo* to nearly completely disappear.

To what extent language contact played a role in the decline of *swîþe* in Old English is also unclear. Méndez-Naya (2003:389) gives exclusively language-internal reasons: She argues that the main reason for its decline is a loss of expressivity over time. At the same time, the distribution of Middle Low German adverbs that are present in both Old High German and Old Saxon is more akin to the one in High German. This applies to *garo/gār*, *filu/vēle*, and *hardo/harde*, as shown in section 4. The former two show a movement away from a distribution akin to Old English and toward High German. The change in usage of *hardo/harde* could also be due to convergence, but it could also signal more semantic bleaching and thus grammaticalization, as its negative lexical meaning is further eroded (Klein 1998:25–26, Hopper & Traugott 2003:104).

While no research to date has specifically addressed the effect of language contact on the distribution of adverbs of degree, it seems plausible that cognates can influence one another in a contact situation. This is illustrated by the fact that Low German appears to undergo the same changes at various points in time as High German, such as the rise of *sêro/sêre* or the development of *ûtermâte*, *grôtlîk*, and *gans*. The former must have occurred during the attestation gap between the composition of *Genesis* and the beginning of the Middle Low German period, while the latter occurred later. It is notable that only *gans* can be considered a straightforward borrowing, as it is the only one that displays the High German Consonant Shift, perhaps owing to the fact that it did not have a cognate in Low German before this period.

There are a number of issues with the High German influence hypothesis. One issue, for example, concerns the change in usage of g*aro/gār*. As described in section 4.2, its pattern of use in Old Saxon changes in Middle Low German in a way that runs counter to the usual grammaticalization pattern: From modifying verbs of perception, it moves to modifying adjectives and adverbs, whereas normally adverbs of degree have a tendency toward specialization (Bolinger 1972:18). If one assumes direct continuity, this development is puzzling: It seems as if the context of use of this adverb has changed completely, and there is no trace left of its older function. It is currently unclear to what extent such a significant change can be attributed to language contact, and further research on this topic may be required to make a final judgment.

Another challenge for the High German influence hypothesis is posed by the dominance of *sêre* in 13th-century Middle Low German (see discussion in section 4.1). In this regard, *sêre* much more resembles its counterpart in Middle Dutch than in Middle High German. This, in turn, suggests convergence of Middle Low German with Dutch and not just with High German. One implication of interpreting this convergence solely based on language contact is that the system of adverbs of degree had to be quite stable between the departure of the Anglo-Saxons and the composition of the *Heliand*: The similarity of the system of degree adverbs in the *Heliand* and *Genesis* to the one in Old English suggests that relatively little change must have occurred during this early period (as opposed to fairly significant changes that must have occurred later). Such a state of the system, however, would be more in line with the hypothesis of early linguistic stability (Krogh 1996:403–404, Krogh

2013, Versloot & Adamczyk 2017:126) than with early dialect mixing (Wolff 1934:154, Stiles 1995:202, Braunmüller 2007:32, Peters 2012:447, Stiles 2013:20).

Finally, it is unclear to what extent High German influenced other parts of the Low German lexicon during the gap between the time when *Genesis* was composed and the Middle Low German period. Although during later periods, Low German showed convergence with High German in the domain of grammatical words (see Peters 1995), it is currently unclear to what extent this happened during the early period.

Despite the influence that High German has had on Low German, it is clear that this language contact was fairly one-sided: Peters (1999:167, 170) notes that the bulk of Low German vocabulary in Modern Standard German dates from the time after High German had replaced Low German as the main written language, and that the influence of Low German on High German was marginal before this period. The high level of stability in the High German adverbs of degree also attests to this limited influence and shows that language contact need not always lead to change in the system of adverbs of degree.

Thus, the High German influence hypothesis is unable to capture the apparent lack of continuity in the system of degree adverbs between Old Saxon and Middle Low German. In the next section, I examine the grapholect hypothesis in light of the same data and show that it can better account for the differences between the two languages.

5.2. Hypothesis 2: Old Saxon as an Artificial Grapholect.

According to the grapholect hypothesis, the apparent lack of continuity between Old Saxon and Middle Low German is due to the fact that literary Old Saxon never reflected a genuine spoken language (Collitz 1901, Rooth 1973, Doane 1991:45–46). Instead, it was at least partially an imitation of Old English conventions, which explains why certain patterns of use are absent from Middle Low German. I argue that this hypothesis is better suited to account for the drastic differences between the two languages. For example, the extensive use of *swîðo* in both the *Heliand* and *Genesis* imitates an Old English convention rather than reflects its actual usage, which is why it is not found in Middle Low German.

This reasoning also applies to adverbs with different patterns of use in Old Saxon versus Middle Low German. For example, if the usage of

Old Saxon *garo* and *filu* is an imitation of Old English, this would explain the different behavior of these adverbs in Middle Low German. The use of Old Saxon *garo* may have been modeled after Old English *ġearwe* (see discussion in section 4.2), which explains why Middle Low German *gār* exhibits a very different pattern of use. Similarly, Old Saxon *filu* never occurs with comparatives, unlike Middle Low German *vēle*. This contrast is explained if the use of *filu* imitated the use of Old English *fela*, which also never combined with comparatives (see discussion in section 4.1). In contrast, the use of this adverb with comparatives could reflect an early usage (as in Gothic) and not be a result of late convergence with High German.

The main argument against the grapholect hypothesis is that the Old Saxon system of degree adverbs does display unique features of its own that set it apart from Old English. One such feature is the usage of *tulgo*. While this adverb represents an isogloss between Old English and Old Saxon, it is far more restricted in the former, being attested only once, as mentioned in section 4.1. The fact that the scribe of *Heliand* S added additional instances of this adverb makes it less likely that this was a mere imitation of Old English, as these additions indicate that this adverb was likely a part of the scribe's native dialect. Alternatively, one could assume influence from Frisian on the language of S. There are no attestations of this adverb in Old Frisian, but this is possibly due to the late attestation of the language (there are no major Old Frisian texts attested before the late 13th century), as Stiles (1995:209) considers it likely that it was used there as well, though this remains a speculation. Either way, *tulgo* is a relatively low-frequency adverb in Old Saxon and so it would be more likely to disappear than a high-frequency adverb, such as *swîðo*, especially if it was already a declining adverb.

Note that the adverb *swîðo* may also present a challenge for the grapholect hypothesis, as its usage in the Old Saxon texts differs somewhat from its usage in Old English. For example, the fixed collocation *swîðo an sorgun* 'very much in sorrows', which appears in both major Old Saxon texts, is particularly unusual, as it is not found in Old English, though *swîðo* does combine with other similar prepositional phrases (see example 6b). Furthermore, the fact that traces of this adverb remain in Middle Low German, as noted in section 4.1, also suggests that the usage of *swîðo* cannot have been wholly artificial, though its usage frequency in the *Heliand* and *Genesis* may have been inflated.

Despite those two examples, however, compared to the High German influence hypothesis, the grapholect hypothesis presents fewer serious issues, and so it more easily accounts for the changes in usage of adverbs such as *garo/gār* and the decline of *swîðo*. It is currently uncertain to what extent High German influence could have caused these changes. Also, the suggestion that the usage of *tulgo* may not have been strictly artificial does not necessarily pose a problem for the grapholect hypothesis, since it could have declined naturally. Regardless, both the larger presence of *tulgo* and the somewhat differing usage of *swîðo* require the additional assumption that not everything in the language of the *Heliand* is a strict imitation of Old English conventions, and that it still incorporated native Old Saxon elements.

It is also important to stress that if written Old Saxon were an artificial grapholect, this would not exclude the possibility of High German influence. In fact, this would suggest that the system of adverbs of degree in Old Saxon was closer to High German (and by extension to Middle Low German) than what is reflected in the language of the *Heliand*, which would be in line with the hypothesis of early dialect mixing (Wolff 1934:154, Stiles 1995:202, Braunmüller 2007:32, Peters 2012:447, Stiles 2013:20). Under this view, High German could still have contributed to the decline of adverbs such as *tulgo*. Ultimately, more work on adverbs of degree in a contact situation is required to evaluate how likely it is that dialect contact could have caused the stark differences between Old Saxon and Middle Low German. In the meantime, the possibility that the system reflects an artificial poetic register should not be discarded.

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Center for Language and Cognition Groningen (CLCG)
University of Groningen
Oude Kijk in 't Jatstraat 26
9712 EK Groningen
The Netherlands
[l.j.visser@rug.nl]