Indefinites, Negation and Jespersen's Cycle in the History of Low German[*]

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This paper offers a formal account of the diachronic changes in the interaction between indefinites in the scope of negation and the expression of sentential negation in the history of Low German. Different types of negative concord develop at the different historical stages. Parallel to that, the language underwent Jespersen's Cycle. In addition, I argue that, against common belief, Jespersen's Cycle is at best indirectly related to the type of interaction between indefinites and negation. Changes in the type of indefinites used in the scope of negation arise due to changes in the lexical properties of the indefinites involved, not as a result of changes in the expression of negation. Conversely, changes in the type of indefinites do not trigger changes in the expression of negation.

Keywords: *Old Saxon, Middle Low German, negation, indefinite quantification, negative indefinites, Jespersen's Cycle, negative concord*

1. Introduction

The historical development of the expression of negation in Low German is extremely under-researched, certainly from a formal perspective. Besides a chapter on Old Saxon (the *Heliand*) in Coombs (1976), the only formal account is Sundquist (2007) on variation in the expression of negation in a corpus of Middle Low German diplomatic letters from the city of Lübeck (14th and 15th centuries). The present study is the first to address any aspect of the diachronic development of negation in Low German from the beginning of attestation in the 9th century until the end of written Low German in the 16th century, covering four MLG scribal dialects.

1.1. Low German

Low German is a West Germanic language spoken in northern Germany and the eastern Netherlands. It contrasts with German in lacking the affrication or spirantisation of West Germanic *p, *t, *k.

Old Low German (=Old Saxon) was spoken ca. 800-1200 by a group of Germanic tribes who called themselves Saxons in what is now northwestern Germany and parts of what are now the Netherlands (Klein 2000: 1245). The first monasteries — and with these (mostly Latin) writing — appeared at the end of the 8th century in the south of the area. Old Low German (OLG) is poorly attested textually, the bulk is biblical poetry (*Heliand*, *Genesis*) from the 9th century, plus minor texts such as verses, ecclesiastic and secular functional prose, and glosses. The *Heliand* epos (ca. 830) is the largest work by far; with its ca. 6000 lines, it makes up about 80% of all OLG material (Sanders 2000: 1277). The *Heliand* (ca. 830), *Genesis* fragments (ca. 840) and the minor texts (10th and 11th centuries) were used for the present study, 695 negative finite clauses in total.

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Middle Low German (MLG) was written and spoken in northern Germany between 1200 and 1650 (Stellmacher 1990: 39, Peters 2000a: 1482). In the 14th and 15th centuries, it became an international lingua franca with the expansion of the Hanseatic League around the North and Baltic Seas, which led to a certain standardisation of the written language, incorporating features of different Low German dialects (Härd 1980, 2000; Peters 2000b). MLG was replaced as the written language in the area by Early New High German (ENHG) after 1550, though Low German continues to be spoken. The composition of the MLG corpus used here follows the methods proposed by van Reenen & Mulder (2000) for a corpus of Middle Dutch (also used for the Dutch in Transition corpus (1400-1700) built at Nijmegen University; e.g. Coupé & Van Kemenade 2009): Only texts that are not translations from other languages and which are clearly dated and localised have been chosen. This corpus therefore consists of charters, official letters and legal texts from the public records of ten places from different scribal dialects, covering the period from 1325 to 1575. The choice of this time interval is determined by the transitions from Latin to MLG (first half of the 14th century) and from MLG to ENHG (second half of the 16th century) in the texts used. The scribal dialects represented in the corpus are Westphalian (Börstel, Steinfurt), Eastphalian (Barsinghausen, Braunschweig, Mariengarten) and North Low Saxon (Oldenburg, Scharnebeck and Uelzen in the 'Altland' and Lübeck and Stralsund in the East Elbian 'Neuland'). The present MLG corpus contains a total of 2817 negative clauses.

1.2. Jespersen's Cycle

Low German, like its West Germanic relatives High German, Dutch, English and Frisian, has undergone Jespersen's Cycle, the diachronic development by which an original negative marker is first joined by a reinforcing new element which becomes the new expression of negation and ultimately replaces the original element. (1) exemplifies this development for English, partitioning the development into three basic stages: one in which the expression of standard negation is predominantly preverbal, one in which it is predominantly bi-partite and one in which it is predominantly postverbal.[1] English can be said to have completed Jespersen's Cycle, because the rise of do-support in negative clauses (or the use of other negative auxiliaries) made the expression of negation essentially preverbal again (from the perspective of the lexical verb).

(1) *Jespersen's Cycle in English*

stage I	stage II	stage III	stage I'
ne V	*ne* V *noht*	V *not*	*do not* > *don't* V

It is cross-linguistically common that the older element is a head and that it precedes the finite verb, while the new element is (initially) a free morpheme, often an adverb, and, depending on other properties of the language (such as whether it is OV or VO and whether it has overt verb movement like V2), commonly post-verbal. In an OV language with verb-second such as (historical) Low German, the new adverbial negation particle is post-verbal (post-finite) in verb-initial and verb-second clauses, and pre-verbal elsewhere.

1.3. Negative concord

This paper focuses on the interaction between indefinites in the scope of negation and the expression of standard negation in the history of Low German. A widespread form of such

[1] Other authors have proposed more fine-grained subdivisions, depending on the optionality of the two elements involved, e.g. Van Kemenade (2000) or Zeijlstra (2004).

interaction (e.g. Haspelmath 2005) is the phenomenon of negative concord, which can be defined as follows.

(2)*Negative concord*

Generally, we talk about 'negative concord' in situations where negation is interpreted just once although it seems to be expressed more than once in the clause.
(Giannakidou 2000: 458)

Besides the element expressing standard sentential negation (e.g. *not* in English), indefinites in the scope of negation can encode negation, provided they are able to identify sentential negation in isolation, such as in fragment answers, a criterion first established by Zanuttini (1991). Such indefinites are commonly called n-words after Laka (1994a, 1994b), though they need not be morphologically marked as expressing negation, as the term might suggest.

(3)*N-word*

An expression is an n-word iff:
(a) it can be used in structures containing sentential negation or another expression yielding a reading equivalent to one logical negation; and
(b) it can provide a negative fragment answer.
(Giannakidou 2005: 328)

Negative concord takes two forms: negative doubling and negative spread (Den Besten 1983). We speak of negative doubling when negation is expressed by the element standardly expressing sentential negation (the negation particle) and additionally by an indefinite in the scope of negation. Negative spread obtains when negation is expressed by more than one indefinite in the scope of negation. Negative doubling is further subdivided into strict and non-strict negative doubling. In a strict negative doubling language, the sentential negator is required to always be present in a structure containing an n-word (Giannakidou 1998, 2000, Zeijlstra 2004). In a non-strict negative doubling language, the sentential negator only co-occurs with an n-word if the latter follows the former. This is the case for instance in Portuguese: while the sentential negator is obligatory when preceding n-words (4a), it is obligatorily absent with n-words preceding its usual position (in front of the finite verb (4b)). Next to negative doubling, Portuguese has negative spread, as the co-occurrence of *ninguém* and *nada* in (4b) shows. Finally, Portuguese n-words can express negation on their own (without the sentential negator) in fragment answers, (4c).

(4)*Portuguese*

a. ***Não****veio* ***ninguém***
NEG came no one
"No one came" (* "No one didn't come")
b. ***Ninguém*** *(****não****)* *viu* *nada*
no one NEG saw nothing
"No one saw anything" (* "No one saw nothing")
c. *Quem veio?* ***Ninguém****.*
who came? No one.

Romanian, on the other hand, has strict negative doubling as well as negative spread, as (5) shows: n-words can precede (*niciun student*) or follow (*nicio carte*) the sentential negator *nu*, and they co-occur with each other.

(5)*Romanian*
Niciun *student* ***nu*** *a citit* ***nicio*** *carte*
no student NEG has read no book
"No student read any book."
(after Haspelmath 1997:263)

Other forms of interaction between indefinites and sentential negation are possible, depending on the type of indefinite system (e.g. Jäger 2010). The following section turns to the types of interaction observed in the history of Low German.

2. Indefinites and negation in the history of Low German

2.1. Old Low German

OLG is clearly in stage I of Jespersen's Cycle: more than 99% of the negative clauses in the corpus used contain the negative head *ni*, which is strictly left-adjacent to the finite verb, and there is no clear evidence of adverbial negation particles beyond very rare instances of emphatic strengthening (see below). Table 1 summarises the distribution of negative particles and indefinites in the scope of negation in the OLG corpus (for the definition of the terms 'n-marked' and 'n-free' see below).[2,3]

	negation		indefinites		total
	ni/ne	*niouuiht*	n-marked	n-free	(neg. cls.)
Heliand	617	0	35 (20%)	142 (80%)	620
Genesis	37	0	0	12	37
minor texts	37	(1)	5	0	38
	691	(1)	40 (21%)	154 (79%)	695

Table 1. Negation particles and indefinites in the scope of negation in OLG

There are hardly any indications of incipient Jespersen's Cycle in OLG. OLG used some emphasisers, most of which are adverbially used prepositional phrases meaning something like "in this world" (*an thesaro uueroldi, obar erdu* (6a)), thus generalisers. The next most frequent type of emphasiser is 'pseudo-argumental' use of *(io)uuiht* "(any)thing" with a genitive complement (6b). This use is called 'pseudo-argumental' here because although

[2] The reason only 617 out of 620 negative clauses have preverbal *ni* in the *Heliand* is that in some negative conjuncts to negative clauses introduced by the disjunction *ni, ne* "that not, nor", the negation marker can be omitted before the finite verb. Even in this type of clause, the preverbal particle is still used in the majority of the cases (1a): only in 3/17 *ni/ne*-conjuncts is there no additional preverbal particle *ni/ne* (1b).

(1) a. *the thar an themu aldon euua gebiudid. that thu man ni slah. ni thu menes ni*
who there in the old law rules that you man NEG hit that.not you false.oath NEG
sueri.
swear
"... who rules there in the old law that you do not hit any man, nor that you swear false oath."
(*Heliand* 3268-3269)

b. *Nis thes tueho enig gumono nigienumu, ne sie ina [_] fargelden san*
NEG=is the.GEN.SG.N doubt any men.GEN.PL none.DAT.PL that.not they them [NEG] repay soon
medmo kusteon.
jewel.GEN.PL glory.DAT.PL
"There is no doubt about it to any of the men that they do not repay them soon the glory of the jewels."
(*Heliand* 3190-3192)

[3] Regarding the one occurrence of *niouuiht* as a negation particle in the minor texts, see example (6d) below.

(io)uuiht is grammatically the argument of the verb and takes a genitive attribute, semantically this attribute is more likely to be the actual argument of the verb, and *(io)uuiht* an emphasiser. Thus (6b) rather means "he cannot conceal it at all/in the least" than "he cannot conceal any(thing) of it" (cf. present-day colloquial English *any* in *I haven't slept any*). In view of the later grammaticalisation of the negative indefinite pronoun *niouuiht* "nothing" as an adverbial negation particle *nicht* "not" in MLG, the most interesting cases are those eight instances in the *Heliand* of adverbial *(nio)uuiht* , expressing an extent, cf. (6c).[4] In the minor texts, one instance of an n-marked indefinite is used on its own expressing negation adverbially or pseudo-argumentally (6d):

(6)a. generalisers:
Ne mugun gi iu betaran rad geuuinnan ***an thesoro uueroldi***
NEG can you you better advice win at this world
"You cannot obtain better advice in this world."
(*Heliand* 1462-1463)

b. 'pseudo-argumental' *(io)uuiht* with a genitive complement:
thes *ni magh e farhelan* ***eouuiht***
this.GEN NEG can he conceal anything
"He cannot disguise it in the least." (lit.: "He cannot disguise anything of it.")
(*Heliand* 1754)

c. adverbially used *(nio)uuiht*:
Ne ik thi gethni deriu ***(neo)uuiht*** *quad he.*
and.not I you also NEG damage nothing said he
"I will also not harm you at all, he said."
(*Heliand* 3892)

d. *thia the thar* ***niauuiht*** *gimanigfaldoda sindun an thero genuftsamidu thero geuono*
those who there nothing multiplied are on the abundance the.GEN.PL gifts.GEN
"those who are not/to no extent multiplied in the abundance of the gifts"
(*Psalmenauslegung* 12,7-8)

Although most of these examples use *(eo)uuiht* "a thing, anything" instead of *niouuiht* "nothing", such cases point to an incipient grammaticalisation of the later negation particle *nicht* via predicates permitting an optional extent argument as a bridging context (Breitbarth et al. 2013). This is similar to the use of *nichts* "nothing" in present-day German with the same verb as in (6c), *schaden* "damage, harm":[5]

(7)*Das wird dir* ***nichts*** *schaden.*
that will you nothing harm
"That won't harm you (at all)," lit. "That will not harm you anything."

Example (6d), where *niauuiht* is used on its own, corroborates this reconstruction of the start of Jespersen's Cycle in Low German. This indefinite is, however, rarely used as an

[4] In the older Monacensis manuscript, the form is *neouuiht*, but *uuiht* in the Cottonianus manuscript. Among the eight cases of pseudo-argumental or potentially adverbial *(nio)uuiht* in the *Heliand*, five are *(io)uuiht* (spelled *uuiht, giouuiht, eouuiht*), two are *niouuiht (neouuiht, nieuuiht)* and (6c) is attested with both. That is, the use of n-free forms in this context is in fact almost three times more frequent than n-marked forms, which can be taken to mean that any grammaticalisation of *niouuiht* as a new adverbial negation particle was still a long way away.
[5] See also Bayer (2008) on adverbial uses of German *nichts* "nothing".

emphasiser of negative polarity in OLG, and none of the emphasisers used in OLG seems to be conventionalised, that is, more frequent or predictable in the contexts it occurs in than the others. So it may be premature to see evidence for the beginning of the cycle in the OLG corpus used here.

OLG had a tripartite system of indefinites similar to the Old High German (OHG) one (Jäger 2008, 2010), with one series licensed in neutral or non-affective contexts, one in affective, or weak NPI, contexts including negation and one restricted to the scope of negation. The series licensed in affective contexts (*ênig* "any", *(io)uuiht* "anything", *(io)man* "anyone", *io* "ever" etc.) will be referred to as 'n-free' here, and the series restricted to direct negation (*nênig, nigên* "no(ne)", *niouuiht* "anything", *nioman* "anyone", *nio* "ever" etc.) will be referred to as 'n-marked'. These terms refer to their morphological make-up. N-marking is the formal sign of an indefinite being restricted to the scope of negation. Despite the absence of textual evidence for independent use in fragment answers, this restriction points to these indefinites being capable of expressing negation and thus being elements that participate in negative concord according to the definition in (2). Accordingly, indefinites and sentential negation can interact in the following ways, cf. Jäger (2008: 206) for OHG:

A — *ni*-V... n-marked indefinite (negative doubling)
B — *ni*-V... n-free indefinite
C — V... n-marked indefinite (no sentential negation particle *ni*)

There is some variation between the OLG texts concerning the interaction between the expressions of sentential negation with indefinites, suggesting a subdivision of the OLG period into three sub-periods with respect to this interaction. In the *Genesis* fragments, all negative clauses with indefinites in the scope of negation are of type B, that is, without negative doubling. (8) illustrates this: the negation particle *ni* co-occurs with an n-free indefinite, *êniga huîla*.

(8) *nu uuêt ik, that ik hier* ***ni*** *mag* ***ênigahuîla*** *libbian*
now know I that I here NEG can any while live
"Now I know that I cannot live here for any (amount of) time."
(*Genesis* 67)

The *Genesis* fragments do not contain negative clauses with more than one indefinite, but given the absence of negative marking on single indefinites, we may postulate the absence of negative spread in the *Genesis*.

In the *Heliand*, 80% of the negative clauses with indefinites in the scope of negation are like in the *Genesis*, that is, they have no negative doubling (type B), (9a). 20% on the other hand have (strict) negative doubling (type A), that is, the negation particle *ni* is obligatory, whether the n-words precede (9b) or follow it (9c).

(9)a. ***Nis*** ***eo*** *so salig man*
NEG=is ever so fortunate man
"No man is ever so fortunate that ..."
(*Heliand* 1655)
b. ***Ni*** *gibu ic that te rade quad he rinco* ***negenun***, *that he uuord godes uuendean*
NEG give I that to advice said he nobleman no(ne) that he word god.GEN turn
biginna
begin

"I do not advise any nobleman to start altering the word of God."
(*Heliand* 226)

c. ***Neo*** *endi**ni*** *kumid* *thes* *uuidon rikeas*
never end NEG comes the.GEN broad kingdom
"The broad kingdom will never end."
(*Heliand* 267-268)

There does not appear to be negative spread; at most one of two (or more) indefinites is n-marked, (10).

(10) a. more than one indefinite, all n-free:
it ***ni*** *magiu* *te* ***enigoro*** *frumu* *huuergin* | *uuerdan te* ***enigumu*** *uuilleon.*
it NEG can you to any benefit at.all redound to any happiness.PL
"It is not able to do you any good at all, nor bring you any happiness."
(*Heliand* 1854-1855)

b. more than one indefinite, one n-marked, one n-free:
Nis *thes* *tueho* ***enig*** *gumono* ***nigienumu*** ...
NEG=is the.GEN.SG.N doubt any men.GEN.PL none.DAT.PL ...
"There is no doubt about it to any of the men..."
(*Heliand* 3190-3191)

In the minor texts (10th-11th centuries), all of the (only five) negative clauses with indefinites in the scope of negation in have (strict) negative doubling (type A), that is, n-marked indefinites co-occur with the negation particle irrespective of their position relative to it.

(11) *that iu* ***nian*** *scathe* ***ni*** *uuírthid*
that you.DAT no damage NEG become
"that you suffer no damage"
(*EsG*.53,31-1)

Based on this, I conclude that each of the three bodies of text from the OLG period represents a different grammar, presumably corresponding to diachronic stages. The *Genesis* fragments, lacking negative concord, probably represent the oldest stage. The *Heliand*, where negative doubling is still dispreferred, represents the middle stage. The minor texts (10th-11th centuries), where negative doubling was arguably obligatory, represent the latest stage.[6] This is likely for two reasons. First, a parallel chronology is found in OHG. Jäger's (2008:208) data show that an interaction of type B is predominant in older texts, especially *Isidor* (ca. 800), the oldest and grammatically most archaic text she considers. The percentages Jäger gives for this text are very similar to those here for the *Heliand*, viz. 18% interaction of type A (negative doubling with *ni* on the verb), but 82% interaction of type B (no negative doubling). This suggests that lack of negative doubling is a feature of a common (West) Germanic proto-stage.[7] Second, the n-marked forms of the indefinites were arguably formed by univerbation (loss of morpheme boundaries) of the particle expressing sentential negation *ni* with the n-free forms, which are available in all three bodies of text in the OLG corpus in weak NPI contexts (*ni*+*ioman* > *nioman*), that is, the n-free forms forming to input to the n-marked ones must be older than these. As n-marked indefinites are furthermore near-obligatory in negative clauses with indefinites in the scope of negation in the MLG period, as

[6] This only partially coincides with the accepted chronology of the texts: as noted, the *Heliand* is dated to ca. 830, the *Genesis* fragments ca. 840.
[7] A further parallel with OHG is the absence of negative spread, cf. Jäger (2008).

will be seen below, it can be concluded that the n-marked indefinites are historically younger than the n-free ones.

Summing up, negative doubling emerges and becomes obligatory over the three postulated subperiods of OLG.[8]

2.2. Middle Low German

MLG has a rather different system of expressing negation and marking indefinites in the scope of negation from OLG, although the system of indefinites itself does not differ much from the OLG one — MLG has three series of indefinites, a neutral or positive one, a series of NPI-indefinites (e.g. *iemand* < *ioman* "anyone") and an n-marked series restricted to the scope of direct negation (e.g. *ne(y)man(d)* < *nioman* "no one"). The language in the present corpus of official letters and legal texts is already in transition from stage II to III of Jespersen's Cycle; the transition from stage I to II is not attested. The transition to stage III happens around 1450 (earlier or later depending on dialect). The new adverbial negation particle *nicht* "not" is the standard expression of negation; 99.9% of negative clauses without indefinites in the scope of negation are negated using this particle. The inherited preverbal particle *ne/en* < *ni* on the other hand is no longer involved in the expression of negation. (12) is the only example of single preverbal sentential negation, against 1548 clauses with *nicht*, of which 1045 have *nicht* alone.

(12) *der ik unde myne erven **en**scholed recht warende wesen*
of.that I and my heirs NEG.shall law guarding be
".. of which I and my heirs shall not be judges"
(Scharnebeck 26/05/1420)

As in Breitbarth (2009), I assume that *ne/en* is no longer involved in the expression of negation in MLG,[9] but has rather developed into a marker of affective polarity or perhaps a weak NPI (cf. Zeijlstra's 2009 arguments for French). Arguments for this are its inability to express negation in negative clauses on its own and its ability to occur in certain non-negative affective contexts, such as exceptive clauses in MLG (13), which Breitbarth (2009) shows not to contain logical negation, for instance because they never contain n-marked nor n-free NPI-indefinites in the MLG corpus used. Exceptive clauses commonly depend on negative clauses.

(13) *Ok en schal me neymandejn dat gerichte setten, he **en** sij denne drittichjar olt*
also EN shall one no one in the tribunal put he EN be then thirty years old
"One should also not add anyone to the tribunal unless he is (at least) thirty years old."

[8] I reject the view that the low number of tokens in the minor texts disallows statements about their grammar. The *Heliand* with 620 negative clauses, 169 of which contain 177 indefinites (n-marked and n-free), forms a solid body of data. The probability that all five cases of n-marked indefinites in the minor texts happen to belong to the 20% of the *Heliand*-grammar and that the 80% share of n-free indefinites is accidentally unattested is merely 0.0004 (by Fischer's exact test in R). In other words, it is improbable that the grammars of the minor texts and the *Heliand* are identical.

[9] The one exception in (12) accounts for 0.04% of all negative clauses in the MLG corpus, and 0.06% of the negative clauses without indefinites. This is far below the commonly accepted rate of grammatically insignificant deviation. Santorini (1989) for instance takes a 0.7% (15/2247) rate of postposition of particles, pronouns, etc. in structurally INFL-final clauses in Yiddish to be grammatically insignificant; similarly, Pintzuk (1991) takes up to 1.1% (1/94) of post-verbal particles in structurally verb-final clauses in Old English to be grammatically insignificant. Building on that, Bies (1996) concludes that the 0.6% (2/358) rate of postposition of particles and the 0.1% (1/979) rate of postposition of pronominal objects in structurally verb-final clauses in Early New High German are grammatically insignificant.

(Braunschweig 20/04/1488)

Consequently, co-occurrence of *ne/en* with some marker of negation (e.g. an n-marked indefinite) will not be considered as an instance of negative concord.

Table 2 summarises the distribution of negative particles and indefinites in the scope of negation in the MLG corpus.[10]

en/ne alone	1
en/ne ... *nicht*	503
nicht alone	1045
en/ne..n-marked	476
en/ne..n-marked ... *nicht*	0
n-marked ... *nicht*	(1)
n-marked alone	787
en/ne ... n-free	4
total	2817

Table 2. Negation particles and indefinites in the scope of negation in MLG

Given the rise of a new particle expressing standard negation, the list of types of interaction discussed for OLG above has to be adapted as follows.

A — *en*-V ... n-marked indefinite
B — *en*-V ... n-free indefinite
C — V... n-marked indefinite (no sentential negation particle *nicht*)
D — (*en*)-V..*nicht* (negative doubling)

The most frequently attested type of interaction, as Table 2 shows, is C (787 occurrences), followed by A (476 occurrences). Type B plays an extremely marginal role, 0.3% (4 occurrences in 1268 negative clauses involving indefinites), well below the threshold commonly accepted for grammatically insignificant deviation (cf. fn. 9). The rate of use of n-free indefinites is higher in clauses with multiple indefinites (8.4%; 9 occurrences in 107); with one exception containing *en* (type B), (14a), they co-occur here with n-marked forms. However, the most common type of interaction in this type of clause (91.6%) is negative spread, that is, the multiple occurrence of n-marked forms (14b).

(14) a. ***jement*** *van orer weghene* ***ene*** *scholde uppe datsulve gut* ***mit ichte jenighewis***
anyone on their behalf NE=should on that.same good with anything in.any.way
saken
file.suit
"No one on their behalf should file a suit concerning this same good in any way at all."
(Barsinghausen 29/03/1380)

b. *Na sunte Micheles daghe 1349 scal* ***nemen nenne*** *rok dragen ...*
after St. Michael's day 1349 shall no one no cloak wear
"No one shall wear a(ny) cloak after St. Michael's day 1349 ..."

[10] The column listing the figures for single preverbal *en/ne* does not include the 168 instances of exceptive clauses in the corpus.

(Braunschweig 1380)

Under the assumptions outlined above, with inherited *en* no longer functioning as the expression of sentential negation, MLG has no negative doubling with the particle expressing sentential negation, which is now *nicht*. (15) is the only exception in 1268 clauses with indefinites in the scope of negation, 0.08%.

(15) *dat ze sik* ***nychten****scholen vorbynden tjegen* ***nyne*** *heren*
that they REFL NEG NE=shall unite against no masters
"that they shall not unite themselves against any masters"
(Oldenburg 01/05/1436)

It may be that *nycht* in (15) is not in fact the new particle expressing sentential negation "not", but a negative indefinite "nothing". The use of the genitive form *nicht-(e)s* of the old n-marked indefinite *nicht* < *niouuiht* "nothing" as meaning "nothing" to distinguish it from the new negation particle *nicht* "not" is a newer development and not followed to 100% in the present corpus, as examples like (16) show.

(16) *also dat wy uns offte unsennakomelynghen dar* ***nicht*** *ane beholden*
such that we ourselves or our progeny there nothing of keep
"such that neither we nor our progeny keep any of that"
(Lübeck 01/11/1403)

It is therefore not impossible that (15) is an instance of the old extent use ("in no measure, to no degree") of the indefinite. There seems to be great historical continuity in both High and Low German on this use of an indefinite to express emphatic negation; cf. also (7) and Bayer (2008).

Summing up, while negative doubling is lost, MLG innovates negative spread. The loss of negative doubling is due to the old negative particle, which continues to co-occur with n-marked indefinites until it is lost from the language entirely, ceasing to express sentential negation. The new negative particle, *nicht*, does not co-occur with n-marked indefinites.

3. Accounting for the Low German developments

3.1. Theoretical background

This section presents an account of the changes within OLG and from OLG to MLG, extending Zeijlstra (2004). According to this approach, negative concord languages mark negation syntactically, by means of agreement between interpretable or uninterpretable features, using the general theory of the operation Agree in Chomsky (2000, 2001). Interpretable features mark the presence of an overt negative operator OP¬; uninterpretable negation features mark the presence of a potentially covert OP¬. This is in opposition to languages without negative concord, in which — according to Zeijlstra — all negative elements are assumed to correspond to an OP¬, leading to multiple negations cancelling each other out. Zeijlstra calls this the semantic expression of negation, as opposed to the syntactic expression of negation found in negative concord languages.

Given that different elements may be associated with different types of negation features (uninterpretable or interpretable), different types of interactions between negation and

indefinites are predicted. In a language without negative concord, all elements expressing negation bear an interpretable negation feature, [iNEG].

In a non-strict negative concord language, Zeijlstra takes the marker of sentential negation to have an [iNEG] feature, while n-words are taken to have uninterpretable negation features [uNEG]. As long as n-words follow the marker of sentential negation, they are licensed by it under c-command, as in (4a). In cases of an n-word preceding what would be the standard position of the negation marker, such as in (4b), it would be outside its scope. In that case, Zeijlstra proposes that preverbal n-words in non-strict negative concord languages can self-license by triggering the insertion of a covert [iNEG] operator OP¬ by virtue of having an unlicensed [uNEG] feature. This ability to self-license is also the reason why fragment answers with n-words are grammatical in negative concord languages, and why the [uNEG] negation particle is sufficient to express negation in strict NC languages. If, in a non-strict negative concord language, the negation particle ([iNEG]) were to be inserted in a clause with a preverbal ([uNEG]) n-word, the presence of two [iNEG] features (of the negation particle and the covert OP¬ licensing the n-word) would lead to double negation.

In a strict negative concord language, all overt expressions of negation, n-words and negation particles alike, are [uNEG] and need to be licensed by an abstract [iNEG] OP¬.[11] Consequently, the negation particle is not dropped even if n-words precede it, cf. (5).

This leads to the typology of negative concord (NC) seen in Table 3:

	neg-particle	n-word
no NC	[iNEG]	[iNEG]
non-strict NC	[iNEG]	[uNEG]
strict NC	[uNEG]	[uNEG]

Table 3. Typology of negation/indefinite interactions (Zeijlstra 2004)

This typology predicts the existence of another type of language, in which n-words are [iNEG] and the negative particle is [uNEG]. Biberauer & Zeijlstra (2012) propose that this gap is filled by a more conservative/prescriptive variety of Afrikaans ('Afrikaans A'), which they argue to be a language with (strict) negative doubling but without negative spread. This is based on the fact that in this variety, n-words can co-occur with sentence-final *nie*, but not with each other (unless double negation is intended). It is, however, important to note that Afrikaans has two elements *nie*, one, sometimes called nie_1, expressing sentential negation and occurring in the middle field, much like Dutch *niet* or German *nicht*, and one, nie_2, occurring in strictly sentence-final position, whether the sentence is negated by nie_1 or a negative indefinite (cf. Besten 1983, Robbers 1992 and Bell 2004, among others). This nie_2 is unable to express sentential negation on its own. Biberauer & Zeijlstra's (2012) [uNEG] 'negative marker' is nie_2. It is furthermore important to note that Biberauer (2007, 2008, 2009), building on Oosthuizen (1998), has argued independently that sentence-final nie_2 is really a polarity marker, not a negative marker, based on the observation that it can also occur in non-negative affective contexts, besides not being able to express sentential negation on its own. Afrikaans A may therefore not be the missing language Biberauer & Zeijlstra (2012)

[11] In case there is more than one element bearing a [uNEG] feature, this can happen either by Multiple Agree, as proposed by Zeijlstra (2004), whereby one element bearing an [iNEG] feature licenses all [uNEG] elements in its scope simultaneously, or by binary (pairwise) Agree, as proposed by Haegeman & Lohndal (2010), according to whom two elements bearing uninterpretable features can also enter into an Agree relation with other uninterpretable features of the same type, eliminating one of the uninterpretable occurrences, but ultimately need one interpretable feature to be removed from the derivation. The MLG data treated here in which there is negative spread, do however not allow us to distinguish between these two proposals.

suppose to have discovered. However, as argued presently, the OLG of the *Heliand* is a language of this type. As discussed in §2.1, this language uses n-words together with the negation particle irrespective of the position of the n-words and thus qualifies as a strict negative concord language. At the same time, it lacks negative spread, which should be expected to be possible if n-words were [uNEG] as in other strict negative concord languages, given Zeijlstra's (2004) application of Multiple Agree, or alternatively Haegeman & Lohndal's (2010) (recursive) binary Agree, cf. fn. 12.

Another type of language is still missing, viz. languages without negative doubling, but with (possible) negative spread. It was argued above that MLG was such a language. A more current example is present-day French. Two implementations of Zeijlstra's basic system are available for this type of languages. Zeijlstra (2009) analyses French as having [uNEG] n-words and a semantically negative negation marker (preverbal *ne* is analysed as an NPI). The [uNEG] n-words always trigger the merger of a covert OP¬. The [iNEG] feature on this operator would clash (i.e., lead to double negation) with the semantically negative negation particle *pas*, if present. An alternative analysis of the French system has been proposed by Penka (2010). She argues that n-words are always [uNEG], even in double negation languages, but that in some languages, they can only be licensed by a covert OP¬, in which case they are specified as [uNEGø]. The absence of negative spread is under her approach accounted for in terms of a parametrisation of Multiple Agree.[12]

The complete typology, based on Zeijlstra (2004), Biberauer & Zeijlstra (2012) and Penka (2010), is thus as in Table 4 (NS = negative spread).

	neg-particle	n-word
no NC	[iNEG]	[iNEG]
non-strict NC	[iNEG]	[uNEG]
strict NC	[uNEG]	[uNEG]
strict NC, no NS	[uNEG]	[iNEG]
NS only	[iNEG]	[uNEGø]

Table 4. Typology of negation/indefinite interactions

In what follows, the developments in historical Low German will be accounted for by merging Zeijlstra's and Penka's accounts: Following Biberauer & Zeijlstra (2012), OLG will be analysed as having a [uNEG] negation particle (*ni*) and, once they appear, [iNEG] n-words. Following Penka (2010), the absence of negative doubling in MLG, while negative spread is available, is attributed to the n-words carrying a [uNEGø] feature.[13]

3.2. The Low German developments

Let us look at the distributional properties of the different negative elements over time. It was argued above that at the oldest stage of Old Low German, no n-words are used in negative clauses, only n-free indefinites. These n-free indefinites are not restricted to the scope of negation. In the OLG corpus used for the present study, they are also found in other NPI

[12] See also Jäger (2008). Jäger (2010), who also assumes that negative indefinites are universally semantically non-negative, assumes that there is an economy constraint on the multiple expression of negation which can be ranked higher or lower in an Optimality-Theoretic account.

[13] As pointed out by a reviewer, the problem with Zeijlstra's (2009) account of the French system is that the conceptual difference between an [iNEG] feature and the property of being 'semantically negative' as assumed for *pas* is unclear.

contexts such as the restriction of a universal quantifier (17) or the complement of a negative clause (indirect negation; (18)):

(17) *allaro barno bezta,thero the* ***io*** *giboran uurdi*
all.GEN children.GEN best those.GEN who ever born were
"the best of all children who were ever born"
(*Heliand* 835)

(18) ***ne*** *uuârun an themu lande geuuno, that sie* ***eo*** *fan sulicun êr seggean gehôrdin*
NEG were in this land used that they ever of such before say heard
"they were not used to hearing such things said in the past in their land"
(*Heliand* 1828-1829)

They are therefore to be analysed as weak NPIs. NPIs are licensed under c-command by an affective operator (e.g. Ladusaw 1980, Linebarger 1987, Zwarts 1996, 1998, van der Wouden 1997, Giannakidou 1998), but not through syntactic agreement (feature checking), which accounts for instance for the fact that they are not subject to the same locality restrictions as n-words.

In the *Heliand*, n-marked indefinites begin being used, spelling the rise of negative concord in historical Low German. Under Zeijlstra's (2004) approach to negative concord, the negative head *ni* in OLG must have had a [uNEG] feature: First, where n-marked indefinites were used at all,[14] they can either follow or precede *ni*, implying that OLG was a strict negative doubling language to the extent that it had (developed) negative doubling, as in (9b, 9c). Second, even n-free indefinites can precede *ni*, providing additional evidence that there must be a covert [iNEG] OP¬ in a higher position taking scope over them; (19a). What is more, such examples are also found in the *Genesis*, which does not contain any cases of negative doubling at all, suggesting that *ni* was already [uNEG] before the rise of [iNEG] n-words given the chronology proposed here (19b).

(19) a. *quadun that* ***gio*** ***ni*** *uurdi an thit lioht cumin uuisaro uuarsago.*
said that ever NEG would to the light come wise.COMP prophet
"They said that a wiser prophet would never appear."
(*Heliand* 2875-2876)
b. *that is* ***ênig*** *seg* ***ni*** *ginas*
that of.it any man NEG was.saved
"that no man was saved from it"
(*Genesis* 322)

The new n-marked series of indefinites arose during the OLG period through univerbation of the indefinites of the n-free series with the negative particle *ni*: *ni* + *ioman* "NEG + anyone" > *nioman* "no one" (cf. e.g. Van der Auwera 2010). This series had two advantages over the old n-free series: (a) it was restricted to the scope of negation, and (b) it was morphologically marked for this restriction. The increase in the frequency of negative doubling during the OLG period can be seen as a result of a form of the Elsewhere Condition (Kiparsky 1973): once a more specific series of indefinites in the scope of negation is available, it will be used (also Jäger 2008, 2010).

[14] As shown above, n-words are not used in the *Genesis*, and only in 20% of the possible cases in the *Heliand*.

As seen above, OLG developed strict negative doubling. However, n-marked indefinites are not found to co-occur with each other; if more than one indefinite is used in the scope of negation, only one of them is n-marked, cf. (10). That is, OLG lacks negative spread. It will therefore be analysed as a language of the rare type addressed in Biberauer & Zeijlstra (2012), with the sentential negation particle *ni* bearing a [uNEG] feature and n-marked indefinites bearing an [iNEG] feature. The present analysis follows Zeijlstra's (2004: 249) analysis of Czech where the preverbal negation marker is assumed to be a bound morpheme on the verb carrying a [uNEG] feature.

The question arises whether postulating an [iNEG] feature on an n-word (negative quantifier) may not lead to double negation with the covert [iNEG] operator projected by the [uNEG] feature on the negation particle *ni*. The position assumed in the present paper is that covert [iF] operators should only be projected as a matter of last resort in order to ensure syntactic licensing of all uninterpretable features [uF] (also Zeijlstra 2004: 246). Assuming, as is common within Minimalism (Chomsky 1995, 2000, 2001), that syntactic derivations proceed bottom-up, *ni*'s [uNEG] feature is already licensed by the [iNEG] feature of the n-word at the level of *v*P before any covert operator is merged, which minimally adjoins to *v*P (Penka 2010), or is merged as the specifier of a designated NegP (Zeijlstra 2004). This is true for both object and subject n-words. Even adverbial n-words, in the present corpus only *nio* "never", if analysed as adjoining to *v*P, are unproblematic. In all cases, an element carrying an [iNEG] feature c-commands *ni* ([uNEG]) in the base position of the verb and thus ensures the syntactic licensing.

The rise of negative spread between OLG and MLG (14b) can be accounted for if we assume, as just proposed, that the new morphologically negative series starts out having an [iNEG] feature, but later changes into having a [uNEG] feature during later OLG or early MLG. Such a development can be seen as a consequence of Van Gelderen's (2008b: 297) Feature Economy principle (20).

(20) *Feature Economy*
Minimize the semantic and interpretable features in the derivation, e.g:
VP-Adverbial CP-Adverbial C-Head
semantic > [iF] > [uF]

Once they have a [uNEG] feature, they can enter negative spread, either through multiple Agree (Zeijlstra 2004) or recursive binary Agree (Haegeman & Lohndal 2010). The changes in the features of the indefinites and contexts they occur in are summarised in Table 5.

	Genesis and before	*Heliand*	later OLG → MLG
NPI contexts	n-free	n-free	n-free
negation		n-marked [iNEG]	n-marked [iNEG] → [uNEG]

Table 5. Typology of negation/indefinite interactions (Zeijlstra 2004, 2009, Penka 2010)

The dominant type of negative concord in MLG is negative spread, regardless of the (dwindling) presence of *ne/en*. The fact that there is no negative doubling, that is, that n-words do not interact with the new negation particle *nicht* in MLG, may be attributed to a further change in the properties of the n-words [uNEG] > [uNEGø]. Applying Penka's (2010) account, *nicht* has an [iNEG] feature, but cannot license the n-words, as they carry the more

specific feature [uNEGø], requiring licensing by a covert OP¬ [iNEGø], which would produce double negation with *nicht*'s [iNEG] feature.

4. The interaction with Jespersen's Cycle

A connection is frequently made, explicitly or implicitly, between Jespersen's Cycle and negative concord (Haspelmath 1997, Rowlett 1997, Zeijlstra 2004, 2009,Van Gelderen 2008a). There are two ways such a connection could be conceived. If Jespersen's Cycle influences negative concord, we expect that the syntactic status of the preverbal marker and any change of this status under Jespersen's Cycle (weakening or loss) influences the availability of negative concord. If on the other hand negative concord triggers Jespersen's Cycle, that is, if n-words are neg-strengtheners (as assumed explicitly by Van Gelderen 2008a and implicitly by Haspelmath 1997 or Zeijlstra 2009), they are expected to cause the weakening and loss of the negation particle, that is, initiate Jespersen's Cycle.

4.1. Jespersen's Cycle triggering negative concord?

Turning to the first view of the interaction between Jespersen's Cycle and negative concord, consider the role of the status of the negative marker and changes to this status separately. Does the status of the negative marker influence the availability and/or type of negative concord? There are two formulations of what has been called 'Jespersen's Generalisation' available in the literature:

(21) A language is an NC language iff the overt marker of pure sentential negation is not associated with SpecNegP.
(Rowlett 1997: 326)

(22) All languages with a negative marker X^o are NC languages [...]
(Zeijlstra 2004: 165)

The OLG of the *Genesis* fragments, argued above to represent the oldest form of LG, is a language with a negative head, but without negative concord (see (5)), and also in the OLG of the *Heliand*, this pattern is found in the majority of the negative sentences with indefinites. Neither Rowlett's nor Zeijlstra's formulation of the generalisation allow such a situation under the present understanding of negative concord (2), viz. the multiple expression of negation. Under Zeijlstra's (2008) definition of negative concord,[15] (22) holds vacuously in OLG-type languages as the [uNEG] feature on the negative head agrees with the [iNEG] feature of the covert OP¬ licensing it.

Early OLG is by no means exceptional in this. Poole (2009) argues for instance that Old Spanish had such a system, with a negative head, and where the present-day n-words were NPIs which did not express negation on their own, for instance in fragment answers (23a). Not having n-words, Old Spanish cannot be said to have had negative concord. Similarly, North Sámi has a negative marker which is a syntactic head, but it lacks negative concord. Indefinites in the scope of negation are NPIs and cannot occur without the negative head (23b). If the negation particle in these languages turned out to be [iNEG], which is hard to tell as the indefinites are NPIs without formal negation features, they would not even have

[15] This is only explicitly formulated in Biberauer & Zeijlstra (2012: 348): "NC is an Agree relation involving one element bearing a formally interpretable feature [iNEG] and one or more further elements carrying uninterpretable formal features [uNEG]".

negative concord under Zeijlstra's (2008) definition in terms of syntactic agreement with an abstract operator.

(23) a. *E porende dize en la Santa Escriptura: 'Sy Dios es con nos, quien es aquel*
and therefore says in the holy scripture if God is with us who is that

*poderoso que sera contra nos?' Asy commo sy dixiese: '**Non ninguno**.'*
powerful that will.be against us thus as SE said NEG no one
"And therefore it says in the Holy Scripture 'If God is with us, who is so powerful as to be against us?' As it is said 'No one.'"
(*El Libro del Caballero Zifar*, 14th c., from Poole 2009)

b. A: *Maid don leat oaidnán?*
what.ACC you is seen
B: ***(In) maidege**.*
NEG.1SG anything
A: "What have you seen?"
B: "Nothing"
(Marit Julien, p.c.)

Rowlett's formulation also cannot capture the relation between the syntactic status of negative markers and the availability of negative concord in languages of other types. Languages with phrasal negation particles may still have a form of negative concord, as witnessed by MLG, which has a phrasal negation particle and negative spread as discussed. Other languages have phrasal negation particles with negative doubling, such as Bavarian dialects of German (Weiß 1998, 1999) and spoken Flemish (Haegeman 1995, Aelbrecht 2007). Zeijlstra's (2004) formulation readily allows for such a situation, as it does not formulate any restrictions on such languages, while under Rowlett's all depends on whether or not the particle expressing sentential negation is associated with SpecNegP. Given that under analyses following the NegP hypothesis (Pollock 1989, Haegeman 1995), phrasal negative particles (in NC languages) are assumed to be located in SpecNegP (e.g. Zeijlstra 2004, Jäger 2008), negative concord is expected to be excluded, if Rowlett is right.

On the other hand, do changes in the status of a negative particle under Jespersen's Cycle affect the availability and/or type of negative concord? Haspelmath (1997: 204) argues that negation on the indefinite without doubling on the verb (pattern C above) arises through Jespersen's Cycle, but is functionally marked, as it violates the isomorphism principle (marking predicate negation on a participant rather than the verb), and that this is remedied later by using the new strengthening particle also in sentences with negative indefinites. Iyeiri (2001) calls the incompatibility of n-words and postverbal negation 'Jack's Law', after observations of the relative rarity of this pattern in Middle English by Jack (1978a, 1978b). This development also seems to be related to the availability of negative spread at this stage of Jespersen's Cycle, e.g. Middle English (Jack 1978a, 1978b, Iyeiri 2001) or present-day French. It is however not clear how this should relate to the changes in the negative particle. English for instance loses negative spread in the Early Modern English period when the *any*-series becomes available under negation, replacing the *no*-series, long after *not* had become the standard expression of sentential negation (Iyeiri 2002a, 2002b, Wallage 2005, Nevalainen 2006). Clearly, this is due to a change in the indefinite system, and not to the much earlier change in the expression of sentential negation. Middle High German on the other hand never really develops negative spread, apart from cases involving the former NPI-indefinite *kein* "any > no" (Jäger 2008), despite an otherwise parallel development to English or Low German.

Returning to historical Low German, it is unclear how the reanalysis of the old negation particle *ni* and its later loss in the transition from OLG to MLG could have triggered the change from [iNEG] to [uNEG] in the n-marked indefinites. The old [uNEG] *ni* was in principle compatible with negative spread. A non-negative polarity marker, as MLG *ne/en* is analysed here following Breitbarth (2009), is as well.[16] The rise of *nicht* [iNEG] is equally unlikely to have triggered this change in the indefinites: even though of course its [iNEG] feature would have clashed with the [iNEG] feature on an n-marked indefinite, it continues to clash with the [iNEG] feature on the covert operator whose insertion is triggered by the now [uNEG] n-words. Rather, it now becomes clear, the availability and type of negative concord depends mainly on the features of indefinites interacting with negation, not on the status of the negation particle or changes in this status. If indefinites in the scope of negation are NPIs, or if they carry a [uNEG] feature, they can co-occur with the (obligatory) negation particle as well as each other. If they have a [uNEGø] feature, they can only co-occur with each other, but need to be licensed by a covert OP¬ and cannot co-occur with an overt [iNEG] particle. If they have an [iNEG] feature, negative doubling is only possible if the negative particle has a [uNEG] feature.

4.2. Negative concord triggering Jespersen's Cycle?

Let us now turn to the opposite direction of the presumed dependency between negative concord and Jespersen's Cycle, the question whether (the development of) negative concord can trigger Jespersen's Cycle. With respect to OLG, there is no clear evidence for a dependency, that is, whether the rise of n-marked indefinites causes the preverbal negation particle *ni* to weaken. First, it is unclear how to understand such a 'weakening'. There is no phonological weakening of *ni* during OLG (only later in MLG), and there is no weakening in terms of features either. As was argued in the discussion of (19), *ni* must have been [uNEG] all along as it has the same distribution in texts with and without NC in OLG. It is furthermore unclear when the [iNEG] *nio*-indefinites come up; they are already used in 20% of the negative clauses with indefinites in the earliest text (*Heliand*). It is finally unclear when they change from [iNEG] to [uNEG] — there are no examples of multiple indefinites (n-marked OR n-free) in later OLG. What can be said with certainty however is that n-marked indefinites have co-existed with *ni* for at least 400 years before *nicht* is regularly used as a negative marker, and they did so in obligatory negative doubling for about 200-300 years. The effect of the rise of NC is therefore not as obvious or immediate as one would expect.

With respect to MLG, no weakening effect of the (pervasive) presence of negative spread on the particle expressing sentential negation *nicht* can be discerned. Although LG n-words do not begin to co-occur with the new negation particle in later MLG, they are predicted to do so at some point. Zeijlstra (2004: 141-144) argues that Québécois French, which allows the co-occurrence of *pas* and e.g. *personne*, represents a more advanced stage of Jespersen's Cycle than (Standard/European) French. Zeijlstra links this to a weakening of *pas*, and an imminent return to stage I of Jespersen's Cycle; for Haspelmath (1997:205), this is a return to isomorphism in the expression of negation. However, Québécois has in fact been argued to be a continuation of an older stage of French, at which today's n-words were NPIs. Martineau & Déprez (2004) show that *pas*, by then the expression of standard sentential

[16] The absence of this pattern is much less of a 'law' in Middle English than it is in MLG. Jack (1978a) reports 28 instances of n-words co-occurring with *ne* and 35 with *ne … not* out of 335 sentences with n-words in his corpus of Late Middle English Prose, that is, 18.% of n-words co-occur with *not* in some form. In the Early Middle English corpus discussed in Jack (1978b), the frequency is about 4% ("fewer than twenty examples of this kind among more than five hundred instances of *ne ... nawt*"; Jack 1978b: 299). On the absence of a complementary distribution of *not* and n-words in Late Middle English, see also Wallage (2005: 225-226).

negation, can co-occur with indefinites like *rien* and *aucun* already in Classical French, and that the Québécois (and generally Acadian) pattern is arguably a continuation.

(24) a. *je* ***ne*** *veux* ***pas*** *vous exposer à* ***rien*** *de fâcheux*
I NE(G) want NEG you expose to nothing of aggravating
"I do not wish to expose you to anything aggravating"
(Chasles, Les Illustres Françoises, 254; from Martineau & Déprez 2004: 40)

b. *Et* ***n'y*** *trouverez* ***pas rien*** *d'estrange à mon avis*
and NE(G)=there find NEG nothing of=strange in my opinion
"And you will find nothing strange there, in my opinion."
(Pereisc, Lettres T. 6 1602-1637, 129; from Martineau & Déprez 2004: 41)

That is, they argue that in European French *rien, aucun*, etc. have lost their original NPI status and have become negative, which is also supported by a change in their syntactic position (Hirschbühler & Labelle 1994, Martineau 1994), and are therefore unable to co-occur with *pas*. Further support for this as a historically older stage comes from the fact that the pattern *ne ... pas rien/aucun* is nowadays regarded as literary.

We can conclude that whether or not negative doubling arises is not necessarily due to a weakening of an element expressing sentential negation, but more likely a consequence of changes in the indefinites involved. There is no clear evidence that negative concord triggers the weakening of elements expressing sentential negation.

Rather, whether or not a negative particle (phrase or head) weakens and embarks upon JC can only be determined if there are regular/conventionalised reinforcers available which show signs of losing any emphatic or pragmatic properties. OHG *drof* "drop" for instance is a common reinforcer in Otfrid's Gospel Book, which has clearly already overcome certain context restrictions (such as predicates involving fluids like *drink, pour, spill*, etc.), (25), but has not fully become conventionalised and does not survive as the new negative particle in later stages of German (also Jäger 2008). Italian *mica* 'at all, not', to give another example, is already entirely conventionalised as negation emphasiser, but is still subject to pragmatic restrictions, as shown in (26): the proposition to be negated has to be 'activated' in the discourse (Cinque 1991 [1976], Schwenter 2006, Visconti 2009).

(25) Old High German
Ni fórihti thir, bíscof, ih ni térru thir ***drof***
NEG fear you.DAT bishop I NEG harm you.DAT drop
"Do not be afraid, Bishop, I will not harm you in the least"
(Otfrid, *Evangelienbuch* 3 23, 37)

(26) Italian
a. A: *Chi viene a prenderti?*
who comes to take=you
"Who's coming to pick you up?"
B: *Non so. Ma Gianni non ha (#**mica**) la macchina.*
NEG know but Gianni NEG has MICA the car
"I don't know. But Gianni doesn't have the car."
(Schwenter 2006: his (6a); quoted after Visconti 2009: 938)

b. *Questa non è* ***mica*** *una festa data in nostro onore, ma in onore di Ada e*
This NEG is MICA a party given in our honour but in honour of Ada and
Guido! Parla di loro!
Guido speak of them

"This is not MICA a party given in our honour, but in honour of Ada and Guido! Talk about them!"
(I. Svevo, *La coscienza di Zeno*, 6 [LIZ XX]; from Visconti 2009: 944)

In the absence of such reinforcers (strengtheners, emphasisers), one cannot talk about an incipient Jespersen's Cycle, whether or not a language has negative concord, even though Van Gelderen (2008a) argues that the mere availability of negative concord spells the imminent beginning of Jespersen's Cycle.[17] If this were true, it would be surprising that, e.g., the Slavonic languages did not long ago embark on Jespersen's Cycle.

5. Conclusion

This paper has shown that OLG went from a (partially reconstructed) original stage without negative concord (whether doubling or spread) to one with negative doubling. Negative doubling was lost in the transition to MLG, but negative spread arose. Parallel to that, Low German underwent Jespersen's Cycle. In order to account for the historical variation in the interaction between indefinites in the scope of negation and the expression of sentential negation in OLG and MLG, Zeijlstra's (2004) account of negative concord was adopted, taking into account the findings in Biberauer & Zeijlstra (2012) to account for the availability of strict negative doubling languages without negative spread, such as (later) OLG. This allows n-words to carry an interpretable negation feature [iNEG]. Under the assumption that a covert operator is only postulated as a matter of last resort, which makes sense especially from an acquisitional perspective, such an operator would be absent in a negative sentence with an n-word in those historical varieties of OLG that used n-marked indefinites already. The developments in Old Low German, that is, an increase in n-words, can be accounted for by the operation of a form of the Elsewhere Condition. The rise of the MLG system, with negative spread but no negative doubling, was accounted for in terms of another change in the properties of the n-words. As a consequence of Van Gelderen's principle of Feature Economy, their formal negation features turned from interpretable to uninterpretable, and finally to [uNEGø], using Penka's (2010) analysis of French negative concord to MLG. At the same time, a new expression of sentential negation was grammaticalised, which, bearing an [iNEG] feature, was not able to license the now [uNEGø] n-words. Triggered by a presumably universal economy principle, the change within the n-words is independent of the rise of the new negative particle in MLG.

I have argued that the stage of Jespersen's Cycle is at best indirectly related to the type of interaction between indefinites and negation in historical Low German. Changes in the type of indefinites used in the scope of negation arise due to changes in the lexical properties of the indefinites involved, not as a result of changes in the expression of negation. Conversely, changes in the type of indefinites in the scope of negation do not trigger changes in the expression of negation.

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[17] See also Haspelmath (1997) for the assumption that the use of 'negative indefinites' is a form of strengthening of the expression of negation.

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Résumé

Cet article présente une analyse formelle de l'intéraction entre les quantifieurs indéfinis sous la portée de la négation et l'expression de la négation de phrase dans l'histoire du Bas-Allemand. Au cours des stades linguistiques successifs, différents types d'accord de négation se créent. En même temps, la langue passe par le cycle de Jespersen. De plus, l'article soutient que le cycle de Jespersen n'est, dans le meilleur des cas, qu'indirectement lié à l'interaction entre la négation et les quantifieurs indéfinis. Les indéfinis qui entrent dans la portée de la négation subissent des modifications qui s'expliquent par leurs propriétés lexicales intrinsèques et non par des changements dans l'expression de la négation. À l'inverse, les évolutions que subissent les quantifieurs indéfinis ne sont pas la cause des changements qui surviennent dans l'expression de la négation.

Zusammenfassung

Der vorliegende Aufsatz schlägt eine formale Analyse der Interaktion zwischen Indefinita im Skopus der Negation und dem Ausdruck der Satznegation in der Geschichte des Niederdeutschen vor. In den einzelnen Sprachstadien entwickeln sich unterschiedliche Arten von Negationskongruenz. Parallel dazu durchschreitet die Sprache Jespersens Zyklus. Der Aufsatz legt zudem dar, dass Jespersens Zyklus bestenfalls indirekt mit der Art der Interaktion zwischen Negation und Indefinita zusammenhängt. Veränderungen im Typ der im Negationsskopus gebrauchten Indefinita entstehen durch Veränderungen in den lexikalischen Eigenschaften der betroffenen Indefinita selbst, nicht als Folge von Veränderungen im Ausdruck der Negation. Ebensowenig sind Veränderungen im Typ der Indefinita als Auslöser von Veränderungen im Ausdruck der Negation zu sehen.

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