Additive negation in Dutch, from synchrony to diachrony, cyclical and non-cyclical[1]

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Abstract

This is a study of the synchrony and the diachrony of Dutch 'additive negation' strategies. 'Additive negation' is the negation expressed by *neither ... nor*. The term 'additive negation' is argued to be better than its competitors and we sketch some parameters of variation. In the synchronic part we describe the competition between three types of constructions, viz. ones that use a synthetic form *noch* and ones that use an analytic construction involving either *ook niet/geen* 'also not/no' or *min* 'little'. Each type has subtypes. We describe the frequencies of the three types, both in absolute terms and relative to the parameters of variation. In the diachronic part, we argue that the *noch* strategies are the oldest ones, followed by the *ook niet*/*geen* strategies and the *min* strategies. We discuss to what extent diachronic changes can be considered cyclical and we claim that the notion of 'cycle' has a limited value here. Special attention goes to the origin of the *min* strategies: we consider their additive negation uses to be a conventionalization of a context-dependent yet non-cancellable meaning, called 'discourse entailment'.

Keywords: additive negation, coordination, comparative, cycle, discourse entailment

1. Introduction

In this paper we study how Dutch expresses what corresponds to English *neither ... nor* as in Shakespeare's *Neither a borrower nor a lender be.* We propose to call this domain 'additive negation' and in section 2 we justify the term and compare it to other terms used in this connection. Section 3 sketches the synchrony of Dutch additive negation and we will see that

[1] Thanks are due to Maj-Britt Mosegaard Hansen (Manchester University), Iker Salaberri (University of the Basque Country), and Richard Waltereit (Humboldt University Berlin).

there are three sets of strategies. Section 4 sketches the diachrony, taking its starting point in the synchrony and in some remarks in the literature, and adding a few limited corpus probes. We show how the development of one of the strategies represents a kind of change which is undocumented so far and for which the term 'discourse entailment' has been suggested. We also focus on whether or not the changes can be characterized as cycles. Section 5 is the conclusion.

2. Additive negation

In this section we first define the notion of 'additive negation'. We also present elements of a typology.

Let 'additive negation' be the term for the constructions illustrated with Dutch *noch ... noch, niet ... en ook niet* and *niet ... en evenmin* in (1).

(1) Dutch

a. Ik vind het *noch* zinvol *noch* respectvol.
I find it ADNEG sensible ADNEG respectful
'I find it neither sensible nor respectful.'

b. Ik vind het *niet* zinvol *en ook niet* respectvol.
I find it NEG sensible [and AD NEG]$_{\text{ADNEG}}$ respectful
'I find it not sensible and not respectful either.'

c. Ik vind het *niet* zinvol *en evenmin* respectvol.
I find it NEG sensible [and equally.little]$_{\text{ADNEG}}$ respectvol
'I find it not sensible and not respectful either.'

Additive negation uses one or more[2] 'additive negators' ('ADNEGs'), which are elements that both connect and negate phrases or clauses, symbolized in what follows by 'X' and 'Y', and that furthermore express that what is predicated of X is additionally predicated of Y (cp. also Szabolcsi and Haddican 2004). In333 (1)a the three components, i.e., connection, negation, and addition, are expressed synthetically with one word, viz. *noch*. In (1)b and c we see analytic

[2] It is possible that constructions with three or more ADNEGS, as in (a), have partially different properties, but this issue is outside of the purview of this paper.
(a) I like *neither* coffee *nor* tea *nor* fruit juice.

versions, with either three or two words for the Y component, viz. *en ook niet* and *en evenmin*. To indicate that we consider these two- or three-word constructions as additive connectors we use square brackets and a subscript ADNEG.33

It is not part of the definition that the additive negator must be used with both X and Y. In (1)a *noch* is used with X and Y, but in (2) there is either the ordinary clausal negator ('NEG'), as in (2)a, or there is nothing, as in (2)b.

(2) Dutch

a. Ik vind het *niet* zinvol, *noch* respectvol.
I find it NEG sensible ADNEG respectful

b. Ik vind het Ø zinvol *noch* respectvol
I find it Ø sensible ADNEG respectful.
'I find it neither sensible nor respectful.'

For our purposes, the non-additive negator need not be clausal. In (3) we see a negative determiner *geen. Geen* is glossed with 'NEG', just like the clausal negator.

(3) Dutch

Er was *geen* geld *en* *ook* *geen* voedsel.
there was NEG money [and AD NEG]$_{ADNEG}$ food
'There was no money and no food either.'

It is also not part of the definition that the X and Y elements must be structurally identical, which differs from the approach taken in van der Auwera and Koohkan (2021: 20) and Salaberri (2022: 648–649).

(4) English

a. Mary was *neither* happy, *nor* was she sad.
b. Marry was *neither* happy *nor* sad.

Quirk et al. (1991: 938–939) call the pattern shown in (4)a 'mixed'. For (4)a they consider *neither* to be an adverb and *nor* a coordinator, different from their occurrence in (4)b, in which both *neither* and *nor* are taken to be coordinators. The difference between adverbs – here 'conjunctive' adverbs – and coordinators – and also conjunctions – is, of course, interesting

and it has attracted a fair amount of research (e.g. Bredschneijder 1999 or Broekhuis and Corver 2019: 212–217 for Dutch). It has also been suggested that *neither* is a focus particle (Johannessen 2005). These issues are outside the scope of this paper.

Finally, it is not part of the definition that the analytic constructions must contain an explicit conjunction. The conjunction may be 'expressed' asyndetically, with a pause, typically marked by a comma.

(5) Dutch

Er	was	*geen*	geld,	*ook*	*geen*	voedsel.
there	was	NEG	money[,	AD	NEG]$_{\text{ADNEG}}$	food

'There was no money, no food either.'

We will henceforth refer to the patterns with and without *en* as '(*en*) *ook* NEG'.

The term 'additive negation' is thus used in a wide sense. But it is not as wide as 'connective negation', used in van der Auwera (2021), van der Auwera et al. (2021), and van der Auwera and Koohkan (2022). 'Connective negation' lacks the additive component and thus also covers constructions such as the ones in (6).

(6) Dutch

a.

Ik	vind	het	*niet*	zinvol	en	*niet* respectvol.
I	find	it	NEG	sensible	and	NEG respectful

'I find it not sensible and not respectful.'

b.

Ik	vind	het	*niet*	zinvol	*of*	respectvol.
I	find	it	NEG	sensible	or	respectful

'I find it not sensible or respectful.'

'Additive negation' is wider than 'correlative negation' (Gianollo 2018), which applies easily to *noch* ... *noch* in (1)a, less easily to *niet* ... *en ook niet* (1)b or *niet* ... *en evenmin* in (1)c and least of all to Ø ... *noch* in (2)b.[3] It is also wider than 'negative coordinating conjunction' (Hansen 2021), which applies easily to *noch,* but less so to the multi-word constructions *en ook niet* or *en evenmin.* Our term is different from 'emphatic negative coordination', proposed by

[3] In the Dutch literature the term *reeksvormer* (lit.) 'series former' is found for the correlative structure. The term was introduced by Paardekooper (1963: 146).

Haspelmath (2007) and taken up by Salaberri (2022, 2023a, 2023b), though the idea is similar to our idea. When something is added, this 'something' is, trivially, a separate element. This idea of separation and addition comes close to the way in which Salaberri (2022: 649), following Haspelmath (2007: 15), defines emphasis: '[…] it is emphasized that the coordinated members are part of a coordination structure and are thus considered separately'. However, there is also the more common notion of emphasis, used e.g. in the comprehensive Dutch grammar called '*ANS*' ('*Algemene Nederlandse Spraakkunst*') (https://e-ans.ivdnt.org/topics/pid/ans250801lingtopic, accessed April 4 2023), where it is stated that the double *noch* in (1)a is more emphatic than the single *noch* in (2)b. In both versions, however, the coordinated elements are considered separately. To be able to use the ordinary notion of emphasis, we do not use it for the general phenomenon, which we just call 'additive negation.' Other terms reflecting the same idea are 'segregatory' (Quirk et al. 1991: 953-956) and 'distributive' (Broekhuis and Corver 2019).

In most of the examples so far, the additive negators connect phrasal constituents. But, as already adumbrated by the examples in (4), there are other types. Van der Auwera (2021) and van der Auwera et al. (2021) distinguished four types, but we now revise this typology and extend it to six types.

A special phrasal additive negation is 'finite' phrasal additive negation, i.e., the additive negation of finite verbs. The reason for distinguishing this is that non-finite phrasal (henceforth just 'phrasal') additive negation and finite phrasal (henceforth just 'finite') additive negation may be constructed differently. Thus in French, finite additive negation cannot have the double *ni* construction found in phrasal additive negation – compare (7)a to (8). Instead we get a construction with *ni ne* for the Y component, illustrated in (7)b.

(7) French

a. *Ils (*ne*) *ni* peuvent *ni* doivent répondre.
They (NEG) ADNEG can ADNEG must answer

b. Ils *ne* peuvent *ni* *ne* doivent répondre.
they NEG can ADNEG NEG must answer
'They neither can nor must reply.'

(8) French

Il	*n'*aime	*ni*	le	théâtre	*ni*	l'opéra.
he	NEG likes	ADNEG	the	theatre	ADNEG	the opera

'He likes neither theatre nor opera.'

Additive negation can also have scope over clauses. We call it the 'clausal' use. That it is special can be illustrated by English (9). It contains the one clausal *neither* example in Horn (1989) out of a total of 255 *neither* attestations.

(9) English

> […] for *neither* can there be anything more extreme than the extreme, *nor* can there be more than two extremes for one internal. (Horn 1989: 37; italics ours)

So, at least in English, clausal connection is very marked – Bond (2011: 87) gives such sentences a question mark. We furthermore distinguish both phrasal and clausal uses from a 'phrasal-clausal use', illustrated with Dutch (10). Here a subordinate finite clause functions as a phrasal complement. This construction is different from the simple phrasal use, for the phrasal-clausal use cannot use the 'X ADNEG Y' strategy, i.e., the strategy in which X has no negator.

(10) Dutch

Ik	zei	*niet*/*noch*/*Ø	dat	hij	lachte,	*noch*	dat	hij	weende.
I	said	NEG/ADNEG/Ø	that	he	laughed	ADNEG	that	he	cried

'I said neither that he laughed nor that he cried.'

The phrasal-clausal use is also different from the simple clausal use, which, in (11), cannot use *noch* for the X element.

(11) Dutch

Jan	wou	**noch/niet*	helpen,	*noch*	kon	hij	iemand	anders	om	hulp
Jan	would	ADNEG/NEG	help	ADNEG	could	he	somebody	else	for	help

vragen.
ask
'Jan wouldn't help, nor could he ask somebody else for help.'

A fifth special use is illustrated with French (12).

(12) French[4]

A:	Je	t'	aime.	B :	(*Ni*)	moi	*non*	*plus.*
	I	you	love		ADNEG	me	[NEG	more]$_{ADNEG}$
	'I love you'.				'Me neither.'			

We call this use 'phrasal-elliptical', for the elliptical response B contains both a phrase and an additive negator. The label 'phrasal-elliptical' seems clumsy, but we need it to distinguish it from a simple 'elliptical' construction, which only contains an additive negator, as in the response in French (13). *Non plus* is the sole additive negator here. In the phrasal-elliptical use *non plus* is possible too, as shown in (12), but there is also the alternative *ni … non plus,* which is impossible in the elliptical constructions.

(13) French

A :	Je	ne	suis	pas	malade.	Est-ce	que	Jean	est	malade ?			
	I	NEG	am	NEG	sick	is-it	that	Jean	is	sick			
	'I am not sick. Is Jean sick?'												
B :	*Non, *ni*.	/	*Non,	*ni*	*non*	*plus*.	/	(?Non,)	*non*	*plus.*			
	No	ADNEG	no	[ADNEG	NEG	more]$_{ADNEG}$	no	[NEG	more]$_{ADNEG}$				
	('No,) he isn't either.'												

Figure 1 summarizes the parameters to be used in the present study. We will refer to the ones in the bottom line as 'contextual parameters'.

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[4] This famous and infamous conversation is pragmatically marked – for some background, see https://www.google.com/search?client=firefox-bd&q=je+t%27aime, accessed October 19 2022.

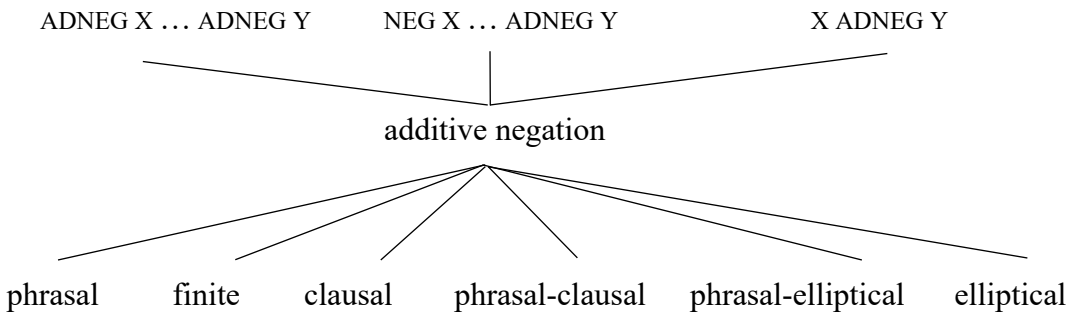

Figure 1. Additive negation: contextual parameters

Note that we do not claim that these contextual parameters are relevant or equally important in all languages. We also do not claim that these parameters are the only ones. We know that there are other parameters – see Jespersen (1917: 103–116), Bond (2011), and Salaberri (2022) – but in what follows we will refer only to the ones shown in Figure 1.

3. The synchrony of Dutch additive negation

3.1. Overall frequency differences

We have illustrated the three main ADNEG strategies of Dutch in (1), in terms of what appears with the Y component. One strategy uses *noch,* another one (*en*) *ook* NEG and a third one involves a construction with *min.* Each type shows variation and there are also intermediate types. The variation in the case of *noch* concerns what precedes the X element and this has already been illustrated – see examples (1)a and (2). In the case of (*en*) *ook* NEG the variation concerns the presence vs. absence of the conjunction *en*, the choice between the clausal negator *niet* and the negative determiner *geen* – these choices are illustrated in (1)b, (3) and (5) – and also the relative order of *ook* and NEG, illustrated in (14).

(14) Dutch

Ik heb geen vader meer
I have NEG father anymore

a. *en* ik wil mijn moeder [*ook* *niet*]$_{\text{ADNEG}}$ kwijt.
[and]$_{\text{ADNEG}}$ I want my mother [also NEG]$_{\text{ADNEG}}$ lost

b. *en*] ik wil [*niet* *ook*] mijn moeder kwijt.
[and]$_{\text{ADNEG}}$ I want [NEG also]$_{\text{ADNEG}}$ my mother lost

'I have no father anymore and I don't want to lose my mother either.'

As (15) shows, the *min* strategy comes in many subtypes. We will discuss the main parameters in section 3.4.

(15) Dutch

a. Er was *geen* geld *en* *evenmin* voedsel.
there was NEG money [and equally.little]$_{\text{ADNEG}}$ food

b. Er was geld *evenmin* *als* voedsel.
there was money [equally.little as]$_{\text{ADNEG}}$ food

c. Er was *evenmin* geld *als* voedsel.
there was [equally.little]$_{\text{ADNEG}}$ money [as]$_{\text{ADNEG}}$ food

d. Er was geld *net* *zo min* *als* voedsel.
there was money [just so little as]$_{\text{ADNEG}}$ food

e. Er was *geen* geld *en* voedsel *evenmin*.
there was NEG money [and]$_{\text{ADNEG}}$ food [equally.little]$_{\text{ADNEG}}$

'There was neither money nor food.'

Then there are intermediate constructions, combining *ook* with *noch* or *min*.

(16) Dutch (https://www.marxists.org/nederlands/marx-engels/1865/1865loonprijs.htm, accessed October 22 2023)

De boeren konden […] *noch* de waarde van de tarwe,
the farmers could ADNEG the value of the wheat
noch *ook* zijn marktprijzen verhogen.
[ADNEG also]$_{\text{ADNEG}}$ his market prices increase

'The farmers couldn't increase […] the value of the wheat nor its market prices.'

(17) Dutch
(https://forum.spaarinformatie.nl/icesave-f35/icesave-toekomst-niet-onder-ned-depositogatrantiestelsel-t793.html, accessed October 22 2023)

Zonder	die	bescherming	zou	Landsbanki	hier	helemaal	
without	that	protection	would	Landsbanki	here	at.all	
niet	kunnen	werken	*en*	*ook*	*evenmin*	worden	toegelaten
NEG	be.able	work	[and	also	equally.little]$_{\text{ADNEG}}$	become	admitted
als	bank.						
as	bank						

'Without that protection Landsbanki would not be able to operate here at all and not be admitted as a bank either.'

The intermediate types are very infrequent, which we will show for the type illustrated in (16), which appears to be the most frequent of the infrequent intermediate types, but we will thereafter leave the intermediate types out of the discussion.

Table 1 documents the frequency of the three 'pure 'construction types and the intermediate *noch ook* type in three corpora, viz. the nlTenTen20 corpus, a corpus of online present-day Dutch from various sources (discussion forums, blogs, Wikipedia, news sites, etc.; Jakubíček et al. 2013), the SoNaR corpus, documenting written Dutch from the 1950s onwards (Oostdijk et al. 2013), and the CGN corpus, documenting present-day spoken Dutch (Dutch Language Union 2004).[5] For (*en*) *ook* NEG we have only included the subtype with *ook* in front of NEG, so only the subtype shown in (14)a and not the one shown in (14)b. The latter is infrequent.[6] Table 1 shows the absolute frequencies and Table 2 recalculates them on 1,000,000 words.[7]

[5] The first corpus was searched via SketchEngine (https://www.sketchengine.eu/), the other two corpora via OpenSoNaR (https://opensonar.ivdnt.org/).
[6] In the nlTenTen20 corpus, for instance, there are 23,147 instances for (*en*) NEG *ook* against 1,052,404 for (*en*) *ook* NEG, which makes the latter about 45 times more frequent than the former.
[7] It is important to stress that these numbers are mostly approximations: the strings were retrieved automatically; for strings with fewer than 200 hits, all instances were examined and irrelevant cases discarded; for every string with more hits, a random sample of 200 was analysed and irrelevant instances were tagged; and the proportions of relevant cases were extrapolated to the overall retrieval figures. Irrelevant hits include, among other things, *zo min mogelijk* 'as little as possible', *nog* 'still' misspelled as *noch* (their pronunciations are identical) and cases of *noch* before X (*noch* X *noch* Y would be counted twice otherwise).

corpus	∑ words	(*en*) *ook* NEG	*noch*	*min*	*noch ook*
nlTenTen20	5,890.009,964	1,052,404	196,906	119,941	1,662
SoNaR	540,188,237	70,233	19,860	16,304	29
CGN	10,085,169	5,018	115	76	0

Table 1. Absolute frequencies

corpus	*(en) ook* NEG	*noch*	*min*	*noch ook*
nlTenTen20	178.68	33.43	20.36	0.28
SoNaR	130.02	36.76	30.18	0.05
CGN	497.56	11.40	7.54	0.00

Table 2. Relative frequencies per 1,000,000 words

We can draw the following conclusions. First, the (*en*) *ook* NEG strategy is by far the most frequent one. It is about 5.5/3.5 times more frequent than *noch,* the second most frequent strategy, in the nlTenTen20/SoNaR corpora, and the difference is clearest in the spoken language, i.e., the CGN, where (*en*) *ook* NEG strategy is about 45 times more frequent than *noch*. Second, the differences between the *noch* and *min* strategies are modest, but *noch* is more frequent than *min*, especially in the nlTenTen20 corpus, where it occurs about 1.5 times more often. Third, if we compare the written SoNaR corpus to the spoken CGN corpus, we see that (*en*) *ook* NEG is nearly 4 times more frequent in the spoken corpus, whereas the proportions are reversed for *noch* and *min* (*noch* is 3.2 times more frequent in the written corpus and *min* 4 times). We thus confirm the claim in the *ANS* that *noch* is primarily used in written Dutch (https://e-ans.ivdnt.org/topics/pid/ans250301lingtopic, accessed March 23 2023; the *ANS* does not comment on any preference for *min*). Fourth, as pointed out already, the intermediate strategy with *noch ook* is marginal.

3.2. Frequencies relative to the contextual parameters

In Table 3 we report on the frequency of the three main strategies, viz. (*en*) *ook* NEG, *noch* and *min,* relative to the distinction between phrasal, finite, clausal, phrasal-clausal, phrasal-elliptical and elliptical uses. The numbers are based on random 100-hit samples, where that amount of data is available (for *min* in CGN there are only 76 attestations). The random samples for *min* are representative in the sense that they reflect the proportions of *evenmin* and *zomin/zo*

min.[8] For *noch*, we should point out again (see footnote 8) that we looked at the first 100 relevant cases of *noch* before Y, so as not to bias the results toward *noch X noch Y.*

<Insert Table 3 about here>

Table 3 shows that the three strategies have different profiles. The dominant use for *noch* is clearly phrasal, regardless of the corpus. The dominant uses for the *min* strategies are the phrasal and the clausal ones, with a potential difference between the corpora, but the differences are not statistically significant. The dominant uses for (*en*) *ook* NEG are clausal and phrasal – the main difference between the corpora is the higher number of (phrasal-)elliptical cases in the CGN and its higher occurrence in the CGN is due to the corpus's spoken/interactive nature.

We also want to know what each context prefers. This is shown in Table 4. It is based on the preceding tables and therefore shares their approximative nature. Note that the elliptical category is missing for the nlTenTen20 and SoNaR corpora: in Table 3 these corpora have no hits for this category.

<Insert Table 4 about here>

While Tables 1 and 2 show that (*en*) *ook* NEG is the dominant strategy, we now see that it is the dominant one for each use.[9] (*En*) *ook* NEG gets competition from *noch* mainly in the phrasal and the phrasal-clausal use, particularly in nlTenTen20 and SoNaR. As for the competition between *noch* and *min*: *noch* wins out in phrasal and phrasal-clausal uses, still tends to be slightly more frequent in finite uses but loses to *min* in clausal uses.

[8] In SoNaR, for instance, *zomin* and *zo min* account for 11.16 % of the total number of hits and the SoNaR 100-hit sample therefore contains 11 instances.

[9] The phrasal-clausal use in CGN appears to be an exception but it can be ignored. If the 100-hit sample for *(en) ook* NEG for this corpus had contained just a single phrasal-clause use, our extrapolation procedure would have given us a frequency of 50.8, compared to an extrapolated frequency for phrasal-clausal *noch* of 4.8 and an actual frequency for phrasal-clausal *min* of 1.

In what follows we will zoom in on some aspects of the variation in usage of *noch* and *min* individually. The variation in the case of (*en*) *ook* NEG is less interesting and will not be discussed any further.

3.3. *noch*

We limit ourselves to the variation found in the main use of *noch*, viz. the phrasal one. As illustrated in (1)a and (2), there are three patterns, viz. ADNEG X ADNEG Y, NEG X ADNEG Y and X ADNEG Y. The X ADNEG Y pattern is typical in fixed combinations (*ANS*, https://e-ans.ivdnt.org/topics/pid/ans250301lingtopic, accessed March 23 2023).[10] These combinations have a meaning that is no longer compositional and the order of the X and Y constituents tends to be fixed.[11] (18) are two of the *ANS* examples. In these examples three of the four nouns (*kraai, heg, steg*) no longer have a transparent meaning. Our glosses render the older senses.

(18) Dutch (https://e-ans.ivdnt.org/topics/pid/ans250301lingtopic, accessed March 23 2023)

a. kind *noch* kraai hebben
   child ADNEG crowing have
   'have no next of kin', (lit.) 'have neither children nor a rooster'

b. heg *noch* steg weten
   hedge ADNEG alley know
   'not know the area', (lit.) 'know neither hedge nor the alley')

This raises the question whether fixed expressions only go for the X ADNEG Y pattern. Table 5

[10] This claim only concerns the phrasal context. The other contexts remain to be studied, but it is clear that main clause finite verbs only allow the x ADNEG x pattern.

(a) Ik hoorde *noch* zag hem.
    I heard ADNEG saw him
(b) *Ik *noch* hoorde *noch* zag hem.
    I ADNEG heard ADNEG saw him
(c) *Ik hoorde *niet noch* zag hem.
    I heard NEG ADNEG saw him
    'I neither heard nor saw him.'

[11] There is at least one phrase where the order is not fully fixed. These are the Dutch counterparts to *neither fish nor fowl,* describing something that cannot be classified easily, viz. *vis noch vlees* 'fish nor meat' and *vlees noch vis* 'meat nor fish', with Belgium strongly preferring the former (50 vs. 21 of the SoNaR hits) and the Netherlands the latter (44 vs. 3 hits).

surveys the alternation between fixed and non-fixed ('free') expressions for the 100-hit sample of Table 3.

		ADNEG X ADNEG Y		NEG X ADNEG Y		X ADNEG Y	
		free	fixed	free	fixed	free	fixed
nlTenTen20	n = 81	32	0	28	0	15	6
SoNaR	n = 89	35	0	23	0	27	4
CGN	n = 86	44	2	17	0	7	16

Table 5. *noch*: free vs. fixed phrasal constructions

Table 5 shows that the X ADNEG Y use is indeed strongly associated with fixed expressions, in the sense that fixed expressions overwhelmingly prefer the X ADNEG Y pattern. Also, fixed expressions are relatively more common in the spoken register – compare the 16-7 ratio for CGN to the 4-27 ratio for SoNaR and the 6-15 ratio for nlTenTen20. But the X ADNEG Y pattern is by no means restricted to fixed expressions. In fact, in the nlTenTen20 and SoNaR corpora free expressions choosing the X ADNEG Y pattern are more common than the fixed ones and they are not particularly rare either. This means that it is not only because an expression is fixed that it prefers the X ADNEG Y pattern. Already Neckel (1912: 13), approvingly cited by Jespersen (1917: 109), has a hypothesis: when X and Y are close to each other, the ADNEG has a better chance to scope over both X and Y. This demands further study and perhaps this closeness is just one factor of many. One other such factor could relate to a principle formulated by Jespersen (1917: 5):

> There is a natural tendency, also for the sake of clearness, to place the negative first, or at any rate as soon as possible, very often immediately before the particular word to be negatived [sic] (generally the verb).

It has various names, including 'Neg First' principle (Horn 1989: 293) or, taking Jespersen's hedges with *at any rate,* and *very often* seriously, 'Neg Early' principle (van der Auwera 2022: 520). It has proven useful for at least three aspects of negation. First, it helps explain why clausal negators generally prefer the preverbal to the postverbal position (e.g. Krasnoukhova et al. 2021: 500). Second, the Neg Early principle is called upon to account for Romance style non-strict negative concord (e.g. Haspelmath 1997: 206; van der Auwera 2022: 520–521), the phenomenon that a negative indefinite must occur with a clausal negator when the negative

indefinite follows the verb, but not when the negative indefinite precedes the verb. This is illustrated with Italian (19).

(19) Italian

a. *(Non) ho visto nessuno.
NEG have seen nobody
'I have seen nobody,.'

b. Nessuno (*non) venne.
nobody NEG came
'Nobody came.'

Third, the Neg Early principle is claimed to be relevant when we see that at least some languages with negative concord, whether strict or non-strict, allow phrasal additive negation with an X ADNEG Y pattern when the additive negation follows the verb, but require ADNEG X ADNEG Y when it precedes the verb (van der Auwera 2021).[12] What we see now is a fourth application – and even a double one.

For one thing, Neg Early could relate to the length of the X component: the longer the X is, the later the sole ADNEG of the X ADNEG X construction will be. Table 6 shows the length (in numbers of words) of the X and Y components for each of the three patterns with *noch* as the in-between ADNEG.

		ADNEG X ADNEG Y		NEG X ADNEG Y		X ADNEG Y	
		free	fixed	free	fixed	free	fixed
nlTenTen20	n = 81	3.13	n/a	4.50	n/a	1.93	1.00
SoNaR	n = 89	2.66	n/a	2.87	n/a	1.67	1.00
CGN	n = 86	2.68	1.00	3.00	n/a	1.43	1.00

Table 6. The length of X in ADNEG X ADNEG, NEG X ADNEG Y, and X ADNEG Y constructions

One can see here that the X ADNEG Y cases always have a shorter X than the ADNEG X ADNEG Y and NEG X ADNEG Y cases, regardless of whether the former are free or fixed expressions, suggesting that, for longer Xs, an initial negation is preferred.

For another thing, as suggested by Moeyaert et al. (1986: 122), the position of the

[12] Note that Neg Early has also been claimed to be cross-linguistically stronger in imperatives than in declaratives, but this hypothesis turns out to be false (Van Olmen 2021).

additive negation relative to the verb could be important. Compare sentences (20) to (21).

(20) Dutch

De mensen die we gisteren gezien hebben *noch* de mensen
the people that we yesterday seen have ADNEG the people
die we morgen gaan zien zijn bijzonder te noemen.
that we tomorrow go see are speciaal to name
'Neither the people that we saw yesterday nor the people that we will see tomorrow are to be called special.'

(21) Dutch

?Ik ken de mensen die we gisteren gezien hebben *noch* de
I know the people that we yesterday seen have ADNEG the
dieren die we morgen gaan zien.
animals that we tomorrow go see
'I know neither the people that we saw yesterday nor the animals that we will see tomorrow.'

In both the X component is very long, but (20) is much better than (21). The reason is, we propose, that the ADNEG of (20) still precedes the main clause verb, and the one in (21) does not. In (20) the lack of an initial *noch* doesn't cause any processing problems, i.e., we know from the *noch* between X and Y that the sentence is negative. The *noch* before Y even comes earlier than where the clausal *niet* would go – see (22).

(22) Dutch

De mensen die we gisteren gezien hebben en de mensen
the people that we yesterday seen have and the people
die we morgen gaan zien zijn niet bijzonder te noemen.
that we tomorrow go see are NEG special to name
'The people that we saw yesterday and the people that we will see tomorrow are not to be called special.'

(21) is more difficult to process, for *ik ken de mensen die we gisteren gezien hebben* could

initially be interpreted as a positive clause.[13]

3.4. *min*

Next to the *noch* and *(en) ook* NEG constructions there is a third set of constructions, all containing the element *min* 'less'. Though originally a comparative (https://www.etymologie.nl/, accessed Aug 10 2023), *min* now occurs as part of a new comparative *minder* 'less' and there is also a superlative *minst* 'least'. On its own, *min* functions in the predicative adjectival phrase *te min* meaning 'inferior, insignificant', as an adverb or adjective in phrases like *zo min mogelijk* 'as little as possible' and as part of *min of meer* 'more or less' and *niettemin* 'nevertheless'.

(23) Dutch
Ben ik te *min*?
am I too inferior
'Am I inferior?'

(24) Dutch
Je moet er *zo min mogelijk* aan denken.
you must there so little possible on think
'You must think about it as little as possible.'

(25) Dutch
Dat is *min of meer* juist.
that is less or more correct
'That is more or less correct.'

(26) Dutch
Het is *niettemin* een interessant gegeven.
it is nevertheless an interesting fact
'It is nevertheless an interesting fact.'

[13] A reviewer wonders whether Dutch *noch* would be impossible in clause-initial position. If this were the case, this would also be a factor for explaining the distribution of the ADNEG X ADNEG Y pattern. But Dutch *noch* is not ungrammatical. However, further study will have to show whether the clause-initial pattern is at least dispreferred.

In what follows we first survey the 118 hits in the phrasal 100-hit samples of Table 3. We rephrase the examples to mean ‘there was no money and no food either’. In (27) we list the attestations corresponding to *geen geld* (NEG X) and in (28) the ones corresponding with *geld* (X).

(27) Dutch

	Er	was	geen	geld	…	
	there	was	NEG	money		
a.	*en*	*evenmin*		voedsel.		32
	and	equally.little		food		
b.	*en*	voedsel		*evenmin.*		15
	and	food		equally.little		
c.	*evenmin*	*als*	voedsel.			14
	equally.little	as	food			
d.	, voedsel	*evenmin.*				13
	food	equally.little				
e.	*net* *zo min*		*als*	voedsel.		9
	just as little		as	food		
f.	, *evenmin*		voedsel.			8
	equally.little		food			
g.	*net* *zomin*		*als*	voedsel.		6
	just as.little		as	food		
h.	*net* *zo min*			voedsel.		1
	just as little			food		
i.	*zo min*	*als*	voedsel.			1
	as little	as	food			

‘There was no money and no food either.’

(28) Dutch

	Er	was	geld	…	
	there	was	money		
a.	*evenmin*	*als*	voedsel.		12
	equally.little	as	food		
b.	*net*	*zo min*	*als*	voedsel.	4
	just	as little	as	food	
c.	*net*	*zomin*	*als*	voedsel.	3
	just	as.little	as	food	

'There was no money and no food either.'

The first thing to note is that the *min* strategies show extensive variation. The parameters are described in Table 7.

Does the construction use	Findings
NEG X or X?	NEG X : 99 vs. X: 19
min Y or Y *min* ?	*min* Y : 90 vs. Y *min* : 28
even or *zo*?	*even*: 94 vs. *zo*: 24
evenmin or *even min*?	*evenmin*: 94 vs. *even min*: 0
en or no *en* ?	*en :* 47 vs. no *en* : 71
zomin/zo min als Y or *zomin /zo min* Y ?	*zomin/zo min als* Y : 23 vs. *zomin /zo min* Y: 1
net zomin/zo min or *zomin/zo min* ?	*net zomin/zo min* : 23 vs. *zomin/zo min* : 1
evenmin als Y or *evenmin* Y?	*evenmin als* Y : 26 vs. *evenmin* Y : 32
zomin or *zo min* ?	*zomin*: 9 vs. *zo min*: 15
net zomin or *net zo min* ?	*net zomin*: 9 vs. *net zo min*: 14

Table 7. Parameters of variation for the *min* constructions

The second thing is that for most parameters there are clear preferences. Thus in most constructions X is preceded by a negator, *min* precedes Y much more often than that it follows Y, *even* is more frequent than *zo*, *evenmin* is always written together and *zomin* not even in half of the attestations (and the presence of *net* has no effect on the choice), the constructions usually

do not contain an explicit *en* conjunction, *zomin* and *zo min* constructions overwhelmingly cooccur with *als*, different from *evenmin* constructions, in which *als* occurs in less than half of the attestations.

Third, some of the parameters are connected. Thus (i) e*n* and *als* do not cooccur, (ii) when X does not have a negator, then Y is preceded by *min*, and (iii) when *min* follows Y, then we see *even* but no *als.*

Some of the findings can be related to earlier accounts. First, we confirm the claim in the *ANS* (https://e-ans.ivdnt.org/topics/pid/ans251201lingtopic, accessed Aug 10 2023) that the construction with *even* is more common than the one with *zo.* Second, we also confirm the *ANS* claim that the *zo* variant occurs more often with *net* than without (https://e-ans.ivdnt.org/topics/pid/ans251201lingtopic, accessed Aug 10 2023). Third, we disagree with the ANS claim that the *zo* version with *net* is less formal than the one without *net* (https://e-ans.ivdnt.org/topics/pid/ans251201lingtopic, accessed Aug 10 2023, see also https://taaladvies.net/evenmin-als-jij-ga-ik-daar-niet-naartoe, accessed Aug 10 2023). Table 8 sketches the distribution of the two variants in the text types of the entire SoNaR corpus. *Net zomin* has 90% frequency in all text types. Furthermore, the discussion lists are the text type with a substantial number of hits that has the higher percentage of just *zomin.*

<Insert Table 8 about here>

Fourth, we found *zo min* to be more frequent than *zomin*. This is a peculiar finding. The *ANS* only lists the *zomin* form. As the dataset illustrated in (27) and (28) is limited, we surveyed the distribution of the two forms in the entire SoNaR corpus (see Table 9). The complete lack of any pattern (e.g. newspapers vs periodicals, tweets vs discussion lists) suggests that many writers do not know how to write it. We also hypothesize that any tendency for univerbation of *zo* and *min* is obstructed by the *zo min* + adjective/adverb pattern illustrated in (24). This construction overwhelmingly uses *zo min* rather than *zomin* (the SoNAR corpus has 1,129 attestations of *zo min mogelijk* vs. only 5 of *zomin mogelijk).* Finally, the discussion in Broekhuis and Corver (2019: 215) implicitly takes *evenmin* to be as separable as *zomin*, but this is not the case.

<Insert Table 9 about here>

It is important to stress that the search reported on in (27) and (28) is limited to the 118 cases in the random 100-hit samples. The corpora show more variation – and thus more parameters. We also find *min* constructions in front of X, such as the ones illustrated in (29).

(29) Dutch

a.	Er	was	*evenmin*		geld	als	voedsel.
	there	was	equally.little		money	as	food
b.			*net*	*zomin*			
			just	so.little			

'There was no money and no food either.'

A final note is that all the occurrences of *evenmin* and *zomin/zo min* illustrated so far only have the additive negation sense, even though the components are transparent and suggest the 'equally little' or 'so little' senses. We will discuss this in section 4.2.

3.5. Conclusion

The main findings of this synchronic investigation are the following. First, present-day additive negation can be expressed with three types of constructions. Second, the most frequent strategy uses (*en*) *ook* NEG, followed 'at a great distance' by both *noch* and then *min,* in each of the three corpora and for most of the six context types. Third, (*en*) *ook* NEG is found much more often in the spoken corpus than in the written one, and for *noch* and *min* the proportions are reversed. Fourth, each type comes in subtypes. For *noch* it is most remarkable that there is a subtype that is dedicated for fixed expressions in the spoken register. For *min* it is the sheer number of subtypes that strikes the eye. In the next section, we will attempt to make sense of some of the synchronic variation by bringing in diachrony.

4. The diachrony of Dutch additive negation

In this section we turn to the diachrony of Dutch additive negation. Though what is necessary is a focussed diachronic corpus study, our knowledge of the present-day constructions in combination with some observations from the literature and some snapshot diachronic searches do allow us to frame some diachronic hypotheses.

4.1. *noch* and (*en*) *ook* NEG

Noch is composed of the negator *n*(*e*) and an additive particle, possibly –(*u*)*h* 'also, and', much like Latin *neque* derives from *ne* and -k^we, (https://etymologiebank.nl/trefwoord/noch, accessed March 27 2023; Salaberri 2023b). According to the dictionary of Old Dutch (before 1200) (https://ivdnt.org/woordenboeken/oudnederlands-woordenboek/, accessed April 2 2024), the –(*u*)*h* particles no longer occurs on its own, and we only see the univerbation *noh*.

(30) Old Dutch (https://etymologiebank.nl/trefwoord/noch, accessed March 27 2023)

ne	sint	spraken	*noh*	woorth
NEG	are	languages	ADNEG	words

'there are neither languages nor words'

Assuming that –(*u*) was once an independent element, we can think of the diachrony of *noch* as developing from *ne* and (*u*)*h* as a cycle. In a first stage there is a meaning that is expressed by a strategy, then we get an intermediate stage with a competition between two strategies, and in the third stage we return to expressing this meaning with just one strategy, viz. the new one.

ne (*u*)*h* → *ne* (*u*)*h* / *noch* → *noch*

Figure 2. A *noch* cycle

There is no trace of (*en*) *book* NEG in Old Dutch, but that does not mean that it did not occur, for the relevant dictionaries focus on words, not phrases and, more generally, Old Dutch is poorly documented.[14] (*En*) *ook* NEG is attested since at least Middle Dutch (1200–1300).

[14] Nevertheless, Van der Horst (2008: 270-271) (earlier also Zeijlstra 2004: 86) reports the existence of a two-word form *ne oh*, but he speculates that this construction is influenced by Old High German.

(31) Middle Dutch
(https://gtb.ivdnt.org/iWDB/search?actie=article&wdb=MNW&id=39046&lemmodern=ook&domein=0&conc=true, lemma 6>

Ende	wilde	*ook*	bliven	*niet*
and	wanted	also	stay	NEG

'and neither did … want to stay'

It is safe to assume that *noch* is older than (*en*) *ook* NEG. We hypothesize that (*en*) *ook* NEG will then be a newcomer and gradually increase in frequency and surpass *noch.* We had a snapshot look at the Corpus Oudnederlands, the Corpus Gysseling (Early Middle Dutch), the Corpus Middelnederlands and the Couranten Corpus as well as the Brieven als Buit Corpus (Early Modern Dutch), all at the Instituut voor de Nederlandse taal (https://ivdnt.org/historisch-nederlands/, accessed 29 November 2023).[15] The results are shown in Table 10 and they confirm our hypothesis.

<Insert Table 10 about here>

We also looked at the word frequency list for the spoken subcorpus Uit den Boogaart (1975), for which we can compare the data to the CGN data that concerns more recent material.[16] This subcorpus contains around 120,000 words documenting the Dutch language in the 1960s. There are 4 attestations of *noch* occurring with an Y constituent (Uit den Boogaart ed. 1975: 137). Recalculated on 1,000,000 words this gives us 33.33 attestations. Compared to

(a) Old Dutch (Van der Horst 2008: 271)

bethio	*ne*	upstandunt	ungenethege	in	urdeile,	*ne*	*oh*
know	NEG	stand.up	impious	in	judgment	NEG	also
sundege	in	gerede	rehtero				
sinful	in	council	judges				

'I know that the impious will not stand in the judgment nor the sinful in the council of the judges.'

If this *oh* is the ancestor of German *auch* and Dutch *ook* (see Behaghel 1928: 218), then the *ne oh* construction can be seen as an ancestor of *ook niet* – a short-lived one, for *ne* will be replaced by *niet.*

[15] We searched for the lemmas "noch" and "ne" + "ook" for the *noch* figures and for "ook" + "niet/geen" for *(en) ook* NEG, For Middle Dutch we relied on a variety of spellings, e.g. *ook*|*oc*|*ock*|*oic*|*oick*|*ooc*|*oock* for *ook*. For *noch* this is problematic because it could be confused with *nog* 'still' and here we manually controlled 100 random instances and extrapolated the percentages of cases meaning 'neither' to the total number of hits.

[16] There is also a written subcorpus, but this cannot be compared to our written corpus, i.e. the SoNaR corpus, for the latter contains materials from the 1950s on.

the CGN data (see Table 2), this would suggest that the frequency of *noch* decreased from 33.33 to 11.40.

Nowadays, the *noch* variant is mostly found in written Dutch, in contrast with (*en*) *ook* NEG (see Tables 1 and 2). In the same vein, Broekhuis and Corver (2019: 8, 190–191, 211) consider *noch* a feature of a formal register. This is at harmony with the idea that *ceteris paribus* change happens first in informal registers and that older constructions survive longer in the formal register – and in fixed phrases (see Table 5). We can thus think of the competition between *noch* and (*en*) *ook* NEG as following a second cycle, symbolized in Figure 3. The second cycle starts when the first one comes to an end. To show that the last stage of the second cycle is only a potential stage, the last arrow has a dotted line.

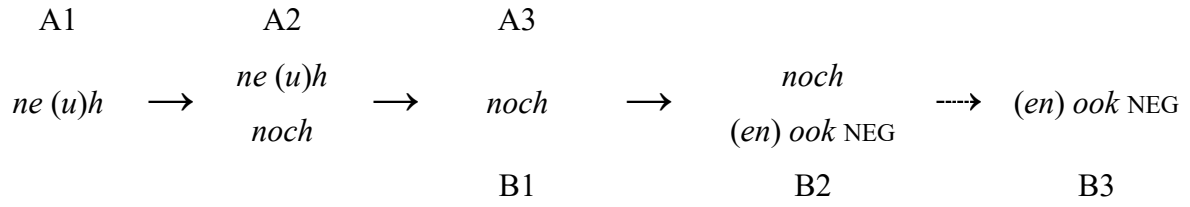

Figure 3. *noch* and (*en*) *ook* NEG: two cycles

In order to understand better what is to be gained from considering the diachrony of *noch* and (*en*) *ook* NEG to be cyclical, let us compare the *noch* and (*en) ook* NEG cycle to the 'Jespersen Cycle', the main cycle uncontroversially accepted for clausal, i.e., non-additive negation. Figure 4 sketches Latin-French Jespersen cycles, abstracting from many of the details. Latin *non* derives from the univerbation *ne oenum* 'not one'. Sound changes of French turn this *non* form into *ne*, which is the beginning of a new cycle, with the word *pas* 'step'. The line to B3 is a dotted one: Standard French has not reached B3.

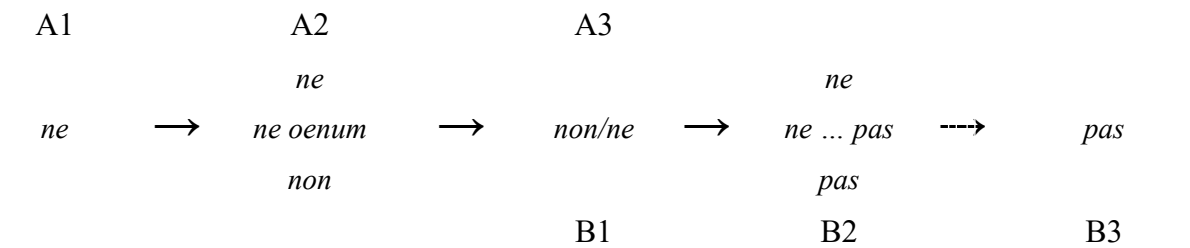

Figure 4. The Latin-French Jespersen Cycles

We will now describe six properties of the Jespersen Cycle and check whether they also apply to the proposal for *noch* – (*en*) *ook niet* cycles.

First, in a Jespersen cycle the first and the last stages of a cycle have the same meaning. A1 and A3 as well as B1 and B2 simply express clausal negation. We find the same in the *noch* – (*en*) *ook* NEG cycles: A1 and A3 as well as B1 and B3 express additive negation. Second, these first and last stages have to to be similar in a non-trivial way. The first and last stages need not and typically are not identical, though. Trivially, the *ne* of stage B1 is phonetically not the same as the *pas* of stage B3 and the Latin *non* of stage A3 is different from the Latin *ne* of stage A1. Less trivially, the syntactic properties may be different. The French *ne* negator of stage B1 precedes the finite verb, and the *pas* negator of stage B3 follows it. For the *noch* – (*en*) *ook* NEG cycles, both stages A1 and A3 (*ne uh* and *noch*) and stages B1 and B3 (*noch* and (*en*) *ook* NEG) are also similar: in each of these stages there is only one construction. But the stages are not identical: A1 has two words and A3 one, and on the B cycle it is the first stage that has one word and the last one has two. In the Jespersen cycle, as shown in Figure 3, each first and last stage has one word. If one takes this kind of similarity to be criterial for a change to constitute a cycle, then the changes from *ne uh* to *noch* and from *noch* to (*en*) *ook* NEG are not cycles. We understand similarity in a wider sense, but it is true that the first and last stages of the Jespersen cycle show a higher degree of similarity than the ones of the *noch* – (*en*) *ook* NEG cycles. It is to be noted also that Figure 4 is a simplification. Thus Latin not only had *ne* and *non*, but also *haud*, which disappeared and was not renewed (Magni and Orlandini 2017) and in French *pas* was not the only minimizer that was developing into a clausal negator, the most important one being *point* and especially *mie* (Muller 1991: 153–154; Hansen 2018c). In this respect the Jespersen and the *noch* – (*en*) *ook* NEG cycles are similar again, for the representation of the latter in Figure 4 is also a simplification: it does not show the *min* strategies yet – we will come to them in 4.2. Third, because Figure 4 shows a succession of two cycles, we also see that the change from stage A1 to A3 is similar to the change from B1 to B3. The similarity of the changes derives from the similarity of their first and last stages.[17]

[17] Precisely because of the similarity of the first and last stages it is regrettable that the phenomenon did not become known with its traditional name 'spiral' (van der Auwera 2022: 614; Hansen 2018a: 129, 2018b: 54). This was the term that Meillet (1912) used, which he must have owed to von der Gabelentz (1891/1901) (von der Gabelentz et al. 2016: 268–271), who used it for changes from analytic to synthetic language types. For this issue, Jespersen too used the term 'spiral' (Jespersen 1922: 424–425). For his 'Jespersen Cycle' Jespersen used neither 'cycle' nor 'spiral'. It is also regrettable that the similarity of the first and last stage has not always been stressed, not e.g. by Givón (1979: 210, 232). He devotes more attention to the similarity of the changes, i.e., to the

This trivially holds for the *noch – (en) ook* NEG cycles, too. Fourth, the similarity of the intermediate stages, i.e., stages A2 and B2, can be less strong. For the Jespersen cycles, they both involve a minimal unit, with *oenum* 'one' in Latin and *pas* 'step' in French, but in A2 we see univerbation, yet not in B2. If we look at more languages, we see that the similarity of the intermediate stages may be reduced further (van der Auwera and Krasnoukhova 2020: 96, 102; van der Auwera et al. 2022: 617, 618). What happens in the second stage is interesting and certainly not random, but at a cross-linguistic level the similarity of the intermediate stages is trivial: it is the stage through which a language goes from one strategy to a different yet similar strategy and it harbours their competition. As to the *noch* – (*en*) *ook* NEG cycles, the similarity in the intermediate stages is also limited (A2 again shows univerbation and B2 does not) and in both A2 and B2 we see competition. Fifth, we are allowed to hypothesize 'incomplete' cycles (e.g. Vossen 2016 or Breitbarth et al. 2019: 3), though not light-heartedly: one needs language-internal and/or cross-linguistic data, suggesting the potential of completion. We see an incomplete Jespersen cycle in Standard French, which has not shed *ne*. With *noch* – (*en*) *ook* NEG we also see an incomplete cycle: stage B3 with only the (*en*) *ook* NEG choice has not been reached. Sixth, Hansen (2018a, 2018b, 2020) makes a distinction between onomasiological and semasiological cycles and we can describe both Jespersen and *noch* – (*en) ook* NEG in these terms. All cycles are onomasiological and some are semasiological as well (Hansen 2020: 172). For both types the first stage is defined in terms of a meaning. The label 'semasiological' is relevant only when two or more cycles are compared, and they are called 'semasiological' when the first stages of the two or more cycles involve identical or etymologically closely related constructions. Hansen applies the distinction to pragmatic cycles, but we agree that a morpho-syntactic cycle such as the Jespersen cycle, is 'driven' by pragmatics (Hansen 2020: 167) and that the distinction can also be applied to the Jespersen cycles. This implies then that the Jespersen cycles are, trivially, onomasiological and, just in case the first stages of two or more Jespersen cycles use an identical or etymologically related form, the cycles are semasiological as well. Thus we can recognize the Latin-French Jespersen cycles as semasiological: the Latin A1 is etymologically related to the French B1 stage. As for the two *noch* – (*en*) *ook* NEG cycles, they are semasiological too: the additive and negative components of stages A1 and B1 are etymologically related.

recurrence of the cycles. Scivoletto (2020: 253) suggests 'spiral' for the recurrence of stages and 'wave' for the recurrence of changes.

An interesting difference between *noch* and (*en*) *ook* NEG is that (*en*) *ook* NEG is possible only in the Y domain. This makes sense, for (*en*) *ook* NEG is transparently additive, i.e., anaphoric, it 'looks back' at the X element and adds an Y element. We hypothesize that the NEG X ADNEG Y construction is older than the ADNEG X ADNEG Y and X ADNEG Y constructions.[18] As to the relative age of the latter two constructions, we hypothesize that the ADNEG X ADNEG Y pattern is older than the X ADNEG Y pattern: the latter is arguably more complex in that the middle ADNEG is both cataphoric and anaphoric, it is cross-linguistically more rare (Haspelmath 2007: 18; Salaberri 2022: 668) and in Dutch it use is more restricted.[19] To check these hypotheses we looked at *noch* in the Corpus Oudnederlands, the Corpus Gysseling (Early Middle Dutch), the Corpus Middelnederlands and the Couranten Corpus as well as at Brieven als Buit Corpus (Early Modern Dutch (https://ivdnt.org/historisch-nederlands/, accessed 29 November 2023). We collected all instances in Old Dutch and a random sample of 50 cases of *noch* for Early Middle Dutch, Middle Dutch and Early Modern Dutch. The results are shown in Table 11.

<Insert Table 11 about here>

Table 11 shows a complicated picture, with attestations of a ADNEG form *weder* and a clausal negator that precedes *weder* X *noch* Y and, mainly in subordinate clauses, follows X *noch* Y. Nevertheless, the data support our hypotheses: (i) Old Dutch only has one case of *noch* X *noch* Y, this may be a coincidence, but at least the better coverage of the later periods shows this pattern to be more frequent, (ii) *X noch* Y without a clausal negator only shows up in Early Modern Dutch.

4.2. *min*

Now we come to the *min* constructions. The lemma in the *WNT* (*Woordenboek der Nederlandsche* Taal) for *evenmin*, written in 1918, gives two meanings, viz. the additive negation meaning as well as the meaning 'equally little', suggested by the components *even* and *min.* The *WNT* lemma for *zomin* from 1996 gives 'equally little' too, as well as *evenmin*, which, we have just seen, is listed with two meanings. In the *ANS*, however, only the additive

[18] Lithuanian has both NEG X ADNEG Y and ADNEG X ADNEG Y constructions and the former are claimed to be older (Ostrowski 2014)

[19] In Latin the X ADNEG Y is claimed to be a later development (Gianollo 2018: 234–235).

negation meaning is mentioned) and the same is true for Van der Heijden (1999: 84) and Broekhuis and Corver (2019: 106). Language advice sites also only mention the additive negation meaning for *evenmin* and *zomin* (https://www.vandale.nl/taaltip-is-het-net-zo-min-of-net-zomin; https://www.vlaanderen.be/taaladvies/taaladviezen/evenmin-als-niet, both accessed April 19 2023). So we may assume that there has been a semantic change, in which the additive negation sense has become either the only sense or the dominant one.

The lemmas and observations just discussed only concern the one-word constructions. These are fairly recent. The lemmas in the *WNT* give 1857 and 1869 as the first attestations of the univerbations (see also https://etymologiebank.nl/trefwoord/evenmin, accessed March 28 2023), for *even* and *zo*, respectively. It is clear that the earlier two-word constructions allowed the additive negation interpretation too. (32) is an example from 1814.

(32) Dutch (https://www.dbnl.org/tekst/neuf002klei01_01/neuf002klei01_01_0240.php, accessed 30 October 2023)

Mogen	alle	dit	gelooven,	gij	mijne	lieve	zult	er	zeker	niet	aan
may	all	this	believe	you	my	dear	will	there	surely	NEG	at
twijfelen,	*even*	*min*	*als*	aan	mijn	vurig	verlangen,	dat	ik	goede	
doubt	equally	little	as	at	my	fiery	desire	that	I	good	
tijdingen	van	u	bekomen.								
tidings	from	you	get								

‘May all believe this, you my dear ones will surely not doubt, and no less / neither at my strong desire, that I get good tidings from you.’

It is tempting to follow the present-day discussions and claim that the additive negative sense is now the only one. At least, all of the examples given so far only allow the additive negation sense. Yet, the ‘equally little’ sense is still available. We see it in (33).

(33) Dutch

Een	zweetkuur	hielp	*weinig*,	*evenmin*	*als*	een	aderlating.
a	sweat cure	helped	little	equally.little	as	a	bloodletting

‘A sweat cure helped little, as little as a bloodletting.’

In (33) the X domain contains an explicit *weinig* ‘little’ element and *evenmin* ‘equally.little’ immediately follows *weinig*. These two features would seem to be important. Without the

preceding marking of a low degree like *weinig*, the etymological reading is not possible, and when the *min* construction is separated from this marking, it becomes more difficult.

(34) Dutch

Een	zweetkuur	heeft	weinig	voor	die	mensen	kunnen	doen
a	sweat cure	has	little	for	those	people	can	do
evenmin	*als*	een	aderlating.					
equally.little	as	a	bloodletting.'					

??'A sweat cure has done little for these people, as little as a bloodletting.'

Here is our hypothesis on how the change took place. Consider (27)a again.

(27) a. Er was geen geld *en* *evenmin* voedsel.
there was NEG money and equally.little food
'There was no money and no food either.'

The original and still transparent meaning of *evenmin* is 'as little as'. In (27)a the X part of the sentence says that there was no money. When the Y part literally says that there was as little food as money, this entails that there was no food either. This makes a context like that of (27)a, a NEG X ADNEG Y context, a bridging context[20]: it allows both the old 'equally little' reading and the additive negation reading. Note that contexts without a negative in the X domain, such as (28)a and (29)a, are not bridging contexts.

(28) a. Er was geld *evenmin* *als* voedsel.
there was money equally.little as food
'There was no money and no food either.'

(29) a. Er was *evenmin* geld *als* voedsel.
there was equally.little money as food
'There was no money and no food either.'

[20] The term is due to Evans and Wilkins (2000) and spread in large measure due to Heine (2002) – the same idea is also expressed in e.g. Diewald (2002) and, in an early generative framework, in Hankamer (1977). A bridging context is a context that allows two analyses, one reflecting the older use and the other the incoming one.

Given the original meaning of *evenmin*, the sentences should mean that there was as little money as food. This is not what they mean. We hypothesize that the additive negation use that we see in (28)a and (29)a became available after the additive negative established itself in uses such as (27)a.

The additive negation interpretation that we hypothesize to have emerged in a bridging context is a context-dependent one. This makes it similar to a semantic change based on implicature. However, an implicature-based interpretation is inherently cancellable. We can illustrate this with the additive negation found in English, possibly first drawn attention to by Jespersen (1917: 110, 112) and named 'negative connexion' by him. The example is ours.

(35) Fred did*n't* like Lutherans *any more* than the Pope did.

The literal meaning has Fred not liking Lutherans more than the Pope. There is also an additive negation interpretation, viz. an implicature that Fred didn't like Lutherans, but this depends on the assumption that the Pope didn't like Lutherans. This additive negation interpretation in (35) is cancellable: it is perfectly possible that the Pope does like Lutherans, at least to some extent. The additive negation reading with Dutch *min* constructions illustrated in (27) to (29) is not cancellable.[21] In ongoing work on French and Spanish additive negative construction Maj-Britt Mosegaard Hansen has suggested the term 'discourse entailment' for the non-cancellable yet context-dependent interpretation, which will eventually become conventionalized (van der Auwera et al. 2023).

We don't know when the new sense developed. But given that the change has not been completed yet and that the univerbation took place in the mid-nineteenth century, which for *zomin* hasn't been completed either (see Table 9), it is possible that the additive negation sense was consolidated only in the 19th century. Given that the *min* strategies are strongly associated with the written register, we hypothesize that it started there. Its frequency in the spoken register is still much lower than in the written register (see Tables 1 and 2).[22] In the written register the frequency is, of course, also low – albeit less low – and thus the grammaticalization of the *min* connective will constitute a good example of a low-frequency grammaticalization (cp. Hoffmann 2005).

When the *min* strategies developed, they joined the *noch* and (*en*) *ook* NEG strategies.

[21] Another difference between the English *not any more* and the Dutch *min* constructions is that the Dutch ones scope over the Y constituents and the English ones over the X constituents.
[22] In the spoken Van den Boogaart (1975) subcorpus *min* didn't occur at all.

We must thus put the *noch* – (*en*) *ook* NEG cycles, represented in Figure 3 in a wider context. Figure 4 sketches the current situation. The ovals represent the A and B cycles of Figure 3, the latter only shown in its current incomplete shape.

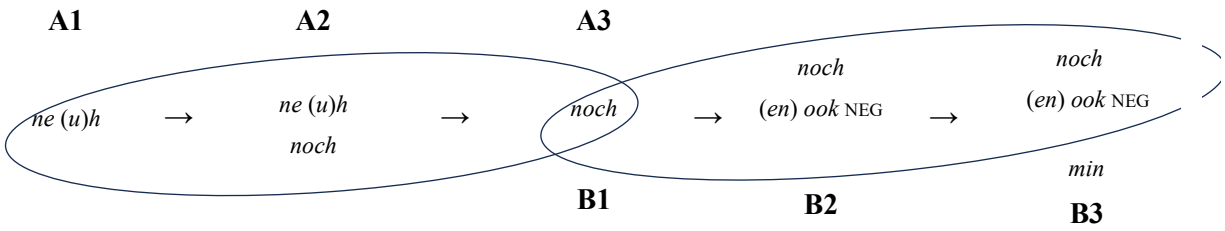

Figure 4. The additive negation cycles in a wider context

What will happen in the future is unclear. For some time to come, the three current strategies or, better, sets of strategies, will co-exist, though there are context-dependent differences (Table 3). If, at some point, (*en*) *ook* NEG prevails, then the B cycle will come to its conclusion. If, at some point, the *min* strategies oust both *noch* and (*en*) *ook* NEG, we can posit another cycle, with *noch* as the first stage and *min* as the last one. A future scenario ending with only the *min* strategies is currently unlikely[23]: the frequencies of the *min* strategies are just too low. Even for the clausal use, the one in which the *min* strategies made 'most progress', the *min* strategies are still much less frequent than the (*en*) *ook* NEG strategies (see Table 4).

Thus the only change in the realm of Dutch additive negation for which we can now hypothesize cyclicity is the one from *ne* (*u*)*h* to *noch.* That does not make the intrusion of *min*, which disturbs the projected conclusion of the B cycle, any less interesting, and there is also no need to attribute a higher significance to pure cyclical changes. Do we exaggerate the importance of cyclical change? Is a cycle perhaps only an 'illusory epiphenomenon' or is 'cycle' only another word for 'grammaticalization chain' (Givón 2016: 253)? This is too drastic: if a change takes a language to a stage that is similar in a non-trivial way to an initial stage, it is worthwhile having a label for it and 'cycle' is an acceptable label.

Finally, the representation in Figure 4 does not reflect that at present, i.e., at the B3 stage, the three strategies have different frequencies, overall and relative to register and context (Tables 1 to 4). Overall, (*en*) *ook* NEG is vastly more frequent: it now is the default strategy, the canonical one. *Noch* and *min* are 'satellites', *noch* being the stronger one – except for the clausal

[23] In French and Spanish, however, the counterparts *non plus* 'no more' and *tampoco* 'so.little' are much more successful (van der Auwera et al. 2023).

context. Koch and Oesterreicher (1996) and Detges (2020) use the term ‘satellite’ only for the younger competitors to the canonical construction, so, in this context, only for the *min* constructions. We see no reason for denying the label to the *noch* constructions: *min* and *noch* both hover around frequency levels far removed from that of (*en*) *ook* NEG. About the younger satellites, Detges (2020) stresses that they typically come in many variants. This is definitely the case for the *min* strategy. Detges (2020) also argues that normally many of the variants will disappear and that the eventual replacement of a canonical form by a satellite is in fact a very special and relatively rare case. If it does happen, we have a real cycle – in Detges’ terms, ‘a full cycle’. So from this point of view, too, there is no need to drop the notion of ‘cycle’, but we should be aware of its limitations.

5. Conclusion

In this paper we defined a notion of additive negation, which captures the meaning of constructions like English *neither … nor*. We surveyed the three types of constructions that express additive negation in present-day Dutch. One involves the element *noch* ‘neither/nor’, another the phrase *ook niet/geen* ‘also not/no’ and a third one uses the element *min* (lit.) ‘little’. We described parameters of variation and frequencies. We then framed hypotheses about their diachronies. We focussed on two issues: (i) the process through which a phrase meaning ‘equally/as little’ acquires the additive negation meaning through what we termed a ‘discourse entailment’, and (ii) the extent to which we can use the term ‘cycle’ to capture the diachronies.

Abbreviations

AD ‘additive’ ADNEG ‘additive negation’, NEG ‘negation’

Corpora used

Dutch Language Union. 2004. *Corpus Spoken Dutch: Release 1.0.* The Hague: Dutch Language Union. https://opensonar.ivdnt.org/

Jakubícek, Miloš, Adam Kilgarriff, Vojtech Kovár, Pavel Rychlý, and Vit Suchomel. 2013.

‘The TenTen corpus family’. *Proceedings of the International Corpus Linguistics Conference* 7: 125–127. https://www.sketchengine.eu/

Oostdijk, Nelleke, Martin Reynaert, Véronique Hoste, and Ineke Schuurman. 2013. ‘The construction of a 500-million-word reference corpus of contemporary written Dutch’. In *Essential Speech and Language Technology for Dutch: Results by the STEVIN Programme,* edited by Peter Spyns and Jan Odijs, 219–247. Dordrecht: Springer. https://opensonar.ivdnt.org/

Historical corpora at the Instituut voor de Nederlandse taal – the Corpus Oudnederlands, the Corpus Gysseling (Early Middle Dutch), the Corpus Middelnederlands and the the Couranten Corpus, the Brieven als Buit Corpus (Early Modern Dutch)

References

ANS. Algemene Nederlandse Spraakkunst. https://e-ans.ivdnt.org/

Behaghel, Otto. 1928. *Deutsche Syntax. Eine geschichtliche Darstelling. Band III. Die Satzgebilde*. Heidelberg: Carl Winter’s Universitätsbuchhandlung.

Bond, Oliver. 2011. ‘Negation in clause linkages’. *Language documentation and description* 9: 77–120. https://lddjournal.org/articles/10.25894/ldd206

Breitbarth Anne, Lieven Danckaert, Elisabeth Witzenhausen, and Miriam Bouzouita. 2019. ‘Cycling through diachrony’. In *Cycles in language change*, edited by Miriam Bouzouita, Anne Breitbarth, Lieven Danckaert, and Elisabeth Witzenhausen, 1–12. Oxford: Oxford University Press.

Bredschneijder, Martijn. 1999. ‘Reeksvorming: initiële coördinatie in het Nederlands’. *Tabu* 29: 1–20.

Broekhuis, Hans and Norbert Corver. 2019. *Syntax of Dutch. Coordination and ellipsis.* Amsterdam: Amsterdam University Press.

Detges, Ulrich. 2020. ‘Future markers in Western Romance. Cyclic change, synchronic variation and diachronic competition’. *Journal of Historical Pragmatics* 21: 289–314.

Diewald, Gabriele. 2002. ‘A model for relevant types of contexts in grammaticalization’. In *New reflections on grammaticalization*, edited by Ilse Wischer and Gabriele Diewald. 103–120. Amsterdam: Benjamins.

Evans, Nicholas and David Wilkins. 2000. ‘In the mind’s ear: the semantic extensions of perception verbs in Australian languages’. *Language* 76: 546–592.

Gianollo, Chiara. 2018. *Indefinites between Latin and Romance.* Oxford: Oxford University Press.

Givón, Talmy. 1979. *On understanding grammar*. New York: Academic Press.

Givón, Talmy. 2016. 'The diachrony of pronominal agreement. In Ute and maybe elsewhere'. In *Cyclical change continued,* edited by Elly Van Gelderen, 251–286. Amsterdam: Benjamins, 251–286.

Hankamer, Jorge. 1977. 'Multiple analyses'. In *Mechanisms of syntactic change,* edited by Charles N. Li, 583–607. Austin: University of Texas Press.

Hansen, Maj-Britt Mosegaard. 2018a. 'The role of inferencing in semantic/pragmatic cyclicity: the case of Latin *nunc* and French *or*/*maintenant*'. *Open Linguistics* 4: 127–148.

Hansen, Maj-Britt Mosegaard. 2018b. 'Cyclic phenomena in the evolution of pragmatic markers. Examples from Romance'. In *Beyond grammaticalization and discourse markers*, edited by Salvador Pons Bordería and Óscar Loureda Lamas, 51–77. Leiden: Boston.

Hansen, Maj-Britt Mosegaard. 2018c. 'The expression of clause negation: from Latin to Early French'. In *Latin tardif, français ancient*. *Continuités et ruptures,* edited by Anne Carlier and Céline Guillot-Barbance, 269–297. Berlin: De Gruyter.

Hansen, Maj-Britt Mosegaard. 2020. 'Introduction. The role of pragmatics in cyclic language change'. *Journal of Historical Pragmatics* 21: 165–181.

Hansen, Maj-Britt Mosegaard. 2021. 'Cyclic changes to the negative coordinating conjunction from Latin to Modern French'. *Folia Linguistica Historica* 42: 223–254.

Haspelmath, Martin. 1997. *Indefinite pronouns.* Cambridge: Cambridge University Press,

Haspelmath. Martin. 2007. 'Coordination'. In *Language typology and syntactic description*. *Volume 2*, edited by Timothy Shopen, 1–51. Cambridge: Cambridge University Press.

Heine, Bernd. 2002. 'On the role of context in grammaticalization'. In *New reflections on grammaticalization*, edited by Ilse Wischer and Gabriele Diewald*,* 83–102. Amsterdam: Benjamins.

Hoffmann, Sebastian. 2005. *Grammaticalization and English complex prepositions: A corpus-based study.* London: Routledge.

Horn, Laurence R. 1989. *A natural history of negation.* Chicago: The University of Chicago Press.

Jespersen, Otto. 1917. *Negation in English and other languages.* København: Høst & Søn.

Jespersen, Otto. 1922. *Language – Its nature, development and origin*. London: George Allen Unwin.

Johannessen, Janne Bondi. 2005. 'The syntax of correlative adverbs'. *Lingua* 115: 419–443.

Koch, Peter and Wulf Oesterreicher. 1996. 'Sprachwandel und expressive Mündlichkeit'. *Zeitschrift für Literaturwissenschaft und Linguistik* 26: 64–96.

Krasnoukhova, Olga, Johan van der Auwera, and Mily Crevels. 2021. 'Postverbal negation – typology, diachrony, areality'. *Studies in Language* 45: 499–519.

Magni, Elisabetta and Anna Orlandini. 2017. *Haud :* usages et fonctions d'une négation perdue, *Revue de linguistique latine du centre Alfred Ernout* 14 https://hal.sorbonne-universite.fr/hal-03368108

Meillet, Antoine. 1912. 'L'évolution des formes gramamaticales'. *Scientia* 12: 384–400. (Reprinted in Meillet, Antoine. 1926. *Linguistique historique et linguistique générale.* Paris: H. Champion, 130–148).

Moeyaert, C., P.C. Paardekooper, and J. Peperstraete. 1986. *Beknopte A.B.N.-spraakkunst.* Kapellen: Pelckmans.

Muller, Claude. 1991. *La negation en français. Syntaxe, sémantique et éléments de comparaison avec les autres langues romanes.* Genève: Droz.

Neckel, G[ustav]. 1912. 'Zu den germanischen Negationen'. *Zeitschrift für vergleichende Sprachwissenschaft auf dem Gebiete der Indogermanischen Sprachen* 45: 1–23.

Ostrowski, Norbert. 2014. 'From sentence negation to additive. Old Lithuanian *nei*(*gi*) "and not; nor; than; before"'. *Baltic Linguistics* 5: 123–143.

Paardekooper, P.C. 1963. *Beknopte ABN-syntaxis*. Den Bosch: Malmberg.

Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik. 1991. *A comprehensive grammar of the English language*. London: Longman.

Salaberri, Iker. 2022. 'A cross-linguistic study of emphatic negative coordination'. *Studies in Language* 46: 647–717.

Salaberri. Iker. 2023a. Towards and account of the emergence, evolution and variability of emphatic coordination in Indo-European, Part 1: A synchronic account. Paper presented at the 56th Annual Meeting of the *Societas Linguistica Europaea*, Athens August 2023.

Salaberri. Iker. 2023b. Towards and account of the emergence, evolution and variability of emphatic coordination in Indo-European, Part 2: A diachronic account. Paper presented at the 26th International Conference on Historical Linguistics, Heidelberg September 2023.

Szabolcsi, Anna and Bill Haddican. 2004. 'Conjunction meets negation: A study in cross-linguistic variation'. *Journal of Semantics* 21: 219–249.

Scivoletto, Giulio. 2020. 'Semasiological cyclicity in the evolution of discourse markers'.

Journal of Historical Pragmatics 21: 236–262.

Uit den Boogaart, P.C. (ed.) 1975. *Woordfrequenties in geschreven en gesproken Nederlands*. Utrecht: Oosthoek, Scheltema & Holkema.

van der Auwera, Johan. 2021. 'Quirky negative concord: Croatian, Spanish and French *ni*'s'. *Jezikoslovlje* 22: 195–225.

van der Auwera, Johan. 2022. 'Nominal and pronominal negative concord, through the lens of Belizean and Jamaican Creole'. *Linguistics* 60: 505–540.

van der Auwera, Johan and Sepideh Koohkan. 2022. 'Extending the typology: negative concord and additive negation in Persian'. *Linguistic Typology at the Crossroads* 2: 1–36. https://typologyatcrossroads.unibo.it/issue/view/1039

van der Auwera, Johan and Olga Krasnoukhova. 2020. 'The typology of negation'. In *The Oxford handbook of negation,* edited by Viviane Déprez and M.Teresa Espinal, 91–116. Oxford: Oxford University Press.

van der Auwera, Johan, Olga Krasnoukhova, and Frens Vossen. 2022. 'Intertwining the negative cycles'. *The Negative Existential Cycle from a historical-comparative perspective*, edited by Ljuba Veselinova and Arja Hamari, 611–650. Berlin: Language Science Press. https://langsci-press.org/catalog/book/307

van der Auwera, Johan, Motoki Nomachi, and Olga Krasnoukhova. 2021. 'Additive negation and negative concord in Balto-Slavic'. In *Studies in Baltic and other Languages. A Festschrift for Axel Holvoet on the occasion of his 65th birthday*, edited by Peter Arkadiev, Jurgis Pakerys, Imesa Šeškauskienė, and Vaiva Žeimantienė, 45–66. Vilnius: Vilnius University Press, 45. https://www.journals.vu.lt/open-series/article/view/24483

van der Auwera, Johan, Daniel Van Olmen and Maj-Britt Mosegaard Hansen. 2023. Equatives and negative comparatives for connective negation. Paper presented at the 56th Annual Meeting of the *Societas Linguistica Europaea*, Athens August 2023.

Van der Heijden, Emmeken Marjolein Rian. 1999. *Tussen nevenschikking en onderschikking. Een onderzoek naar verschillende vormen van verbinding in het Nederlands.* Doctoral dissertation, Katholieke Universiteit Nijmegen.

Van der Horst, J.M. 2008. *Geschiedenis van de Nederlandse syntaxis. Deel 1.* Leuven : Leuven University Press.

Van Olmen, Daniel. 2021. 'On order and prohibition'. *Studies in Language* 45: 520–556.

von der Gabelentz, Georg, James McElvenny, and Manfred Ringmacher. 2016. *Die Sprachwissenschaft: Ihre Aufgaben, Methoden und bisherigen Ergebnisse.* (Classics in Linguistics 4). Berlin: Language Science Press. DOI: 10.17169/langsci.b97.143

Vossen, Frens. 2016. *On the typology of the Jespersen cycles.* Doctoral dissertation, University of Antwerp.

WNT. Woordenboek der Nederlandsche Taal. https://ivdnt.org/woordenboeken/woordenboek-der-nederlandsche-taal/

Zeijlstra, Hedde. 2004. *Sentential negation and negative concord.* Doctoral dissertation, University of Amsterdam.

Complex tables

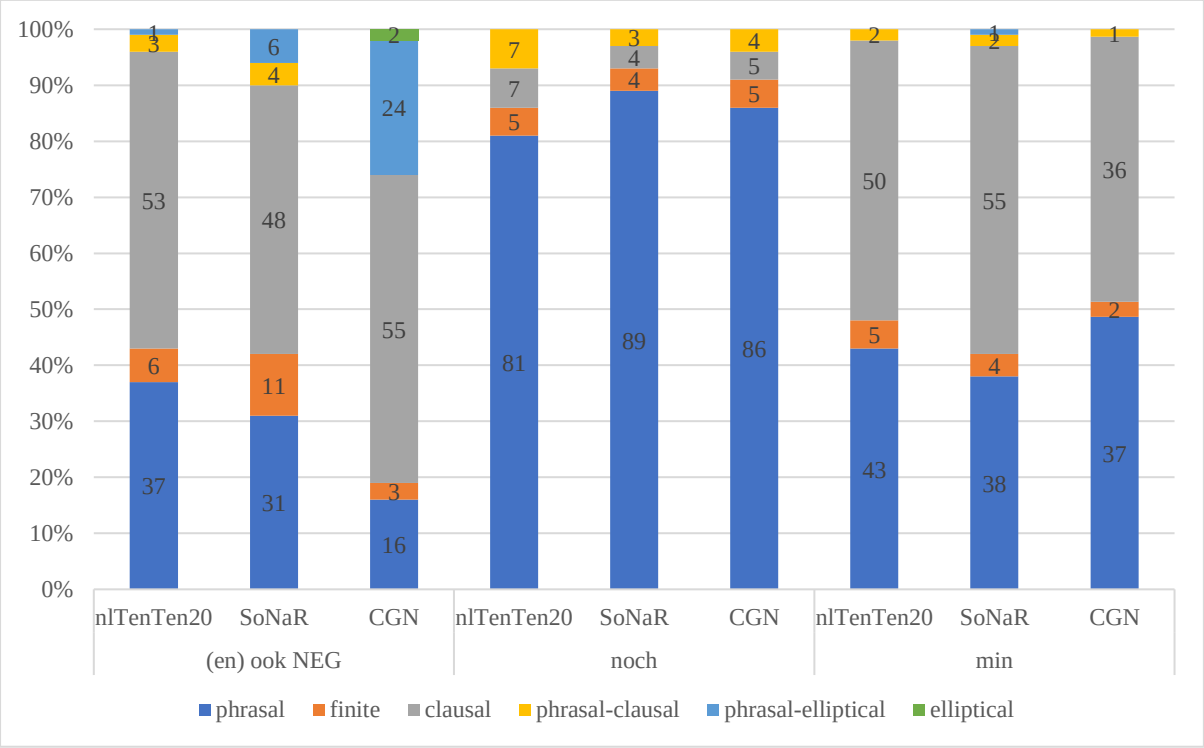

Table 3. Profiling the strategies

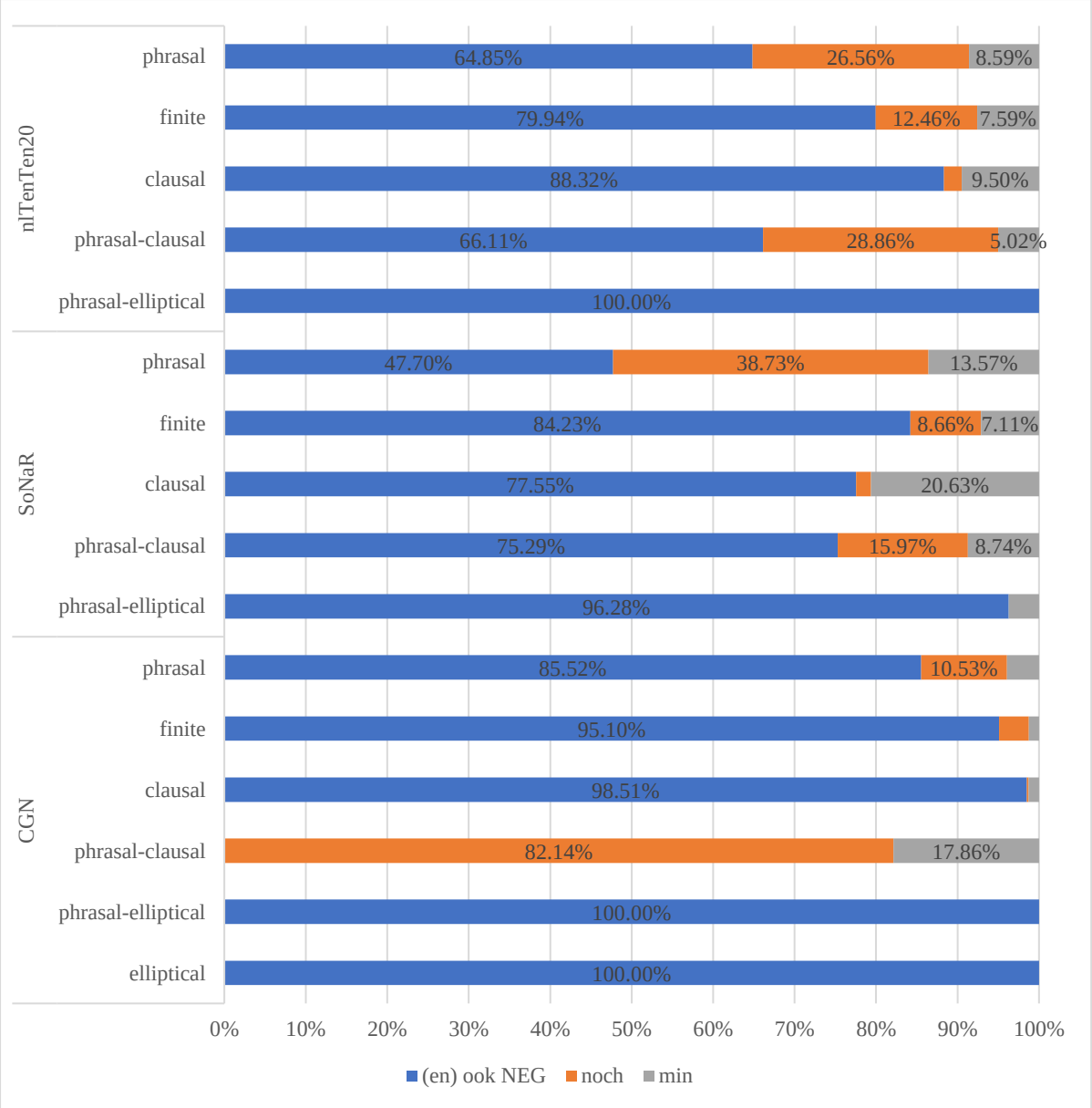

Table 4. Profiling the contexts

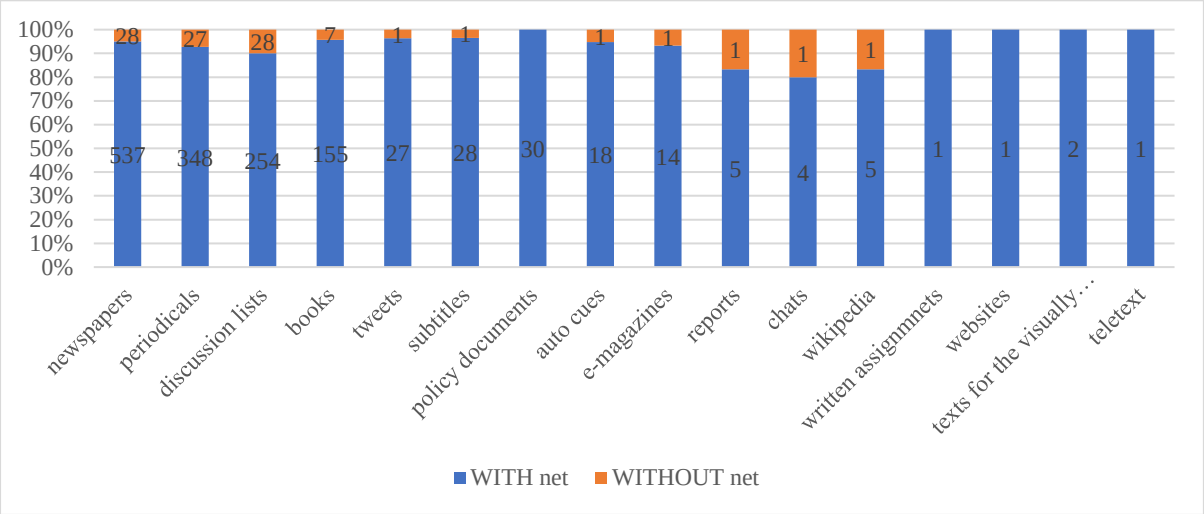

Table 8. *zomin/zomin* with and without *net* in the SoNaR corpus

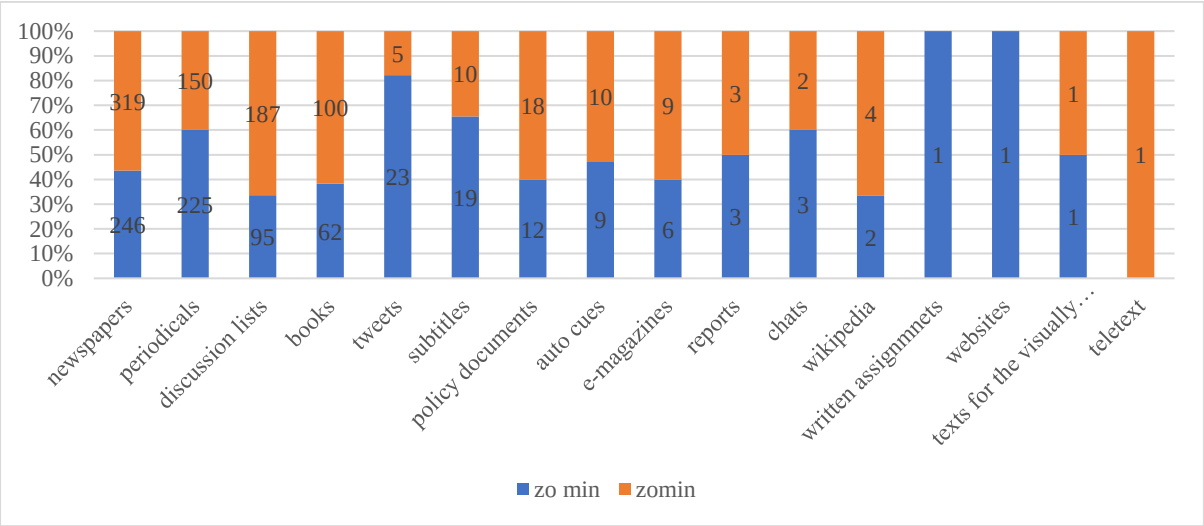

Table 9. *zo min* vs. *zomin* in the SoNaR corpus

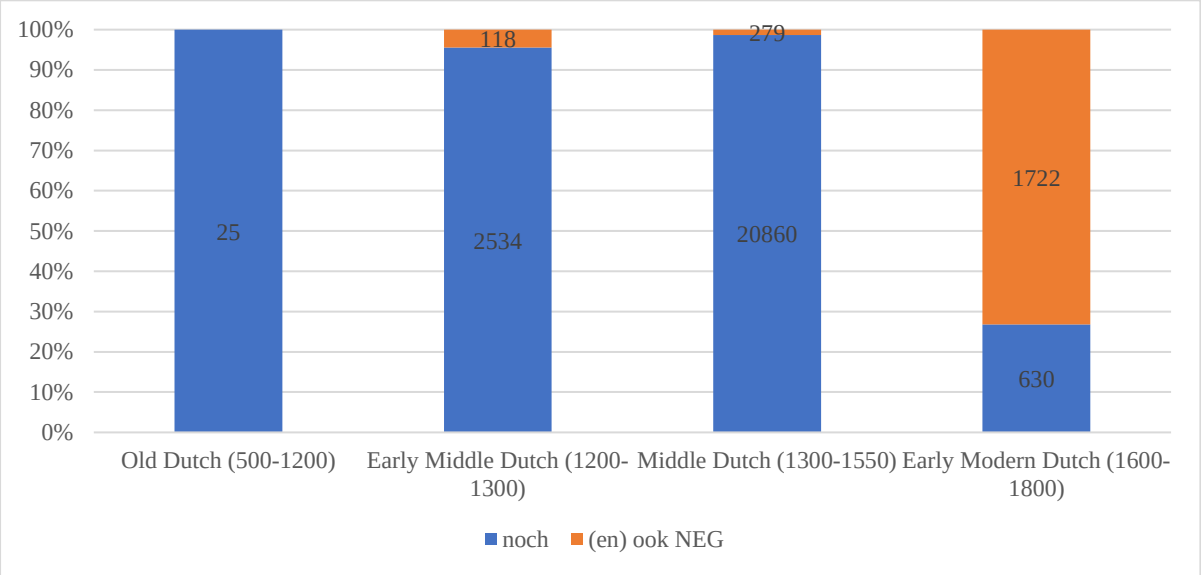

Table 10. *noch* and (*en*) *ook* NEG from Old Dutch to Early Modern Dutch

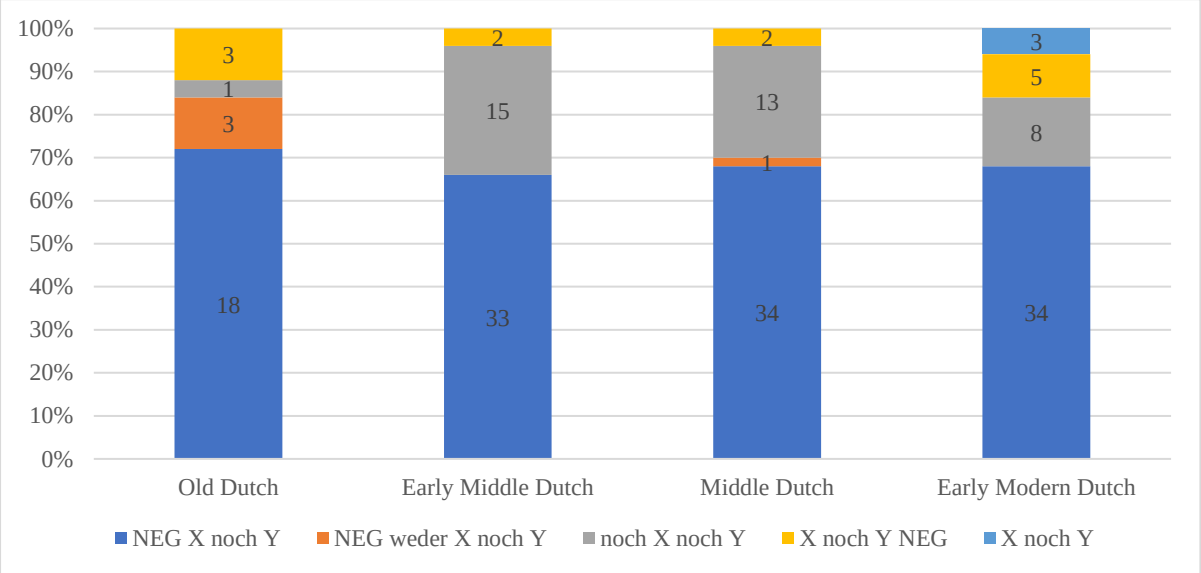

Table 11. *noch* patterns from Old Dutch to Early Dutch