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Grammar or error? Non-compositional (expletive/paratactic) negation in Dutch sentences with *zonder* ‘without’

Abstract: The chapter deals with the use of a non-compositional (extra/expletive/paratactic) negation in Dutch sentences with the conjunction *zonder* ‘without’ called the “negative without construction” (NWC). The NWC can be seen as an instance of expletive negation but also shares properties with negative concord constructions. Based on previous research hypotheses about the acceptability of such sentences are formulated. These hypotheses are tested in an acceptability survey with sentence pairs. This type of testing was introduced to overcome issues which have to do with the influence of prescriptive, normative grammar. The survey shows that there is a clear correlation between two factors (presence of (i) negation or negative evaluation in the main clause and (ii) focus word in the subordinate clause) and the acceptability of the NWC. It also shows that there is quite some variation between speakers to what extent they accept the extra negation. It is hypothesized that speakers who reject extra negation are influenced by the rules of normative grammar, and that the use of non-compositional negation is a naturally occurring phenomenon which builds on general principles of grammar.

1 Introduction

In this chapter we set out to provide an analysis and explanation for the use of a non-compositional (extra) negation in Dutch sentences with the conjunction *zonder* (*dat*) ‘without’. In doing so we also aim to provide more insight into the phenomenon of non-compositional negation in general, and the relation between this type of negation and similar constructions, including instances of negative concord. An example of a regular sentence with *zonder* is given in (1), where *zonder* occurs with an infinitive.

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- (1) *Ik bleef mijn moeder aankijken zonder te kunnen geloven wat*
 I kept my mother look.at without to can believe what
ik zojuist had gehoord.
 I just had heard
 'I kept on looking at my mother, without being able to believe what I had just heard'

The conjunction *without* also occurs with the negation *niet* 'not', as in (2) and (3). Even though such use is infrequent, it can be found in sources such as newspaper articles (see Fortuin 2023):

- (2) *Je kunt de krant geen dag openslaan zonder niet*
 You can the newspaper no day open without not
gewezen te worden op de taalachterstand bij kinderen.
 pointed to become on the language.deficiency with children
 'You cannot open the newspaper without [lit. without not] being pointed at the language deficiency of children'
- (3) *Het was echt onmogelijk om naar dat verhaal te luisteren*
 it was really impossible to that story to listen
zonder niet telkens te lachen.
 without not all the time to laugh
 'It was really impossible to listen to that story without [lit. without not] laughing all the time'

In sentences like (2) and (3) the rule of logical double negation does not apply, which means that 'without' does not negate 'not'. As such, one can speak of non-compositional or extra negation. The construction can be seen as an instance of paratactic (expletive) negation (see Fortuin 2023), but also shares properties with negative concord constructions. Sentences like (2) and (3) will be called instances of the "negative without construction" (NWC), and sentence (1) an instance of the "without construction". Various authors use different terms for sentences with 'without' in various languages. Fortuin (2023) uses the term "privative" for the Dutch construction with *zonder* 'without', Olguín Martínez and Peregrina Llanes (2023) use the term "negative concomitance" for constructions which express 'without V-ing', and Oskolskaja et al. (2020) use the term "caritive" (from Latin 'lack') as a comparative concept. We decided to use the transparent label "(negative) without construction".

The term negative concord (NC) is used for constructions where negative (indefinite) forms expressing meanings such as 'nothing', 'never', etc. co-occur with a clausal negator such as 'not' (see for example van der Auwera and Krasnoukhova

2020, and van der Auwera and Gianollo (This volume). If one considers *zonder* as a negative form, one could, depending on the specific definition of negative concord, see the NWC as at least similar to negative concord. In both cases, clausal negation is redundant. The NWC is, however, different from negative concord constructions as defined here since *zonder* is not a negative indefinite form. We will say more about the relation between NWC and negative concord (as described here) in the discussion section of this chapter (Section 4). Furthermore, it should be noted that standard Dutch is not a negative concord language, so even if one sees the NWC as an instance of negative concord, it would have to be seen as an isolated instance of negative concord in Dutch.

The NWC in Dutch can probably best be classified as an instance of expletive or paratactic negation. These terms are used for constructions with non-compositional negation where a negator such as ‘not’ is triggered by implicit negative forms or forms which imply or presuppose a negative meaning (see for example Delfitto 2020, Jin and Koenig 2020).¹ Since *zonder* could be taken as having an implicit negative meaning, the NWC could be seen as an instance of paratactic or expletive negation. See Fortuin (2023) for further discussion.

To our knowledge, no other research on the NWC or similar constructions in Dutch exists except for Fortuin (2023). Based on a corpus study, Fortuin (2023) has shown that there are two main triggers for the occurrence of non-compositional negation in the NWC: (i) the presence of negation or a negative evaluation in the main clause, and (ii) the presence of an accented or focused (accentable) word in the subordinate clause. In the majority of the sentences in his dataset both factors occur at the same time, as in (3), where we find *onmogelijk* ‘impossible’ in the main clause and *telkens* ‘all the time’ in the subordinate clause. Fortuin argues that non-compositional negation is used to negate the idea that the situation mentioned in the subordinate does not occur. This presupposition of non-occurrence is typical for sentences with negation in the main clause as in (3) where the speaker contradicts the idea that one could listen to the story and not laugh. Similarly, the use of accented words in the subordinate clause such as *telkens* ‘all the time’ as in (3) can be explained by the function of accent to negate an alternative idea (Keijsper 1985: 112–113, 149, 171–199).

The data provided by Fortuin (2023) show that instances with non-compositional negation are relatively infrequent and not accepted by all speakers of Dutch, even though they occur in formal written genres such as newspaper articles.

¹ Van der Wouden (1994: 110) argues that the set of words and constructions that license paratactic (expletive) negation and the set of words and constructions that license polarity effects in subordinate clause overlap to a very large extent.

Furthermore, in Dutch other constructions with non-compositional negation are rather rare, as opposed to for example Italian or other languages (see section 4 for a discussion). This could be seen as an argument that the instances of NWC provided by Fortuin must be seen as language errors, which are not part of grammar. The present study aims to shed further light on this topic by testing whether the results of Fortuin (2023) are obtained when language users are confronted with instances of the NWC and have to review them. Thus we will address the following research questions:

- (i) How do native speakers of Dutch judge instances of the NWC?
- (ii) Is there a correlation between the factors given in Fortuin (2023), which occur in his dataset of the NWC, and the acceptability of the NWC judged by native speakers.
- (iii) How can the NWC best be explained? As a performance error or as a construction that fits in the grammatical inventory of Dutch?
- (iv) How can the NWC best be analyzed? As an instance of negative concord or as an instance of expletive (paratactic) negation?

2 Methodology

2.1 Survey design

Testing the acceptability of non-compositional negation in the NWC is challenging because language users, especially educated language users, tend to be influenced by the norms of language taught in school. According to such norms, the non-compositional negation violates the rules of logic. Respondents in a survey might therefore be inclined to rate sentences with the NWC poorly, even if such sentences are quite natural in spontaneous written and spoken language (see Fortuin 2023 for data about the occurrence of such sentences in written Dutch). This was confirmed by a small-scale pilot study we did with a straightforward design wherein respondents were asked to rate sentences with non-compositional negation on a scale of 1 “very unnatural” to 5 “fully natural”. This pilot study revealed that the six respondents consistently rated sentences with the NWC poorly even if the sentences contained the factors that tend to co-occur with the NWC. It was hypothesized that the reason for the low acceptability ratings was the respondents’ awareness of the presence of non-compositional negation and how its usage is incorrect according to prescriptive rules. In order to overcome this normative (prescriptive) factor, we designed a different kind of acceptability survey. Instead of asking respondents to rate single sentences, we opted to have respondents compare two sentences and to indicate which

sentence was more natural, and by how much. For the survey we used a five-point scale. Having five options was considered optimal because three options would give much less specific information and a seven-point scale would increase the difficulty level of an already difficult task. The scale used was the following:

- Sentence one is much more natural than sentence two
- Sentence one is somewhat more natural than sentence two
- Sentence one and two are equally (un)natural
- Sentence two is somewhat more natural than sentence one
- Sentence two is much more natural than sentence one

The rationale behind this method was that if respondents have to compare two sentences that both have the NWC, one of the sentences can still be less natural than the other even if both sentences would have been rated individually as “very unnatural”. Essentially, this reasoning relies on the notion of “the lesser of two evils”. It has long been known in psychology that people will choose a disagreeable option as long as it is the optimal one out of a pair, even when the options have earlier received an equally poor evaluation (Slovic 1975). In this way, respondents are led to take other sentential variables into account. The effects of normative incorrectness are therefore mitigated, even when respondents are aware of the purpose of the survey. In semantics, there are other experimental paradigms that can be said to rely on similar assumptions. One example is best-worst scaling (Hollis and Westbury 2018), in which participants are asked to choose the best and worst words from a handful of options along a certain dimension, for example “pleasantness”. If the two words with the most and least pleasant connotations are chosen out of a set of four, then this yields indirect pairwise rankings (the best word is better than each of the other words, and each nor-best-nor-worst word is better than the worst word). The similarity between the methodology in our survey and the best-worst scaling method, then, is that people have to compare items along a single dimension and have to select the best/worst one, even if both are good/bad. Data from the best-worst scaling method has been shown to be reliable (Hollis and Westbury 2018; De Bruyne, De Clercq, and Hoste 2021), but we estimated that simultaneously comparing four or more sentences with the highly complex NWC was too labour-intensive for respondents, and decided to use pairwise comparisons with a scale.

A limitation of the five-point scale is that the third option, in which both sentences are rated as equally (un)natural, is in principle ambiguous between a positive and negative judgement for both sentences. However, it was already known that a conscious judgement yields negative ratings for non-compositional sentences. Separating the middle option into “equally natural” and “equally unnatural” is not feasible in light of the statistics, because this would add a new dimension to the data, transforming the simple one-dimensional scale into something more complex.

We distributed two online surveys made with the Qualtrics software (<https://www.qualtrics.com>) to collect acceptability ratings from native speakers. The initial plan was to make a single survey, but due to an oversight in the stimuli set of the first survey it was necessary to add a follow-up survey. The silver lining is that this allowed us to collect more data. Both surveys used the same methodology, so the data are combined in the analysis. There is a partial overlap between the respondents who participated in the surveys, but this is not expected to have influenced the main conclusions.

2.2 Hypotheses to be tested

The survey was set up to test two things. First, to test various research hypotheses which functioned as variables in the statistical analysis. These research hypotheses are given below:

1. The presence of negation (or negative evaluation) in the main clause makes the NWC more acceptable.
2. The presence of focus elements in the subordinate clause makes the NWC more acceptable.
3. Constituents after the verb in the subordinate clause of the NWC make it more acceptable.
4. Language users are disinclined to use the NWC if *niet* also occurs as the negation in the main clause so as to avoid the sequence *niet* [. . .] *zonder niet*, which contains *niet* twice.
5. There is no difference between *zonder te* (*zonder* + infinitive) versus *zonder dat* (*zonder* + finite verb) with respect to the acceptability of the NWC.

Hypotheses one, two and five were put forward by Fortuin (2023) on the basis of corpus research. In this research we wanted to find out whether we would get the same outcome when working with a survey. Hypotheses three and four were added by us to account for sentences which contain negation in the main clause, but which, according to our native speaker intuition, are still less acceptable with non-compositional negation. Consider the following sentence:

- (4) *Het was voor mij onmogelijk om Titanic te kijken zonder niet*
 it was for me impossible to Titanic to watch without not
te huilen.
 to cry
 ‘It was impossible for me to watch Titanic without [lit. without not] crying’

According to our native speaker intuition this sentence feels less acceptable than the same sentence with more constituents after the main verb:

- (5) *Het was voor mij onmogelijk om Titanic te kijken zonder niet*
 it was for me impossible to Titanic to watch without not
te huilen tijdens de laatste scène.
 to cry during the final scene
 ‘It was impossible for me to watch Titanic without [lit. without not] crying during the final scene’

We hypothesized that (5) is more acceptable because there are more constituents after the main verb. In (4) *niet* occurs almost at the end of the sentence, so that it is close to the sentence-final intonational accent on *huilen* ‘to cry’. The proximity to this prosodically prominent element may more easily trigger a compositional reading of *niet*, given that a stressed *niet* cannot have a non-compositional reading. In (5) the final sentence accent is on *de laatste scène* ‘the last scene’ so that *niet* can disappear more easily into the background.

Another factor we thought was relevant was the possibility of a sequence of *niet* in the main clause and the subordinate clause. Consider the following sentence:

- (6) *We kunnen niet weg zonder gezien te worden.*
 we can not away without seen to become
 ‘We cannot leave without [lit. without not] being seen’

Even though this sentence contains the negation *niet* in the main clause, adding a non-compositional negation in the subordinate clause would, according to our native-speaker judgement, make the sentence much less acceptable:

- (7) ? *We kunnen niet weg zonder niet gezien te worden.*
 We can not away without not seen to become
 ‘We cannot leave without being seen’

It could be hypothesized that the sentence (7) is less acceptable because there is a sequence of *niet* in the main clause and in the subordinate clause. This may make the logical redundancy of the second *niet* more overt, complicating a non-compositional interpretation of the NWC.

In addition, we also used the survey to find out whether specific (individual) sentences would be rated better than others. Consider the following two sentences, of which the first one provides context and the second one begins with a NWC:

- (8) *Dankzij de Dutch Belgian Super Star wordt er nu in de achterhoede evenzeer voor elk plekje hard gevochten en daarin wil ik mijn mannetje staan.*
Zonder niet te vergeten dat racen voor mij een hobby is
without not to forget that racing for me a hobby is
en blijft.
and remains
‘Thanks to the Dutch Belgium Super Star (race), every spot is now being fought for hard in the rear and I want to stand my ground in that race. Without [lit without not] forgetting that racing is and remains a hobby for me’

The NWC in (8) is rather atypical, since it lacks the negation triggering factors put forward by Fortuin (2023). It could be argued that the reason why the writer used non-compositional negation is that it contains a negative lexical verb (‘forget’) instead of a positive version of the same verb (‘realize’). We included this sentence and a sentence with ‘realize’ in our survey to test whether the acceptability of these sentences was influenced by the negative meaning of the lexical verb.

2.3 Variables and stimuli

For the purpose of the survey, five research hypotheses (1–5) were converted into five variables to be tested in a total of 26 different sentences. The sentences were either taken from naturally occurring language (based on the dataset used in Fortuin (2023)) or modelled on such sentences. Of these, 20 sentences had the NWC; 5 sentences lacked the non-compositional *niet* but were otherwise identical to five of the sentences with the NWC (i.e. they were minimal pairs), and 1 sentence was perfectly ordinary and was used as a baseline for the qualitative analysis. The 20 different sentences with non-compositional negation all appeared at least twice. Table 1 shows the number of times each type of sentence occurred in the two surveys.

Table 1: The number of occurrences of each of the three sentence types in both surveys.

	Survey 1	Survey 2
Non-compositional negation	32	23
Minimally different	5	4
Baseline	3	1
Total number	40 sentences (= 20 pairs)	28 sentences (= 14 pairs)

Table 2: variable values for each of the 20 different sentences¹ with non-compositional negation with Y(es) to indicate the presence and N(o) to indicate the absence of a sentential variable.

Variable	Value																									
Neg evaluation ²	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	N	N	Y	Y	Y	Y	N	N	Y	Y	“Zonder niet te . . .”, with <i>vergeten</i> ‘forget’ and <i>beseffen</i> ‘realize’
Focus	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	N	N	N	Y	N	Y	Y	N	N	Y	Y	N	N	
Constituents after verb ³	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	
Sequence of niet	Y	Y	N	N	N	N	N	Y	Y	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	
Zonder te	Y	Y	N	N	N	N	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Sentence number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	23	24	25	26	15,16							

² For this survey we used explicit negative words such as *niet* ‘not’, *niemand* ‘no one’, *onmogelijk* ‘impossible’. From corpus data (Fortuin 2023) we know that the NWC also occurs with more implicit negative elements such as rhetorical questions or expressions such as *het is lastig dat* ‘it is difficult that’.

³ Sentences without constituents after the verb end with the verb or with a part of the complex verb that cannot be accented, for example *gezien te worden* (seen.PTCP to become.INF ‘to be seen’). In the sentences that do have a constituent after the verb, this is often a prepositional phrase of a complement of the verb.

The variables of the sentences with the NWC were introduced in the previous section. Each is a binary variable with two values: absent or present. In Table 2, the values are given for each of the 20 different sentences with non-compositional negation. Y is short for yes/present and N is short for no/absent. Sentences 15 and 16 do not fit in this scheme because they are not preceded by a main clause, and instead stand on their own. These two sentences have the verbs *vergeten* ‘to forget’ and *beseffen* ‘to realize’, of which *vergeten* is hypothesized to make non-compositional negation more natural due to its inherent negative semantics.

These sentences were paired up with each other, with the baseline sentence, and with minimally different sentences when applicable. The sentence pairs were presented in a random order, but the pairs themselves remained constant. If the stimuli of both surveys are combined, each variable is tested at least 7 times by contrasting its values in sentence pairs. The number of times each variable is tested in the two surveys are given in Table 3.

Table 3: number of times each variable is tested in both surveys.

Variable	Survey 1	Survey 2
Neg evaluation	4	3
Focus	0	7
Constituents after verb	3	5
Sequence of <i>niet</i>	4	5
Zonder te	2	5

The disparity between the number of contrasts between the first and second survey are partially due to an oversight in pairing up the sentences, and partially because the first survey also intentionally featured pairs that have exactly the same variable values. Each sentence in the survey was preceded by a sentence that provided context. In this way, it was assured that the stimuli could not be interpreted as having negation with a truly negative meaning.

Below in Table 4 an example sentence pair is given from the survey that compared the sentences numbered 6 and 11, both with non-compositional negation. The test sentence is in boldface.

Table 4: example of a sentence pair from the survey, presented similarly to how respondents saw it in the survey.

De cabaretvoorstelling van gisteravond was de beste ooit wat mij betreft, vooral het stuk over de dierentuin. Het was echt onmogelijk om naar dat verhaal te luisteren zonder niet telkens te lachen.	Toen ze op vakantie was naar Spanje herontdekte ze hoe fijn het kan zijn om soms alleen te zijn. Het was voor haar een verademing om in bed te liggen zonder niet telkens uit haar slaap te worden gehouden door het gesnurk van haar echtgenoot.
‘The cabaret show from last night was the best ever as far as I am concerned, especially the part about the zoo. It was really impossible to listen to that story without [lit without not] constantly laughing. ’	‘When she was on holiday in Spain she rediscovered how pleasant it can sometimes be to be alone. It was a relief for her to lie in bed without [lit without not] constantly being kept awake by the snoring of her spouse. ’

2.4 Respondents

The combined number of respondents for the surveys was 152 (80 for the first survey and 72 for the follow-up survey). The respondents were found within the social networks of the authors and on social media and most of them may be assumed to have a higher level of education. The only inclusion criterion for respondents was that they were native speakers of Dutch. Personal data such as sex, age, and region were not tracked because this would decrease statistical power and there were no specific hypotheses to test. One factor which does presumably play a role is level of education. People with a higher level of education are generally better at prescriptive grammaticality judgements and are also more conscious of violations of prescriptive norms (Mills and Hemsley 1976; Favier and Huettig 2021). Furthermore, Hubers et al. (2016) describe specifically for Dutch how higher-educated people are more likely to attach importance to language norms, and that true purists even become annoyed upon encountering non-standard grammar. In their neuro-imaging experiment, Hubers et al. (2016) found that purists experience processing difficulty when listening to sentences that are common in spoken Dutch but strictly speaking incorrect according to prescriptive rules. Because our sample is not balanced for level of education, it must be borne in mind that our average respondent may have valued prescriptive norms more than the average Dutch speaker (also cf. Rotter and Liu, This volume for negative concord in American English). However, it would be difficult to find a sufficient number of people with a lower level of education to fill out an online survey without any financial compensation, let alone a survey that has much text and requires respondents to make a challenging linguistic judgement. We will return to this matter in the discussion.

2.5 Statistical analysis

The data from the sentences with non-compositional negation (except sentences 15 and 16) and their minimal pairs were analyzed in Rstudio (Rstudio Team 2020). Because the five-point scale that respondents used to answer was ordered, an ordinal logistic regression model was created using the *ordinal* package (Christensen 2022). The link function used to build the model was “logit”, after it was found to produce the lowest AIC-score compared to “cauchit”, “probit”, and “cloglog”.

The variables fed into the model were the following:

- `neg_eval`: a negative evaluation in the main clause
- `focus`: a focus word in the subordinate clause
- `constituent`: post-verbal constituents in the subordinate clause
- `sequence`: a sequence of *niet* by having it as the negation in the main clause and the subordinate clause
- `zonder_te`: *zonder te* as opposed to *zonder dat*
- `Ncn_neg`: presence of non-compositional negation (negative for the minimally different sentences only)
- `RespondentID`: the unique ID of each respondent, as a random effect
- `SentencePair`: each unique sentence pair, as a random effect

Because the raw data from the surveys had values that indicated relative acceptability within a sentence pair, the data had to be transformed in order to be analyzed with the regression model.⁴ After all, the acceptability rating (numerically 1–5) gives no information about the presence or absence of the variables in the two sentences that are being compared. A solution was chosen in which a sentence pair received a score –1, 0, or 1 for each variable. The score –1 indicated that the first sentence of a pair *did* have the variable whereas the second sentence *did not*. The score 0 indicated that there was no contrast in the presence or absence of the variable between the two sentences. Finally, 1 indicated that the first sentence *did not* have the variable whereas the second sentence *did*. For example, a sentence

⁴ An alternative method that would require no data transformation (and concomitant loss of information) would be to have respondents rate sentence pairs *and* a subset of the individual sentences that the pairs consist out of. If the rating of an individual sentence A is known, an estimated rating can be calculated for sentence B when it is compared to A. If sentence B is compared to sentence C, the estimation of B's acceptability can in turn be used to estimate the acceptability of sentence C. Naturally, a limitation is that each iterative estimation is less reliable. The reason why this method was not chosen here is because it would have required the survey to be much longer. However, this method could be implemented in a study investigating a simpler phenomenon that takes respondents less time and effort per trial.

pair in which the first sentence had a focus word but the second one did not would receive a value of -1 for *focus*. In this way, one row of data can express whether the two test sentences under comparison differed in terms of a sentential variable, and if so, in which of the two sentences the variable was present.

3 Results

3.1 Quantitative and qualitative results

The ordinal logistic regression test assessed how different sentential variables affect acceptability ratings of sentences with the NWC. The results of the test are given in Table 5 below.

Table 5: statistical analysis of the data using an ordinal logistic regression test.

	Estimate	Standard error	Odds ratio	Z-value	p-value
Neg_eval	0.77	0.21	2.17	3.64	$p < 0.001^{***}$
Focus	0.70	0.19	2.03	3.72	$p < 0.001^{***}$
Constituent	0.26	0.18	1.29	1.48	$p = 0.14$
Sequence	0.02	0.24	1.03	0.09	$p = 0.93$
Te_dat	0.12	0.25	1.11	0.49	$p = 0.63$
Ncn_neg	-2.72	0.23	0.07	-12.00	$p < 0.001^{***}$

Three of the six variables have a highly significant outcome. First, *Neg_eval*, which refers to the presence of some type of negation in the main clause of a sentence. It has a coefficient estimate of 0.77 in the model, which can be transformed into an odds ratio value by exponentiating it, yielding 2.17. This means that, in a sentence pair where one sentence has negation in the main clause while the other sentence lacks it, the odds of the sentence with that negation being rated as more natural/acceptable is 2.17 times higher than if there had been no difference between the sentences in terms of presence of negation in the main clause. The presence of a focus word has a slightly lower effect size with an odds ratio of 2.03, but it is still highly significant. Thirdly, there is *Ncn_neg*, which has a negative coefficient estimate and therefore an odds ratio lower than 1, being 0.07. This means that, in the minimally different sentences in the survey, the absence of non-compositional negation makes a sentence much more likely to be rated as more natural in comparison to a sentence with non-compositional negation. It should be noted, though, that respondents still sometimes preferred sentences with an extra negation over sentences without it. This can be shown by the sentence pair in Table 6, where we

find a negative word in the main clause and a focus word in the subordinate clause; the relevant words are given in boldface.

Table 6: minimal sentence pair with and without non-compositional negation that was included in both surveys.

Sentence 1:	Sentence 2:
Zelfs nadat de tweede wereldoorlog over was, bleef het nog jarenlang deel uitmaken van het dagelijkse leven. Mensen konden in die tijd niet bij elkaar op visite gaan zonder niet minstens één keer over de oorlog te beginnen.	Zelfs nadat de tweede wereldoorlog over was, bleef het nog jarenlang deel uitmaken van het dagelijkse leven. Mensen konden in die tijd niet bij elkaar op visite gaan zonder minstens één keer over de oorlog te beginnen.
‘Even after the Second World War was over, it continued to be part of everyday life for years to come. People couldn’t visit each other in those days without [lit. without not] mentioning the war at least once.’	‘Even after the Second World War was over, it continued to be part of everyday life for years to come. People couldn’t visit each other in those days without mentioning the war at least once.’

The distribution of the 80 + 72 (152) respondents was as follows:

Sentence one is much more natural than sentence two:	5 + 7 (total 7.9%)
Sentence one is a bit more natural than sentence two:	9 + 6 (total 9.9%)
Sentence one and two are equally (un)natural:	13 + 5 (total 11.8%)
Sentence two is a bit more natural sentence one:	20 + 13 (total 21.7%)
Sentence two is much more natural than sentence one:	33 + 41 (total 48.7%)

The data show that 48.7% of the respondents strongly prefer the version without the NWC. Even though this is quite a large percentage, in this specific case 17.8% of the respondents still prefer non-compositional negation. Thus the data show that even though on average the respondents prefer sentences without the NWC, there is variation (different from the English ‘No X is too Y to Z’ construction, as discussed by Wason and Reich (1979), where most people prefer the version with non-compositional negation).

The other three variables are not significant. Constituents after the verb in the subordinate clause have an estimate of 0.26, which is quite high, but the large standard error results in an insignificant outcome. The other two variables, a sequence of *niet* and the difference between *zonder te* and *zonder dat*, have a much smaller effect and are much further removed from significance. A lack of an effect for *te/dat* was expected and is in line with the hypothesis in section 2.2.

The random effect of RespondentID has a variance of 4.65e-10, which is extremely small. This means that there are no important speaker-specific effects, i.e. no handful

of participants who consistently rate NWCs as natural. The variance of Sentence-Pair is 0.17, which is much higher. When comparing the model with and without the random effect SentencePair, the outcome of a likelihood ratio test is 2.82e-20, meaning that the model is better when taking the variation between sentence pairs into account. Because the stimuli consisted of complete sentences with differences in semantic content that cannot be fully controlled for, it is unsurprising that some sentence pairs differ in relative acceptability regardless of the assigned variables.

It can be hypothesized that the hypothesis that the number of constituents after the verb increases the acceptability which was meant to account for the difference between example sentences (4) and (5) given above was formulated incorrectly by us, and that the following hypothesis would be more suitable:

Alternative hypothesis: *Niet* does not occur immediately before the last accented (main) verb.

One sentence pair from our survey could provide some insight into this hypothesis. In sentence one in Table 7, *gezien* ('seen') has the sentence-final accent, whereas in sentence two, the final accent is on the noun *kinderen* ('children'). The alternative research hypothesis predicts that respondents in our survey will rate sentence two higher than sentence one:

Table 7: sentence pair with non-compositional negation from the second survey.

Sentence 1:	Sentence 2:
Als ze zich echt verstopt hebben in de loods dan kunnen ze geen kant meer op. Er is maar één uitgang dus dan kunnen ze niet weg zonder niet gezien te worden.	Je zou wellicht denken dat de gemiddelde taalvaardigheid toeneemt omdat mensen meer lezen dan ooit, maar niets is minder waar. Je kunt de krant geen dag openslaan zonder niet gewezen te worden op de taalachterstand bij kinderen.
'If they are really hiding in the shed then they can't go anywhere. There is only one exit so they can't leave without [lit. without not] being seen.'	'You might think that average language skills are increasing because people are reading more than ever, but nothing could be further from the truth. You can't open a newspaper for a day without [lit. without not] being made aware of the language delay in children.'

The distribution of the 72 respondents was as follows:

Sentence one is much more natural than sentence two: 2 (2.8%)
Sentence one is a bit more natural than sentence two: 5 (6.9%)

Sentence one and two are equally (un)natural:	44 (61.1%)
Sentence two is a bit more natural sentence one:	17 (23.6%)
Sentence two is much more natural than sentence one	4 (5.6%)

The large majority of respondents do not see a difference between the sentences in Table 7, possibly because they reject non-compositional negation in general. The number of people that prefer the second sentence (29.2%) is larger than those who prefer the first sentence (9.7%). There is therefore some evidence that the newly formulated research hypothesis is correct, but further research is necessary.

Another hypothesis that we tested in our survey has to do with negative lexical verbs as in example sentence (8) given above. This hypothesis was tested by comparing the sentences given in Table 8.

Table 8: Sentence pair with non-compositional negation part from the first survey with and without a negative lexical verb.

Sentence 1:	Sentence 2:
Waar ik naar op zoek ben is een actieve hobby die zo leuk is dat ik er gemakkelijk een paar uur mee bezig ben. Zonder niet te beseffen dat ik daarmee eigenlijk honderden kilocalorieën verbrand.	Dankzij de Dutch Belgian Super Star wordt er nu in de achterhoede evenzeer voor elk plekje hard gevochten en daarin wil ik mijn mannetje staan. Zonder niet te vergeten dat racen voor mij een hobby is en blijft.
'What I'm looking for is an active hobby that is so much fun that I enjoy it so much that I can easily spend a few hours with it. Without [lit. without not] realizing that I actually burn hundreds of kilocalories.'	'Thanks to the Dutch Belgian Super Star, the rear guard fought hard for every spot and I want my man in that to stand. Without [lit. without not] forgetting that racing is and remains a hobby for me.'

The distribution of the 80 respondents was as follows:

Sentence one is much more natural than sentence two:	0 (0%)
Sentence one is a bit more natural than sentence two:	4 (5.0%)
Sentence one and two are equally (un)natural:	59 (73.8%)
Sentence two is a bit more natural sentence one:	13 (16.3%)
Sentence two is much more natural than sentence one	4 (5.0%)

The data show that the large majority of the respondents do not see a difference between the two sentences, even though there are more people that prefer sentence two (21.3%) than people that prefer sentence one (5.0%). We can conclude that there is weak evidence for the hypothesis, and more research is necessary.

One of the questions which is raised by our data is whether it is possible to say that there are non-compositional negation “haters” and those who either like the NWC or are at least tolerant. For this it is possible to look at the random effect of RespondentID. This random effect has a variance of $4.65\text{e-}10$, which is extremely small. This means that the variance in acceptability ratings cannot be explained by taking into account differences between individuals. This does not conform to the expectation that people would differ in respect to NWC acceptability judgements. However, most sentence pairs consisted of sentences that both had a NWC, so the inferential statistics mostly concern individual variance on how much the sentential variables mattered to different individuals rather than the NWC itself. To examine variation between respondents in NWC ratings in another way, a closer look was taken at the minimally different pairs, which only differed in the presence/absence of a non-compositional (extra) negation. It was found that the group of speakers who rated the sentence with a non-compositional negation (NWC) of a given pair as somewhat or much more natural than the sentence without non-compositional negation, on average, rate the NWCs in the other pairs more favourably too. For example, the group who was favourable to the NWC in pair #14 gave an average rating closest to “equally (un)natural” (numerically: 2.9/5) to the sentences in #13, whereas those who rated the NWC in #14 as less natural had an average rating for #13 that closely corresponded to “[the sentence with a NWC] is somewhat less natural” (numerically: 4.1/5). The same pattern of differing averages holds for comparisons between the other minimally different sentences. In this way, different average ratings were found, without exception, between favourable and non-favourable groups regardless of which sentence pair was taken as the starting point for comparing average ratings, and the average difference between the two groups was about three quarters of a step on the rating scale. In conclusion, although the inferential statistics do not show it, there seems to be interspeaker variation based on the descriptive statistics of the minimally different pairs, where those who are favourable to NWCs are consistently more favourable to them, and vice versa. It must be underlined here that these results come from respondents who are inevitably explicitly aware of the NWC, and that interspeaker differences in acceptability ratings might be much higher if it were feasible to elicit ratings without conscious evaluations of NWCs.

To conclude, our survey has provided evidence that the two factors already discussed in Fortuin (2023) and presented as research hypotheses one and two (i) the presence of negation in the main clause makes the NWC more acceptable; (ii) the presence of focus elements in the subordinate clause makes the NWC more acceptable) do indeed positively impact on the acceptability of non-compositional negation in the NWC. Nevertheless, there is variation between people, and a majority of people prefer sentences without non-compositional negation. Two other research

hypotheses ((iii) constituents after the verb in the subordinate clause of the NWC make it more acceptable; (iv) language users are disinclined to use the NWC if *niet* also occurs as the negation in the main clause so as to avoid the sequence *niet* [. . .] *zonder niet*, which contains *niet* twice) could be rejected on the basis of our analysis, even though the data suggest that the data can probably be accounted for with a modified research hypothesis. The fifth research hypothesis ((v) there is no difference between *zonder te* (*zonder* + infinitive) versus *zonder dat* (*zonder* + finite verb) with respect to the acceptability of the NWC) was confirmed by the data.

4 Discussion: mistakes or part of grammar and relation to other constructions

In this section we discuss how the data can be explained, and more generally, what our data say about the occurrence of non-compositional negation in the NWC and the relation between the NWC and other constructions with non-compositional negation, specifically negative concord (see the research questions (iii) and (iv) in the introduction).

There are two main types of explanations for the occurrence of non-compositional negation in constructions such as the NWC: (i) the language error approach, and (ii) the grammar approach. The first type of explanation is that the additional negation is a language error which occurs because the construction makes people think about something negative which leads to the incorrect use of a negative form. This hypothesis is put forward by Jin and Koenig (2020: 57) for what they call “expletive negation”. This analysis is given both for non-compositional negation which occurs with negative meanings (for example ‘without’ plus ‘not’) or for non-compositional negation and non-negative meanings (for example ‘before’ plus ‘not’). They do, however, remark that some of these uses can become part of the linguistic convention. A stronger version of the “error” approach is put forward by Paape et al. (2020) and Zhang et al. (2023) for the English ‘No X is too Y to Z’ construction (see also Horn (1991: 98) and the collection of examples from English of (perceived) misnegation on the Language Log). In most of the constructions discussed by these authors we find three negations. According to the “error” approach, people have difficulties in processing logical double negation, leading to the incorrect use of an extra, non-compositional and often third negation.

There are two factors which could be seen as evidence of the “error” approach to the NWC where we often find three negations (negation in the main clause, and both *zonder* ‘without’ and *niet* ‘not’ in the subordinate clause). First, a negation in

the main clause is a strong factor for the occurrence of non-compositional negation in the NWC, and language users do indeed have difficulties in handling logical double negation (Maldonado and Culbertson 2021). Second, the majority of the respondents in our survey prefer sentences without non-compositional negation, and the data from Fortuin (2023) also show that sentences with non-compositional negation are relatively infrequent as compared to sentences without non-compositional negation. As such, one could argue that the NWC is an instance of a construction that has gone wrong.

A second type of explanation is to see non-compositional negation as part of grammar which has a specific semantic-syntactic function. This approach is taken for example by Napoli and Nespore (1976) for Italian comparatives, Delfitto (2020) for Italian ‘before’ constructions, Fortuin (2014) for the English “No X is too Y to Z” construction, and Fortuin (2023) for the Dutch NWC. What all these analyses have in common is that they see non-compositional (paratactic, expletive) negation as a form-meaning element which makes explicit that the presupposition of “non-occurrence” attributed to the addressee is negated. According to this approach, this also explains why in the NWC the use of non-compositional negation is typically triggered by complex sentences with an explicit or implicit negative element in the main clause. In such sentences it is negated that something is not the case, and by using the extra negation the speaker/ author explicitly negates a presumed presupposition of non-occurrence on the part of the addressee (hearer or reader) expressed by *zonder*.

There are a number of factors which can be seen as evidence for the “grammar” approach in the case of the NWC. First, focus words are a trigger for the occurrence of non-compositional negation, even in sentences without negation in the main clause (see for example Fortuin 2023: 2 [example 3], 14 [example 17]). This cannot be explained by the language error explanation, whereas it can be explained by the grammar approach in terms of the function of accent to negate an alternative idea (Keijsper 1985: 112–113, 149, 171–199) and the fact that the negation and the focused word form a syntactic-semantic unit. This function is reminiscent of the use of non-compositional negation in other constructions which can be analysed in terms of the negation of the presupposition of non-occurrence (see Fortuin 2023 for a discussion). Second, in many sentences with the NWC we do not find an explicit negative element in the main clause but expressions such as ‘it is difficult to’ or a rhetorical question (see Fortuin 2023). It is not clear to us whether there is any independent proof that language users have difficulty to use this expression with a negation in the subordinate clause. And third, as is shown by Fortuin (2023: 21–23), the NWC occurs with the negator *niet* ‘not’ but not with negative indefinites like *nooit* ‘never’, *nergens* ‘nowhere’, *niemand* ‘no one’ and *geen* ‘no’. This restriction is

difficult to explain if one sees the NWC merely as a performance error.⁵ In the same vein, the performance error approach cannot easily explain why the NWC is not used in English, whereas it is found in written Dutch, for example in newspapers. This suggests that the NWC is part of the grammar and linguistic conventions of Dutch. Finally, In the case of the NWC, the non-compositional negation is also triggered by the complex (main clause, subordinate clause) syntactic structure of the construction. One could argue that this is in fact evidence for the “error” approach, since the complex construction makes it harder to correctly apply the negation in the main clause to the subordinate clause, leading to an extra, superfluous, and non-compositional negation in the subordinate clause. In our view, however, this is not a valid conclusion. Even if the NWC is facilitated by the complex syntactic structure of the construction, this does not mean that the NWC must be seen as a language error. In our view, the NWC can better be compared to phenomena like resumptive pronouns, which can be used by the language user to facilitate production and processing.

It still has to be explained, though, why not all speakers accept the construction, and in what way the construction builds on other parts of the grammar. In (written) standard Dutch, non-compositional negation in general and paratactic (expletive) negation in particular is not a widespread phenomenon (see van der Wouden 2021). It thus differs from paratactic (expletive) negation in Italian, which can occur in “before” clauses or in comparatives (Napoli and Nespor 1976).⁶ There are, however, other contexts which sometimes trigger non-compositional negation in modern Dutch, for example sentences with *niet verbazen* ‘not be surprised’ in the main clause as in the following examples from newspapers (taken from the Nexis Uni corpus):

- (9) *Op een beetje blikshade wordt niet gekeken en*
het zou me niet verbazen als er niet zo nu en dan
it would ne not surprise if there not now.and.then
onschuldige slachtoffers vielen.
innocent victims fell
 ‘They don’t care about a little bit of damage, and I wouldn’t be surprised if there were [lit. weren’t] innocent victims from time to time’

⁵ The editors pointed out that this is an important syntactic difference with respect to negative concord, which does not have similar restrictions.

⁶ As the editors pointed out, in Italian a further negative marker in a ‘without’ + infinitive construction is completely unacceptable: **senza non ridere* (without not laugh.inf; intended ‘without laughing’). It would be interesting to see how other (strict) negative concord languages behave in contexts with ‘without’.

- (10) *Het zou me niet verbazen als hij niet snel daarna ook
it would me not surprise if he not fast afterwards also
in een nieuw carrièrebootje is gestapt.
in a new career.boat is stepped
'I would not be surprised if he stepped into a new career boat [i.e. had a new
career] soon after that'*

In both sentences we find a negative element in the main clause, and a focused element in the subordinate clause (*niet zo nu en dan, niet snel erna*). This construction shows similarities to the NWC. Like in the case of the NWC, data from corpora show that it is not a very frequent construction, and that in most instances with *niet verbazen* 'not be surprised' no non-compositional negation is found. Interestingly, similar instances can be found in English as well, for example:

- (11) *I think he has some broken ribs, and from the bruises I saw, I wouldn't be
surprised if there wasn't some internal bleeding.
(meant to convey: 'There being some internal bleeding wouldn't surprise me.')*

Other more isolated instances of non-compositional negation can also be found, as exemplified by the following sentence:⁷

- (12) *Tot slot vroeg hij **waarom** de wijziging van de Wpg niet
finally asked he why the change of the Wpg not
al eerder komt, en **niet pas** in september.⁷
already earlier comes and not only in September
'Finally, he asked why the change to the Wpg [law] will not be realized earlier,
but only [lit and not only] in September'*

In this case, it seems, the author has chosen to repeat *niet* in the last part of the construction with *pas*, signaling that it is part of the same construction given earlier (*waarom niet* 'why not'), even though in this case *niet* does not logically negate *pas* (the deadline for the amendment to the law is September).

The tendency, at least for some Dutch language users, to use non-compositional negation is not a norm of language that is learned in school, nor is it a norm of language that can be easily learned or made explicit, since the triggers are rather subtle or difficult to explain. At the same time, when pointed out to language users, people can accept or object the use of non-compositional negation, and one could imagine

⁷ https://www.eerstekamer.nl/nieuws/20220517/eerste_kamer_stemt_tegen_verlengen

that grammars of Dutch might describe the NWC and provide simple basic rules for its use. It can be seen as a norm in the sense of Bartsch (1987). It is, however, not a rule of language that builds on a frequent pattern in the grammar, even though we find infrequent similar constructions in Dutch. Non-compositional negation is also very reminiscent of similar phenomena in other languages. All of this strongly suggests that the non-compositional negation in the NWC and non-compositional negation in general is a grammatical pattern which naturally evolves in different languages for similar reasons, and that the tendency to use non-compositional negation must be attributed to the way human beings use and process language. Natural language differs from logic in that its syntactic-semantic structure is influenced by the cognitive capacities of human beings and by factors which have to do with the anticipation of the speaker on the way the message might be understood by the addressee. In the case of non-compositional negation in the NWC, these two factors are interconnected. Fortuin (2023) argues that the use of the non-compositional negation is typical for complex constructions consisting of a main clause and a subordinate clause and for constructions which contain more implicit negative forms. In order to facilitate production and processing, and in order to make explicit the negative orientation of the construction and to negate the proposition of non-occurrence that is attributed to the addressee, the speaker or writer may choose to use a non-compositional negation. In the NWC the negation is often part of a constituent with an accented word. Forming a constituent with another accented word, and not with *zonder*, is a signal that *niet* cannot be interpreted in a compositional way. Such considerations are of course absent in the case of logic.

What, then, is the reason that some people reject sentences like these when they are asked to reflect upon them? In our view this can be explained by the rules of grammar and logic taught at school and the influence of the so-called written language bias which also influences people that write grammars (Linell 2005). In our research, this is likely also related to the level of education of the respondents. The more educated respondents are, the more likely it is that they will reject the construction. It can be hypothesized that as languages become written languages and explicit written norms emerge, the aversion to this kind of construction will also increase. It is probably no coincidence that various types of non-compositional negation (both negative concord and paratactic (expletive) negation) were common in Middle Dutch but became less frequent with the rise of written language in Dutch society. Van der Horst (2008: 1023, 1303, 1577) shows that negative concord, paratactic negation with negative verbs such as ‘forbid’ were used in Middle Dutch but disappeared in the course of the seventeenth and eighteenth century (see also the examples of non-compositional negation with the comparative given in Breitbarth 2013).

A reviewer remarked that since the construction under discussion did not exist in Dutch at a time when other types of non-compositional (paratactic) negation were still part of the standard language, this means that the construction must be a recent development, in the opposite direction of the rest of the negation system where non-compositional negation became rarer. This, in turn, according to them, makes the claim that the construction is part of the grammatical inventory of Dutch an extraordinary claim which needs extraordinary evidence. At first glance, we understand this point of view since one would expect that in general, specific constructions build on other constructions which show similar properties, and which together are part of a more abstract construction. At the same time, there are also data which are not in accordance with this idea, apart from the fact that our research has shown that a considerable number of speakers find the construction in some contexts fully acceptable.

First, there are no data which show that the construction was absent in older stages of Dutch when paratactic negation with verbs like *fear* was part of the grammar such as Middle Dutch. Fortuin (2023: 8–9) provides an overview of the use of *zonder* (*sonder*) with extra negation in Middle Dutch and later stages of Dutch based on corpus research. In Middle Dutch *zonder* (*sonder*) could occur with *niet* ‘not’, even though in the majority of instances that were found no extra negation was used. In later stages of Dutch (seventeenth century to the first half of the nineteenth century), the use of *zonder* and non-compositional negation became extremely infrequent.⁸ In the instances with extra negation, the modern triggers (negation in the main clause, focus particles) were absent in the data from the corpus. On this basis, however, one cannot conclude that the modern NWC triggers were absent in Middle Dutch. No instances were found with negation in the main clause and *zonder* (*sonder*) in the subordinate clause in the first place, which means that we do not know whether negation in the main clause was a trigger for non-compositional negation. In fact, if one believes in a production or process error explanation, one would expect the construction to exist in all diachronic stages of the language.

Secondly, the situation in Dutch is very similar to that of English. In older stages of English implicit negative verbs such as *fear* could occur with non-compositional (paratactic) negation. These constructions disappeared from the language. At the same time, in modern English we find constructions with non-compositional negation such as *No head injury is too trivial to be ignored*, which are considered fully

⁸ Van der Wouden (1994: 109) suggests that in seventeenth century Dutch *zonder* did not occur with non-compositional negation at all, but the data show that it did not become fully extinct, as evidenced by the following eighteenth-century example from a letter from the *Brieven als Buit-corpus* with *zonder niets te verdienen* lit. ‘without to earn nothing’, that is ‘without earning anything’.

acceptable by native speakers of English, and in some registers of English one also finds negative concord (see also Rotter and Liu, This volume). This shows that constructions with non-compositional negation may occur in relative isolation in the language structure.

It would be interesting to investigate the diachronic development and disappearance of paratactic (expletive) negation in Dutch to see whether it is the result of the normative influence on language structure and grammar. In the same vein, it would be interesting to investigate why in some languages paratactic (expletive) negation becomes part of the norm while in other languages it does not. To illustrate this, why is expletive negation acceptable in some constructions in Italian, for example in the comparative or sentences with ‘before’, but not in Dutch? And is there a hierarchy to this, such that if a language has paratactic (expletive) negation of type X, it is likely that it will also have paratactic (expletive) negation of type Y? Why does paratactic negation occur in modern standard Dutch in the NWC, but not in sentences with *voordat* ‘before’ or in the comparative? Is this a coincidence or not? And if not, is it because the semantic-syntactic structure of the NWC, just like sentences with ‘surprise’ and sentences of the type *No head injury is too trivial to be ignored* requires the use of an extra negation more than other construction because of their semantic-syntactic complexity? If so, we could conclude that the NWC is part of the grammar of Dutch and that, at the same time, production and processing capacities can explain why this is the case.

Another issue which would be worthwhile to investigate further is the relationship between the NWC and negative concord. The negation in the NWC is related to the negative meaning of *zonder* and the need to make explicit the negative orientation of the sentence in specific contexts. This is either done by negating the predicate or a focus word. This is partly reminiscent of negative concord constructions of the type *I didn’t see nobody* where the negative form (*nobody* instead of *anybody*) is chosen (see van der Auwera and Gianollo, This volume, and van der Auwera and van Alsenoy 2016: 484). In this construction the use of *nobody* is triggered to counter the presupposition that anybody was seen. This shows similarities to the NWC, specifically to instances of the NWC where *niet* belongs to a focused constituent as in (3) (*niet telkens* ‘not all the time’).

Note that in informal (spoken) Dutch we also find negative concord constructions such as in the following examples from the Open Sonar Corpus:

- (13) *Dat gelooft toch niemand niet.*
 that believes PART no one not
 ‘No one believes that.’

- (14) *Daar hebben we nog nooit geen problemen over gehad.*
 there have we PART never no problems over had
 ‘We’ve never had any problems with that.’

According to Zeijlstra (2010: 40–41) and van der Wouden (1994: 146–149; 2021) the extra negation in such sentences has an emphasizing function. This would suggest that the speaker in (13) or (14) can optionally add this extra negation to counter any presupposition that there are in fact people that believe it or that there were problems respectively. The use of an extra negation in these type of sentences could then be said to have evolved out of the desire of the speaker to counter a presupposition attributed to the hearer that something is not the case. Note that Zeijlstra (2010) does not treat such constructions as actual instances of negative concord, but as a lexically stored (idiomatic) constructions which developed after the decline of negative concord in Dutch. Van der Wouden (1994: 149) also points at the lexical properties of the construction. In our view, however, the emphasizing function of the negative concord construction in (13) or (14) needs more empirical research and is not evident. It may be that some speakers of Dutch consistently use negative concord in sentences like (13) and (14) and never use the construction with a single negation (see also van der Auwera 2009: 51–52 for Belgian Brabantic). For such people the presumed emphasizing function may be absent. It would, of course, be possible to hypothesize that speakers of (13) and (14) always use NC in these specific expressions, because these expressions are set expressions with an inherent emphasizing meaning. In constructions without such inherent emphasizing meaning, these speakers would then not use NC. But in order to test this hypothesis a better definition of “emphasis” is necessary. However it may be, in the case of the NWC the communicative desire to emphasize the negation is connected to the semantic-syntactic structure of the sentence (for example, negation in the main clause, main clause-subordinate clause structure, and presence of an implicit negative element in the subordinate clause), whereas in the case of the negative concord construction in (13) or (14) the construction possibly evolved out the desire of the speaker to mark the negative meaning in two different ways, both by using a negative indefinite meaning and by independently stating that the state of affairs expressed by the predicate is not the case, as such making the negative orientation extra clear. But to determine whether this hypothesis is correct requires further analysis.

5 Conclusion

This chapter deals with Dutch sentences where *zonder* ‘without’ occurs with a non-compositional negation (extra, paratactic) in the subordinate clause, called the “Negative Without Construction (NWC)” by us. In this chapter we investigated the following research questions by conducting an acceptability survey where native speakers of Dutch had to rate sentence pairs:

- (i) How do native speakers of Dutch judge instances of the NWC?

Answer: A majority of language users in our survey do not find them acceptable or at least less acceptable than sentences with *zonder* without non-compositional negation, but there still is a considerable group of people which do accept them and sometimes even find them more acceptable than sentences without non-compositional negation. As such, the data clearly show variation among people. We hypothesized that the rejection of the NWC is due to the normative influence of education.

- (ii) Does the survey corroborate the hypothesis put forward by Fortuin (2023), who argues that a negation in the main clause and a focus word in the subordinate clause enhance the acceptability of the NWC?

Answer: The data from our survey corroborate the corpus analysis given by Fortuin (2023).

- (iii) How can the NWC best be explained? As a performance error or as a construction part of the grammatical inventory of Dutch?

Answer: In our view, the NWC can be seen as part of the Dutch grammar, which can be explained in terms of the function of non-compositional negation. At the same time, grammar is also shaped by production and processing capacities. In order to facilitate production and processing, and in order to make explicit the negative orientation of the construction and negate the proposition of non-occurrence that is attributed to the addressee, the speaker or writer may choose to use a non-compositional negation.

- (iv) How can the NWC best be analyzed? As an instance of negative concord or as an instance of expletive (paratactic) negation?

Answer: In our view, both negative concord and paratactic negation are instances of non-compositional negation. The NWC can be seen as an instance of paratactic (expletive) negation, which shows strong functional similarities to some instances of negative concord, especially instances where emphasis or focus plays a part.

Further research could look into (i) the relation between negative concord and expletive negation from a crosslinguistic and diachronic perspective, (ii) the way expletive negation has been adopted in grammars of the language and at what

stage in grammar writing, and (iii) the question why in some languages non-compositional negation occurs in some constructions and not in others. We expect that more information on these three topics will bring more insight into the intriguing phenomenon of non-compositional negation in general, and expletive negation and negative concord in particular.

Abbreviations

AIC	Akaike Information Criterion
INF	infinitive
NC	negative concord
NWC	Negative Without Construction
PART	particle
PTCP	participle

Corpora and other resources used

Brieven als Buit-corpus. Leiden University. Compiled by Marijke van der Wal (Programme leader), Gijsbert Rutten, Judith Nobels and Tanja Simons, with the assistance of volunteers of the Leiden-based Wikiscripta Neerlandica transcription project, and lemmatised, tagged and provided with search facilities by the Institute for Dutch Lexicology (INL). 3rd release January 2021. <http://hdl.handle.net/10032/tm-a2-s4>

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