Negative Concord and (Multiple) Agree: A Case Study of West Flemish

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This article examines the formalization of negative concord in terms of the Minimalist Program, focusing entirely on negative concord in West Flemish. It is shown that a recent analysis of negative concord that advocates Multiple Agree is empirically inadequate. Instead of Multiple Agree, a particular implementation of the simpler and less powerful binary Agree proves superior in deriving the data in question.

Keywords: Agree, intervention, Multiple Agree, negative concord, West Flemish

1 Introduction

With the advent of the Agree model (Chomsky 2000, 2001, 2004, 2007, 2008), negative concord, in which there seems to be agreement between negative constituents, has garnered renewed interest, both from a synchronic (Watanabe 2004, Zeijlstra 2004, Lindstad 2007, Penka 2007a,b, to appear) and from a diachronic (Roberts and Roussou 2003, Zeijlstra 2004, Roberts 2007, van Gelderen 2008) point of view. In this article, we focus exclusively on data such as West Flemish (WF) (1a).1 As the translation indicates, (1a) is interpreted as if it contained a single expression of sentential negation, even though it contains three negative expressions, nooit ‘never’, niets ‘nothing’, and niet ‘not’, each of which can express sentential negation all by itself.2

1 The fact that the negative expressions nooit ‘never’ and niets ‘nothing’ express a single negation is often referred to as negative spread, with negative concord being reserved for the relation between en and niet and the n-constituents (see Den Besten 1989). We will not make this distinction; instead, we use the term negative concord to refer to any context in which multiple negative constituents express a single sentential negation.

2 (1) also contains the morpheme en, which, though related to the expression of sentential negation, is not able to express sentential negation all by itself. We discuss it briefly in section 2.1.

Except when absolutely sentence final, when both [nit] and [ni] are found, niet is usually pronounced [ni]. This is why niet has often been given as nie in the literature. Here we stick to the spelling niet.
The interest of (1a) for the concept Agree is that the three so-called \textit{n}-words, \textit{nooit}, \textit{niets}, and \textit{niet}, jointly convey a single (sentential) negation. (1a) suggests that such negative constituents are not semantically negative (i.e., that they do not themselves encode sentential negation); instead, they are uninterpretable “negative dependents” (see Borsley and Jones 2005, Willis 2006) of an interpretable (possibly null) negative constituent.\footnote{We remain agnostic here on whether there is a functional projection NegP. As far as we can see, this issue, though relevant in its own right, does not bear on the current discussion.} Or, to put it differently, (1a) can be taken to display a form of syntactic agreement between a number of constituents that depend on/are in the scope of the constituent encoding semantic negation (Ladusaw 1992, Brown 1999, Zeijlstra 2004, 2008, Penka 2007a,b, Biberauer and Zeijlstra, to appear). Formalizing this hypothesis, it has been argued (Roberts and Roussou 2003:145, Zeijlstra 2004, 2008, Moscati 2006, Penka 2007a,b) that negative concord involves only one interpretable negative feature that values (possibly multiple) uninterpretable negative features.\footnote{See Brown (1999:29ff.) for an earlier proposal that \textit{n}-words carry a [\textit{uneg}] feature. Brown’s discussion of WF (1999:43–44), however, lacks detail and we cannot assess it here.} In this view, negative concord (hereafter NC) would be a case of Multiple Agree (Ura 1996, Hiraiwa 2001, 2005, Chomsky 2008).

Although attractive, the Multiple Agree (MA) account raises questions. One is conceptual in nature: MA, in which many probes enter into an Agree relation (henceforth, \textit{Agree}) with one goal, leads to abandoning a strict locality condition on agreement. In addition, as we will show, adopting MA to account for NC (as proposed in Zeijlstra 2004, Penka 2007b) leads to empirical problems for WF. We will propose that a slightly revised formulation of binary Agree (much in the spirit of Pesetsky and Torrego 2007) makes it possible to handle the WF data.

The article is structured as follows. Section 2 presents the core data of sentential negation in WF relevant for the issue of NC as an instantiation of MA. Section 3 presents the MA account of NC proposed by Zeijlstra (2004, 2008) and discusses the conceptual and empirical problems raised by the proposal. Section 4 introduces the theoretical machinery that we adopt for our own analysis, and section 5 elaborates our analysis of WF NC in terms of binary Agree. Section 6 summarizes the article.
2 Sentential Negation in West Flemish

This section introduces the data regarding sentential negation in WF that are relevant for the analysis of NC as MA. Readers familiar with the WF data will not find much new here (see Haegeman and Zanuttini 1991, 1996, Haegeman 1995). For reasons of space, we omit issues that do not seem relevant for the present discussion.

2.1 Expressions of Negation: An Inventory

Three types of constituents are implicated in the expression of sentential negation in WF. One is the morpheme *en*, which cliticizes onto the finite verb (see Haegeman 1998a,b, 2000a,c, 2002b) and moves along with it (see (2d)). We assume that it spells out a head. *En cannot express negation all by itself (2a); it must cooccur with a negative constituent (2b–c). Furthermore, *en* is never obligatory: in (2b–d), it may be left out without loss of grammaticality. As it is only tangential to our discussion, we will not discuss the properties of *en* in detail. Following Haegeman (1998a,b, 2000a,c, 2002b), we assume that *en* is a spell-out of the head Pol (see Willis 2006 for PolP in Welsh; see also Breitbarth and Haegeman 2008 for a slightly different implementation) rather than being associated with a [NEG] feature. For reasons of space, we will not elaborate this point here and we refer to the papers cited for arguments.

(2) a. *da* Valère dienen boek *en*-kent
   that Valère that book *en*-knows
b. da Valère dienen boek *niet en*-kent
   that Valère that book not *en*-knows
   ‘that Valère doesn’t know that book’
c. da Valère niemand *en*-kent
   that Valère no.one *en*-knows
   ‘that Valère doesn’t know anyone’
d. Valère *en*-kent dienen boek *niet.
   Valère *en*-knows that book not
   ‘Valère doesn’t know that book.’

A second negative element is the marker of sentential negation, *niet ‘not’, which is parallel to Germanic negative markers such as German *nicht*, Dutch *niet*, and Norwegian *ikke*. *Niet* is located in the middle field, in a position c-commanding vP. As (2d) shows, *niet* is not affected by the movement of the finite verb. We assume that *niet* has XP status (see Haegeman 1995, Zeijlstra 2004).

Negative constituents, or *n*-words as they are usually called following Laka (1990),\(^{*}\) are the third type of negative expression. An *n*-word is a constituent that appears in the NC contexts we

\(^{*}\) Giannakidou (2006:328) defines *n*-words informally as in (i).

(i) N-word
   An expression *α* is an *n*-word iff
   a. *α* can be used in structures containing sentential negation or another *α* expression yielding a reading equivalent to one logical negation; and
   b. *α* can provide a negative fragment answer.
are interested in here. The relevant WF n-words are either simple one-word items such as *niemand* ‘nobody’, *niets* ‘nothing’, *nooit* ‘never’, and *nieverst* ‘nowhere’ (these will be referred to jointly as simple n-constituents) or syntactically more complex constituents that contain the negative quantifier *geen* ‘no’, such as *geen studenten* ‘no students’ and *geen geld* ‘no money’ (which will be referred to as geen-NPs), or that contain the negative marker *niet* as in *niet dikkerst* ‘not often’, *niet lange* ‘not long’, *niet vele* ‘not much’, and so on. The use of n-words is illustrated in (1c), (1d), (2c), and (3). As the parentheses indicate, *en* remains optional.

(3) a. da Valère dienen boek nieverst (en)-vindt
    that Valère that book nowhere (en)-finds
    ‘that Valère doesn’t find that book anywhere’
b. da Valère geen geld (en)-eet
    that Valère no money (en)-has
    ‘that Valère doesn’t have any money’
c. da Valère ier niet dikkerst geweest (en)-eet
    that Valère here not often been (en)-has
    ‘that Valère hasn’t been here often’

Our article is concerned with the extent to which the n-constituents and *niet* enter into NC readings (see Vanacker 1975 for a first description (in Dutch) of some of the crucial data).

2.2 Negative Concord in West Flemish

Haegeman (1995, 1997) argues that in WF an n-word with sentential scope must undergo leftward Neg-movement, as illustrated in (4) (see Haegeman’s discussion for details and Christensen 1986, 1987 for similar proposals for Norwegian).

(4) a. da Valère van niemand ketent en-was
    that Valère of no. one contented en-was
    ‘that Valère was not pleased with anyone’
b. *da Valère ketent van niemand en-was
    that Valère contented of no. one en-was

6 In reply to a question from an anonymous reviewer: (4b) is ungrammatical because it contains *en*, which requires the presence of an n-constituent with sentential scope. Not having undergone Neg-movement, *van niemand* ‘of no one’ cannot take sentential scope. Without *en* the example would be possible with *van niemand*—with *niemand* stressed—expressing local negation, for instance in the following sequence:

(i) Kweten juste da Jan ketent is van Lieve, da José ketent is van Jan, en da Valère ketent is van niemand.
    I know only that Jan contented is of Lieve that José contented is of Jan and that Valère contented is van niemand.
    of no. one
    ‘What I know is that Jan is pleased with Lieve, that José is pleased with Jan, and that Valère is pleased with no one.’

See also Haegeman 1997 and Svenonius 2002 regarding local negation.
When *n*-constituents with sentential scope cooccur with *niet*, they must move to the left of *niet*. Such moved constituents enter into an NC relation with each other and with *niet* (Haegeman 1995:138–139) as in (5a). Failure to undergo Neg-movement leads to a double negation (DN) reading as in (5b). Importantly, though, as also shown by (4), the obligatory leftward movement of the *n*-constituent(s) in (5a) cannot be motivated by their need to enter into NC with *niet* as such, because Neg-movement must also take place when *niet* is absent. Parallel with (5a), in which the *n*-constituents precede *niet*, in (5c) *niet* is absent. Once again the *n*-constituents have to undergo Neg-movement. If *over niets* ‘about nothing’ were to remain to the right of *ketent* ‘contented’, NC would be excluded (5d).

\[
\begin{align*}
(5) \ a. \ & \text{dat ter} \ \text{*niemand over niets niet ketent en-is} \ & \text{(NC)} \\
& \text{that there no.one about nothing not contented en-is} \\
& \text{‘that no one is satisfied with anything’} \\
\text{b. da ter} \ \text{niemand niet ketent over niets en-is} \ & \text{(*NC/?DN)} \\
& \text{that there no.one not contented about nothing en-is} \\
& \text{‘that no one isn’t satisfied with anything’} \\
\text{c. dat ter} \ \text{niemand over niets ketent en-is} \ & \text{(NC)} \\
& \text{that there no.one about nothing contented en-is} \\
& \text{‘that no one is satisfied with anything’} \\
\text{d. da ter} \ \text{niemand ketent over niets en-is} \ & \text{(*NC/?DN)} \\
& \text{that there no.one contented about nothing en-is} \\
& \text{‘that no one isn’t satisfied with anything’}
\end{align*}
\]

Not only simple *n*-words such as *niemand* ‘no one’, *niets* ‘nothing’, *nieverst* ‘nowhere’, and *nooit* ‘never’ enter into an NC relation. Other negated DPs with more complex structure can also enter into NC with clausemate *n*-constituents (Haegeman 2002b). For instance, in (6a) the DP *geenen tyd* ‘no time’ enters into an NC relation with *nooit* ‘never’. In (6b), *niet* ‘not’ negates a quantified nominal constituent (*te) vele tyd* ‘too much time’; the negated constituent enters into NC with *nooit* ‘never’. In (6c), *niet* negates an adverb (*lange* ‘long’, *dikkerst* ‘often’), and the negated adverb enters into NC with *niemand* ‘no one’. On the basis of data like (6a–c), Haegeman (2002b: 157) concludes that DPs containing negated quantifiers or negated adverbs are to all intents and purposes clausal negators.

\[
\begin{align*}
(6) \ a. \ & \text{*da Valère ketent van geen studenten en-was} \\
& \text{that Valère contented of no students en-was} \\
\text{b. da Valère van geen studenten ketent en-was} \\
& \text{that Valère of no students contented en-was} \\
& \text{‘that Valère is not satisfied with any students’}
\end{align*}
\]

7 Once again, a negated constituent with clausal scope has to undergo leftward movement. For reasons that will become clear in section 3.3.2.2 (discussion of examples in (17)), we cannot show this by means of the distribution of the relevant constituent with respect to *niet*, such negative constituents being incompatible with *niet*. However, as the contrast in (i) shows, a complex negative constituent that is the complement of an adjective (e.g., *ketent* ‘contented’) must move to the left of that adjective. (See Haegeman 1997 for arguments that this is not simply due to the quantificational nature of the constituent.)

\[
\begin{align*}
(i) \ a. \ & *\text{da Valère ketent van geen studenten en-was} \\
& \text{that Valère contented of no students en-was} \\
\text{b. da Valère van geen studenten ketent en-was} \\
& \text{that Valère of no students contented en-was} \\
& \text{‘that Valère is not satisfied with any students’}
\end{align*}
\]
It is also possible for constituents containing a negative quantifier to have local scope. This is illustrated in (7): in geen tyd ‘in no time’ does not negate the clause; instead, it means something like ‘in very little time’. Because the clause is not negative, en is not licensed, and there is no need for Neg-movement (7b). An n-word present in the middle field of the clause will not enter into NC with in geen tyd. In (7c), en is licensed by virtue of the presence of niet, but niet and in geen tyd do not enter into an NC relation. For reasons of space, we do not discuss n-words with local or constituent scope; we refer to, among others, Borkin 1971, Lawler 1971, Haegeman 1997, 2000b, Progovac 2000, Svenonius 2002, Moscati 2006, and the references cited there.

2.3 DP-Internal Negative Concord

The bracketed negative constituent in (8) also expresses sentential negation. The string differs minimally from the quantified n-constituent in (6b) by the addition of geen ‘no’, but importantly,
this does not lead to a change in meaning. For arguments that the bracketed string in (8) is a constituent, see Haegeman 2002a. Haegeman analyzes the niet Q geen N sequences as instantiations of DP-internal NC.

(8) K’(en)-een nooit [niet (te) vele geen tyd].
    I (en)-have never not (too) much no time
    ‘I never have a lot of/too much time.’

3 Negative Concord as Multiple Agree (Zeijlstra 2004, 2008)

In this section, we first summarize Zeijlstra’s (2004, 2008) proposal for analyzing NC in terms of MA (see also Penka 2007a,b). We then discuss the conceptual and empirical problems facing his account.

3.1 Zeijlstra 2004, 2008

To account for the cooccurrence of what seems like multiple n-constituents conveying a single sentential negation, Zeijlstra (2004, 2008) proposes that such constituents are semantically non-negative indefinites with a [uNEG] feature (2004:245). The sentential negative marker (e.g., WF niet) is also taken to bear [uNEG]. The very existence of [uNEG] features triggers the projection of NegP. Sentential negation as such is encoded by a covert negative operator OP→, in Spec,NegP, associated with an [iNEG] feature. According to Zeijlstra’s definition, ‘‘OP→ (i) introduces a negation at LF, and (ii) unselectively binds all free variables under existential closure’’ (2004:247).9

In Zeijlstra’s system, OP→[iNEG] in Spec,NegP c-commands the (multiple) [uNEG] n-constituent(s) on the vP edge. This ‘‘reverse Agree’’ departs from the standard view according to which the probe with the uninterpretable feature c-commands the goal with the interpretable feature. (For some discussion of reverse Agree, see also Brown 1999:29n11, Adger 2003, Merchant 2004, von Stechow 2005, Bošković 2007, Baker 2008, Merchant and Sadock 2008, and von Stechow and Zeijlstra 2008.)

In Zeijlstra’s approach, NC is the result of MA (Hiraiwa 2001) between OP→, on the one hand, and the negative marker and n-words, on the other.

The central hypothesis behind the assumption that [NC] languages express (sentential) negation by means of syntactic negation is that negation in these languages exhibits syntactic agreement that, in principle, does not differ from (syntactic) person or Tense agreement. . . . n-words are non-negative indefinites that are syntactically marked for negation, i.e. they bear an uninterpretable [uNEG] feature,
that at some point during the derivation needs to be checked against an overt or covert element that carries an interpretable \([i\text{NEG}]\) feature. This feature checking is governed by the syntactic operation Agree. Thus \([NC]\) is the realisation of an agreement relation between a negative operator and an \(n\)-word. (2004:244–245; our italics)

3.2 Application

Consider the Czech example (9a). Since Czech is an NC language, Zeijlstra assumes it has a NegP whose specifier hosts a covert operator with an \([i\text{NEG}]\) feature. In (9a), the verb \(\text{vdi} \text{‘see’}\) is associated with a negative morpheme \(\text{ne}\), with a \([u\text{NEG}]\) feature, and so is the \(n\)-word \(\text{nikoho} \text{‘no one’}. Through MA, the \([u\text{NEG}]\) features are checked and deleted (9b).

(9) a. Milan nevidi nikoho.
    Milan neg.sees no.one
b. \([\text{NegP OP} \to [i\text{NEG}] \quad \text{[vP nikoho [\#\text{NEG}]]] [\text{vP Milan nevidi [\#\text{NEG}]]}]\)
   (Zeijlstra 2004:250)

Zeijlstra also applies his analysis to WF (2004:255–256). According to his analysis, in a WF example with a single negative marker \(\text{niet} \text{‘not’}\) and the negative morpheme \(\text{en}\), both \(\text{niet}\) and \(\text{en}\) carry \([u\text{NEG}]\) and the two \([u\text{NEG}]\) features are checked by the \([i\text{NEG}]\) feature on the negative operator in Spec,NegP. In (10), his analysis is applied to an example with a single negative marker \(\text{niet} \text{‘not’}\) and the negative morpheme \(\text{en}\): both carry a \([u\text{NEG}]\) feature, and the two uninterpretable features are checked via the interpretable feature on the negative operator in Spec,NegP. Observe that \(\text{en}\) is optional here. In (11a), sentential negation is conveyed by means of an \(n\)-word, \(\text{niemand} \text{‘no one’}, which may be accompanied by \(\text{niet}\) as well as by \(\text{en}\). Zeijlstra provides the representations (10b) and (11b).

(10) a. da Valère niet (en)-klaapt
    that Valère not (en)-talks
    ‘that Valère doesn’t talk’
b. \([\text{NegP OP} \to [i\text{NEG}] \quad \text{[vP niet [\#\text{NEG}]]] [\text{vP Valère [\text{\text{'en}-klaapt [\#\text{NEG}]]}]}}\)
   (Zeijlstra 2004:255)

(11) a. da Valère tegen niemand (niet) en-klaapt
    that Valère against no.one (not) en-talks
    ‘that Valère doesn’t talk to anyone’
b. \([\text{NegP OP} \to [i\text{NEG}] \quad \text{[vP[PP tegen niemand [\#\text{NEG}]]] [\text{vP (niet [\#\text{NEG}]) [\text{vP Valère [\text{\text{'en}-klaapt [\#\text{NEG}]]}]}}\]
   (Zeijlstra 2004:255)

\(^{10}\) Zeijlstra (2004) assumes that the head of NegP is also associated with a \([u\text{NEG}]\) feature. This feature will not play a role in our discussion, so we leave it out of our representations for expository reasons.
3.3 Negative Concord as Multiple Agree: Problems for the Account

A first problem for Zeijlstra’s (2004, 2008) MA account of NC is conceptual: MA, in which many probes Agree with one goal, leads to the abandonment of a strict locality condition on Agree, in that precisely in the context of MA a probe need not have a local relation with (at least one of) its goal(s). Not only does this raise general questions concerning the role of locality in syntax, but also, as we will show, locality plays a crucial role in determining the conditions of NC in WF. There are two specific empirical problems for the MA account of WF NC. First, the across-the-board application of MA to derive NC gives rise to the wrong predictions. Second, the MA approach has difficulty in handling the DP-internal application of NC, and its relation to NC at the sentential level.11

3.3.1 Multiple Agree and Locality

In Hiraiwa’s (2001) original conception as well as in Zeijlstra’s (2004, 2008) implementation, MA is a process whereby all uninterpretable features are “simultaneously” eliminated:

MULTIPLE AGREE (multiple feature checking) with a single probe is a single simultaneous syntactic operation; Agree applies to all matched goals at the same derivational point derivationally simultaneously. (Hiraiwa 2001:69; our italics)

The implementation of MA for the phenomenon of NC can be presented schematically as in (12). Following and adapting Hiraiwa’s own formulation (“Agree applies to all matched features”), we assume that MA, like binary Agree, is a two-step process that first matches the features and then leads to checking. After Merge/Move of the individual n-constituents to the edge of vP, each with its [uNEG] feature, the abstract negative operator, OP \( \sim \) with \([iNEG]\), is merged in Spec,NegP. MA relates \([iNEG]\) “across the board” to each of the individual \([uNEG]\) features; crucially, there is no relation between the \([uNEG]\) constituents as such. MA thus implies that Agree can be nonlocal, since in (12c), for instance, [B \(uNEG\)] and [C \(uNEG\)] intervene between [OP \(iNEG\)] and [D \(uNEG\)].

(12) a. \([NegP OP \sim [iNEG]] [vP [B uNEG] [vP [C uNEG] [vP D uNEG]]]] \Rightarrow \text{Match}

b. \([NegP OP \sim [iNEG]] [vP [B uNEG] [vP [C uNEG] [vP D uNEG]]]] \Rightarrow \text{MA}

c. \([NegP OP \sim [iNEG]] [vP [B ##uNEG] [vP [C ##uNEG] [vP D ##uNEG]]]]

We illustrate the application of the system to WF in (13). Here we apply Zeijlstra’s approach to an example in which three n-words, nooit ‘never’, niemand ‘no one’, and niet vele ‘not much’, enter into an NC relation.

\(11\) A further problem arises with Zeijlstra’s analysis of WF en. Zeijlstra (2004) assumes that en is associated with an uninterpretable feature \([uNEG]\), which is licensed under agreement with an interpretable feature on a nonovert negative operator (see below in the text for details). On Zeijlstra’s account, the question then arises why (i) is not acceptable.

(i) a. *Valère en-klaapt.
Valère \(en\)-talks

b. *[NegP OP \sim [iNEG]] [vP Valère [v en-klaapt [##iNEG]]]

(Zeijlstra 2004:255)

See section 2.1 for a different account that is compatible with the data.
3.3.2 Empirical Problems I: Negative Concord and Binary Relations

In the following sections, we will discuss conditions on the application of NC in WF (section 3.3.2.1) and implications these have for an MA analysis (section 3.3.2.2).

3.3.2.1 Conditions on Negative Concord in West Flemish

According to the MA account, NC is a one-to-many relation in which the negative operator agrees with each \( n \)-word and in which there is no specific relation between the individual \( n \)-words. However, Haegeman and Zanuttini (1996) signal that in WF the nature of the negative element also plays a role in generating NC. To the best of our knowledge, the data they present have so far not been taken into account in the literature on NC.

Consider (14): in (14a), \textit{niemand} ‘no one’ enters into an NC relation with \textit{niet} ‘not’; in (14b), \textit{niemand} enters into an NC relation with \textit{niet dikkerst} ‘not often’; and in (14c), the three \( n \)-constituents, \textit{niet dikkerst}, \textit{niemand}, and \textit{niet}, enter into NC.

\begin{enumerate}
\item[(14)]
\begin{enumerate}
\item[a.] dat er doa niemand niet gewerkt eet \textit{niemand niet}: NC
\begin{quote}
that there there no one not worked has
\end{quote}
‘that no one has ever worked a lot’
\item[b.] dat er \textipa{[NegP OP \textipa{[\textipa{i}NEG]} [\textipa{\nuP nieoit \textipa{[\textipa{u}NEG]} [\textipa{\nuP niemand [\textipa{u}NEG]} [\textipa{\nuP niet vele [\textipa{u}NEG]} gewerkt eet]]]]} \textit{niemand niet dikkerst}: NC
\begin{quote}
that there there not often no one worked has
\end{quote}
‘that not often did anyone work there’
\item[c.] dat er doa niet dikkerst niemand niet gewerkt eet \textit{niemand niet dikkerst}: NC
\begin{quote}
that there there not often no one not worked has
\end{quote}
‘that not often did anyone work there’
\end{enumerate}
\end{enumerate}

In terms of Zeijlstra’s approach, this means that \textit{niet dikkerst} ‘not often’, \textit{niemand} ‘no one’, and the marker of sentential negation \textit{niet} ‘not’ all carry a \textipa{[\textipa{u}NEG]} feature that is checked by the \textipa{[\textipa{i}NEG]} feature on the sentential negative operator. Since \textit{niet dikkerst} and \textit{niet} are in an NC relation in (14c), one might expect that (14d), with the same three \( n \)-constituents, now in the sequence \textit{niemand niet dikkerst} and \textit{niet}, would also be grammatical with an NC reading. But this is not the case: (14d) is ungrammatical with an NC reading. It is marginal with an interpretation in

\footnote{12 The data discussed by Déprez (2000) are different in that they implicate a preverbal/postverbal asymmetry, which is not at issue here.}
which niemand and niet dikkerst enter into NC and in which (stressed) niet expresses an independent negation, resulting in a double negation (DN) reading.\footnote{In general, DN readings are marked; and where an NC reading is available, that will be the default interpretation. For reasons of space, we do not present an analysis of DN readings, but we hope to return to the issue in future work.} When niet is replaced by niet meer ‘no more’ (14e), the NC reading is again available.\footnote{The final consonant of meer ‘more’ often remains unpronounced.}

\begin{Verbatim}
\input{14}
\end{Verbatim}
Data such as those in (14) can be multiplied. What emerges from (14) is that although a complex n-constituent such as niet dikkerst ‘not often’ can participate in NC readings, it cannot do so if it is the n-word that is closest to the sentential negator niet. Instead, such an n-constituent can only participate in an NC relation with niet if it is separated from niet by a simple n-constituent such as niemand. No such ‘antilocality’ constraint applies to niemand (14a) or to the other simple n-words such as nooit ‘never’, niets ‘nothing’, and nieverst ‘nowhere’ (15a–c). (15d) shows that the presence of a geen-NP between niet dikkerst and niet does not suffice to yield an NC reading.

For completeness’ sake, note that there is no adjacency requirement between the simple n-constituent and niet, as already shown by (14g); but see section 5.4.2 for further discussion.

The restriction on the creation of NC readings for complex n-constituents such as niet dikkerst also applies to n-constituents containing the negative quantifier geen ‘no’. We illustrate this point in (16). As just shown in (15c), nieverst ‘nowhere’ and niet can enter into an NC relation. The n-constituent geneenen student ‘no student’ cannot enter into an NC relation with niet (16a), but it can do so when it is separated from niet by nieverst; see (16b), in which geneenen student,
nieverst, and niet enter into an NC relation. Alternatively, if niet is replaced by niet meer (16c),
the sentence is also grammatical with an NC reading.

(16) a. *dat er geneenen student over zukken dingen niet klaapt
     that there no student about such things not talks
     DN: ‘that no student does not talk about such things’

b. dat er geneenen student nieverst niet over klaapt
   that there no student nowhere not about talks
   ‘that no student talks about anything’

c. dat er geneenen student over zukken dingen niet meer klaapt
   that there no student about such things not more talks
   ‘that no student talks about such things any longer’

3.3.2.2 Implications for a Multiple Agree Analysis The data above show that WF NC is sensi-
tive to the type of n-constituents involved and to their relative positions. Because all n-constituents
(niemand, niet lange, niet dikkerst, niet, niet meer, geen-NP, etc.) can enter into an NC reading
in some combinations, Zeijlstra’s (2004, 2008) MA analysis would lead us to expect that they
can always enter into an Agree relation with the relevant negative operator, and it is not clear
how MA formulated as a one-time across-the-board procedure can ‘‘distinguish’’ acceptable
combinations from unacceptable ones. In (17), we provide schematic representations of (14c) and
(14d) to illustrate this point. On an MA approach, it will be the case that niemand, niet dikkerst,
and niet can enter into an NC relation in (17a), while this is not possible in (17b).

(17) a. dat er doa [NegP [iNEG] niet dikkerst [uNEG] niemand [uNEG] niet [uNEG] . . . eet]

b. *dat er doa [NegP [iNEG] niemand [uNEG] niet dikkerst [uNEG] niet [uNEG] . . . eet]

As (17) shows, WF NC is subject to a locality condition, a property that is crucially absent from
the formulation of MA. It is therefore not clear that the MA account can handle these cooccurrence
restrictions, which are not addressed in Zeijlstra 2004, 2008.16 In section 5, we develop our own

16 An approach in which NC is derived by unselective binding of the n-constituents by an operator (see, e.g., Ladusaw
1992, Acquaviva 1993, Piñar 1996, Giannakidou 1997) also does not seem to be able to derive the pairwise relations
observed here without additional machinery. In their discussion of NC in Italian dialects, Manzini and Savoia (2008:91)
propose that the binding of several variables by the same quantifier requires that the variables be of the same semantic
type, and they invoke a system with the features N(eg) and Q. This requirement is parameterized. Again, this account
does not lead us to expect the particular pairwise relations displayed in WF.
proposal to derive NC readings in WF, using a modified version of Haegeman and Zanuttini’s (1996) proposal cast in terms of binary Agree.

3.3.3 Empirical Problems II: DP-Internal Negative Concord  
WF also displays DP-internal NC. This was illustrated in (8) and is also shown in (18a). We want to say that niet vele and geen enter into an Agree relation, because geen can only be present in the DP by virtue of the negative property of niet vele, as shown in (18b) (see Haegeman 2002a).

(18) a. niet vele geen boeken
   not many no books
   ‘not many books’

   b. *vele geen boeken

In (18a), niet negates the quantifier vele. Geen itself does not express a quantificational negation of the nominal constituent: niet vele geen boeken, literally ‘not many no books’, can only mean ‘not many books’; it can never be interpreted as meaning ‘no books’, nor can it mean ‘many books’. One might propose that geen bears the [uNEG] feature, that niet in niet vele bears the [iNEG] feature, and that [uNEG] is subject to DP-internal checking as in (18c–d).

(18) c. niet vele [iNEG] geen [uNEG] ⇒ Agree

   d. niet vele [iNEG] geen [uNEG]

However, the resulting complex n-constituent niet vele geen boeken will then carry an [iNEG] feature (18d). Thus, following Zeijlstra’s (2004) account, the n-constituent should contribute its own negative value to the clause.17 This has two consequences. (a) If Neg-movement of n-constituents is driven by [uNEG], the resulting n-constituent (18a), with the feature content in (18d), should not be subject to Neg-movement, since it no longer contains an unchecked [uNEG]. (b) The n-constituent (18a) should not enter into an NC relation with other n-constituents in the clause. Bearing [iNEG], the n-constituent should give rise to a DN reading if it is c-commanded by the clausal negative operator with the [iNEG] feature. These predictions, which follow from the standard assumption that when valuation has happened, the valued item is not able to enter into further Agree relations (Chomsky 2000 et seq.) or to undergo further movement (for extensive arguments, see Boeckx 2007, 2008 and Bošković 2007), are both incorrect.

First, just like any other n-constituent, the constituent in (18a) must undergo Neg-movement (see also footnote 6).

(18) e. *dan ze ketent van niet vele geen boeken zyn
   that they contented of not many no books are
   that they of not many no books contented are
   ‘that they are not pleased with many books’

Second, just like niemand, niet, and so on (for which we assume, following Zeijlstra (2004, 2008), that they bear [uNEG]), niet vele geen boeken ‘not many books’ may enter into an NC relation

17 For full discussion of Zeijlstra’s typology, see also Biberauer and Zeijlstra, to appear.
with other \( n \)-constituents: in (19), \( \textit{niet vele geen boeken} \) enters into an NC relation with \( \textit{nooit} \) ‘never’ and with \( \textit{niemand} \) ‘no one’.

(19) Ier \( \text{en leest er niet} \) niemand niet \( \text{vele geen boeken} \).

here \( \text{en} \) reads there never no.one not many no books

‘No one ever reads many books around here.’

So since \( \textit{niet vele geen boeken} \) undergoes Neg-movement and is able to enter into an NC relation, (18c–d) cannot be correct. That is, \( [u_{\text{NEG}}] \) must remain active and must not have been valued and deleted DP-internally.

An alternative would be to assume that both \( \textit{niet vele} \) and \( \textit{geen} \) bear \( [u_{\text{NEG}}] \), basically along the lines of Zeijlstra’s proposals for NC at the clausal level. Under MA, then, they would enter into an Agree relation with the \( [i_{\text{NEG}}] \) feature of the clausal negative operator.\(^{18}\)

(20) a. \([\text{OP} [i_{\text{NEG}}] [\text{Neg} [vP \textit{niet } [u_{\text{NEG}}] \textit{vele geen } [u_{\text{NEG}}] \ldots ]]] \Rightarrow \text{Agree}\]

b. \([\text{OP} [i_{\text{NEG}}] [\text{Neg} [vP \textit{nieu } [u_{\text{NEG}}] \textit{vele geen } [u_{\text{NEG}}] \ldots ]]]\]

(20) represents both \( \textit{geen} \) and \( \textit{niet vele} \) as being checked by (hence directly related to) the \( [i_{\text{NEG}}] \) feature of the negative operator, but it fails to capture their observed DP-internal interdependency. The MA analysis would provide (21a) with the representation in (21b), again with no dependency between the DP-internal \( [u_{\text{NEG}}] \) on \( \textit{niet vele} \) and that on \( \textit{geen} \).

(21) a. T’eet ier \( \text{niet} \) niemand niet \( \text{vele geen boeken} \).

it has here no.one not many no books

‘No one has many books here.’

b. \([\text{NegP OP} [i_{\text{NEG}}] [\text{niemand } [u_{\text{NEG}}] \textit{niet vele } [u_{\text{NEG}}] \textit{geen } [u_{\text{NEG}}] \ldots ]]]\]

But the availability of \( \textit{geen} \) does depend on that of \( \textit{niet vele} \): (21a) does not have a variant (21c) in which \( \textit{geen} \) is directly dependent on the sentential negation, with MA applying as shown in (21d–e).

(21) c. \(*\text{T’eet ier } \text{niemand vele geen boeken.} \)

it has here no.one many no books

d. \(*[\text{OP} [i_{\text{NEG}}] [\text{Neg niemand } [u_{\text{NEG}}] [vP \textit{vele geen } [u_{\text{NEG}}] \ldots ]]] \Rightarrow \text{Agree}\]

e. \(*[\text{OP} [i_{\text{NEG}}] [\text{Neg niemand } [u_{\text{NEG}}] [vP \textit{vele geen } [u_{\text{NEG}}] \ldots ]]]\)

As DP-internal \( \textit{geen} \) in (21) is seen to depend on the presence of the DP-internal negative \( \textit{niet} \), what is required instead of (21e) is a representation like (21f) in which we can first establish an

\(^{18}\)As an anonymous reviewer observes, an MA analysis could also claim that the \( [u_{\text{NEG}}] \) of \( \textit{geen} \) is too deeply embedded inside the DP phase for the negative operator to Agree with it. However, under an MA analysis it is not clear how this embedded \( [u_{\text{NEG}}] \) would be checked so that it does not cause a crash. One could amend the MA analysis such that MA takes place within the DP, and then within the clause, though it is not clear what the MA operation within the DP would be in Zeijlstra’s framework since the DP contains two unvalued features and no interpretable one that can function as a probe. This would in fact be tantamount to reintroducing binary Agree.
Agree relation between the [uNEG] features on both geen and niet vele, prior to establishing the NC relation with the [NEG] feature on niemand.

(21) f. \[[NegP OP [iNEG] \ldots [vP niet [uNEG] vele [vP geen [uNEG]] \ldots\]]

If DP-internal NC is analyzed as a process relating two n-constituents each of which bears [uNEG], this leads to the hypothesis that Agree can be established between items with [uNEG].

3.4 Summary

We have shown in this section that apart from the conceptual issue concerning the role of locality, the MA approach to NC has two empirical shortcomings when applied to WF. Specifically:

1. It fails to predict the binary matching restrictions on NC.
2. It fails to provide a separate application for NC/MA in cases of DP-internal NC.

In what follows, we will show how these two problems can be dealt with by an alternative approach to NC in terms of binary Agree.

4 Negative Concord Is Binary Agree (in West Flemish)

4.1 Agree

One outcome of our discussion in section 3 is that in order to capture the observed locality restrictions on WF NC in terms of Agree, we need to abandon Zeijlstra’s (2004, 2008) “across-the-board” MA and revert to binary Agree. Furthermore, to accommodate DP-internal NC we need to be able to establish an Agree relation between [uNEG] features. In this section, we outline the conception of Agree that we will implement in section 5.19

We propose the following informal definition (building in particular on Pesetsky and Torrego 2007:268):20

(22) Agree

\[ \alpha \text{ Agrees with } \beta \text{ if } \alpha \text{ c-commands } \beta, \alpha \text{ and } \beta \text{ both have a feature } F, \text{ and there is no } \gamma \text{ with the feature } F \text{ such that } \alpha \text{ c-commands } \gamma \text{ and } \gamma \text{ c-commands } \beta. \]

The locality condition in the latter half of the definition (“and there is no . . .”) enables us to account for cases in which NC is disallowed. We return to this point shortly. Before doing so,

19 Although we only deal with negation in this article, our definition of Agree is intended to be a general definition. We hope to return to this in future work.
20 We thank Norbert Hornstein (pers. comm.) for discussing the concept Agree with us.
21 Pesetsky and Torrego (2007:268) give the definition in (i).

(i) Agree (feature-sharing version)

a. An unvalued feature F (a probe) on a head H at syntactic location \( \alpha \) (\( F_\alpha \)) scans its c-command domain for another instance of F (a goal) at location \( \beta \) (\( F_\beta \)) with which to Agree.
b. Replace \( F_\alpha \) with \( F_\beta \), so that the same feature is present in both locations.
we note that—crucially, for our purposes—our definition of Agree allows for agreement between two uninterpretable/unvalued features (see also López 2008 for a different implementation of the same idea). Pesetsky and Torrego (2007:269) elaborate on this point as follows:

If value assignment is allowed to apply vacuously, the derivation on this view contains two unvalued occurrences of \( F \) before Agree, and contains exactly the same two unvalued occurrences of \( F \) after Agree. If the feature sharing view is correct, however, Agree between two unvalued occurrences of \( F \) . . . is far from vacuous, since its output will be a structure that contains only one occurrence of \( F \) with two instances.

In an Agree relation between uninterpretable features, it is difficult to say which is the probe and which is the goal, and whether there is a probe-goal relationship at all between the two features. Pesetsky and Torrego (2007:269n9) acknowledge this, saying that “when Agree applies between two unvalued occurrences of a feature, inspection of the output cannot reveal whether the goal replaced the probe, or vice versa.” We depart from their proposal in that we do not adopt a feature-sharing view and in that we assume that after Agree between two uninterpretable features, the uninterpretable feature survives on the higher element. An Agree relation that is allowed in principle by (22) but must be ruled out on independent grounds is a relation between two interpretable features. That should be excluded because if Agree reduces the agreeing features to one, in effect interpretable features—information that has to be retained—would be deleted (see Chomsky’s (1995) notion of Full Interpretation).

Schematically, our proposal can be illustrated as follows:

\[
(23) \quad \begin{array}{c}
a. \quad \alpha \ \beta \gamma \\
\begin{array}{c}
\text{i}F \\
uF \\
uF \\
\Rightarrow \text{Agree}
\end{array}
\end{array}
\]

\[
b. \quad \text{i}F \quad uF \quad \Rightarrow \text{Agree}
\]

\[
c. \quad \text{i}F
\]

In (23), \( \beta \) c-commands \( \gamma \) and, according to (22), by virtue of their shared feature \( (F) \), they are able to Agree, eliminating the lowest feature \( (uF) \). The topmost \( uF \) on \( \beta \) survives and, given that \( \alpha \) c-commands \( \beta \), it is able to Agree with \( [iF] \) on \( \alpha \). On this approach, Agree operates “stepwise” and locally.²³

4.2 Negative Concord as Binary Agree

Returning to NC, in (24) we give a schematic representation of how binary Agree can derive NC. We use overstrikes to indicate that only one \([u\text{NEG}]\) feature survives after Agree. As a result of stepwise Agree, just one \([i\text{NEG}]\) feature is left.

²² We depart from Pesetsky and Torrego 2007 and from Moscati 2006 in that we use interpretable/valued and uninterpretable/unvalued interchangeably.

²³ The system we are advocating bears some resemblance to a proposal made by Frampton and Gutmann (2006), who pursue the following approach to agreement: “Agree induces feature sharing, with matching features coalescing into a single shared feature, which is valued if either of the coalescing features is valued” (p. 128). However, although their approach and ours seem to derive the same result, it is unclear what kind of operation “coalescing” is. Therefore, we will not use this terminology.
5 Decomposing N-Words in West Flemish: Our Proposal

In this section, we propose an analysis of NC in WF based on a particular feature decomposition of the n-words. We should stress at the outset that our proposal is restricted to WF. Although we are convinced that our analysis can ultimately be extended to other NC languages, it is not clear to us at this point that it can capture all crosslinguistic variation in NC (see Giannakidou 2006 for discussion of variation across NC languages). We plan to return to the comparative aspect in future work.

5.1 A “Maximization” Requirement on Negative Concord

Haegeman and Zanuttini (1996:143) describe the cooccurrence restrictions on NC in some detail. They classify WF n-constituents in terms of their internal structure and feature composition. We do not repeat their discussion, but simply provide table 1, which shows their classification of the n-constituents with the associated features (from Haegeman and Zanuttini 1996:145). The bare quantifiers such as niemand and niets correspond to our simple n-words. In table 1, [q] is a quantificational feature, yes means that an NC reading is possible, and no means that it is not possible.

Haegeman and Zanuttini (1996) derive NC by means of Neg-factorization, which extracts the negative component from all the items involved. Factorization operates in a stepwise binary

Table 1
Head features on negative elements and cooccurrence restrictions

<table>
<thead>
<tr>
<th></th>
<th>Bare Q [NEG, q]</th>
<th>Geen-NP [q]</th>
<th>Niet [NEG]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bare Q</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>[NEG, q]</td>
<td>niemand niets</td>
<td>niemand geen geld</td>
<td>niemand niet</td>
</tr>
<tr>
<td>Geen-NP [q]</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>geen mens niemand</td>
<td>geen mens geen tyd</td>
<td>*geen mens niet</td>
</tr>
<tr>
<td></td>
<td>no person no one</td>
<td>no person no time</td>
<td>no person not</td>
</tr>
<tr>
<td>Niet meer [q]</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>niemand niet meer</td>
<td>geen mens niet meer</td>
<td>*niet meer niet</td>
</tr>
<tr>
<td></td>
<td>no one no more</td>
<td>no person no more</td>
<td>no more not</td>
</tr>
</tbody>
</table>
NEGATIVE CONCORD AND (MULTIPLE) AGREE

fashion: rather than across-the-board factorization as in (25a), Haegeman and Zanuttini propose a pairwise factorization as in (25b).

\[(25)\]
\[
a. \ [x \neg][y \neg][z \neg] \Rightarrow [[x, y, z] \neg]
\]
\[
b. \ [x \neg][y \neg][z \neg] \Rightarrow [x \neg][[y, z] \neg] \Rightarrow [[x, y, z] \neg]
\]

The precise conditions under which pairwise factorization operates are not clear, and how it could be implemented to derive the restrictions in table 1 is not straightforward.

The internal makeup of \(n\)-constituents plays a role in determining how they enter into NC relations. Starting from Haegeman and Zanuttini’s classification, we propose here that WF \(n\)-words be composed featurally as in (26).

\[(26)\]
\[
a. \ \text{niet} \ [\text{uNEG}, \text{uQ}] \quad \text{‘not’}
\]
\[
b. \ \text{niemand} \ [\text{uNEG}, \text{iQ}] \quad \text{‘no one’}
\]
\[
c. \ \text{geen-NP} \ [\text{uNEG}] \quad \text{‘no NP’}
\]
\[
d. \ \text{niet meer} \ [\text{uNEG}] \quad \text{‘no more’}
\]
\[
e. \ \text{niet dikkerst} \ [\text{uNEG}] \quad \text{‘not often’}
\]

These items enter into NC relations as follows:

\[(27)\]
\[
a. \ \text{niemand} + \text{niet} \quad [\text{uNEG}, \text{iQ}] + [\text{uNEG}, \text{uQ}]
\]
\[
b. \ ^*\text{niet dikkerst} + \text{niet} \quad [\text{uNEG}] + [\text{uNEG}, \text{uQ}]
\]
\[
c. \ ^*\text{geen-NP} + \text{niet} \quad [\text{uNEG}] + [\text{uNEG}, \text{uQ}]
\]
\[
d. \ ^*\text{niet meer} + \text{niet} \quad [\text{uNEG}] + [\text{uNEG}, \text{uQ}]
\]
\[
e. \ \text{niemand} + \text{geen-NP} \quad [\text{uNEG}, \text{iQ}] + [\text{uNEG}]
\]
\[
f. \ \text{niemand} + \text{niet meer} \quad [\text{uNEG}, \text{iQ}] + [\text{uNEG}]
\]

Given the patterns displayed in (27), NC (and its formalization in terms of Agree) seems to be subject to a maximization requirement, in the sense that, having two uninterpretable features, \textit{niet} can match and undergo Agree only with an item that carries both of them. A match between \textit{niet} and the simple \(n\)-constituent \textit{niemand} is possible, the latter combining a [uNEG] feature with an [iQ] feature, but a match between \textit{niet} and a complex \(n\)-constituent is not possible because the latter lacks the quantificational feature. It looks as if, because of the lack of maximal matching,

\[24\] We have adjusted this representation in terms of our own article. In particular, we abandon the idea that \(n\)-words are universal quantifiers.

\[25\] We are grateful to Michal Starke and Klaus Abels for very useful discussions regarding the feature content of these elements. Neither is responsible for the way we have used their comments.

On the relevance of [\text{NEG}] and [\text{Q}] to NC, see also Manzini and Savoia 2008.
[uQ] of niet remains unchecked in (27b–d). The same problem does not arise for NC between niemand with its two features [uNEG] and [iQ] and the complex n-constituents with their one feature [uNEG]: even though niemand does have one additional feature, [iQ], the latter is interpretable and hence need not be checked by Agree (27e–f).

The feature composition in (26) gives the right results to derive NC readings, but at this stage the feature sets are simply postulated in order to do just that. In part on the basis of Haegeman and Zanuttini 1996:143–145, section 5.2 motivates the feature composition of the n-constituents in (27), using semantic, morphological, and syntactic criteria.

5.2 Motivation for the Decomposition

5.2.1 Simple N-Words  Simple n-words such as niemand ‘no one’ and niets ‘nothing’ are the negative counterparts of the (Standard Dutch) quantifiers iemand ‘someone’ and iets ‘something’.26

(28) Quantifier Negative quantifier

iemand ‘someone’ niemand ‘no one’
iets ‘something’ niets ‘nothing’

We propose that in the quantifiers iemand ‘someone’ and iets ‘something’, -ie spells out the quantificational component and bears [iQ]. We assume that iemand occupies a functional head in the nominal domain and moves to D.

In simple n-words such as WF niemand, n- spells out [uNEG]27 and is merged with iemand ‘someone’ through head movement, and this complex ends up in D.28 The syntactic structure is given in (29) (see Haegeman 2002a, Troseth 2009, and Aelbrecht, to appear, for NegP within DPs).

(29) a. DP

     D  |  NegP

     niemand  Neg  NP

     [uNEG, iQ]  [iQ]

     n- [uNEG] [iQ] [uNEG, iQ]

b. n- iemand ⇒ niemand

26 For reasons that are not clear, WF does not use iemand and iets; instead, it uses entwien ‘someone’ and entwa ‘something’, both of which are composed of an indefinite article een and a wh-word. See Haegeman 1991 on these indefinite pronouns in WF.

27 For arguments that the [NEG] feature on the n-constituent is uninterpretable, see the discussion in section 3.

28 Thanks to an anonymous reviewer for suggesting this implementation.
Crucial for our account is Haegeman and Zanuttini’s (1996) hypothesis that the \([iq]\) feature in \textit{niemand} is available on the topmost layer of the DP and hence remains accessible at future derivational steps. Because \([\textit{ineg}]\) remains to be valued, the \(n\)-words are still visible for further operations after the derivation in (29b).

5.2.2 The Sentential Negator Niet Following Zeijlstra (2004, 2008) and Penka (2007a,b, to appear), we assume that sentential negation is encoded in an abstract operator associated with an \([\text{i} \text{neg}]\) feature. With Zeijlstra (2004, 2008), we assume that the marker of sentential negation, \textit{niet}, bears a \([\text{une}g]\) feature, which will be eliminated by Agree with the clausal \([\text{i} \text{neg}]\) feature. For arguments, see Zeijlstra 2004, 2008 and Penka 2007a,b, to appear.

In addition, however, we propose that \textit{niet} carries \([uQ]\). The association of a quantificational feature with \textit{niet} is morphologically motivated. Specifically, we suggest that \textit{niet} is decomposed as \(n + \text{iet}\), parallel to \textit{niets}. Following up on the discussion in the preceding section, \textit{niet} is part of the paradigm of simple \(n\)-words containing \(n\)-ie: \textit{niemand} ‘no one’, \textit{niets} ‘nothing’, and also \textit{nieverst} ‘nowhere’.

In stage II of Jespersen’s cycle in Middle Dutch, a sentential negative marker \textit{niet} developed from the negative indefinite \textit{niet} ‘nothing’, which was used adverbially, and it became a reinforcer of sentential negation ‘not at all’ (sentential negation having originally been expressed solely by the preverbal negative marker) (see, e.g., van der Auwera and Neuckermans 2004, Breitbarth and Haegeman 2008). We speculate that the development of the adverbial reinforcer into a marker of sentential negation involved a feature change: \([iq]\) associated with -\textit{ie} changed into \([uQ]\). (For discussion of grammaticalization in relation to the diachronic development of negation, see van der Auwera and Neuckermans 2004 and in particular van Gelderen 2008.)

With its two features \([\text{une}g, uQ]\), \textit{niet} enters into an NC relation with negative quantifiers such as \textit{niemand} and \textit{niets}, which also display the two features. Postulating that \textit{niet} carries the feature set \([\text{une}g, uQ]\), however, has as a consequence that the clause must also contain a matching feature set \([\text{i} \text{neg}, iQ]\). This means that the negative operator bears \([\text{i} \text{neg}, iQ]\). In other words, only if both features are instantiated on the negative operator will the uninterpretable features of \textit{niet} be able to be checked. We understand this to mean that what is labeled ‘sentential negation’ is not merely a negative feature taking scope over the clause; rather, it involves negative quantification over events.

5.2.3 Complex N-Constituents According to (26), the feature specification of complex \(n\)-constituents such as \textit{niet dikkerst} ‘not often’, \textit{niet meer} ‘no more’, and \textit{niet vele} ‘not many’ differs from that of \textit{niet}. This might appear surprising since these \(n\)-constituents contain the formative \textit{niet} and we would a priori want \textit{niet} as the marker of sentential negation and \textit{niet} in complex \(n\)-constituents such as \textit{niet vele} to be the same formative, with \([\text{une}g, uQ]\). We will indeed assume that, like the marker of sentential negation, \textit{niet} in complex \(n\)-constituents bears the features \([\text{une}g, uQ]\). In addition, however, we propose that these complex \(n\)-constituents contain a quantificational

\[29\] Some speakers, though not Liliane Haegeman, still use \textit{niet} as an alternative to \textit{niets}. 

\[29\] Some speakers, though not Liliane Haegeman, still use \textit{niet} as an alternative to \textit{niets}.
element. For instance, in *niet vele* we assume that *vele* ‘many’ has a quantificational feature that has to be interpretable because the ability to quantify is inherent to this item. Since *niet* negates *vele* in *niet vele*, we also assume that *niet* c-commands *vele* and is the specifier of a DP-internal NegP (Haegeman 2002a). On the basis of this decomposition, the *[uQ]* feature on *niet* can be checked inside the *n*-constituent as shown in the simplified structure in (30). We assume, following Haegeman (2002a), that *niet* moves from Neg to D.\(^{30}\)

(30) a. 

\[
\text{DP} \quad \begin{array}{c}
\text{D} \\
\text{NegP} \\
\text{niet} \\
\text{Neg} \\
\text{QP} \\
\text{vele} \\
\text{NP}
\end{array}
\]

b. *niet* \quad *vele* \quad \Rightarrow \quad \text{Agree}

\[
\begin{array}{c}
\text{niet} \\
\text{QP} \\
\text{QP}
\end{array}
\]

c. *niet* \quad *vele* \quad \Rightarrow \quad \text{Agree}

\[
\begin{array}{c}
\text{niet} \\
\text{QP} \\
\text{QP}
\end{array}
\]

We assume that *[iQ]* is too deeply embedded to take part in further Agree operations at the clausal stage. That is, at the next derivational step, only the feature *[uNEG]* is visible. The precise implementation of this idea requires that we postulate that DPs are phases and that D is the relevant phase head (Svenonius 2004:267, Chomsky 2007:26). We assume that QPs in WF are merged below the D head, and, following Haegeman (2002a), that NegP is merged at the top of the DP. Chomsky’s (2001) Phase Impenetrability Condition (PIC) allows for Agree across a phase boundary until the next phase is merged. This means that when the verbal phase head is merged

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\(^{30}\) In our proposal, the *[iQ]* feature on *vele* is not instantiated on *niet*, with which an Agree relation is established. This is not compatible with Pesetsky and Torrego’s (2007) proposal, according to which the output of Agree is a single feature shared by two locations. As mentioned, we do not adopt feature sharing here. Instead, we propose that the interpretable feature remains on the element where it is interpreted, as is standardly assumed.

Observe that the issue is different for cases where two uninterpretable features Agree (see section 4.1). For such cases, we propose that the feature survives on the topmost element. This is required to ensure that the uninterpretable feature is not spelled out in a lower phase if the lowest *n*-word is in a phase other than the topmost one.

As a reviewer points out, we therefore have to adopt two different algorithms for the two Agree relations. This is perhaps unfortunate. We intend to look into this in future work.
in the clause, a probe in the higher phase is unable to Agree with *vele*, which is not in the accessible domain of the lower phase.^{31}

We assume that a similar derivation can extend to the complex negative adverbials *niet dikkerst* ‘not often’, *niet meer* ‘no more’, and so on.^{32} This assumption has important consequences for the internal makeup of such constituents, but for reasons of space we do not discuss this issue further here.

5.2.4 Geen-NPs

Like the *n*-constituents discussed in the preceding section, *geen*-NPs are both quantificational and negative. Once again, though, unlike simple negative quantifiers such as *niemand* ‘no one’, they do not enter into NC with *niet*. We assume, as was the case for *niet vele*, that *geen*-NPs differ from simple negative quantifiers in that their quantificational feature is not instantiated on the head of the phrase. Haegeman and Zanuttini (1996:144) present some evidence in favor of this. First, in the singular the *geen*-NP has two variants, as shown in (31). In (31b), which is the emphatic variant of (31a), the negative element *gen* is distinguished morphologically from the quantificational element *eenen* (see also Kranendonk 2008).

(31) a. geenen boek
   no book
 b. gen- eenen boek
   no one book

The singular indefinite article *eenen* corresponds to a zero quantifier in the plural. (32) illustrates the decompositions.^{33}

(32) |                | Singular  | Plural       |
    |                | eenen boek | 0 boeken    |
    | **Affirmative** |            |             |
    | **Negative**   | gen- eenen boek | geen 0 boeken |

^{31} Bošković (2007) has argued that Agree should not be constrained by the PIC. However, Richards (2008) shows that when reanalyzed, the data Bošković discusses can in fact be analyzed in accordance with the PIC.

^{32} Consider also (i), in which the predicate *niet ziek* ‘not sick’ enters into NC with *niet meer* ‘no more’ but not with *niet* ‘not’.

(i) da Vale `re niet ziek niet *(meer) is
   that Vale`re not sick no *(more) is
   ‘that Vale`re isn’t sick any more’

This suggests that *niet ziek* be treated like the complex *n*-constituents composed with *niet*; but at first sight it cannot be straightforwardly analyzed in terms of our system. *Ziek* by itself does not seem to be quantificational. We therefore suggest that there is a silent quantificational element, DEGREE or QUANT, between *niet* and *ziek* (see Kayne’s (2005) approach to silent elements, and see Corver 1997a,b on the internal syntax of adjectival phrases and the role of degree and quantification) and that this element bears [*iQ*]. As a result of Agree, the [*uQ*] feature on *niet* will duly be checked and only the [uNEG] feature will be visible for further Agree operations. The silent DEGREE could be said to introduce the default standard by which “sickness” is measured.

^{33} Our analysis differs from that of Kranendonk (2008), who assumes that *geen* is a quantificational element. An alternative would be to assume that *geen*-NPs are associated with the features [uNEG] and [*iQ*]. *Geen* spells out [uNEG]; [*iQ*] is located on the (possibly null) article, which we assume to be lower than DP (say, NumP).
Second, WF has DP-internal NC (33), as seen above. In (33), the quantificational force of the phrase is expressed by the quantifier *niet vele*, and *geen* simply acts as a negative element entering into NC with the negative component of the negated quantifier *niet vele*.

(33) niet vele geen boeken
not many no books
‘not many books’

We propose to align *geen* with *niet*, so that *geen* has both a \([u_{NEG}]\) and a \([u_Q]\) feature. The \([u_Q]\) feature on *geen* would be valued DP-internally under Agree with \([i_Q]\) on *eenen* or on a nonovert article.

(34) a. geen eenen boek
   no one book
   \([u_{NEG}, u_Q]\) \([i_Q]\)

b. geen \(\emptyset\) boeken
   no books
   \([u_{NEG}]\) \([i_Q]\)

5.3 Maximization and Intervention

In terms of the feature sets proposed in (26), the restrictions on NC in (27) suggest that NC is subject to a maximization condition (see Chomsky 2001) in that *nie*, with its \([u_{NEG}]\) and \([u_Q]\) features, can enter into an NC relation only with simple \(n\)-constituents also instantiating both an accessible \([NEG]\) feature and an accessible \([Q]\) feature. This section shows that this maximization requirement can be made to follow from intervention. Intervention occurs in a case where \(\alpha\) and \(\beta\) share a feature \(F\) but in which there is a \(\gamma\) such that \(\alpha\) c-commands \(\gamma\) and \(\gamma\) c-commands \(\beta\) and \(\gamma\) also has the feature \(F\) (see (22)). In this case, \(\gamma\) will be an intervener and block the Agree relation between \(\alpha\) and \(\beta\).

Consider (35), where the \(n\)-constituents will enter into NC. Our definition of Agree will allow both uninterpretable features on *niet* to be checked by the features on *niemand*; after Agree, \([u_{NEG}]\) survives only on *niemand*. In turn, the surviving \([u_{NEG}]\) will Agree with the \([i_{NEG}]\) of sentential negation. (35) is a case in which the feature sets of *niemand* and *niet*, the agreeing items, are identical.

(35) \(\alpha\) \(\gamma\) \(\beta\)
OP niemand niet
\([i_{NEG}, i_Q]\) \([u_{NEG}, u_Q]\) \([u_{NEG}, u_Q]\) \(\Rightarrow\) Agree \([u_{NEG}, u_Q]\)
\([i_{NEG}, i_Q]\) \([u_{NEG}, i_Q]\) \(\Rightarrow\) Agree \([u_{NEG}]\)
\([i_{NEG}, i_Q]\) \([i_Q]\)

In (36), the feature sets of \(\gamma\) and \(\beta\) are not identical, and NC is not available.

(36) \(\alpha\) \(\gamma\) \(\beta\)
OP niet vele niet
\([i_{NEG}, i_Q]\) \([u_{NEG}]\) \([u_{NEG}, u_Q]\)
The absence of NC in (36) can be derived as a result of intervention (Rizzi 1990). Agree can apply to γ (niet vele) and β (niet), resulting in a configuration that will only delete $[u_{\text{NEG}}]$ on β (niet), stranding $[u_{\text{Q}}]$ there. $[u_{\text{NEG}}]$ survives on γ (niet vele), the c-commanding n-constituent. We use overstriking here to show the effect of Agree.

(37) a. \( γ \) \( β \)
\( \text{niet vele} \) \( \text{niet} \)
\( [u_{\text{NEG}}] \) \( [u_{\text{NEG}}, u_{\text{Q}}] \) \( \Rightarrow \) Agree $[u_{\text{NEG}}]$
\( \text{Feature checking} \)

The next step of the derivation involves the merger of sentential negation.

(37) b. \( α \) \( γ \) \( β \)
\( \text{OP} \) \( \text{niet vele} \) \( \text{niet} \) \( \Rightarrow \) Agree $[u_{\text{NEG}}]$
\( [i_{\text{NEG}}, i_{\text{Q}}] \) \( [u_{\text{NEG}}] \) \( [u_{\text{Q}}] \) \( \Rightarrow \) *Agree $[u_{\text{Q}}]$
\( \text{Feature checking} \)

In (37b), $[u_{\text{NEG}}]$ on γ (niet vele) Agrees with $[i_{\text{NEG}}]$ on α (OP). However, $[u_{\text{Q}}]$ on β (niet) cannot be valued by $[i_{\text{Q}}]$ on α (OP) because $[u_{\text{NEG}}]$ on the c-commanding γ (niet vele) intervenes. We are assuming that $[\text{NEG}]$ and $[\text{Q}]$ belong to the same feature class (on feature classes, see Starke 2001, Rizzi 2004). (37b) instantiates a classic case of intervention: OP (α) c-commands niet vele (γ) and niet vele c-commands niet (β); niet vele is a closer goal sharing a feature of the relevant class with niet.

Thus, we have shown that the locality condition on Agree derives the maximization requirement on items entering into NC. We take this to be a welcome result because it means that we do not have to stipulate maximization.

5.4 Illustrations and Extensions

5.4.1 Some Examples The application of binary Agree to derive NC in (38) shows that there is no adjacency requirement on NC: in this example, niet vele and niet meer enter into NC while being separated by the PP tegen Valère. We assume that the features of the latter constituent belong to a different feature class in the sense of Starke 2001 and Rizzi 2004 and will not give rise to intervention.

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34 As an anonymous reviewer points out, the structure in (36) is very reminiscent of a pattern that according to Starke (2001) and Rizzi (2004) creates no intervention effects. We cannot discuss this issue comprehensively here, nor how to reconcile the Starke-Rizzi approach with the way we are analyzing intervention. We intend to look into this in future work. See also Boeckx and Jeong 2004 on intervention.

35 An anonymous reviewer asks whether our proposal predicts a problem for φ-agreement between T and a wh-subject since the wh-subject has a [w[h] feature that T does not have. We assume that no problems will arise because φ-features and [w[h] features belong to different classes in the sense of Rizzi 2004.
(38) a. da Jan niet vele tegen Valère niet meer klaapt
    that Jan not much to Valère not more talks
    ‘that Jan doesn’t talk to Valère much any more’
b. da Jan \([i\text{NEG}, iQ]\) niet vele \([u\text{NEG}]\) tegen Valère niet meer \([u\text{NEG}]\) klaapt
    \[
    \begin{array}{c}
    \text{Agree} \\
    \text{Agree}
    \end{array}
    \]

As shown above and illustrated in (39a), NC also applies DP-internally in WF. The derivation of the NC reading of (39a) is given in (39b–c).

(39) a. niet vele geen boeken
    not many no books
    ‘not many books’
b. niet \([u\text{NEG}, iQ]\) vele \([iQ]\) \(\Rightarrow\) Agree \([uQ]\) and \([iQ]\)
c. niet vele \([u\text{NEG}, iQ]\)
d. niet vele geen \([u\text{NEG}, iQ]\) \([u\text{NEG}, iQ]\) \(\Rightarrow\) Agree \([u\text{NEG}]\)
    niet vele geen \([u\text{NEG}, iQ]\) \([iQ]\)

Niet vele geen boeken retains \([u\text{NEG}, iQ]\) and can then enter into further NC relations in the clause; however, like geen boeken, it cannot enter into NC with niet. Recall that when the vP is merged in the clause, the complement of D is spelled out. This makes the \([iQ]\) features on vele and geen unavailable. Thus, the \([uQ]\) feature on the clausal niet will remain unchecked and the derivation will crash.

(40) Ier en leest er nooit niemand niet vele geen boeken niet *(meer).
    here en reads there never no one not many no books not *(more)
    ‘No one ever reads many books around here.’

Notice that this also explains why vele geen boeken (see (18)) is disallowed. In this case, geen will have an unchecked \([u\text{NEG}]\) feature, and since there is no other \(n\)-word within the DP, when the clausal vP is merged, this unchecked feature will be spelled out (because it is located in D’s complement), thus causing a crash.

5.4.2 Further Intervention Effects  Our approach correctly predicts that nonnegative quantifiers may also interfere with the various Agree relations between the \(n\)-constituents undergoing NC (see also Haegeman and Zanuttini 1996).36 While a definite DP does not give rise to intervention in (41a), the quantifier alles disrupts the NC relation between niemand and niet in (41b).

36 Thanks to an anonymous reviewer for raising this point.
(41) a. dat er niemand die boeken niet kent
    that there no one those books not knows
    ‘that no one knows those books’

b. dat er niemand alles niet kent
    that there no one everything not know

c. OP niemand alles niet
    [iNEG, iQ] [uNEG, iQ] [iQ] [uNEG, uQ] ⇒ Agree [uQ]
    *Agree [uNEG]

This follows straightforwardly. The quantifier alles ‘all’ bears [iQ]. This feature will be able to check [uQ] of niet. The stranded [uNEG] feature on niet will then no longer be available for Agree (because of intervention), and thus the NC reading cannot be derived.37

6 Conclusion

In this article, we have shown how a detailed analysis of negative concord in West Flemish questions the validity of Multiple Agree as a mechanism for deriving negative concord. At a more general level, the data also challenge the validity of MA as an operation of narrow syntax.

We have argued that the simpler and less powerful Agree mechanism, which is binary and strictly local, is superior to MA—an across-the-board phenomenon—for deriving the data in question. Agree in its original format as a binary operation offers a way of dealing with the various intervention effects found in WF NC.

Our proposal has conceptual and empirical consequences that we hope to return to in future work. In particular, on the conceptual side, we would like to examine whether other cases that have been accounted for in terms of MA can be reanalyzed in terms of our proposal. On the empirical side, it would be interesting to find out whether the crosslinguistic variations among NC patterns described by Giannakidou (2006) and the diachronic development and grammaticalization of n-constituents (‘Jespersen’s cycle’) can be captured in relation to the feature content of n-constituents.

References


37 Zeijlstra (2004:184–187) discusses the relation between sentential negation and universal quantifiers. We speculate that many of the issues he describes may be subject to an analysis in terms of the intervention effects we observe for WF. For reasons of space, we do not develop this point here.


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