Negative Concord

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1. Introduction¹

It is not uncommon in natural languages that negation seems to behave in an illogical manner. For instance, there are a great many cases where a double or multiple negative does not express an affirmative but a negative. This phenomenon, which we will refer to as **negative concord**, may take various forms. Following Jespersen (1917, 1924), we distinguish three types: **double attraction** (also known as 'cumulative negation' or 'negative concord proper'), where negation seems to be expressed in every possible element, including sentence negation, negative noun phrases and negative conjunctions (examples in (1)), **resumptive negation**, where the negative force of a negated sentence is enhanced by a negative tag (2), and **paratactic negation**, where a negative word or special complementizer is found in a clause dependent on a verb or construction with negative import (3).

- (1) a It ain't no cat can't get into no coop (BEV: Labov 1972)
 - b There was *hardly no* money, *nor* hardly *no* hope (Cockney: Seuren 1991)
 - c Je *n*'ai vu *personne* (French) I not-have seen nobody 'I haven't seen anybody'
- (2) a I shall *never* do it, *not* on any condition (example from Jespersen 1917)
 - b He cannot sleep, neither at night nor in the daytime (id.)
 - c He wasn't changed at all hardly (Kipling, cited by Jespersen)
- (3) a Timeo *ne* veniat (Latin) Fear-1SG that-not come-3SG(SUBJ) 'I fear that he may come'
 - b Then fearing *lest* we should have fallen upon rocks, they cast four anchors out of the stern (Acts 27:29)

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c Meer goets dan Artur *nie* gewan (Middle Dutch: Stoett 1923) More goods than Arthur never won

Although we wouldn't like to go so far as to claim that all concordant elements in negative concord structures are negative polarity items, there is, in our impression, so much parallelism between negative concord and negative polarity that the same mechanism must be at work in both of these phenomena.² Van der Wouden (1992) gives a more elaborate account of this parallelism in the case of paratactic negation. In the present paper we will concentrate on double attraction, but some of our conclusions may carry over to other subtypes.

2. Two types of double attraction

Double attraction may take either of two forms: 1. the negative feature is 'spread' or distributed over any number of indefinite expressions within its scope; 2. a distinguished negative element shows up in the sentence whenever it contains a negative expression. After den Besten (1986), we may call these two types **negative spread** and **negative doubling**, respectively. Languages may show either of them, none, or both. Patterns typical of negative spread and negative doubling are exemplified in (4) and (5) below, combinations of are given in (6).

(4)	а	Nobody said nothing to nobody (NS English: Ladusaw 1991)
	b	Niemand vertelt mij nooit niks (NS Dutch)
		Nobody tells me never nothing
		'Nobody ever tells me anything'
	c	Valère ging nooit nieverst noatoe (West Flemish: Haegeman &
		Zanuttini 1990)
		V. went never nowhere to
		'V. never went anywhere'
(5)	а	Je n'ai vu personne (= 1c)
	b	Valère en-klaapt tegen geen mens (West Flemish: Haegeman &
		Zanuttini 1990)
		V. not-talks to no person
		'V doesn't talk to anybody'
	c	Hulle het nooit gesing nie (Afrikaans: den Besten 1986)
		They have never sung not
		'They have never sung'
(6)	а	Personne n'a rien dit (French)
		Nobody not-has nothing said
		'Nobody said anything'

² Several authors have given voice to this idea, among them Labov (1972). For arguments against this position, cf. Zanuttini (1991) and the references given there.

b Valère *en*-ging *nooit nieverst* noatoe (West Flemish: Haegeman & Zanuttini 1990)
V. not-went never nowhere to 'V. never went anywhere'

In French, the doubling element is *ne* or (before vowels) n (5a), in West Flemish it is en^3 (5b), and in Afrikaans it is *nie* or (in spoken language) *ie* (5c). Note that the position of the doubling element may vary, even between closely related languages: in West Flemish (as in French) it cliticizes onto the finite verb, whereas it is sentence-final in Afrikaans. Discussion of this variation is beyond the scope of the present article.

3. The contexts of negative polarity and double attraction

The term 'negative polarity' is misleading: in many languages where the phenomenon exists, it may be triggered by elements and constructions that are not (overtly) negative, but do possess some sort of 'negative import'. For instance, we find negative polarity items in certain comparative constructions, in the first argument of universal quantifiers, and in the scope of adverbs such as *hardly*.

- (7) a Susan is lovelier than *anyone* expected her to be
 - b Anyone who budged an inch was shot
 - c There was hardly *any* money, and hardly *any* hope

In the seminal work of Ladusaw (1979), not negation but the semantic property of **downward monotonicity** was demonstrated to be the crucial factor in triggering negative polarity in English (although normal negation possesses this property as well). Zwarts (1981) and Hoeksema (1983) have shown that some negative polarity items (NPIs) in Dutch only occur with a subset of the downward monotonic operators, viz. the anti-additive ones. Yet a third class of NPIs combines with a proper subset of the anti-additive operators, namely the antimorphic operators. Comparable generalizations hold for English (van der Wouden 1992). The relevant definitions are given below:

Definition A functor f is downward monotonic iff $f(X \text{ or } Y) \rightarrow f(X)$ and f(Y)

Definition A downward monotonic functor f is anti-additive iff $f(X \text{ or } Y) \leftrightarrow f(X)$ and f(Y)

Definition An anti-additive functor f is antimorphic iff $f(X \text{ and } Y) \leftrightarrow f(X)$ or f(Y)

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This en occurred in many, if not all, earlier Dutch dialects: cf. Stoett (1923).

These functional properties are by no means restricted to one syntactic class or one language. For instance, the noun phrase *few children* and the adverb *hardly* are downward monotonic, the preposition *without* and the sentential comparative are anti-additive (Hoeksema 1983), and the Dutch adverbs *niet* 'not' and *allerminst* 'not at all' are antimorphic.

- (8) a Few children drink or smoke \rightarrow Few children drink and few children smoke
 - b There was hardly money or hope \rightarrow There was hardly money and there was hardly hope
- (9) a The king arrived without greeting any knight or baronet ↔ The king arrived without greeting any knight and the king arrived without greeting any baronet
 - b Susan is lovelier than any student or teacher expected her to be \leftrightarrow Susan is lovelier than any student expected her to be and Susan is lovelier than any teacher expected her to be
- (10) a Begijntjes dansen of zingen niet ↔ Begijntjes dansen niet en begijntjes zingen niet
 Beguines dance or sing not
 'Beguines do not sing or dance'
 b Dit probleem is allerminst begrepen of opgelost ↔ Dit probleem is
 - b Dit probleem is allerminst begrepen of opgelost ↔ Dit probleem is allerminst begrepen en dit probleem is allerminst opgelost
 This problem is not-at-all understood or solved
 'This problem is anything but understood or solved'

Likewise, the term 'negative concord' is a misnomer: there is a strong parallel between negative polarity and negative concord with respect to the contexts in which the two phenomena occur. For instance, we find cases of double attraction with the weakest downward monotonic constructions, such as Afrikaans *nie alle X* 'not all X' that is downward monotonic but not anti-additive. Likewise, they may be found in contexts that are downward monotonic but do not contain any negation, such as the adverb *hardly* and the comparative.⁴

 a Nie alle bestuurders sal dit in die stadsverkeer waag nie (Afrikaans: Ponelis 1985)
 Not all drivers will this in the city trafic dare not

⁴ The parallelism goes even further: some negative polarity items may occur in the complement of a superlative, an environment that is provably not downward monotonic (Hoeksema 1986); double attraction is found in this context as well:

[[]i] Dit is de grootste snoek die hier *ooit* gevangen is (Dutch) This is the biggest pike that here ever caught is

[[]ii] Dat hi die beste ridder was, die *noit* quam in sconinx hof (Middle Dutch: Stoett 1925) That he the best knight was that never came in the-king's court

- b There was *hardly no* money *nor* hardly *no* bread (Cockney: Seuren 1991)
- c Maria è piú intelligente di quanto *non* sia Carlo (Italian: Napoli & Nespor 1976)

Maria is more intelligent than Carlo is (not)

On the other hand, we may re-interpret some Serbo-Croatian facts as cases of double attraction triggered by antimorphic operators only. The phenomenon of so-called ni-expressions, whose occurrence is limited to clauses containing the negative particle ne according to Progovac (1988, 24), may just as well be regarded as negative spread in an antimorphic environment.

- a Milan *ne* vidi *ništa* Milan not sees nothing
 'Milan cannot see anything'
 *Milan vidi *ništa*
- (13) a *Niko nikada ne-*će kročiti na Sunce No-one never not-will step on Sun 'No one will ever set foot on the Sun'
 - b *Niko nikada će kročiti na Sunce

As the contrasting examples in (12) and (13) show, the occurrence of the *ni*-words *ništa*, *niko* and *nikida* crucially depends on the presence of the antimorphic expression *ne*.

4. Context-sensitive semantics

Consider a sentence with an even number of negative lexical elements in a Negative Concord language such as non-standard English.

(14) Nobody said nothing

If negation were to behave logically, this sentence would mean 'everybody said something', with the two negations cancelling each other. However, in NC English this sentence simply means 'Nobody said anything'. What can we say about the semantics of the lexical elements starting with n in this sentence, given that we want to adhere to a compositional semantics, i.e., to the assumption that the meaning of the whole is a function of the meaning of its parts and the way they are combined?

Let us assume that the assignment of semantic values may be contextsensitive, i.e. that the semantic contribution of a lexical element may be dependent on the meaning of the construction it is part of. If this is a valid move, then we have a way to implement our intuition that n-words denote an existential quantifier when they are in the scope of a negative element and a negated

existential quantifier in all other cases. In terms of the theory of quaternality, what this means is that the denotation of an n-word can vary between an existential quantifier and its so-called contradual.⁵

Can we find arguments that justify such an extension of the Fregean principle of compositionality? We think the answer should be affirmative. To begin with, it has been suggested in the literature (Keenan 1974, Partee 1984) that the polysemy of adjectives such as *red* in combinations like *red grapefruit, red army, red carpet* can (and should) be implemented by adopting a disjunctive meaning function for the adjective.⁶ This meaning function would then associate the form *red* with various semantic values, depending on the noun being modified. Bartsch (1986) makes a comparable proposal for evaluative adjectives such as *good*.

Secondly, so-called negative polarity idioms, such as *lift a finger*, *hold a candle* and *give a damn* get their idiomatic reading only in certain contexts. In section 3, we characterized these contexts in semantic terms as downward monotonic. Note, however, that most of these negative polarity idioms, e.g. *lift a finger* and *hold a candle*, also occur in grammatical sentences which do not provide a downward monotonic context. In a sense it is therefore unjustified to call the strings under discussion negative polarity items, if we understand this term in the usual way, i.e. as denoting elements that occur only in negation-like environments. Therefore, it might be better to re-analyze this behavior as another case of context-sensitive meaning attribution. The expression *lift a finger* would then be polysemous in much the same way that the adjective *red* is: it would mean 'do nothing' (the 'idiomatic' meaning) when construed in the scope of a downward monotonic operator, and 'move a certain body part in upward direction' (the 'literal' meaning) elsewhere.⁷ Note that this instance of context-sensitive

⁵ The theory of quaternality and the associated notions of duality, contraduality, and complementation are discussed in Zwarts (1991).

⁶ Note that the combinations are more or less fixed, i.e. collocational, which guarantees (one would hope) that the number of different meanings attributed to *red* will be finite.

⁷ It should be noted that negative polarity items like the ones discussed, though infinite in number (Schmerling 1971), do not necessarily correspond to an infinite number of disjunctive meaning functions. Without exception, the idiomatic reading of these elements involves some 'basic' verb such as 'give', 'do', 'move' etcetera, in combination with a negated existential quantifier. That is to say, a productive semantic (meta-)rule (perhaps based on pragmatic principles: Fauconnier 1975) seems to be at work that maps verb phrases containing an activity verb and an argument with the (denotational or implied) meaning 'a small bit' to the combination meaning of the hyperonym of the verb + existential quantifier, in the contexts discussed.

Note that the context-sensitive meanings of NC elements and of NP idioms live in the same world, viz., of Boolean or quantificational operators. The change in verbal meaning invariantly remains in the world of sets and supersets (that is, the operation is monotonic), and the same holds for the nominal meaning (as the existential quantifier is the top element in the hierarchy of indefinite noun phrases).

It is therefore intuitively plausible that children will be able to learn such a rule: it maps more complex verbal meanings (a specialized verb such as 'lift') onto simpler verbal meanings ('move') and

assignment of semantic values is sensitive to the same type of contextual properties as the negative concord cases, viz. the family of downward-monotonic functions.

Therefore, given that the concept of context-sensitive semantics is not new, and that a comparable type of context-sensitive semantics turns up elsewhere, we suggest the following

Hypothesis (language-universal): NC involves context-sensitive assignment of semantic values to a closed class of lexical items. When these items occur in the scope of an appropriate operator, they denote an existential quantifier (or a subtype thereof); when not in this kind of environment, their semantic value is either the contradual, or it is undefined.

Remark: as we haven't discussed a scope theory that is relevant for NC, and as we have nothing to offer in this respect, we assume, for the time being, that 'scope' is to be understood as relevant on surface structure. Under this assumption, an element is in the scope of an operator if the element follows (for a left-to-right language) or precedes (for right-to-left) the operator linearly and no operator or boundary blocks the interaction of operator and element.⁸

5. Parametrizing Negative Concord

With the help of the analytic apparatus developed so far, we are able to describe the difference between negative spread and negative doubling in terms of the elements that have a context-sensitive semantics. In cases of negative spread, exemplified in (4) and repeated as (15) below, all negative quantifiers are semantically context-sensitive; in the case of negative doubling ((5), repeated as (16)), only one designated *not*-like element is polysemous in this way.⁹

[i] Je crains qu'il ne vienne I fear that-he not come-SUBJ 'I fear that he will come'

complex nominal meanings ('finger') onto the simplest (Boolean) type of nominal meanings.

Incidentally, in the other type of context sensitive meaning change Fauconnier (1975) discusses, the meaning change is monotonous and Boolean as well. In these cases, where noun phrases containing a superlative denote universal quantifiers (*John can solve the most difficult problems*, 'John can solve every problem'), a specific noun phrase meaning is mapped onto the most general noun phrase meaning, the universal quantifier.

⁸ Although nothing hinges on this, we think that in a sentence such as (8a), the noun phrase *few children* should be taken as the operator and not just the 'negative' word *few*. Cf. Zwarts (1991) for discussion.

⁹ Note that the lexical element that occurs in negative doubling is often the very same element that occurs in paratactic negation, e.g. French *ne* below and Italian *non* in (11c):

(15)	а	Nobody said nothing to nobody (NS English)
	b	Niemand vertelt mij nooit niks (NS Dutch)
	c	Valère ging nooit nieverst noatoe (West Flemish)
$(1 \circ)$		

- (16) a Je *n*'ai vu *personne* (French)
 - b Valère en-klaapt tegen geen mens (West Flemish)
 - c Hulle het nooit gesing nie (Afrikaans)

Note that the examples of negative spread do not give any indication as to what is the negative element and what are the concordant elements. That is to say, it is not immediately clear which elements are in the scope of which elements. On the other hand we can conclude from the negative doubling sentences in (16) that the preverbal position is in the scope of the postverbal direct object both in French and in West Flemish. But in Afrikaans the scopal direction must be from left to right, given that *nie* is always sentence-final.

The operator that triggers context-sensitive interpretations defines another dimension of variation as well. Earlier we saw that in some dialects of NC-English downward monotonic operators trigger negative spread, whereas in other variants at least an anti-additive expression is needed.¹⁰ One may even hypothe-

[i] Mario non ha vista quasi nessuno Mario not has seen almost nobody 'Mario has seen almost nobody'
[ii] Je n'ai presque rien vu

I not-have almost nothing seen 'I have seen almost nothing'

However, other downward monotonic expressions do not show the effect:

- [iii] J'ai vu peu d'enfants
- [iv] *Je n'ai vu peu d'enfants
 I not-have seen few of-children
 'I have seen few children'

We have no explanation for this difference, but comparable lexical variation occurs in Afrikaans, where all downward monotonic operators trigger the negative polarity item *ooit* 'ever', but only a subclass of the downward monotonic operators trigger doubling (Ponelis 1985):

- [v] Sy is nêrens ooit tevrede nie
 She is nowhere ever happy not
 'Nowhere is she ever happy'
- [vi] Hy het hard gewerk, *sonder* om haar *ooit* tevrede te stel (**nie*) He has hard worked, without COMP her ever happy to make 'He has worked hard, without ever making her happy'

¹⁰ Matters may even be more complicated than we suggest here. On the basis of examples such as the following, we are inclined to think that negative doubling in Italian and French may be triggered by downward monotonic expressions in postverbal position:

size a third variant, where only anti-morphic operators show negative spread.¹¹ Furthermore, NC may be optional or obligatory, whereas the notion 'in the scope of' defines yet another dimension of variation. Finally, negative spread and negative doubling may or may not occur together in the same language. For instance, as may be concluded from the sentences (15c) and (16b), West Flemish has both. The Afrikaans counterpart of (15c), however, is ungrammatical under a NC-reading, which shows that this language only has doubling.

There exist considerable but subtle differences between languages with respect to their negative concord behavior. Rather intricate patterns are found in the Romance languages. Ladusaw (1991) tries to account for this variation languages by means of parametrized well-formedness conditions on negative chains that are supposed to be met at LF. As we have seen, however, it is not just negation that triggers NC, which means that the notion 'negative chain' cannot be taken literally. Moreover, all other things being equal, we prefer explanations that refer only to surface structure to theories that need additional levels of representation. Finally, if we don't really need notions such as 'negative chain' and 'LF' for the treatment of the behavior of negative and positive polarity items, we'd rather do without such constructs for the explanation of negative concord as well, as both phenomena show a lot of parallelism (cf. van der Wouden 1992).

Our account meets these requirements and also allows for the description and explanation of many aspects of the variation found. Take for example the following Catalan data (from Ladusaw 1991).

- (17) a En Pere no ha fet res
 - 'Peter has done nothing'
 - b *En Pere ha fet res
 - c No m'ha telefonat ningú 'nobody has called me'
 - d *M'ha telefonat ningú
 - e Ningú (no) ha vist en Joan 'nobody has seen John'

[i'] Nobody said anything to anybody nie

¹¹ Suppose there exists a dialect of English, let's call it M, that is an instance of this variant. In M, one would expect a minimal pair such as the following, as *nobody* is anti-additive and sentence-negation n't is antimorphic.

[[]i] Nobody said anything to anybody

[[]ii] John didn't say nothing to nobody

One might object that sentence [ii] may as well be analyzed as a combination of spread and doubling. Assume however a variant of this dialect, M', that is identical to M, apart from the existence of a designated doubling element *nie* that obligatory occurs in sentence-final position, as is the case with Afrikaans *nie*. Then one gets

[[]ii'] John didn't say nothing to nobody nie

We see that all negated sentences contain some negative material in pre-verbal position. If we assume that 'scope' is strictly from right to left, and that Catalan has both spread and doubling, this follows immediately. In (17a), the negative (downward monotonic) direct object *res* triggers the doubling element *no* in preverbal position (the c-example shows that certain pronominal clitics are closer to the verb). From (17b) we conclude that doubling is obligatory in such cases. Examples (17c) and (17d) illustrate that the same holds for postverbal subjects. From the optionality of *no* in the case of preverbal negative subjects (17e), we must conclude that 1. both *ningú* and *no* can express negation all by themselves and 2. negative subjects are in the scope of sentential negation¹², and may thus get a context-sensitive meaning.¹³ This element *no* can express negation all by itself, whenever it is not in the scope of a downward entailing operator; then, it has scope over the subject, as is the case in (17e), where it yields an existential (non-negative) reading for *ningú*.

Now compare the Catalan data just given with the following Italian sentences (again taken from Ladusaw 1991):

- (18) a Mario non ha visto nessuno
 - 'Mario has seen no one'
 - b Mario non ha parlato di niente con nessuno

- [i] Aucun agent de blanchiment n'intervient dans sa fabrication Any agent of bleeching not intervenes in his fabrication 'No bleeching agent intervenes in its fabrication'
- [ii] *Aucun agent de blanchiment intervient dans sa fabrication

¹³ The following sentences [i] and [ii], also given by Ladusaw (1991), show that the doubling element *no* sometimes is optional in the case of postverbal negative elements. This, however, does not refute our claims, provided we assume that *mai* may occupy the same clitic position as *no*. Support for this approach comes from the fact that *no* again is obligatory if *mai* is postverbal, as in [iii].

- [i] En Pere mai (no) fa res 'Peter never does anything'
- [ii] En Pere mai (no) renta els plats 'Peter never washes the dishes'
- [iii] En Pere *(no) renta mai els plats 'Peter never washes the dishes'

For a sentence such as the following (from Zanuttini 1991, p. 108) we must assume that $ning \dot{u}$ can occupy this clitic position as well.

[iv] Ningú (no) ha dit rest
 Nobody (not) has said nothing
 'Nobody has said anything'

¹² As an extra argument that the subject may be in the scope of negation, enclitic to the verb, cf. the following French sentence, where the negative polarity item *aucun* in subject position is licensed by preverbal ne:

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'Mario hasn't spoken with anyone about anything'

Nessuno ha parlato con nessuno с

'No one has spoken with anyone'

- d *Mario ha visto nessuno
- Nessuno ha visto Mario е
- 'Nobody has seen Mario' f
- *Nessuno non ha visto Mario
- *E arrivato nessuno g is arrived nobody
- Nessuno è arrivato h nobody is arrived 'nobody arrived'
- i Con nessuno ha parlato nessuno with nobody has spoken nobody 'nobody has spoken to nobody'
- Non ha telefonato nessuno j 'nobody called'

On the basis of (18b) we assume that negative spread occurs freely in Italian. Doubling occurs again from right to left, i.e., postverbal downward monotonic¹⁴ elements trigger a preverbal non, no matter whether they are objects (18a) or subjects (18j). The first position in the sentence, be it occupied by a subject (18f), a direct object (18h), or a prepositional phrase (18i), does not take scope over the verb, nor the other way around. Therefore, doubling is prohibited if some downward monotonic operator occurs sentence-initial, as this would yield two full-fledged negations in one clause.¹⁵

As an aside, we note that focus might play a role here. Probably, the preverbal position in Italian bears focus, as it does in other languages. Focus is relevant in NC anyway: as Labov (1972) points out, double negation readings can be forced in NC-English by stressing (and thus focussing) the second negative element. That is to say, in NC-English, negative elements may be 'lifted' outside

¹⁴ Cf. the sentences involving postverbal quasi nessuno discussed in footnote 10.

¹⁵ An alternative approach to the subject-object asymmetries, or better, the pre-verbal vs. postverbal asymmetry in Italian would be to postulate an optional non-deletion rule and a surface filter

[[]i] *nessuno non

parallel to the suggestion made in Robbers (1992) to account for the ungrammaticality of nie niesequences in Afrikaans. This solution is not too enlightening, however.

the scope of other negative elements by focussing. If such a thing can happen in NC-English, it can happen in Italian as well. 16

An extra argument for the approach chosen may be found in Keenan (1989), who argues that direct objects function semantically as functors that take a transitive verb as their argument and yield an intransitive verb. From this, it follows immediately that *nessuno* in object position triggers *non* to its left. Suppose now that a postverbal subject acts in the same way, whereas a pre-verbal subject does not (in Italian): pre-verbal subjects, and probably pre-verbal elements in general, will then be arguments of the verb.

Space limitations forbid us to fully analyze the other types of negative concord Ladusaw (1991) discusses. From the above, however, it will be clear that our approach offers enough parameters to tackle the variation one finds across languages.

6. Negative concord and negative polarity

It is now reasonable to ask whether there is any difference left between negative polarity and negative concord, given that they are sensitive to the same type of contextual properties, enter into the same type of long-distance relations between downward monotonic element and sensitive element, etcetera. It has even been claimed that all but one of the terms in a negative concord structure should be analyzed as negative polarity items (e.g. Rizzi 1982, according to Ladusaw 1991). We have nothing new to say about this: for the time being, we follow Ladusaw's (1991) suggestion "to reserve the use of this term for expressions like *any* and *ever* which are never able on their own to express negation but which must be interpreted as indefinites licensed by and bound within the scope of other operators."¹⁷

¹⁶ Assuming a theory of focus, the following West Flemish contrast might be explained as well (examples after Haegeman & Zanuttini (1991); the asterisks mean 'ungrammatical in NC-reading', as logical double negation readings are available):

da Valère niemand niks nie gegeven (en-)heet that V nobody nothing not given (not) has 'that V. hasn't given anything to anybody'

[[]ii] *da Valère niemand nie niks gegeven (en-)heet

[[]iii] *da Valère nie niemand niks gegeven (en-)heet

¹⁷ Note, incidentally, that *any* may be analyzed as a lexical element with a context-sensitive lexical meaning as well: next to negative polarity *any*, there exists a so-called free-choice *any* that occurs outside monotone decreasing contexts:

[[]i] Don't take any of these apples (NP any)

[[]ii] You may take any of these apples (free-choice any)

Cf. also the earlier discussion of negative polarity idioms.

A second point to note is the following. If negative elements in NC structures would have the same meaning as 'ordinary' *not*, we would expect them to change the downward monotonic context into an upward monotonic one, thus disallowing negative polarity items. However, the following examples are fine:

- (19) a Nobody never *lifted a finger* to help Mary (NS English)
 - b Niemand vertelt mij nooit geen *ene moer* hier (NS Dutch) Nobody tells me never no one bolt here 'Nobody here ever tells me anything''
 - c Ick ... keerme aen moeder noch aen zusters 't minste niet (17th C. Dutch: Vondel)
 I turn-me to mother nor to sisters the least not
 - 'I do not listen to my mother and sisters at all'

One likewise expects that positive polarity items (of the appropriate type) will not co-occur with NC, for the very same reason that negative polarity items do show up there: the concordant elements are not assigned Boolean complementation as their semantic value, therefore they don't reverse polarity, therefore the contexts in which these elements show up are still downward monotonic, therefore positive polarity items are not allowed there. Again, this expectation is empirically justified:

 (20) a ?Nobody never would rather be in no place like this (NS English)
 b *Niemand vertelt mij nooit sommige dingen hier (NS Dutch) Nobody tells me never certain things here

7. Concluding remarks

We have tried to outline a new approach to the long-standing problem of negative concord. On the basis of parallels with, among other things, polarity items, a context-sensitive lexical semantics was proposed for concordant elements. Although our treatment of the phenomena was necessarily sketchy, we were able to show that it can account for (at least part of) the variation found in negative concord systems across languages. As this form of context-sensitive lexical semantics is embedded in Boolean semantics, the amount of ambiguity is limited. The 'illogical' behavior of negative elements thus forms another reflection of logical patterns in language structure and language use.

References

Bartsch, R. (1986) 'Context-dependent Interpretations of Lexical Items'. In: J. Groenendijk, D. de Jongh and M. Stokhof (eds.) *Foundations of Pragmatics and Lexical Semantics*, Foris, Dordrecht, 1-26.

- den Besten, J. (1986) 'Double Negation and the Genesis of Afrikaans'. In: P. Muysken and N. Smith (eds.) Substrata versus Universals in Creole Languages, Benjamins, Amsterdam/Philadelphia, 185-230.
- Fauconnier, G. (1975) 'Pragmatic Scales and Logical Structure'. In: *Linguistic Inquiry* 6, 353-375.
- Haegeman, L. and R. Zanuttini (1990) 'Negative Concord in West Flemish'. Ms. University of Geneva.
- Hoeksema, J. (1983) 'Negative Polarity and the Comparative'. In: *Natural Language and Linguistic Theory* 1, 403-434.
- Hoeksema, J. (1986) 'Monotonie en Superlatieven'. In: C. Hoppenbrouwers, J. Houtman, I. Schuurman and F. Zwarts (eds.) *Proeven van Taalwetenschap*, TABU, Groningen, 38-49.
- Jespersen, O. (1917) 'Negation in English and Other Languages'. In: O. Jespersen (ed.) Selected Writings of Otto Jespersen, London, Allan & Unwin.
- Jespersen, O. (1924) The Philosophy of Grammar, London, Allan & Unwin.
- Keenan, E. (1974) 'The Functional Principle: Generalizing the Notion "Subjectof"'. In: *CLS* 10, 298-310.
- Keenan E. (1989) 'Semantic Case Theory'. In: R. Bartsch, J. van Benthem en P. van Emde Boas (eds.): Semantics and Contextual Expression, Dordrecht, Foris, 33-56.
- Labov, W. (1972) 'Negative Attraction and Negative Concord'. In: *Language* 48, 773-818.
- Ladusaw, W. (1979) *Polarity Sensitivity as Inherent Scope Relations*. PhD Thesis, University of Texas at Austin.
- Ladusaw, W. (1991) 'Interpreting Negative Concord Structures'. Paper read at the 1991 LSA Annual Meeting.
- Napoli D. Jo & M. Nespor (1976) 'Negatives in Comparatives'. In: *Language* 52, 811-838.
- Partee, B. (1984) 'Compositionality'. In: F. Landman and F. Veltman (eds.) *Varieties of Formal Syntax*, Foris, Dordrecht, 281-311.
- Ponelis, F. (1985) Afrikaanse Sintaksis. 2nd ed., Pretoria, J.L. van Schaik.
- Progovac, L. (1988) A Binding Approach to Polarity Sensitivity. PhD Thesis, University of Southern California.
- Robbers, K. (1992) 'Properties of Negation in Afrikaans and Italian'. In: R. Bok-Bennema and R. van Hout (eds.) *Linguistics in the Netherlands 1992*, Benjamins, Amsterdam/Philadelphia.
- Schmerling, S. (1971), 'A Note on Negative Polarity'. In *Papers in Linguistics*, 4, 200-206.
- Seuren, P. (1991) 'Grammatika als algorithme: rekenen met taal'. In: Koninklijke Nederlandse Akademie van Wetenschappen, Mededelingen van de Afdeling Letterkunde, Nieuwe Reeks 54, 2.
- Stoett, F. (1923) *Middelnederlandsche Spraakkunst. Syntaxis.* Martinus Nijhoff, 's-Gravenhage.
- van der Wouden, T. (1992) 'Polarity and "Illogical Negation"'. Ms. Groningen.

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Zanuttini, R. (1991) Syntactic Properties of Sentential negation. A Comparative Study of Romance Languages. PhD Thesis, University of Pennsylvania.

Zwarts, F. (1981) 'Negatief Polaire Uitdrukkingen 1'. In: Glot 4, 35-132.

Zwarts, F. (1991) 'Negation and Generalized Quantifiers'. In: J. van der Does and J. van Eijck (eds.) *Generalized Quantifier Theory and Applications*. Amsterdam, 443-462.