On the Interpretation of Multiple Negation in Spoken and Written Afrikaans

László Molnárfi University of Vienna oregdeu@netscape.net

Abstract

This paper investigates sentential negation in written and spoken variations of modern Afrikaans. I will provide arguments concerning two main topics. First, I will argue that negative concord (NC) in Afrikaans is not subject to the Neg-Criterion, but is an instance of feature percolation with the spell-out of one or more neg-copies within the scope of negation. Second, following Abraham (2000), I will analyse NC as a characteristic property of spoken vernaculars exploited to facilitate parsing of sentences. I will argue that spoken and written Afrikaans employ different strategies of information processing, which affect the scope interpretation of multiple negation.

Keywords: spoken Afrikaans, negative concord, parsing, feature percolation, scope interpretation

1. Introduction

Though in recent years much attention has been paid to the phenomenon of negative concord (NC) in the spoken varieties of the West Germanic languages (cf. Haegeman 1995 for West Flemish or Bayer 1990, Weiß 1998, 1999, 2000 and Abraham 2000 for Bavarian), negation in Afrikaans, apart from a few descriptively orientated studies (cf. Ponelis 1993 or Donaldson 1993), has remained a rather neglected field of research (see, however, recently Abraham 2000 and Molnárfi 2001). The aim of the present paper is to fill this empirical gap, introducing new data from both standard and substandard Afrikaans into the discussion. Our major concern here will be sentential negation in Afrikaans as exemplified in (1):

- (1) Ek het nie₁ geweet dat hy bobbejane gesien het nie₂.
 - I have not known that he baboons seen has not
 - 'I didn't know that he has seen baboons'

A distinctive feature of (1) is the establishing of a *negation bracket* (NB), consisting of two morphologically identical negative particles. The first negator (nie_1) opens the scope of negation, whereas the second one (nie_2) marks the right-periphery of the sentence, accompanying negated elements deep down into the extraposition domain. Similarly to what has been observed in Bavarian and West Flemish, the multiple occurance of negation particles does not trigger the logically expected cumulation of negation. A sentence such (1) is not interpreted as double negation, but has the semantics of a single sentential negation. This reading is referred to as negative concord in the literature (cf. Weiß 1999: 819).

However, in an interesting way, the semantic interpretation of NC seems to vary in standard Afrikaans and its spoken vernaculars. Negative concord is much more radical in the spoken language, where the spell-out of *additional* negation copies with NC-reading is allowed.

- (2) Ek het niemand nie gesien nie.
 - I have nobody not seen not

[•] I would like to thank Jac Conradie, Helmut Weiß, Werner Abraham and Andrew Mcintyre for their helpful comments on earlier versions of this paper. The research this work is based upon was supported by a visiting grant from NIAS, which is thankfully acknowledged here.

Readings (DN=double negation, NC=negative concord)

- (a) I have seen everybody (DN-reading, preferred in the written language)
- (b) I have not seen anybody (NC-reading, preferred in the spoken language)

In the present paper, I will attempt to account for this puzzling semantic difference with respect to the interpretation of negation scope tied to stylistic variations of language. The main idea pursued here is akin to Abraham (1999, 2000), explaining the emergence and use of certain grammatical forms as specific means of oral communication employed to facilitate parsing of sentences. In this spirit, I will analyse NC as a characteristic property of spoken vernaculars, arguing that spoken and written languages employ different strategies of information processing, which can affect the semantic interpretation of negation. All this has a lot to do with the following questions: Is negative concord indeed an instance of operator licensing in the spirit of the Negative Criterion (Haegeman 1995, Rizzi 1996) and as such morpho-syntactically driven? Or is it primarily semantically motivatable, being inextricably intertwined with conflicting quantificational and negation requirements of weak indefinites in the sense of Weiß (1998, 1999)? One of the central assumptions of this paper will be that, beyond solid empirical arguments for the existence of a Neg-projection in Afrikaans, negative concord, contrary to Haegeman (1995) and others, should not be captured in terms of a formal operator licensing mechanism. Neither will the semantic restriction with respect to indefiniteness made by Weiß (1998) be taken to be universal or seen as sufficient to account for the Afrikaans data. Rather, NC is analysed as an instance of top-down feature percolation. where silent copies of the first negator infiltrate all terminal nodes within the scope of negation. Written and spoken Afrikaans will be shown to differ with respect to the constrains which govern the morphological spell-out of the negation copies. Negative spread is only allowed in the spoken language, where the lexicalization of additional neg-copies can be exploited to signal scope dependencies and to identify discourse functional categories early in the information flow.

The paper is organised as follows. First, I will present the relevant empirical data on negative concord in Afrikaans. Then, turning to the discussion in section 3, I will assume the existence of an abstract feature +Neg that is copied and spelt out redundantly within the scope domain of negation. In section 4, 5 and 6, I will discuss the main theoretical and empirical consequences of this proposal, showing that spoken and written Afrikaans obey different constraints with respect to the spell-out rules of negation copies. Section 7 contains the conclusions.

2. Empirical data

Putting aside the case of inherently negative quantifiers for the time being (but cf. section 3.2. for discussion), from a descriptive point of view, multiple negation in Afrikaans consists of two morphologically identical negation particles. The first negator (nie_1) , determining the scope of negation, is doubled at the coda of the negation domain (nie_2) (cf. Ponelis 1993 or Donaldson 1993).

(2) a. NIE1 XP NIE2 b NIE1 VP NIE2

Accordingly, (2a) is the schematic representation of constituent negation, while (2b) is the schematic representation of sentential negation in Afrikaans, exemplified in (3a) and (3b) respectively:

(3)	a.	Nie ₁ ver van hier nie_2 het ek gebly. (NC-reading)
		not far of here not have I stayed
		,I have stayed not far from here'
	b.	Ek het nie_1 boeke gelees nie_2 (NC-reading)
		I have not books read not
		.I have not read books'

Note that (3a and b) share the common semantic property of lacking a cumulative double negation reading. In this respect, the realisation of the second negation particle is clearly redundant – and, as no new negation scope is opened, it is clearly of an anaphoric nature. Note further that this holds independently of the question of whether, under well-defined structural conditions, negative constituents such as inherently negative indefinites, may remain invisible at LF for semantic interpretation. One of the central arguments of this essay will be that many of the formal licensing mechanisms proposed to capture NC (cf. most notably the Neg-criterion) are in fact specific instances of more general principles, to be reduced to conditions on anaphoric chain formation and the minimal lexical identification of functional domains.

A peculiarity of NC in (3a and b) is the formation of a *negation bracket*, comparable to the verbal bracket in SOV-Germanic. Just as V2 and V_{last} bridge the wide *Mittelfeld* in the Westgermania, the negation particles *nie*₁ and *nie*₂ mark the right and left boundary of the negation scope. *Nie*₁ opens the domain of negation and *nie*₂ closes this domain, the second negator spelt out right-adjacently to the most deeply embedded element in the tree:

(4)	a.	Ek het; nie[vp boeke t, gelees nie] I have not books read not 'I have not read books'	(adjacency to the participle)
	b.	Ek gooi, nie [VP boeke wegi nie] I throw no books away not 'I do not throw books away'	(adjacency to the verb particle)
	c.	Ek lees, nie [vp boeke nie ti]. I read not books not 'I do not read books'	(adjacency to DO)
	d.	Ek is nie op die universiteit nie. I am not on the university not 'I am not at the university'	(adjacency to PP)

The right-peripheral position of the second negator is strictly enforced, even if negated elements are extraposed out of the scope of negation. In this case, the second negator accompanies suboordinate clauses or heavy PPs deep down into the domain of extraposition:

- a. Ek het nie [vp ti gedink] [cp dat hy dit sou doen nie], I have not thought that he this would do not 'I would not have thought that he would do this'
 - b. * Ek het nie [vP t, gedink nie] [cP dat hy dit sou doen],
 - c. Ek het nie ingegaan op die invloed van daardie faktore nie. I have not in-gone on the influence of those factors not 'I did not go into the influence of those factors'
 - d.* Ek het nie ingegaan nie op die invloed van daardie faktore.

The contrast between (5a-b) and (5c-d) indicates that the negation bracket is not closed at the semantic boundary of the negation domain, which is at the right edge of the VP as demonstrated in the illicit sentences (5b and d). Rather, extending the negation scope to the domain of extraposition, bracketing must always take place on the right-periphery of the sentence:

(6) a. NEG₁ [VP] ([domain of extraposition]) NEG₂

NB, in the form as represented in (6), is a striking feature of Afrikaans, not to be found in any other West Germanic vernacular displaying NC.

Afrikaans also has a unique status from a *typological* point of view, having negative concord as a canonized form of negation in its *written* variant. While the occurrence of multiple negators, at least in the Germanic languages, is restricted to spoken vernaculars (cf. Abraham 2000), the negation pattern in (2) is the only licit choice in standard and in most varieties of substandard Afrikaans.¹ Compare the following sentences from West Flemish and Bavarian (cf. Haegeman 1995: 116 and Bayer 1990:20 respectively):

(7)	a.	das an Bosdboon koa Hund ned beisd	(Bavarian)
		that the postman-AKK no dog-NOM not bites	. ,
		'that no dog bites the postman'	
	b.	daß den Postboten kein Hund (*nicht) beißt	(Standard German)
	c.	da Valère die boeken nie an zen voader getoogd en-oat	(West Flemish)
		that Valère the books not to his father shown en has	
		'that Valère has not shown the books to his father'	
	1	TATE IN THE PARTY AND A STREET	

d. dat Valère de boeken niet aan zijn vader (*niet) getoond heeft (Standard Dutch)

Neither standard German nor standard Dutch (ABN) allows the expression of sentential negation by multiple negation particles. The corresponding sentences in (7b and d) may contain only one negator phrase. In Afrikaans, on the other hand, there is no such contrast between written and spoken language. The negation bracket is required in both cases:

(8) dat ek nie boeke gelees het *(nie) (Afrikaans – spoken and written language)
 'that I do not read books'

Note further, that, contrary to Bavarian (cf. Weiß 1999: 820 or Abraham 2000), and similarly to West Flemish (cf. Haegeman 1995: 117f.), NC in Afrikaans is triggered obligatorily if the VP contains lexical material, regardless of the existence of (inherently negative) indefinites:

- (9) a. Ek he t_i nie [_{VP} t_i (die lied/ 'n lied) gesing *(nie)]. I have not the song/a song sung not ,I have not sung (the song/a song).'
 b. Ek sing_i nie [_{VP} t_i (*nie)].
 - I sing not not ,I do not sing.'

The contrast between (9a) and (9b) shows that the presence of the second negator is a question of the evacuation of the VP by verb movement or XP-movement to the left and not

¹ A well-noted exception is vernacular northwestern Afrikaans where the second *nie* is commonly lacking. However, this is probably due to external (interference) factors, facultative NC being registered in the first place among *bilingual* speakers of Khoi and Afrikaans (cf. Ponelis 1993: 445).

something tied to a single class of elements, that is to the presence of weak indefinites. Once lexical material appears in the scope of negation, the second negator must be realised rightadjacently to it, irrespective of the valency of the verb or the semantic properties of its arguments (cf. also 4a-d for further examples).

This particular feature of Afrikaans highlights another relevant contrast to spoken vernaculars of the Westgermania. In (9a) and (4a-d), negative concord is not a free option, but a forced derivation of the computational system, which is independent of the existence of inherently negative quantifiers. This considerably weakens the explanatory power of any NC-analysis based on the idea that (optional) NC would serve to disambiguate quantificational binding properties of indefinites that are ambigous between a strong and a weak entry (cf. particularly Weiß 1998, 1999 for Bavarian). To all appearances, NC is neither confined to the semantic class of indefinites in Afrikaans, nor can such dependency relation be taken to be a universal property of multiple negation (cf. also Bernini and Ramat 1996 or Van der Wouden 1996 for a typological overview).

3. Discussion – the structure of negation in Afrikaans

In the light of the empirical data above, I would like to propose the following abstract structure for negative sentences in Afrikaans.²

(6) dat ek nie₁ boeke lees nie₂.



² As it is not crucial for our analysis, the functional domain above VP is left unelaborated in (6). However, as I have argued elsewhere in great detail, there are good empirical reasons to believe that the functional dimension in Afrikaans can be kept minimal, and that, in particular, the feature checking cascade of Agr-projections assumed in Minimalism (Chomsky 1993) can be fully dispensed with. In this scenario, agreement of nominatives with V is accounted for by a merger if I and V within VP in the spirit of Reuland & Kosmejer (1989) or in terms of Haider's (1993: 82) concept of status government, and (optional) leftward XP-movement is assumed to take place under the discourse functional weight of *thema* and *rhema*, rather than being triggered by functional case attractors in Agr-projections (cf. Molnárfi 2000 and Abraham & Molnárfi 2001). The structural space of the middle field, exploited for the identification of discourse functions is opened up by the SVOV verbal bracket in Afrikaans, which, similar to Dutch and German, is head final, with Abraham (1997, 1999) and contrary to Kayne (1994) or Zwart (1993) and countless followers.

Drawing on seminal work done by Haegeman (1995) and Rizzi (1996), negation is represented in (6) by a projecting an abstract feature which has its own maximal projection on top of VP. While I also will follow the Neg-criterion (cf. 3.2. for discussion), in assuming a landing site for inherently negative quantifiers in Spec-Neg for purposes of feature checking, I will depart from Haegeman (1995) and others in some relevant respects. First, I will not take the first negator to be an XP-element, but to be the head of the Neg-projection. Further, the second negator is here not given an autonomous syntactic status, that is the status of a syntactic head, in contrast with proposals for Bavarian ned (Baver 1990) or West Flemish en (Haegeman 1995). Rather, I will assume that the negation domain is infiltrated by silent copies of the first negator in terms of a feature percolation mechanism, in a spirit similar to the top-down focus spread concept of Rosengren (1993), Jacobs (1993) and recently Haider & Rosengren (1998: 89). The scope of negation will be the domain dominated by the +Negfeature. In this scenario, NC is about the morphological realisation of one or more of the NEG-copies, and the second negator is the spell-out of the lowest copy within the scope of negation. Such anaphoric chain formation will be shown to fulfil important (although different) shibboleth-functions in written and spoken language. In the written language, NC non-redudantly signals the opening and coda-position of the domain of neg-percolation, while in spoken Afrikaans additional copies can be spelt out at PF to faciliate parsing of the negation bracket. The Neg-criterion, covering only one particular subclass (that is that of quantifier raising) of NC, will be reduced to the minimal lexical identification requirement of functional projections in the spirit of Ouhalla (1993).

In what follows, I will discuss the main theoretical and empirical aspects of this proposal.

3.1. General conditions of NEG-percolation

3.1.1. The status of the first negator

The first negator, as head of the Neg-projection, opens the semantic domain of negation at the left edge of the VP. It asymmetrically c-commands³ each constituent within the government domain of V. I will take this c-command relation to be instrumental in determining all scope dependencies. Elements outside the c-command domain of nie_1 will also fall outside the scope of negation, while elements c-commanded by the first negator will have to be interpreted within the scope of negation.

One of our central assumptions is that nie_1 is the morphological spell-out of the feature +Neg, which is the syntactic head of the maximal projection NegP on top of VP. This is contrary to Haegeman's (1995: 117f.) analysis, who claims that, in the West Germanic languages, all first negation particles are in fact XP-elements, to be moved to the operator position Spec-NegP.⁴

However, there are at least two strong arguments for the head status of the first negator in Afrikaans (cf. similar arguments of Weiß 1998: 202 for *ned* in Bavarian). First, contrary to XP-elements, *nie*₁ cannot be topicalized in Afrikaans:

³ I will adopt here Reinhart's (1976) definition of c-command:

 $[\]alpha$ c-commands β iff

⁽a) the first branching node dominating α also dominates β and

⁽b) neither α dominates β nor β dominates α .

⁴ Haegeman (1995: 115) argues for establishing a checking relation between the first and second negator (*nie* and *en* respectively) in West Flemish, which would satisfy the Neg-criterion overtly, that is, by moving the Neg-head en+V-complex to Spec-Neg at the left edge of TP. Such a Spec-head configuration is, however, less than plausible in Afrikaans, where the second negator is always realised right-peripherially and often dissociated from the verbal head (cf. 4a-d).

- (7) a. *Nie het hy gekom nie. not has he come not
 - b. Nie hy het gekom nie. not he has come not 'Not he has come'

That nie_1 does not trigger the V2-effect (inversion) in (7a) also indicates its missing constituent status (cf. also Haftka 1994: 139f. or Haider 1997: 95 for German *nicht*). Compare, by contrast, the grammaticality of (7b), where the negated subject is moved together with the negation particle to SpecCP.

Second, and more importantly, *nie*₁ displays in negative imperative contexts (in the so called prohibitive) a clear clitic-like behaviour. The prohibitive in Afrikaans is very frequently expressed by the word *moenie*, which is a contracted form of the modal auxiliary *moet* and the first negator *nie* (cf. Ponelis 1993: 459 or Donaldson 1993: 416):

(8) [CP (Jy) [C moenie, [NEG t, [VP boeke lees nie]]]].
 you mustCLnot books read not
 'Do not read books'

In (8), the negator has moved out of its functional projection in order to cliticise to the modal verb *moet* in C. A similar movement to C is to be assumed in the following sentences, showing that nie_1 easily attaches itself to main verbs or other auxiliaries in the V2-second position.⁵

- (9) a. Hulle probeerie werk nie. they tryCLnot work not ,They try not to work.'
 - b. Hulle hoorie die verkeer nie. they hearCLnot the traffic not ,They do not hear the traffic.'
 - c. Ek willie dit doen nie. I wantCLnot this do not ,I don't want to do this.

The clitic data in (9a-c) provide decisive support for the head status of the first negator in Afrikaans.

3.1.2. The status of the second negator

Given the peculiarities of negation bracketing in Afrikaans, the question arises of how the morphological reduplication of the first negator at the right-periphery of the negation domain can be accounted for. In what follows, I will adopt an idea of Jacobs (1993) and Rosengren (1993), originally proposed in the framework of focus-background theory. Other than traditional bottom-up approaches (cf. Selkirk 1984 or Rochemont 1986), Jacobs and Rosengren assume that focus spreads downwards, that is from a dominating node to all constituents dominated by the abstract feature [+F]. It is also assumed that all constituents dominated by the percolating +F-feature are in focus. In this way, the size of the focus domain depends on which node [+F] is assigned to. In the case of narrow focus the domain of

⁵ I would like to thank Jac Conradie for drawing my attention to this fact.

infiltration is minimal, that is involves only the focused contituent, while in the case of wide focus the domain of infiltration is maximal, that is includes the whole VP.

Let us assume a similar mechanism for explaining negative spread in Afrikaans. While opening the scope of negation, the first negator also infiltrates this domain. Silent copies of the Neg-feature percolate to all terminal nodes, spreading downwards to the most deeply embedded element. Adopting this approach, each constituent within the domain of the Negfeature is also in the scope of negation. In the case of sentential negation, this domain is the whole VP. In this scenario, the status of the second negator is that of a phonologically restricted (weak) copy of the first negator, which is spelt out at the bottom of the negation scope. Its function is to signal the coda position of the scope domain opened by the first negator. This proposal has the obvious advantage to former analyses that it does not have to rely on the existence of inherently negated indefinites (Weiß 1998) or require a Spec-head checking configuration between the two negators (Haegeman 1995) for the formation of the negation chain. Rather, negative concord is reduced to the question which copies can be spelt out in the domain of infiltration. I would like to propose the following spell-out rule for Afrikaans:

(10) Spell-out rule of Neg-Percolation

Spell out only the lowest copy.

(10) ensures that the percolation of the Neg-feature is stopped at the rightmost periphery of the tree, that is, the domain of +Neg is the largest possible in the case of sentential negation. In what follows, I will discuss the main consequences of this analysis. Let us first turn to the empirical arguments supporting the non-autonomous status of the second negator.

Our first observation is of prosodic nature. Contrary to the first negator, the coda position of the second negator cannot be stressed:

- (11) a. Ek het NIE die boek gesien nie. 'I have NOT seen the book'
 - b. *Ek het nie die boek gesien NIE.

Similarly, the second negator (again contrary to the first negator) cannot be modified by focus adverbials (see also Abraham 2000):

- (12) a. Ek het dit glad *nie* gedoen nie.I have this ADV not done not'I have not done this at all'
 - b. *Ek het dit nie gedoen glad nie.

In fact, no lexical material can intervene between nie_2 and the past participle in (12a). Note that this condition also seems to hold generally. There is strict adjacency enforced between the second negator and whatever element is most deeply embedded within the negation scope. In terms of a feature percolation analysis, this follows straightforwardly. The second negator can freely be associated with different terminal nodes, depending on which node is most deeply embedded (cf. also Donaldson 1993:419). As a phonologically weak copy, nie_2 easily cliticises on such verbal, adjectical or nominal heads:

(13) a. Ek gaan nie waggie (>wag nie, cliticisation to V)
 I go not waitCLnot
 'I am not going to wait'

- b. Dit lyk vir my nie te ergie (>erg nie, cliticisation to A) this seems for me not too badCLnot
 'It does not seem to me too bad'
- c. Dit maak nie sakie (>saak nie, cliticisation to N)
 this makes no matter CLnicht
 'It does not matter'
- d. Hy weet nie van die sakie (>saak nie, cliticisation to N within PP) he knows not of the matterCLnot 'He does not know about the matter'

The non-existent syntactic autonomy of the second negator also explains why negation in Afrikaans can also be doubled (copied) beyond the sentence boundary. As each constituent within the domain of the Neg-feature is associated with silent copies of negation, movement out of the scope of negation to a lower position, according to (10), shifts the spell-out position of the copy to the right.⁶ Compare (1) again, repeated here for convenience as (14):

(14) Ek het nie₁ geweet dat hy bobbejane gesien het nie₂.
 I have not known that he baboons seen has not
 'I didn't know that he has seen baboons

The second negator is spelt out right-adjacently to the most deeply embedded lexical node that contains a copy of the Neg-feature. Its function is to extend the negation domain so that extraposed elements can be identified as belonging to the semantic domain of negation. Nie_2 signals the coda of the extended scope domain opened by the first negator:⁷

(15) Neg₁ [VP] ([domain of extraposition]) Neg₂

(1) niets en,-peinzen-k da ze t,-wilt doen

nothing en thinkCLI that she want do

,I think she will do nothing."

In (1) the Neg-head follows the topicalised indefinite pronoun into the matrix clause so that a checking relation in terms of the Neg-criterion is established. In the corresponding Afrikaans sentence, the second negator must be spelt out right-peripherially:

(ii) Niks dink ek dat sy wil doen *(nie)

(1) indicates that, in Afrikaans, no checking relation is established between the first and second negator.

⁷ An alternative path to follow would be to dispense fully with extraposition, as proposed in terms of the minimalistically inspired Universal Base Hypothesis (cf. most notably Kayne 1994, and numerous followers). One of the leading advocates of this idea is Zwart (1993), claiming that the SOV-Westgermania are in fact hidden SVO languages with forced overt movement of all VP-internal material to functional projections However, apart from the dubious nature of such *pervasive* leftward movement (cf. Haider & Rosengren 1998 44f.), adopting the Base Hypothesis would not only blurr important insights of Cinque's (1993) Accent Theory, but also straightforwardly lead to false empirical predictions, given discourse functional considerations are also taken into account in languages like German or Afrikaans (cf. particularly Abraham 1997, 1999 and Abraham & Molnárfi 2001) Moreover, as Haegeman (1995:58 f.) discusses in detail, not even deploying a full minimalist machinery succeeds in eliminating extraposition from the theory, the problem only being shifted from rightward movement to leftward clausal movement to some stipulated low functional projection in the tree

⁶ Note that this is an important difference to West Flemish where the second negator may only move to the left from subordinated clauses (Haegeman 1995: 117f. and Weiß 1998: 201):

(15) indicates that negation bracketing takes place relatively late in the derivation, that is after movement operations (to the left or to the right) have applied. The negation bracket itself has an important identification function: each element within the bracket is interpreted at LF within the scope of negation.

3.2. Negative Quantifiers in Spec-Neg

Besides the first negator, there is another important class of elements triggering negative concord in Afrikaans. Inherently negative quantifiers (INQ) such as *niks* (nothing), *nêrens* (nowhere) or *niemand* (nobody) obligatorily cooccur with the second negator (cf. Ponelis 1993: 453): ⁸

(16) a. Ek het niks [vp t gesê *(nie)] I have nothing said not 'I have said nothing'
b. Jy gaan nêrens [vp t heen *(nie)]. You go nowhere to not 'You go nowhere'
c. Ek het niemand [vp t gesien *(nie)]. I have nobody seen not 'I have seen nobody'

While perhaps the most famous and most widely discussed form of NC in the literature, the sentences in (16a-c) represent only one of the possible forms of multiple negation across languages. Recall the Afrikaans data introduced in section 2, suggesting that negative concord cannot be universally tied to the presence of INQs as claimed in several writings of Weiß (1998, 1999).⁹ Keeping this in mind, let us turn to the discussion of the main properties of NC as triggered by the presence of INQs.

(1) Ek, sien, homk [NegP nooit (nie)[VP t, t, tk]
 I see him never not

- (1) wai koa Beispiel bekannt sa muaß
 - as no example known be must
 - ,as no example must be known'
- (11) was koa Beispiel ned bekannt sa muaß (NC-reading) as no example not known be must

(iii) omdat nie voorbeelde bekend moet wees *(nie)

⁸ Unless, similarly to what we have seen in section 2, the VP is fully evacuated In this case, the realisation of NC is facultative (cf Ponelis 1993 455)

[,] I never see him '

As the abstract structure of (1) shows, the Neg-head can be optionally realised adjacently to the INQ, if there is no lexical material within VP to be followed by the second negator Contrary to (14a-c), thus, no negation copy is spelt out in (1) (cf 5 for discussion)

⁹ Weiß (1998 210f) assumes that the primary function of multiple negation would be to disambiguate quantificational properties of weak indefinites. As NC in Bavarian is an optional process, involving only INQs, the presence of multiple negators can be used to signal that a negated indefinite is existentially bound within the scope of the nucleus.

While single negation in (i) is ambiguous between an existential and a generic reading, the double-negated indefinite in (ii) can only be interpreted as existentially bound (cf. Weis 1998 215) However, as the second negator in (iii) must be realised obligatorily, no such functional justification can be given for NC in Afrikaans.

Following Haegeman (1995) and (Ponelis 1993: 453), I assume that INQs in Afrikaans are operators, containing an inherent Neg-feature. According to the Neg-criterion of Haegeman (1995) such operators, in order to take scope, have to be licensed in a feature checking relation with a negative head.

(17) Neg-criterion (Haegeman 1995: 106f.)
 a. A Neg-operator must be in a Spec-head configuration with an X⁰ [Neg]
 b. An X⁰ [Neg] must be in a Spec-head configuration with a Neg-operator.

According to (17), an INQ must be raised to the Neg-Spec-position where it can check off its inherent Neg-feature against a matching feature of the Neg-head. In this spirit, I propose the following abstract structure for INQ-raising in Afrikaans:

(18) Ek het niemand gesien nie.



In (18) INQ is licensed in a left-peripherial scope position, after having been moved to the SpecNeg-position for purposes of feature checking. As filling the Spec-position sufficiently identifies the Neg-projection, feature percolation is licensed, and the second negator copy at the coda position of the negation scope will be spelt out.

Apart from the conceptual elegance of the Neg-criterion (negation can be subsumed under the general notion of operator licensing, cf. the Affect-Criterion of Haegeman 1995: 93), there are also good empirical arguments for a raising analysis in the spirit of (18).

As discussed in Molnárfi (2001), in Afrikaans, the syntactic distribution of negative quantifiers and indefinite pronouns is complementary in the case of sentential negation:

(19)	a.	Ek het niks (nie) gelees nie.	(NC-reading)
		I have nothing not read not	
		'I have read nothing'	
	b.	Ek het nie niks gelees nie.	(DN-reading)
		'I have read everything'	
	c.	Ek het nie iets gelees nie.	(NC-reading)
		I have not something read not	-
		'I have read nothing'	
	d.	Ek het iets nie gelees nie.	(specific reading)
		I have something not read not	
		'I have not read something'	

As the unmarked case, indefinite pronouns are negated within the scope of sentential negation (cf. 19c). ¹⁰ Compare, on the other hand, the specific reading of (19d), where the indefinite is placed higher than the first negator. However, *ceteris paribus*, inherently negated quantifiers cannot be c-commanded by the first negator. The required NC-reading occurs only if the INQ preceeds the first negator in (19a). This indicates that INQs must occupy a relatively high, VP-external syntactic position in the tree. The obligatory DN-reading of (19b) shows that the Neg-criterion must be complied with overtly in Afrikaans. In a minimalistic terminology, this means that INQs in Afrikaans contain a strong Neg-feature, which must be eliminated before Spell-out. ¹¹

4. The puzzle – negative spread in the scope domain

An important problem not discussed in the previous section is whether the head of the Negprojection can be spelt out adjacently to the quantifier in (18). In a more general perspective, the question arises under which structural conditions additional negation copies can be realised in the domain of Neg-percolation. In this respect, Afrikaans displays a puzzling difference pertaining to its spoken and written variants. The semantic interpretation of NC seems to vary in standard and colloquial varieties of the language. Compare the following sentence:

(20) dat hy niks nie sien nie that he nothing not see not

In (20), the negator head is spelt out right-adjacently to INQ. In written Afrikaans, the preferred reading of (20) is that of the logical cumulation of negation:

(21)	'that he sees everything'	(DN-reading)
------	---------------------------	--------------

semantic paraphrase: < there is no X such that Y does not see X>.

As (21) shows, the insertion of the first negator adjacent to the INQ blocks the NC-reading. However, we find no such semantic shift in the more informal varieties of spoken Afrikaans, where the preferred interpretation of (20) is the usual NC-reading :

(22) 'that he does not see anything' (*NC-reading*)

semantic paraphrase: <there is no X such that Y sees X>

- (ii) Ek het g'n iets gesê nie.
 'I have not say anything'
- (iii) Ek is g'n van die Kaap nie.'I am not from the Cape'

¹⁰ Note that this contradicts the assumption of Weiß (1998: 213) that quantifiers are not transparent with respect to the scope of negation, that is, existentially bound indefinites cannot stay to the right of the first negator in the case of sentential negation.

¹¹ However, no operator status is assumed here for the negation particle g'n, displaying the same distribution properties as the first negator in spoken Afrikaans (cf. Donaldson 1993: 409f.). In particular, similarly to *niel*, g'n can cooccur with definite NPs and license sentential negation involving definites and prepositional phrases:

⁽i) Ek het g'n die man gesien nie.
'I have not seen the man'

To all appearances, NC is more radical in the spoken varieties of Afrikaans. The spell-out of additional negation copies with NC reading is allowed only in the colloquial language.

It is important to note that, by blocking the lexicalisation of the Neg-head in (20), written language seems to follow a general strategy, avoiding the spell-out of more than one negation copy in the percolation domain. Including (20), there are basically three syntactic contexts where additional negation copies can be spelt out.

(a) Spell-out of the NEG-head adjacently to INQ

(23) Ek het niemand nie gesien nie.
 I have nobody not seen not
 'I have seen nobody'

(NC-reading in the spoken language)

(23) is the same construction as what we have seen in (20). If the first negator is spelt out, NC-reading is only possible in the informal language (cf. Ponelis 1993:454).

- (b) Spell-out of an intermediate negation copy
- (24) * Ek het nie gedink nie dat hy dit sou doen nie
 (OK in the spoken language)
 I have not thought not that he this would do not
 'I would not have thought that you would do this'

In (24), in addition to the coda copy at the end of the extraposition domain, an intermediate negation copy is spelt out at the semantic boundary of negation. Again, NC-reading is only possible in the spoken language, in written Afrikaans is (24) illicit (cf. Ponelis 1993: 458).

(c) Negative Spread

 (25) * Ek het nog nooit niks van niemand gevra nie (OK in the spoken language) I have yet never nothing form nobody asked not 'I have never asked anybody for anything'

In (25) the domain of negation is maximally identified as all silent copies have been spelt out. The same semantic conditions hold as in case of (24). NC-reading is only licit in some varieties of the spoken language, the construction is out in formal Afrikaans (cf. Ponelis 1993: 454, Donaldson 1993: 409 or Van der Wouden 1997: 192).

The three forms of negative spread will be discussed in some depth in the following sections, pursuing the question of why the semantic interpretation of the domain of negation is register-bound in Afrikaans.¹² The justification sought after here will be primarily a functional one. Following Abraham's (1999, 2000) insights, I will argue that spoken and written

(i) Ik em niemand nie gezien nie
 (NC-reading in Aarschotts)
 I have nobody not seen not
 'I have seen nobody'

¹² Note that there is no *a priori* reason why the lexicalisation of the Neg-head in (23) should block NC-reading in written Afrikaans. Empirical data from Aarschotts (a dialect spoken in South-Brabant) and West Flemish show that the morphological spell-out of the first negator does not have to effect the reading of NC triggered by INQ (cf. Pauwels 1958: 435f., Ponelis 1993: 467 and Haegeman 1995: 116):

 ⁽ii) da Valère ier niemand nie en-kent (NC-reading in West Flemish) that Valère here nobody not en knows 'that Valère knows nobody here'

Afrikaans follow different strategies of the identification and interpretation of the negation domain, arising from the different communicative needs written and spoken vernaculars have to attend to in the course of sentence planning and processing.

5. Towards a solution - the identification of functional domains

As we have seen in the previous section, negative concord in written Afrikaans is much more restricted. Neither can the specifier and the head position of the negation projection be lexicalised at the same time, nor is the spell-out of additional copies allowed in the domain of infiltration, if NC-reading is to be maintaned. On the other hand, there seems to be no such restriction in the spoken language. To explain the different lexicalisation requirements of the Neg-projection in written and spoken variants of Afrikaans, I would like to adopt here an idea of Ouhalla (1993), again from the field of focus licensing. Ouhalla introduces the following constraint pertaining to the licensing of functional projections:

(26) Identification Requirement (Ouhalla 1993: 284)

The (abstract) features encoded in the functional heads of Structural Descriptions must be identified.

Identification of the feature F is *lexicalization* of the functional domain of F. Crucially, such lexicalization can be achieved in two ways (cf. similarly Haider 1993: 95):

(a) by lexicalizing the head position of F

or

(b) by filling the Spec-Position of F

As a functional head cannot c-select lexical material for its Spec-position, the Spec-position of a functional projection can only be filled by movement. That means that identification of F can be achieved either by element displacement into the Spec-position of F or by spelling out the head position of F.

Following this idea, Ouhalla (1993) discusses strategies of contrastive focusing in Classical Arabic. As it seems, focusing can be achieved in this language in two ways: by preposing the focused phrase or by introducing a focus marker sentence-initially. Ouhalla's point is that Classical Arabic uses these two strategies in a strict complementary distribution. A natural explanation for this fact is to assume that identification of F is the *minimal* lexicalization of the projection of F. If the identification of the focus feature takes place uniquely, applying both operations at the same time leads to an uneconomical derivation (see also Haegeman 1995: 109). As it seems, written Afrikaans makes use of the same strategy. Here also, the identification of the functional domain has to take place uniquely, that is non-redundantly. I will state this important correlation in the following principle:

(27) Economy Principle of the identification of abstract features

Abstract features must be identified uniquely within their checking domain.

An important consequence of (27) is that, within the same negation domain, *either* the lexicalization of the Spec-position by movement *or* the morphological spell-out of the head position are allowed, but not both operations at the same time (very much in the spirit of Ouhalla 1993). As quantifier raising identifies the NEG-feature sufficiently and uniquely, any further lexicalization of the negation projection is uneconomical. Hence, *redundant* spell-outs within the same projection will be interpreted as scope markers of new negation domains. This triggers a cumulative reading (negation of negation) of (28) at LF:

(28) dat hy niks nie sien nie

Accordingly, (28) can be assigned the the following abstract structure:

(29) [CPdat [IP hy [SpecNeg niks [Neg' [SpecNeg [Neg' nieNEG1[VP tj ti sien nieNEG2]]]]]]]

In (29) the INQ and the Neg-feature are not in the required Spec-Head configuration, as the indefinite opens a new negation domain higher in the tree. However, both Neg-projections are sufficiently and uniquelly identified, the higher Neg-phrase by filling its SpecNeg-position with the INQ, the lower functional phrase by the lexicalisation of the Neg-feature. Also, the Neg-criterion is complied with as the INQ can check off its inherent Neg-feature against the non-lexicalized Neg-head.

According to the Economy Principle in (27), the morphological presence of Neg_1 in (29) has to be interpreted as a signal for the opening of a new negation domain of which the scope is VP. As in (29) there are two scope domains, licensed in separate functional projections, the two conflicting negation elements will cancel each out at LF, leading to negation of negation, that is a DN-reading. By complying with (27), in the written language the uniqueness of negation interpretation is ensured. The same scope domain can be opened and closed at most once.

There is another important consequence of this analysis. Adopting Ouhalla's approach, the Neg-criterion will become dispensable as a specific case of the Identification Requirement. What it means is that NC in Afrikaans is not about a formal configurational requirement between a Neg-operator and a Neg-head, but more generally, about the minimal identification of the negation domain. Such identification can take place in terms of head-lexicalisation or in terms of INQ-raising to the SpecNeg-position (only the latter covered by the Neg-criterion). In both cases, Neg-percolation is licensed and the right-peripherial Neg-copy is spelt out in the spirit of (10). In the case of Afrikaans, such departure from the Neg-criterion seems not only empirically well motivated, but also desirable on general methodological grounds, obeying Ockhams Razor.

6. Interpreting negation in the spoken language – negation copies as scope-shibboleths

Note, first, that a DN-reading of (28) is also possible in spoken Afrikaans, if supported by appropriate prosodic signals:

(30)	a.	dat hy niks NIE sien nie	(DN-reading in the spoken language)
	b.	dat hy niks nie sien nie	(NC-reading in the spoken language)

As it seems, disambiguation of the interpretation of negation in the spoken language is safeguarded by the assignment of different stress patterns to the first negator. In (30a), the first negator receives heavy pitch accent, while in (30b) the first negator is correlated with a default weak prosodic signal. As written languages lack this intonational dimension, no such prosodic disambiguation is possible here. (27) forces the DN-reading uniformly.

In the light of the above mentioned observations, an important question arises: Why can our economy principle in (27) be overruled in the spoken language? In what follows, I would like to argue that the justification for the redundant identification of the negation domain is a functional one, that is, it lies outside of core syntax. The main idea to be elaborated upon is that the intermediate copies spelt out in (23, 24 and 25) have an important shibboleth function in the process of parsing: they faciliate the on-line processing and adequate semantic interpretation of negation domains. Note, that the presence of such additional morphological shibboleths is extremely useful in spoken Afrikaans for at least two reasons. First, due to the highly impoverished morphology, the parser cannot make use of any distinct morphological case or inflection shibboleths in the online-processing of acoustic discourse strings. Second, and crucially, due to the negation bracket and the $SV_{fin}OV_{infin}$ verbal bracket, the identification of valency and negation scope is delayed until the last lexical element within VP or in the domain of extraposition is processed (cf. also Abraham 1999 and 2000 for Bavarian).

Let us consider a concrete example for how the spell-out of additional neg-copies can faciliate the processing of the negation bracket. On account of the right-peripheral bracketing in Afrikaans, the opening and coda shibboleth of the negation scope can sometimes be separated by a large structural space (cf. Bernini&Ramat 1996: 63):

(31) en dan het hy geweet dat hy hom nie losgeskud het and then has he known that he him not freed has vir die herstel van sy energie uit die diepste bronne for the recovery of his energy out the deepest sources in die natuur en in sy eie gees nie. in the nature and in his own spirit not 'and then he knew that he could not free himself for the recovery of his energy from the deepest sources in the nature and in his own spirit'

In (31), we see a typical sentence from the written language, where, due to extraposition of the heavy PP, the coda position of the sentential negation is shifted to the far right. In the written language, parsing of (31) does not have to cause any serious difficulties for the reader. As texts, contrary to acoustic strings, can be easily reread, the interpretation of the negators can always be corrected and the intended reading of sentential negation remains accessible.

In the spoken language, on the contrary, parsing of (31) is heavily impaired, as the correct semantic interpretation of the negation scope can only be achieved *after* the negation bracket including the extraposition domain has been processed on-line, and the relevant morphological information in form of the second negator has been recognized. This constitutes a considerable burden for the short-time memory. The relieving strategy employed here is to spell out not only the coda-copy, but also the intermediate copy at the semantic boundary of the negation scope. This makes on-line identification possible for the hearer, even before the negation bracket is fully processed.

(32) en dan het hy geweet dat hy hom nie₁ losgeskud het nie₂ [vir die herstel ...]nie₃

The correct on-line interpretation of (32) is safeguarded by the functional interaction of the first negator and its copy-shibboleths. We may think of the parsing process as taking place in the following steps. First, the first negator at the left boundary of the VP is processed and identified as opening-shibboleth of the scope of negation. Then, the parser comes to the first negation copy *nie*₂ and interprets the scope of negation as being closed within the domain of VP. At last, the presence of the third negation copy *nie*₃ at the end of extraposition domain is interpreted as signal that the extraposed PP belongs to the scope of the negated matrix clause.¹³

¹³ Note that the redundant spell-out of the intermediate Neg-copy is also useful in sentence planning, the speaker resuming the negation at the semantic boundary of the scope domain. In this particular case, thus, sentence planning and parsing go hand in hand, rather than displaying conflicting demands (cf. Wasow 1997 for the interaction of sentence planning and processing).

Crucially, if the displaced element does not belong to the scope of negation, the third copy will not be realized (cf. Bernini&Ramat 1996: 63):

Jan en Marie het nie op skool ontmoet nie, maar by 'n partytjie (*nie).
 Jan and Marie have not on school met not but by a party.
 'Jan and Marie have not met at school, but at a party'

As the adverbial in (33) does not belong to the semantic domain of negation, and as such it is not infiltrated by the Neg-feature, the sentence-peripheral copy cannot be realised. In this way, the coda copy fulfils a relevant shibboleth-function: it morphologically signals the scope properties of elements in the domain of extraposition. In addition, the third negation copy in (33) identifies the extraposed heavy PP as a rhematic constituent, belonging to the negated matrix clause.

6.1. Negative spread as rheme-shibboleth

The radical form of this parsing strategy is *negative spread (NS)*, that is the full infiltration of the scope domain by negation copies:

(34) dat hy [NEGP nooit [VP niks van niemand gevra het nie]] that he never nothing of nobody asked has not 'that he never asked anybody for anything'

In (34), each silent copy of the negation head is spelt out in the rhematic domain of VP, ensuring a maximal lexical identification of the negation scope. The complete spell-out of the silent negation copies within VP provides the parser with another helpful clue: it makes it possible to identify discourse rhemes early in information flow, that is, before the last member of the verbal bracket is processed (see particularly Abraham 1999, 2000).

Note, that NS is subject to two striking restrictions which support this discourse identifying function:

- (a) NS can infiltrate only indefinite, but not definite NPs within VP.
- (35) a. dat ek nog nooit die vraag aan iemand gevra het nie
 (sentential negation) daß ich noch nie die Frage an jemand gefragt habe nicht 'daß ich noch nie jemand die Frage gefragt habe'
 - b. *dat ek nog nooit nie die vraag aan niemand gevra het nie

Definites cannot be infiltrated by NS as they escape negation scope by movement to the left triggered under the discourse functional weight of *theme* and defocusing (cf. Molnárfi 2000 and Abraham & Molnárfi 2001). On the other hand, indefinites, as prototypically rhemes, stay within VP and so within the domain of sentential negation. In this way, the redundant Negshibboleths identify rhematic elements and only those in the structural domain of VP.

- (b) NA is harmonious, that is, the NEG-feature must spread on each indefinite within the domain of scope.
- (35) a. *dat ek nooit iets van niemand gevra het nie
 - b. *dat ek nooit niks van iemand gevra het nie
 - c. dat ek nooit niks van niemand gevra het nie (NC-reading)
 - d. dat ek nooit iets van iemand gevra het nie (NC-reading)

NC-reading can only be maintained if the negation chain remains intact. Negation harmony is a signal for the parser that the accumulation of the NEG-features is to be interpreted within the same scope. Note that the formation of such harmonious chains is clearly an anaphoric process, each copy resuming the negation of the previous section (cf. also Abraham 2000). Crucially, the realisation of intermediate copies, contrary to the spell-out of the second negation particle, is always optional. All this indicates that NS must apply at a late stage of the derivation, probably at PF.

The assumption that negative spread takes place as late as PF in Afrikaans also answers the question of why the VP-internal status of the negative indefinites in (35c) does not violate the Neg-criterion. Contrary to "genuine" negative quantifiers which have to move overtly to Spec-Neg, VP-internal negative indefinites in the negation chain are just copies of an already established grammatical relation between the first negator and INQ, spelt out after syntax. Given these considerations, we may think of the identification of the negation domain as taking place in the following steps.

Identification of the domain of negation

(37) dat ek [NEGP [NEG [VP nooit iets van iemand gevra het]]]

First, the INQ is moved to the Spec-position of Neg in order to check its strong Neg-feature against the negator head. A Spec-Head configuration is established and INQ can take scope over the negation domain. By filling the SpecNeg-position, the negation projection is identified uniquely and sufficiently, according to (27).

(38) dat ek [NEGP nooit, [NEG [vP t, iets van iemand gevra het nie]]]

negation percolation through silent copies

In (38), Neg-percolation is licensed by the identification of the negation domain, silent copies of +Neg infiltrating the domain of negation. According to (10), the most deeply embedded copy is spelt out. This operation takes places after verb movement and extraposition, but still before Spell-out, that is in the syntax. The morphological realisation of the second negator leads the the formation of the negation bracket, typical of Afrikaans.



At PF, additional copies can be spelt out, faciliating parsing and ensuring a maximal identification of the negation domain. Resuming the negation at every constituent also helps recognize discourse functions early in information flow, providing valuable morphological shibboleths for the identification of the rhematic VP-domain.

7. Conclusion

In this paper, I have argued that multiple negation in Afrikaans is a specific form of top-down feature percolation in the scope domain of the first negator. The register-bound nature of such copy mechanisms can be justified as a parsing strategy: The online-processing and

appropriate semantic interpretation of negation and rheme-domains have to be facilitated by morphological redundancy signals in the spoken, but not in the written language.

In the written language, an economy condition on the identification of functional domains has to be respected, requiring that the opening and coda position of scope be marked non-redundantly within the same negation domain. Lacking the prosodic dimension of spoken vernaculars, the spell-out of *additional* NEG-copies will be taken to signal the opening of a new scope, leading to a *cumulative* interpretation of negation. As texts, unlike nonrecurring acoustic strings, can be easily reread, this mechanism suffices to achieve the correct interpretation of negation domains.

In the spoken language, on-line scope interpretation can be considerably delayed if the coda member of the negation bracket is in the domain of extraposition. Here the spell-out of additional negation copies, supported by appropriate prosodic correlates, can be exploited to correctly interpret negation scope and to identify rhematic elements early in the information flow. In extreme cases, all silent negation copies can be spelt out, ensuring a maximal morphological identification of the negation and of the rhematic domain at PF.

The existence of such morphological discourse shibboleths seems to be particularly helpful in SOV-languages, where the parser has to overcome a large structural space before identifying discourse status and grammatical functions, encoded into the coda position of the verbal bracket. This, no doubt, supports Abraham's findings (1999, 2000) that spoken vernaculars employ specific (and partly grammaticalized) parsing strategies to overcome difficulties of on-line processing arising from bracketing of lexical material. On the other hand, exactly this kind of bracketing opens up a wide structural space of the middle field or the extended negation scope to be exploited to identify discourse functional categories as theme and rheme in the SOV-West Germanic.

References

- Abraham, W. 1997. Zur Basisstruktur des deutschen Satzes unter Berücksichtigung diskursfunktionaler Erwägungen. In Sprache im Fokus Festschrift Heinz Vater, ed. Chr. Dürscheid, K.H. Ramers and M. Schwarz, 59-67. Tübingen: Max Niemeyer.
- Abraham, W. 1999. Präteritumschwund in German: the Parsing Trigger. In Characteristic Properties of Spoken Vernaculars, ed. W. Abraham. Folia Linguistica 33/1, 39-58.
- Abraham, W. 2000. Mehrfachnegation im Deutschen und im Afrikaans. To appear in *Festschrift für Franz Hundsnurscher*. Linguistische Arbeiten 2000.
- Abraham, W. and L. Molnárfi 2001. The German clause under discourse functional weight: Focus and Antifocus. To appear in On formal German(ic) Typology, ed. W. Abraham, C.J.-W. Zwart. Linguistik Aktuell/Linguistics Today. Amsterdam: John Benjamins
- Bayer, J. 1990. What Bavarian Negative Concord Reveals about the Syntactic Structure of German. In *Grammar in Progress*, ed. J. Mascaró and M. Nespor, 13-23. Dordercht: Foris.
- Bernini G., Ramat P. 1996. Negative Sentences in the Languages of Europe. Berlin: Mouton de Gruyter.
- Chomsky, N. 1993. A Minimalist Program for Linguistic Theory. In *The View from Building* 20. Essays in Honor of Sylvian Bromberger, ed. K. Hale and J. Keyser. Cambridge, Mass.: MIT Press.
- Cinque, G. 1993. A Null Theory of Phrase and Compound Stress. In *Linguistic Inquiry* 24/2, 239-298.
- Donaldson, B.C. 1993. A Grammar of Afrikaans. Berlin: Mouton de Gruyter.
- Haftka, B. 1994. Wie positioniere ich meine Position? Überlegungen zu funktionalen Phrasen im deutschen Mittelfeld. In Was determiniert Wortstellungsvariation?, ed. B. Haftka, 139-159. Opladen: Westdeutscher Verlag.
- Haegeman, L. 1995. The Syntax of Negation. Cambridge: University Press.

- Haider, H. 1993. Deutsche Syntax- generativ. Vorstudien zur Theorie einer projektiven Grammatik. Tübingen: Narr.
- Haider, H. 1997. Projective Economy. On the Minimal Functional Structure of the German Clause. In German: syntactic problems - problematic syntax, ed. W. Abraham and E.v. Gelderen, 83-103. Tübingen: Max Niemeyer.
- Haider, H. and I. Rosengren 1998. Scrambling. In Sprache und Pragmatik 49, 1-104.
- Jacobs, J. 1993. Integration. In Wortstellung und Informationsstruktur, ed. M. Reis, 63-116. Tübingen: Narr.
- Kayne, R. 1994. The antisymmetry of syntax. MIT Press, Cambridge, Massachusetts.
- Molnárfi, L. 2000. Focus and Antifocus in Afrikaans and West-Germanic In Proceedings of the Discourse Anaphora and Reference Resolution Conference (DAARC2000), ed. P. Baker, A. Hardie, T. Mcenery and A. Siewierska. UCREL Technical Papers 12, 223-237.
- Molnárfi, L. (2001). Die Negationsklammer im Afrikaans Mehrfachnegation aus formaler und funktionaler Sicht. In On formal German(ic) Typology, ed. W. Abraham, C.J.-W. Zwart. Linguistik Aktuell/Linguistics Today. Amsterdam: John Benjamins.
- Ouhalla, J. 1993. Negation, focus and tense: the Arabic maa and laa. In *Rivista di Linguistica* 53/2, 275-300
- Pauwels, J. L. 1958. Het dialect van Aarschot en omstreken. Brussel: Belgisch Interuniversitair Centrum voor Neerlandistiek. (=Bouwstoffen en studiën voor de geschiedenis van het Nederlands, 5/1)
- Ponelis, F. 1993. The Development of Afrikaans. Frankfurt am Main: Peter Lang. (=Duisburger Arbeiten zur Sprach- und Kulturwissenschaft 18)
- Reinhart, T. 1976. The Syntactic Domain of Anaphora. Doctoral Dissertation. Cambridge, Mass.: MIT Press.
- Reuland, E. & W. Kosmeijer 1988. Projecting inflected verbs. In Groninger Arbeiten zur germanistischen Linguistik 29, 88-113.
- Rizzi, L. 1996. Residual Verb Second and the Wh-Criterion. In *Parameters and Functional Heads*, ed. A. Belletti and L. Rizzi, 63-90. Oxford: Oxford University Press.
- Rochemont, M. 1986. Focus in Generative Grammar. Amsterdam: Benjamins.
- Rosengren, I. 1993. Wahlfreiheit mit Konsequenzen Srcambling, Topikalisierung und FHG im Dienste der Informationssstrukturierung. In Wortstellung und Informationssstruktur, ed. M. Reis, 251-312. Tübingen: Narr.
- Selkirk, E.O. 1984. Phonology and Syntax. The Relation between Sound and Structure. Cambridge.
- Van der Wouden, T. 1996. Negative Contexts. Collocation, polarity and multiple negation. London and New York: Routledge.
- Wasow, Th. 1997. End-weight from the Speaker's Perspective. In *Journal of Psycholinguistic* Research 263, 347-361.
- Weiß, H. 1998. Syntax des Bairischen. Studien zur Grammatik einer natürlichen Sprache. Tübingen: Niemeyer.
- Weiß, H. 1999. Duplex negatio non semper affirmat: a theory of double negation in Bavarian. In *Linguistics* 37/5, 818-846.
- Weiß, H. 2000. Information Structure Meets Syntax. On Argument Order and Case Morphology in Bavarian. This volume.
- Zwart, J.-W. 1993. Dutch Syntax. A Minimalist Approach. Ph.D. Thesis, University of Groningen.