

Reducing Binding to Agree

Johan Rooryck (LUCL)
Guido Vanden Wyngaerd (CRISSP/HUB/K.U.Leuven)

Outline

1. Central assumptions	1
2. The Proposal	1
3. Absence of Principle B Effects (APBE).....	3
4. The Syntax of Simplex Reflexives	8
5. Self-Reflexives as Floating Quantifiers	13
6. Reflexives in PPs.....	17
7. Conclusion	19

1. CENTRAL ASSUMPTIONS

- SMT: the grammar contains no rules or principles specifically designed to derive the distribution and reference of anaphors and pronouns.
- Goal: to develop an analysis of the distribution of anaphors and pronouns that strictly makes use of mechanisms and principles that are independently needed in the grammar.
- Traditional Binding Theory:
BT(A) → coindexation of anaphor and antecedent → agreeing φ -features.

- (1)
- John_i likes himself_i.
 - Mary_i likes herself_i.
 - The girls_i like themselves_i.

- Our proposal:
 - Agree → agreeing φ -features
 - Reflexive = probe, antecedent = goal
 - Referential identity is a consequence of Agree
- Variation in binding relationships is determined by
 - the syntactic configuration (simplex vs complex reflexives)
 - the morphological inventory of any given language (DM: the syntax manipulates features, lexical items are inserted post-syntactically)

2. THE PROPOSAL

2.1. Syntax

- (2) *φ -features*
PERSON: 1, 2, 3
NUMBER: sg, pl
GENDER: masc, fem, neuter
- (3) *Syntax of Reflexive Relationships*
- Reflexive pronouns enter the derivation with (interpretable but) unvalued features (universally) (see also Reuland 2005, 2011, Heintz 2008, Hicks 2009).
 - These features are valued through an Agree relationship with the antecedent.

- c. Agree does not copy feature values, but causes feature values to be shared by probe and goal (cf. Frampton & Gutmann 2000, 2006)
- (4) *Agree*
- Agree involves a probe α that has one or more unvalued features and a goal β that has matching (i.e. identical) valued features.
 - Agree is an asymmetric feature valuation operation that values the features of α with the features of β at a distance in a local domain.
 - α c-commands β and there is no potential alternative goal γ such that α asymmetrically c-commands γ , and γ asymmetrically c-commands or dominates β .
- (5)
- | | | |
|----|---------------------|---------------------------------------|
| a. | {P:3, N:sg, G:m} | lexically valued features (e.g. goal) |
| b. | {P:_, N:_, G:_} | unvalued features (probe) |
| c. | {P:3*, N:sg*, G:m*} | features valued after Agree (probe) |

➤ What with c-command?

- Low Nominative Hypothesis (Sigurðsson 2006)
- Goal may c-command probe (Neeleman & Van de Koot 2002, Adger 2003, Von Stechow 2005, Zeijlstra 2008, Baker 2008, Hicks 2009)
- ✓ Simplex anaphors start out in a configuration where traditional c-command relationships are reversed, i.e. where the anaphor c-commands its antecedent.
- ✓ Complex anaphors move to a position c-commanding their antecedent.

➤ An example:

- (6)
- | | | | | |
|----|-----------------------|-------|----------------------|----------|
| a. | Johannes _i | liebt | sich _{i/*i} | [German] |
| | Johannes | loves | himself | |
| b. | Johannes _i | liebt | ihn _{*i/j*} | |
| | Johannes | loves | him | |

- (7) [_{VP} [_{DP2} {P:_, N:_, G:_}]] [_{VP} [_{DP1} {P:3, N:sg, G:m}]] [_{VP} V [_{DP2} ~~{P:_, N:_, G:_}~~]]]]
- | | | |
|------|----------|-------|
| sich | Johannes | liebt |
|------|----------|-------|

Agree →

- [_{VP} [_{DP2} {P:3*, N:sg*, G:m*}]] [_{VP} [_{DP1} {P:3, N:sg, G:m}]] [_{VP} V [_{DP2} ~~{P:3*, N:sg*, G:m*}~~]]]]
- | | | |
|------|----------|-------|
| sich | Johannes | liebt |
|------|----------|-------|

- (8) [_{VP} [_{DP1} {P:3, N:sg, G:m}]] [_{VP} V [_{DP2} {P:3, N:sg, G:m}]]]]
- | | | |
|----------|-------|-----|
| Johannes | liebt | ihn |
|----------|-------|-----|

➤ The interface levels can distinguish the output of (7) (feature values shared as a result of Agree) from (8) (lexically determined feature values) (Frampton & Gutmann 2000, 2006)

2.2. *Morphology*

- (9)
- | | | | |
|----|------------------|---|----------------------------|
| a. | {P:3*} | ↔ | sich / ____ |
| b. | {P:3, N:sg, G:m} | ↔ | ihn / ____ accusative Case |

(10) *Subset Principle* (Halle 1997:428)

The phonological exponent of a Vocabulary item is inserted into a morpheme in the terminal string if the item matches all or a subset of the grammatical features specified in

the terminal morpheme. Insertion does not take place if the Vocabulary item contains features not present in the morpheme. Where several Vocabulary items meet the conditions for insertion, the item matching the greatest number of features specified in the terminal morpheme must be chosen.

2.3. *Semantic interpretation*

- a DP that has shared feature values, like DP₂ in (7), is interpreted as referentially dependent on the DP it shares its features with (DP₁ in (7))
- two DPs that have lexically specified φ -features, as in (8) receive a default interpretation of disjoint reference.

3. ABSENCE OF PRINCIPLE B EFFECTS (APBE)

3.1. *What is it?*

- (11) a. Jan_i heeft zich_{i/*i} gewassen. [Standard Dutch]
 Jan has REFL washed
 'Jan washed himself.'
 b. Jan_i heeft hem_{*i/i} gewassen.
 'Jan washed him.'

- (12) a. Ik_i heb me_i gewassen. [Standard Dutch]
 'I washed myself.'
 b. Jan_i heeft me_{*i/i} gewassen.
 'Jan washed me.'

- (13) a. Jij_i heb je_{i/*i} gewassen. [Standard Dutch]
 'You washed yourself.'
 b. Jan_i heeft je_{*i/i} gewassen.
 'Jan washed you.'

- Basic intuition: 3P contrasts with 1/2P because there is a dedicated reflexive form for 3P that is lacking in 1/2P:

- (14) 1 me *mich [Standard Dutch]
 2 je *jich
 3 hem zich

(15) *Absence of Principle B Effect (APBE)*

Pronouns behave like anaphors when a dedicated class of reflexive pronouns is lacking. (cf. Pica 1984, Bouchard 1983:58ff; 1985, Burzio 1989a, 1989b, 1991, 1992, 1996). In such a case, pronouns function as 'elsewhere' forms (Déchaine & Manfredi 1994).

3.2. *Possessive pronouns*

- (16) a. They like [_{DP} each other's bags].
 b. He likes [_{DP} his dog].

- (17) a. Hon_i ser sin_{i/*j} man. [Swedish]
b. Hon_i ser hennes_{*i/j} man.
'She sees her husband.'
- (18) a. Ioannes_i sororem suam_{i/*j} vidit. [Latin; Bertocchi & Casadio 1980]
b. Ioannes_i sororem eius_{*i/j} vidit.
'Ioannes saw his sister.'
- (19) a. On_i uze rasskazal mne o svoej_{i/*j} zizni. [Russian; Timberlake 1979]
b. On_i uze rasskazal mne o ego_{*i/j} zizni.
'He had already told me about his life.'
- (20) a. Jørgen_i elsker sin_{i/*j} kone. [Danish]
Jørgen loves self's wife
b. Jørgen_i elsker hans_{*i/j} kone.
Jørgen loves self's wife
- (21) a. *De_i elsker sine_i koner. [Danish]
They love self's wives
b. De_i elsker deres_{i/j} koner.
They love their wives

3.3. *Languages without dedicated simplex reflexive forms*

- (22) a. Max_i hâld him_i/^{*}himsels_i. [Frisian]
Max behaves him/himself
'Max behaves himself.'
b. Max_i hatet himsels_i/^{*}him_i.
Max hates himself/him
'Max hates himself.'
- (23) a. Max_i gedraagt 'em_i/^{*}z'n eigen_i. [Flemish Brabant Dutch]
Max behaves him/his own
'Max behaves himself.'
b. Max_i haat z'n eigen_i/^{*}em_i.
Max hates his own/him
'Max hates himself.'

3.4. *A Distributed Morphology account*

- DM (Halle & Marantz 1993, Harley & Noyer 1999) allows us to account for the APBE.
- Lexical insertion occurs postsyntactically, and it is the process that provides morphosyntactic features with a phonological expression.
 - Vocabulary items specify a relation between a morpheme (i.e. a feature bundle) and a phonological exponent, as well as the context where that phonological string may be inserted.
 - Insertion rules are ordered, subject to the Elsewhere Principle in (24):
- (24) *Elsewhere Principle* (Anderson 1992:132)
Application of a more specific rule blocks that of a later more general one

3.4.1. German

(25)

German	nonreflexive			reflexive
	nominative	dative	accusative	
1sg	ich	mir	mich	
2sg	du	dir	dich	
3sg.masc	er	ihm	ihn	sich
3sg.fem	sie	ihr	sie	
3sg.neut	es			
1pl	wir	uns		
2pl	ihr	euch		
3pl.masc	sie	ihnen	sie	sich
3pl.fem				
3pl.neut				

(26) *Insertion Rules*

- a. {P:1, N:sg} ↔ ich / ___ nominative Case
- b. {P:1(*), N:sg(*)} ↔ mir / ___ dative Case
- c. **{P:1(*), N:sg(*)}** ↔ **mich / ___ accusative Case**
- d. {P:2, N:sg} ↔ du / ___ nominative Case
- e. {P:2(*), N:sg(*)} ↔ dir / ___ dative Case
- f. {P:2(*), N:sg(*)} ↔ dich / ___ accusative Case
- g. {P:1, N:pl} ↔ wir / ___ nominative Case
- h. {P:1(*), N:pl(*)} ↔ uns / ___ accusative Case
- i. {P:2(*), N:pl(*)} ↔ euch / ___ accusative Case
- j. **{P:3*}** ↔ **sich**
- k. {P:3, N:sg, G:m} ↔ er / ___ nominative Case
- l. **{P:3, N:sg, G:m}** ↔ **ihn / ___ accusative Case**
- m. {P:3, N:sg, G:m} ↔ ihm / ___ dative Case
- n. {P:3, N:pl} ↔ ihnen / ___ dative Case
- o. {P:3, N:sg, G:n} ↔ es
- p. {P:3} ↔ sie
- q. elsewhere ↔ ihr

(27) a. Ich liebe mich. [German]

I love myself

b. Johannes liebt mich.

Johannes loves me

(28) a. $[_{VP} [_{DP2} \{P:1^*, N:sg^*, G:0^*\}] [_{VP} [_{DP1} \{P:1, N:sg, G:0\}] [_{VP} V [_{DP2} \{P:1^*, N:sg^*, G:0^*\}]]]]]$
mich ich liebe

b. $[_{VP} [_{DP1} \{P:3, N:sg, G:m\}] [_{VP} V [_{DP2} \{P:1, N:sg, G:0\}]]]$
Johannes liebt mich

→ (26c) applies

(29) a. Johannes_i liebt sich_{i/*j}. [German]

Johannes loves himself

b. Johannes_i liebt ihn_{*i/j}.

Johannes loves him

(30) $[_{VP} [_{DP2} \{P:3^*, N:sg^*, G:m^*\}] [_{VP} [_{DP1} \{P:3, N:sg, G:m\}] [_{VP} V [_{DP2} \{P:3^*, N:sg^*, G:m^*\}]]]]]$
 sich Johannes liebt
 → (26j) applies

(31) $[_{VP} [_{DP1} \{P:3, N:sg, G:m\}] [_{VP} V [_{DP2} \{P:3, N:sg, G:m\}]]]$
 Johannes liebt ihn
 → (26l) applies

3.4.2. Brabant Dutch

(32)

Brabant Dutch	nonreflexive				reflexive	
	subject form		object form		simplex	complex
	strong	weak	strong	weak		
1sg	ik	‘k	mij	me	m’n eige	
2sg	gij	de	u		uw eige	
3sg.masc	hij	‘m	hem	‘m	z’n eige	
3sg.fem	zij	ze	haar	‘r	‘r eige	
3sg.neut	het	‘t	het	‘t	z’n eige	
1pl	wijle	we	ons		ons eige	
2pl	gijle		ulle		ullen eige	
3pl	zij	ze	hun		hun eige	

(33) Jan_i heed ‘m_{i/j} gewasse. [Flemish Brabant Dutch]
 Jan has him washed.
 ‘Jan washed him(self).’

(34) $\{P:3(*), N:sg(*), G:m(*)\} \leftrightarrow$ ‘m / ___ accusative Case, weak

3.5. Competition among insertion rules

➤ Diachronic and synchronic relationships between reflexive systems:

	S1	S2	S3
reflexive meaning	pronoun	pronoun + reflexive	reflexive
nonreflexive meaning	pronoun	pronoun	pronoun

➤ These relationships become apparent in

- diachronic evolutions
- L1 acquisition

3.5.1. Diachronic evolutions

➤ English (Penning 1875, Farr 1905, Visser 1963, Mitchell 1985, van Gelderen 2000, Ogura 2001, Keenan 2002, Lange 2006, Sinar 2006)

	S1	S2	S3
English	before 1150	1150-1500	after 1500
reflexive meaning	hine	hine + hine selfne	himself
nonreflexive meaning	hine	hine	him

- (35) a. Wyp þe tokene he gan hym blesse. [Middle English]
With the token he began to bless himself
'With the token he began to bless himself.'
(Robert Mannyng, *Handlyng Synne*, line 3875, quoted in Keenan 2002)
- b. Hys ry3t hand vp he lyfte and blessed hym-self stedfastly.
His right hand up he lifted and blessed himself steadfastly
'He lifted his right hand up and blessed himself steadfastly.'
(Robert Mannyng, *Handlyng Synne*, line 3588, quoted in Keenan 2002)

- In S2, pronouns and *self*-forms coexist for the expression of reflexive meaning. *Self*-forms are analysed as syntactically complex DPs (cf. Sinar 2006).
- In S3, *self*-forms cease to be syntactically compositional: they are grammaticalized as reflexives (cf. Sinar 2006). Pronouns are no longer used as reflexives, Principle B effects arise.
- Grammaticalisation = loss of syntactic complexity → integration into the pronominal paradigm → competition for insertion.

3.5.2. L1 acquisition

English	S1	S2	S3
	below 3	3-8 yrs	8 and older
reflexive meaning	her(self)	her + herself	herself
nonreflexive meaning	her(self)	her	her

- Delay of Principle B Effect (DPBE):
 - English (Jakubowicz 1984, Chien & Wexler, 1990; Grodzinsky & Reinhart, 1993; Thornton & Wexler, 1999)
 - Dutch (Koster 1993, Philip and Coopmans 1996)
 - Russian (Avrutin & Wexler, 1992)

- (36) a. Sue_i thinks that Sally_j saw her_{i/j} [English child language]
b. Sue_i thinks that Sally_j saw herself_{j/*i}

- Clitic Exemption Effect (CEE, Baauw 1999):
 - Italian (McKee 1992)
 - French (Jakubowicz 1984, Hamann, Kowalski & Philip 1997, Hamann 2002)
 - Spanish (Padilla 1990, Baauw, Escobar & Philip 1997)
 - Catalan (Escobar & Gavarró 2001).

- (37) Gianni_i lo_{i/j} asciuga [Italian child and adult language]
John him-cl dries
'John dries him.'

- Additional languages with Exemption Effect (EE)
 - German (Ruigendijk 2007)
 - Icelandic (Sigurjónsdóttir & Hyams 1990)

(38)

	Dutch		German		Icelandic	
	non-reflexive	reflexive	non-reflexive	reflexive	non-reflexive ACC/DAT/GEN	reflexive ACC/DAT/GEN
1	me	me	mich	mich	mig/mér/mín	mig/mér/mín
2	je	je	dich	dich	þig/þér/þín	þig/þér/þín
3	hem	zich	ihn	sich	hann/honum/hans	sig/sér/sín

- DPBE is due to the fact that it may take a while before the child recognizes pronouns and anaphors as forming part of the same pronominal system, i.e. as competing for insertion.
- (C)EE is explained by the fact that morphosyntax in certain languages makes pronouns more easily recognizable as belonging to a pronominal paradigm, and therefore as competing for insertion.

4. THE SYNTAX OF SIMPLEX REFLEXIVES

4.1. Introduction

- *zich* is a body part, and has the syntax of constructions of inalienable possession.

- (39) a. Milo heeft zich bezeerd.
Milo has REFL hurt
'Milo hurt himself.'
- b. — [bezeren [RP [DP₁ zich_{Possessum}] [R [DP₂ Milo_{Possessor}]]]]
hurt REFL Milo

- *zich* is merged as the Possessum in a possessive constituent RP (Relator Phrase), that also hosts its antecedent, the Possessor *Milo*.
- The Possessum (*zich*) is merged in a position which c-commands the Possessor (*Milo*) (Den Dikken 2006)
- RP is the internal argument of an unaccusative verb
- Possessum *zich* is the probe with unvalued φ -features entering an Agree relation with the Possessor-antecedent that it c-commands:

- (40) [VP V [RP [DP₁ {P:_, N:_, G:_} Possessum] [DP₂ {P:3, N:sg, G:m} Possessor]]]
bezeer zich Milo
- Agree →
- [VP V [RP [DP₁ {P:3*, N:sg*, G:m*} Possessum] [DP₂ {P:3, N:sg, G:m} Possessor]]]
bezeer zich Milo

4.2. Support for the possessive analysis

4.2.1. A double alternation

- (39a) alternates with an overtly possessive construction (41a), for which we propose the same unaccusative syntax (41b):

- (41) a. Milo heeft zijn been bezeerd.
Milo has his leg hurt
'Milo hurt his leg.'
- b. — [VP bezeren [RP zijn been Milo]] (unaccusative)
hurt his leg Milo

- (39a) also alternates with a nonpossessive construction, for which we propose the transitive syntax (42b):

- (42) a. Milo heeft Marie bezeerd.
Milo has Marie hurt
'Milo hurt Marie'
- b. [DP Milo] [VP bezeren [DP Marie]] (transitive)
Milo hurt Marie

- The complex reflexive *zichzelf* occurs in the transitive construction (42):

- (43) a. Milo heeft zichzelf bezeerd.
Milo has refl.self hurt
'Milo hurt himself.'
- b. [DP Milo] [VP bezeren [DP zichzelf]]
Milo hurt refl.self

4.2.2. Distributional arguments

- The possessive/unaccusative configurations (39) and (41) behave systematically alike, and behave systematically different from the transitive configurations (42)/ (43).

1. Cause-PPs occur with the unaccusative configuration, not the transitive one:

- (44) a. Milo heeft zich bezeerd aan de roestige spijker_{CAUSE}
Milo has REFL hurt on the rusty nail
'Milo hurt himself on the rusty nail.'
- b. Milo heeft zijn voet/arm/rug bezeerd aan de roestige spijker_{CAUSE}
Milo has his foot/arm/back hurt on the rusty nail
'Milo hurt his foot/arm/back on the rusty nail.'
- c. ?*Milo heeft Marina/zichzelf bezeerd aan de roestige spijker_{CAUSE}
Milo has REFL.self hurt on the rusty nail
'Milo hurt himself on the rusty nail.'

2. Instrument-PPs occur with the transitive configuration, not the unaccusative one:

- (45) a. *?Marina heeft zich/haar voer bezeerd met behulp van een roestige spijker_{INST}
‘Marina hurt herself/her foot by means of a rusty nail.’
b. Marina heeft Milo/zichzelf bezeerd met behulp van een roestige spijker_{INST}
‘Marina hurt Milo/herself by means of a rusty nail.’

3. Passive: the transitive configuration passivizes, the unaccusative one does not:

- (46) a. Milo werd verwond door Marie.
‘Milo was wounded by Marie.’
b. Er werden mensen verwond.
There were people wounded.
‘People were wounded.’
- (47) a. *Er werd zich verwond.
there was REFL wounded.
b. *Zijn voet werd verwond door Milo aan de roestige spijker.
His foot was wounded by Milo on the rusty nail
‘His foot was wounded by Milo on the rusty nail.’
c. *Er werden drie vingers verwond door Milo aan de roestige spijker.
There were three fingers wounded by Milo on the rusty nail.

4. Intentionality: the sentences with *zich* and body part DPs lack the intentional interpretation.

- (48) a. Maxine (un)intentionally killed Judith.
b. Maxine (*un)intentionally murdered Judith.
c. Many people *(un)intentionally died after drinking contaminated water.
- (49) a. Marina heeft Milo (on)opzettelijk bezeerd. (\pm *intentional*)
Marina has Milo (un)intentionally hurt
‘Marina hurt Milo (un)intentionally.’
b. Milo heeft zichzelf (on)opzettelijk bezeerd. (\pm *intentional*)
Milo has REFL.self (un)intentionally hurt
‘Milo hurt himself (un)intentionally.’
- (50) a. Milo heeft zich *(on)opzettelijk bezeerd aan de tafel. ($-$ *intentional*)
Milo has REFL (un)intentionally hurt on the table
‘Milo hurt himself against the table (un)intentionally.’
b. Milo heeft *(on)opzettelijk zijn voet bezeerd aan de tafel. ($-$ *intentional*)
Milo has (un)intentionally his foot hurt on the table
‘Milo hurt his foot against the table (un)intentionally.’

5. Strict and sloppy identity: in comparative deletion contexts, *zich* and body part DPs only allow a sloppy reading, while *zichzelf* has both a sloppy and a strict reading.

- (51) a. Bij dat ongeval heeft zij zich erger gekwetst dan Peter. (sloppy)
In that accident has she REFL more.seriously hurt than Peter
‘In that accident, she hurt herself more seriously than Peter hurt himself.’
*‘In that accident, she hurt herself more seriously than Peter hurt her.’ (*strict)
b. Bij dat ongeval heeft zij haar benen erger gekwetst dan Peter. (sloppy)
In that accident has she her legs more.seriously hurt than Peter

- ‘In that accident, she hurt her legs more seriously than Peter hurt his legs.’
*‘ In that accident, she hurt her legs more seriously than Peter hurt her legs.’
- c. Zij heeft zichzelf erger gekwetst dan Peter.
she hurt REFL.self more seriously than Peter
‘She hurt herself more seriously than Peter hurt himself.’ (sloppy)
‘She hurt herself more seriously than Peter hurt her.’ (strict)
6. Duplication: *zichzelf* allows for duplication readings in Mme Tussaud’s contexts, while *zich* does not:

- (52) a. Ze zag zich in een griezelige hoek staan. (Reuland 2001:483)
she saw REFL in a creepy corner stand
‘She saw herself (=reflection) standing in a creepy corner.’
b. Ze zag zichzelf in een griezelige hoek staan.
she saw REFL.self in a creepy corner stand
‘She saw herself (=statue) standing in a creepy corner.’

- (53) a. Ringo heeft zich gestoten. (– duplication)
Ringo has REFL bumped
‘Ringo bumped (into something).’
b. Ringo heeft zijn voet gestoten. (– duplication)
Ringo has his foot bumped
‘Ringo stubbed his foot.’

- (54) a. Ringo heeft zichzelf gestoten. (± duplication)
Ringo has REFL bumped
‘Ringo hit himself.’
b. ?Ringo heeft Marie gestoten.
Ringo has Marie bumped
‘Ringo hit Marie.’

(55)

		transitive	unaccusative
<i>Syntax:</i>	Cause PP	*	√
	Instrument PP	√	*
	Passivisation	√	*
<i>Semantics:</i>	Intentionality	√	*
	Strict-sloppy ambiguity	√	*
	Duplication readings	√	*

4.2.3. Developing the unaccusative analysis

- Kayne (1993), Den Dikken (2006): The Possessor moves to the subject position of *have*. The Possesum receives accusative case from the P present inside *have*.

- (56) a. _____ T BE [RP [POSSESSUM] REL [PP P_{dativ} [POSSESSOR]]]
b. [POSSESSOR] T HAVE_{BE+R+P} [RP [POSSESSUM] R+P [PP P_{dativ} [POSSESSOR]]]

- (57) a. Liber est mihi. [Latin]
book.NOM is me.DAT

- ‘I have a book.’
b. I have a book.

➤ We propose a similar analysis for the case of inalienable possession:

- (58) a. Jan bezeert zich/zijn voet
Jan hurts REFL/his foot.
‘Jan hurts himself/his foot.’
b. _____ T [VP bezeer [RP [DP zich/zijn voet] R [PP P [DP Jan]]]]
c. Jan bezeert+R+P+T [VP bezeer+R+P [RP [DP zich/zijn voet] R+P [PP P [DP Jan]]]]

➤ (65a) involves a possessive RP as in (58b). The R+P head of the possessive RP raises and incorporates into the unaccusative verb, endowing it with accusative Case-licensing potential. The possessor undergoes inversion, raising to Spec, T with nominative Case.
➤ The ability to assign accusative Case is responsible for the selection of the perfect auxiliary in Dutch, i.e. *hebben* ‘have’ rather than *zijn* ‘be’:

- (59) Jan heeft/*is zich bezeerd
Milo has/is REFL hurt
‘Milo has hurt himself.’

4.3. Extending the analysis: inherently reflexive verbs

- (60) a. Marie gedraagt zich.
Marie behaves REFL
‘Marie behaves.’
b. *Marie gedraagt Jan.
‘Marie behaves Jan.’

- (61) _____ T [VP gedraag [RP [DP zich] R [PP P [DP Marie]]]]
behave refl M

➤ We expect *zich* to alternate with body part DPs in inherently reflexive configurations. This prediction is borne out:

(62)

Inherently reflexive verbs	<i>zich</i>	body part DP	other DP
Type 1: <i>gedragen</i> ‘to behave’	+	–	–
Type 2: <i>verreken</i> ‘to strain’	+	+	–
Type 3: <i>verzwikken</i> ‘to sprain’	–	+	–

- (63) a. Milo verrekte zich/een spier.
Milo pulled REFL/a muscle
‘Milo strained himself/Milo pulled a muscle.’
b. *Milo verrekte Marie/de veer.
Milo stretched Marie/the spring.

- (64) a. Milo verzwikte zijn enkel/*zich.
Milo sprained his ankle/REFL
‘Milo sprained his ankle.’
b. Milo verstuikte zijn voet/*zich.

- c. Milo twisted his foot/REFL
*Milo verzwikte/verstuikte de tafelpoot/Marie
'Milo strained/twisted the leg of the table/Marie.'

5. SELF-REFLEXIVES AS FLOATING QUANTIFIERS

5.1. General structure of the argument

- (65) a. John saw *himself* in the mirror.
b. John has *himself* been working on that problem.
c. The Dutch linguists have *all* been working on that problem.

- *Self*-reflexives as in (65a) are frequently built using an intensifier morpheme as in (65b).
- The properties of intensifiers match those of FQs such as *all* in (65c)
- In the analysis of FQs proposed by Doetjes (1997), the FQ is an adverbial that needs to bind a trace position. Put differently, a FQ needs to c-command its antecedent at some point in the derivation.
- *Self*-reflexives as in (65a) share the syntax of FQs: they raise to an adverbial position from which they c-command their antecedent.

- (66) Pete invited himself.

- (67) $[_{VP} [_{DP1} \{P:3, N:sg, G:m\}] [_{VP} V [_{DP2} \{P:_, N:_, G:_\}]]]$
Pete invited himself

Adjunction of DP₂ to vP →

- $[_{VP} [_{DP2} \{P:_, N:_, G:_\}] [_{VP} [_{DP1} \{P:3, N:sg, G:m\}] [_{VP} V [_{DP2} \{P:_, N:_, G:_\}]]]]$
himself Pete invited

Agree →

- $[_{VP} [_{DP2} \{P:3^*, N:sg^*, G:m^*\}] [_{VP} [_{DP1} \{P:3, N:sg, G:m\}] [_{VP} V [_{DP2} \{P:3^*, N:sg^*, G:m^*\}]]]]$
himself Pete invited

5.2. Morphological evidence

- Intensifiers appear in the morphological make-up of reflexives (König & Siemund 2000a,b,c)
- Examples: Albanian *vetë*, Arabic *nafs*, Japanese *zibun*, Mandarin *ziji*, Persian *xod*, and Turkish *kendi*.

- Malayalam *tanne* (from Jayaseelan 1988):

- (68) a. raaman awan-e **tanne** aṭicc-u.
Raman.Nom he.Acc *self* hit.Past
'Raman hit himself.'
b. raaman **tanne** pooy-i.
Raman.Nom *self* go.Past
'Raman himself went.'

5.3. *Intensifiers, FQs, anaphors: a syndrome of properties*

➤ The FQ-antecedent relation, the intensifier-antecedent relation and the complex reflexive-antecedent relation are all subject to the following four properties:

- obligatoriness
- c-command
- locality
- uniqueness

➤ *Obligatoriness*: there must be a suitable antecedent:

- (69) a. The children have all left.
b. *John has all left.
- (70) a. The caterers have gone home themselves.
b. *Mary has gone home themselves.

➤ *C-command*: the antecedent must c-command the floating quantifier:

- (71) a. *[The mother of my friends_i] has all_i left.
b. *John has all_i seen the boys_i.
- (72) a. *[The mother of my friends_i] has themselves_i left.
b. *John has themselves_i seen the boys_i.

➤ *Locality*: the antecedent must be local

- (73) a. *My friends_i think that I have all_i left.
b. *My friends_i think that I have themselves_i left.
- (74) a. *I all_i think that my friends_i have left.
b. * I themselves_i think that my friends_i have left.

➤ *Uniqueness*: no split antecedents.

- (75) Les enfants_i leur_j ont tous_{i/j/*i+j} parlé.
The children to-them have all talked
'All of the children talked to them.'
'The children talked to all of them.'
*All of the children talked to all of them.'

- (76) *John_i gave Mary_j themselves_{i+j} the book.

(77)

	Intensifiers	Floating Qs
Obligatoriness	+	+
C-command	+	+
Locality	+	+
Uniqueness	+	+

5.4. Analysis of FQs

- Doetjes (1992, 1997): the FQ is an adverb binding an empty category in argument position:

(78) $[_{DP} \text{ Les enfants}] \text{ ont } [_{VP} [_{FQ} \text{ tous } pro] [_{VP} \text{ les enfants}]]$ [French]
‘The children have all slept.’

- FQs show φ -feature agreement with their antecedent:

(79) a. (les livres) Pierre les a tous lus.
b. (les photos) Pierre les a toutes vues.
c. John ate the pizza himself/ *herself.

- A FQ has unvalued φ -features, and probes for a Goal in its c-command domain.

(80) a. My friends all laughed.
b. $[_{VP} [_{QP} \{P:_, N:_, G:_\}]] [_{VP} [_{DP} \{P:3, N:pl, G:m\}] v]]$
all my friends laughed
Agree →
 $[_{VP} [_{QP} \{P:3^*, N:pl^*, G:m^*\}]] [_{VP} [_{DP} \{P:3, N:pl, G:m\}] v]]$
all my friends laughed

- Deriving the properties of FQs
 - Obligatoriness follows from the need to value unvalued features
 - C-command, locality, and uniqueness follow from Agree.

5.5. Intensifiers

- Intensifiers are adjuncts with unvalued φ -features that need to be valued by a Goal in their c-command domain.

(81) a. John himself laughed.
b. $[_{VP} [_{DP} \{P:_, N:_, G:_\}]] [_{VP} [_{DP} \{P:3, N:sg, G:m\}] v]]$
himself John laughed
Agree →
 $[_{VP} [_{DP} \{P:3^*, N:pl^*, G:m^*\}]] [_{VP} [_{DP} \{P:3, N:pl, G:m\}] v]]$
himself John laughed

- Semantically, intensifiers like *zelf*, *himself* and *eux-mêmes* ‘themselves’ are quantifiers because of focus properties: they pick out an element from a contrast set (Eckardt 2001, Siemund 2000).
- The properties of *obligatoriness*, *c-command*, *locality* and *uniqueness* follow as they did for FQs.

5.6. Self-reflexives

- *Self*-anaphors have unvalued φ -features (see Reuland 2005, Heintz 2006, Hicks 2009).
- *Self*-anaphors raise to an adjoined position (vP or VP). They value their features by probing for a suitable Goal.

- *Self-anaphors* are pronouns turned into anaphors by adopting the syntax of FQs: they are binders rather than bindees.

(82) $[_{VP} [_{DP1} \{P:3, N:sg, G:m\}] [_{VP} V [_{DP2} \{P:_, N:_, G:_}\}]]$
 Pete invited himself

Adjunction of DP₂ to vP →

$[_{VP} [_{DP2} \{P:_, N:_, G:_}\}] [_{VP} [_{DP1} \{P:3, N:sg, G:m\}] [_{VP} V [_{DP2} \{P:_, N:_, G:_}\}]]]$
 himself Pete invited

Agree →

$[_{VP} [_{DP2} \{P:3^*, N:sg^*, G:m^*\}] [_{VP} [_{DP1} \{P:3, N:sg, G:m\}] [_{VP} V [_{DP2} \{P:3^*, N:sg^*, G:m^*\} self]]]]]$
 himself Pete invited

Raising of DP₁ and V (Johnson 1991, Koizumi 1995) to the TP domain →

$[_{TP} [_{DP1} \{P:3, N:sg, G:m\}] V [_{VP} [_{DP2} \{P:3^*, N:sg^*, G:m^*\}] [_{VP} [_{DP1} \{P:3, N:sg, G:m\}]]]]]$
 Pete invited himself
 $[_{VP} V [_{DP2} \{P:3^*, N:sg^*, G:m^*\}]]]$

- *Obligatoriness.*

No Goal available:

(83) a. *Himself smiled.
 b. $*[_{VP} [_{DP1} \{P:_, N:_, G:_}\}] [_{VP} V]$
 himself smiled

Feature mismatch:

(84) a. *I invited himself.
 b. $[_{VP} [_{DP2} \{P:_, N:_, G:_}\}] [_{VP} [_{DP1} \{P:1, N:sg, G:0\}] [_{VP} V [_{DP2} \{P:_, N:_, G:_}\}]]]]]$
 himself I invited

- *C-command: if the reflexive must c-command its antecedent, what rules out (85)?*

(85) *Himself invited Pete.

(86) $[_{VP} [_{DP1} \{P:_, N:_, G:_}\}] v [_{VP} V [_{DP2} \{P:3, N:sg, G:m\}]]]$
 himself invited Pete

- Heintz (2006): the Agree-relationship between the *v* head of *vP* and the object DP leaves no unvalued φ -features behind on DP₂. This renders the object DP inactive for further φ -feature agreement. As a result, the *self*-form in subject position cannot value its features and the derivation crashes.

(87) *[Pete's girlfriend] invited himself.

(88) $[_{VP} [_{DP3} \{P:_, N:_, G:_}\}] [_{VP} [_{DP1} [_{DP2} \{P:3, N:sg, G:m\}] D_1 [_{NP} \{P:3, N:sg, G:f\}]]] v+V]$
 himself Pete 's girlfriend invited
 $[_{VP} V [_{DP2} \{P:_, N:_, G:_}\}]]]$

- The complex reflexive cannot have its features valued by the DP2 (*Pete*), which is embedded in the subject DP1 (*Pete's girlfriend*) because of minimality, i.e. because there is a closer candidate for Agree.
- *Locality* is derived by assuming that the *self*-reflexive can only adjoin to its local vP or VP. No successive-cyclic movement is possible: once the reflexive has valued its features, it is inactive for further syntactic processes.

- (89) a. *John thought [that himself was the best]
b. *John believed [Mary to have invited himself]

➤ *Uniqueness*

- (90) Piet_i vertrouwde Jan_j zichzelf_{i/j/*i+j} toe.
Piet entrusted Jan refl.self prt
'Piet entrusted Jan with himself.'

- (91) [_{VP} [_{DP3} {P:3*, N:sg*, G:m*}]] [_{VP} [_{DP2} {P:3, N:sg, G:m}]] [_{VP} [_{DP1} {P:3, N:sg, G:m}]]
zichzelf Jan Piet
[_{VP} [_{DP2} {P:3, N:sg, G:m}]] V [_{DP3} {P:3*, N:sg*, G:m*}]]
toevertrouwde

- the indirect object and the reflexive adjoin to *v*P (scrambling). The reflexive probes, and values its features, either with those of the subject DP₁ or with those of the indirect object DP₂.

6. REFLEXIVES IN PPS

6.1. Introduction

- (92) a. Peter keek achter zich.
Peter looked behind REFL
'Peter looked behind himself.'
b. Piet keek naar zichzelf in de spiegel.
Piet looked at REFL.SELF in the mirror
'Piet looked at himself in the mirror.'

- Complex reflexives: the floating quantifier analysis extends to these cases. The *self*-part of the complex reflexive makes it raise covertly to an adjoined position from where it c-commands its antecedent.
- Simplex reflexives: no analysis in terms of a possessive R/PP as in (93), but one as in (94), with the reflexive merged as the complement of P:

- (93) [_{VP} Peter [_{VP} keek [_{PP} achter [_{RP} zich R [_{PP} P Peter]]]]]

- (94) [_{PP} P zich]

- How does the reflexive reach a position from which it c-commands its antecedent?

6.2. Two kinds of PPs: spatial vs functional

- (95) a. Jan stond *aan/voor* het hek. (+locative)
'Jan stood at/in front of the gate'
b. Karen sprong *over* het hek. (+locative)
'Karen jumped over the gate.'
- (96) a. Jan denkt *aan* zijn vakantie. (-locative)
'Jan is thinking of his vacation.'
b. Karen praat met Piet *over* het weer. (-locative)
'Karen is talking with Piet about the weather.'

➤ The following generalizations hold (cf. Vat 1980, Koster 1985, De Vries 1999):

- (97) a. *zich* can occur as a prepositional complement when the preposition has a spatial meaning.
b. *zich* cannot occur as a prepositional complement when the preposition is functional.
c. *zichzelf* can occur in the complement of any preposition.
- (98) a. Karel praatte met Marie *over* zich*(zelf). (-locative)
'Karel talked with Marie about himself.'
b. Karel heeft *op* zich*(zelf) geschoten. (-locative)
'Karel shot at himself.'
c. Karel vecht *voor* zich*(zelf). (-locative)
'Karel fights for himself.'
- (99) a. Fred luisterde naar zich*(zelf) op de radio.
Fred listened to REFL on the radio
b. Fred beluisterde zich(zelf) op de radio.
Fred PRT-listened REFL on the radio
'Fred listened to himself on the radio.'
- (100) a. Piet keek naar zich*(zelf) in de spiegel.
Piet looked at REFL in the mirror
b. Piet bekeek zich(zelf) in de spiegel.
Piet PRT-looked REFL in the mirror
'Piet looked at himself in the mirror.'

6.3. Analysis

➤ Functional PPs are sisters of V, spatial PPs are left-adjoined to vP (Barbiers 1995).

- (101) a. $[_{VP} DP v [_{VP} V [_{PP} P \textit{zich}(\textit{zelf})]]]$ (functional PP)
b. $[_{VP} [_{PP} P \textit{zich}(\textit{zelf})] [_{VP} DP [_{VP} V]]]$ (spatial/temporal PP)

➤ In (101a), there is no way for the reflexive to c-command its antecedent. Therefore, the probe *zich* cannot find an appropriate goal and the derivation crashes.

(102) * $[_{VP} [_{DP1} \{P:3, N:sg, G:m\}] \nu [_{VP} V [_{PP} P [_{DP2} \{P:_, N:_, G:_}\}]]]]$
Fred luisterde naar zich

➤ In (101b), the reflexive c-commands out of its PP.

(103) a. Peter keek achter zich.
'Peter looked behind himself.'
b. $[_{VP} [_{PP} P [_{DP2} \{P:3^*, N:sg^*, G:m^*\}]] [_{VP} [_{DP1} \{P:3, N:sg, G:m\}] [_{VP} V]]]]$
achter zich Peter keek

➤ Barbiers (1995:15ff) presents evidence suggesting that c-command out of a PP is possible. The evidence includes Condition C effects, quantifier binding and negative polarity items.

(104) a. *We geven aan hem_i een boek over Jan_i.
'We gave to him a book about Jan.'
b. *We hebben bij hem_i Jan_i vader ontmoet.
'We met Jan's vader at his place.'
c. *It seems to him_i that John_i is sick.

(105) a. In elke schrijver zijn boek las Marie dat ie huwelijksproblemen had.
'In each writer's book Marie read that he had marital problems.'
b. Van elke man wist ik wat ie dacht.
'Of each man I knew what he thought.'
c. John gave candy to every boy on his birthday.
d. She spoke to each employee about his paycheck.

(106) a. Op *niemand* heeft Jan ook maar iets aan te merken.
on no-one has Jan anything at to mark
'Jan has no qualms with anyone.'
b. Op *geen enkel idee* was ze ook maar een dag trots geweest.
'She had not been proud of any idea for a single day.'

➤ Technical implementation:
○ redefine c-command as in Barbiers (1995:22) (in terms of 'a (connected) path of left branches')
○ (covert) PP-internal movement of the complement of P to a PP-internal specifier position (possibly of a functional head) (Van Riemsdijk 1978, Kayne 1994).

(107) $[_{PP} DP_i [_{PP} P \overline{DP}_i]]$

7. CONCLUSION

- SMT: the grammar contains no rules or principles specifically designed to derive the distribution and reference of anaphors and pronouns.
- Our analysis of the distribution of anaphors and pronouns uses mechanisms and assumptions that are independently needed in the grammar:
 - Absence of Principle B Effects: Agree + Elsewhere Principle
 - Simplex reflexives (*zich*): Agree + syntax of inalienable possession
 - Self-reflexives: Agree + syntax of floating quantifiers

- Reflexives in PPs: Agree + structural difference between functional & lexical PPs

References

- Adger, David. 2003. *Core Syntax. A Minimalist Approach*. Oxford: Oxford University Press.
- Avrutin, Sergei and Ken Wexler. 1992. Development of Principle B in Russian: coindexation at LF and coreference. In *Language Acquisition* 2:259-306.
- Baauw, Sergio. 1999. The role of the clitic-full pronoun distinction in the acquisition of pronominal coreference. In *Proceedings of BUCLD 23*, ed. Annabel Greenhill, Heather Littlefield and Cheryl Tano, 32-43. Somerville, Massachusetts: Cascadia Press.
- Baauw, Sergio, Maria Escobar and William Philip. 1997. A delay of principle B effect in Spanish speaking children: the role of lexical feature acquisition. In *Proceedings of the GALA 97 Conference on Language Acquisition*, ed. Antonella Sorace, Caroline Heycock and Richard Shillcock, 16-21. Edinburgh: Edinburgh University Press.
- Baker, Mark. 2008. *The Syntax of Agreement and Concord*. Cambridge: Cambridge University Press.
- Barbiers, Sjef. 1995. The syntax of interpretation. PhD dissertation, Leiden, HIL.
- Bertocchi, Alessandra and Claudia Casadio. 1980. Conditions on anaphora: an analysis of reflexive in Latin. In *Papers on Grammar*, ed. Gualtiero Calboli, 1-46. Bologna: CLUE.
- Burzio, Luigi. 1989a. On the morphology of reflexives and impersonals. In *Proceedings of LSRL XIX*, ed. Christiane Laufer and Terrell Morgan, 399-414. Amsterdam: John Benjamins.
- Burzio, Luigi. 1989b. On the non-existence of disjoint reference principles. In *Rivista di Grammatica Generativa* 14:3-27.
- Burzio, Luigi. 1991. The morphological basis of anaphora. In *Journal of Linguistics* 27:81-105.
- Burzio, Luigi. 1992. On the morphology of reflexives and impersonals. In *Theoretical Analyses in Romance Linguistics*, ed. Christine Laufer and Terrell Morgan, 399-414. Amsterdam: John Benjamins.
- Burzio, Luigi. 1996. The role of the antecedent in anaphoric relations. In *Principles and Parameters in Comparative Grammar*, ed. Robert Freidin, 1-45. Cambridge, Massachusetts: MIT Press.
- Chien, Yu-Chin and Ken Wexler. 1990. Children's knowledge of locality conditions in binding as evidence for the modularity of syntax and pragmatics. In *Language Acquisition: A Journal of Developmental Linguistics* 1:225-295.
- Dechaine, Rose-Marie and Victor Manfredi. 1994. Binding domains in Haitian. In *Natural Language and Linguistic Theory* 12:203-257.
- Dikken, Marcel den. 2006. *Relators and Linkers*. Cambridge, Massachusetts: MIT Press.
- Doetjes, Jenny. 1992. Rightward floating quantifiers float to the left. In *The Linguistic Review* 9:313-332.
- Doetjes, Jenny. 1997. Quantifiers and Selection. Doctoral dissertation. Leiden.
- Eckardt, Regine. 2001. Reanalysing 'selbst'. In *Natural Language Semantics* 9:371-412.
- Escobar, Linda and Anna Gavarro. 2001. The acquisition of clitics and strong pronouns in Catalan. In *Clitics in Phonology, Morphology and Syntax*, ed. Birgit Gerlach and Janet Grijzenhout, 161-180. Amsterdam: John Benjamins.
- Farr, James. 1905. *Intensives and Reflexives in Anglo-Saxon and Early Middle English*. Baltimore: J.H. Furst.
- Frampton, John and Sam Gutmann. 2000. Agreement is feature sharing. Ms. Northeastern University, Boston.
- Frampton, John and Sam Gutmann. 2006. How sentences grow in the mind. In *Agreement Systems*, ed. Cedric Boeckx, 121-157. Amsterdam: John Benjamins.
- Gelderen, Elly van. 2000. *A History of English Reflexive Pronouns: Person, Self, and Interpretability*. Amsterdam: Benjamins.

- Grodzinsky, Yosef and Tanya Reinhart. 1993. The innateness of binding and of coreference. In *Linguistic Inquiry* 24:69-101.
- Hamann, Cornelia. 2002. *From Syntax to Discourse. Pronominal Clitics, Null Subjects and Infinitives in Child Language*. Dordrecht: Kluwer.
- Hamann, Cornelia, Odette Kowalski and William Philip. 1997. The French 'delay of principle B' effect. In *BUCLD Proceedings 21*, ed. Elizabeth Hughes, Mary Hughes and Annabel Greenhill, 205-219. Somerville, Massachusetts: Cascadilla Press.
- Heinat, Fredrik. 2006. Probing phrases, pronouns, and binding. In *Lund Working Papers in Linguistics* 6:19-37.
- Hicks, Glyn. 2009. *The Derivation of Anaphoric Relations*. Amsterdam: John Benjamins.
- Jakubowicz, Celia. 1984. On markedness and binding principles. In *Proceedings of NELS 14*, ed. Charles Jones and Peter Sells, 154-182. Amherst: GLSA, University of Massachusetts.
- Jayaseelan, Karattuparambil Achuthan. 1988. Emphatic reflexive x-self. In *CIEFL Working Papers in Linguistics* 5-1:Hyderabad (India).
- Johnson, Kyle. 1991. Object positions. In *Natural Language and Linguistic Theory* 9:577-636.
- Kayne, Richard. 1993. Toward a modular theory of auxiliary selection. In *Studia Linguistica* 47:3-31.
- Keenan, Edward. 2002. Explaining the creation of reflexive pronouns in English. In *Studies in the History of the English Language: a Millennial Perspective*, ed. Donka Minkova and Robert Stockwell, 325-354. Berlin: Mouton de Gruyter.
- Koster, Charlotte. 1993. Errors in Anaphora Acquisition. Doctoral dissertation. Utrecht University.
- Koster, Jan. 1985. Reflexives in Dutch. In *Grammatical representation*, ed. Jacqueline Guéron, Hans-Georg Obenauer and Jean-Yves Pollock, 141-167. Dordrecht: Foris.
- König, Ekkehard and Peter Siemund. 2000a. Locally free self-forms, logophoricity, and intensification in English. In *English Language and Linguistics* 4:183-204.
- König, Ekkehard and Peter Siemund. 2000b. The development of complex reflexives and intensifiers in English. In *Diachronica* 17:39-84.
- König, Ekkehard and Peter Siemund. 2000c. Intensifiers and reflexives: a typological perspective. In *Reflexives: Forms and Functions*, ed. Zygmunt Frajzyngier and Tracy Curl, 41-74. Amsterdam: Benjamins.
- Lange, Claudia. 2006. *Reflexivity and Intensification in English: a Study of Texts and Contexts*. Frankfurt: Peter Lang Publishing.
- McKee, Cecile. 1992. A comparison of pronouns and anaphors in Italian and English language acquisition. In *Language Acquisition* 2:21-54.
- Neeleman, Ad and Hans van de Koot. 2002. The configurational matrix. In *Linguistic Inquiry* 33:529-574.
- Ogura, Michiko. 2001. Verbs used reflexively in Old and Middle English: a case of syntactic continuity and lexical change. In *Neuphilologische Mitteilungen* 102:23-36.
- Padilla, José. 1990. *On the Definition of Binding Domains in Spanish*. Dordrecht: Kluwer.
- Penning, Gerhard. 1875. *A History of the Reflective Pronouns in the English Language*. Bremen: Heinrich Frese.
- Philip, William and Peter Coopmans. 1996. The role of referentiality in the acquisition of pronominal anaphora. In *Proceedings of NELS 26*, ed. Kiyomi Kusumoto, 241-255. Amherst: GLSA, University of Massachusetts.
- Pica, Pierre. 1985. Liage et contiguïté. In *Recherches sur L'Anaphore*, ed. Jean-Claude Milner, 119-164. Paris: Université de Paris VII.
- Reuland, Eric. 2005. Agreeing to bind. In *Organizing Grammar. Studies in Honor of Henk van Riemsdijk*, ed. Hans Broekhuis, Norbert Corver et al., 505-513. Berlin: Mouton de Gruyter.
- Reuland, Eric. 2011. *Anaphora and Language Design*. Cambridge, Massachusetts: MIT Press.

- Rooryck, Johan & Guido Vanden Wyngaerd. 2011. *Dissolving Binding Theory*. Oxford: Oxford University Press.
- Ruigendijk, Esther. 2007. Reference assignment in German preschool children. In *Proceedings of GALA 2007*, ed. Anna Gavarró Algueró and M. João Freitas, 368-379. Cambridge: Cambridge Scholars Publishing.
- Safir, Ken. 2004. *The Syntax of Anaphora*. Oxford: Oxford University Press.
- Siemund, Peter. 2000. *Intensifiers in English and German*. London: Routledge Studies in Germanic Linguistics.
- Sigurðsson, Halldór. 2006. The nominative puzzle and the low nominative hypothesis. In *Linguistic Inquiry* 37:289-308.
- Sigurjónsdóttir, Sigríður & Nina Hyams. 1990. The development of 'long-distance anaphora': a cross-linguistic comparison with special reference to Icelandic. *Language Acquisition* 1, 57-93.
- Sinar, Beck. 2006. A History of English Reflexives. Doctoral dissertation. University of York.
- Stechow, Arnim Von. 2005. Temporal orientation of modals and attitudes (and covert temporal operators). Ms. Tübingen and Cornell.
- Thornton, Rosalind and Kenneth Wexler. 1999. *Principle B, VP Ellipsis and Interpretation in Child Grammars*. Cambridge, Massachusetts: MIT Press.
- Timberlake, Alan. 1979. Reflexivisation and the cycle in Russian. In *Linguistic Inquiry* 10:109-141.
- Vat, Jan. 1980. Zich en zichzelf. In *Linguistics in the Netherlands*, ed. Saskia Daalder and Marinel Gerritsen, 127-138. Amsterdam: North-Holland.
- Visser, Fredericus. 1963. *An Historical Syntax of the English Language*. Leiden: Brill.
- Vries, Mark de. 1999. Het schemergebied tussen pronomina en anaforen. In *Nederlandse Taalkunde* 4:125-160.
- Zeijlstra, Hedde. 2008. On the syntactic flexibility of formal features. In *The Limits of Syntactic Variation*, ed. Theresa Biberauer, 143-174. Amsterdam: John Benjamins.