

WHEN ONE IS NOT ENOUGH:
TWO CASE STUDIES OF
SYNTACTIC DOUBLING IN DUTCH DIALECTS

Olaf Koeneman & Marika Lekakou
University of Amsterdam & Meertens Institute
(joint work with Sjef Barbiers)

CASE STUDY 1 DOUBLING IN WH-QUESTIONS

1 Identical and non-identical doubling in colloquial Dutch

- | | | |
|-----|--|----------------------|
| (1) | Wie denk je wie ik gezien heb?
who think you who I seen have
'Who do you think I have seen?' | <i>Drenthe</i> |
| (2) | Wat denk je wie ik gezien heb?
what think you who I seen have | <i>Overijssel</i> |
| (3) | Wie denk je die ik gezien heb?
who think you REL.PRON I seen have | <i>North-Holland</i> |
| (4) | Wat denk je die ik gezien heb?
what think you REL.PRON I seen have | <i>Overijssel</i> |

The order of the doubling elements is fixed:

- | | | |
|-----|--|--|
| (5) | *Wie denk je wat ik gezien heb?
who think you what I seen have | |
| (6) | *Die denk je wie ik gezien heb?
REL.PRON think you who I seen have | |
| (7) | *Die denk je wat ik gezien heb?
REL.PRON think you what I seen have | |

(6) and (7) are not out because they are ill-formed questions:

- | | | |
|-----|---|--|
| (8) | Dit is de man wie ik denk die Jan gezien heeft. <i>Drenthe</i>
this is the man who I think REL.PRON Jan seen has
'This is the man Jan thinks I have seen.' | |
| (9) | *Dit is de man die ik denk wie Jan gezien heeft.
this is the man REL.PRON I think who Jan seen has | |

THE NULL HYPOTHESIS: All the constructions in (1) and (2) are amenable to a uniform treatment; they involve movement chains created in narrow syntax.

This is a break with analyses available in the literature:

A. DIRECT DEPENDENCY (van Riemsdijk 1982; McDaniel 1989; Beck & Berman 2000 *i.a.*): the highest WH-element is a base-generated expletive element indicating the scope of the lower WH-phrase. At LF, expletive replacement places the contentful WH-phrase in the highest SpecCP.

- No doubling and identical doubling → overt movement
- Non-identical doubling → covert movement

B. INDIRECT DEPENDENCY (Dayal 1994; Felser 2001, *i.a.*): There is no direct syntactic dependency between the two WH-elements. The highest one is the object of the matrix verb and semantically an operator over propositions whose restriction is provided by the entire embedded clause.

- No doubling and identical doubling → movement chain
- Non-identical doubling → no movement chain

The generalization (Barbiers 2006):

(10) In a syntactic movement chain, a higher chain link is not more specified than a lower chain link.

(11)	<i>Syntax:</i>	<i>Phonology:</i>
	(a) Full copying	(a) Spell out one chain link
	(b) Partial copying	(b) Spell out more than one chain link

Given (11), we expect four possibilities:

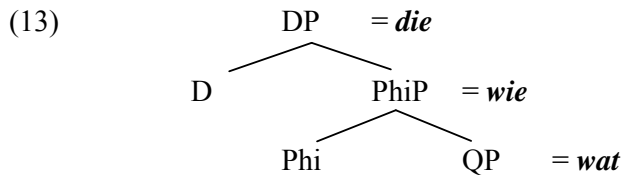
- (i) Full copying and both chain members are spelled out: identical doubling.
- (ii) Full copying, but (for some reason) only the higher chain member is spelled out: non-doubling.
- (iii) Partial copying and both chain members are spelled out: non-identical doubling.
- (iv) Partial copying but (for some reason) only the higher chain member is spelled out.

(iv) does not occur for an independent reason: if after partial copying only the higher chain link is spelled out, this inevitably creates a recoverability problem. Hence, partial copying entails doubling.

2 The structure of pronouns

Our analysis rests on the following assumptions:

- (12) a. Syntactic copying can be optionally partial (cf. Cheng 2000, Sabel 2000).
- b. PF spell-out is all or nothing, i.e. there is no partial spell-out at PF (cf. scattered deletion discussed in Nunes 2004).
- c. Pronouns are spell-outs not of terminals but of phrases (cf. Weerman & Evers-Vermeul 2002; Neeleman & Szendrői 2007).



Partial copying = subextraction.

2.1 The analysis of *wat*

The multi-functionality of *wat*:

- (14)
- a. Jan heeft *wat* gegeten.
Jan has WAT eaten
'Jan has eaten something.'
 - b. Jan heeft *wat* boterhammen gegeten.
Jan has WAT sandwiches eaten
'Jan has eaten some sandwiches.'
 - c. Alles *wat* ik ooit dacht te weten.
everything WAT I ever thought to know
'Everything I thought I knew'
 - d. *Wat* zal ik vanavond eten?
WAT shall I tonight eat
'What shall I eat tonight?'
 - e. *Wat* een ellende is dit!
WAT a disaster is this
'What a disaster this is!'

Following Postma (1994), there is only one *wat*, whose interpretation is determined by the syntactic context in which it appears (see also Cheng 1991):

- (15)
- a. Jan heeft **wat** gegeten.
Jan has WAT eaten
'Jan has eaten something.'
NOT: 'What has Jan eaten?'
 - b. **Wat** heeft Jan gegeten?
WAT has Jan eaten
'What has Jan eaten?'
NOT: 'Jan has eaten something.'

Wat is underspecified for gender (see 16), for number (see 17) and for definiteness (see (17)):

- (16)
- a. het brood / wat brood
the_{neuter} bread WAT bread
 - b. de kaas / wat kaas
the_{non-neuter} cheese WAT cheese

- (17) wat boek-en
WAT book.PLUR
- (18) Er is wat gekomen.
there is WAT come
'Something arrived'

We assume a privative system with the features [plural], [non-neuter] and [definite]. *Wat* is not specified for any of these features. If *wat* is not combined with anything and appears on its own, it is interpreted by default rules: singular in the absence of [plural], neuter in the absence of [non-neuter], indefinite in the absence of [definite].

As regards its categorial status, *wat* is the spell-out of a QP, cf. (13). In short, *wat* is an indefinite numeral, in close kinship with Dutch *veel* 'many' and *weinig* 'little' (also Q-elements, Corver 1997). Informally, the denotations we assign to them are:

- (19) *veel* 'much', 'many' = high quantity
weinig 'few', 'little' = low quantity
wat 'something' = quantity

All three elements can be modified by adverbs like *heel* 'very' and *nogal/best* 'quite':

- (20) { heel }
 { nogal } veel / weinig / wat boeken
 { best }

They are in complementary distribution with determiners and numerals:

- (21) *twee veel/weinig/wat boeken
 two many/few/ some books

In noun ellipsis contexts, they obligatorily occur with quantitative *er* when modifying a count noun (a characteristic property of numerals), but they occur without quantitative *er* when modifying a mass noun:

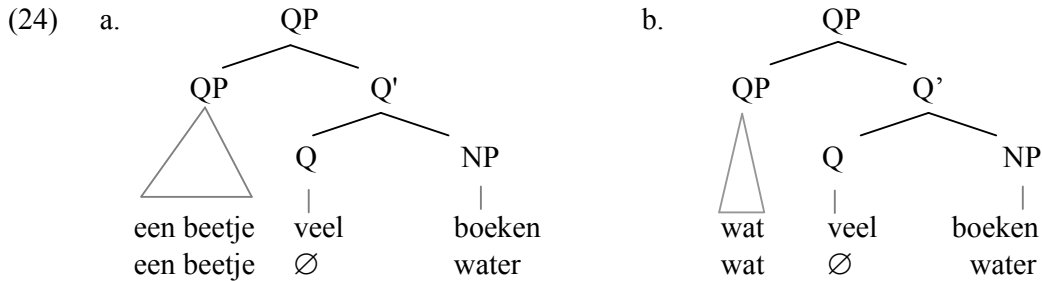
- (22) a. (Over boeken): Ik heb *(er) veel / weinig / wat gelezen.
 about books I have there many / few / some read
 'As for books I read many/few/some.'
 b. (Over kaas): Er ligt *(er) veel / weinig / wat in de koelkast.
 about cheese there is there much / little / some in the fridge
 'As for cheese there is much/little/some in the fridge.'

Wat is not always in complementary distribution with *veel* and *weinig*, see (23a). In such cases it has the same position as the phrasal *een beetje* 'a bit' (see (23b)):

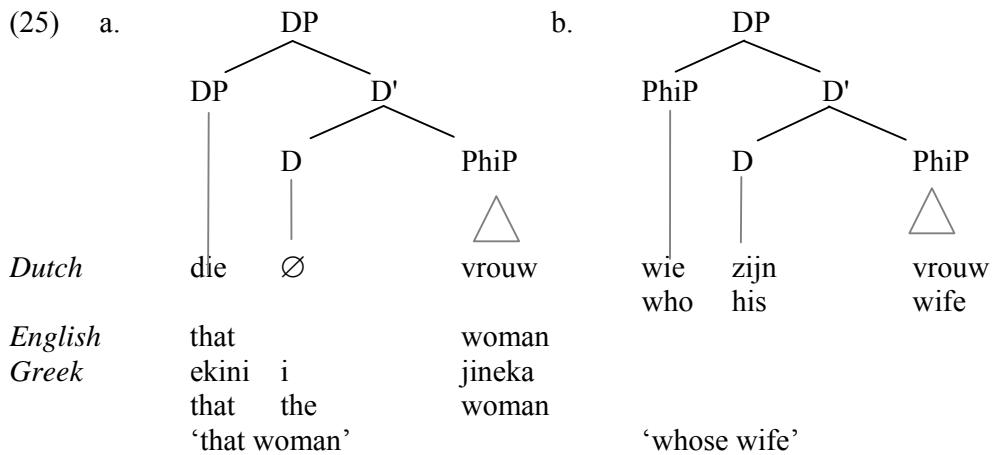
- (23) a. Ik heb wat veel/ weinig boeken gelezen.
 I have WAT many/little books read
 'I read quite a bit / a bit too little books.'

- b. Ik heb een beetje veel/weinig boeken gelezen.
 I have a bit many/little books read
 ‘I have read a little too many books.’

If *veel* and *weinig* are heads of QP (as argued for in Corver 1997), *wat* cannot be. But this is exactly what we expect if *wat* is the spell-out of a phrase rather than a head:

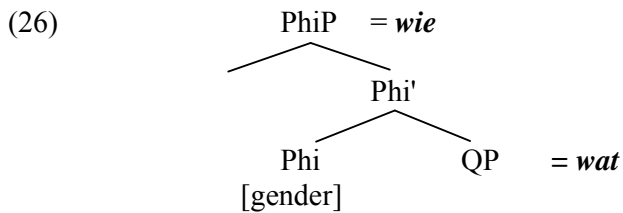


In virtue of spelling out phrases, *die* and *wie* also spell out phrases are also expected to occur as specifiers. Some ancillary support from possessor WH-phrases in Dutch (see (25b)):



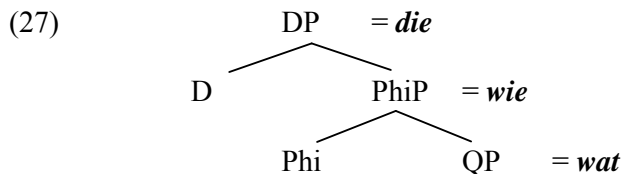
2.2 The analysis of *wie*

Following Déchaine & Wiltschko (2002), we assume that DPs have a PhiP-layer, where among other things gender is expressed. It is this layer that can be spelled out by *wie*:



2.3 The analysis of *die*

PhiPs can be embedded under a DP-layer. This is what *die* spells out.



The contribution of this layer is definiteness (cf. Bennis 2001):

- (28) a. *Dat* = *wat* + definiteness
 b. *Die* = *wie* + definiteness

- (29) a. Hans heeft wat gelezen. ⇒ Wat heeft Hans gelezen?
 Hans has something read something has Hans read
 'Hans has read something.' *'Something, Hans has read.'
- b. Hans heeft dat gelezen. ⇒ Dat heeft Hans gelezen.
 Hans has that read that has Hans read
 'Hans has read that.' 'That, Hans has read.'

In virtue of their ability to function as topics, *dat* and *die* can be topic-dropped.

- (30) a. Wie het weet, (die) mag het zeggen.
 who it knows D-PRON. may it say-INF
 'Whoever knows it may say it.'
- b. Wat je weet, (dat) mag je zeggen.
 what you know D-PRON. may you say
 'Whatever you know you can tell.'

In sum: *die*, *wie* and *wat* are spell-outs of phrases corresponding to different layers of a nominal structure, namely DP, PhiP and QP, respectively.

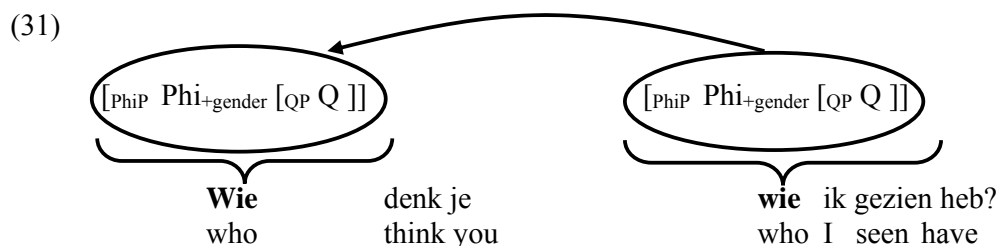
3 Our account in terms of (partial) copying

The doubling patterns arise by minimally copying the QP and by:

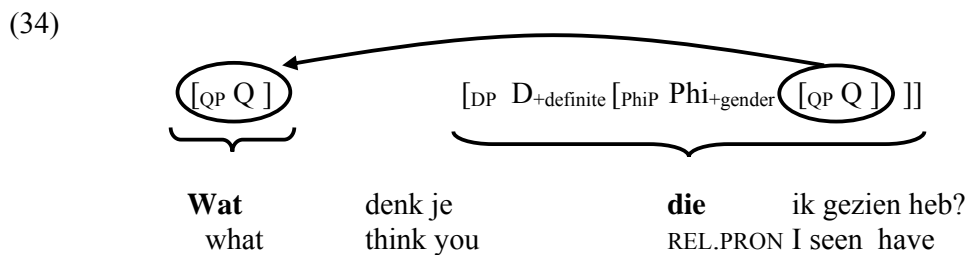
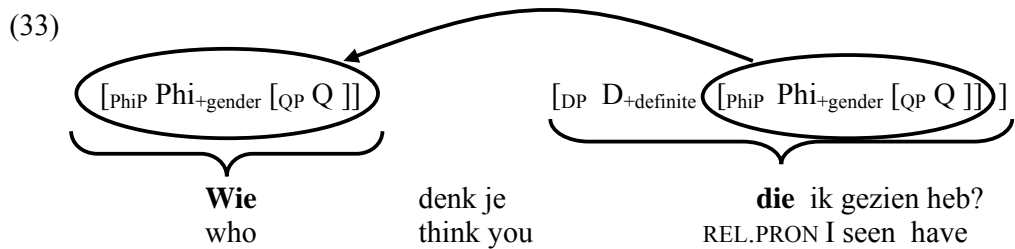
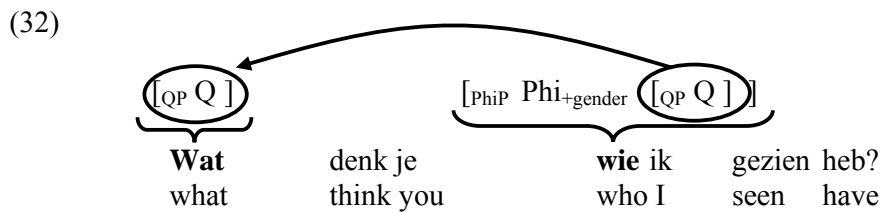
- generating either a DP or PhiP in the base position plus
- optional pied-piping of DP and PhiP.

3.2 Derivations

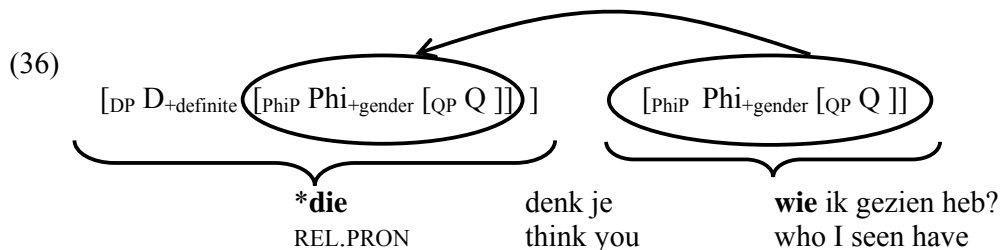
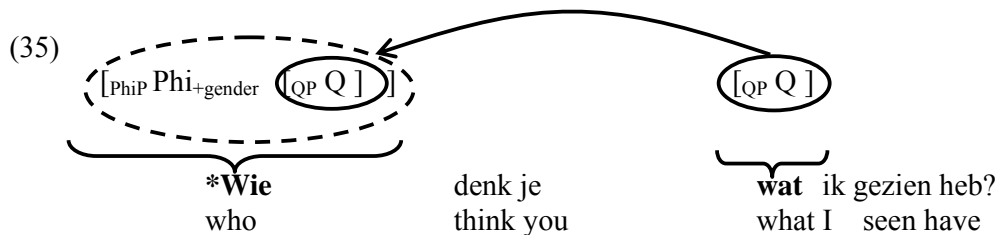
Full copying:



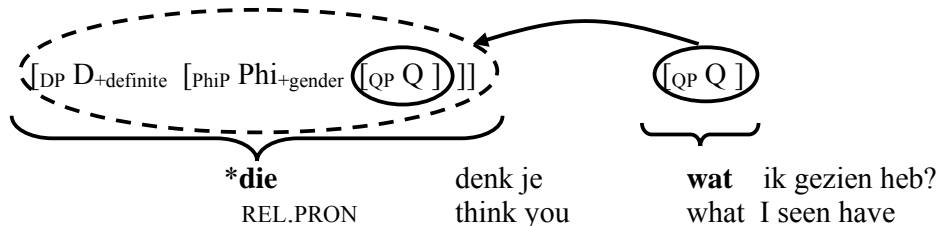
Partial copying:



Ruling out the unattested patterns relies on the Inclusiveness Condition (Chomsky 1995):



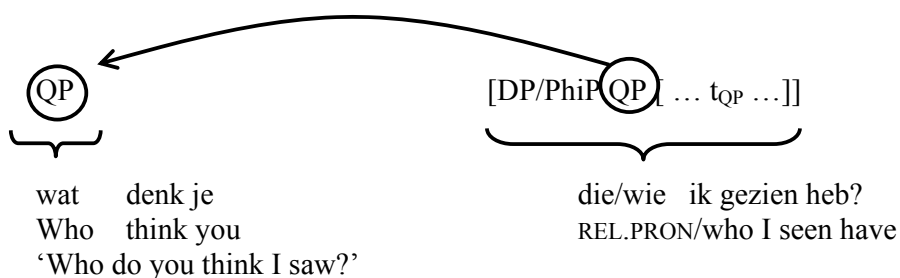
(37)



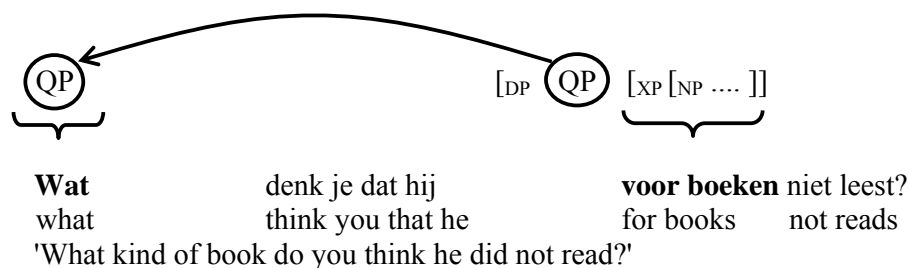
3.3 The parallel with *wat...voor-split*

Assume that DP- or PhiP-internally *wat* first moves into specDP or specPhiP before leaving the nominal constituent. This allows us a parallel with *wat...voor-split*:

(38)



(39)



Prediction: These constructions have similar properties.

SIMILARITY 1: The higher copy cannot be more specific than the lower one.

- (40) a. ***Wie** denk je **wat** ik gezien heb?
Who think you what I seen have
- b. ***Wat voor boeken** denk je **wat** Jan gelezen heeft?
What for books think you what Jan read has

SIMILARITY 2: PF does not spell out WH-copies VP-internally.

- (41) a. *Ik vraag me af [_{CP} **wat**_i Jan **wie**_i gezien heeft].
I ask me PRT. what Jan who seen has
'I wonder who Jan has seen.'
- b. *Ik vraag me af [_{CP} **wat** Jan **wat voor boeken** gelezen heeft].
I ask me PRT what Jan what for books read has
'I wonder what kind of books Jan has read.'

Not spelling out the lower *wat* in (41b) gives a grammatical result (cf. 42b). Not spelling out the lower copy is not a valid strategy for (49a), as that would delete unrecoverable Phi-features, i.e. the sentence can no longer get the *who*-reading.

- (42) a. Ik vraag me af [_{CP} **wat**_i Jan **wie** gezien heeft].
I wonder what John who seen has
NOT: 'I wonder who Jan has seen.'
b. Ik vraag me af [_{CP} **wat** Jan **wat voor boeken** gelezen heeft].
I ask me PRT what Jan for books read has
'I wonder what kind of books Jan has read.'

SIMILARITY 3: The WH-elements must be spelled out in specCP of the embedded clause:

- (43) a. **Wat** denk je *(**wie**) Jan gezien heeft?
what think you who John seen has
'Who do you think Jan saw?'
b. **Wat** denk je *(**wat**) **voor boeken** Jan gelezen heeft?
What think you what for books Jan read has
'What kind of books do you think that Jan has read?'

SIMILARITY 4: Both partial WH-copying and '*wat ... voor*'-split are blocked by negation (cf. Felser 2004 and references cited therein):

- (44) a. * **Wat** denk je **niet wie** Jan ontmoet heeft?
what think you not who John met has
b. * **Wat** denk je **niet dat** Jan **voor mensen** ontmoet heeft?
what think you not that John for people met has

4 Alternative accounts

4.1 Scattered deletion

Nunes (2004) rules out multiple spell-out in general as a violation of the LCA (Kayne 1994). Strategies to make linearization possible:

- (i) Delete all but one copy (where deleting lower copies is cheaper).
(ii) Allow the intermediate copy to undergo reanalysis with a C-head by syntactic movement to C (Nunes 2004) or post-syntactic fusion (see BKL 2009).
(iii) Scattered deletion: deletion of complementary material in two copies, see (38) (from Nunes (2004: 29), taken from Cavar & Fanselow (1997)):

(where (i) entails non-doubling, (ii) entails identical doubling and (iii) entails non-identical doubling)

- (45) a. Na kakav je Ivan krov bacio loptu? *Croatian*
on what.kind.of be Ivan roof throw ball
'On what kind of roof did Ivan throw the ball?'
b. [[_{PP} na [kakav krov]]ⁱ je Ivan [[_{PP} na [kakav krov]]ⁱ bacio loptu [[_{PP} na [kakav krov]]ⁱ]

- c. $[[_{PP} \text{na} [\text{kakav} \text{ krov}]]^i \text{ je Ivan } [[_{PP} \text{na} [\text{kakav} \text{ krov}]]^i \text{ bacio loptu } [[_{PP} \text{na} [\text{kakav} \text{ krov}]]^i]$

This incorrectly predicts partial underspecification of a lower copy to be possible. In other words, additional stipulations are needed to derive the generalization in (10).

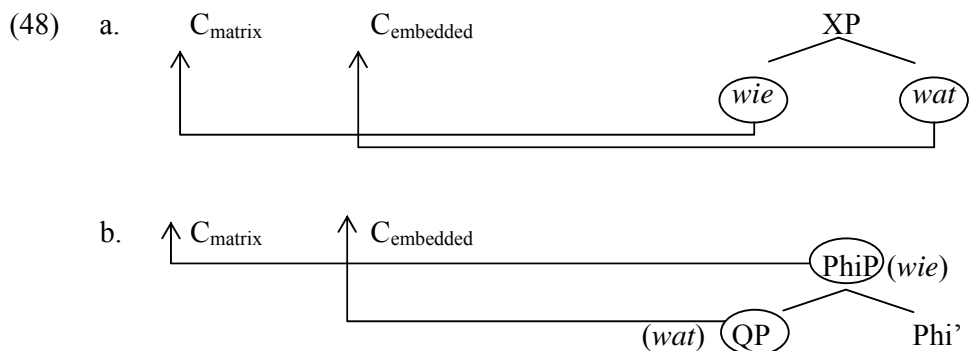
4.2 Big XPs (Cecchetto 2000, Kayne 2002, Belletti 2005 etc)

Poletto & Pollock 2004 on WH-doubling in Romance varieties: doubler and doublee are initially contained in the same nominal XP. During the derivation, they move to different syntactic positions, creating a doubling effect. Applying the gist of this analysis to the data at hand yields (46). (47) represents our own proposal:

- (46) a. $[_{XP} \text{ wat } \text{ wie}]$ or $[_{XP} \text{ wie } \text{ wat}]$
 b. $[_{XP} \text{ wie } \text{ die}]$ or $[_{XP} \text{ die } \text{ wie}]$
 c. $[_{XP} \text{ wat } \text{ die}]$ or $[_{XP} \text{ die } \text{ wat}]$
- (47) (a) $[_{\text{wie}} \text{ wat}]$
 (b) $[_{\text{die}} \text{ wie}]$
 (c) $[_{\text{die}} [_{\text{wie}} \text{ wat}]]$

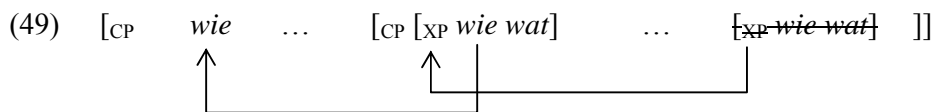
There are two ways in which *wie wat* can be derived, and these have to be ruled out. Only our approach can successfully do that.

(a) *Wat* moves to the embedded SpecCP, and *wie* subsequently moves into matrix CP:



There is no reason for *wat* to move to the embedded SpecCP position, if movement to an intermediate position is locality-related; it does not move there for feature checking reasons (cf. Bošković 2007). Both approaches can resort to this reasoning.

(b) XP moves to the embedded SpecCP, *wie* is subextracted to the matrix SpecCP:



It is impossible to do a similar derivation in our approach. Since spelling out PhiP subsumes spelling out QP (i.e. PhiP dominates QP), the only way for *wat* to surface is if it is subextracted from PhiP. Movement of PhiP never strands QP. Hence, moving

PhiP can at most lead to identical doubling (*wie...wie*) but never to non-identical doubling (*wie...wat*).

4.3 The indirect dependency

A different kind of approach (Dayal 1996, 2000; Horvath 2000; Fanselow & Mahajan 2000; Felser 2001):

- ‘what’ is the object of the matrix verb and a regular wh-operator
- the restriction to the operator is provided by the embedded clause.
- the embedded clause denotes a set of propositions (i.e. is a question).

What is the syntactic status of the embedded CP?

And what is its syntactic relation to the operator ‘what’?

Problems for the indirect dependency applied to German have been noted in particular by Bayer (1996), see also Beck & Berman (2000) and von Stechow (2000).

- The scope-marker cannot remain in situ, unlike normal wh-items in multiple questions:

- (50) a. **Wer** hat **was** gedacht? *German*
 who has what thought
 'Who thought what?'
 b. ***Wer** hat **was** gedacht **wen** wir anrufen sollten?
 who has what thought whom we call.up should
 Intended: ‘For which person x and for which person y, x thought that we should call up y?’

Felser (2001), Fanselow & Mahajan (2000): the wh-clause is a secondary predicate of *was*; when *was* is in situ and the subject of a secondary predicate, the wh-interpretation is lost, cf. (51c). This creates a clash with the wh-clause in (51b).

- (51) a. Er hat mir was Schönes gesagt.
 he has me something nice said
 'He said something nice to me.'
 b. Was hat er dir denn Schönes gesagt?
 what has he you PRT nice said
 'Which nice things did he say to you?'
 c. Wer hat dir denn was Schönes gesagt?
 who has you PRT something nice said
 'Who said something nice to you?'
 *'Who said which nice things to you?'

But not all secondary predicates behave the way described above; in situ *was* can be interpreted as a wh-item:

- (52) Wer hat was roh gegessen?
 who has what raw eaten
 'Who ate something raw?'
 'Who ate what raw?'

- One additional argument from Dutch. Recall the following doubling data:

- (53) **Wie** denk je **die** ik gezien heb? *North-Holland*
 who think you REL.PRON I seen have

- (54) **Wat** denk je **die** ik gezien heb? *Overijssel*
 what think you REL.PRON I seen have

(53) is outside the reach of the indirect dependency, because *wie* is not a suitable propositional operator. (54) can be accounted for, but only at the cost of treating the *die*-clause as a question (denoting a set of propositions). This generates the unwelcome prediction that the following should be well-formed questions:

- (55) a. ***Die** denk je **die** ik gezien heb?
 REL.PRON think you REL.PRON I seen have
 b. ***Die** heb ik gezien?
 REL.PRON have I seen

5 An unresolved issue: intervention effects

Negation only intervenes in doubling constructions and not in long wh-movement:

- (56) a. **Wie** denk je niet dat zij uitgenodigd heeft?
 who think you not that she invited has
 'Who don't you think she has invited?'
 b. ***Wat** denk je niet **wie** zij uitgenodigd heeft?
 what think you not who she invited has
 c. ***Wie** denk je niet **wie** zij uitgenodigd heeft?
 who think you not who she invited has

We cannot explain the discrepancy between (identical and non-identical) doubling and long wh-movement. But intervention is ill-understood in general.

When a universal intervenes, the data have been claimed to be as follows (Felser 2000, 2004; Pafel 2000; Rett 2006; von Stechow 2000):

- (57) a. **Wie** denkt iedereen dat een goede president is geweest? ($\forall\exists$ & $\exists\forall$)
 who thinks everyone that a good president is been
 'Who does everyone think was a good president?'
 b. **Wie** denkt iedereen **wie** een goede president is geweest? ($\forall\exists$ & $\exists\forall$)
 who thinks everyone who a good president is been

- c. **Wat** denkt iedereen **wie** een goede president is geweest? ($\forall\exists$)
 what thinks everyone who a good president is been

Note that in this case $\exists\forall$ entails (is a special case of) $\forall\exists$.

We constructed examples involving a non-monotone quantifier, 'everyone by John', which cannot QR:

- (58) a. Wie_i kent iedereen t_i? ($\forall\exists$ & $\exists\forall$)
 Who knows everyone
 'Who does everyone know?'
 b. Wie_i kent iedereen behalve Jan t_i? ($\exists\forall$)
 who knows everyone but John
 'Who does everyone but John know?'

We would expect partial copying across this quantifier to lead to ungrammaticality. It doesn't. Moreover, interpretation-wise it patterns with full copying and long wh-movement.

- (59) **Wat** denkt iedereen behalve Jan **waar** de beste wijn vandaan komt? ($\exists\forall$)
 what thinks everyone but Jan where the best wine from comes
 'Where does everyone but Jan think that the best wine comes from?'

CASE STUDY 2 PERFECT DOUBLING

1. The phenomenon

- | | | | |
|-----|----|---|------------------------|
| (1) | a. | Ik heb vandaag nog niet gerookt
I have today still not smoked | <i>Standard Dutch</i> |
| | b. | Ik heb vandaag nog niet gerookt gehad
I have today still not smoked had | <i>Dialectal Dutch</i> |
| (2) | a. | Ik heb het gezegd
I have it said | <i>Standard Dutch</i> |
| | b. | Ik heb het gezegd gehad
I have it said had | <i>Dialectal Dutch</i> |
| (3) | a. | Ik ben twee keer gevallen
I am two times fallen | <i>Standard Dutch</i> |
| | b. | Ik ben twee keer gevallen geweest
I am two times fallen been | <i>Dialectal Dutch</i> |

Franco-provençal (Carruthers 1994, Paesani, 2001):

- (4) On a **eu** mis de l'eau sur les chaises.
one has had put of the water on the chairs

Bavarian/Alemannic German (Poletto 2009, Schaden 2007):

- (5) I ha gässa **cha** und denn bin i hei gange
I have eaten had and then am I home gone

Northern Italian (Poletto 2009):

- (6) Co go **bio** magnà,...
when have.1sg had eaten,...

Claims for Dutch:

- (i) The variation between doubling and non-doubling is lexical in nature.
- (ii) Doubling constructions are retentions of diachronic stages in the development of HAVE from a lexical to a functional element.
- (iii) There is no perfect or auxiliary doubling in an analytical sense.

2. Hypotheses and previous research

THE 'LEADING' HYPOTHESIS FROM THE SYNTACTIC ANGLE:

Perfect doubling involves activation of a(n additional) functional head (Poletto 2009).

- German dialects → Terminative Aspect Phrase
- Northern Italian dialects → Anterior Tense Phrase

THE 'LEADING' HYPOTHESIS FROM THE SEMANTIC ANGLE:

Perfect doubling has specific semantics (Schaden, 2007)

- German dialects → past resultative
- French dialects → perfective terminative

- THE ANTERIOR USE:
 - (7) Quand j'ai eu soupe, je suis sorti. (substandard French; Schaden 2009)
when I have had suppered I am left
'After having had supper, I left.'
 - (8) Wia i hamkumman bin, hot mai schwesta den opfl scho gessen ghobt.
(Bavarian)
As I home-come am, has my sister the apple already eaten had
'When I arrived at home, my sister had already eaten the apple.'
- THE 'SUPERPERFECT' USE:
 - (9) Du ble, j'en ai recolte du plus beau.
of wheat I of-it have harvested of-the more beautiful
'I've harvested the most beautiful wheat.'
 - (10) I hob d badhos scho azoga khet, abr i hob se widr wegto.
I have the short already onput had but I have it again away.put
'I HAD put on my bathing shorts, but I've put them off again.'

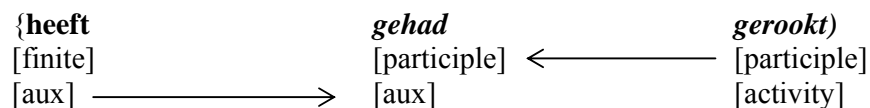
Two considerations:

- (i) The suggested semantics cannot be replicated for the Dutch doubling constructions. Our previous research (Barbiers, Koeneman & Lekakou 2008):
 - Doubling constructions accepted in same environments as their non-doubling counterparts → no obvious tense-semantic difference.
 - Difference between doubling and non-doubling constructions is phonological: they have the same underlying syntax.

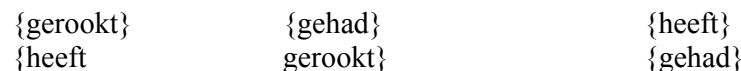
Hypothesis:

Gehad is not spelled out if its formal features (i.e. [auxiliary] and [participle]) are expressed by other heads in the same prosodic phrase (determined by Selkirk's 1986 algorithm: XP movements create additional prosodic boundaries).

- Standard Dutch: 1-2-3 cluster order



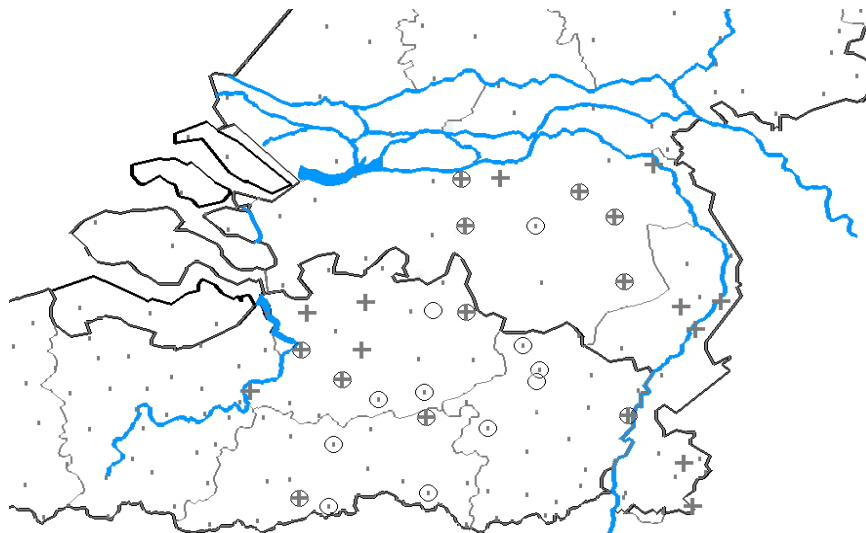
- Dialects: 3-2-1 and 1-3-2 cluster orders



Our recent fieldwork: dialects also accept 3-1-2 (a cluster order pervasive in Standard Dutch).

- (ii) Proximity of the doubling construction with the so-called undative construction (Broekhuis & Cornips 1994, Cornips 1994).

- (11) a. Ik heb de hond ziek (present)
I have the dog sick
'My dog is sick.'
- b. Ik heb de hond ziek gehad (present perfect)
I have the dog sick had
'My dog has been sick.'
- (12) a. Ik heb de broek gewassen. (Present perfect/Undative)
I have the trousers washed
'I have washed my trousers.'/'I have a clean pair of trousers.'
- b. Ik heb [de broek gewassen] gehad. (perfect of the undative)
I have the trousers washed had
'I have had a clean pair of trousers.'



- (22) doubling construction
+ (22) undative construction
⊕ (11) overlap

Questions:

(i) Does geographical proximity indicate grammatical proximity? If so, the variation is in the make-up of HAVE.

- (13)
- ```

 HAVE
 / \
 lexical functional (auxiliary)
 / \
possessive undative

```

(ii) How do we fit in perfect doubling?

*Hypothesis:*

Perfect doubling involves a lexical HAVE too.

- o Perfect doubling is not auxiliary doubling.
- o Perfect doubling resembles GO-doubling (West Flemish; cf. Haegeman 1990, van Riemsdijk 2002) and DO-doubling (Schütze 2004):

- (14) a. dank morgen **goan gon** wissen that-I tomorrow go go fish  
‘that I’m going to go fishing tomorrow’
- b. Bob says he is going to join the labour party. It will be interesting to see if he **does do**.
- c. Ik **heb** het **gehad**  
I have it had

**3. Data collection and results**

PHASE 1: Written questionnaire:

- 70 locations in and around the area where doubling was attested according to SAND (Barbiers et al 2005).
- Questionnaires from 55 locations returned, of which 22 had doubling.
- Two kinds of tasks:

PHASE 2: Oral questionnaire

- administered in 12 locations in 4 provinces.
- translation tasks, relative grammaticality judgment tasks.

Properties of the perfect doubling construction:

- (i) It appears in similar contexts as its non-doubling counterpart: no ‘pluperfect’.
- (ii) It is not sensitive to semantic properties of the main verb.
- (iii) It is not an undative construction.
- (iv) In embedded clauses, the cluster order is predominantly 321 and 312.

*Ad (i): It appears in similar contexts as its non-doubling counterpart: no pluperfect.*

- (15) Toen mijn hond in de tuin lag, ... [*drie sigaretten roken*].  
‘When my dog lay in the garden, ... [*to smoke three cigarettes*].’
- |    |                             |                                          |
|----|-----------------------------|------------------------------------------|
| a. | PRAETERITUM:                | ... rookte ik drie sigaretten            |
| b. | PRESENT PERFECT:            | ... heb ik drie sigaretten gerookt       |
| c. | PAST PERFECT:               | ... had ik drie sigaretten gerookt       |
| d. | PRESENT PERFECT + DOUBLING: | ... heb ik drie sigaretten gerookt gehad |
| e. | PAST PERFECT + DOUBLING:    | ... had ik drie sigaretten gerookt gehad |
- (16) a. Ik heb de hele dag hard gewerkt **gehad**.  
I have the whole day hard worked had
- b. Ik heb de hele dag hard gewerkt.  
I have the whole day hard worked

GENERALIZATION 1:

- i. If (11d) accepted, then (11b) accepted.

ii If (11e) accepted, then (11c) accepted.

GENERALIZATION 2:

Present perfect + doubling cannot be used to denote an event that happened prior to a point in the past: it is a present (perfect) tense.

- (17) Context: I didn't see you eat yesterday. Why not?  
 Answer: #Ik heb al gegeten gehad.  
 I have already eaten had

***Ad (ii): It is not sensitive to semantic properties of the main verb.***

i. Achievement

- (18) Ik heb ooit eens een kostbare vaas **gebroken** gehad.  
 I have once an expensive vase broken had

ii. Accomplishment

- (19) Dit bedrijf heeft deze maand drie huizen **gebouwd** gehad.  
 This company has this month three houses built had

iii. Activity

- (20) Ik heb nog nooit een kat **geaaid** gehad.  
 I have still never a cat stroked had

iv. Stative

- (21) Ik heb mijn baas altijd **gehaat** gehad.  
 I have my boss always hated had

***Ad (iii): It is not an undative construction.***

GENERALIZATION 1:

There is only a partial geographical overlap. See the map earlier.

GENERALIZATION 2:

There is a significant meaning difference.

- (22) a. Ik heb de broek gewassen (gehad)  
 b. Ik heb vandaag nog niet gerookt (gehad)

In (22a), anybody could have done the washing. The subject of the participle is syntactically absent: the participle is passive.

***Ad (iv): In embedded clauses, the cluster order is predominantly 321 and 312.***

We do not have too much to say about this at the moment.

*Conclusion:*

Dutch dialects have at most the 'superperfect' use, which requires current relevance.

#### 4. Synchronic variation as diachronic variation

Three generalizations:

- (i) HAVE developed in several stages from a lexical verb into a functional element.
- (ii) ‘Older’ versions of HAVE can be retained. Hence, these stages were never successive, but overlapping.
- (iii) The development of HAVE should not be seen in isolation but as a development interacting with the development of participles (Duinhoven 1997).

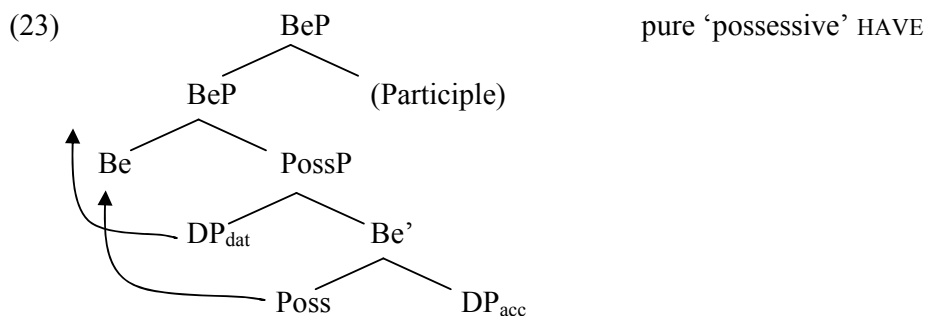
Two questions:

- (i) Which developmental stages can be distinguished? → Duinhoven
- (ii) What are the present day examples reflecting these stages? → our empirical research and Broekhuis & Cornips (1994)

##### Stage 1

a. THE PARTICIPLE: an adjunct modifying the clause. It expresses the cause or manner of action and does not modify a particular DP.

b. HAVE: fully lexical, the participle is an adjunct. In the spirit of Freeze (1992) and Kayne (1993), HAVE consists of an element encoding possession incorporating into BE. The dative argument raises.



c. PRESENT-DAY EXAMPLE:

- (24) Jan komt aangelopen *Standard Dutch*  
 Jan comes ran<sub>part.</sub>  
 ‘Jan comes running’

In (24), *aangelopen* (i) does not denote anteriority and (ii) modifies Jan’s coming, not just Jan.

##### Stage 2

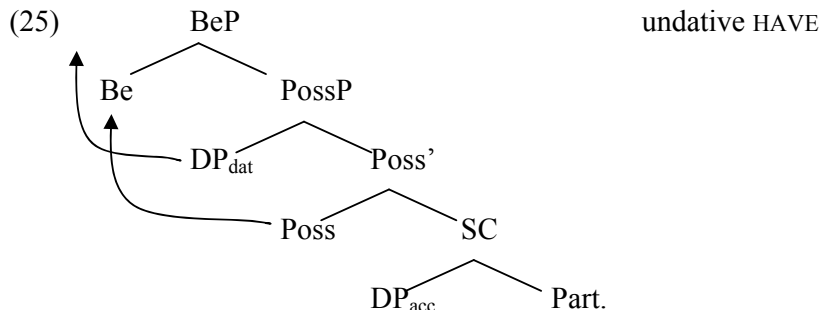
a. THE PARTICIPLE: an adnominal constituent modifying a DP and expressing resultativity. The verb always modifies an object:

- |       |     |                           |     |             |
|-------|-----|---------------------------|-----|-------------|
| (i)   | SU  | $V_{\text{transitive}}$   | [OB | Participle] |
| (ii)  |     | $V_{\text{unaccusative}}$ | [OB | Participle] |
| (iii) | *SU | $V_{\text{unergative}}$   |     | Participle  |

Analysis:

- Participles occur in clauses with HAVE (cf. (i)) and BE. (cf. (ii)).
- Van Duinhoven: participle is a secondary predicate (“bepaling van gesteldheid”) that does not determine the agent of the action denoted by the verb. Our conclusion: the participle becomes the head of an embedded predication without a realized agent; the participle is stative.

b. HAVE: The Poss head now selects a small clause headed by the participle. The dative raises. This is the analysis of Broekhuis & Cornips (1994).



At this stage the possessive relation becomes more abstract, as the arguments that Poss relates to each other are no longer two DPs, but a DP and a small clause.

c. PRESENT DAY EXAMPLES: the *undative construction* (Broekhuis & Cornips 1994):

(26) Zij had d'r haar geverfd. *Standard Dutch*  
 She had her hair dyed  
 'Her hair was dyed.'

(27) Hij had de fiets gestolen. *Dialectal Dutch*  
 he had the bicycle stolen  
 'He had his bicycle stolen.'

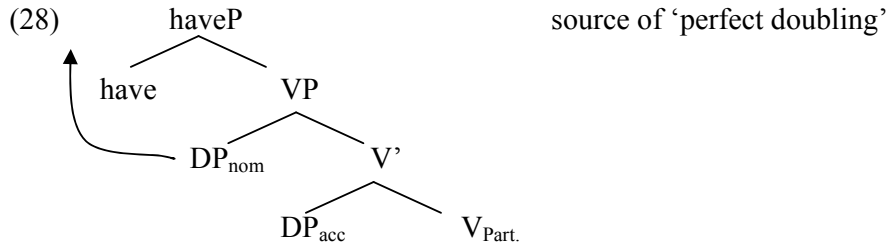
### Stage 3

a. THE PARTICIPLE: 'a complement of the verb' (Duinhoven, 1997). In contrast to the adnominal construction, the subject of the matrix clause now coincides with the Agent of the participle. Our conclusion: the participle heads an embedded predication, and is now active.

b. HAVE: no longer derives from Poss incorporating into BE. Three consequences:

- (i) HAVE becomes a base-generated raising verb
- (ii) The DPs, in need of a theta-role, get reanalyzed as arguments of the participle.
- (iii) The participle becomes an active verb.<sup>1</sup> DP<sub>nom</sub> is the external argument of the underlying predicate (in contrast to previous stage, where there was no Agent role).

<sup>1</sup> This may have happened in two stages. First, the participle is verbal and passive and the higher DP becomes the indirect (dative) object of this predicate. This gives us a construction close to the English 'They had their suitcases packed'. Second, the higher DP becomes the agent of the participle, which is now reanalyzed as active. This predicts that the English construction can also have been retained, preferably in the southern dialects. We do not know if this prediction is borne out.



- c. PRESENT DAY EXAMPLES: The source of the perfect doubling construction as attested in Brabantish dialects.

#### Stage 4

- a. THE PARTICIPLE: now the only predicate of the clause.
- b. HAVE: reanalyzed as a functional auxiliary head associated with a Tense/Aspect projection. It no longer selects a clause but is involved in the formation of compound tenses. At this stage, it is possible to use auxiliary HAVE to construct the present perfect of the retained constructions of stages 1, 2 and 3.
- This gives the doubling effect.
  - Strictly speaking, this is no perfect or auxiliary doubling.

## 5. Discussion/outlook

Features of the analysis:

- Perfect doubling reflects a retention of a diachronic development affecting HAVE: in this respect, it is similar to the (perfect of) pure ‘possessive’ HAVE and the undative construction.
- BE/HAVE are raising verbs throughout the first three stages. This explains why they cannot undergo passivization (Broekhuis & Cornips 1994).
- We now have a parallel between HAVE/DO/GO-doubling: they all involve the co-occurrence of a lexical and a functional head.

Unresolved issues:

- What is the semantics of have in stage 3 and what distinguishes it from its use in stage 4?
- Does the analysis carry over to other Germanic, and Romance, dialects?
  - Are the different properties due to differences in the diachronic development? Cf. the different development of have and be in English, as argued by McFadden & Alexiadou (to appear).
  - Or is it the case that the diachrony is more or less similar but the semantics of the stage 3 construction is underspecified enough to allow room for variation (the actual variation being determined by what other tenses are available in the language)?
- Is there a correlation with verb cluster orders? Excluding dialects with verb projection raising, the only possible orders that were accepted are 321 and 312.
  - It may suggest that *gehad* is lexical rather than functional.

- o But raising verbs usually allow reordering with the head of their complement:
- (29) a. dat Jan vandaag nog niet schijnt<sub>1</sub> te roken<sub>2</sub>  
 that Jan today not yet seems to have smoked  
 b. \*dat Jan vandaag nog niet heeft<sub>1</sub> gehad/hebben<sub>2</sub> gerookt<sub>3</sub>  
 that Jan today yet not has had/have smoked

Note, however, that this is not a minimal pair. *Schijnen* cannot be embedded under functional *have* (cf. also Wurmbrand 2002):

- (30) \*dat Jan vandaag niet heeft geschenen/schijnen te roken.  
 That Jan today not has seemed/seem to smoke

## References

- Barbiers, Sjf. 2006. *Er zijn grenzen aan wat je kunt zeggen*. Inaugural lecture, University of Utrecht.
- Barbiers, Sjf, Hans Bennis, Gunther De Vogelaer, Magda Devos & Margreet van der Ham. 2005. *Syntactic atlas of the Dutch dialects*, Volume 1. Amsterdam: Amsterdam University Press.
- Barbiers Sjf, Olaf Koeneman & Marika Lekakou. 2008a. Syntactic doubling and the structure of chains. In Charles Chang & Hannah Haynie (eds.), *Proceedings of WCCFL 26*, 77-86. Somerville, MA: Cascadilla Proceedings Project.
- Barbiers, S., Olaf Koeneman & Marika Lekakou 2008b. Perfect Doubling. Talk presented at TIN-dag, Utrecht University, 2 February 2008.
- Barbiers Sjf, Olaf Koeneman, Marika Lekakou. 2009. Syntactic doubling and the structure of wh-chains. In press in *Journal of Linguistics*.
- Bayer, Josef. 1996. *Directionality and logical form: on the scope of focusing particles and wh-in situ*. Dordrecht: Kluwer.
- Beck, Sigrid & Steven Berman. 2000. *WH-scope marking: direct vs. indirect dependency*. In Lutz et al. (eds), 17-44.
- Brandner, Ellen. 2000. Scope marking and clausal typing. In Lutz et al. (eds), 45-75.
- Broekhuis, H. & L. Cornips (1994). Undative constructions. *Linguistics* 32: 173-189.
- Carruthers, J. (1994). The *passé surcomposé régional*: towards a definition of its function in contemporary spoken French. *Journal of French Language Studies* 4:171-190.
- Cheng, Lisa. 2000. Moving just the feature. In Lutz et al. (eds), 77-99.
- Chomsky, Noam. 1977. On WH-movement. In Peter Culicover, Tom Wasow & Adrian Akmajian (eds.), *Formal syntax*, 71-132. New York: Academic Press.
- Chomsky, Noam. 1995. *The minimalist program*. Cambridge: MIT Press.
- Cornips, Leonie. 1994. *Syntactische variatie in het Algemeen Nederlands van Heerlen*. PhD Dissertation, University of Amsterdam.
- Cornu, M. 1953. *Les formes surcomposées en français*. Bern: Francke.
- Craenenbroeck, Jeroen van. 2004. *Ellipsis in Dutch dialects*. Ph.D. dissertation, Leiden University.
- Dayal, Veneeta. 1994. Scope marking as indirect WH dependency. *Natural Language Semantics* 2, 137-170.
- Dayal, Veneeta. 2000. Scope marking: cross-linguistic variation in indirect dependency. In Lutz et al. (eds), 157-193.
- Duinhoven, A. 1997. *Middel-nederlandse syntaxis: syhchroon en diachroon*. Groningen: Martinus Nijhoff.
- Fanselow, Gisbert & Anoop Mahajan. 2000. Towards a minimalist theory of WH-expletives, WH-copying, and successive cyclicity. In Lutz et al. (eds.), 195-230.
- Felser, Claudia. 2001. WH-expletives and secondary predication: German partial WH-movement reconsidered. *Journal of Germanic Linguistics* 13, 5-38.
- Felser, Claudia. 2004. WH-copying, phases, and successive cyclicity. *Lingua* 114: 543-574.
- Freeze, Ray. 1992. Existentials and Other Locatives, *Language* 68, 553-595.
- Haegeman, Liliane. (1990). The syntax of motional *goan* in West Flemish. In R. Bok-Bennema & P. Coomans (eds.), *Linguistics in the Netherlands*, 81-90. Dordrecht: Foris.
- Hiemstra, Inge 1986. Some aspects of WH-questions in Frisian. *Nowele* 8, 97-110.

- Horvath, Julia. 2000. On the syntax of “WH-scope marker” constructions: some comparative evidence. In Lutz et al (eds), 271-316.
- Lentz, Øystein Nilssen & Arjen Zondervan (eds.), *Theoretical validity and psychological reality*. Amsterdam/Philadelphia: John Benjamins.
- Kayne, Richard. 1994. Towards a modular theory of auxiliary selection. *Studia Linguistica* 47:3-31.
- Lutz, Uli, Gereon Müller & Arnim von Stechow (eds.). 2000. *Wh-scope marking*. Amsterdam/Philadelphia: John Benjamins.
- McCloskey, James. 1979. *Transformational syntax and model theoretic semantics: a case study in Modern Irish*. Dordrecht/Boston: D. Reidel.
- McCloskey, James. 1990. Resumptive pronouns, A-bar binding and levels of representation in Irish. In Randall Hendrick (ed.), *The syntax of the Modern Celtic languages: Syntax and Semantics* 23, pp. 199-248. New York: Academic Press.
- McDaniel, Dana. 1989. Partial and multiple WH-Movement. *Natural Language and Linguistic Theory* 7, 565-604.
- McFadden Tom & Artemis Alexiadou 2009. Perfects, resultatives and auxiliaries in Early English. To appear in *Linguistic Inquiry*.
- Neeleman, Ad & Kriszta Szendrői. 2007. Radical pro-drop and the morphology of pronouns. *Linguistic Inquiry* 38: 671-714.
- Nunes, Jairo. 2004. *Linearization of chains and sideward movement*. Cambridge, MA: MIT Press.
- Paesani, Kate. 2001. *Syntax and semantics of the passé surcomposé in Modern French*. PhD Dissertation, Indiana University.
- Pankau, Andreas. 2008. WH-copying in German. Ms., University of Utrecht.
- Pafel, Jürgen. 2000. Absolute and relative: on scope in German WH-sentences, w-...w-constructions included. In Lutz et al. (eds), 333-358.
- Poletto, Cecilia. 2009. Double auxiliaries, anteriority and terminativity. *Journal of Comparative Germanic Linguistics* 12:31-48.
- Rett, Jessica. 2006. Pronominal vs. determiner WH-words: evidence from the copy construction. In Olivier Bonami & Patricia Cabredo-Hofherr (eds.), *Empirical issues in syntax and semantics* 6, 355-374. Paris: *Colloque de Syntaxe et Sémantique à Paris*. <http://www.cssp.cnrs.fr/eiss6/>
- van Riemsdijk, Henk. 1982. Correspondence effects and the Empty Category Principle. *Tilburg Papers in Language and Literature* 12. University of Tilburg.
- van Riemsdijk, Henk. 2002. The unbearable lightness of GOing. *Journal of Comparative Germanic Linguistics* 5: 143-196.
- Sabel, Joachim. 2000. Expletives as Features. In Roger Billerey & Brook D. Lillehaugen (eds.), *Proceedings of WCCFL 19*, 411-424. Somerville, MA: Cascadilla Press.
- Selkirk, Elisabeth. 1986. On derived domains in sentence phonology. *Phonology Yearbook* 3:371-405.
- Schaden, Gerhard. 2007. *La sémantique du Parfait. Etude des “temps composés” dans un choix de langues germaniques et romanes*. PhD dissertation, University Paris 8. <http://tel.archives-ouvertes.fr/tel-00143261/en/>
- Schütze, Carson. 2004. Synchronic and diachronic microvariation in English *do*. *Lingua* 114: 495-516.
- Stechow, Arnim von. 2000. Partial WH-movement, scope marking and transparent logical form. In Lutz et al. (eds), 447-478.
- Weerman, Fred & Jacqueline Evers-Vermeul. 2002. Pronouns and Case. *Lingua* 112, 301—338.
- Wurmbrand, Susi 2002. Two types of restructuring—lexical vs. functional. *Lingua* 114: 991-1014.