

Parasitic Participles

Marcel den Dikken & Eric Hoekstra

Marie-Luise Popp

Universität Leipzig
marieluisepopp@hotmail.de

20.05.14

Structure

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- 2 The Data
- 3 The Puzzle
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German verb clusters

(1) German

- a. Er muss₁ das Buch gelesen₃ haben₂ t₁.
 he must.3SG the book read.PTCP have.INF
 'He must have read the book.'
- b. dass er das Buch gelesen₃ haben₂ muss₁.
 that he the book read.PTCP have.INF must.3SG
- c. dass er gelesen₃ (*das Buch) haben₂ muss₁.
 that he read.PTCP the book have.INF must.3SG
 '[...] that he must have read the book.'

(2) Flemish

- a. Hij moet₁ het boek gelezen₃ hebben₂.
 he must.3SG the book read.PTCP have.INF
- b. dat hij het boek moet₁ hebben₂ gelezen₃.
 that he the book must.3SG have.INF lesen.PTCP

More variation in dialects

(3) Erzgebirgish

- a. wenn-sch dir soll₁ (de Kist) trog-n₃ half-n₂.
 if-1SG you.DAT shall.1SG the box carry.INF help.INF
- b. wenn-sch dir trogn₃ (*de Kist) half-n₂ soll₁.
 if-1SG you.DAT carry.INF the box help.INF shall.1SG
 'If I should help you carry the box ...'
- c. wu-sch-n denn furschtbarn Dialekt heer-n₂ hob₁
 when-1SG-3SG the awful dialect hear.INF have.1SG
 reed-n₃.
 talk.INF
 'When I have heard him speak that awful dialect'

- order of the verbs: ascending vs. descending
- no non-verbal material within descending verb clusters

The IPP-effect (*infinitivus-pro-participio*)

- an infinitive appears instead of an (expected) participle

(4) German

- a. dass er das Buch hat₁ lesen₃ können₂.
that he the book have.3SG read.INF can.INF
- b. *dass er das Buch lesen₃ gekonnt₂ hat₁.
that he the book read.INF must.PTCP can.3SG
'that he has been able to read the book.'

(5) Dutch

- a. hij zou₁ het willen₂ hebben₃ gedaan₄.
he would it want.INF have.INF do.PTCP
'He would like to have done it.'
- b. hij zou₁ het hebben₂ willen₃ doen₄.
he would it have.INF want.INF do.INF
'He would have liked to do it.'

New (cool) data from Frisian

(6) Frisian

- a. hy soe₁ it dien₄ ha₃ wolle₂. (M > H)
 he would it do.PTCP have.INF want.INF
- b. hy soe₁ it dien₄ ha₃ *wollen*₂. (M > H)
 he would it do.PTCP have.INF want.PTCP
 'he would like to have done it'
 'Er würde es getan haben wollen.'
- c. hy soe₁ it dwaan₄ wollen₃ ha₂. (H > M)
 he would it do.INF want.PTCP have.INF
- d. hy soe₁ it *dien*₄ wollen₃ ha₂. (H > M)
 he would it do.PTCP want.PTCP have.INF
 'he would have liked to do it'
 '?Er würde es tun gewollt haben.'

PPI constructions - What's so special?

- (7) hy soe₁ it dien₄ ha₃ *wollen*₂.
 he would it do.PTCP have.INF want.PTCP
 'he would like to have done it'
 'Er würde es getan haben wollen.'

- participle appears instead of an (expected) infinitive
- only one auxiliary - two participles → **parasitic participles**

How can that be?

PPI constructions - What's so special?

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How can that be?

- Phonological assimilation, ‘*participle harmony*’?
 - > No, participles are not adjacent
- Deletion of a second auxiliary?
 - > No, the sentences do not have the semantics of two auxiliaries
 (*I would have liked to have done it.*)

Idea:

It must be syntactic movement.

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Questions:

- Where are participles licensed (in general)?
- How are *parasitic* participles licensed?
- Why doesn't Dutch have *parasitic* participles?

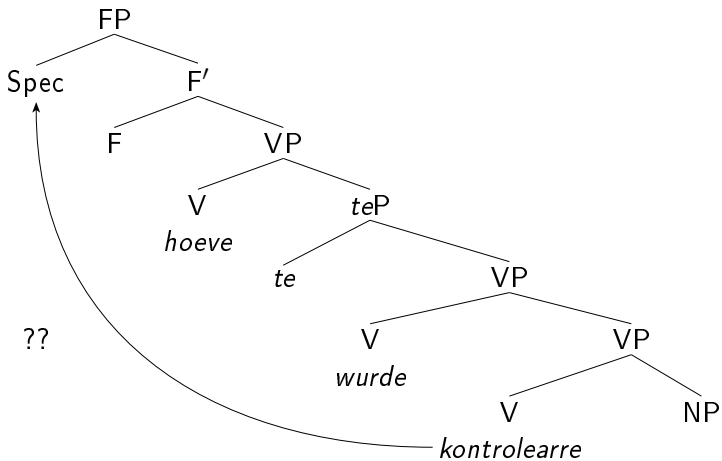
How and where are participles licensed?

Idea:

Participles are checked by the auxiliary within the domain of a functional projection (FP) outside the verbal cluster.

Evidence:

- participles always appear to the left of verbal clusters
- (8)
- a. kontrolearre hoeve te wurden.
check.PTCP need to become.INF₂
 - b. kontrolearre wurde te hoeven.
check.PTCP become to need.INF₂
 - c. *hoeve te kontrolleare wurde(n).
'need to be checked'



How does *kontrolleare* get up there?

Idea 1:

kontrolleare directly head-moves to F.

Problem:

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Idea 2:

kontrolleare head-moves to F step-by-step. It adjoins to each higher head and subsequently excorporates from it.

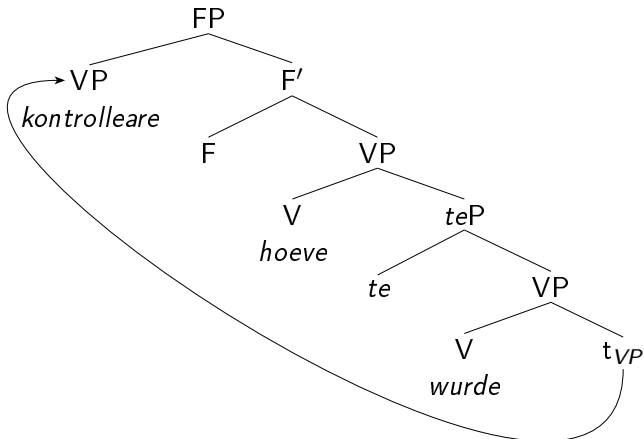
Problem:

- we would expect *kontrolleare* to be able to adjoin to *wurde*
- however, this construction is ungrammatical

- (9) **hoeve te kontrolleare wurde*(n).
 need to check.PTCP become.INF₂
 'need to be checked'

Idea 3:

kontrolleare undergoes XP-movement to SpecFP. Thus the head-movement constraint is not violated.



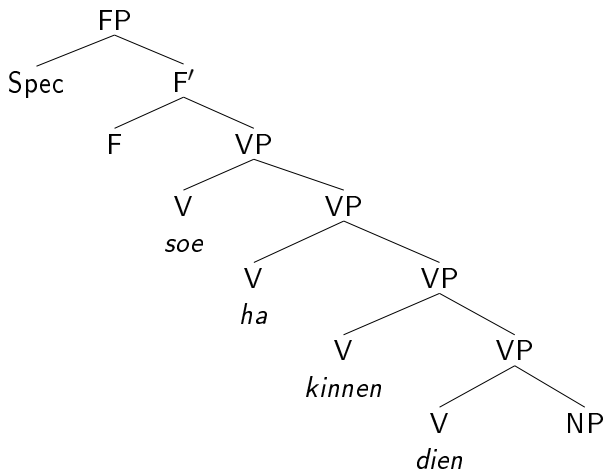
The $H > M$ construction

- (10) $H > M$
- a. *hy soe₁ it dien₄ kinnen₃ ha₂.*
 he would it do.PTCP can.PTCP have.INF
- b. *omdat hy it dien₄ kinnen₃ ha₂ soe₁.*
 because he it do.PTCP can.PTCP have.INF would
 '(because) he would have been able to do it.'

We need to derive ...

- how both participles can be licensed in F.
- why *ha* appears before *soe* in the embedded clause.

Derivation



- ① *dien* is left-adjoined to *kinnen*
- ② as this VP is the complement of an auxiliary, the whole VP is moved to SpecFP (this does not violate the head-movement constraint)

How does multiple participle licensing work?

- both the auxiliary ‘the checker’ and the participles ‘the checkees’ have a [+part] feature
- den Dikken and Hoekstra assume that the checker’s feature is [+int], while the checkee’s is [-int]
- → the checker’s feature is not deleted when checked as it gets interpreted at LF
- thus, the checker can check its [+int] feature more than once
- the checkee’s feature must be [-int] because the parasitic participle is not interpreted as a participle

- ① *dien* is left-adjoined to *kinnen*
- ② as this VP is the complement of an auxiliary, the whole VP is moved to SpecFP (this does not violate the head-movement constraint)
- ③ *ha* head-moves directly to F

How can *ha* skip the intervening head *soe*?

(11) Relativized head-movement constraint

Movement of a head X across a c-commanding head is illegitimate if X and Y share features and is forced otherwise.

- *ha* can skip *soe*, because *ha* has a participial feature, while *soe* has a modal feature
- Note: *ha* has to skip *soe*. If *ha* would first left-adjoin to *soe*, the new-formed verbal complex could not check the participial feature in F, because the head of the complex is a modal

- ① *dien* is left-adjoined to *kinnen*
- ② as this VP is the complement of an auxiliary, the whole VP is moved to SpecFP (this does not violate the head-movement constraint)
- ③ *ha* head-moves directly to F
- ④ participial features are (multiply) checked

Evidence: Multiple parasitic participles

- (12) *hy soe it dien kinnen wollen ha.*
 he would it do.PTCP can.PTCP want.PTCP have.INF
 'he would have liked to be able to do it.'

The M > H construction

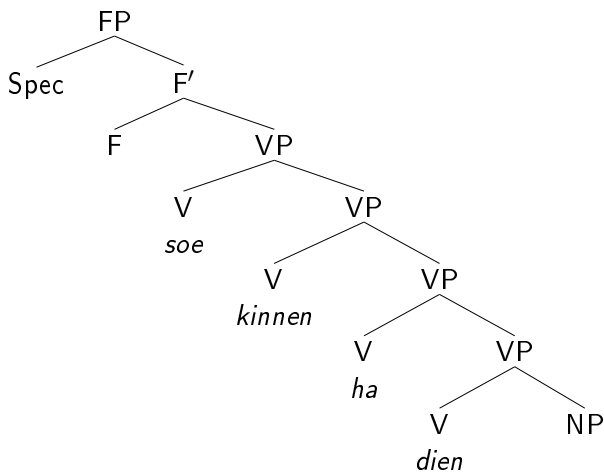
(13) M > H

- a. hy soe₁ it dien₄ ha₃ kinnen₂.
 he would it do.PTCP have.INF can.PTCP
- b. *omdat hy it dien₄ ha₃ kinnen₂ soe₁.
 because he it do.PTCP have.INF can.PTCP would
 '(because) he would be able to have done it'

Questions:

- Why is the embedded clause in the M > H construction ungrammatical?
- How can the participles be multiply licensed in the main clause?

The base structure



Derivation

- ① *dien* XP-moves to SpecFP
- ② *ha* left-adjoines to *kinnen*. They form the cluster *ha kinnen*
- ③ *ha kinnen* moves to F in main clauses, since *soe* has been moved further up to verb-second position
- ④ as *soe* stay in-situ in embedded clauses, *ha kinnen* cannot skip *soe* due to the Relativized Head-movement constraint

Evidence: the embedded sentence is grammatical in its non-PPI version

(14) omdat hy it dien ha kinne soe.
 because he it do.PTCP have.INF can.PTCP would
 'because he would be able to have done it'

(15) hy soe it dien ha kinnen wollen.
 he would it do.PTCP have.INF can.PTCP want.PTCP
 'he would like to be able to have done it.'

What about Dutch?

Why doesn't Dutch have the PPI then?

Answer:

In Dutch, the verbs display the base-generated order. Therefore, there is no need for Dutch verbs to cluster.

Summary

Let us conclude, that ..

- participles are checked within FP
- complements of auxiliaries move overtly to SpecFP in order to get participial morphology
- the [+part] feature can be multiply checked by assuming that the auxiliary's feature is [+int] and is thus not deleted
- the Relativized head-movement constraint can explain the split between main clauses and embedded clauses in the M > H construction
- Dutch lacks the PPI-effects as the verbs do not cluster in Dutch

Problems:

- How does the participial feature look like?
- How can the optionality be explained?
- What about German?

- (16)
- a. hy soe₁ it dien₄ ha₃ wolle₂.
 - b. Er würde₁ das getan₄ haben₃ wollen₂.
he would it do.PTCP have.INF WANT.PTCP
 - c. *Er würde das getan haben gewollt.