

To place your *te* or not, and if so, where?
Variation in *te*-placement in Dutch non-finite
verb clusters

Cora Pots
KU Leuven/CRISSP
cora.pots@kuleuven.be

CGSW32, Trondheim
14 September 2017

Outline

1. The whole talk in a nutshell
2. Methodology
3. The data
4. Prerequisites for the analysis
5. The analysis
6. Conclusion and outlook

1. The whole talk in a nutshell
2. Methodology
3. The data
4. Prerequisites for the analysis
5. The analysis
6. Conclusion and outlook

The whole talk in a nutshell

The whole talk in a nutshell

New data on *te*-placement in Dutch verb clusters

- (1) Koen zal niet [**hoeven**₁ *te* **gaan**₂ voetballen₃].
Koen will not need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

The whole talk in a nutshell

New data on *te*-placement in Dutch verb clusters

- (1) Koen zal niet [**hoeven**₁ *te* **gaan**₂ voetballen₃].
Koen will not need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'
- ▶ The numbers indicate the hierarchical position of the verbs in the cluster (V1 selects V2, V2 selects V3)

The whole talk in a nutshell

New data on *te*-placement in Dutch verb clusters

- (1) Koen zal niet [**hoeven**₁ *te gaan*₂ voetballen₃].
Koen will not need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ The numbers indicate the hierarchical position of the verbs in the cluster (V1 selects V2, V2 selects V3)
- ▶ **The verb in red**: the verb that selects the *te*-infinitive

The whole talk in a nutshell

New data on *te*-placement in Dutch verb clusters

- (1) Koen zal niet [**hoeven**₁ *te* **gaan**₂ voetballen₃].
Koen will not need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ The numbers indicate the hierarchical position of the verbs in the cluster (V1 selects V2, V2 selects V3)
- ▶ **The verb in red**: the verb that selects the *te*-infinitive
- ▶ **The verb in blue**: the verb on which *te* normally appears

The whole talk in a nutshell

New data on *te*-placement in Dutch verb clusters

- (1) Koen zal niet [**hoeven**₁ *te gaan*₂ voetballen₃].
Koen will not need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'
- ▶ The numbers indicate the hierarchical position of the verbs in the cluster (V1 selects V2, V2 selects V3)
 - ▶ **The verb in red**: the verb that selects the *te*-infinitive
 - ▶ **The verb in blue**: the verb on which *te* normally appears
 - ▶ In (1), V1 *hoeven* 'need to' selects the *te*-infinitive *te gaan* 'to go'

The whole talk in a nutshell

New data on *te*-placement in Dutch verb clusters

- (2) Koen zal niet [*hoeven*₁ *gaan*₂ voetballen₃].
Koen will not need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'
- ▶ V1 *hoeven* 'need to' selects a *te*-infinitive

The whole talk in a nutshell

New data on *te*-placement in Dutch verb clusters

- (2) Koen zal niet [**hoeven**₁ **gaan**₂ voetballen₃].
Koen will not need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'
- ▶ V1 *hoeven* 'need to' selects a *te*-infinitive
 - ▶ Many Dutch speakers allow or even need *te* to be dropped, contrary to selection requirements: *te*-drop (2)

The whole talk in a nutshell

New data on *te*-placement in Dutch verb clusters

- (3) Koen zal niet [*te* *hoeven*₁ *gaan*₂ voetballen₃].
Koen will not to need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ V1 *hoeven* 'need to' selects a *te*-infinitive

The whole talk in a nutshell

New data on *te*-placement in Dutch verb clusters

- (3) Koen zal niet [*te* *hoeven*₁ *gaan*₂ voetballen₃].
Koen will not to need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'
- ▶ V1 *hoeven* 'need to' selects a *te*-infinitive
 - ▶ Many Dutch speakers also allow *te* to appear on V1 instead of V2: *te*-raising (3)

The whole talk in a nutshell

New data on *te*-placement in Dutch verb clusters

- (3) Koen zal niet [*te* *hoeven*₁ *gaan*₂ voetballen₃].
Koen will not to need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'
- ▶ V1 *hoeven* 'need to' selects a *te*-infinitive
 - ▶ Many Dutch speakers also allow *te* to appear on V1 instead of V2: *te*-raising (3)
 - ▶ In addition, we also find *te*-doubling

The whole talk in a nutshell

New data on *te*-placement in Dutch verb clusters

- (3) Koen zal niet [*te* *hoeven*₁ *gaan*₂ *voetballen*₃].
Koen will not to need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'
- ▶ V1 *hoeven* 'need to' selects a *te*-infinitive
 - ▶ Many Dutch speakers also allow *te* to appear on V1 instead of V2: *te*-raising (3)
 - ▶ In addition, we also find *te*-doubling
 - ▶ Focus of this talk: *te*-drop and *te*-raising

The whole talk in a nutshell

Main points of the analysis

The whole talk in a nutshell

Main points of the analysis

- ▶ Dutch verb clusters are cases of functional restructuring (Cinque 2001; IJbema 2001; Wurmbrand 2001)

The whole talk in a nutshell

Main points of the analysis

- ▶ Dutch verb clusters are cases of functional restructuring (Cinque 2001; IJbema 2001; Wurmbrand 2001)
- ▶ *Te*-raising is an instance of clitic climbing

The whole talk in a nutshell

Main points of the analysis

- ▶ Dutch verb clusters are cases of functional restructuring (Cinque 2001; IJbema 2001; Wurmbrand 2001)
- ▶ *Te*-raising is an instance of clitic climbing
- ▶ *Te*-drop is due to differences in structural complement size

The whole talk in a nutshell

Main points of the analysis

- ▶ Dutch verb clusters are cases of functional restructuring (Cinque 2001; IJbema 2001; Wurmbrand 2001)
- ▶ *Te*-raising is an instance of clitic climbing
- ▶ *Te*-drop is due to differences in structural complement size

- ▶ *Te*-raising thus fills a previously unexplained gap in the cross-linguistic distribution of restructuring phenomena across Germanic and Romance

1. The whole talk in a nutshell
2. Methodology
3. The data
4. Prerequisites for the analysis
5. The analysis
6. Conclusion and outlook

Methodology: design

Methodology: design

Large-scale questionnaire study

- ▶ Three types of clusters in 123-order were tested

Methodology: design

Cluster type I. *Te-V1-V2-V3*

- (4) Anne **zegt** hier [*te willen*₁ blijven₂ zitten₃].
Anne says here to want.INF remain.INF sit.INF.
'Anne says that she wants to remain seated here.'

Methodology: design

Cluster type I. *Te-V1-V2-V3*

- (4) Anne *zegt* hier [*te willen*₁ *blijven*₂ *zitten*₃].
Anne says here to want.INF remain.INF sit.INF.
'Anne says that she wants to remain seated here.'

- ▶ The finite verb *zegt* 'says' in verb second position selects a *te*-infinitive

Methodology: design

Cluster type I. *Te*-V1-V2-V3

- (4) Anne *zegt* hier [*te willen*₁ *blijven*₂ *zitten*₃].
Anne says here to want.INF remain.INF sit.INF.
'Anne says that she wants to remain seated here.'

- ▶ The finite verb *zegt* 'says' in verb second position selects a *te*-infinitive
- ▶ The highest verb in the cluster (V1) is a *te*-infinitive

Methodology: design

Cluster type II. V1-*te*-V2-V3

- (5) Koen zal niet [**hoeven**₁ *te* **gaan**₂ voetballen₃].
Koen will not need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

Methodology: design

Cluster type II. V1-*te*-V2-V3

- (5) Koen zal niet [*hoeven*₁ *te gaan*₂ voetballen₃].
Koen will not need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ V1 *hoeven* 'need to' selects a *te*-infinitive

Methodology: design

Cluster type II. V1-*te*-V2-V3

- (5) Koen zal niet [**hoeven**₁ *te* **gaan**₂ voetballen₃].
Koen will not need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ V1 *hoeven* 'need to' selects a *te*-infinitive
- ▶ The second verb in the cluster (V2) is a *te*-infinitive

Methodology: design

Cluster type III. V1-V2-*te*-V3

- (6) Peter zal lang [moeten₁ zitten₂ *te* wachten₃].
Peter will long must.INF sit.INF to wait.INF.
'Peter will have to wait for a long time.'

Methodology: design

Cluster type III. V1-V2-*te*-V3

- (6) Peter zal lang [moeten₁ zitten₂ *te* wachten₃].
Peter will long must.INF sit.INF to wait.INF.
'Peter will have to wait for a long time.'

- ▶ V2 *zitten* 'sit' selects a *te*-infinitive

Methodology: design

Cluster type III. V1-V2-*te*-V3

- (6) Peter zal lang [moeten₁ zitten₂ *te* wachten₃].
Peter will long must.INF sit.INF to wait.INF.
'Peter will have to wait for a long time.'

- ▶ V2 *zitten* 'sit' selects a *te*-infinitive
- ▶ The lowest verb in the cluster (V3) is a *te*-infinitive

Methodology: design

Goal of the questionnaire study:

- ▶ Test whether te can appear in a different position than it should appear in based on the selection requirements

Methodology: design

Goal of the questionnaire study:

- ▶ Test whether *te* can appear in a different position than it should appear in based on the selection requirements
- ▶ Different versions of the three cluster types were included in the questionnaire:

Methodology: design

Goal of the questionnaire study:

- ▶ Test whether *te* can appear in a different position than it should appear in based on the selection requirements
- ▶ Different versions of the three cluster types were included in the questionnaire:
 - ▶ the 'correct' version (meeting the selection requirements)

Methodology: design

Goal of the questionnaire study:

- ▶ Test whether *te* can appear in a different position than it should appear in based on the selection requirements
- ▶ Different versions of the three cluster types were included in the questionnaire:
 - ▶ the 'correct' version (meeting the selection requirements)
 - ▶ *te* occurs on one of the other verbs of the cluster

Methodology: design

Goal of the questionnaire study:

- ▶ Test whether *te* can appear in a different position than it should appear in based on the selection requirements
- ▶ Different versions of the three cluster types were included in the questionnaire:
 - ▶ the 'correct' version (meeting the selection requirements)
 - ▶ *te* occurs on one of the other verbs of the cluster
 - ▶ *te* is absent

Methodology: design

Goal of the questionnaire study:

- ▶ Test whether *te* can appear in a different position than it should appear in based on the selection requirements
- ▶ Different versions of the three cluster types were included in the questionnaire:
 - ▶ the 'correct' version (meeting the selection requirements)
 - ▶ *te* occurs on one of the other verbs of the cluster
 - ▶ *te* is absent
 - ▶ *te* occurs twice

Methodology: design

7 different versions of all cluster types:

1. *te-V1-V2-V3*
2. *V1-te-V2-V3*
3. *V1-V2-te-V3*
4. *V1-V2-V3*
5. *te-V1-te-V2-V3*
6. *te-V1-V2-te-V3*
7. *V1-te-V2-te-V3*

▶ 28 test items, 25 filler items, 5 practice items

Methodology: procedure

Methodology: procedure

Task

- ▶ Judgment task, using a 5-point Likert scale

Methodology: procedure

Task

- ▶ Judgment task, using a 5-point Likert scale
- ▶ Online written questionnaire, created in LimeSurvey©

Methodology: procedure

Task

- ▶ Judgment task, using a 5-point Likert scale
- ▶ Online written questionnaire, created in LimeSurvey©
- ▶ Test items presented in randomized order, preceded by a practice round (5 practice items, same order for all participants)

Methodology: procedure

Instructions

- ▶ Participants were asked to answer the following question on a 5-point Likert scale after reading the test sentence out loud:

'Is this a possible sentence in Dutch as it is spoken in your immediate environment?'

Methodology: procedure

Instructions

- ▶ Participants were asked to answer the following question on a 5-point Likert scale after reading the test sentence out loud:

'Is this a possible sentence in Dutch as it is spoken in your immediate environment?'

- ▶ 'Immediate environment' was defined as 'friends, family, town or city'

Methodology: procedure

Instructions

- ▶ Participants were asked to answer the following question on a 5-point Likert scale after reading the test sentence out loud:

'Is this a possible sentence in Dutch as it is spoken in your immediate environment?'

- ▶ 'Immediate environment' was defined as 'friends, family, town or city'
- ▶ 5 = 'certainly', 1 = 'certainly not'; they could also assign 2,3,4 or 'I don't know', and comment on their rating in a comment field

Methodology: participants

Methodology: participants

Participants

- ▶ 531 native Dutch speakers completed the questionnaire, 459 were included for analysis:

Methodology: participants

Participants

- ▶ 531 native Dutch speakers completed the questionnaire, 459 were included for analysis:
 - ▶ 70 participants were excluded due to them having lived abroad for longer than 10% of their lives

Methodology: participants

Participants

- ▶ 531 native Dutch speakers completed the questionnaire, 459 were included for analysis:
 - ▶ 70 participants were excluded due to them having lived abroad for longer than 10% of their lives
 - ▶ 2 participants were excluded due to inconsistent responses to the filler items

Methodology: participants

Participants

- ▶ Mean age: 53 (*SD* 12,5; range: 18-99)

Methodology: participants

Participants

- ▶ Mean age: 53 (*SD* 12,5; range: 18-99)
- ▶ Gender: 250 female, 209 male

Methodology: participants

Participants

- ▶ Mean age: 53 (*SD* 12,5; range: 18-99)
- ▶ Gender: 250 female, 209 male
- ▶ Place of birth: The Netherlands: 361, Belgium: 95 (other: 3)

Methodology: participants



Figure 1: Distribution of included participants

1. The whole talk in a nutshell
2. Methodology
- 3. The data**
4. Prerequisites for the analysis
5. The analysis
6. Conclusion and outlook

The data: *te-drop*

The data: *te*-drop

Terminology:

1. *Te* is present in the cluster, as required by selection:
no *te*-drop

The data: *te*-drop

Terminology:

1. *Te* is present in the cluster, as required by selection:
no *te*-drop
2. *Te* is absent in the cluster, even though selection requires it to be present: *te*-drop

The data: *te*-drop

Type of cluster	No <i>te</i> -drop	Optional <i>te</i> -drop	Obligatory <i>te</i> -drop
I. <i>te</i> -V1-V2-V3	451 (98,3%)	8 (0,7%)	0 (0%)
II. V1- <i>te</i> -V2-V3	191 (41,6%)	187 (40,7%)	19 (4,2%)
III. V1-V2- <i>te</i> -V3	20 (4,4%)	152 (33,1%)	223 (48,6%)

Table 1: Frequency overview of *te*-drop per type of cluster

The data: *te*-drop

Type of cluster	No <i>te</i> -drop	Optional <i>te</i> -drop	Obligatory <i>te</i> -drop
I. <i>te</i> -V1-V2-V3	451 (98,3%)	8 (0,7%)	0 (0%)
II. V1- <i>te</i> -V2-V3	191 (41,6%)	187 (40,7%)	19 (4,2%)
III. V1-V2- <i>te</i> -V3	20 (4,4%)	152 (33,1%)	223 (48,6%)

Table 1: Frequency overview of *te*-drop per type of cluster

- ▶ 62 speakers (13,5%) rejected all versions of cluster type II

The data: *te*-drop

Type of cluster	No <i>te</i> -drop	Optional <i>te</i> -drop	Obligatory <i>te</i> -drop
I. <i>te</i> -V1-V2-V3	451 (98,3%)	8 (0,7%)	0 (0%)
II. V1- <i>te</i> -V2-V3	191 (41,6%)	187 (40,7%)	19 (4,2%)
III. V1-V2- <i>te</i> -V3	20 (4,4%)	152 (33,1%)	223 (48,6%)

Table 1: Frequency overview of *te*-drop per type of cluster

- ▶ 62 speakers (13,5%) rejected all versions of cluster type II
- ▶ 64 speakers (13,9%) rejected all versions of cluster type III

The data: *te*-drop

Te-drop

- ▶ *Te* cannot be dropped in cluster type I (7)

(7) Anne *zegt* hier [** (te) willen*₁ *blijven*₂ *zitten*₃].
Anne says here to want.INF remain.INF sit.INF.
'Anne says that she wants to remain seated here.'

The data: *te*-drop

Te-drop

- ▶ However, in cluster type II (8) and cluster type III (9), *te* can or even has to be dropped

- (8) Koen zal niet [hoeven₁ gaan₂ voetballen₃].
Koen will not need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'
- (9) Peter zal lang [moeten₁ zitten₂ wachten₃].
Peter will long must.INF sit.INF wait.INF.
'Peter will have to wait for a long time.'

The data: *te*-drop

- (10) Koen zal niet [**hoeven**₁ **gaan**₂ voetballen₃].
Koen will not need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ In cluster type II, 187 speakers (40,7%) show optional *te*-drop, i.e. for these speakers *te* can be dropped, but they also allow *te* in situ and/or *te*-raising

The data: *te*-drop

- (10) Koen zal niet [**hoeven**₁ **gaan**₂ voetballen₃].
Koen will not need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'
- ▶ In cluster type II, 187 speakers (40,7%) show optional *te*-drop, i.e. for these speakers *te* can be dropped, but they also allow *te* in situ and/or *te*-raising
 - ▶ 19 speakers (4,2%) need *te* to be dropped in this cluster, i.e. they neither allow *te* in situ, nor *te*-raising

The data: *te*-drop

- (11) Peter zal lang [moeten₁ zitten₂ wachten₃].
Peter will long must.INF sit.INF wait.INF.
'Peter will have to wait for a long time.'

- ▶ In cluster type III, 152 speakers (33,1%) show optional *te*-drop, i.e. these speakers allow *te* to be dropped, but also allow *te* in situ and/or *te*-raising

The data: *te*-drop

- (11) Peter zal lang [moeten₁ zitten₂ wachten₃].
Peter will long must.INF sit.INF wait.INF.
'Peter will have to wait for a long time.'

- ▶ In cluster type III, 152 speakers (33,1%) show optional *te*-drop, i.e. these speakers allow *te* to be dropped, but also allow *te* in situ and/or *te*-raising
- ▶ 223 speakers (48,6%) need *te* to be dropped in this cluster, i.e. they neither allow *te* in situ, nor *te*-raising

The data: *te*-raising

The data: *te*-raising

Terminology:

1. *Te* occurs in the position required by selection requirements:
te in situ

The data: *te*-raising

Terminology:

1. *Te* occurs in the position required by selection requirements: *te in situ*
2. *Te* occurs in a higher position within the cluster: *te-raising*

The data: *te*-raising

Te-raising

Type of cluster	No	Optional	Obligatory
I. <i>te</i> -V1-V2-V3	459 (100%)	-	-
II. V1- <i>te</i> -V2-V3	193 (51,1%)	165 (43,6%)	20 (5,3%)
III. V1-V2- <i>te</i> -V3	124 (72,1%)	39 (22,7%)	9 (5,2%)

Table 2: Frequency overview of *te*-raising per type of cluster

The data: *te*-raising

- (12) Anne *zegt* hier [*te willen*₁ *blijven*₂ *zitten*₃].
Anne says here to want.INF remain.INF sit.INF.
'Anne says that she wants to remain seated here.'

- ▶ In cluster type I, *te* is already on the highest verb of the cluster; we thus do not find *te*-raising in this cluster

The data: *te*-raising

(12) Anne *zegt* hier [*te* *willen*₁ *blijven*₂ *zitten*₃].
Anne says here to want.INF remain.INF sit.INF.
'Anne says that she wants to remain seated here.'

- ▶ In cluster type I, *te* is already on the highest verb of the cluster; we thus do not find *te*-raising in this cluster
- ▶ All 459 speakers (100%) allow *te* in situ (i.e. *te* in the position required by selection requirements)

The data: *te*-raising

- (13) ...[<*te*> *hoeven*₁ <*te*> *gaan*₂ voetballen₃].
... to need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ In cluster type II, 193 (51,1%) of the speakers who allow *te* in this cluster, only allow *te* in situ (i.e. no *te*-raising)

The data: *te*-raising

(13) ...[<*te*> *hoeven*₁ <*te*> *gaan*₂ voetballen₃].
... to need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ In cluster type II, 193 (51,1%) of the speakers who allow *te* in this cluster, only allow *te* in situ (i.e. no *te*-raising)
- ▶ 165 speakers (43,6%) show optional *te*-raising, i.e. for these speakers *te* can be raised, but they also allow *te* in situ

The data: *te*-raising

(13) ...[<*te*> *hoeven*₁ <*te*> *gaan*₂ voetballen₃].
... to need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ In cluster type II, 193 (51,1%) of the speakers who allow *te* in this cluster, only allow *te* in situ (i.e. no *te*-raising)
- ▶ 165 speakers (43,6%) show optional *te*-raising, i.e. for these speakers *te* can be raised, but they also allow *te* in situ
- ▶ 20 speakers (5,3%) need *te* to be raised in this cluster

The data: *te*-raising

(14) ...[<*te*> moeten₁ <*te*> zitten₂ <*te*> wachten₃].
... to must.INF to sit.INF to wait.INF.
'Peter will have to wait for a long time.'

- ▶ In cluster type III, 124 (72,1%) of the speakers who allow *te* in this cluster, only allow *te* in situ (i.e. no *te*-raising)

The data: *te*-raising

(14) ...[<*te*> moeten₁ <*te*> zitten₂ <*te*> wachten₃].
... to must.INF to sit.INF to wait.INF.
'Peter will have to wait for a long time.'

- ▶ In cluster type III, 124 (72,1%) of the speakers who allow *te* in this cluster, only allow *te* in situ (i.e. no *te*-raising)
- ▶ 39 speakers (22,7%) show optional *te*-raising, i.e. for these speakers *te* can be raised, but they also allow *te* in situ

The data: *te*-raising

(14) ...[<te> moeten₁ <te> zitten₂ <te> wachten₃].
... to must.INF to sit.INF to wait.INF.
'Peter will have to wait for a long time.'

- ▶ In cluster type III, 124 (72,1%) of the speakers who allow *te* in this cluster, only allow *te* in situ (i.e. no *te*-raising)
- ▶ 39 speakers (22,7%) show optional *te*-raising, i.e. for these speakers *te* can be raised, but they also allow *te* in situ
- ▶ 9 speakers (5,2%) need *te* to be raised in this cluster

The data: *te*-doubling

The data: *te*-doubling

- (15) Koen zal niet [*te* *hoeven*₁ *te* *gaan*₂ voetballen₃].
Koen will not to need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ In addition, we find cases of *te*-doubling

The data: *te*-doubling

- (15) Koen zal niet [*te* *hoeven*₁ *te* *gaan*₂ voetballen₃].
Koen will not to need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'
- ▶ In addition, we find cases of *te*-doubling
 - ▶ *Te*-doubling: *te* appears twice, whereas only one *te* is required by selection requirements

The data: *te*-doubling

- (15) Koen zal niet [*te* *hoeven*₁ *te* *gaan*₂ voetballen₃].
Koen will not to need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'
- ▶ In addition, we find cases of *te*-doubling
 - ▶ *Te*-doubling: *te* appears twice, whereas only one *te* is required by selection requirements
 - ▶ *Te*-doubling is attested in all three cluster types, but much less frequent in cluster type III than in cluster type I and II

The data: geographical distribution

The data: geographical distribution



Figure 2: Linguistic differences mapped onto geographical space

- ▶ The darker the lines between locations, the more linguistically similar the varieties spoken in those locations

The data: geographical distribution

- ▶ There are no clear geographical patterns in the distribution of *te-raising* and *te-drop*

The data: geographical distribution

- ▶ There are no clear geographical patterns in the distribution of *te*-raising and *te*-drop
- ▶ That is, both phenomena are widespread and not restricted to (a) specific area(s)

The data: summary

The data: summary

Two main findings:

1. *Te*-raising occurs in cluster types II and III, with higher frequencies for cluster type II than for cluster type III

The data: summary

Two main findings:

1. *Te*-raising occurs in cluster types II and III, with higher frequencies for cluster type II than for cluster type III
 - ▶ For the largest group of speakers who allow *te*-raising, this raising is optional

The data: summary

Two main findings:

1. *Te*-raising occurs in cluster types II and III, with higher frequencies for cluster type II than for cluster type III
 - ▶ For the largest group of speakers who allow *te*-raising, this raising is optional
 - ▶ I.e., for them the following *implicational relation* holds: if they allow *te*-raising, they also allow *te* in situ

The data: summary

Two main findings:

1. *Te*-raising occurs in cluster types II and III, with higher frequencies for cluster type II than for cluster type III
 - ▶ For the largest group of speakers who allow *te*-raising, this raising is optional
 - ▶ I.e., for them the following *implicational relation* holds: if they allow *te*-raising, they also allow *te* in situ
 - ▶ For a small group of speakers, *te*-raising is obligatory

The data: summary

Two main findings:

1. *Te*-raising occurs in cluster types II and III, with higher frequencies for cluster type II than for cluster type III
 - ▶ For the largest group of speakers who allow *te*-raising, this raising is optional
 - ▶ I.e., for them the following *implicational relation* holds: if they allow *te*-raising, they also allow *te* in situ
 - ▶ For a small group of speakers, *te*-raising is obligatory
2. *Te*-drop occurs in cluster types II and III, with higher frequencies for cluster type III than cluster type II

The data: summary

Two main findings:

1. *Te*-raising occurs in cluster types II and III, with higher frequencies for cluster type II than for cluster type III
 - ▶ For the largest group of speakers who allow *te*-raising, this raising is optional
 - ▶ I.e., for them the following *implicational relation* holds: if they allow *te*-raising, they also allow *te* in situ
 - ▶ For a small group of speakers, *te*-raising is obligatory
2. *Te*-drop occurs in cluster types II and III, with higher frequencies for cluster type III than cluster type II
 - ▶ In addition, we also find *te*-doubling (not the main focus of this talk)

1. The whole talk in a nutshell
2. Methodology
3. The data
4. Prerequisites for the analysis
5. The analysis
6. Conclusion and outlook

Prerequisites for the analysis

Four theoretical tenets:

Prerequisites for the analysis

Four theoretical tenets:

1. Approach to verb clusters: functional restructuring

Prerequisites for the analysis

Four theoretical tenets:

1. Approach to verb clusters: functional restructuring
2. The size of the complement of Dutch modals: TP

Prerequisites for the analysis

Four theoretical tenets:

1. Approach to verb clusters: functional restructuring
2. The size of the complement of Dutch modals: TP
3. The position of *te*: merged in T

Prerequisites for the analysis

Four theoretical tenets:

1. Approach to verb clusters: functional restructuring
2. The size of the complement of Dutch modals: TP
3. The position of *te*: merged in T
4. The morphosyntactic status of *te*: clitic vs. prefix

Prerequisites for the analysis

Approach to verb clusters

- ▶ **Proposal:** Dutch non-finite verb clusters are cases of functional restructuring

Prerequisites for the analysis

Approach to verb clusters

- ▶ **Proposal:** Dutch non-finite verb clusters are cases of functional restructuring
- ▶ Modal, aspectual and motion verbs are merged in functional heads above the lexical verb (Cinque 2001; Wurmbrand 2001)

Prerequisites for the analysis

The size of the complement of Dutch modals

- ▶ Dutch modals select a TP complement (Aelbrecht 2009)

Prerequisites for the analysis

The size of the complement of Dutch modals

- ▶ Dutch modals select a TP complement (Aelbrecht 2009)
- ▶ *Support*: the modal and lexical verb can be modified by conflicting temporal adverbs (Aelbrecht 2009: 35)

Prerequisites for the analysis

- ▶ Dutch modals select a TP complement (Aelbrecht 2009)
- ▶ *Support*: the modal and lexical verb can be modified by conflicting temporal adverbs (Aelbrecht 2009: 35)

(16) *Gisteren moest* ik nog *volgende week optreden*
yesterday must.PAST I still next week perform
en nu zijn de plannen alweer een week opgeschoven.
and now are the plans again a week delayed.
'Yesterday, I still had to perform next week, and now the
plans have been delayed by another week.'

Prerequisites for the analysis

The position and morphosyntactic status of *te*

- ▶ *Te* is merged in T (Bennis and Hoekstra 1989; Rutten 1991; IJbema 2001)

Prerequisites for the analysis

The position and morphosyntactic status of *te*

- ▶ *Te* is merged in T (Bennis and Hoekstra 1989; Rutten 1991; IJbema 2001)
- ▶ We find conflicting judgments on the distributional properties of *te* (Zwart 1993; Bennis 2000; IJbema 2001)

Prerequisites for the analysis

Conflicting judgments on the distributional properties of *te*

- ▶ Zwart (1993: 104):

- (17) a. Om in L.A. *te* *leven* en (*te*) *sterven*.
for in L.A. to live.INF and to die.INF.
'To live and die in L.A.'
- b. Om in L.A. *ge-* *boren* en * (*ge-*) *storven* te zijn.
for in L.A. GE- born and GE- died to be.
'To be born and have died in L.A.'

Prerequisites for the analysis

Conflicting judgments on the distributional properties of *te*

- ▶ Zwart (1993: 104):

- (17) a. Om in L.A. *te* *leven* en (*te*) *sterven*.
for in L.A. to live.INF and to die.INF.
'To live and die in L.A.'
- b. Om in L.A. *ge-* *boren* en * (*ge-*) *storven* te zijn.
for in L.A. GE- born and GE- died to be.
'To be born and have died in L.A.'

- ▶ IJbema (2001: 70): (17) shows that *te* is a clitic, as clitics can have scope over two elements in a coordination, whereas prefixes cannot (Miller 1991)

Prerequisites for the analysis

Conflicting judgments on the distributional properties of *te*

- ▶ Bennis (2000: 115) rejects coordinations with *te* taking scope over two infinitives (i.e. he argues that *te* is a prefix):

- (18) De generaal moedigt het leger aan om *te strijden*
the general encourages the army PRT for to fight
en * (*te*) winnen.
and to win.
'The general encourages the army to fight and win.'

Prerequisites for the analysis

The morphosyntactic status of *te*

- ▶ **My proposal:** *te* can be either a prefix or a clitic

Prerequisites for the analysis

The morphosyntactic status of *te*

- ▶ **My proposal:** *te* can be either a prefix or a clitic
- ▶ Differing native speaker judgments reflect variation in the categorial status of *te*

Prerequisites for the analysis

The morphosyntactic status of *te*

- ▶ **My proposal:** *te* can be either a prefix or a clitic
- ▶ Differing native speaker judgments reflect variation in the categorial status of *te*
- ▶ Consequently, speakers for whom *te* is a prefix, do not allow *te*-raising; speakers for whom *te* is a clitic, do

1. The whole talk in a nutshell
2. Methodology
3. The data
4. Prerequisites for the analysis
- 5. The analysis**
6. Conclusion and outlook

The analysis: *Te*-raising is clitic climbing

The analysis: *Te*-raising is clitic climbing

- ▶ In Italian, clitics can also appear on a different host than the one they are syntactically associated with (Rizzi 1982; Kayne 1989; Cinque 2004)

The analysis: *Te*-raising is clitic climbing

- ▶ In Italian, clitics can also appear on a different host than they are syntactically associated with (Rizzi 1982; Kayne 1989; Cinque 2004)

- (19) a. *<Ci>* vorrei andar *<ci>* con Maria.
there I.would.want go.INF.there with Maria.
'I would like to go there with Maria.'
- b. *<*Ci>* detesterei andar *<ci>* con Maria.
there I.would.hate go.INF.there with Maria.
'I would hate to go there with Maria.'

(Cardinaletti and Shlonsky 2004: 521)

The analysis: *Te*-raising is clitic climbing

- ▶ Restructuring is a necessary condition for both Italian clitic climbing and Dutch *te*-raising

The analysis: *Te*-raising is clitic climbing

- ▶ Restructuring is a necessary condition for both Italian clitic climbing and Dutch *te*-raising
- ▶ I therefore propose that ***te*-raising is a case of clitic climbing**

The analysis: *Te*-raising is clitic climbing

Further support: three parallels between Italian and Dutch restructuring

The analysis: *Te*-raising is clitic climbing

Further support: three parallels between Italian and Dutch restructuring

1. Auxiliary switch

The analysis: *Te*-raising is clitic climbing

Further support: three parallels between Italian and Dutch restructuring

1. Auxiliary switch
2. Clitic doubling

The analysis: *Te*-raising is clitic climbing

Further support: three parallels between Italian and Dutch restructuring

1. Auxiliary switch
2. Clitic doubling
3. Variation in optionality of clitic climbing

The analysis: *Te*-raising is clitic climbing

Auxiliary switch

- ▶ A restructuring effect in which the auxiliary of the lower, lexical verb is selected, instead of the auxiliary that is associated with the higher, functional verb:

(20) Ci **sarei** **voluto andare** con Maria.
there I.would.be wanted go.INF with Maria.
'I would have liked to go there with Maria.'

The analysis: *Te*-raising is clitic climbing

Auxiliary switch

- ▶ A restructuring effect in which the auxiliary of the lower, lexical verb is selected, instead of the auxiliary that is associated with the higher, functional verb:

(20) Ci **sarei** **vuluto andare** con Maria.
there I.would.be wanted go.INF with Maria.
'I would have liked to go there with Maria.'

- ▶ Functional *volere* 'want' normally selects auxiliary *avere* 'have'

The analysis: *Te*-raising is clitic climbing

Auxiliary switch

- ▶ A restructuring effect in which the auxiliary of the lower, lexical verb is selected, instead of the auxiliary that is associated with the higher, functional verb:

(20) Ci *sarei* *vuluto andare* con Maria.
there I.would.be wanted go.INF with Maria.
'I would have liked to go there with Maria.'

- ▶ Functional *volere* 'want' normally selects auxiliary *avere* 'have'
- ▶ In (20), the auxiliary associated with lexical verb *andare* 'go' is selected instead (e.g. *sarei* 'would be' (*essere* 'be'))

The analysis: further parallels between Italian and Dutch restructuring

Auxiliary switch

- ▶ We see the same restructuring effect in verb clusters in (mostly Southern) varieties of Dutch:

(21) ...dat ik naar huis **ben moeten gaan**.
...that I to house am must.INF go.INF
'...that I had to go home.'

The analysis: further parallels between Italian and Dutch restructuring

Auxiliary switch

- ▶ We see the same restructuring effect in verb clusters in (mostly Southern) varieties of Dutch:

(21) ...dat ik naar huis **ben moeten gaan**.
...that I to house am must.INF go.INF
'...that I had to go home.'

- ▶ Functional *moeten* normally selects auxiliary *hebben* 'have'

The analysis: further parallels between Italian and Dutch restructuring

Auxiliary switch

- ▶ We see the same restructuring effect in verb clusters in (mostly Southern) varieties of Dutch:

(21) ...dat ik naar huis **ben moeten gaan**.
...that I to house am must.INF go.INF
'...that I had to go home.'

- ▶ Functional *moeten* normally selects auxiliary *hebben* 'have'
- ▶ In (21), the auxiliary associated with lexical verb *gaan* 'go' is selected instead (e.g. *ben* 'am' (*zijn* 'be'))

The analysis: further parallels between Italian and Dutch restructuring

Clitic doubling

- ▶ Both in varieties of Italian (Cardinalletti & Shlonsky 2004: 251) and Dutch, we see clitic doubling patterns in restructuring contexts:

(22) A' *m* *la* dev leve *m la*.
I to-me it must take-away.to-me it.
'I have to take it away.'

(23) Koen zal niet [*te* hoeven₁ *te* gaan₂ voetballen₃].
Koen will not to need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

The analysis: further parallels between Italian and Dutch restructuring

Variation in optionality of clitic climbing

- ▶ *Recall*: In the Dutch data, we see three patterns: obligatory *te*-raising, optional *te*-raising, and no *te*-raising (i.e. *te* in situ)

The analysis: further parallels between Italian and Dutch restructuring

Variation in optionality of clitic climbing

- ▶ *Recall*: In the Dutch data, we see three patterns: obligatory *te*-raising, optional *te*-raising, and no *te*-raising (i.e. *te* in situ)
- ▶ Exactly these three patterns are also found for clitic climbing in restructuring contexts across varieties of Italian (see amongst others Cinque (2004))

The analysis: further parallels between Italian and Dutch restructuring

Variation in optionality of clitic climbing

- ▶ *Recall*: In the Dutch data, we see three patterns: obligatory *te*-raising, optional *te*-raising, and no *te*-raising (i.e. *te* in situ)
- ▶ Exactly these three patterns are also found for clitic climbing in restructuring contexts across varieties of Italian (see amongst others Cinque (2004))
 - ▶ Many northern varieties have obligatory clitic in situ

The analysis: further parallels between Italian and Dutch restructuring

Variation in optionality of clitic climbing

- ▶ *Recall*: In the Dutch data, we see three patterns: obligatory *te*-raising, optional *te*-raising, and no *te*-raising (i.e. *te* in situ)
- ▶ Exactly these three patterns are also found for clitic climbing in restructuring contexts across varieties of Italian (see amongst others Cinque (2004))
 - ▶ Many northern varieties have obligatory clitic in situ
 - ▶ Standard Italian (and other varieties) has optional clitic climbing

The analysis: further parallels between Italian and Dutch restructuring

Variation in optionality of clitic climbing

- ▶ *Recall*: In the Dutch data, we see three patterns: obligatory *te*-raising, optional *te*-raising, and no *te*-raising (i.e. *te* in situ)
- ▶ Exactly these three patterns are also found for clitic climbing in restructuring contexts across varieties of Italian (see amongst others Cinque (2004))
 - ▶ Many northern varieties have obligatory clitic in situ
 - ▶ Standard Italian (and other varieties) has optional clitic climbing
 - ▶ Many southern varieties have obligatory clitic climbing

The analysis: Te in cluster type I.

The analysis: *Te* in cluster type I.

Cluster type I, *te*-V1-V2-V3

- (24) Anne *zegt* hier [*te willen*₁ *blijven*₂ *zitten*₃].
Anne says here to want.INF remain.INF sit.INF.
'Anne says that she wants to remain seated here.'

- ▶ The finite verb *zegt* 'says' in verb second position selects the *te*-infinitive

The analysis: *Te* in cluster type I.

Cluster type I, *te*-V1-V2-V3

- (24) Anne *zegt* hier [*te willen*₁ *blijven*₂ *zitten*₃].
Anne says here to want.INF remain.INF sit.INF.
'Anne says that she wants to remain seated here.'

- ▶ The finite verb *zegt* 'says' in verb second position selects the *te*-infinitive
- ▶ V1 *willen* 'want' is in Mod, V2 *blijven* 'remain' in Asp and the lexical verb V3 *zitten* 'sit' is in V

The analysis: *Te* in cluster type I.

Cluster type I, *te*-V1-V2-V3

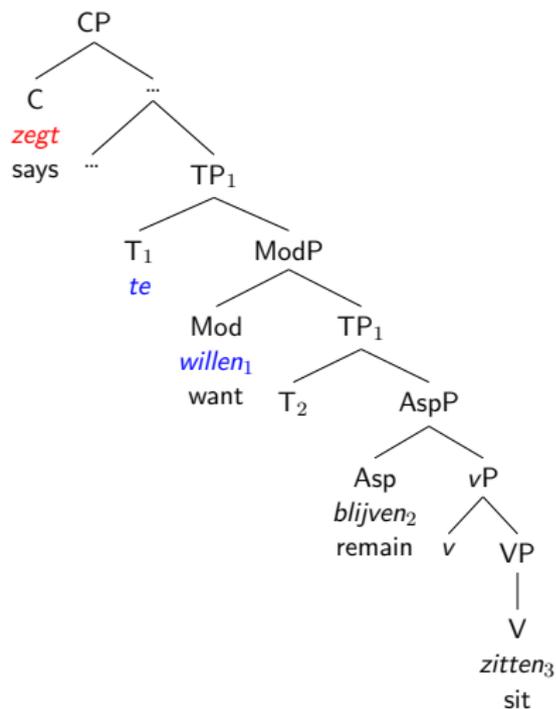
- (24) Anne *zegt* hier [*te willen*₁ *blijven*₂ *zitten*₃].
Anne says here to want.INF remain.INF sit.INF.
'Anne says that she wants to remain seated here.'

- ▶ The finite verb *zegt* 'says' in verb second position selects the *te*-infinitive
- ▶ V1 *willen* 'want' is in Mod, V2 *blijven* 'remain' in Asp and the lexical verb V3 *zitten* 'sit' is in V
- ▶ There is no *te*-raising and no *te*-drop in this cluster type

The analysis: *Te* in cluster type I.

The structure of cluster type I:

(25)



The analysis: Te in cluster type II.

The analysis: *Te* in cluster type II.

Cluster type II, V1-*te*-V2-V3

- (26) Koen zal niet [**hoeven**₁ *te gaan*₂ voetballen₃].
Koen will not need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ The highest verb in the cluster, V1 *hoeven* 'need to' selects the *te*-infinitive

The analysis: *Te* in cluster type II.

Cluster type II, V1-*te*-V2-V3

- (26) Koen zal niet [**hoeven**₁ *te gaan*₂ voetballen₃].
Koen will not need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ The highest verb in the cluster, V1 *hoeven* 'need to' selects the *te*-infinitive
- ▶ V1 *hoeven* 'need to' is in Mod, V2 *gaan* 'go' in Asp and the lexical verb V3 *voetballen* 'play football' is in V

The analysis: *Te* in cluster type II.

Cluster type II, V1-*te*-V2-V3

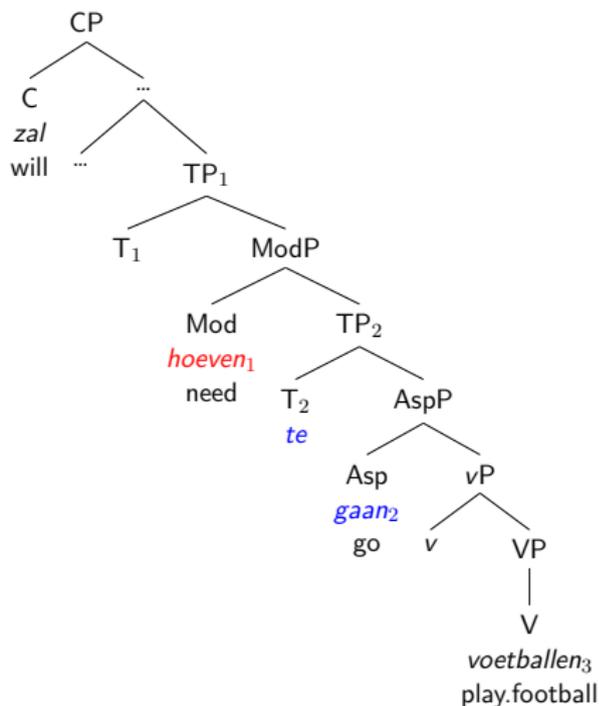
- (26) Koen zal niet [**hoeven**₁ *te* **gaan**₂ voetballen₃].
Koen will not need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ The highest verb in the cluster, V1 *hoeven* 'need to' selects the *te*-infinitive
- ▶ V1 *hoeven* 'need to' is in Mod, V2 *gaan* 'go' in Asp and the lexical verb V3 *voetballen* 'play football' is in V
- ▶ 185 speakers allow *te*-raising in this cluster

The analysis: *Te* in cluster type II.

The structure of cluster type II:

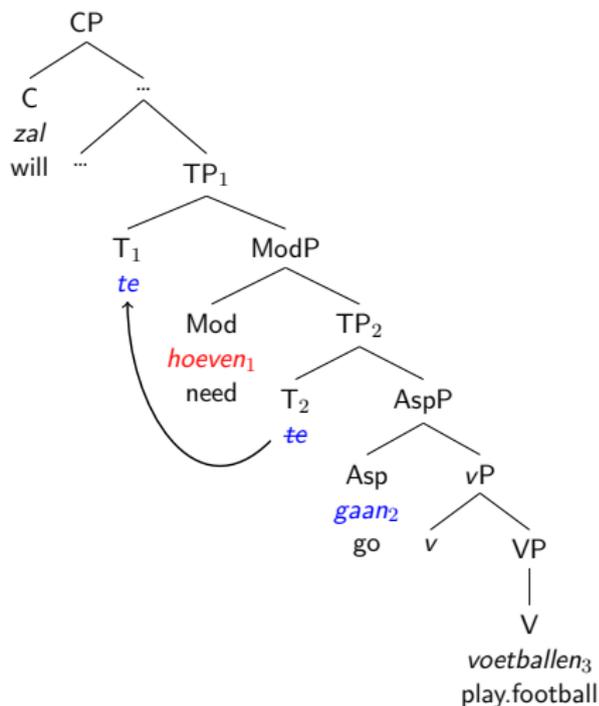
(27)



The analysis: *Te* in cluster type II.

Te-raising in cluster type II:

(28)



The analysis: *Te* in cluster type II.

- ▶ *Recall*: there are also speakers who allow *te*-drop in cluster type II

(29) Koen zal niet [hoeven₁ gaan₂ voetballen₃].
Koen will not need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'

The analysis: *Te* in cluster type II.

- ▶ *Recall*: there are also speakers who allow *te*-drop in cluster type II

(29) Koen zal niet [*hoeven*₁ *gaan*₂ voetballen₃].
Koen will not need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ Diachronic work shows that in the last fifty years, *hoeven* is losing its ability to select a *te*-infinitive (Van de Velde 2017)

The analysis: *Te* in cluster type II.

- ▶ *Recall*: there are also speakers who allow *te*-drop in cluster type II

(29) Koen zal niet [**hoeven**₁ **gaan**₂ voetballen₃].
Koen will not need.INF go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ Diachronic work shows that in the last fifty years, *hoeven* is losing its ability to select a *te*-infinitive (Van de Velde 2017)
- ▶ The fact that this is an ongoing language change is reflected by variation among speakers in allowing or disallowing *te*-drop in this cluster

The analysis: Te in cluster type III.

The analysis: *Te* in cluster type III.

Cluster type III, V1-V2-*te*-V3

- (30) Peter zal lang [moeten₁ zitten₂ *te* wachten₃].
Peter will long must.INF sit.INF to wait.INF.
'Peter will have to wait for a long time.'

- ▶ The second verb in the cluster, V2 *zitten* 'sit' selects the *te*-infinitive

The analysis: *Te* in cluster type III.

Cluster type III, V1-V2-*te*-V3

(30) Peter zal lang [moeten₁ zitten₂ *te* wachten₃].
Peter will long must.INF sit.INF to wait.INF.
'Peter will have to wait for a long time.'

- ▶ The second verb in the cluster, V2 *zitten* 'sit' selects the *te*-infinitive
- ▶ 48 speakers allow *te*-raising in this cluster

The analysis: *Te* in cluster type III.

Cluster type III, V1-V2-*te*-V3

- (30) Peter zal lang [moeten₁ zitten₂ *te* wachten₃].
Peter will long must.INF sit.INF to wait.INF.
'Peter will have to wait for a long time.'

- ▶ The second verb in the cluster, V2 *zitten* 'sit' selects the *te*-infinitive
- ▶ 48 speakers allow *te*-raising in this cluster
- ▶ Furthermore, 152 speakers optionally drop *te* in this cluster, and for 223 speakers *te*-drop is obligatory

The analysis: *Te* in cluster type III.

- ▶ In cluster type III the verb selecting the *te*-infinitive is progressively-used *zitten* 'sit'

The analysis: *Te* in cluster type III.

- ▶ In cluster type III the verb selecting the *te*-infinitive is progressively-used *zitten* 'sit'
- ▶ In Dutch, posture verbs, such as *zitten* 'sit', can be used in a periphrastic progressive construction:

The analysis: *Te* in cluster type III.

- ▶ In cluster type III the verb selecting the *te*-infinitive is progressively-used *zitten* 'to sit'
- ▶ In Dutch, posture verbs, such as *zitten* 'to sit', can be used in a periphrastic progressive construction:

(31) Sofia **zit** *te* lachen.
Sofia sits to laugh.
'Sofia is laughing.'

The analysis: *Te* in cluster type III.

- ▶ In cluster type III the verb selecting the *te*-infinitive is progressively-used *zitten* 'to sit'
- ▶ In Dutch, posture verbs, such as *zitten* 'to sit', can be used in a periphrastic progressive construction:

(31) Sofia **zit** *te* lachen.
Sofia sits to laugh.
'Sofia is laughing.'

- ▶ The structure of cluster type III thus has a ProgP layer

The analysis: Te in cluster type III.

- ▶ Harwood (2013): there is a vP_{prog} above ProgP

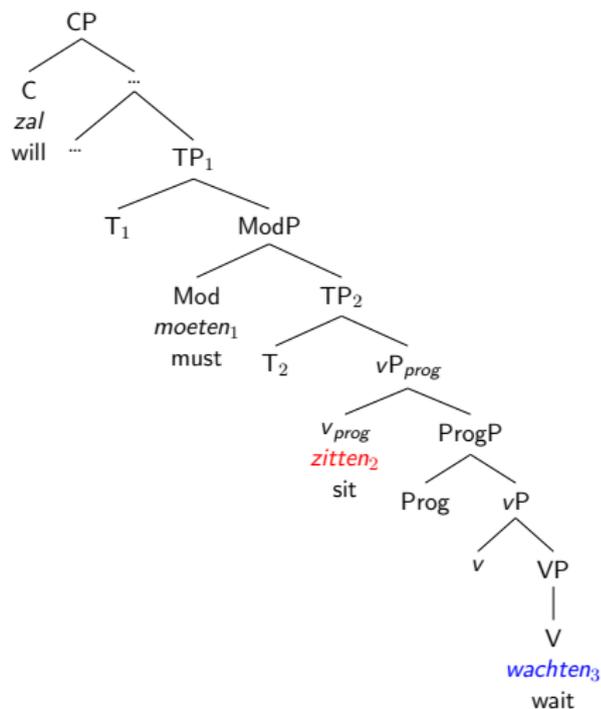
The analysis: Te in cluster type III.

- ▶ Harwood (2013): there is a vP_{prog} above ProgP
- ▶ In the structure of cluster type III V2 *zitten* 'sit' is merged in V_{prog}

The analysis: *Te* in cluster type III.

The structure of cluster type III:

(32)



The analysis: *Te* in cluster type III.

- ▶ There is no T-position below V2 *zitten* 'sit', which selects the *te*-infinitive

The analysis: *Te* in cluster type III.

- ▶ There is no T-position below V2 *zitten* 'sit', which selects the *te*-infinitive
- ▶ The structure of cluster type III thus predicts that speakers do not allow *te* to occur in this cluster

The analysis: *Te* in cluster type III.

- ▶ *Recall*: The majority of speakers (223) need *te* to be dropped in this cluster:

The analysis: *Te* in cluster type III.

- ▶ *Recall*: The majority of speakers (223) need *te* to be dropped in this cluster:

(33) Peter zal lang [moeten₁ zitten₂ wachten₃].
Peter will long must.INF sit.INF wait.INF.
'Peter will have to wait for a long time.'

The analysis: *Te* in cluster type III.

- ▶ *Recall*: The majority of speakers (223) need *te* to be dropped in this cluster:

(33) Peter zal lang [moeten₁ zitten₂ wachten₃].
Peter will long must.INF sit.INF wait.INF.
'Peter will have to wait for a long time.'

The analysis: *Te* in cluster type III.

- ▶ *Recall*: The majority of speakers (223) need *te* to be dropped in this cluster:

(33) Peter zal lang [moeten₁ zitten₂ wachten₃].
Peter will long must.INF sit.INF wait.INF.
'Peter will have to wait for a long time.'

- ▶ The high frequency of obligatory *te*-drop follows from the structure of the cluster: there is no T-position below V2 *zitten* 'sit' for *te* to be merged in

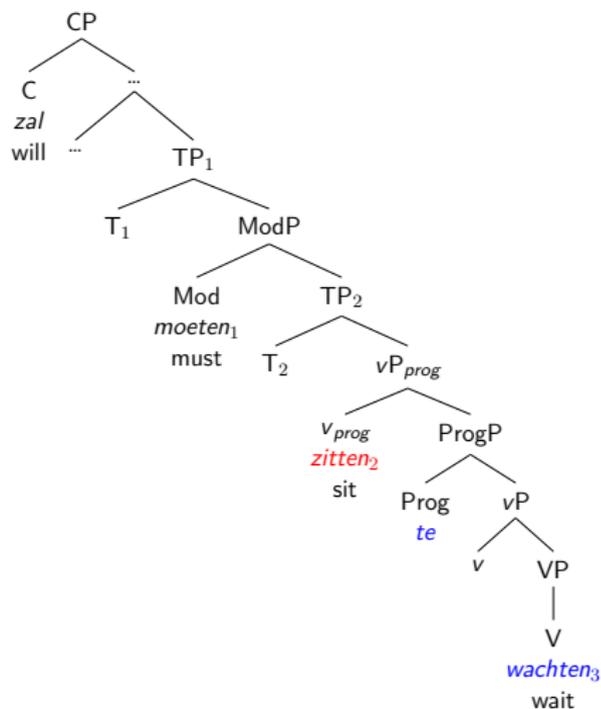
The analysis: *Te* in cluster type III.

- ▶ For the 172 speakers who do allow *te* in cluster type III, I propose that they can spell out Prog as *te*, i.e. these speakers have reanalysed *te* as a progressive marker

The analysis: *Te* in cluster type III.

Te in cluster type III:

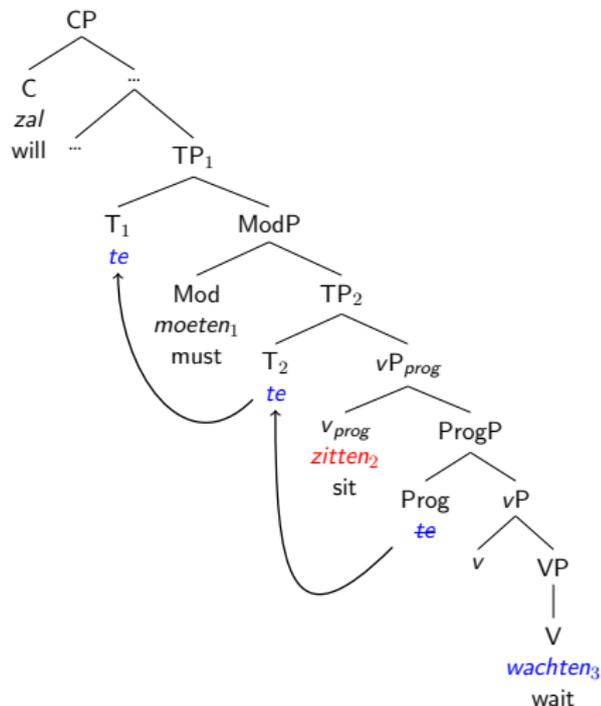
(34)



The analysis: *Te* in cluster type III.

Te-raising to V2 or V1 in cluster type III:

(35)



Extension of the analysis: *te*-doubling

Extension of the analysis: *te*-doubling

- ▶ *Recall*: *te* can also be doubled:

(36) Koen zal niet [*te* *hoeven*₁ *te* *gaan*₂ voetballen₃].
Koen will not to need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

Extension of the analysis: *te*-doubling

- ▶ *Recall*: *te* can also be doubled:

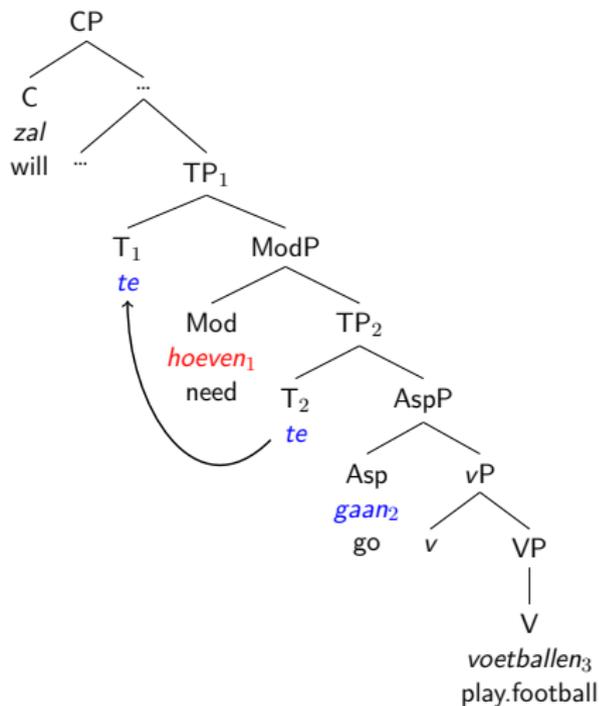
(36) Koen zal niet [*te* *hoeven*₁ *te* *gaan*₂ voetballen₃].
Koen will not to need.INF to go.INF play.football.INF.
'Koen won't have to go and play football.'

- ▶ *Implicational relation*: If speakers allow doubling, they also allow *te*-raising

Extension of the analysis: *te*-doubling

- ▶ I analyse *te*-doubling as cases of *te*-raising in which both copies of *te* are spelled out

(37)



1. The whole talk in a nutshell
2. Methodology
3. The data
4. Prerequisites for the analysis
5. The analysis
6. Conclusion and outlook

Conclusion and outlook

- ▶ **New data:** The infinitival marker *te* in Dutch non-finite verb clusters can be raised, doubled and dropped

Conclusion and outlook

- ▶ **New data:** The infinitival marker *te* in Dutch non-finite verb clusters can be raised, doubled and dropped
- ▶ **Analysis:**

Conclusion and outlook

- ▶ **New data:** The infinitival marker *te* in Dutch non-finite verb clusters can be raised, doubled and dropped
- ▶ **Analysis:**
 - ▶ Dutch verb clusters are cases of functional restructuring

Conclusion and outlook

- ▶ **New data:** The infinitival marker *te* in Dutch non-finite verb clusters can be raised, doubled and dropped
- ▶ **Analysis:**
 - ▶ Dutch verb clusters are cases of functional restructuring
 - ▶ **Te-raising** is an instance of clitic climbing, which is possible when (i) there is a higher T-position for *te* to move to, and (ii) when *te* has the morphosyntactic status of a clitic in the speaker's grammar

Conclusion and outlook

- ▶ **New data:** The infinitival marker *te* in Dutch non-finite verb clusters can be raised, doubled and dropped
- ▶ **Analysis:**
 - ▶ Dutch verb clusters are cases of functional restructuring
 - ▶ **Te-raising** is an instance of clitic climbing, which is possible when (i) there is a higher T-position for *te* to move to, and (ii) when *te* has the morphosyntactic status of a clitic in the speaker's grammar
 - ▶ **Te-doubling** is the spell-out of both copies of displaced *te*

Conclusion and outlook

- ▶ **New data:** The infinitival marker *te* in Dutch non-finite verb clusters can be raised, doubled and dropped
- ▶ **Analysis:**
 - ▶ Dutch verb clusters are cases of functional restructuring
 - ▶ **Te-raising** is an instance of clitic climbing, which is possible when (i) there is a higher T-position for *te* to move to, and (ii) when *te* has the morphosyntactic status of a clitic in the speaker's grammar
 - ▶ **Te-doubling** is the spell-out of both copies of displaced *te*
 - ▶ **Te-drop** is due to differences in structural complement size

Conclusion and outlook

Topic for future research:

- ▶ Different word orders are possible in Dutch verb clusters (without any semantic effect)

Conclusion and outlook

Topic for future research:

- ▶ Different word orders are possible in Dutch verb clusters (without any semantic effect)
- ▶ This study only focussed on variation in te-placement in three-verb clusters in 123-order

Conclusion and outlook

Topic for future research:

- ▶ Different word orders are possible in Dutch verb clusters (without any semantic effect)
- ▶ This study only focussed on variation in *te*-placement in three-verb clusters in 123-order
- ▶ **Future research:** investigate whether there is an interaction between *te*-placement and different cluster orders (i.e. 132, 213, 231, 312, 321)

- ▶ **Full paper:** www.bit.ly/Pots-te-raising
- ▶ www.crissp.be/activities
- ▶ cora.pots@kuleuven.be

References

- Aelbrecht, L. (2009). *You have the right to remain silent: The syntactic licensing of ellipsis*. PhD thesis, Catholic University of Brussels.
- Bennis, H. (2000). *Syntaxis van het Nederlands*. Amsterdam University Press, Amsterdam.
- Bennis, H. and Hoekstra, T. (1989). *Generatieve grammatica*. Foris, Dordrecht.
- Cardinaletti, A. and Shlonsky, U. (2004). Clitic positions and restructuring in Italian. *Linguistic Inquiry*, 35:519–557.
- Cinque, G. (2001). “Restructuring” and the order of aspectual and root modal heads. In Cinque, G. and Salvi, G., editors, *Current studies in Italian syntax: Essays offered to Lorenzo Renzi*, pages 137–155. Elsevier, Amsterdam.
- Cinque, G. (2004). “Restructuring” and functional structure. In Belletti, A., editor, *Structures and Beyond: The Cartography of Syntactic Structures*, volume 3, pages 132–191. Oxford University Press, Oxford.
- Harwood, W. (2013). *Being progressive is just a phase: Dividing the functional hierarchy*. PhD thesis, Ghent University.
- IJbema, A. (2001). *Grammaticalization and Infinitival Complements in Dutch*. PhD thesis, Leiden University.
- Kayne, R. S. (1989). Null subjects and clitic climbing. In Jaeggli, O. and Safir, K. J., editors, *The Null Subject Parameter*, pages 239–262. Kluwer Academic Publishers, Dordrecht, Holland.
- Miller, P. (1991). *Clitics and constituents in phrase structure grammar*. PhD thesis, Utrecht University.
- Rizzi, L. (1982). *Issues in Italian syntax*. Foris, Dordrecht.
- Rutten, J. (1991). *Infinitival complements and auxiliaries*. PhD thesis, University of Amsterdam.
- Van de Velde, F. (2017). Understanding grammar at the community level required a diachronic perspective. evidence from four case studies. *Nederlandse taalkunde*, 22:47–74.
- Wurmbrand, S. (2001). *Infinitives: Restructuring and clause structure*. Mouton de Gruyter, Berlin.
- Zwart, C. J.-W. (1993). *Dutch Syntax: A Minimalist Approach*. PhD thesis, University of Groningen.