Te wel of niet *(te)* hoeven *(te)* plaatsen
Variation in *te*-placement in Dutch non-finite verb clusters

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Outline

The whole talk in a nutshell

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

(1)   Koen zal niet [hoeven$_1$ *te* gaan$_2$ voetballen$_3$].
      Koen will not need.INF to go.INF play.football.INF.
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- ▸ The verb in blue: the verb on which *te* normally appears

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- ▶ 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

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(2)   Koen zal niet [hoeven$_1$ gaan$_2$ voetballen$_3$].
       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

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(2)   Koen zal niet [hoeven$_1$ gaan$_2$ voetballen$_3$].
        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: <u>*te*-drop</u> (2)

The whole talk in a nutshell

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

(3) Koen zal niet [*te* hoeven$_1$ gaan$_2$ 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

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: <u>*te*-raising</u> (3)

The whole talk in a nutshell

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

(4) Koen zal niet [*te* hoeven$_1$ *te* gaan$_2$ voetballen$_3$].
     Koen will not to 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 whole talk in a nutshell

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

(4) Koen zal niet [*te* hoeven$_1$ *te* gaan$_2$ voetballen$_3$].
Koen will not to 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
- ▶ Many Dutch speakers also allow *te* to appear twice, instead of once: <u>*te*-doubling</u> (4)

The whole talk in a nutshell

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

(5)   Koen zal niet [hoeven$_1$ gaan$_2$ *te* voetballen$_3$].
      Koen will not need.INF go.INF to 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

(5)   Koen zal niet [hoeven$_1$ gaan$_2$ *te* voetballen$_3$].
           Koen will not need.INF go.INF to play.football.INF.
           'Koen won't have to go and play football.'

- ▶ V1 *hoeven* 'need to' selects a *te*-infinitive
- ▶ A relatively smaller group of Dutch speakers also allow *te* to appear on V3 instead of V2: <u>*te*-lowering</u> (5)

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- ▸ **Focus of today's talk**: *te*-raising and *te*-drop

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Main points of the analysis

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

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- *Te*-raising is an instance of clitic climbing (cf. Italian)
- *Te*-doubling is the spell out of both copies of raised *te*

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- *Te*-drop is due to differences in structural complement size

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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 (cf. Italian)
- *Te*-doubling is the spell out of both copies of raised *te*
- *Te*-drop is due to differences in structural complement size

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

Methodology: design

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Large-scale questionnaire study

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

Methodology: design

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

(6)   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.'

Methodology: design

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

(6)   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

(6)   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

(7)   Koen zal niet [hoeven$_1$ *te* gaan$_2$ voetballen$_3$].
       Koen will not need.INF to go.INF play.football.INF.
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Cluster type II. V1-*te*-V2-V3

(7)   Koen zal niet [hoeven$_1$ *te* gaan$_2$ voetballen$_3$].
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Cluster type II. V1-*te*-V2-V3

(7)   Koen zal niet [hoeven$_1$ *te* gaan$_2$ voetballen$_3$].
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       '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

(8)   Peter zal lang [moeten$_1$ zitten$_2$ *te* wachten$_3$].
       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

(8)   Peter zal lang [moeten₁ zitten₂ *te* wachten₃].
      Peter will long must.INF sit.INF to wait.INF.
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  ▶ V2 *zitten* 'sit' selects a *te*-infinitive

Methodology: design

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

(8)   Peter zal lang [moeten$_1$ zitten$_2$ *te* wachten$_3$].
        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

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  - the 'correct' version (meeting the selection requirements)
  - *te* occurs on one of the other verbs of the cluster
  - *te* is absent

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Goal of the questionnaire study:

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- 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

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Task

- Judgment task, using a 5-point Likert scale

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- 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?'

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

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'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

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  - 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

- <u>Mean age</u>: 53 (*SD* 12,5; range: 18-99)

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- 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

The data: geographical distribution

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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 variation in *te*-placement (i.e. *te*-raising, -drop, -doubling and -lowering)

The data: geographical distribution

- There are no clear geographical patterns in the distribution of variation in *te*-placement (i.e. *te*-raising, -drop, -doubling and -lowering)
- That is, the phenomena are widespread and not restricted to (a) specific area(s)

The data: *te*-drop

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Terminology:

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

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 *te*-drop	Optional *te*-drop	Obligatory *te*-drop
I. *te*-V1-V2-V3	451 (98,3%)	8 (0,7%)	0 (0%)
II. V1-*te*-V2-V3	191 (41,6%)	187 (40,7%)	19 (4,2%)
III. V1-V2-*te*-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

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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 (9)

(9) 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 (10) and cluster type III (11), *te* can or even has to be dropped

(10) 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.'

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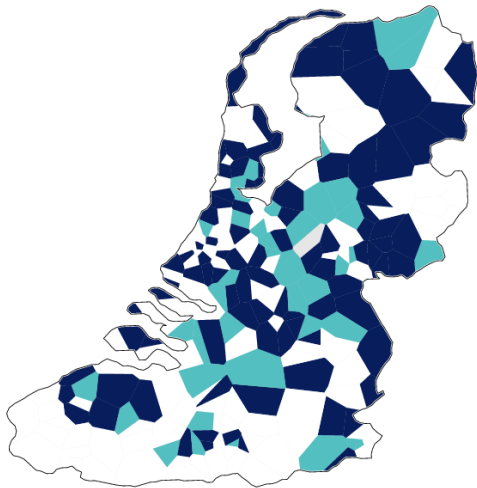'Peter will have to wait for a long time.'

The data: *te*-drop

Figure 3: Distribution of *te*-drop with *hoeven* 'need'

The data: *te*-drop

(12) Koen zal niet [hoeven$_1$ gaan$_2$ voetballen$_3$].
      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

(12)   Koen zal niet [hoeven₁ gaan₂   voetballen₃].
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       '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

Figure 4: Distribution of *te*-drop with *zitten* 'sit'

The data: *te*-drop

(13)   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

(13)   Peter zal lang [moeten$_1$ zitten$_2$ wachten$_3$].
              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

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Terminology:

1. *Te* occurs in the position required by selection requirements:
   <u>*te* in situ</u>

The data: *te*-raising

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

The data: *te*-raising

Te-raising

Type of cluster	No	Optional	Obligatory
I. *te*-V1-V2-V3	459 (100%)	-	-
II. V1-*te*-V2-V3	193 (51,1%)	165 (43,6%)	20 (5,3%)
III. V1-V2-*te*-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

(14)   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

(14) 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)
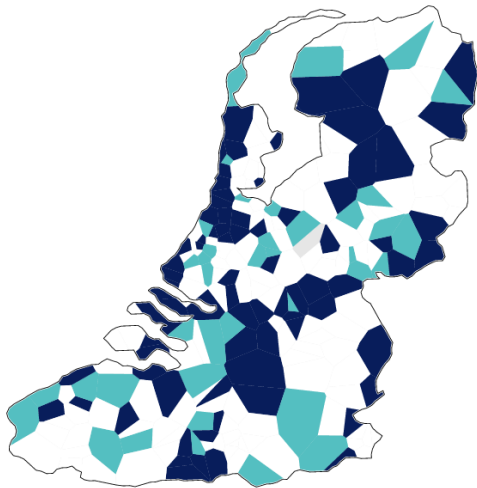
The data: *te*-raising

Figure 5: Distribution of *te*-raising with *hoeven* 'need'

The data: *te*-raising

(15) …[<te> hoeven$_1$ <te> gaan$_2$ voetballen$_3$].
      … 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

(15)   ...[<te> hoeven$_1$ <te> gaan$_2$ voetballen$_3$].
　　　 ... 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

(15) …[<te> hoeven₁ <te> gaan₂ 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

Figure 6: Distribution of *te*-raising to V2 with *zitten* 'sit'

The data: *te*-raising

Figure 7: Distribution of *te*-raising to V1 with *zitten* 'sit'

The data: *te*-raising

(16)   …[<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

(16)   ...[<te> moeten$_1$ <te> zitten$_2$ <te> wachten$_3$].
       ... 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

(16)   ...[<te> moeten$_1$ <te> zitten$_2$ <te> wachten$_3$].
        ... 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

(17)   Koen zal niet [*te* hoeven$_1$ *te* gaan$_2$ voetballen$_3$].
       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

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- *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: summary

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Two main findings:

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2. *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

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   - For a small group of speakers, *te*-raising is obligatory

- In addition, we also find *te*-doubling (not the main focus of this talk)

Prerequisites for the analysis

Four theoretical tenets:

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2. The size of the complement of Dutch modals: <u>TP</u>
3. The position of *te*: <u>merged in T</u>

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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

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Approach to verb clusters

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

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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)

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

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- *Support*: the modal and lexical verb can be modified by conflicting temporal adverbs (Aelbrecht 2009: 35)

(18)　*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):

(19) 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.'

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          for in L.A. GE- born and GE- died to be.
          'To be born and have died in L.A.'

- ▶ IJbema (2001: 70): (19) shows that <u>*te* is a clitic</u>, 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 <u>te is a prefix</u>):

(20)   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.'

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The morphosyntactic status of *te*

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

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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

The analysis: *Te*-raising is clitic climbing

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(21) 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)

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

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- 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**

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Further support: three parallels between Italian and Dutch restructuring

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Further support: three parallels between Italian and Dutch
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1. Auxiliary switch

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1. Auxiliary switch
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The analysis: *Te*-raising is clitic climbing

Further support: three parallels between Italian and Dutch restructuring

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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:

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- Functional *volere* 'want' normally selects auxiliary *avere* 'have'
- In (22), 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:

(23) …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

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- In (23), the auxiliary assiociated 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:

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

(25) Koen zal niet [**te** hoeven$_1$ **te** gaan$_2$ voetballen$_3$].
      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)

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► Exactly these three patterns are also found for clitic climbing in restructuring contexts across varieties of Italian (see amongst others Cinque (2004))

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    - Many northern varieties have obligatory clitic in situ
    - Standard Italian (and other varieties) has optional clitic climbing

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- *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.

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

(26)   Anne zegt hier [*te* willen₁   blijven₂   zitten₃].
       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

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- ▶ 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:

(27)
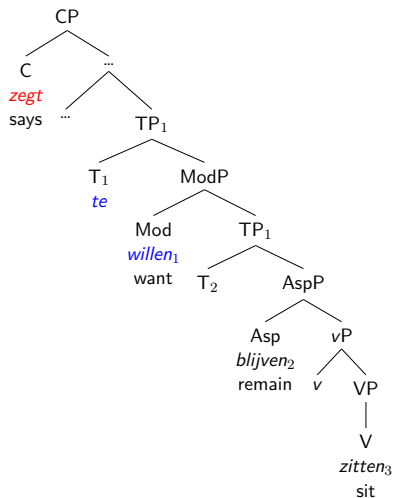
The analysis: *Te* in cluster type II.

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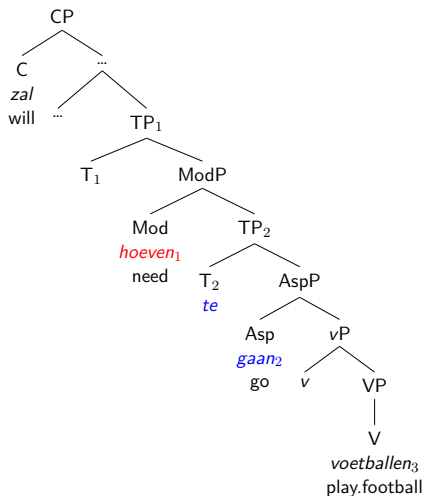
Cluster type II, V1-*te*-V2-V3

(28) Koen zal niet [hoeven$_1$ *te* gaan$_2$ voetballen$_3$].
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.

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- 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:

(29)

The analysis: *Te* in cluster type II.

Te-raising in cluster type II:

(30)

The analysis: *Te* in cluster type II.

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

(31) Koen zal niet [hoeven$_1$ gaan$_2$ voetballen$_3$].
      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.

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

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- Diachronic work shows that in the last fifty years, *hoeven* is losing its ability the select a *te*-infinitive (Van de Velde 2017)
- The fact that this 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 II.

▶ This is also visible in the data: a correlation test between *te*-drop in this cluster type and age of the participants shows a (weak) correlation (r = .20, df = 457, *p* < .001)
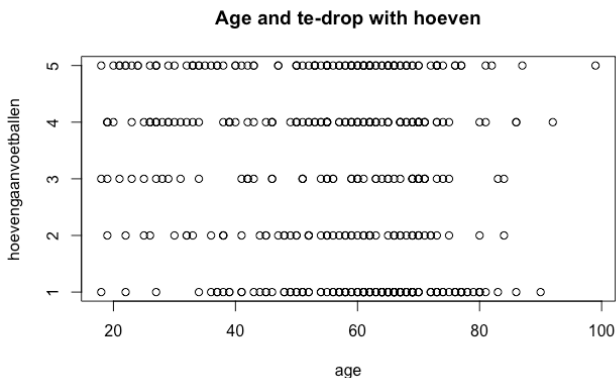

Figure 8: Age of participants and *te*-drop with *hoeven* 'need'

The analysis: *Te* in cluster type III.

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

(32)   Peter zal lang [moeten$_1$ zitten$_2$ *te* wachten$_3$].
        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
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Cluster type III, V1-V2-*te*-V3

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- ▶ 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:

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

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(33) 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.
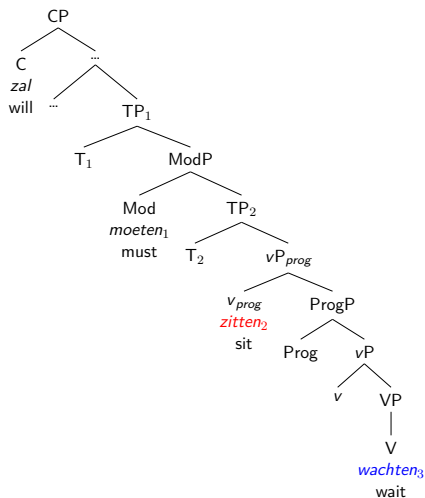
- Harwood (2013): there is a vP_{prog} above ProgP

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:

(34)

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.

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  (35) Peter zal lang [moeten$_1$ zitten$_2$ wachten$_3$].
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- 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
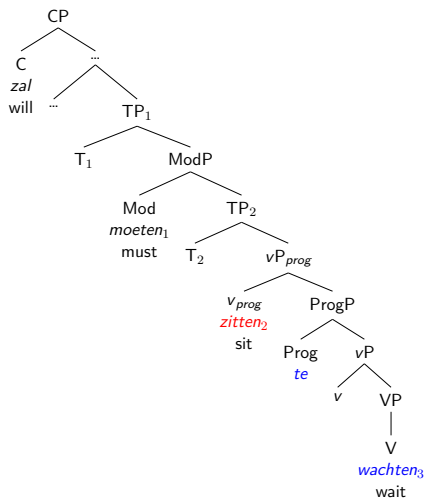
The analysis: *Te* in cluster type III.

- ▶ 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.
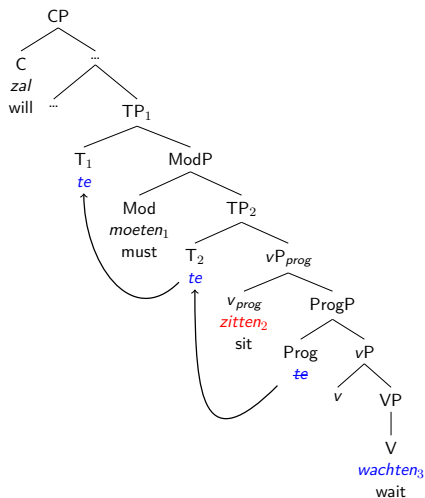
Te in cluster type III:

(36)

The analysis: *Te* in cluster type III.

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

(37)

Extension of the analysis: *te*-doubling

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▶ *Recall*: *te* can also be doubled:

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      Koen will not to need.INF to go.INF play.football.INF.
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- *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

(39)
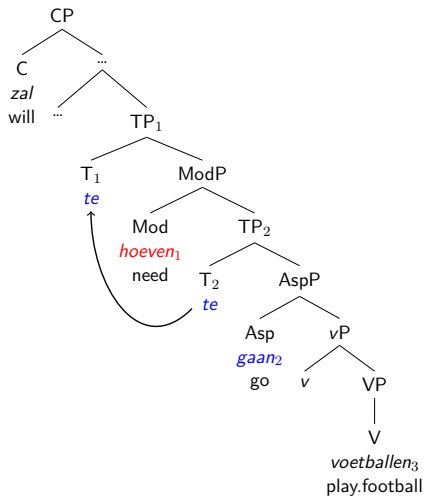
Displaced morphology in verb clusters across Germanic

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- In addition to *te*-drop, *te*-raising, and *te*-doubling, the data also show a fourth pattern: *te*-lowering
- <u>*Te*-lowering</u>: *te* appears on a lower position than required by selection requirements
- *Te*-lowering shows interesting similarities with other morphological displacement phenomena in other Germanic languages, such as German and Afrikaans

Displaced morphology in verb clusters across Germanic

Lowering of the infinitival marker in German

- ▶ In German, the infinitival marker can also be lowered (Salzmann 2017: 2):

(41) a. ohne   das Buch lesen$_3$ gekonnt$_2$ zu haben$_1$.
          without the book read.INF can.PTCP to have.INF
          'without having been able to read the book.'

      b. ohne   das Buch haben$_1$ lesen$_3$ zu können$_2$.
          without the book have.INF read.INF to can.INF
          'without having been able to read the book.'

Displaced morphology in verb clusters across Germanic

Lowering of the past participle marker

- We also find lowering of other types of verbal morphology in verb clusters, e.g. lowering of the past participle marker, in (older) varieties of Dutch, German and Afrikaans

Displaced morphology in verb clusters across Germanic

Ge-lowering in Middle German dialects (Höhle 2006: 68):

(42) in   die edele vrouwen het(e)$_1$ lazen$_2$ daz ge- tan$_3$.
      him the noble lady   have   let.INF that GE- do.
      'the noble lady had let him do that.'

Displaced morphology in verb clusters across Germanic

Ge-lowering in Kahrkams Afrikaans (De Vos 2001: 96)

(43) Ons had$_1$ ook mos   maar laat$_2$ *ge*- ploeg$_3$.
      We have also ADV ADV let   GE- plough
      'We also (began) ploughing.'

Displaced morphology in verb clusters across Germanic

Ghe-raising (Postma 1999: 320)

- ▶ As we find both *te*-lowering and *te*-raising, we find, besides *ge*-lowering, *ge*-raising in some Germanic varieties

(44) Men zoud-ze   niet *ghe-* connen$_1$ raken$_2$.
      One would-them not GHE- be.able damage
      'One would not be able to damage them.'

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- ▶ These data show that in sub-standard/older varieties of Germanic, verbal morphology can be expressed on either one of the three verbs of the cluster
- ▶ In German and Afrikaans, an ascending word order is a requirement for displaced verbal morphology
- ▶ **Future research**: testing if this also applies to Dutch *te*-displacement patterns (i.e. comparing *te*-placement in 321 order and ascending word orders)

Conclusion and outlook

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- 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**

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