Restructuring non-finite verb clusters in Dutch

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In a nutshell

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

1. The data

2. Prerequisites for the analysis

3. The analysis

4. Conclusion and outlook
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Example:

(1) Koen zal niet \[\text{hoeven}_1 \text{ te gaan}_2 \text{ voetballen}_3\].
Koen will not need.INF to go.INF play.football.INF.
‘Koen won’t have to go and play football.’
The data

Example:

(1) Koen zal niet [hoeven₁ te gaan₂ voetballen₃].
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▶ V₁ hoeven ‘need to’ selects a te-infinitive
Example:

(1) Koen zal niet [hoeven₁ te gaan₂ voetballen₃].
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- V1 hoeven ‘need to’ selects a te-infinitive
- Dutch speakers allow te also to appear on V1 (te-raising)
Example:

(2) Koen zal niet [te hoeven₁ gaan₂ voetballen₃].
Koen will not to need.INF go.INF play.football.INF.
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- V1 hoeven ‘need to’ selects a te-infinitive
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Three types of clusters in 123-order:

Cluster type I. Te-V1-V2-V3

(3) 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 a te-infinitive: te should appear on V1
Cluster type II. V1-te-V2-V3

(4) Koen zal niet [hoeven\textsubscript{1} te gaan\textsubscript{2} voetballen\textsubscript{3}].
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: te should appear on V2
The data

Cluster type III. V1-V2-te-V3

(5) 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: te should appear on V3
The data

- Large-scale questionnaire study, 459 native Dutch speakers participated

<table>
<thead>
<tr>
<th>Type of cluster</th>
<th>Te in situ</th>
<th>Te-raising</th>
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<tr>
<td>I. te-V1-V2-V3</td>
<td>459</td>
<td>-</td>
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<td>II. V1-te-V2-V3</td>
<td>378</td>
<td>185</td>
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<td>III. V1-V2-te-V3</td>
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Table: Frequency overview of te-raising per type of cluster
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Table: Frequency overview of te-raising per type of cluster

- Implicational relation: if speakers allow te-raising, they also allow te in situ
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Prerequisites for the analysis

- I take Dutch non-finite verb clusters to be cases of functional restructuring
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- Modal, aspectual and motion verbs are merged in functional heads above the lexical verb (Cinque 2001; Wurmbrand 2001)
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- I take Dutch non-finite verb clusters to be cases of functional restructuring
- Modal, aspectual and motion verbs are merged in functional heads above the lexical verb (Cinque 2001; Wurmbrand 2001)
- I assume te to be merged in T (Bennis and Hoekstra 1989; Rutten 1991; IJbema 2001)
Prerequisites for the analysis

- I assume Dutch modals to 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)
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- Support: the modal and lexical verb can be modified by conflicting temporal adverbs (Aelbrecht 2009: 35)

(6) *Gisteren moest ik nog volgende week optreden en nu zijn de plannen alweer een week opgeschoven.*

‘Yesterday, it was still planned that I would perform next week, and now the plans have been delayed with another week.’
1. The data

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The analysis: *Te*-raising is clitic climbing

▶ In other languages (e.g. Italian), clitics can also appear on a different host than they are syntactically associated with (Cardinaletti and Shlonsky 2004: 521)
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(7) a. \( <Ci> \) vorrei andar\( <ci> \) con Maria.
    'I would like to go there with Maria.'

b. \( <*Ci> \) detesterei andar\( <ci> \) con Maria.
    'I would hate to go there with Maria.'
The analysis: *Te*-raising is clitic climbing

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\(<Ci> \text{ vorrei andar} <ci> \text{ con Maria.} \)  

There I.would.want go.INF.there with Maria.  

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\(<*Ci> \text{ detesterei andar} <ci> \text{ con Maria.} \)  

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- Recall: implicational relation: if *te*-raising, then also *te* in situ
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<*Ci> \text{ detesterei andar}<ci> \text{ con Maria.}
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- **Recall:** implicational relation: if *te*-raising, then also *te* in situ
- Similarly here: if clitic climbing, also clitic in situ
The analysis: Position of *te* in cluster type I.

The structure of *cluster type I, V1-tekne-V2-V3*:

(8)
The analysis: Position of *te* in cluster type II.

The structure of cluster type II, $V1$-$te$-$V2$-$V3$:

(9)
The analysis: Position of *te* in cluster type II.

*Te*-raising in cluster type II, *V1-te-V2-V3*:

(10)
The analysis: Position of \textit{te} in cluster type III.

- In cluster type III, V1-V2-\textit{te}-V3, the verb selecting the \textit{te}-infinitive is progressively-used \textit{zitten} ‘sit’
The analysis: Position of *te* in cluster type III.

- In cluster type III, V1-V2-*te*-V3, 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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\[(11)\quad \text{Sofia } zit \text{ } \text{te } lachen.\]
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\text{Sofia sits to laugh.} \\
\text{‘Sofia is laughing.’}\]
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  (11) Sofia *zit te* lachen.
  Sofia sits to laugh.
  ‘Sofia is laughing.’

- The structure of **cluster type III, V1-V2-*te*-V3** thus has a ProgP layer
The analysis: Position of *te* in cluster type III.

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- In the structure of cluster type III, V1-V2-*te*-V3, V2 *zitten* ‘sit’ is merged in $v_{prog}$
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The structure of cluster type III, V1-V2-*te*-V3:

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The analysis: Position of *te* in cluster type III.

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- There is no T position below V2 *zitten* ‘sit’, which selects the *te*-infinitive
- The structure of cluster type III, V1-V2-*te*-V3, thus predicts that speakers do not allow *te* to occur in this cluster
The analysis: Position of te in cluster type III.

- *Recall:* low frequencies for both te in situ (172) and te-raising (48) in cluster type III, V1-V2-te-V3

The data also revealed that the majority of speakers need te to be dropped in this cluster:

```
Peter zal will long moeten 1 must.INF zitten 2 sit.INF wachten 3 wait.INF
```

'Peter will have to wait for a long time.'

The high frequency of te-drop follows from the structure of the cluster: there is no T position below V2 zitten 'sit' for te to be merged in
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\[(13) \quad \text{Peter zal lang [} \text{moeten}_{1} \text{ zitten}_{2} \text{ wachten}_{3}\text{].} \]

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- These speakers have reanalysed *te* as a progressive marker
The analysis: Position of te in cluster type III.

Te-raising to V2 or V1 in cluster type III, V1-V2-te-V3:

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Conclusion and outlook

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- **Extension of the analysis**: doubling
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- In certain varieties of Italian clitic doubling occurs instead of clitic climbing in restructuring contexts (Cardinaletti and Shlonsky 2004)
- The data show that *te* can also be doubled:
Conclusion and outlook

- **Extension of the analysis:** doubling
- Clitic doubling is attested in restructuring contexts in certain varieties of Italian (Cardinaletti and Shlonsky 2004)
- *Te* can also be doubled:

\[(15)\] Koen zal niet [te hoeven\textsubscript{1} te gaan\textsubscript{2} voetballen\textsubscript{3}].
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- If speakers allow doubling, they also allow *te*-raising, i.e. in *te*-doubling, both copies of *te* are spelled out.

bit.ly/slidesPots
Conclusion and outlook

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- cora.pots@kuleuven.be


