Cross-continental clusters

Funky morphology in Afrikaans and Dutch verb clusters

Cora Pots
KU Leuven

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Introduction

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Empirical focus

- Morphosyntactic variation in Dutch and Afrikaans verb clusters

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- Morphosyntactic variation in Dutch and Afrikaans **verb clusters**

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Empirical focus

- Morphosyntactic variation in Dutch and Afrikaans **verb clusters**

(1) ...dat hij *haar* **heeft**$_1$ (**haar*) **zien**$_2$ (**haar*) **dansen**$_3$.
...that he her has her seen her dance.
'...that he has seen her dance.'

(2) ...dat hij *snel* **heeft**$_1$ (**snel*) **staan**$_2$ (**snel*) **praten**$_3$.
...that he fast has fast stand fast talk.
'...that he has been talking at great speed.'

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- Verb clusters occur in Afrikaans, German, Dutch and Frisian

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- Not a lot of empirical research has done on Afrikaans verb clusters 'in spoken language' (most knowledge based on grammars)

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Empirical focus

- Morphosyntactic variation in **Dutch and Afrikaans** verb clusters
- Verb clusters occur in Afrikaans, German, Dutch and Frisian
- Not a lot of empirical research has done on Afrikaans verb clusters 'in spoken language' (most knowledge based on grammars)
- Dutch and Afrikaans are the only two verb cluster languages with progressive verb clusters (later this talk)

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Empirical focus

- **Morphosyntactic variation** in Dutch and Afrikaans verb clusters

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  1. Morphosyntactic variation between the two languages (*cross-linguistic variation*)

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- **Morphosyntactic variation** in Dutch and Afrikaans verb clusters
  1. Morphosyntactic variation between the two languages (*cross-linguistic variation*)
  2. Morphosyntactic variation between speakers within the languages (*interspeaker variation*)

Introduction

Empirical focus

- **Morphosyntactic variation** in Dutch and Afrikaans verb clusters
  1. Morphosyntactic variation between the two languages (*cross-linguistic variation*)
  2. Morphosyntactic variation between speakers within the languages (*interspeaker variation*)
  3. Morphosyntactic variation within speakers of the languages (*intraspeaker variation*)

Introduction

Empirical focus

- Cross-linguistic variation

(3) ...dat ik heb$_1$ **lopen**$_2$ ***te*** werken$_3$.
...that I have walk to work.
'...that I have been working.' (Dutch)

(4) ...dat ek **loop**$_2$ ***en*** werk$_3$ het$_1$.
...that I walk and work have
'...that I have been working.' (Afrikaans)

Introduction

Empirical focus

- Interspeaker variation

(5) a. ...dat ik heb$_1$ **zitten**$_2$ (***te***) werken$_3$.
...dat I have sit to work
'...that I have been working.'
(some Dutch speakers)

b. ...dat ik heb$_1$ **zitten**$_2$ werken$_3$.
...dat I have sit work
'...that I have been working.'
(other Dutch speakers)

Introduction

Empirical focus

- Intraspeaker variation

(6) a. ...dat ek **loop**$_2$ ***en*** werk$_3$ het$_1$.
...that I walk and work have
'...that I have been working.'
(an Afrikaans speaker)

b. ...dat ek **loop**$_2$ werk$_3$ het$_1$.
...that I walk and work have
'...that I have been working.'
(the same Afrikaans speaker)

Introduction

Today's case studies

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1. Displacement and disappearance of *te* in Dutch verb clusters (inter- and intra-speaker variation)

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1. Displacement and disappearance of *te* in Dutch verb clusters (inter- and intra-speaker variation)
2. Morphosyntactic variation in progressive verb clusters in Afrikaans ((cross-linguistic,) inter- and intra-speaker variation)

Outline

Case study I: introduction

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

(7) 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.'

Case study I: introduction

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- The verb in red: the verb that selects the *te*-infinitive

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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 (7), V1 *hoeven* 'need to' selects the *te*-infinitive *te gaan* 'to go'

Case study I: introduction

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

(8) 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

Case study I: introduction

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

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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 (8)

Case study I: introduction

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

(9) 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.'

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Case study I: introduction

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

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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 (9)

Case study I: introduction

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

(10) 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.'

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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: *te*-doubling (10)

Case study I: introduction

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

(11) 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.'

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Case study I: introduction

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Koen will not need.INF go.INF to play.football.INF.
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- 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: *te*-lowering (11)

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

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- 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: *te*-lowering (11)

- **Focus of today's talk**: the optionality of these phenomena (i.e. the *inter- and intraspeaker variation*)

Case study I: methodology

Methodology: design

Methodology: design

Large-scale questionnaire study

- Three types of clusters were tested

Methodology: design

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

(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.'

Methodology: design

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

(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.'

- The finite verb *zegt* 'says' selects a *te*-infinitive

Methodology: design

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

(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.'

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

Methodology: design

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

(13) 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.'

Methodology: design

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

(13) 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.'

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

Methodology: design

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

(13) 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.'

- 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

(14) 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

(14) 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

Methodology: design

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

(14) 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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- Different versions of the three cluster types were included in the questionnaire:

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  - the 'correct' version (meeting the selection requirements)

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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

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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

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

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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'

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

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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

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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

Case study I: optionality in the data

Case study I: optionality in the data

Phenomena that are always optional

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Phenomena that are always optional

- If speakers allow *te*-lowering or *te*-doubling, this is always optional

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- I.e., these speakers always also allow *te* to appear in the 'correct' position

Case study I: optionality in the data

Phenomena that are always optional

- If speakers allow *te*-lowering or *te*-doubling, this is always optional
- I.e., these speakers always also allow *te* to appear in the 'correct' position
- This holds across all three cluster types

Case study I: optionality in the data

Phenomena that are always optional

- The other two phenomena, *te*-raising and *te*-drop are *obligatory* for many speakers

Case study I: optionality in the data

Phenomena that are always optional

- The other two phenomena, *te*-raising and *te*-drop are *obligatory* for many speakers
- I.e., these phenomena seem more robustly part of many local varieties

Case study I: optionality in the data

Theoretical importance

Case study I: optionality in the data

Theoretical importance

- From many other studies into morphological displacement, we know that it is more likely for elements to become positioned in a *higher* position (linearly more to the left) rather than a lower one (linearly to the right) (*te*-raising *vs* *te*-lowering)

Case study I: optionality in the data

Theoretical importance

- From many other studies into morphological displacement, we know that it is more likely for elements to become positioned in a *higher* position (linearly more to the left) rather than a lower one (linearly to the right) (*te*-raising *vs* *te*-lowering)
- We also know that morphology that is unstressed and semantically vacuous (like *te*) are elements that can eventually disappear from structures (*te*-drop *vs* *te*-doubling)

Case study I: optionality in the data

Theoretical importance

- The fact that *te*-raising and *te*-drop are the only phenomena that are obligatory for many speakers is thus in line with what we know about how languages evolve

Case study II: introduction

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The cross-linguistic variation

- Dutch and Afrikaans periphrastic progressives with a motion/posture verb as aspectual marker

Case study II: introduction

The cross-linguistic variation

- Dutch and Afrikaans periphrastic progressives with a motion/posture verb as aspectual marker
  - →Henceforth PVCs (Progressive Verb Cluster)

Case study II: introduction

The cross-linguistic variation

- Dutch and Afrikaans PVCs with a motion/posture verb as aspectual marker

(15) Ik **loop**/**zit**/**sta**/**lig** ***te*** **werken**.
I walk/sit/stand/lie to work
'I'm working.' (Dutch)

(16) Ek **loop**/**sit**/**staan**/**lê** ***en*** **werk**.
I walk/sit/stand/lie and work
'I'm working.' (Afrikaans)

Case study II: introduction

The cross-linguistic variation

- Dutch and Afrikaans PVCs with a motion/posture verb as aspectual marker

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'I'm working.' (Afrikaans)

→In Dutch: 'motion/posture verb *te* V'

Case study II: introduction

The cross-linguistic variation

- Dutch and Afrikaans PVCs with a motion/posture verb as aspectual marker

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'I'm working.' (Dutch)

(16) Ek **loop**/**sit**/**staan**/**lê** ***en*** **werk**.
I walk/sit/stand/lie and work
'I'm working.' (Afrikaans)

→In Dutch: 'motion/posture verb *te* V'

→In Afrikaans: pseudocoordination, i.e. 'motion/posture verb *and* V'

Case study II: introduction

Inter- and intraspeaker variation

(17) a. ...dat ek in die skadu ***loop*** ***en*** **wag** het.
...that I in the shade walk and wait have
'...that I've been waiting in the shade.'

b. ...dat ek in die skadu ***loop*** **wag** het.
...that I in the shade walk wait have
'...that I've been waiting in the shade.' (Afrikaans)

Case study II: introduction

Inter- and intraspeaker variation

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...that I in the shade walk wait have
'...that I've been waiting in the shade.' (Afrikaans)

- In Afrikaans PVCs with motion verb *loop*, many speakers allow *en* to be dropped

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Inter- and intraspeaker variation

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'...that I've been waiting in the shade.'

b. ...dat ek in die skadu ***loop*** **wag** het.
...that I in the shade walk wait have
'...that I've been waiting in the shade.' (Afrikaans)

- In Afrikaans PVCs with motion verb *loop*, many speakers allow *en* to be dropped
- **Focus of today's talk**: getting insight in the optionality of *en*-less PVCs *in Afrikaans*, by using different methodologies (a corpus study and a questionnaire study)

Case study II: methodology corpus study

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Afrikaans corpus

- *Korpusportaal* (https://viva-afrikaans.org)
  - 85 million words
  - Standard and regional Afrikaans
  - Written and electronic text, incl. text written to be spoken (broadcast)
  - Various registers and genres
  - Containing fiction and non-fiction

Case study II: methodology corpus study

Queries

- Afrikaans PVCs with motion verb *loop* ‘walk’, and the posture verbs *sit* ‘sit’, *staan* ‘stand’ and *lê* ‘lie’, embedded under temporal auxiliary *het* ‘have’

Case study II: methodology corpus study

Queries

- Afrikaans PVCs with motion verb *loop* ‘walk’, and the posture verbs *sit* ‘sit’, *staan* ‘stand’ and *lê* ‘lie’, embedded under temporal auxiliary *het* ‘have’
- Queries returning PVCs with and without *en*

Case study II: methodology questionnaire study

Methodology: design

Methodology: design

Large-scale questionnaire study

Methodology: design

Large-scale questionnaire study

- Verb clusters with motion/posture verbs were tested, in all cases embedded under temporal auxiliary *het* 'have'

Methodology: design

Large-scale questionnaire study

- Verb clusters with motion/posture verbs were tested, in all cases embedded under temporal auxiliary *het* 'have'
- For the *loop* PVCs, both progressive and andative use was tested

Methodology: design

Test sentence with progressive use of a *loop* PVC:

(18) Steve sê dat Cornelia gisteraand baie **loop en praat**
Steve says that Cornelia yesterday a.lot walk and talk
het.
het.
'Steve says Cornelia has been talking a lot yesterday.'

Methodology: design

Test sentence with andative use of a *loop* PVC:

(19) Paul sê dat Lisa verlede week 'n splinternuwe
Paul says that Lisa last week a completely.new
motor **loop en koop het**.
car walk and buy has.
'Paul says Lisa went and bought a completely new car last week.'

Methodology: design

Test sentence with a *sit* PVC:

(20) Simon sê dat Thomas die hele middag **sit en**
Simon says that Thomas the entire afternoon sit and
lees het.
read has
'Simon says Thomas has been reading the entire afternoon.'

Methodology: design

Test sentence with a *staan* PVC:

(21) Susan sê dat Elsa vir ure met haar ma op die
Susan says that Elsa for hours with her mom at the
telefoon **staan en praat het**.
phone stand and talk has
'Susan says Elsa has been talking on the phone for hours with her mom.'

Methodology: design

Test sentence with a *lê* PVC:

(22) Eric sê dat Michael die hele naweek **lê en slaap**
Eric says that Michael the entire week lie and sleep
het.
has
'Eric says Michael has been sleeping the entire weekend.'

Methodology: design

Goals of the questionnaire study:

Methodology: design

Goals of the questionnaire study:

- Test the optionality of *en* in PVCs

Methodology: design

Goals of the questionnaire study:

- Test the optionality of *en* in PVCs
- Test this on both an intraspeaker level as an interspeaker level (cf. corpus study)

Methodology: design

4 different versions of all PVCs:

1. loop/sit/staan/lê en V het
2. loop/sit/staan/lê V het
3. (geloop/gesit/gestaan/gelê en V het)
4. (geloop/gesit/gestaan/gelê V het)

Methodology: design

4 different versions of all PVCs:

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4. (geloop/gesit/gestaan/gelê V het)

- 16 test items, 12 filler items, 4 practice items

Methodology: design

4 different versions of all PVCs:

1. loop/sit/staan/lê en V het
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3. (geloop/gesit/gestaan/gelê en V het)
4. (geloop/gesit/gestaan/gelê V het)

- 16 test items, 12 filler items, 4 practice items
- Today, we only focus on versions 1 and 2

Methodology: procedure

Methodology: procedure

Task

- Judgment task, using a 5-point Likert scale

Methodology: procedure

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

Methodology: procedure

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- Online written questionnaire, created in LimeSurvey©
- Test items presented in randomized order, preceded by a practice round (4 practice items, same order for all participants)

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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 Afrikaans as it is spoken in your immediate environment?'

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  'Is this a possible sentence in Afrikaans 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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- 204 Afrikaans speakers completed the questionnaire

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- 157 female, 47 male
- Mean age: 49,6 (SD=30.4, range 20-88)

Case study II: comparing the results of both studies

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  1. The presence/absence of *en* in the clusters
  2. The influence of the type of aspect (progressive *vs* andative) on the presence of *en* in the *loop* PVCs

Case study II: comparing the results of both studies

Recall: optionality of *en* in PVCs

(23) Steve sê dat Cornelia gisteraand baie **loop** (**en**) **praat** **het**.
Steve says that Cornelia yesterday a.lot walk and talk het.
'Steve says Cornelia has been talking a lot yesterday.'

Case study II: comparing the results of both studies

The results of the corpus study: presence of *en*

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Verb	*En* present	*En* absent	Total
Loop	24 (21,6%)	85 (78,4%)	109 (100%)
Sit	455 (100%)	0 (0%)	455 (100%)
Staan	346 (100%)	0 (0%)	346 (100%)
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- *En*-less *loop* PVCs are much more frequent than those with *en*

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- *En* can only be absent in the *loop* PVCs
- *En*-less *loop* PVCs are much more frequent than those with *en*
- *Question*: Does the type of aspect (andative *vs* progressive) has an influence on the presence of *en*?

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The results of the corpus study: presence of *en* and type of aspect for *loop* PVCs combined

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Aspect	*En* present	*En* absent	Total
Andative	3 (6,8%)	41 (93,2%)	44 (100%)
Progressive	13 (48,0%)	12 (52,0%)	25 (100%)
Unclear	9 (22,5%)	31 (77,5%)	40 (100%)
Grant total			*109 (100%)*

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- *En* is almost always absent when the *loop* PVC expresses andative aspect
- *En* is more or less optional when the *loop* PVC expresses progressive aspect

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  3. *En* is obligatorily absent if speakers only allow the PVC without *en*

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The results of the questionnaire study: presence of *en*

Verb	Oblig. *en*	Optional *en*	Oblig. no *en*	Total
Loop	85 (41,7%)	113 (55,5%)	6 (2,9%)	204 (100%)
Loop	12 (5,9%)	109 (53,4%)	85 (40,7%)	204 (100%)
Sit	148 (72,5%)	55 (27,0%)	1 (0,5%)	204 (100%)
Staan	127 (62,3%)	72 (35,3%)	5 (2,4%)	204 (100%)
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- *En*-drop is not completely ruled out with the posture PVCs

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  2. The corpus cannot show *optionality* in the data

Methodological discussion: why combine?

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- Both types of studies have their pros and their cons

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- *Con*: it can even make it seem as if certain versions of a construction never occur (i.e. *en*-less posture PVCs)

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- *Additionally*: finding the same patterns in both studies shows that the design of the questionnaire study can be trusted (and repeated)
- Taken together, **combining different methodologies gives us the most accurate insight into a phenomenon**

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- Case study I showed that *te* in Dutch verb clusters can be displaced or can disappear, two phenomena that often happen to morphology when certain constructions evolve over time
- Case study II showed that *en* in Afrikaans PVCs is optional for many speakers, or even obligatorily absent, where we saw an effect of type of aspect (andative *vs* progressive aspect)
- From the second case study we were also able to conclude that combining different methodologies gives the best insight into a phenomenon

Baie dankie! Super bedankt!

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