Progressive evaluations
Comparing Dutch and Afrikaans periphrastic progressives

Cora Pots & Katherine Fraser
KU Leuven — U. of the Basque Country, UPV/EHU
cora.pots@kuleuven.be — katherineelizabeth.fraser@ehu.eus

CamCoS 7, Cambridge
10-12 May 2018
Introduction

The data

The analysis

Conclusion
Introduction

**Empirical focus:** Dutch and Afrikaans MPPs

- Comparing Dutch and Afrikaans periphrastic progressives with a *motion/posture* verb as progressive marker
Introduction

**Empirical focus:** Dutch and Afrikaans MPPs

- Comparing Dutch and Afrikaans periphrastic progressives with a *motion/posture* verb as progressive marker
  → Henceforth MPPs (*Motion/Posture* Progressive)
Introduction

**Empirical focus:** Dutch and Afrikaans MPPs

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

(1) \( \text{Ik heb } \text{lopen/zitten/staan/liggen te werken.} \)  
I have walk/sit/stand/lie to work  
‘I have been working.’  
(Dutch)

(2) \( \text{Ek het } \text{loop/sit/staan/lê en werk.} \)  
I have walk/sit/stand/lie and work  
‘I have been working.’  
(Afrikaans)
Introduction

**Empirical focus:** Dutch and Afrikaans MPPs

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

(1) Ik heb **lopen/zitten/staan/liggen te werken**.
I have walk/sit/stand/lie to work
‘I have been working.’

(2) Ek het **loop/sit/staan/lê en werk**.
I have walk/sit/stand/lie and work
‘I have been working.’

→ In Dutch: ‘motion/posture verb to V’
Introduction

**Empirical focus:** Dutch and Afrikaans MPPs

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

(1)  
\[ \text{Ik heb } \text{lopen/zitten/staan/liggen te werken.} \]  
\[ \begin{align*} & \text{I have walk/sit/stand/lie to work} \shortfill \text{‘I have been working.’} \end{align*} \]  
\[ \text{(Dutch)} \]

(2)  
\[ \text{Ek het } \text{loop/sit/staan/lê en werk.} \]  
\[ \begin{align*} & \text{I have walk/sit/stand/lie and work} \shortfill \text{‘I have been working.’} \end{align*} \]  
\[ \text{(Afrikaans)} \]

→ In Dutch: ‘motion/posture verb to V’
→ In Afrikaans: pseudocoordination, i.e. ‘motion/posture verb and V’
Main aims of this talk
Main aims of this talk

- Presenting data of a systematic comparative study of Dutch and Afrikaans MPPs, investigating:
  - Morphosyntactic variation
  - Semantic bleaching of the motion/posture verbs
  - The presence/absence of secondary, evaluative content
  - Presenting an analysis how these three factors interact with each other
Introduction

Main aims of this talk

- Presenting data of a systematic comparative study of Dutch and Afrikaans MPPs, investigating:
  - Morphosyntactic variation
Introduction

Main aims of this talk

- Presenting data of a systematic comparative study of Dutch and Afrikaans MPPs, investigating:
  - Morphosyntactic variation
    - *Today’s focus:* morphological form of the motion/posture verb
Introduction

Main aims of this talk

- Presenting data of a systematic comparative study of Dutch and Afrikaans MPPs, investigating:
  - Morphosyntactic variation
    - *Today’s focus*: morphological form of the motion/posture verb
  - Semantic bleaching of the motion/posture verbs
Introduction

Main aims of this talk

- Presenting data of a systematic comparative study of Dutch and Afrikaans MPPs, investigating:
  - Morphosyntactic variation
    - *Today’s focus*: morphological form of the motion/posture verb
  - Semantic bleaching of the motion/posture verbs
  - The presence/absence of secondary, evaluative content
Main aims of this talk

- Presenting data of a systematic comparative study of Dutch and Afrikaans MPPs, investigating:
  - Morphosyntactic variation
    - Today’s focus: morphological form of the motion/posture verb
  - Semantic bleaching of the motion/posture verbs
  - The presence/absence of secondary, evaluative content
- Presenting an analysis how these three factors interact with each other
Introduction

The data

The analysis

Conclusion
The data

Type of data

- Corpus data (SoNaR+ & Korpusportaal)
The data

Type of data

- Corpus data (SoNaR+ & Korpusportaal)
- Two data-sets:
The data

Type of data

- Corpus data (SoNaR+ & Korpusportaal)
- Two data-sets:
  1. All hits for Dutch/Afrikaans MPPs, to investigate the morphosyntactic variation
The data

Type of data

- Corpus data (SoNaR+ & Korpusportaal)
- Two data-sets:
  1. All hits for Dutch/Afrikaans MPPs, to investigate the morphosyntactic variation
  2. Smaller, randomly selected data-sets for each MPP in each language, annotated for semantic bleaching and evaluative content
Dataset #1: morphosyntax

- **Focus**: morphological form of the *motion/posture* verb in MPPs when embedded under temporal auxiliary *hebben/het* ‘have’

  - In Dutch MPPs, the *motion/posture* verb always has to appear as an infinitive (=IPP form), and can never appear as past participle (Schmid 2005)
  - In Afrikaans MPPs, the *motion/posture* verb can either appear in IPP form or as past participle (De Vos 2005; Schmid 2005; Augustinus & Dirix 2013)
Dataset #1: morphosyntax

- **Focus**: morphological form of the motion/posture verb in MPPs when embedded under temporal auxiliary *hebben/het* ‘have’
- Temporal auxiliary *hebben/het* ‘have’ normally selects a past participle
Dataset #1: morphosyntax

- **Focus:** morphological form of the motion/posture verb in MPPs when embedded under temporal auxiliary hebben/het ‘have’
- Temporal auxiliary hebben/het ‘have’ normally selects a past participle
- In Dutch MPPs, the motion/posture verb always has to appear as an infinitive (IPP form), and can never appear as past participle (Schmid 2005)
Dataset #1: morphosyntax

- **Focus**: morphological form of the *motion/posture* verb in MPPs when embedded under temporal auxiliary *hebben/het* ‘have’
- Temporal auxiliary *hebben/het* ‘have’ normally selects a past participle
- In Dutch MPPs, the *motion/posture* verb always has to appear as an infinitive (≡IPP form), and can never appear as past participle (Schmid 2005)
- In Afrikaans MPPs, the *motion/posture* verb can either appear in IPP form or as past participle (De Vos 2005; Schmid 2005; Augustinus & Dirix 2013)
In Dutch MPPs, the motion/posture verb always has to appear in IPP form, and can never appear as past participle.

(3) a. Ik heb *(gelopen)/lopen te werken.
    I have walk.PPC/walk.INF to work

b. Ik heb *(gezeten)/zitten te werken.
    I have sit.PPC/sit.INF to work

c. Ik heb *(gestaan)/staan te werken.
    I have stand.PPC/stand.INF to work

d. Ik heb *(gelegen)/liggen te werken.
    I have lie.PPC/lie.INF to work

‘I’ve been working.’ (Dutch)
In Afrikaans MPPs, the motion/posture verb can either appear in IPP form or as past participle.

(4)  

a. Ek het **geloop**/ loop en werk.  
I have walk.PPC/ walk.INF to work

b. Ek het **gesit**/ sit en werk.  
I have sit.PPC/ sit.INF to work

c. Ek het **gestaan**/ staan en werk.  
I have stand.PPC/ stand.INF to work

d. Ek het **gelê**/ lê en werk.  
I have lie.PPC/ lie.INF to work

‘I’ve been working.’ (Afrikaans)
Different extents of semantic bleaching

A physical motion through space, or seated, standing, lying position is not always entailed by the motion/posture verb in MPPs (Haeseryn et al. 1997; Lemmens 2005; Donaldson 1993; De Vos 2005; Biberauer 2017; Breed 2017a)

Example no motion entailed:

(5) [It is] a pity that they've been cutting in the show, a couple of fun parts were missing. 

(Dutch, SoNaR+)
Dataset #2: semantic bleaching

Different extents of semantic bleaching

- A physical motion through space, or seated, standing, lying position is not always entailed by the motion/posture verb in MPPs (Haeseryn et al. 1997; Lemmens 2005; Donaldson 1993; De Vos 2005; Biberauer 2017; Breed 2017a)

Example no motion entailed:

(5) Jammer dat ze in de show hadden lopen knippen, Pity that they in the show had walk.INF cut, miste een aantal leuke stukken. missed a couple fun parts. ‘[It is] a pity that they’ve been cutting in the show, a couple of fun parts were missing.’

(Dutch, SoNaR+)
Summary of the data

- **Morphological form of the progressive verb:**
  - In Dutch MPPs, the motion/posture verb always appears in IPP form.
  - In Afrikaans MPPs, the motion verb appears in IPP form in roughly 75% of the cases and in past participle form in 25%; for the posture verbs, IPP/past participle form occur equally frequently.

- **Semantic bleaching of the progressive verb:**
  - In both languages, the motion verbs are semantically bleached to the highest extent (more in Dutch (81.7%) than in Afrikaans (39.4%)).
  - In general, Dutch progressive verbs are more semantically bleached than the Afrikaans ones.
Summary of the data

- **Morphological form of the progressive verb:**
  - In Dutch MPPs, the motion/posture verb always appears in IPP form.
  - In Afrikaans MPPs, the motion verb appears in IPP form in roughly 75% of the cases and in past participle form in 25%; for the posture verbs, IPP/past participle form occur equally frequently.
  - Semantic bleaching of the progressive verb:
    - In both languages, the motion verbs are semantically bleached to the highest extent (more in Dutch (81.7%) than in Afrikaans (39.4%)).
    - In general, Dutch progressive verbs are more semantically bleached than the Afrikaans ones.
Summary of the data

- **Morphological form of the progressive verb:**
  - In Dutch MPPs, the *motion/posture* verb always appears in IPP form.
Summary of the data

- **Morphological form of the progressive verb:**
  - In Dutch MPPs, the **motion/posture** verb always appears in IPP form.
  - In Afrikaans MPPs, the **motion** verb appears in IPP form in roughly 75% of the cases and in past participle form in 25%; for the **posture** verbs, IPP/past participle form occur equally frequently.
Summary of the data

- **Morphological form of the progressive verb:**
  - In Dutch MPPs, the *motion/posture* verb always appears in IPP form
  - In Afrikaans MPPs, the *motion* verb appears in IPP form in roughly 75% of the cases and in past participle form in 25%; for the *posture* verbs, IPP/past participle form occur equally frequently

- **Semantic bleaching of the progressive verb:**
Summary of the data

- **Morphological form of the progressive verb:**
  - In Dutch MPPs, the *motion/posture* verb always appears in IPP form.
  - In Afrikaans MPPs, the *motion* verb appears in IPP form in roughly 75% of the cases and in past participle form in 25%; for the *posture* verbs, IPP/past participle form occur equally frequently.

- **Semantic bleaching of the progressive verb:**
  - In both languages, the *motion* verbs are semantically bleached to the highest extent (more in Dutch (81.7%) than in Afrikaans (39.4%)).
Summary of the data

- **Morphological form of the progressive verb:**
  - In Dutch MPPs, the motion/posture verb always appears in IPP form.
  - In Afrikaans MPPs, the motion verb appears in IPP form in roughly 75% of the cases and in past participle form in 25%; for the posture verbs, IPP/past participle form occur equally frequently.

- **Semantic bleaching of the progressive verb:**
  - In both languages, the motion verbs are semantically bleached to the highest extent (more in Dutch (81.7%) than in Afrikaans (39.4%)).
  - In general, Dutch progressive verbs are more semantically bleached than the Afrikaans ones.
Introduction

The data

The analysis

Conclusion
The analysis

Three main claims:
The analysis

Three main claims:

1. Afrikaans MPPs are on a grammaticalisation path from a complex-v construction (De Vos 2005) to a structure in which the *motion/posture* verb is directly merged in a functional head of the lexical verb’s Fseq (Cinque 2001; De Vos 2002)
The analysis

Three main claims:

1. Afrikaans MPPs are on a grammaticalisation path from a complex-v construction (De Vos 2005) to a structure in which the motion/posture verb is directly merged in a functional head of the lexical verb’s Fseq (Cinque 2001; De Vos 2002)

2. Dutch MPPs always have the latter structure
The analysis

Three main claims:

1. Afrikaans MPPs are on a grammaticalisation path from a complex-v construction (De Vos 2005) to a structure in which the motion/posture verb is directly merged in a functional head of the lexical verb’s Fseq (Cinque 2001; De Vos 2002)
2. Dutch MPPs always have the latter structure
3. The attested morphosyntactic variation in MPPs follows from the extent to which the progressive verbs are grammaticalised
The analysis

Two structures for Afrikaans MPPs

- A complex v-structure (De Vos 2005) and a ProgP-structure in which the motion/posture verb is merged in the Fseq of lexical verb
  - In the complex v-structure, the progressive verb still behaves as a light verb rather than a functional head and can therefore carry inflection

(6)  

(7)  

\[(ge-)loop\]
The analysis

Grammaticalisation path of Afrikaans MPPs

- From the complex *-structure to the ProgP-structure
The analysis

Grammaticalisation path of Afrikaans MPPs

- From the complex v-structure to the ProgP-structure
  - Assumption: this grammaticalisation mirrors the semantic bleaching of the motion/posture verb
The analysis

Grammaticalisation path of Afrikaans MPPs

- From the complex v-structure to the ProgP-structure
  - Assumption: this grammaticalisation mirrors the semantic bleaching of the motion/posture verb
  - The lexical semantic features of the motion/posture verb are gradually replaced by functional ones (e.g. [prog]-feature)
The analysis

Grammaticalisation path of Afrikaans MPPs

Stage 1 (8): progressive verb still has its semantics and can occur as a past participle → becomes more semantically bleached →

Stage 2 (9): expresses progressive aspect together with *en* (only IPP form)
The analysis

Grammaticalisation path of Afrikaans MPPs

- *Recall*: the *posture* verbs in Afrikaans MPPs are semantically bleached to a lesser extent than *loop*.
The analysis

Grammaticalisation path of Afrikaans MPPs

- *Recall*: the *posture* verbs in Afrikaans MPPs are semantically bleached to a lesser extent than *loop*
- They also show higher frequencies of past participle form/IPP form (around 50%/50%), while *loop* has much higher frequencies of IPP-form (around 75%)
The analysis

Grammaticalisation path of Afrikaans MPPs

- *Recall*: the *posture* verbs in Afrikaans MPPs are semantically bleached to a lesser extent than *loop*
- They also show higher frequencies of past participle form/IPP form (around 50%/50%), while *loop* has much higher frequencies of IPP-form (around 75%)
- *Loop* is more semantically bleached, thus further along the grammaticalisation path to a ProgP-structure, in which it is a functional head and thus appears in bare, IPP form
The analysis

Grammaticalisation path of Afrikaans MPPs

- *Recall*: the **posture** verbs in Afrikaans MPPs are semantically bleached to a lesser extent than **loop**
- They also show higher frequencies of past participle form/IPP form (around 50%/50%), while **loop** has much higher frequencies of IPP-form (around 75%)
- **Loop** is more semantically bleached, thus further along the grammaticalisation path to a ProgP-structure, in which it is a functional head and thus appears in bare, IPP form
- Dutch **motion/posture** verbs are semantically bleached to a higher extent than the Afrikaans ones, always occur in IPP form: always have the ProgP-structure
The analysis: additional pragmaticalisation
The analysis: additional pragmatisationalion

- On top of the morphosyntactic variation and the semantic bleaching, **motion** verbs have been said to often carry secondary, evaluative content (Haeseryn et al. 1997; Lemmens 2005; Biberauer 2017; Biberauer & Vikner 2017; Breed 2017)
The analysis: additional pragmaticalisation

- On top of the morphosyntactic variation and the semantic bleaching, motion verbs have been said to often carry secondary, evaluative content (Haeseryn et al. 1997; Lemmens 2005; Biberauer 2017; Biberauer & Vikner 2017; Breed 2017)
  - They signal the speaker’s evaluation or attitude concerning the eventuality described by the sentence
The analysis: additional pragmaticalisation

- On top of the morphosyntactic variation and the semantic bleaching, **motion** verbs have been said to often carry secondary, evaluative content (Haeseryn et al. 1997; Lemmens 2005; Biberauer 2017; Biberauer & Vikner 2017; Breed 2017)
  - They signal the speaker's evaluation or attitude concerning the eventuality described by the sentence

- In dataset #2, we wanted to see to what extent pragmaticalisation may be occurring
The analysis: additional pragmaticalisation

Secondary, evaluative component

(10) Ja ik merk net dat ik de herhaling heb open
    yes I noticed just now that I the rerun have walk
    kijken, verdikkeme.
    watch, dammit
    ‘Yes I just notice that I’ve been watching the rerun,
    dammit.’
    (Dutch, OpenSoNaR+)
The analysis: additional pragmaticalisation

Secondary, evaluative component

(10) Ja ik merk net dat ik de herhaling heb opengelopen.

Yes I noticed just now that I the rerun have walk

kijken, verdikkeme.

watch, dammit

‘Yes I just notice that I’ve been watching the rerun, dammit.’

(Dutch, OpenSoNaR+)

▶ The speaker was expecting to watch a new episode, not the re-run
The analysis: additional pragmaticalisation

Evaluative content in dataset #2:

**Dutch**
- *lopen*: 75/94 (79,8%)
- *zitten*: 28/93 (30,0%)
- *staan*: 33/94 (35,1%)
- *liggen*: 65/94 (69,1%)

**Afrikaans**
- *loop*: 75/109 (68,8%)
- *sit*: 11/109 (10,0%)
- *staan*: 24/109 (22,0%)
- *lê*: 28/109 (10,0%)
The analysis: additional pragmaticalisation

Evaluative content in dataset #2:

<table>
<thead>
<tr>
<th>Dutch</th>
<th>Afrikaans</th>
</tr>
</thead>
<tbody>
<tr>
<td>lopen: 75/94 (79.8%)</td>
<td>loop: 75/109 (68.8%)</td>
</tr>
<tr>
<td>zitten: 28/93 (30.0%)</td>
<td>sit: 11/109 (10.0%)</td>
</tr>
<tr>
<td>staan: 33/94 (35.1%)</td>
<td>staan: 24/109 (22.0%)</td>
</tr>
<tr>
<td>liggen: 65/94 (69.1%)</td>
<td>lê: 28/109 (10.0%)</td>
</tr>
</tbody>
</table>

- ‘Walk’ has a high percentage of evaluative sentences in both languages
The analysis: additional pragmaticalisation

Evaluative content in dataset #2:

*Dutch*
- lopen: 75/94 \((79,8\%\))
- zitten: 28/93 (30,0%)
- staan: 33/94 (35,1%)
- liggen: 65/94 (69,1%)

*Afrikaans*
- loop: 75/109 \((68,8\%\))
- sit: 11/109 (10,0%)
- staan: 24/109 (22,0%)
- lê: 28/109 (10,0%)

- `Walk` has a high percentage of evaluative sentences in both languages
- These motion verbs are also semantically bleached to the highest extent in the respective languages
The analysis: additional pragmaticalisation

- Recall: Dutch *lopen* is more semantically bleached than Afrikaans *loop*, and shows a higher percentage of evaluative content
The analysis: additional pragmatisationalisation

- **Recall**: Dutch *lopen* is more semantically bleached than Afrikaans *loop*, and shows a higher percentage of evaluative content.
- I.e., a more grammaticalised verb as the progressive marker is more likely to have evaluative content.
The analysis: additional pragmatisationalisation

- **Recall**: Dutch *lopen* is more semantically bleached than Afrikaans *loop*, and shows a higher percentage of evaluative content.
- I.e., a more grammaticalised verb as the progressive marker is more likely to have evaluative content.
- **Our proposal**: grammaticalisation is a trigger for pragmatisationalisation (evaluative content).
The analysis: additional pragmaticalisation

- **Recall**: Dutch *lopen* is more semantically bleached than Afrikaans *loop*, and shows a higher percentage of evaluative content
- I.e., a more grammaticalised verb as the progressive marker is more likely to have evaluative content
- **Our proposal**: grammaticalisation is a trigger for pragmaticalisation (evaluative content)
  - This accounts for the frequency differences in evaluative content between the two languages, and between the *motion/posture* verbs
The analysis: additional pragmaticalisation

- *Recall*: Dutch *lopen* is more semantically bleached than Afrikaans *loop*, and shows a higher percentage of evaluative content

- I.e., a more grammaticalised verb as the progressive marker is more likely to have evaluative content

- *Our proposal*: grammaticalisation is a trigger for pragmaticalisation (evaluative content)
  - This accounts for the frequency differences in evaluative content between the two languages, and between the motion/posture verbs

- Especially Dutch *lopen* is even so far grammaticalised that this evaluative meaning has almost conventionalised (=high extent of pragmaticalisation)
Introduction

The data

The analysis

Conclusion
Conclusion

- **New data**: Dutch and Afrikaans motion verbs in MPPs as compared to their posture verb counterparts:
  - show different morphosyntactic behaviour
  - are more semantically bleached
  - often carry secondary, evaluative content

- **Analysis**: the motion verbs are further along a grammaticalisation path than the posture verbs
  - This grammaticalisation goes hand in hand with pragmaticalisation (evaluative content)

- **Preview**: Dutch and Afrikaans motion verbs in MPPs are grammaticalising even further, which is reflected by other morphosyntactic quirks (e.g. *te/en*-drop)
  - They are becoming completely functional progressive markers, which makes *te/en* (progressive markers) no longer necessary
Acknowledgements

Many thanks to/veel dank aan/baie dankie vir:
Erin Pretorius, Kitty Bons, Regine Pots, Peter Pots, Benito Trollip

This research has been partially supported by predoctoral grant BES-2016-076783 (Spanish Ministry of Economy, Industry and Competitiveness, MINECO), project FFI2015-66732-P, funded by MINECO and the European Regional Development Fund (FEDER), the IT769-13 Research Group (Basque Government), and UFI11/14 (University of the Basque Country, UPV/EHU).
Appendix I: semantic bleaching in Dutch

Physical motion through space/posture position entailed per motion/posture verb MPP for Dutch

<table>
<thead>
<tr>
<th>Motion/posture entailed</th>
<th>lopen $n=94$</th>
<th>zitten $n=93$</th>
<th>staan $n=94$</th>
<th>liggen $n=94$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>17 (18,3%)</td>
<td>35 (37,6%)</td>
<td>79 (84,0%)</td>
<td>66 (70,0%)</td>
</tr>
<tr>
<td>No</td>
<td>76 (81,7%)</td>
<td>58 (62,4%)</td>
<td>15 (16,0%)</td>
<td>28 (30,0%)</td>
</tr>
<tr>
<td>Unclear</td>
<td>1 (01,0%)</td>
<td>0 (00,0%)</td>
<td>0 (00,0%)</td>
<td>0 (00,0%)</td>
</tr>
</tbody>
</table>

Table 1: Semantic bleaching per motion/posture verb in Dutch
Appendix II: semantic bleaching in Afrikaans

- Physical motion through space/posture position entailed per motion/posture verb MPP for Afrikaans

<table>
<thead>
<tr>
<th>Motion/posture entailed</th>
<th>loop $n=109$</th>
<th>sit $n=109$</th>
<th>staan $n=109$</th>
<th>lê $n=109$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>12 (11,0%)</td>
<td>98 (89,9%)</td>
<td>94 (86,2%)</td>
<td>94 (87,2%)</td>
</tr>
<tr>
<td>No</td>
<td>43 (39,4%)</td>
<td>2 (01,8%)</td>
<td>4 (03,7%)</td>
<td>13 (11,9%)</td>
</tr>
<tr>
<td>Unclear</td>
<td>54 (49,6%)</td>
<td>9 (08,3%)</td>
<td>11 (10,1%)</td>
<td>1 (00,9%)</td>
</tr>
</tbody>
</table>

Table 2: Semantic bleaching per motion/posture verb in Afrikaans
The analysis

Grammaticalisation path of Afrikaans MPPs

- The assumption that the semantics of the progressive verb are still very salient when the progressive verb occurs in past participle form is reflected in the data:

  - The occurrences of loop as past participle in Afrikaans MPPs entail physical motion through space much more often (80.8% of the past participle occurrences) than the IPP-form occurrences (54.2%).
The analysis

Grammaticalisation path of Afrikaans MPPs

- The assumption that the semantics of the progressive verb are still very salient when the progressive verb occurs in past participle form is reflected in the data:
- The occurrences of *loop* as past participle in Afrikaans MPPs entail physical motion through space much more often (in 80.8% of the past participle occurrences) than the IPP-form occurrences (54.2%)
The analysis: additional pragmaticalisation

Secondary, evaluative component

(11) Ek weet dis jy wat jou gif by die blomme loop
I know it is you that your poison at the flowers walk spuit het.
spray has
‘I know it was you that has been spraying poison on the flowers.’ (Afrikaans, Korpusportaal)
The analysis: additional pragmaticalisation

Secondary, evaluative component

(11) Ek weet dis jy wat jou gif by die blomme loop
I know it is you that your poison at the flowers walk
spuit het.
spray has
‘I know it was you that has been spraying poison on the
flowers.’ (Afrikaans, Korpusportaal)

- The behavior, i.e. spraying poison on the flowers, of the
  addressee (jy ‘you’) is undesired