An A No-Category Approach to Analysing P-based V-Particles\textsuperscript{1,2} (In Afrikaans)

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Introduction

This talk
\> puts forward an analysis of Afrikaans particle verbs,
\> with a view to demonstrating the workings of a system in which syntactic categories are not ontologically primitive.

Longstanding issues relating to particle verbs:

\begin{enumerate}
  \item (a) \ldots dat mense wyn aan-dra
    \begin{itemize}
      \item that people wine on-carry
      \item “…that people are bringing wine.”
    \end{itemize}
    \textit{“INCORPORATION” in OV-GERMANIC}

  \item (b) Mense \{“aan-\}dra wyn \{aan\}
    \begin{itemize}
      \item people on carry wine on
      \item “People are bringing wine.”
    \end{itemize}
    \textit{SEPARABILITY UNDER V2}

  \item (a) Jan sê jy het hom uitgeskel.
    \begin{itemize}
      \item Jan says you have him out-scolded
      \item “Jan says you scolded him.”
    \end{itemize}
    \textit{IDIOMATIC MEANING}

  \item (b) Jan hang die wasgoed uit.
    \begin{itemize}
      \item Jan hangs the washing out
      \item “Jan is hanging out the washing.”
    \end{itemize}
    \textit{(vs. TRANSPARENT MEANING)}
\end{enumerate}

\begin{enumerate}
  \item (a) Complex Word analysis:
  \item (b) Syntactic analysis:
\end{enumerate}

\begin{center}
\begin{tikzpicture}
  \node {VP} [grow=up,level distance=1.5cm]
  \node {V\textsuperscript{0}} [grow=left,level distance=1cm]
  \node {Obj} [grow=left,level distance=1cm]
  \node {PRT\textsuperscript{0}} [grow=left,level distance=1cm]
\end{tikzpicture}
\begin{tikzpicture}
  \node {VP} [grow=up,level distance=1.5cm]
  \node {V} [grow=left,level distance=1cm]
  \node {Obj} [grow=left,level distance=1cm]
  \node {PRTP} [grow=left,level distance=1cm]
  \node {SC} [grow=left,level distance=1cm]
\end{tikzpicture}
\end{center}

\textsuperscript{1}I am grateful to Theresa Biberauer, Norbert Corver, and Marjo van Koppen for providing valuable feedback on various versions of this work, at various stages.

\textsuperscript{2}This research has been funded by the South African NRF, EUROSA (Erasmus Mundus), and Zuid-Afriikhuis.
I raise the additional issue of SYSTEMATIC HOMOPHONY:

> Particles are patently “recycled” from other categories
> Regardless of the origin-category, they form a distinct syntactic class

(4)

(a) aan dra
   on-carry
   “bring”
   Particle: aan (P-based form)

(b) sleg sê
   bad-say
   “insult”
   Particle: sleg (A-based form)

(c) weg neem
   away-take
   “remove”
   Particle: weg (Adv-based form)

(d) fiets ry
   bike-ride
   “ride bike”
   Particle: fiets (N-based form)

The main idea

> category effects arise from the sub-categorial structure an exponent lexicalises; as such,
> there is an important distinction between a lexical entry and an exponent, where

lexical entries are specified for a range of formal potentials (pre-insertion) and
exponents exhibit the category effects of the insertion site (post-insertion)

> since matching is not rigid (cf. range of formal potentials), different exponents of the
same entry may be realising different formal potentials in different syntactic contexts, thus
exhibiting different category effects.
The main claim

> conventional categories are expanded into zones of ordered formal features
> no distinct “cut off” points in the syntactic spine between such zones

> individual morphemes lexicalise spans of features
(span: head-complement features within an extended projection)

> morphemes that lexicalise features in the broad “V zone” behave as verbs, morphemes
that lexicalise features in the broad “P zone” behave as adpositions;
> (P-based) V-particles = members of a “hybrid category” that lexicalise nodes in both zones

Given the above, the proposed analysis should

> take into account the longstanding issues in (1-3)
> take into account systematic homophony in (4)
> correctly identify the nodes/features that P-based V-particles lexicalise

Overview:

1. Proposed Analysis
2. V-particles and T-state Passives
3. Telicity: Particle Contribution to Verb-internal Aspect
4. (Non-)Transparent and (Non-)Predicative Particle Verbs
5. Systematic Homophony
6. Concluding Remarks

1. Proposed Analysis

P-based V-particles:
> are exponents that lexicalise RES(ult) of the “V zone” (Ramchand, 2008) and
> derive from lexical entries that also have features from the “P zone” in their range of
formal potentials
In Ramchand (2008):

> The “V zone” of syntax is comprised of three event structure subcomponents – [INIT(iation) [PROC(ess) [RES(ult)]]], where

INIT = the causation subcomponent of an event
PROC = the dynamic change
RES = the state that comes about because of any change denoted by PROC

> No subcomponent alone corresponds to “V”
> Each subcomponent is predicative; spec-head represents the argument-predicate relation

Eg. John ran: \([\text{INIT} \text{DP}, \text{INIT} \text{PROC} \text{DP}, \text{PROC}])\]
John washed the dishes: \([\text{INIT} \text{DP}, \text{INIT} \text{PROC} \text{DP}, \text{PROC}])\]
John arrived: \([\text{INIT} \text{DP}, \text{INIT} \text{PROC} \text{DP}, \text{PROC}] \text{RES} \text{DP}, \text{RES}])\]
John tore the paper: \([\text{INIT} \text{DP}, \text{INIT} \text{PROC} \text{DP}, \text{PROC}] \text{RES} \text{DP}, \text{RES}])\]

> NB for later: structural asymmetry between a DP of which an event subcomponent is predicated & incremental themes/paths:
the former are specifiers
incremental themes/paths are complements of the event structure

incremental themes/paths are monotonic with the event, i.e. they are “used up” in proportion to the progression of the event

Eg. John baked a cake: \([\text{INIT} \text{DP}, \text{INIT} \text{PROC} \text{DP}, \text{PROC} \text{INCR THEME}])\]
John walked to the beach \([\text{INIT} \text{DP}, \text{INIT} \text{PROC} \text{DP}, \text{PROC} \text{PATH}])\]

In line with what Ramchand & Svenonius (2002) and Ramchand (2008) have proposed:

(5) (a) Jan gaan die koekies opeet.
Jan go the cookies up-eat
“Jan is going to eat the cookies up.”

\[\begin{array}{c}
\text{INITP} \\
\text{DPINITIATOR} \\
\text{Jan} \\
\text{INIT} \\
\text{PROC} \\
\text{DPUNDERGOER} \\
\text{Jan} \\
\text{PROC} \\
\text{DPRESULTTEE} \\
\text{eet} \\
\text{die koekies} \\
\text{RES} \\
\text{op} \\
\end{array}\]
Rolling up RESP derives OV order in the base clause and

> particle “incorporation” / pre-verbal placement in OV-Germanic
> lack of “true” incorporation accounts for separability
> the particle verb’s theme-argument forms a constituent with the particle (cf. 6-7):

(6) (a) John eats with chopsticks, and [Mary]₁ [with a fork]₂.
    (b) John eats spaghetti, and [Mary]₁ [chop suey]₂.
    (c) *John eats spaghetti with a fork, and [Mary]₁ [chop suey]₂ [with chopsticks]₃.

(7) (a) Turn the oxygen off when I say to, and [the acetylene on]₁ [a moment later]₂
    (b) Turn the oxygen off with your elbow, and [the acetylene on]₁ [with your knee]₂

(Svenonius 1992; from Den Dikken 1996:43)

> Tension between (3a) and (3b) is resolved at this grain of analysis:

[An analysis on which the event subcomponent RES is expressed by the particle – EP] resolves
the debate between the small clause approach... and the complex predicate approach... by
representing the essential correctness of both positions. The small clause approach is correct
because the particle is associated with additional predicational structure which thematically
affects, and is sometimes even solely responsible for the presence of the direct object, which is
essentially the ‘subject’ of that introduced small clause. On the other hand, the first-phase
decomposition is in effect a complex (decomposed) predicate, where the subevents involved
combine to create a singular (albeit internally articulated) event. This complex event is a unit for
the purposes of case licensing and idiom formation.

(Ramchand 2008:133)
2. V-particles and T-state Passives

This section points out various similarities in the behaviour of T(state)-state passive participles and V-particles.

It follows that what we know about the structure underlying T-states can be instructive for V-particles.

Classic ternary distinction between eventive, R(esultant)-state, and T(arget)-state passive participles:

(8) (a) The dustbin is empty  \( \text{T-state} \)
(b) The dustbin is emptied  \( \text{R-state} \)
(c) The dustbin was emptied (by David)  \( \text{Eventive} \)

(Adapted from Embick 2003:148)

Embick (2003; 2004): T-states express no information other than the identification of a state, and carry no information about the event that brought it about → absence of PROC.

Caha (2007) and Lundquist (2008) argue that T-state, R-state, and eventive passives correspond to the following event structure subcomponents:

(9) (a) \( \text{T-state:} \) \[ \text{RES} \]
(b) \( \text{R-State:} \) \[ \text{PROC [RES]} \]
(c) \( \text{Eventive:} \) \[ \text{INIT [PROC [RES]]} \]

(Caha 2007:24)

(10) Some English roots and their corresponding passive participles:

<table>
<thead>
<tr>
<th>Root</th>
<th>T-state</th>
<th>R-state</th>
<th>Eventive</th>
</tr>
</thead>
<tbody>
<tr>
<td>bless</td>
<td>blessed</td>
<td>blessed</td>
<td>blessed</td>
</tr>
<tr>
<td>rot</td>
<td>rotten</td>
<td>rotted</td>
<td>rotted</td>
</tr>
<tr>
<td>sink</td>
<td>sunken</td>
<td>sunk</td>
<td>sunk</td>
</tr>
<tr>
<td>shave</td>
<td>(clean-) shaven</td>
<td>shaved</td>
<td>shaved</td>
</tr>
<tr>
<td>open</td>
<td>open</td>
<td>opened</td>
<td>opened</td>
</tr>
<tr>
<td>empty</td>
<td>empty</td>
<td>emptied</td>
<td>emptied</td>
</tr>
<tr>
<td>dry</td>
<td>dry</td>
<td>dried</td>
<td>dried</td>
</tr>
<tr>
<td>close</td>
<td>closed</td>
<td>closed</td>
<td>closed</td>
</tr>
</tbody>
</table>

(Embick 2003:153)

> R-states and eventives are usually homophones.
> T-states are usually distinct, and frequently take the form of an underived adjective.

3 T-State Participle

For a large number of verbs, there is a “typical” independently identifiable state that its object is in after the verb is true of it. If the state is transitory, then we come to use the adjective form of the past participle to stand for the transitory state instead of for the permanent resultant state. For example, anything that is cracked and then not repaired is in a state that is easy to identify.

R-State Participle

For every event e that culminates, there is a corresponding state that holds forever after. This is “the state of e’s having culminated”, which I call the “Resultant state of e” or “e’s R-state”. If Mary eats lunch, then there is a state that holds forever after: The state of Mary’s having eaten lunch.

(Parsons 1990: 234-235)
In Afrikaans, T-states of “regular” verbs take the participle morpheme (11a).
T-states formed of particle verbs take the form of “underived” As, Ps, etc. (11b-c)

Note: I refer to T-states formed from “regular” verbs as V-based and those formed from particle verbs as A-based, P-based (or whatever category the particle is otherwise associated with).

(11) (a) Die afstandbeheer is gebreek.
the distance-control PASS PTCPL-break
“The remote control is broken.”

(b) Die deur is oop.
the door PASS open
“The door is open.”

(c) Die tent is op.
the tent PASS up
“The tent is up.”

(12) Some Afrikaans roots and their corresponding passive participle forms

<table>
<thead>
<tr>
<th>Root</th>
<th>T-state</th>
<th>R-state</th>
<th>Eventive</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>skeer (shave)</td>
<td>ge-skeer PTCPL-shave “shaven”</td>
<td>ge-skeer PTCPL-shave “shaved”</td>
</tr>
<tr>
<td>V</td>
<td>breek (break)</td>
<td>ge-breek PTCPL-break “broken”</td>
<td>ge-breek PTCPL-break “broken”</td>
</tr>
<tr>
<td>V</td>
<td>spot (tease)</td>
<td>--- PTCPL-tease “teased”</td>
<td>ge-spot PTCPL-tease “teased”</td>
</tr>
<tr>
<td>A</td>
<td>oop (open)</td>
<td>oop “open” open-PTCPL-make “opened”</td>
<td>oop-ge-maak PTCPL-make “opened”</td>
</tr>
<tr>
<td>A</td>
<td>droog (dry)</td>
<td>droog dry “dry” dry-PTCPL-make “dried”</td>
<td>droog-ge-maak PTCPL-make “dried”</td>
</tr>
<tr>
<td>P</td>
<td>op (up)</td>
<td>op “up” up-PTCPL-set “set up”</td>
<td>op-ge-slaan PTCPL-set “set up”</td>
</tr>
<tr>
<td>P</td>
<td>in (in) uit (out)</td>
<td>in/in/out “in/out” in/out-PTCPL-locked “in/excluded”</td>
<td>in/in-out-ge-sluitt PTCPL-locked “in/excluded”</td>
</tr>
<tr>
<td>P</td>
<td>deur (through)</td>
<td>deur through “passed” through-PTCPL-put “passed”</td>
<td>deur-ge-sit PTCPL-put “passed”</td>
</tr>
</tbody>
</table>

The transparent morphological “nesting” exhibited by the passive participles in (12) makes a case for the “structural nesting” proposed in (9).
Embick (2003; 2004): T-states pattern with (underived) adjectives w.r.t. degree modification.

(13) (a) Herman is heeltemal gelukkig.
Herman is completely happy
“Herman is completely happy”

(b) Herman is heeltemal gekuier
Herman is completely partied
“Herman is completely drunk”

(c) Die hek is heeltemal oop.
The gate is completely open
“The gate is completely open.”

(d) Die kos is heeltemal op.
the food is completely up
“The food is completely finished.”

Afrikaans P-based V-particles do not accept modification by reg (“right/straight”), as adpositions do:

(14) (a) …dat Jan die beker reg op/in die wasbak sit het.
that Jan the mug right on/in the basin put has
“…that Jan put the mug right on/in the basin.”

(b) …dat Jan reg verby die plaasdam gery het.
that Jan right past the farm-dam drives has
“…that Jan drove right past the farm dam.”

As (13) also shows, though, they systematically accept modification by heeltemal:

(15) (a) …dat Jan die koekies *reg/ heeltemal opgeëet het.
that Jan the cookies right completely up-eaten has
“…that Jan ate the cookies up completely.”

(b) …dat Jan die berg *reg/ heeltemal uitgeklim het.
that Jan the mountain right completely out-climbed has
“…that Jan climbing the mountain all the way to the top.”

(c) …dat Jan sy hare *reg / heeltemal afgespoel het.
that Jan his hair right completely off-rinsed has
“…that Jan did a thorough job of rinsing off his hair.”

It follows that
> modifiers like heeltemal scope over RES
> modifiers like reg scope beneath RES.
> particles are lexicalising structure as high as RES
The particle modifier can be topicalised with the particle, leaving the verb behind:

(17)  
(a)  [Heeltemal op] het Jan die koekies geëet.  
completely up has Jan the cookie eaten

(b)  [Heeltemal in/uit/op] het Jan geklim.  
completely in/out/up has Jan climbed

This means the constituent containing the particle and the modifier excludes the verb, as it does on the SC analysis and on the present analysis.

3. Telicity: Particle Contribution to Verb-Internal Aspect

Telicity – or resultativity – identifies the logical end-point of an event.

E.g.  running is atelic  
unless an end point is additionally specified – running a race  
telicity then arises as a semantic entailment

Telicity must be formally encoded in at least some grammars:

Verbs do differ in their inherent aspectual properties:

(18) (a) Jan het vir ‘n uur lank / "binne ‘n uur gedraf.
Jan has for an hour long in an hour jogged
"Jan jogged for an hour."

(b) Jan het binne ‘n uur / "vir ‘n uur lank gearriveer.
Jan has in an hour for an hour long arrived
"Jan arrived in an hour."

ATELIC

TELIC

The presence of bounded incremental themes/paths cause durative activities (≡atelic) to become accomplishments (≡telic).

(19) (a) John ate chakalaka for an hour / "in an hour.
John ate the chakalaka in an hour / "for an hour.
(b) John walked towards Camps Bay for an hour / "in an hour.
(c) John walked to Camps Bay in an hour / "for an hour.

ATELIC

TELIC

Telicity effects in (19) are **semantic entailments**. Such entailments are not encoded by the verb (i.e. such structures lack **RES**). The incremental theme/path is the **complement** of **PROC**:

(20) (a) Jan het ‘n koek gebak.
Jan has a cake baked
"Jan baked a cake."

(b)

Telicity, as an inherent property of the verb, is encoded by **RES** and expressed by the verb
The entity of which the resultant state is predicated is the **specifier of RES**:

(21) (a) Jan het gearriveer.
Jan has arrived
"Jan arrived."
The presence of a V-particle renders inherently atelic verbs (22-i) telic (22-ii):

(22) (a)  
(i) Jan het ("binne 'n uur) televisie gekyk.  
Jan has in an hour television watched  
"Jan watched television."

(ii) Jan het binne 'n seconde omgekyk.  
Jan has in a second around-looked  
"Jan looked around in a second."

(b)  
(i) Jan het ("binne 'n uur) gestaan/geklim/ gestap.  
Jan has in an hour stood climbed strolled  
"Jan stood / climbed / strolled."

(ii) Jan het binne 'n seconde opgestaan / uitgeklim / deurgestap.  
Jan has in a second up-stood out-climbed through-strolled  
"Jan stood up / climbed out / walked through in a second."

(c)  
(i) Jan het ("binne 'n uur) gespeel.  
Jan has in an hour played  
"Jan played."

(ii) Jan het binne 'n uur uitgespeel.  
Jan has in an hour out-played  
"Jan played finished (a game) in an hour."
4. (Non-)Transparent and (Non-)Predicative Particle Verbs

(Non-)transparency is determined by interpretation:
if the particle retains the spatial meaning, the particle verb is transparent
if the particle loses this spatial meaning, it is non-transparent

(23)  (a)  Jan hang die wasgoed op.
        Jan hangs the washing up
        “Jan is hanging the washing up.”
        TRANSPARENT

(b)  Jan eet die chakalaka op.
        Jan eats the chakalaka up
        “Jan is eating the chakalaka up.”
        NON-TRANSPARENT

(Non-)predicative status of the particle is determined based on whether the particle can be the sole predicate in a copular construction:

(24)  (a)  Jan kom al sy eksamens deur.
        Jan comes all his exams through
        “Jan is passing all his exams.”

(b)  Jan is deur.
        Jan is through
        “Jan passed.”
        PREDICATIVE

(25)  (a)  Jan lees die boek deur.
        Jan reads the book through
        “Jan is reading the book (from cover to cover).”

(b)  *Die boek is deur.
        the book is through
        NON-PREDICATIVE

Transparency and predicative status are often thought to be correlated:
particles of transparent particle verbs are said to be predicative
particles of non-transparent particle verbs are said to be non-predicative

But it’s not clear that this is correct.

(26)  (a)  Die polisie soek die woonstel deur.
        the police search the flat through
        “The police are searching the flat.”

(b)  *Die woonstel/die polisie is deur.
        the flat / the police are through
        TRANSPARENT; NON-PREDICATIVE

(27)  (a)  Jan eet die chakalaka op.
        Jan eats the chakalaka up
        “Jan is eating the chakalaka up.”

(b)  Die chakalaka is op.
        the chakalaka is up
        “The chakalaka is finished
        NON-TRANSPARENT; PREDICATIVE
I suggest there is no correlation between transparency and the predicate-status of the particle. Consider the summarising examples in the table:

<table>
<thead>
<tr>
<th>Transparent</th>
<th>Predicative</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>-</td>
<td>deur -soek through-search “thoroughly search” deur -lees through-read “read through”</td>
</tr>
<tr>
<td>+</td>
<td>+</td>
<td>uit -hang af -spoel out-hang off-rinse “hang out” “rinse off”</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>uit -klim uit-skel out-climb out-scold “climb (to the top)” “severely scold”</td>
</tr>
<tr>
<td>-</td>
<td>+</td>
<td>op-eet, aan-/afskakel up-eat on-/ off-switch “eat up” “switch on/off”</td>
</tr>
</tbody>
</table>

Proposal:

**Transparency** arises when the particle lexicalises DIR from the “P zone”

**Non-transparency** arises when the particle does not lexicalise DIR

Particles are **predicative** when they accommodate an argument in spec-RES

Particles are **non-predicative** when RES takes an incremental theme/path complement

The possible combinations are structurally represented in (29-32).

(29) **Transparent, Non-predicative:**

(a) Die polisie soek die woonstel deur.
the police search the flat through
“The police are thoroughly searching the flat.”

(b) Jan lees die boek deur.
Jan reads the book through
“Jan is reading the book (from cover to cover).”

(c)
(30) *Transparent, Predicative:*

(a) Jan hang die wasgoed uit.
   Jan hangs the washing out
   “Jan is hanging the washing out.”

(b) Jan spoel die modder af.
   Jan rinses the mud off
   “Jan is rinsing the mud off.”

(c)

(31) *Non-transparent; Non-predicative:*

(a) Jan klim die berg uit.
   Jan climbs the mountain out
   “Jan is climbing (to the top of) the mountain.”

(b) Jan skel sy vriende uit.
   Jan scolds his friends out
   “Jan is scolding his friends.”

(c)
Non-transparent; predicative:

(a) Jan eet die chakalaka op.
Jan eats the chakalaka up
“Jan is eating the chakalaka up.”

(b) Jan skakel die TV aan / die radio af.
Jan switches the TV on the radio off
“Jan is switching the TV on / the radio off.”

(c) Jan spoel die bord af.
Jan rinses the plate off
“Jan is rinsing the plate off.”

The proposal provides a neat account of **landmark flexibility:**

(a) Jan laai die bakkie af.
Jan loads the pickup off
“Jan is offloading the pickup truck.”

(b) Jan laai die tasse af.
Jan loads the suitcases off
“Jan is offloading the suitcases.”

In each case, the particle is predicative only when the object is a FIGURE:

---

4 Cf. Zeller (2001:179-182) and McIntyre (2001) for discussion of this phenomenon in German, and Van der Merwe (2013) for Afrikaans data; Svenonius (2003) compares the phenomenon in the North and West Germanic languages.
(33') (a) *Die bord is af.  
the plate is off

(b) Die modder is af.  
the mud is off  

"The mud is off."

(34') (a) *Die bakkie is af.  
the bakkie is off

(b) Die tasse is af.  
the suitcases are off  

"The suitcases are off."

(33'') (a)  

(b)
5. Systematic Homophony

The Afrikaans P inventory can be divided into six classes, based on the lexical element’s *formal range potential* (FRaP).

An element’s FRaP = the set of functions it has the capacity to express (=shaded cells in (35))

FRaP is established by an element’s ability to occur in all relevant distributional contexts.

(35) FRaP Chart of Afrikaans P Elements

<table>
<thead>
<tr>
<th>AXIAL PART</th>
<th>ADPOSITION</th>
<th>V–PARTICLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Class A**

<table>
<thead>
<tr>
<th>na2</th>
<th>near</th>
<th></th>
</tr>
</thead>
</table>

**Class B**

<table>
<thead>
<tr>
<th>agter</th>
<th>back</th>
<th>behind</th>
</tr>
</thead>
<tbody>
<tr>
<td>binne</td>
<td>“interior”</td>
<td>inside</td>
</tr>
<tr>
<td>bo</td>
<td>“top”</td>
<td>above</td>
</tr>
<tr>
<td>buite</td>
<td>“exterior”</td>
<td>outside</td>
</tr>
<tr>
<td>onder</td>
<td>under</td>
<td>beneath</td>
</tr>
<tr>
<td>tussen</td>
<td>in.between</td>
<td>between</td>
</tr>
<tr>
<td>van</td>
<td>of</td>
<td>“origin”</td>
</tr>
<tr>
<td>voor2</td>
<td>“face”</td>
<td>front</td>
</tr>
<tr>
<td>langs</td>
<td>beside</td>
<td>next.to</td>
</tr>
</tbody>
</table>

**Class C**

<table>
<thead>
<tr>
<th>af</th>
<th>down/off</th>
<th>down/off</th>
</tr>
</thead>
<tbody>
<tr>
<td>toe</td>
<td>to</td>
<td>to</td>
</tr>
</tbody>
</table>

**Class D**

<table>
<thead>
<tr>
<th>deur</th>
<th>through</th>
<th>through</th>
</tr>
</thead>
<tbody>
<tr>
<td>na1</td>
<td>to</td>
<td>to</td>
</tr>
<tr>
<td>om</td>
<td>around</td>
<td>around</td>
</tr>
<tr>
<td>verby</td>
<td>past</td>
<td>past</td>
</tr>
</tbody>
</table>

**Class E**

<table>
<thead>
<tr>
<th>aan</th>
<th>“contact”</th>
<th>(on)to</th>
<th>to.vicinity</th>
</tr>
</thead>
<tbody>
<tr>
<td>by</td>
<td>at</td>
<td>past</td>
<td>to.with</td>
</tr>
<tr>
<td>in</td>
<td>in</td>
<td>into</td>
<td>into</td>
</tr>
<tr>
<td>op</td>
<td>on</td>
<td>onto</td>
<td>up</td>
</tr>
<tr>
<td>oor</td>
<td>above</td>
<td>over</td>
<td>over</td>
</tr>
<tr>
<td>uit</td>
<td>out</td>
<td>out</td>
<td></td>
</tr>
</tbody>
</table>

**Class F**

<table>
<thead>
<tr>
<th>rond</th>
<th>“perimeter”</th>
<th>“region”</th>
<th>around</th>
<th>around</th>
</tr>
</thead>
<tbody>
<tr>
<td>teen</td>
<td>against</td>
<td>against</td>
<td>to.against</td>
<td>“opposite”</td>
</tr>
</tbody>
</table>
Predictive Hierarchical Model of Syncretism

Robust *ABA pattern (cf. Bobaljik 2012; Bobaljik and Sauerland 2017) in (35): no “gaps” i.t. paradigm.

(36) *ABA Constraint on Afrikaans Spatial P
(a) If a suppletive form functions as an AxPart and V-particle, then it also functions as a locative and directional Adposition
(b) If a suppletive form functions as a locative Adposition and a V-particle, then it also functions as a directional Adposition
(c) If a suppletive form functions as a locative Adposition but not as a directional Adposition, then neither does it function as a V-particle
(d) If a suppletive form functions as a directional Adposition but not as a locative Adposition, then neither does it function as an AxPart

From the constraint in (36) it is possible to derive the Space Contiguity Hypothesis:

(37) Space Contiguity Hypothesis for Afrikaans
Syncretism targets contiguous regions in the sequence AxPart-P_{LOC}-P_{DIR}-V-particle.

This means the syncretism can be modelled hierarchically:

(38)

(elsewhere) = FRaP Class F

V-particle (elsewhere) = FRaP Class D & E
directional Adposition (elsewhere) = FRaP Class B
locative Adposition Axial Part = FRaP Class A

The idea is that this hierarchy should be reflected in syntax.
This is (to a degree) what we already find in the literature (cf. e.g. Svenonius 2007, et seq.):

(39)

? = V-particle
Path = directional Adposition
to Place = locative Adposition
in AXPART = Axial Part
front K
of DP
the car

The V-particle function, if it corresponds to a formal feature of the kind AXPART, PLACE/LOC, PATH/DIR, is located above PATH/DIR.
In the spirit of MMM, the identity of this feature is one that is already in use for other functions: RES—which is also “next node up” from the P zone = the lowest node of the V zone.
6. Concluding Remarks: So what about Category?

V-particles
> are defined by class-specific distribution, so V-particle-hood must be formally encoded (e.g. lack of functional structure (Zeller 2001a,b), defective phase-ood (Biberauer 2016))
> typically have other-category counterparts and
> are both phonologically and semantically related to their other-category counterparts – the relation is systematic not accidental,
so they should be represented in the lexicon by the same entry

But, on a primitive-category approach, V-particles and their other-category counterparts have to be twice-listed because there are no smaller category-related attributes establishing any systematic connections between the V-particle use and the other-category use (as exponents) of the same lexical entry.

The analysis proposed here assumes that categories
> dissolve as an epiphenomenon of the set of formal features an exponent expresses in any given syntactic context;
> are not ontologically primitive
> are not essentially properties of lexical entries or primitive categorisers
> arise based how structure is “framed” by morphemes that have various formal features in their range

We expect:
> some elements are specified for features that “straddle” conventional category boundaries
> languages segment the same structure differently
> functions associated with a certain category in one language correspond to another category in other languages.

BUT: given the ordered feature hierarchy, predictions on variation – both language-internal and cross-linguistic – are highly constrained.

References