

**Peripheral significance: a phasal perspective on the grammaticalisation of speaker perspective**  
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**1. Introduction**

- Something diachronically oriented generativists have developed fine-grained formal understanding of during this millennium in particular: **grammaticalisation** (cf. i.a. Roberts & Roussou 2003, van Gelderen 2004, Roberts 2010, among many others)
- My focus: the sub-type of grammaticalisation concerned with speaker-hearer-oriented meaning, sometimes called **pragmaticalisation** (cf. i.a. Traugott 1995, Diewald 2011, 2012)
- Why this focus?
  - As synchronically and diachronically oriented generativists, we are committed to the idea that *adult grammars are shaped by acquisition*. And acquisition is based on **spoken/vernacular** language; therefore we should pay careful attention to the elements in relevant spoken registers. Which include a strikingly high concentration of speaker-/hearer-related elements (including elements like those in (1-4). Which we mostly have not investigated very carefully to date.
  - Advances this millennium in our understanding of how speaker-/hearer-related elements specifically might be formally modelled.
- Empirical point of departure: Vernacular varieties in general and contact varieties in particular employ a large number of “perspectival” (speaker-hearer-related) elements.

(1) Cantonese:

a. hai3 keoi5 saang1-jat6 **aa3**  
is s/he birthday SFP  
'It's his/her birthday.'

b. hai3 keoi5 saang1-jat6 **aak3**  
is s/he birthday SFP  
'It IS his/her birthday!'

(Wong 2018:3)

(2) Singlish:

a. *Speaker requires a confirmatory response from addressee.*

A: You don't like durian **ah21**?  
'So you don't like durian?'

b. *Speaker asks a question that requires a response from addressee.*

A: Where got sell good durians **ah24**?  
'Where do they sell good durians, do you think?'

c. *Speaker is softening an imperative to addressee.*

A: Come eat durians later **ah24**?  
'Come and eat durians later, okay?' (Lan 2017:18)

- These elements are not confined to the clause **periphery**:

(3) a. Afrikaans

Hy vat **sommer** 'n kans.  
he take MP a chance  
'He's **just** taking a chance.'

- cf. West Germanic modal particles more generally (cf. also Cardinaletti 2011 and Thoma 2016 who ascribe these to the 'low TP domain')

b. English:

She (just) **went and** finished in under 4 hours! (after panicking for weeks about being able to finish the marathon)

c. Korean:

Jina-ka ku chayk-ul ilk- (**e- nay**)- ess- ta  
Jina-NOM that book- ACC read-(LINKER-achieve) PST-DECL  
'Jina read the book (and in terms of the speaker's perspective the subject went through some hardship in the course of the main event).'  
(Jung 2017:93)

- Nor are they confined to the **clause**:

(4) a. German:

[Warum **bloß**] ist ein Rauschenberg so teuer?  
why MP is a Rauschenberg so expensive  
'Why the hell is a Rauschenberg so expensive?'

(Bayer & Obenauer 2011:471)

b. Early Middle English:

Wi qui **ban** mak we vs so ken of **bis** . . .  
oh why then make we us so keen of this  
'Oh, why, then, do we worry so much about this?'

(*Edincma* f9vb, North, 1300-25<sup>1</sup>, via de Haas & van Kemenade 2014:68)

c. Colloquial English:

John is going to [**I think it's Chicago**] on Saturday.

- i.e. so-called (*Horn's amalgams*) or *grafts* (cf. Lakoff 1974, and subsequent discussion by i.a. Henk van Riemsdijk, Kyle Johnson and Alex Grosu)

d. Afrikaans:

'n mooi-**e** (**ou**) meisie-**tjie** (attested)  
a pretty-INFL old girl- DIM-DIM  
'a pretty (little) girl (strongly affective)'

- and see also recent work by Norbert Corver

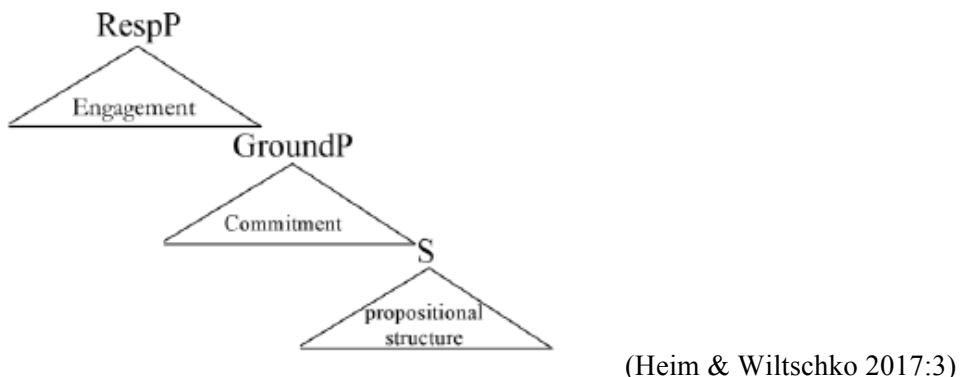
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<sup>1</sup> Manuscript: Edinburgh, Royal College of Physicians, MS of *Cursor Mundi*, entry 1. Hand A. Date: C14a

### Theoretical point of departure:

- Much recent interest in the encoding of speaker-/hearer-related meaning at the clausal periphery, e.g.

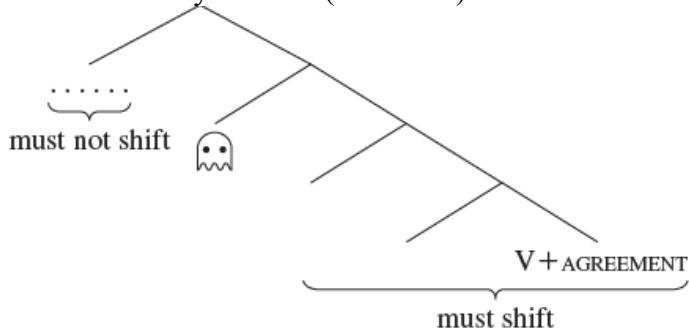
(i) **neo-performative approaches**, building on Ross (1970), like that of Martina Wiltschko and the eh-lab (<https://syntaxofspeechacts.linguistics.ubc.ca>)



- both speaker and hearer are represented at the left-most edge of the clausal periphery (cf. also much work during the last nearly 2 decades by i.a. Peggy Speas, Carol Tenny, Halldór Sigurðsson, Alessandro Giorgi, and Virginia Hill)

(ii) **“perspectival monster”-oriented work** on indexical shift in embedded clauses (cf. i.a. Schlenker 1999, 2003, Anand & Nevins 2004, Anand 2006, Sudo 2012, Podobryaev 2014, Shklovsky & Sudo 2014, Deal 2017):

(6) From Shklovsky & Sudo (2014:387):



- Additionally, the very recent idea that the “reusability” requirement on lexical items is a key third-factor determining syntactic structure (Ramchand 2018)

(7) a. ‘the lexical item is the codification of a certain implicit perceptual and cognitive generalization, reusable as a bridge between internal representations and external events’ (Ramchand 2018:23)<sup>2</sup>  
b. ‘It is at the Evt [Event - TB] level that we introduce the generalized equivalent of a quotation operator ...’ (Ramchand 2018:28)

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<sup>2</sup> This page numbers used here refer to the proof pdf, not the published version, which is due out next month.

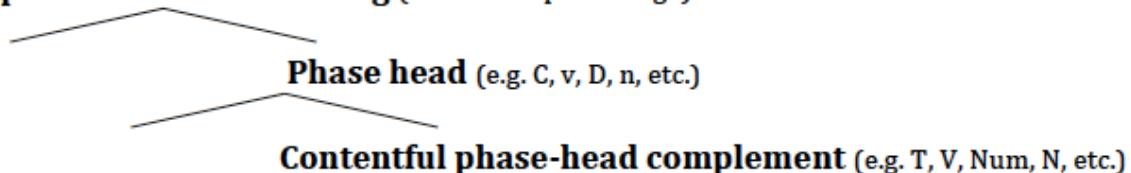
- Ramchand's objective = a quotational semantics; the focus of her book = the vP
- My proposed contribution to this discussion: A formal hypothesis about the **structural locus of speaker-hearer perspective** (8) that also highlights one of the respects in which human language can be said to exhibit **fractal structure**,<sup>3</sup> and that may contribute to our understanding of how acquirers flesh out the structure of their early grammar.

(8) **The Peripheral Speaker-Hearer Hypothesis (PSHH)**

Speaker-hearer perspective is formally encoded at the edges of phasal domains, where phasal domains are independently signalled, realizationally (PF) and interpretively (LF) privileged structural domains, the precise identity of which differs from language to language, and the “size” of which may also differ from derivation to derivation language-internally (i.e. the ‘dynamic’ perspective on phases).

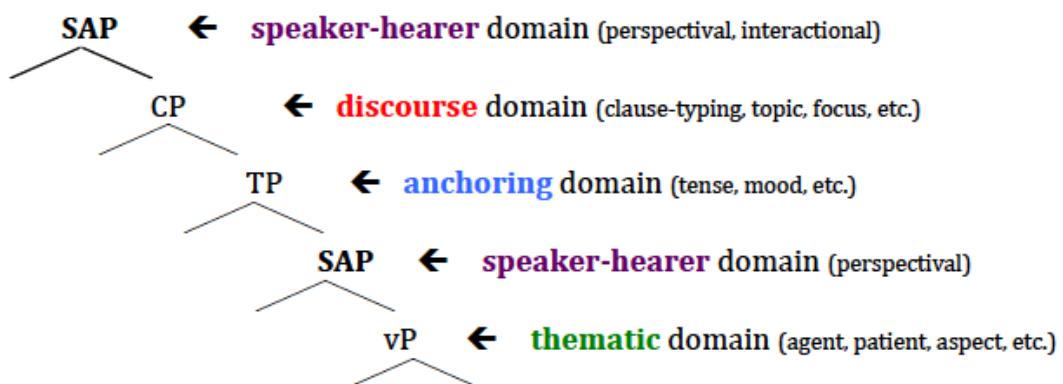
- Simplifying grossly, this entails the basic (recursively employed) design template in (9).<sup>4</sup>

(9) **Speaker-Hearer encoding (outermost phase edge)**



- For the clause, then, one might expect something like the following (once again, grossly simplified):

(10)



- NB: We probably need to be more careful about how we characterise clausal CP, and the “discourse” domain in non-clausal domains more generally:

<sup>3</sup> **Fractal:** a curve or geometrical figure, each part of which has the same statistical character as the whole. They are useful in modelling structures (such as snowflakes) in which **similar patterns recur at progressively smaller scales** ... (from Wikipedia).

<sup>4</sup> The idea that phases may be constructed in importantly parallel ways is directly stated or strongly suggested in much generative work (cf. i.a. Butler 2004, Belletti 2004, Rackowski & N. Richards 2005, Gengel & McNay 2006, M. Richards 2007, Biberauer 2009, 2015a, Dyakonova 2009, Poletto 2012, Cognola 2013, Martin & Hinzen 2014, Alcázar & Saltarelli 2014, van Urk & Richards 2015, Sigurdsson 2017, Biberauer 2017c).

(11) ‘discourse’ = information structure (topics, foci, etc.) + more directly speaker-hearer-oriented structure (relating to degree of speaker commitment, affective considerations, calls on the addressee, etc.)

- 2 different types of ‘discourse’-related meaning, which we might, in some cases, expect to be encoded via quite different means within a given language (cf. Hollingsworth in progress on movement vs particles in Finnish)
- ‘expressives’ and many of the Use-Conditional Items (UCIs) discussed in Gutzmann (2015) clearly fall under the speaker-hearer meaning type

**Key proposal:** **Outermost phase edges** are domains **specifically reserved** for the **integration of elements marking speaker-/hearer-related perspective**. These elements thus serve as a **key acquisition cue** as to the location of phase edges, and are expected to constitute the “grammaticalisation target” for **pragmaticalisation-oriented processes**.

Talk structure:

- Section 2: (8) from a diachronic generative perspective
- Section 3: Top-down creation of speaker-/hearer-related elements I (initially syntactically inert elements)
- Section 4: Bottom-up creation of speaker-hearer-related elements
- Section 5: Top-down creation of speaker-hearer-related elements II (initially formally specified elements)
- Section 6: (interim) Conclusions

## 2. The Peripheral Speaker-Hearer Hypothesis: a diachronic generative perspective

- Speaker-hearer-oriented elements appear to be of two types:

(12) a. elements (often called *particles*) of unknown/no etymology, and  
 b. “recycled” elements that have (i) been grammaticalised to serve (inter)subjective/pragmatic purposes, i.e. pragmaticalised elements (cf. i.a. Traugott 1995, Diewald 2011, 2011, van der Wal 2015), or (ii) directly reused (e.g. as the input to reduplication)

(13) Nupe

a. Musa **gí** kinkere **ni:**  
 Musa eat scorpion NI:  
 ‘(I assure you) Musa DID eat the scorpion.’

b. Musa **gí** kinkere **à** **ni:**  
 Musa eat scorpion neg ni:  
 ‘(I assure you) Musa DID NOT eat the scorpion.’

c. Musa **gí** kinkere **gí**  
 Musa eat scorpion eat  
 ‘(Apparently) Musa DID eat the scorpion.’ (Kandybowicz 2013:53)

- *ni*: (which may be a Hausa borrowing; *nee/cee* being the clause-final emphasis marker in this neighbouring language; cf. Kandybowicz 2013: note 3) doesn’t derive from another lexical item; it is located at the edge of CP; and it signifies strong speaker commitment.

- verb-doubling harnesses an existing lexical item and the process of reduplication (a Copy-Spellout operation); it is said by Kandybowicz (2013) to target the ‘low TP-domain’ (cf. again Cardinaletti 2011 and Thoma 2016 on German modal particles); and it expresses weaker (hedged) speaker commitment.
- Why these sources?

3. **Etymologically opaque speaker-hearer elements, and the “mechanics” of (one type of) top-down integration**

- Following Roberts & Roussou (2003), grammaticalization is now typically analysed as involving **upwards reanalysis**:

(14) a. *have* (‘possess’) > perfect marker (V > T)  
 b. demonstrative > definite article (Adj > D)  
 c. *one* > indefinite article (Num > D)  
 d. *man* > indefinite pronoun (N > D) [all vastly simplified]

- An element that is initially merged in a lexical head or in a relatively lower position along the Extended Projection (EP; Grimshaw 1991 *et seq.*) comes to be associated with grammatical meaning higher up in the relevant EP, leading acquirers to postulate first movement to the higher position and ultimately “reanalysis” of the moving element as one first-merged in the higher position.
- BUT: what about elements which do not originate from within the Extended Projection of the structure they ultimately become part of?
  - Jespersen's Cycle might instantiate this case, if we assume a NegP that constitutes part of the clausal spine (though see i.a. Breitbarth 2014 for arguments against NegP analyses):

(15) minimizer [+N] > negative [+V] (N > Neg)

- And, more generally, cases where initially adjoined elements are grammaticalised such that they become projecting heads on the EP they were initially adjoined to (cf. the Head Preference Principle cases discussed in van Gelderen 2004).
  - we also need to accommodate **lateral grammaticalisation**
- A (potentially) more challenging case: elements that appear to grammaticalise **downwards**:

(16) a. *say* > complementiser (V > C) (Saito, here)  
 b. demonstrative > complementiser (Dem > C)  
 c. downward grammaticalisation of complementisers (Munaro 2016)<sup>5</sup>  
 d. the grammaticalisation of prohibitives (often V > C; cf. i.a. van der Auwera 2010 and below)

- And still more challenging: elements that plausibly lack formal features ([F]s) to begin with, that grammaticalise downwards, e.g. initially speaker-oriented/hearer-directed particles that become integrated with the clausal spine.

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<sup>5</sup> Thanks to Valentina Colasanti for drawing my attention to this work.

Two examples:

A. The emphatic tag resumptive that played a key role in the rise of Afrikaans' grammaticalised clause-final negative concord marker, *nie* (Roberge 2000; Biberauer 2009, 2015a):<sup>6</sup>

(17) Afrikaans:

Ons is nie<sub>1</sub> laat nie<sub>2</sub>.  
us is not late POL  
'We are not late.'

(18) Input construction from slave/child-directed Dutch:

a. Het kan niet waar zijn, **nee!**  
it can not true be no  
'It can't be true, no!'

b. Jij komt niet mee, **ne?**  
you come not with hey  
'You aren't coming, hey/right?'

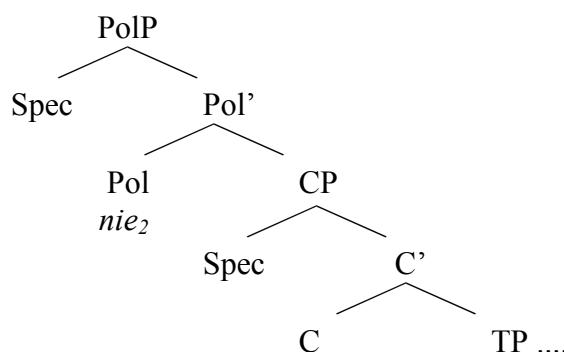
(examples from Roberge 2000)

(19) [[CP *Het kan* [TP *het kan* [VP *niet* [VP *het waar*] *zijn*]]] *nee*] [very simplified!]  
➤ *nee* is an adjunct at this point

(20) Downwards grammaticalisation process:

- a. *nee/ne* optionally adjoined to CP (tag resumptive)
- b. increasing use leads to bleaching of emphatic value
- c. integration as "agreeing" concord element, i.e. formal features (e.g. [Pol]) ascribed to *nie<sub>2</sub>* > clausal integration (or decrease in peripherality), i.e. downwards grammaticalisation, in this case, delivering a new clause-peripheral projection, PolP (Biberauer 2009, 2015a, 2017b)

(21)



- PolP is obligatory in modern-day Afrikaans clausal contexts (Afrikaans is at the obligatorily bipartite negation stage of Jespersen's Cycle; Biberauer 2009, 2015a).
- That the innovated PolP projection does indeed involve downwards grammaticalisation is clear if we consider the location of resumptives in modern-day Afrikaans (recall that *nie*, originated as a resumptive; (18)).

<sup>6</sup> Final Neg-elements in Khoi varieties (i.e. contact), and the way acquisition appears to progress generally - cf. the discussion around (28) below - would also likely have played a role in the rise of *nie<sub>2</sub>*, which is very likely to be the outcome of interacting factors.

(22) Jy moet nie<sub>1</sub> laat wees nie<sub>2</sub>, ne?  
 you must not late be POL hey  
 'You mustn't be late, hey?'

- From the perspective of (5), resumptives would occupy the ResponseP-domain. In modern-day Afrikaans, all ResP-elements **follow** *nie<sub>2</sub>*; thus *nie<sub>2</sub>* has grammaticalised downwards.
- Significantly, *nie<sub>2</sub>* seems to have remained acategorial (i.e. it doesn't seem to have become [+V]) as it also optionally combines with sub-clausal XPs, producing an emphatic interpretive effect (see Biberauer 2009 for more detailed discussion, and Biberauer & Richards 2006 on the relation between optionality and interpretation)

(23) a. [Nie<sub>1</sub> die geld nie<sub>2</sub>], maar die tyd pla hom. [DP]  
 not the money POL but the time worry him  
 'Not the money, but the time worries him.'

b. Moeder Natuur het vir [nie<sub>1</sub> minder nie<sub>2</sub>] as drie beskermende lae [AP]  
 Mother Nature have for no less neg than three protective layers  
 gesorg.  
 cared  
 'Mother Nature provided no less than three protective layers'.

- The optional use of *nie<sub>2</sub>* exemplified in (23) involves another outermost peripheral position whose overt realisation produces expressive meaning.

B. The expressive elements that constitute well-formed first-position XPs in exclamative V2 in certain varieties of English:

(24) MAN/DAMN/UGH is that annoying! (McCready 2008)

- All of these are also well-formed as adjuncts (a, b) and interjections (c) which do not trigger V2:

(25) a. MAN/DAMN/UGH (,) that's disgusting!  
 b. MAN/DAMN/UGH (,), that is disgusting!  
 c. MAN!/DAMN!/UGH! That's DISGUSTING!, etc.

- Speaker-hearer elements can show varying degrees of integration.
- The difference between (24) and (25): the more integrated uses are more speaker-centred, with (24) necessarily involving a degree commitment on the part of the speaker that is absent in (25) (see again McCready 2008)
- Crucially, the integration of expressives into the grammar of the relevant colloquial varieties thus reflects a move towards a pattern that is already clearly part of the grammar of modern English, [focus]-driven V2 (Biberauer 2010; see also Sailor 2017 on so-called *Fuck-inversion*, which exemplifies another case where [F]-less expressives are integrated into the grammar via a relevant "discourse" edge)

Thus:

1. Downwards grammaticalisation exists.
2. It frequently appears to involve speaker-/hearer-related elements, many of which initially lack formal features ([F]s).<sup>7,8</sup>
  - The significance of lacking [F]s:

(26) Lacking [F]s when you start off at the bottom of an Extended Projection is different to lacking [F]s when you start at the top.

- Consider “classic” French-style Jespersen’s Cycle:  
*pas* lacks [Neg] or similar to begin with; but it does have [N], [SG], etc.
- It bears some [F]s, and can therefore be selected from an Lexical Array (LA) for Merge (assuming Merge to be [F]-sensitive; see Biberauer 2017a for a motivation as to why this might be expected to be the case)
- Consider Afrikaans-style Jespersen’s Cycle, by contrast:  
*ne/nee* initially lacks [F]s as it is a discourse particle, and fully optional (i.e. ungrammaticalised) **discourse particles** are **effectively [F]-less roots** (Biberauer 2017c)
  - A lexical root always shares an LA with a categoriser (Marantz 2007 and many others) > it readily becomes visible to the computational system.
  - Discourse-particle roots are never part of “word-level” LAs: they are acategorial (i.e. don’t change the category of the element they combine with); so they can’t become visible to the computational system via merger with a categoriser.
  - Being [F]-less, discourse-particle roots - and, by hypothesis, ungrammaticalised speaker-/hearer-elements more generally - will always be last out of their LA, i.e. last-Merged in the phasal domain (Biberauer 2017b,c)
  - They will therefore **necessarily be phase-peripheral** (cf. (8)).

(27) **The Last-out mechanism**

[F]-less elements must be last out of the Lexical Array/LA defining their phasal domain: being unselectable by other elements, and also not able to select themselves, such elements can only leave their LA when all the [F]-bearing elements – which **can** select/be selected – have been merged.

<sup>7</sup> Speaker-/Hearer-oriented [F]s could, of course, be ascribed to elements serving these functions as [F]s of this type have been postulated in generative work. The perspective I adopt, however, is one which rests on Jakobsen’s **contrastiveness** requirement for distinctive features (in phonology), namely that a formal feature (here: some [F]) is only postulated if it is required to capture a systematic contrast within the system being described (see Hall 2007 for detailed discussed in relation to Phonology, and Biberauer 2017a for discussion and references relating to syntax). Where a contrast of this kind is absent, the feature in question serves an exclusively semantic function, i.e. it is invisible to the computational system.

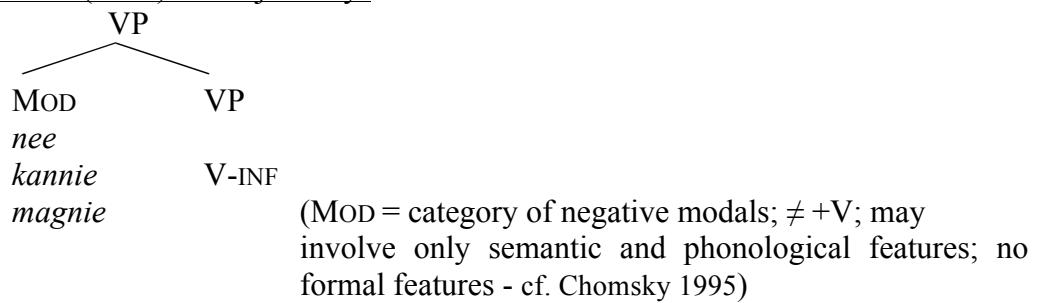
<sup>8</sup> Strikingly, Saito’s proposal (DiGS20 Day 1) as to the mechanics of *say>C* reanalysis requires the speech-verb source to lose its categorial specification, leaving an [F]-less root ( $\sqrt{\text{SPEECH}}$ ). On the approach advocated here, [F]-less roots have only two options in terms of when/how they can be selected for Merge: (i) along with a categoriser (to form a categorially specified lexical element), or (ii) as the last-out element at the edge of a phase. When  $\sqrt{\text{SPEECH}}$  becomes detached from  $v/[+V]$  - i.e. the Lexical Array that produces the head at the bottom of an Extended Projection - it becomes a last-out and, thus, on the present approach, automatically peripheral element. The downwards “rebracketing” that we see in *see>C* reanalysis thus follows as the selected CP-phase will be the closest to the original  $\sqrt{\text{SPEECH}}$ - $v$  element:

(i) [Main Clause ...  $v$ - $\sqrt{\text{SPEECH}}$  [Embedded Clause ...]] → [Main Clause ... V [Embedded Clause  $\sqrt{\text{SPEECH}}$  ...]]

- What is important here is that **the last-out phasal logic** allows us to understand **how (perspectival) elements may be grammaticalised “from outside”**: every phase in principle supplies **an edge position for such elements**.
- It also, crucially, allows us to understand **why perspectival elements would be peripheral**.
- As necessarily phase-peripheral, these elements could serve a valuable role in acquisition, particularly if phase-size varies crosslinguistically (cf. i.a. Harwood 2013, and the work of the Syntax of Idioms project): signalling phase edges.
  - We know that children are very sensitive to “edge” properties (e.g. prosodic marking, the distribution of function words, etc. - Endress, Nespor & Mehler 2009)
- Significantly, there are various proposals in the acquisition literature suggesting that structural elaboration by child acquirers may progress via an initial ([F]-free) Adjunction stage (cf. i.a. much work by Tom Roeper, Hoekstra & Jordens 1996, and Roy, Copley & McCune 2016 on Merge vs Juxtaposition)
- e.g. Hoekstra & Jordens (1996) specifically propose that negative elements in Dutch start off as formally inert adjuncts (28a)

Hoekstra & Jordens (1996): Jasmijn study<sup>9</sup>

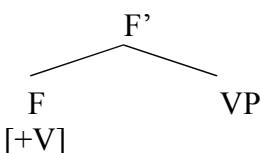
(28) a.



Syntactic structure of the modal system (Jasmijn at 1;10)

- doubly stressed adjunction pattern: *kannie zitten* (cf. the origin of Afrikaans *nie<sub>2</sub>*; (19))
- *kan*, *mag*, etc. never used without *nie*; complementary distribution with *nee* (=anaphoric negator)

b.



Syntactic structure of the modal system (Jasmijn at 1;11)

- integrative stress pattern: *kannie zitten*
- *kan*, *mag*, etc. start to appear independently of *nie*. Modals recognised as [+V], i.e. the [F] initially ascribed to lexical verbs is extended to the class of modals - recognition of an Extended Projection (Grimshaw 1991) - and negation markers separated out from this class.

*NB*: the idea that child integration of linguistic elements into the grammar during the process of L1 acquisition follows the same **adjunction-first route** as diachronic reanalysis of novel elements into the functional structure (compare (19) and (28)).

<sup>9</sup> Thanks to Gertjan Postma for having drawn my attention to this work.

#### 4. Upwards “recycling”: bottom-up creation of novel speaker-hearer elements

- Upwards grammaticalization can also produce intersubjectively oriented phase-edge elements.

Three examples:

A. South African English (SAE) *must* and Afrikaans *moet*:

(29) a. You **must** remember to buy a ticket (hey)!  
b. You **mustn't** lose your passport (ne)!

(30) a. You **must** sleep well!  
b. You **must** have a good holiday!  
c. You **must** relax!

(31) a. You **must just** press that button. (= ‘All you need to do is...’)  
b. Zim **must just** adopt rand.  
[<https://www.dailynews.co.zw/articles/2017/02/26/zim-must-just-adopt-rand>]

**THUS:** *must*-overextension (with use of modal-particle *just*)

- In SAE, *must* is the most commonly used obligation modal (in preference to *have to* and *should*, the latter of which dominates in British and US English; Collins 2005; 2009).
- Unlike other varieties of English, its frequency didn't decline in the 20<sup>th</sup> century (Rossouw & van Rooy 2012, Wasserman 2014, Wasserman & van Rooy 2014).
- must* doesn't entail strong obligation, nor is it typically perceived as face-threatening, as is the case in other varieties of English (Wasserman 2014); it is used practically interchangeably with *should*, and typically involves a positively oriented intersubjective “colouring” (‘I think you should just ...’).

➤ Why? Contact with Afrikaans, and the way *moet* (‘must’) functions in this system.

(32) Afrikaans:

a. Maak die deur oop!  
make the door open  
‘Open the door!’

b. **Moenie** die deur oopmaak nie!  
must.not the door open.make POL  
‘Don’t open the door!’

(33) German:

a. Mach die Tür auf!  
make the door open  
‘Open the door!’

b. Mach die Tür **nicht** auf!  
make the door not open  
‘Don’t open the door!’

- The Afrikaans negative imperative is pretty exotic in the West Germanic context! (Biberauer 2018a; see Biberauer 2015b, 2017a, 2018b, and also Section 3 below on the apparent significance of (negative) imperatives in the acquisition context).
- Ponelis (1993:459-460) registers the first written use of *moenie* (*moe nie*) to the early 19<sup>th</sup> century (1832).
- Potential source:
  - a calque on Malay *jangan* (an initial negative imperative marker) and Asian Creole Portuguese *na/nu misti* ('not must'), once again in the mouths of non-native speakers (den Besten 1986, Ponelis 1993)
  - potentially interacting with the fact that the Bantu languages spoken in South Africa also employ prohibitive-type negative imperatives

(34) Zulu:

**Musa** uku-ngen- a!  
 PROH.AUX INF- come-FV  
 'Don't come!.'

[Zulu]

- potentially interacting with the way in which the (negative) modal system is acquired (cf. again (28) above)
- Of central interest here:
  - *moenie* looks like it may be another initially peripherally introduced element (cf. Section 3 above) - clearly hearer-oriented *Jy moet nie* ('You must not ...'), where *moet* necessarily scopes over *nie* (unlike lower-merged modals). Thus *moenie* is structurally high.
  - Negative imperatives in modern-day Afrikaans require some form of *moenie*; where the imperative is not intended to be face-threatening, modal particles and other softening/politeness-related elements can produce split *moet+nie*:<sup>10</sup>

(35) a. **Moet tog nie** so kerm nie!

must MP not so moan POL  
 'Just please don't moan like that!'

b. **Moet asseblief nie** julle paspoorte vergeet nie!  
 must please not your.PL passports forget POL  
 'Please don't forget your passports!'

- which has resulted in a high occurrence of *moet* in requests:

(36) Ons vra dat jy dit asseblief tog **moet** doen.

us ask that you it please MP must do

Lit: 'We ask that you please just do it.', meaning 'We would be very grateful if you could please do this.'

(Wasserman 2016:34)

<sup>10</sup> The fact that a *moenie*-(based) form has become established as the obligatory form for negative imperatives appears to have produced a cascade of structural consequences for Afrikaans, including reinforcement of both (V-in-C) V2 and OV ordering (Biberauer 2015a), reconfiguration of the scrambling system (Biberauer 2018a,b), reorganisation of the negative indefinite system (use of *geen*; cf. again Biberauer 2018a,b), and the rise of numerous speaker-/hearer-oriented light verbs (Biberauer 2017e).

- Because hearer-oriented particles as in (35) force splitting of negative imperative *moenie*, unstressed - as opposed to stressed - *moet* in Afrikaans has arguably pragmatised into a higher modal, possibly one in the second-phase.
- *tog* and *asseblief* mark the edge of the lower phasal domain here; both are [F]-less, and thus, by hypothesis [(8)], must be merged at the edge of vP.<sup>11</sup>
- Cinque's Mod<sub>Oblig</sub> is plausibly at the edge of vP, while Afrikaans non-emphatic *moet* may be in Mood<sub>Necessity</sub> at the CP-edge, or Mod<sub>Evaluative</sub> within GroundP.<sup>12</sup>  
i.e. **both Afrikaans (unstressed) *moet* and SAE *must* have grammaticalised upwards, taking on speaker-hearer-oriented/politeness-related meanings.**

[The salience of the Afrikaans negative imperative seems to be rather clearly signalled by what we see in colloquial varieties of German that are in contact with Afrikaans (Biberauer, Bockmühl & Shah 2017)

- Namibian German (=Namdeutsch) negative imperatives: there are a range of options, including:
  - (i) a. Mach das **nich!**  
make that not = 'Don't do that!'
  - b. **Nich** das anfassen!  
not that touch = 'Don't touch that!'

AND

- (ii) a. **Musst nicht** spät sein!  
must not late be = 'Don't be late!'
- b. **Net nicht** spät sein!  
just not late be = 'Just don't be late!'  
(*net* = Afrikaans 'just')

- Of these, *muss(t) nich* appears to be the most commonly in spoken Namdeutsch.

Consider also the following data (collected by Juliane Bockmühl)

[*italic* = Afrikaans borrowing; *italic underlined* English borrowing; underlined mixed Afrikaans-English borrowing]

- (ii) a. **Musst nicht** den Laaitie zu nah an den Braai lassen!  
must not the young.boy to close to the BBQ let.INF  
'Don't let the child get to close to the braai/fire!'

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<sup>11</sup> As noted in section 3, others have analysed these elements as low TP elements. Taking into account various considerations, including the fact that the West Germanic vP/first phase seems larger than its English counterpart (see again Harwood 2013, and the Idiom Project work), these analyses and that being proposed here seem entirely compatible.

A nice consequence of the proposal that modal particles are [F]-less is that we can understand why these elements typically resist V2-fronting:

- a. Jy kerm **tog/ mos** oor alles!  
you moan MP MP about everything  
'You really complain about everything!'

- b. \***Mos/tog** kerm jy oor alles! (on the relevant, non-'indeed' reading of *tog*)

<sup>12</sup> All three of the highest Mod-heads in Cinque's (1999) hierarchy would appear to be located within the GroundP in (5), i.e. above CP. This contrasts with earlier proposals (e.g. Speas & Tenny 2003, Speas 2004), but seems correct if we consider what has since been learned about main vs embedded-clause syntax (see i.a. Aelbrecht, Nye & Haegeman 2012, and also the "perspectival" literature mentioned in section 1), on the one hand, and the difference between information-structural and speaker-hearer-oriented meaning, on the other (see again Hollingsworth in progress).

- b. **Musst *net* nicht *dronk*** nach Hause fahren!  
must just not drunk to home drive.INF  
'Just don't drive home drunk!'
- c. **Musst nicht die *paaiplaain* *raak* *kappen*!**  
must not the pipeline touch chop.INF  
'Don't accidentally chop into the pipeline (with your pick)!''
- d. **Musst nicht den Stift so *tjunen*,** der hatte einen *roffen* Tag!  
must not the boy so tease.INF he had a rough day  
'Don't tease the boy like that; he's had a rough day!']

## B. YES and NO in SAE

- We know there is more to the syntax of *yes* and *no* than meets the eye (Holmberg 2016).

South African English

(37) A: *How are you?* B: **No, I'm fine.**

(38) A: *Are you going to be able to make it to the party?* B: **No, I'll be there for sure!**

- Biberauer, van Heukelum & Duke (2017): *no* here is adjoined to ResP; understood *don't worry!*

- i.e. (37) *No, (don't worry!), I'm fine.*  
(38) *No, (don't worry!), I'll be there for sure!*

Contrast:

(39) A: *Is Zuma going to survive this?*  
B: *Yes, (unfortunately) he's going nowhere!*  
B: **#No, (don't worry!) he's going nowhere!**

- The *no* in (37/38) is **hearer-oriented** i.e. it appears to be a higher *no* than the standard English anaphoric negator, which adjoins to CP, within the GroundP zone (speaker commits to negation). And this *no* is employed a great deal in SAE!
- Evidence that we shouldn't just analyse (37/38)-type structures as involving "pragmatic enrichment" of some kind over the "basic" anaphoric negation structure:

(40) a. *Ja no, that's definitely a problem!*  
b. *\*Yes no, that's definitely a problem!*

- *Ja* is the Afrikaans YES-form, i.e. it is a borrowing or the kind of element that we might (initially) expect to be integrated into the structure - in [F]-less form - at the phase-edge (cf. section 3 above).
- *Ja* is used alongside *yes* in SAE, but there are contexts, like that in (40), where *yes* and *ja* are clearly not interchangeable.
- *Yes* is usually adjoined within GroundP (i.e. to CP), paralleling standard English *no*; thus it is ruled out in (40) as there is no lower attachment site for the *no* in (40).
- In structures like (40), *ja* is associated with something like an understood, hearer-directed *I agree with you*, i.e. it seems to be a counterpart to SAE *no* in (37/38) (*no, don't (you) worry*).

- As such, we'd expect it to be adjoined in a higher position than standard *yes*, i.e. to something like ResP in (5).
- Crucially, the *no* in (40) expresses the speaker's agreement with what went before, i.e. it is plausibly located in/adjoined to GroundP.
- (40) thus illustrates Holmberg (2016)'s so-called 'agree/disagree' or truth-based YES/NO answering system: *No, I agree: you are right*.
- Standard English, by contrast, is usually regarded as a 'positive/negative' or polarity-based system: A: *Isn't that a problem?* B: ***No, that is not a problem***.
- The truth- vs polarity-based systems can't be viewed as language-/system-defining; instead, we seem to need to allow for the possibility of interaction-(politeness, etc.)-driven corners of the 'agree/disagree' system in languages that might employ a 'positive/negation' system as the default.
  - This is also clear if we consider the existence of **reversatives** like German *doch*, French *si*, and Norwegian *jo*, all of which explicitly respond to and reverse the polarity of an assertion by the previous speaker (=now the hearer).<sup>13</sup> All of these forms are also distinct from the unmarked *yes*-form: *ja*, *oui* and *ja*, respectively.
- Another non-neutral, interaction-oriented use, and so, seemingly, pragmatised use of *yes* in SAE: *yes* can be used as a (familiar) out-of-the-blue greeting, as in (41):

(41) A: *Yes, how are you?* (A and B know each other)  
 B: *No, I'm fine!* (see (37))

- This is likely to be a contact effect as *yes*-forms in languages like Zulu also serve as a greeting.
- The distinction between positively hearer-oriented *ja* (and (41)-type *yes*) and hearer-neutral, proposition-oriented standard *yes* parallels that discussed by Roeper (2009:45) between *hi* (familiar hearer-oriented) and *hello* (neutral) in at least some varieties of English. SAE is one, meaning that there is a **class** of familiar hearer-oriented vs neutral interactive elements in this variety.
- Thus: SAE and Afrikaans anaphoric negation and affirmation elements have a range of "pragmatised" speaker-hearer uses that are not found in all varieties of English
- The issue here is not a change in the meaning or conventional interpretations of *yes*, *no*, *ja* and *nee*, but, instead, expansion of their left-peripheral functions (=Merge options).

### C. Expressive/evaluative morphology

- This often shows us very clearly that pragmatisation can involve reanalysis - both upward (4d) and lateral-plus-upward (43-44) - and that peripheral domains are speaker-/hearer-oriented (cf. i.a. Zwicky & Pullum 1987, Bauer 1997, and more recent work by Norbert Corver)
  - Recall (4d) above:

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<sup>13</sup> Thanks to Tarald Taraldsen and Lilian Texeira de Sousa for highlighting the relevance of these elements.

(4d) ‘n mooi-e **(ou)**<sup>14</sup> meisie-tjie **-tjie** (attested)  
 a pretty-INFL old girl- DIM-DIM  
 ‘a pretty (little) girl (strongly affective)’  
 ➤ “recycling” of the diminutive, with the outermost form conveying expressive meaning

- Ettinger (1974):
  - a proposed hierarchy of base types for diminutivisation (and augmentivisation)

(42) Noun > Adjective/Verb > Adverb/Numeral/Pronoun/Interjection>Determiner

- The further down the hierarchy a language progresses, the less the actual change in meaning and the greater the importance of **subjective diminutive force**.  
 i.e. the more diminutives can be applied in “extended” uses, where smallness-of-size can’t be a primary consideration, the more we will see speaker-/hearer-oriented meanings.
- Diminutivisation options in Afrikaans:

(43) a. *meisie* > *meisietjie* - girl.DIM: ‘little girl’ (N)  
 b. *loop* > *lopie* - run. DIM: ‘a run in cricket’ (V)  
 c. *mooi* > *mooitjies* - nice.DIM.PL: ‘actually (narrative, mirative quality)’

*Hulle loop toe mooitjies na die skoolhoof!* (Adj)  
 they walk then nice.DIM.PL to the head of the school  
 ‘They then ACTUALLY went and saw the school head (can you believe it?!?)’

d. *drietjies* > three. DIM.PL: ‘three units (friendly informal register, i.a. common in requests)

Gee my maar *drietjies!* (Numeral)  
 give me but.MP three.DIM.PL  
 ‘If you could let me have three (of those), please!'

e. *onderonsie* > *onder* + *ons* + *ie* - under us DIM: ‘a dispute’ (lit: ‘between us’) (Pronoun)

f. *Jissie* - Jes(us).DIM - ‘Heavens! Yikes!', etc. (Interjection)

g. *ditjies* en *datjies* (Determiner)  
 this.DIM.PL and that.DIM.PL  
 ‘bits and pieces (which the speaker views as trivial or non-crucial in some sense)’

- Diminutivisation is pervasive in Afrikaans, and many of its uses are not centrally concerned with literal ‘smallness’.
- This is something children pick up on:

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<sup>14</sup> This is an affective use of *ou* ('old'), which appears to be located at the edge of the lower phase boundary in the adjectival extended projection - cf. *That's clever old black kitten*. See also (46).

(44) Parent (to 4 year-old on the morning of a ‘Show-and-Tell’ session at school): So what are you going to tell your class about *Hasie* (= toy rabbit; *Hasie* = Afrikaans ‘little rabbit’)

Child: Not sure.

Parent: Why don't you tell them his name, and explain that his name is Afrikaans, and then you can explain what it means?

Child: Okay.

[that afternoon]

Parent: Did you tell your class about *Hasie* and what his name means?

Child: Yes, I said his name is *Hasie*, and *Hasie* is Afrikaans, and it means 'rabbit'.

Parent: That sounds great! But *Hasie* actually means 'little rabbit'.

Child (firmly): No, it means 'rabbit'!

Parent: No, *rabbit* is *haas*. But this is *hasIE*; so it's like you are *Daniel*, but we call you *Danieltjie* because you are a little boy.

Child: *Danieltjie* means you love me!

- affective meaning of the diminutive seemingly acquired before the literal diminutive meaning
  - Consider also Dressler & Karpf (1995:111) on Viennese German-acquiring children who produce forms like:

(45) a. *wieso-erl*    b. *wann-erl*    c. *was- erl*    d. *warum-p-erl*    *denn*  
 why- DIM    when- DIM    what- DIM    why - DIM    then.MP  
 (cf. (4a) above)

- Presumably, adults were the source of the copious non-literal diminutivised forms, suggesting that (**native-speaker?**) adults are very keen to “recycle” inflection for pragmatic purposes.
- Another Afrikaans case that suggests this: exaptive use of originally (in Dutch) purely grammatically (gender) conditioned attributive *-e* marking:

(46) a. 'n swaar tas / las  
a heavy bag burden  
'a heavy bag/load' (literal)

c. Dis 'n sware ou tas!  
this.is a heavy-E old bag  
'This is really a jolly heavy bag!' (affective)

## 5 Downwards recycling again: the case of Afrikaans Differential Object Marking

3. **Downwards Recency again: the case of Afrikaans Differential Object Marking**

- Uniquely in Germanic, colloquial Afrikaans has developed P-mediated Differential Object-Marking/DOM (Biberauer 2017d, 2018b).
- The DOM marker is *vir*, the P that has taken over from *aan* as the default indirect object marker in Afrikaans (48).

(47) a. Ek sien/sê/ hoor **vir jou/ \*dit.**  
 I see say hear for you it  
 'I see you.'

b. Ek groet **vir Piet/Marie/die bure.**  
 I greet for Piet Marie the neighbours  
 'I greet Piet/Marie/the neighbours.'

c. Hy was **vir die hond.**  
 he wash for the dog  
 'He washes the dog.'

d. Ons ondersteun **vir die studente/\*studente.**  
 us support for the students students  
 'We support students.'

(48) Hulle gee dit **vir** (aan) my.  
 they give it for to me  
 'They give it to me.'

- Raidt (1976) notes that *voor* in 17<sup>th</sup> and 18<sup>th</sup> century Dutch varieties often took the place of other Ps.<sup>15</sup>
  - e.g. *voor* in place of *als*:

(49) gjij schimpt mij **voor** een schelm uijt  
 you shout me for a crook out  
 'You berate me like/as (if I am) a crook' (CJ 2981, from 1751; Raidt 1976: 77)

- And *vir* (<*voor*) is commented on by various writers who described this structure as one that is particularly prolific in Cape Dutch, particularly in the mouths of the slave, mixed-race and more general non-European population, i.e. among those speaking L2 or contact varieties (the same was initially true of Afrikaans *nie*<sub>2</sub>; cf. Roberge 2000). Even in the Cape Dutch of those of European extraction *vir* rather consistently occurs as *vra vir, skryf vir, stuur vir*.
- The earliest examples = *vir* + indirect object:

(50) ... so geeft het **voor** mij  
 so give it for me  
 '... so give it to me' (CJ 408, from 1699; Raidt 1976:79)

- bias towards human objects
- The earliest example of *voor* + direct object - which is a pattern **not** found in Dutch - can already be found in Jan van Riebeeck's *Dagreghister*.<sup>16</sup>

(51) ... dat hij selffs **voor** de Saldanhars sal gesoubat ende haer vruntschap sal  
 that he even for the Saldanhas shall pleaded and their friendship shall

<sup>15</sup> Dutch became a language routinely spoken in South Africa in the latter half of the 17<sup>th</sup> century.

<sup>16</sup> Jan van Riebeeck arrived in the Cape to establish a Dutch colony there in 1652.

gesocht hebben  
sought have

‘... that he will even have pleaded with/begged the Saldanhas and sought their friendship’  
(*Dagreghister II*, p169; Raidt 1976:83)

- In the 18<sup>th</sup> century, only three Cape-born writers use it, but by the early 19<sup>th</sup> century, writers were using the form extensively - e.g. with verbs like *sien* ('see'), *ken* ('know'), *haal* ('fetch'), *help* ('help'), *klop* ('beat'), *verneuk* ('cheat/trick'), *uitskel* ('scold'), *laat roep* ('let call', i.e. 'summon'), *laat staan* ('let stand', i.e. 'leave/let alone'), *laat los* ('let loose', i.e. 'let go') (Raidt 1976:84).
- By the time the first Afrikaans Bible translation was complete (1923), *vir* was given great prominence as a distinctively Afrikaans characteristic (this was the period during which Afrikaans was being standardised and during which non-Dutch properties were thus valued particularly by those fighting for the recognition of Afrikaans) ... to the point where translators of subsequent editions remarked on the “unacceptably excessive” rate of *vir*-usage! (comparison between later translations and the 1923 version make the *vir*-“exuberance” very clear!)
  - *Vir*, then, very clearly originated in colloquial varieties that were being used in a complex sociolinguistic context.
- But: what has DOM got to do with speaker-/hearer-related elements? Present-Day Afrikaans DOM exhibits the usual animacy and specificity constraints, although ...

(52) Sy skop **vir** die bal (dat hy trek).  
she kick for the ball that he travel  
'She kicks the ball so that it covers a huge distance.'

- a (from the speaker's perspective) highly affected inanimate, i.e. *vir* appears to behave like a DP-edge GroundP-element.
- And *vir* is also very common with the masculine pronoun when this is used in relation to inanimates:

(52) A: Sien jy (**vir**) die bopunt van die toering?  
see you for the top-point of the tower  
'Do you see the top of the tower?'

B: Ek sien **vir** hom, ja!  
I see for him yes  
'I see it, yes!'

BUT: Isn't *vir* just a P, i.e. an additional layer of structure **outside** of the nominal?

- *vir* also optionally occurs in ditransitives that wouldn't usually/readily show dative alternations (see Bruening 2010, 2018):

(53) a. Spaar (**vir**) my jou gesanik!  
spare for me your moaning  
'Spare me your moaning!'

- b. Spaar jou gesanik vir my!  
spare your moaning for me  
≠ ‘Spare me your moaning!’  
= ‘Reserve your moaning for me!’ (the opposite meaning!)

- Further, it readily surfaces in idioms that can only be double object constructions (Bruening 2018:124):

(54) a. Gee (**vir**) hom hel!  
give for him hell  
‘Give him hell!’

b. \*Gee hel **vir** hom! (= \*Give hell to him!)

- These *vir*s appear to be further reflexes of **nominal GroundP-marking**, rather than “actual” Ps signalling the presence of a PP (cf. also Pretorius 2017 for further discussion of the complex categorial behaviour of Afrikaans P)
- In modern spoken Afrikaans, *vir*-marked nominals also surface in various **non-core** dative structures (cf. i.a. Pylkkänen 2008, Horn 2008, Bosse, Bruening & Yamada 2009, Bosse & Bruening 2011, Boneh & Nash 2011, Fernández & Etxepare 2013, Michelioudakis 2016 for recent discussion of *non-core datives*):

(55) a. Sy rook **vir haar** 'n sigaretjie.  
she smoke for her a cigarette.DIM  
‘She smokes herself a cigarette.’

b. Hy kry **vir my** te veel aandag.  
he get for me too much attention  
‘He gets too much attention, in my opinion.’

- In all cases, *vir* doesn’t introduce a new argument as it would in a “core dative” use.
- In all cases, the *vir*-marked nominal doesn’t affect the truth conditions of the structure; it adds what we can very broadly think of as “expressive” or use-conditional meaning (cf. i.a. Potts 2007 and Gutzmann 2015).
- It looks as if this *vir*-usage may also have an early origin in the mouths of non-European speakers (Raitd 1976:80):

(56) Paravicini di Capelli in his (1803) *Reize in de Binnen-Landen van Zuid-Afrika* writes in relation to a Gonokwa-Hottentot (=Khoi speaker):

(Context: He asked for brandy, declaring that nothing gave him greater pleasure.)  
... hy zeide in gebroken Hollands, tis alte lekker **voor** my  
he said in broken Dutch It’s all too enjoyable for me  
‘He said in broken Dutch: “It’s just so enjoyable for me!”

- **Non-core datives** have, in recent years, been convincingly shown to have a different structure to core datives (see again the more recent representatives among the work cited above).

- Common thread: these datives are introduced higher in the structure than core thematic datives.
- They instantiate a perspectival applicative of the “high” kind also identified for other languages (cf. i.a. the above references, and also Tsai 2010 on Mandarin “super-high” “affective” *gei*-phrases, and Marten & Mous 2017 on “expectation”-related applicatives in Bantu) > a GroundP-associated vP-edge element.
- Expectation: If non-core datives are higher than core datives, they should co-occur with “classic” thematic datives. This seems right, even though the examples are not easy to construct:

(57) a. Ek het **vir my** net gou **vir Marie** ‘n geskenkie loop koop.  
 I have for me just quick for Marie a present.DIM walk buy  
 ‘I just quickly went and got me a present for Marie.’

b. Jy het dan **vir jou** ‘n moerse tip **vir die waiter** gegee! (attested)  
 you have then for you a helluva tip for the waiter given  
 ‘Yikes, you really gave that waiter a MASSIVE tip!’

- Affective non-core datives can also co-occur with DOM-marked DOs (which occupy “normal” DP-direct object positions):

(58) Ek het **(vir) my** [DOM **vir Andries**] vererg.  
 I have for me for Andries annoy  
 ‘I got myself annoyed at Andries.’

- As (8) predicts, then, non-core datives are structurally higher than their core counterparts.

**BUT:** Are they plausibly located at the edge of the thematic domain, where (8) would predict them to be?

- If earlier speculation about the locus of modal particles as being vP phase-edge markers is on the right track, we might expect to see MPs and non-core datives exhibiting true optionality, i.e. interpretively vacuous ordering variation in relation to each other (Biberauer & Richards 2006).

(59) a. Ek het **mos (vir) my** [DOM **vir Andries**] vererg.  
 I have MP for me for Andries annoy  
 ‘I after all got myself annoyed at Andries.’

b. Ek het **(vir) my mos** [DOM **vir Andries**] vererg.  
 I have for me MP for Andries annoy  
 ‘I after all got myself annoyed at Andries.’

- The non-core dative and the MP are interchangeable!
- This is what we would expect if neither is selected for and if neither itself selects (cf. the Last Out Mechanism in (26) again): Merge can select either first when these are the only elements remaining in the LA that constructs vP.

Thus: In the Afrikaans dative domain, there appear to be two distinct indications that pursuing a peripheral speaker-hearer hypothesis of the kind suggested in (8) might be worthwhile: DOM and non-core datives.

- Both structures are innovations in modern-day Afrikaans that very clearly originated in colloquial varieties spoken in a (complex) contact situation.
- Similar structures have also been innovated in other vernacular and contact varieties.

#### 4. Conclusion

- We know from other research that edges are important domains in human language (cf. i.a. Endress, Nespor & Mehler 2009, Martin & Hinzen 2014, and discussion and references in Biberauer 2017a,c).
- We also know from affective neuroscience research that the human brain detects and computes the emotional value of input prior to accessing and computing its cognitive value (e.g. semantic meaning; Bromberek-Dzyman 2014)
- Phase edges appear to constitute points of particular significance in language change, contact, and acquisition by providing **a “way in” for elements that have not been (fully) formally integrated into the projecting structure**.
- As hypothesised in (8), they appear to have a privileged connection with Speaker-/Hearer-oriented material - perspectival and intersubjective/interactional content, i.e. there seems to be a concrete sense in which Speakers and Hearers have peripheral significance in the context of natural-language phase syntax.
- If (8) is on the right track:
  - A. There is a new sense in which phasal domains have particular realizational (PF) and interpretive (LF) significance:
    - on the PF side, their **edges** facilitate crucial syntactic domain-size learning
    - on the LF side, their **edges** play a key role in allowing speakers (and hearers) to “look in”, thus contributing to the “reusability” of the finite lexical resources at a given speaker’s disposal and also facilitating insight into the ways in which so-called *use-conditional meaning* (see Gutzmann 2015 for book-length discussion and references) integrates with/overlays what is truth-conditionally expressed and also what may be achieved via “basic” information-structural manipulation (topic, focus, etc.).
  - B. It is relevant for generative syntacticians to distinguish between (i) “regular” information-structural edges (i.e. those associated with topics and foci of various kinds), and (ii) speaker-hearer edges, with the latter indeed seeming to arise not just at the clausal edge, but also at vP-, DP-, and a range of word-level edges.
  - C. We see both “regular” upwards (and, sometimes, in part lateral) grammaticalisation and, to date, less commonly discussed downwards integration of linguistic elements to create novel speaker-hearer items. These elements may subsequently lose their specific speaker-hearer-oriented “colouring”, and become even more grammaticalised, leading to deeper embedding within the phase (cf. Afrikaans clausal *nie<sub>2</sub>*).
  - D. Free variation (“true optionality”) scenarios may arise under certain tightly constrained circumstances where a novel speaker-hearer-oriented item has not been fully formally integrated.

And, last, but not least:

E. If (8) is on the right track, then, speaker-hearer elements and data that showcase these - notably (diachronic) data from vernacular varieties, including those influenced by contact - deserve the kind of central place in modern generative investigation - diachronic and otherwise - that they have mostly not received to date.

- There is a very real sense in which some of what was at one stage relegated to the “periphery” may be absolutely “core”.
- And a no less real sense in which carefully targeted diachronic work may offer a unique window on aspects of this core phenomenon that may be (partially) obscured if one does not take variation and change into account.

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