

# *The Darwin-Plato tension, grammatical primitives, and linguistic principles*

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## 1. Introduction

- One of the desiderata of modern syntactic theory is to arrive at a model of the grammar that is **descriptively adequate & analytically parsimonious**
- Plato's problem: Children come to possess linguistic knowledge that is vastly more complex than anything they can reasonably be expected to have learned based on linguistic input alone.
- Darwin's problem: The cognitive capacity for Language is uniquely human; the timeline of humanity suggests that language has developed relatively recently (in evolutionary terms).

→ Plato's problem has traditionally led to positing a rich Universal Grammar, while Darwin's problem favors a more streamlined conception of the Language Faculty.

→ One solution to the tension is to formulate a grammar with the smallest possible inventory of primitives & principles

- In this talk, I present some of my contributions to this agenda:

★ paring down the inventory of grammatical primitives

→ CASE STUDY I: **participles**

★ streamlining grammatical operations

→ CASE STUDY II: **locality across domains**

## 2. Case study I: Participles are not a lexical category

- ex. Learning the c-selection facts of their language, children have to consider  $n \times n$  (or  $n \times (n-1)$ ) combinations of categories; for 5 categories there are 20 combinations; for 9 there are 72.
- The same consideration holds for the categorization of novel words, word order rules, and any other category-dependent operation (e.g., movement/filler-gap dependencies).
- Traditional grammars usually identify 4-5 uncontroversial lexical categories (e.g., verb, noun, adjective, adposition), but then frequently double that inventory with a number of participles (active, passive, present, past); see Shagal 2019 for an overview.
- In my work (Bešlin in press, Bešlin submitted), I examined active and passive participles in a number of languages—Bosnian/Croatian/Serbian (BCS, with reference to other Slavic languages), English, German, Greek, Hebrew, and K'iche'.
- I concluded that **they are all adjectives which embed varying amounts of verbal structure**.

### 2.1. A primer on passive participles

- Generative syntax had converged on the idea that passive participles belong to two distinct lexical categories, adjectival and **verbal** (Wasow 1977, Levin & Rappaport 1986, Embick 2004, Sleeman 2011, a.m.o.)
- The category distinction is said to go hand in hand with a difference in meaning; verbal = eventive and adjectival = stative, cf. (1a-b)

- (1) a. The package was opened (by the teacher).  
 b. The package remained carefully opened (\*by the teacher).
- Verbal participles are not like ‘regular verbs’ (finite or non-finite), so, on the above story, they must be stored as a separate category in some sense

### 2.1.1. Diagnostics?

- I show that the diagnostics used for ‘verbhood’ in participles have nothing to do with category status, but rather with:

- (i) their eventivity,
- (ii) the amount of verbal structure embedded under the adjectival layer,
- (iii) independent word-order restrictions (which only hold in some lgs)

#### ★ ex. I: complements of *seem* and *remain*

- *seem* and its kin take adjectival but not verbal complements; the ungrammaticality of (2) was taken as evidence that the participle there was a verb
- (2) The suitcases seemed / remained packed (\*by Tiyana’s friends).
- However, observe (3); while *seem* and *remain* can take nominal complements, there is no eventive noun that could take the place of *a fool* in (3)
- (3) He seemed/remained a fool his whole life.
- The contrast in (4a-b) shows that *destruction* can appear as the complement of *remain* when it is resultative, but not when it is an eventive, argument-taking nominalization.
- (4) a. There remained much destruction throughout the city.  
 b. \*There remained much destruction of the city by those left behind.

- The issue in (4b) is clearly the eventive interpretation of the noun, not its categorial status.
- A more promising account of (2) brings together the observation that English agentive *by*-phrases force an eventive interpretation of the participle and the fact that *seem* cannot combine with event-denoting predicates

#### ★ ex. II: postmodification by adverbs

- Meltzer-Asscher (2010) shows that eventive participles pattern with verbs in allowing postmodification by adverbs, to the exclusion of stative participles (5)
- (5) a. The silver was polished carefully. (eventive participle)  
 b. He polishes the silver carefully. (finite verb)  
 c. \*The silver seemed polished carefully. (stative participle)
- However, there is an independently supported explanation for the contrast in (5) which does not appeal to a categorial contrast between eventive and stative participles.
  - Namely, the same result would obtain if the verb/participle moves over the adverb in (5a-b), but not in (5c).
  - Consider (6), where the adverb *wryly* intervenes between the verb *smile* and the PP *at me*.
- (6) I saw Pace smile wryly at me.
- Note first that *wryly* is modifying the event of smiling at me, which suggests *smile at me* needs to compose first, before *wryly* enters the structure.
  - Furthermore, the fact that the complement of *at* is pronominal makes this PP a bad candidate for extraposition.

- Therefore, the only way to derive the word-order in (6) is to assume that the verb moves above the adverb, for example to Voice, the projection that introduces the external argument (e.g., Harley 1995, Marantz 1997).

(7) [...VOICEP Voice smile [vP wryly [VP v smile [ROOTP smile [PP at me ]]]]]

I (and other people) independently argued that the English resultative passive participle (unlike the eventive participle) lacks the Voice layer.

This means that the verbal material cannot move leftward, and also immediately gives us an explanation for the contrast in (5), without recourse to the categorial status of the participles.

### 2.1.2. Positive evidence for adjectival status

- I show positive (language-specific) evidence that even eventive participles are (deverbal) adjectives, for example:

→ (i) They are derived using adjectival morphology & match the head noun in gender and number (and case, in the case of attributive participles)

(8) a. Njihova zarada je uzima-n-a od  
their earning COP.3SG take(IMPF)-ADJ-FEM.SG by  
strane države.  
side state

‘Their earnings were being taken by the state.’

b. Ova knjiga je tuž-n-a.  
this novel COP.3SG sad-ADJ-FEM.SG

‘This novel is sad.’

→ (ii) Definite (specific) form is disallowed in predicative position

(9) a. Materijal je farba-n /\*farba-n-i od...  
material COP.3SG paint-ADJ(INDF) paint-ADJ-DEF by  
‘The material was painted by...’

b. Naš kauč je ruža-n /\*ruž-n-i.  
our couch COP.3SG ugly-ADJ(INDF) ugly-ADJ-DEF  
‘Our couch is ugly.’

→ (iii) They undergo adjectival prefixal comparison, unlike verbs

(10) a. Ova aplikacij-a je naj-korišćen-ij-a od  
this app-FEM.SG COP.3SG SUP-use-CMPR-FEM.SG by  
strane moje ćerke.  
side my daughter

‘This app is (the) most used by my daughter.’

b. Moja ćerka najviše korist-i / \*naj-korist-i  
my daughter the\_most use-3.SG SUP-use-3.SG  
ovu aplikaciju.  
this app

‘My daughter uses this app (the) most.’

- Next steps will include extending the analysis to even more languages and to other, unusual categories; for example, a preliminary investigation of BCS *converbs* suggests that they are essentially deverbal adverbs.

**NB:** The end-goal of this project is not to claim that all elements that have been called ‘participles’ in the world’s languages are adjectives, or that all ‘converbs’ are adverbs, but rather that they are (syntactically) derived from elements that are independently attested and needed (e.g., deverbal nominals or even relative clauses).

### 3. Case study II: Locality in syntax and morphophonology

- **Q:** Can we formulate locality constraints such that the same principle(s) delimit domains in syntax and morphophonology?
  - Chomsky (2000, 2001) proposes that syntactic derivations are cyclic:
- A **phase** is a piece of structure whose derivation is encapsulated—it serves as a point at which an intermediate result of the derivation is *spelled out* and given an interpretation at both the PF and LF interfaces
- Phasehood formalizes locality domains in syntax in an attempt to derive successive-cyclic movement
- Since Chomsky 2000, 2001, research in the framework of Distributed Morphology (DM) has also discovered spell-out domains below the word level; they are hypothesized to be the same kind of entity as Chomskyan phases (e.g., Marantz 2001, 2007, Embick 2010, 2021)
- Using data from Bosnian/Croatian/Serbian (BCS), I'll show that:
    - (i) **BCS *aP* is a DM phase**—it blocks contextual allomorphy and mediates lexical stress via spell-out)
    - (ii) **BCS *aP* is not a Chomskyan phase**—it does not allow movement through its specifier, though it allows movement in general)
  - ★ Taking (i)-(ii) together, we are left with two options: either we conclude that DM phases and Chomskyan phases are distinct entities, or we re-think the phenomena we are trying to explain with Phase Theory and look for alternatives

### 4. Some background on phases

#### 4.1. Chomskyan phases

→ On the original story, locality domains are delimited via the Phase Impenetrability Condition (PIC); I use PIC2 here, which provides us with the best shot to reconcile phases in syntax and in DM

(11) **Phase Impenetrability Condition 2** (Chomsky 2001:14)

Given the structure [ZP Z . . . [HP  $\alpha$  [H' H YP ]]], where H and Z are phase heads, the domain of H is not accessible to operations at ZP; only H and its edge are accessible to such operations.

- A frequently used phasehood diagnostic is "reconstruction for binding" (see e.g., Lebeaux 1988, Fox 2000, Legate 2003, a.o.)
- For Chomsky, passive (and unaccusative) *v* are non-phasal; Legate 2003 argues, based on data like (12), that English passive *v* is a phase because reconstruction for binding purposes is allowed in its specifier
- Assuming the *wh*-phrase to stop over in spec, *vP* is the only way to account for the acceptability of (12a), since a binding condition is violated in both the *wh*'s base position and its surface position<sup>1</sup>
- (12b) is bad because there is a binding violation at every step of mvt

- (12) a. [At which of the parties  $he_i$  invited Mary  $k$  to ]<sub>1</sub> was every man <sub>$i$</sub>   
       ✓<sub>1</sub> introduced to her <sub>$k$</sub>  ✗<sub>1</sub>?
- b. \*[At which of the parties  $he_i$  invited Mary  $k$  to ]<sub>1</sub> was she <sub>$k$</sub>   
       ✗<sub>1</sub> introduced to every man <sub>$i$</sub>  ✗<sub>1</sub>?

<sup>1</sup>This assumes a cascade structure in which *at*-phrases are merged as the lowest argument in the VP; see Pesetsky 1995 (cf. *Every man was introduced to Mary at the first party he invited her to.*)

NB: This diagnostic does not test for what it claims to test: Non-phasal elements can serve as intermediate stopping points for (*A'*-)movement, see Bešlin 2023 and references therein; however, **failing this diagnostic is indicative of non-phasehood**, under specific circumstances I discuss in section 5.

## 4.2. DM phases

- Since Chomsky 2000, there has been interest in finding spell-out domains below the ‘word’ level (e.g., Marantz 2001, 2007, Embick 2010, 2021)

→ This body of research has identified a strict set of locality constraints on contextual allomorphy and allophony

- Specifically, lexical heads (*v*, *n*, *a*) are argued to be phase heads; the merger of a phase head triggers spell-out when the next phase head is merged (see in particular Embick 2010)
- Given late insertion, phasal material merged above a phase head should not be able to influence the form or meaning of the material merged below the phase head and vice versa

→ This is essentially the idea expressed by the PIC2, and I illustrate it with a deverbal noun in (13)

(13)  $[_{nP} n \text{-ing} \quad [_{VP} v \text{-iz(e)} \quad [_{VP} \sqrt{\text{catastroph-}} \dots ]]]$

- Lexical stress has also been argued to be mediated by spell-out (see Marvin 2002); we will make use of this diagnostic in section 4 as well

\*\*\* Q: Is the inventory of phase heads identical in the two domains?

→ A: No, BCS *aP* is a DM phase, but not a Chomskyan phase

## 5. DM phase head $\neq$ movement through specifier

### 5.1. BCS *aP* is not a Chomskyan phase

- The reconstruction-for-binding diagnostic applied to BCS *aP* shows that spec *aP* cannot serve as an intermediate position for *wh*-movement
- In (14), there is a binding violation in the base position, surface position *and* in the potential stopping point in spec, *vP* of *viden* ‘seen’
- The ungrammaticality of the string suggests that a stopping point is not available in spec, *aP* where there would be no binding violations

(14) \*[Na kojoj svojoj<sub>i</sub> žurci na kojoj je bila Marija<sub>k</sub>]<sub>1</sub> je  
 at which self.M party at which AUX was Mary AUX  
 ✗<sub>1</sub> ubijen svaki čovek<sub>i</sub> ✓<sub>1</sub> prisan sa njom<sub>k</sub> ✗<sub>1</sub>?  
 killed every man close with her  
 ‘At which of his parties Mary was at was every man who was close with her killed?’

- Sanity check I: (15) with no extraction and binding-sensitive elements in acceptable positions (confirming the hypothesized structure of (14))
- Sanity check II: (16) with extraction, but without the trouble-maker reflexive, the binding conditions are obeyed in the surface position

(15) Ubijen je svaki čovek<sub>i</sub> prisan sa Marijom<sub>k</sub> na svojoj<sub>i</sub>  
 killed was every man close with Mary at self.M  
 božićnoj žurci na kojoj je ona<sub>k</sub> bila.  
 Christmas party on which AUX she was  
 ‘Every man close with Mary was killed at his Christmas party that she was at.’

- (16) [Na kojoj žurci na kojoj je bila Marija<sub>k</sub>]<sub>1</sub> je  
 at which party at which AUX was Mary AUX  
 ✗<sub>1</sub> ubijen svaki čovek<sub>i</sub> ✓<sub>1</sub> prisan sa njom<sub>k</sub> ✗<sub>1</sub>?  
 killed every man close with her  
 ‘At which party Mary was at was every man close with her killed?’

- ★ Importantly, (long-distance) A'-movement is possible out of aP (17)
- Case connectivity and the badness of (18) suggest that we are dealing with extraction and not base generation in the clause-initial position

- (17) [Čij-e pažnj-e]<sub>1</sub> je (Jovan rekao da  
 whose-GEN attention-GEN AUX Jovan said DA  
 je) Marko vredan t<sub>1</sub>?  
 AUX Marko worthy  
 ‘Whose attention (did Jovan say that) [is] Marko [is] worthy of?’

- (18) \*[Čij-e pažnj-e]<sub>1</sub> je (Jovan rekao da  
 whose-GEN attention-GEN AUX Jovan said DA  
 je) Marko vredan [t<sub>1</sub> i Marijin-e ljubav-i]?  
 AUX Marko worthy and Mary's-GEN love-GEN  
 ‘Whose attention (did Jovan say) is Marko worthy and Mary's love?’

- INTERIM CONCLUSION I: BCS aP allows subextracton, but not through its specifier → BCS aP is not a Chomskyan phase

## 5.2. BCS aP is a DM phase

### 5.2.1. aP blocks root-conditioned allomorphy

- Babić 2002 lists 91 productive nominal suffixes in BCS (Croatian), though a more conservative estimate might put that number at around 30

- There are no discernible differences in the meaning contributions of many of these nominalizing suffixes
- For example, the broadly agentive (person-denoting) nominalizing suffixes in BCS are at least: *-aš*, *-ar*, *-ac*, *-ač*, *-ica*, *-telj*, and *-ik*
- It is quite striking, however, how low the number of suffixes gets once we subtract those that only attach to roots and look at those cases where there are clear morphological (and semantic) indications that a derivation from another category has taken place (19)

- (19) a. **-AŠ** (*batin-aš*, *autonom-aš*, *stranput-aš*, *bogat-aš*)  
 b. **-AR** (*apotek-ar*, *bank-ar*, *čerg-ar*, *kormil-ar*)  
 c. **-ICA** (*izdaj-ica*, *škrt-ica*)  
 d. **-TELJ** (*grad-i-telj*, *nos-i-telj*, *spav-a-telj*, *gon-i-telj*, *odgaj-a-telj*, ...)  
 e. **-AC** (*škrt-ac*, *dobrovolj-ac*, *drip-ac*; *boleš-ljiv-ac*, *svad-ljiv-ac*, *plač-ljiv-ac*, *laž-ljiv-ac*, *plaš-ljiv-ac*, *smrd-ljiv-ac*, *razmet-ljiv-ac*, ...)  
 f. **-IK** (*uč-e-n-ik*, *bran-je-n-ik*, *muč-e-n-ik*, *kažn-je-n-ik*, *tuž-e-n-ik*; *izlet-n-ik*, *besmrt-n-ik*, *put-n-ik*, *rat-n-ik*, *boles-n-ik*, *držav-n-ik*, ...)

- The suffix *-telj* is conditioned by the presence of active v/Voice, exponed by the theme suffix (19e), see Bešlin 2023, Bešlin in press
- The only agentive suffix that appears after the adjectivizer *-ljiv* is *-ac* (19e)
- The only agentive suffix that appears after the adjectivizer *-n* is *-ik* (19f)
- The form of the nominalizing suffix in (19d-f) cannot be influenced by a particular root, unlike in (19a-c)

- Focusing on (19e-f), I argue that this is because BCS *a* is a DM phase—once the nominalizer merges, the complement of *a* is spelled-out
- This explains why the root cannot influence the form of the nominalizing suffix or vice-versa
- **Q:** What about the suffix after the root in some examples in (19f)?
- **A:** This is the exponent of passive *v*, see Bešlin 2023, Bešlin in press
- Importantly, it is **not** the case that just any overt material blocks allomorphy—Bešlin 2023 shows that there is root conditioned allomorphy of *a* across overt passive *v* in BCS, see (20)
- Based on this and other tests, I argued that BCS passive *v* is not a phase
- *However*, once the adjectivizer is attached, higher affixes no longer have access to the root for the purpose of determining their form (20)
- I take this to further suggest *aP* serves as a point of spell-out in BCS

- (20)
- |    |               |  |               |
|----|---------------|--|---------------|
| a. | prožim-a-n-je | ‘permeate- <i>V<sub>pass</sub></i> -A-N’ | ‘permeation’  |
| b. | reš-e-n-je    | ‘solve- <i>V<sub>pass</sub></i> -A-N’    | ‘solution’    |
| c. | prs-nu-t-je   | ‘rupture- <i>V<sub>pass</sub></i> -A-N’  | ‘(a) rupture’ |
| d. | prol-i-t-je   | ‘spill- <i>V<sub>pass</sub></i> -A-N’    | ‘spillage’    |

- Notice that (19e-f) both involve the addition of a nominalizing suffix onto an adjectivized structure, and yet the two nominalizers are distinct in form (while their meanings are not distinct in any obvious way)
- This is expected however: once the nominalizer is merged, the *complement* of the lower phase—*aP*—is spelled out
- We then predict exactly what we observe: the identity of the adjectivizer, but not the identity of the root, may influence the form of the nominalizer

### 5.2.2. Stress-assignment is mediated by spell-out at *aP*

- In BCS, prominent syllables of prosodic words carry a tone, which can be rising [á] or falling [à]<sup>2</sup>
- Inkelas & Zec (1988): Only High tones are represented in the BCS lexicon; a falling tone results from word-initial High tone and a rising tone from a non-word initial High tone that spreads to the preceding syllable
- BCS roots and affixes are lexically marked or unmarked for High tone; if no morphemes in the relevant domain carry a lexical High tone, a High tone is inserted on the first syllable as a default
- Marvin 2002 argues (for English and Slovenian) that lexical stress-assignment is mediated by syntactic structure and, in particular, by phasal spell-out domains below the word level
- In BCS, we can observe that the nominalizer *-ik*, which is lexically marked with a High tone, can influence the stress of a word if it attaches to a root (21), but not if it attaches to an already adjectivized stem (22)
- The adjectivizer *-n* blocks the subsequent addition of the nominalizer *-ik* from influencing the position of the lexical stress (22)

→ ROOT-N

- (21)
- |    |                           |
|----|---------------------------|
| a. | bàgrem → bagrém-ik        |
| b. | sókrat → sokrát-ik        |
| c. | próza → prozá-ik          |
| d. | análget(sko) → analgét-ik |
| e. | àlkohol → alkohól-ik      |

<sup>2</sup>Length information is irrelevant for our purposes and is omitted throughout.

→ ROOT-A-N

- (22) a. nèsreć(a) → nèsreć-n-ik  
 b. bèstid → bèstid-n-ik  
 c. nápast → nápas-n-ik  
 d. prómet → prómet-n-ik

- Equally, the nominalizer *-ac* can influence lexical stress if it attaches to a root (23), but the adjectivizer *-ljiv* blocks the nominalizer *-ac* from influencing the lexical stress of the stem it attaches to (24)

→ ROOT-N

- (23) a. ǐzrael → Izraél-ac  
 b. dùborez → duboréz-ac  
 c. tékstil → tekstíl-ac

→ ROOT-A-N

- (24) a. gráb-ljiv → gráb-ljiv-ac  
 b. krád-ljiv → krád-ljiv-ac  
 c. bǐb-ljiv → bǐb-ljiv-ac

- *-ljiv* itself carries an underlying tone (which is why all of the stems on the lefthand-side of (24) surface with a rising accent), so one may think that this fact prevents *-ac* from influencing the stress pattern
- We can see in (25), however, that a different adjectivizer *-av*, which does not carry an underlying High tone, also blocks the stress shift by *-ac*

→ ROOT-A-N

- (25) a. čùp-av → čùp-av-ac  
 b. bàl-av → bàl-av-ac  
 c. blès-av → blès-av-ac

- I'd like to argue that the contrast in (21)-(22) and (23)-(24)/(25) arises because the adjectivizer in BCS is a phase, and the nominalizer is not able to see the root across it and influence its stress pattern
- In other words, lexical stress in BCS is determined within the first phase, and further material is unable to modify it (see Newell 2008 for a similar conclusion for Turkish and Cupeño)
- A different way to put this is in terms of default stress/tone assignment; since tone has to be assigned within the first phase, the default is inserted on the first syllable in (22a-b)/(25) despite the presence of *-ik/-ac* which have an underlying High tone
- INTERIM CONCLUSION II: BCS *aP* blocks root-conditioned allomorphy and mediates lexical stress via spell-out → BCS *aP* is a DM phase

## 6. Taking stock: Reconciling domains in syntax/morphology

- We have provided evidence that BCS *aP* behaves like a DM phase, but not like a Chomskyan phase
- So how do we reconcile these two notions of phasehood?
- Are there simply two distinct domains the PIC operates on? **Likely not.** Putting aside the conceptual argument against this solution, it is not at all clear how we would draw a line between domains subject to DM PIC and



those subject to Chomskyan PIC, given the established problems with the notion of ‘words’ (e.g., Marantz 2001)

- But if DM phases and Chomskyan phases are equivalent, the evidence presented here would force us to say that a phase does not necessarily require movement to proceed through its specifier—but this is what Phase Theory was originally supposed to capture (SCM)

NB: PIC2 or something like it seems to be necessary for empirical reasons (see Chomsky 2001, Sigurðsson 2002, Embick 2010), but PIC2 is problematic as a mechanism that drives SCM because **it does not actually force movement to proceed through a phasal specifier**—why?

- (26) **Phase Impenetrability Condition (PIC2)** (Chomsky 2001:14)  
Given the structure [ZP Z . . . [HP  $\alpha$  [H' H YP ]]], where H and Z are phase heads, the domain of H is not accessible to operations at ZP; only H and its edge are accessible to such operations.
- So should we rethink Phase Theory as an account of SCM/islands?
- For some island effects—e.g., subject islands, adjunct islands—Phase Theory has *nothing to say at all*
  - If we take a look at Murphy’s (2018) overview of Chomskyan phasehood diagnostics, which I sketch out in (27), they are pretty objectionable (as he himself notes), except the (intermediate) movement diagnostic, and that one only goes in one direction under specific circumstances (**no** stopping point but **yes** movement—not a phase)
- (27) a. **successive-cyclicity:** (a) intermediate pronunciation; (b) intermediate interpretation; (c) intermediate licensing
- b. **PF diagnostics:** no phonological interaction between items that are spelled-out separately (but see e.g., Bošković 2017 on tone sandhi in

Taiwanese)

- c. **LF diagnostics:** QR targets phases. . . but why?

- But successive cyclic movement **is the explanandum**; we have no reliable independent ways of saying whether something is a phase (and, in fact, given that movement to spec of phase is not even forced on PIC2, Phase Theory does not seem to be a very good theory of SCM/islands)

## 6.1. Head-movement drives domain extension?

- *Phase extension* is argued to occur when a (syntactic) phase head  $\alpha$  undergoes head-movement to a non-phasal head  $\beta$ ; in this configuration,  $\beta$  acquires phasal properties (den Dikken 2007)
- If head-movement were to extend the phase in syntax, we would expect this to drive phase-extension in the morphology as well
- Hence this move does not help with the BCS data because *a* behaves like a phase head in the morphophonology, but not in the syntax
- There have been claims that the morphology can also “mess” with the domains provided to it by the syntax (e.g., Fenger 2020, Fenger & Weisser 2022), but only in very limited ways
- Namely, the morphology can put elements that weren’t in the same domain into the same domain (e.g., through pruning of a null phase head), but **it can’t define domain boundaries of its own**
- **Bottom line:** Phase extension cannot help account for the BCS data

## 6.2. A modular PIC?

- What I call a modular version of the PIC requires a separation of the Transfer operation from Phase-Impenetrability (syntactic inaccessibility)
- Transfer is stated over the phases relevant for DM (and so provides the locality domains for the interfaces), but without the consequence that the transferred syntactic structure is inaccessible to further operations<sup>3</sup>
- In this scenario, successive-cyclic movement is not triggered by locality considerations, so the explanation for Chomskyan phase effects has to come from elsewhere (possibly intervention, see below)
- This solution would require the manipulation of already spelled out elements by the syntax (in our case, the complement of the BCS adjective), which has been argued to be impossible (Nissenbaum 2000, Newell 2008)

## 6.3. Chomskyan phasehood as intervention?

- A-over-A effects, deriving from minimality considerations (Rizzi 1990)
- Because the phase (head) itself is a closer target for a particular probe (e.g., Rackowski & Richards 2005 on Tagalog extraction patterns, Halpert 2019 on Zulu hyper-raising; see also the discussion in Thivierge 2021)
- Or because a closer DP goal limits a probe's access to a further away DP (e.g., Keine & Zeilstra to appear)
- This would not be a reconciliation of locality domains in syntax/morphology, but we would be no worse off than where we started:

<sup>3</sup>This is a more constrained version of the modular PIC proposed in D'Alessandro & Scheer 2015; in this work, PIC stated on heads relevant for Chomskyan phasehood is allowed to have no consequences for the morphology, in violation of Y-model feeding relations.

There would still only be one domain-delimiting operation, and Chomskyan "phasehood" would turn out to be epiphenomenal

- However, it is difficult to find the right cases to test this hypothesis in the domain of adjectives

## 7. Conclusion

- The Darwin-Plato tension gives us a pressing reason to try to come up with more minimal explanations of generalizations reached in the GB era
- I have shown how we may go about this in the domain of grammatical primitives–participles can be dispensed with as a lexical category
- I have also asked whether we can reduce the locality constraints in the syntax and morphology to the same operation (WORK IN PROGRESS)

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