

On the distribution of reflexes of successive cyclicity across phases

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1. Abstract. It is commonly assumed that CP, ν P, PP, and DP at least constitute phasal domains, which require intermediate movement to their edge. This paper presents a classification of successive cyclicity effects across languages and investigates the question of whether these are equally distributed across these domains. Using data from the Nilotic language Dinka, it is shown that CP and ν P at least are *parallel domains*: for each effect at the CP edge, we can find an instance of the same effect at the ν P edge and vice versa. The first contribution of this talk then is to provide clear evidence that both constitute locality domains, and that there is no qualitative asymmetry in the strength of evidence for the phasal status of these two phrases (contra Rackowski and Richards 2005; Den Dikken 2009, 2012; Keine 2015). The second contribution is to observe that the same successive cyclicity effects appear to be absent from DPs and PPs. In addition, both DPs and PPs differ from CP and ν P in sometimes displaying *leftness effects*, in which only constituents which can independently appear leftmost can be extracted. On this basis, I propose that although CP, ν P, PP, and DP all constitute phases, only CPs and ν Ps may initiate intermediate movement to their edge. PP and DP are phasal domains, but do not carry features that allow an XP to move to their edge for the purposes of long-distance movement. This difference explains the absence of reflexes of successive cyclicity and the appearance of leftness effects.

2. Distribution of successive cyclicity effects across CP and ν P. The table in (1) presents an overview of effects that implicate successive cyclic movement and the languages in which they are (at least) found:

(1) *Reflexes of successive cyclicity at CP and ν P:*

	CP	ν P
1. Extraction marking	Irish, Seereer, ...	Defaka, Malay, ...
2. φ -agreement	Dinka, Kinande, Wolof, ...	Passamaquoddy
3. Inversion and V2	Belfast English, Spanish, German, Dinka, ...	Mòcheno, Dinka
4. Multiple copy spell-out	German, Frisian, Seereer, ...	Dinka
5. Stranding	West Ulster English, Polish	West Ulster English, Dutch, Polish
6. <i>Wh</i> -trapping/clausal pied-piping	Basque, Quechua	Trinidadian English, Ewe
7. Scope trapping	English, ...	English, ...
8. Parasitic gaps	English, ...	English, ...

- **Extraction marking** refers to the appearance of morphemes that mark extraction only. At the CP edge, Irish is a famous example (2a). An analogous effect in the ν P is found in Defaka (2b).

(2) a. an t-ainm [CP a hinnseadh dúinn [CP a bhí ___ ar an áit]]
the name C.EXT was-told to-us C.EXT was on the place
'the name that we were told was on the place' (McCloskey 2002)

b. áyá jíkà ndò Bòmá ì biè-kè [CP ì ísò ___ sònó-mà-kè]
new house FOC Boma I ask-EXT I ISO buy-NFUT-EXT
'It is a new house that Boma asked me if I'm going to buy.' (Bennett et al. 2012)

- Another morphological effect is φ -agreement. In Dinka, intermediate movement to Spec-CP also causes φ -agreement (3a). In Passamaquoddy, movement to ν P has the same effect (3b).

(3) a. Ye kòoc-kó é-kè-yá ké tàak [é-kè-cí Áyèn ké gàam gàlám]?
be people-which PST-3P-HAB.2S 3PL think PST-3P-PRF.OV Ayen.GEN 3PL give.NF pen
'Which people did (s)he think that Ayen had given a pen to?'

b. **Wen-ik** kisitahatom-on-ik [CP keti-naci-wikuwamkom-oc-ik ___]?
who-3PL decide.IO-2CONJ-PART.3PL IC.FUT-go.do-visit.AO-2CONJ-PART.3PL
'Who all did you decide to go visit?' (Passamaquoddy; Bruening 2006:34)

- Intermediate movement may satisfy **V2** in German or Dinka or trigger **inversion** in the CP in many

Romance languages in a residual V2 effect (Thiersch 1979; Torrego 1984). Similar effects appear in the ν P, in Dinka and Mòcheno, respectively (Van Urk and Richards 2015; Cognola 2013).

- (4) a. Yè **ṅó** [CP cǐ́ mōc [νP ___ yiǰɛn Bòl]]?
 be **what** PRF.OV man.GEN give.NF Bol
 ‘What has the man given Bol?’ (Dinka)
- b. En bem hòt-se [νP **kaft** de zaitung]
 to whom has-she **bought** the newspaper
 ‘Who has she bought a newspaper?’ (Mòcheno; Cognola 2013)

These three effects argue that the moving phrase stands in a **featural relation** with the intermediate phase head, since: its morphological form is affected, it may Agree in other features, and the intermediate phase head may be unique in initiating movement of a lower head (suggesting it is featurally distinct).

- Several effects evidence the intermediate copy. **Copy spell-out** at the CP edge is found in *wh*-copying and Seereer pronoun copying (5a). A copying effect at the ν P edge exists in Dinka (5b).

- (5) a. **Aniin** foog-o [CP yee **den** Yande a-lay-u [CP yee **den** Jegaan a-ga’-u]]?
who.PL think-2SG.EXT C **3PL** Yande 3-say-EXT C **3PL** Jegaan 3-see-EXT
 ‘Who all do you think Yande said Jegaan saw?’ (Seereer; Baier 2014)
- b. Yè **kôc-kó** [CP yí́ Ból [νP **ké** luêeel [CP è cǐ́ Áyèn [νP **ké** tǐj]]]?
 be **people-which** HAB.OV Bol.GEN **3PL** say.NF C PRF.OV Ayen.GEN **3PL** see.NF
 ‘Which people does Bol say Ayen has seen?’ (Dinka)

- The copy is evident also in **stranding**. West Ulster English allows *all*-stranding at the CP edge (6a). As Henry (2012) shows, dialectal variation reveals that other dialects only permit stranding at ν P (6b).

- (6) a. Where do you [νP think [CP **all** that she went on her holidays]]? (West Derry City English)
 b. Where does he [νP **all** think [CP that he found her books]]? (South Derry English)

- Similar symmetry occurs in **wh-trapping**, in which pied-piping “traps” an intermediate moved phrase. This is evident in Basque, with pied-piping of the CP (7a), and in Ewe, with pied-piping of the ν P (7b):

- (7) a. [CP **Se** idatzi rabela Jonek] pentzate su?
what written has Jon.ERG you-think
 ‘What do you think Jon wrote?’ (Basque; Arregi 2003:118)
- b. [νP **Núkà** dí-rí] nè-lè [CP bé má- dà ___]?
what want-PROG 2SG-be.at that 1SG.FUT-prepare
 ‘What do you want me to make?’ (Ewe; Buell 2012:19)

- Similar symmetry is evident in Fox’s (1999) **scope trapping** effects. Fox shows that the distribution of Late Merge provides evidence for a landing site at the ν P edge. I provide analogous evidence for the CP edge. Finally, Nissenbaum’s (2000) account of **parasitic gaps** argues that they require movement to ν P. I show that intermediate movement to the CP edge licenses parasitic gaps in conditionals.

A consistent picture emerges. There are no obvious grounds for the idea that the evidence for ν P as a phase is different than for CP (or vice versa). Every successive cyclicity effect appears at both edges.

3. Successive cyclicity effects in PPs and DPs. However, the effects noted above appear to be absent at the PP and DP edge. The patterns that motivate analyzing PP and DP as landing sites involve *leftness effects*, in which only the leftmost constituent in the PP/DP can undergo extraction. Van Riemsdijk (1979) argues that PP is a bounding node because only Dutch R-words, which are unique in being leftmost in PPs, can move out of PPs. Similarly, Left Branch Extraction is permissible in languages in which adjectives and possessors can appear on the left edge because D is absent (Uriagereka 1988; Bošković 2016). Leftness effects have no obvious counterpart in the CP and ν P domain.

4. An asymmetry between phases. I propose an *asymmetry* between CP/ ν P, on the one hand, and PP/DP, on the other. All four are phases, but I stipulate that only C and ν carry a feature that triggers intermediate movement. As a result, C and ν display reflexes of successive-cyclic movement. PPs and DPs are phases, but do not host intermediate movement. They permit extraction only if (i) the moving phrase is leftmost, or (ii) a non-phasal D/P is merged. Independent support comes from the observation that PPs and DPs in English (but not CPs!) can’t be extraposed if they are extracted from. This follows if non-phasal XPs cannot extrapose (as suggested by the inability of raising infinitives to extrapose also).