Ellipsis by Phase

1. THE GOAL: This paper outlines a theory of ellipsis that adopts the machinery of Chomsky’s (2001; 2004) Phase Theory. In particular, we argue in favor of the hypothesis in (1), which takes Chomsky’s (2004) periodic Transfer (specifically, Transfer to PF or Spell-Out) as a key factor for ellipsis resolution. Pursuing the idea that all levels act in tandem (Chomsky’s 2001 Single-Output Syntax), and taking ellipsis to be PF-deletion (cf. Lasnik 1999 and Merchant 2001), (1) predicts that only the complement domains of phases can be ellided, for only such domains are transferred to PF. In a theory where CP and vP are the relevant phases/cycles (e.g. Chomsky’s 2001; 2004), this amounts to TP and VP (the complement domains) being ellidable, an outcome consistent with the data in (2).

2. ADVANTAGES: Right from the begining, we want to emphasize that the main advantage of an account along these lines concerns its predictive power: if (1) proves correct, it offers a straightforward rationale for the domains affected by ellipsis to be the ones they are, and not others (unless we resort to a characterization in terms of government and agreement richness; see Lobeck 1995). In a proposal like, e.g., Merchant’s (2001), it is not immediately obvious why, say, CP or DP cannot undergo ellipsis (in principle, Merchant’s E diacritic could be assigned to any XP, triggering deletion, contrary to fact), but, under (1), it is: we only have TP and VP deletion because, quite simply, those are the units that are cyclically submitted to the PF component.

3. EMPIRICAL PROBLEMS: A related hypothesis has independently been pursued by Gengel (2007), who combines Merchant’s E-feature assignment with Chomsky’s periodic Transfer to account for VP, TP, and NP deletion. Due to observations by Merchant (2008), though, Gengel contends that (1) does not make the right predictions in the case of pseudogapping, since this variety of VP ellipsis requires deletion of the entire vP. Both Gengel (2007) and Merchant (2008) in fact analyze pseudogapping as deletion of vP after movement of the remnant DP to the SPEC of a FocusP above vP (see 3); were that to be correct, then (1) is threatened, since vP does not qualify as a complement domain.

4. IN DEFENSE OF (1): Here we would like to defend (1) and extend it not only to cover the cases raised by Merchant (2008), but also to further instances where (1) -if correct- should hold too: (a) the complement of so-called weak phase heads (cf. Chomsky 2001), and (b) the complement of phases heads other than C and v*. Consider these cases in turn. That the domain of defective phases patterns according to (1) is confirmed by (4), where the complement of passive/unaccusative v undergoes deletion. As for phase heads other than C and v*, we would like to assume (5), which enlarges (6), with the list of phase heads in order to include D (see Svenonius 2004) and presumably Deg, its adjectival counterpart and P (see Abels 2003, Raposo 2002, and van Riemsdijk 1978). If this is on track, then one expects for the complement of D, Deg, and P to be ellidable: the data in (6) show that this is indeed borne out: the NP ellipsis subcase in (6a) is taken from Gengel (2007), who takes one to occupy a functional head above NP (be it n or Foc), but the cases in (6b) and (6c) have not been reported in connection to (1) in the literature we are familiar with. We take (6c), the deletion of P’s complement example, to be the most interesting case. As the paradigm in (7) indicates, this subcase is ruled by phonological factors: weak (meaning, monosyllabic) prepositions rule out ellipsis, but strong ones do not. Interestingly, this is not unexpected: if D and P are phase heads, then D should feature a behavior similar to P, and it does when D adopts a clitic guise (see 8, from Raposo & Uriagereka 2003).

To conclude our defense of (1), let us now go back to Merchant’s (2008) evidence. The problem, as noted, is the following: pseudogapping apparently involves deletion of the whole vP, as this is the only way to capture the requirement that voice (encoded in v*, according to Merchant 2008) must be the same in both the antecedent and the ellipsis sites. To get around this, we need for v* to be inside the Transfer domain (contra Chomsky 2001; 2004). However implausible, we want to note that there is nothing in the logic of Chomsky’s framework precluding v* from being transferred together with the VP: to be sure, this is impossible in the simple scenario of (9a), but it is technically possible in a scenario such as (9b), where there are extra heads, the role of which would be akin to Gengel/Merchant’s Focus: providing a landing site for the remnant DP, allowing successive cyclic movement, and, crucially, making more room so that v* (which would otherwise be transferred in the next cycle) can fall within the Transfer zone, as required.

5. ROMANCE AND VERB MOVEMENT: Before concluding, one other datum problematic for (1) must be considered, namely the well-known fact that Romance disallows VP ellipsis (see 10). In the GB literature, this has been related, in only a tenuous way, to verb movement (see Lobeck 1995 and Zagona 1989). Keeping this original intuition intact, we would like to assume (11), (see Van Craenenbroeck & Lipták 2007), a statement that, in many respects, is similar to Lasnik’s (1999) (12) in capturing the old idea that movement of the head of a phrase (phrase = phase, barrier, cyle, bounding node) somehow removes its locality properties (see Chomsky 1986 and Uriagereka 1988). With this much in mind, and in order to account for the Romance data, here we propose that verb movement triggers a process of phase sliding/extension (see Galloge 2007 and den Dikken 2006 for different implementations of the same insight) that redefines the eje-complement cut, having a key effect in the amount of structure that is transferred. Adopting Chomsky’s (2001) version of the PIC, it is possible for v*-to-T movement to take place before Transfer of the VP does; if so, then once the verb has moved to T, the complement domain of v* is no longer VP, and so VP ellipsis is not possible, under (1). A problem this analysis has to face -noted by Lasnik (1999)- concerns the puzzling behavior of languages such as European Portuguese, which has verb movement, but features VP ellipsis regardless (see Martins 1994), as shown in (13). To take this, we argue that the data in (13) do not have to be analyzed as VP ellipsis: assuming the verb has moved to a projection above T in this language (Raposo & Uriagereka’s 2005 FP, or any similar projection), the complement of this extra head could perfectly be TP itself, as independently claimed by Holmberg (2007). Therefore, ellipsis in E.Portuguese, much like in Spanish, can also be accounted for by (1).

6. CONCLUSION: The preceding lines put forward a hypothesis that connects ellipsis and Chomsky’s recent conception of the cycle, Phase Theory. As we argued, an (perhaps the most) appealing trait of such a hypothesis is that it gives a rationale for ellipsis domains to be the ones they are: regarding ellipsis as PF-deletion, it makes sense for this operation to be related to the domains that are cyclically submitted to the PF component. If this take is correct, both Merchant’s (2001) and Lobeck’s (1995) accounts can be dispensed with –a welcome conclusion, we feel, since they not only lack any principled restriction, but also resort to technical devices (e-features, government, etc.) that depart from inclusiveness.
Ellipsis by Phase

(1) Ellipsis can only target the Transfer domain of the phases.

(2) a. John sings, and Peter does \([\text{sing}]\) too. \(\text{VP ellipsis}\)
   b. John called Mary, and Peter did Susan \([\text{call}\_\text{Mary}]\) \(\text{Pseudogapping (= VP ellipsis)}\)
   c. John called someone, but I do not know who \([\text{call}\_\text{someone}]\) \(\text{Sluicing (= TP ellipsis)}\)

(3) a. The system can be used by anyone who wants to (use it).
   b. *Some bought roses, and lilies were by others.

(4) a. John died twenty years ago, and Bill did \([\text{die}]\) too.
   b. There were many students arrested, and there were many teachers \([\text{arrest}]\) too.

(5) Phase heads are the loci of uninterruptable morphology (in line with Chomsky 2001; 2004)

(6) a. I saw \([\text{look at}]\) a black one \([\text{rabbit}]\) yesterday. \(\text{Complement of D deletion}\)
   b. John is nice, but his wife even \([\text{deep} \text{more so}]\) \([\text{nice}]\). \(\text{Complement of Deg deletion}\)
   c. John cooked the chicken with garlic . . .

(7) a. *El rey lo hace todo por el pueblo, pero \([\text{sin}]\) el pueblo \([\text{pueblo}]\) \(\text{(Spanish)}\)
   b. Pedro habló antes del partido, \([\text{durante}]\) \([\text{el partido}]\) \(\text{(Spanish)}\)

(8) No compré la aspirina corriente, pero compré la \([\text{aspirina}]\) \(\text{(Spanish)}\)
   'I did not buy the regular aspirin, but I did the effervescent one'

(9) a. \([\text{Subject} v^* [\text{Object}]]\) \(\text{Simple scenario} \quad \text{(Transfer domain: VP)}\)
   b. \([\text{Object} x [\text{Subject} v^* [\text{V} [\text{Object}]]]]\) \(\text{Complex scenario} \quad \text{(Transfer domain: v}^*\text{P)}\)

(10) *María no ha llamado a Pedro, pero Luis ha \([\text{llamado a Pedro}]\) \(\text{(Spanish)}\)
    María not have \([\text{called}]\) \([\text{Pedro}]\), but Luis have \([\text{called}]\) \([\text{Pedro}]\)
    'María has not called Pedro, but Luis has'

(11) Verb movement bleeds VP ellipsis.

(12) XP ellipsis is prohibited if XP has lost its head.

(13) A: Viste o João?
    saw\(_{SG}\) the João

    'Did you see João?'

    B: Vi.
    saw\(_{SG}\)

    'Yes, I did'