Situating ellipsis within the derivational timeline

In this talk, I defend the view that ellipsis occurs during the narrow syntax (Aelbrecht 2010), reviewing existing and new evidence of apparent rule ordering configurations between ellipsis and other grammatical operations. I attempt to situate ellipsis within the overall timeline of the derivation by showing that, whereas ellipsis may precede or follow certain narrow-syntactic operations (e.g. agreement, movement), it evidently cannot follow any postsyntactic operations (e.g. external sandhi phenomena, allomorphy). I argue that this follows from the modular, derivational architecture of grammar familiar from Minimalism, but only if ellipsis is effected in the narrow syntax, and not strictly at PF (as is sometimes assumed or explicitly claimed; Merchant 2001, LaCara 2018, a.o.).

Movement and agreement are two phenomena widely regarded as taking place during the derivation (i.e. they are not purely post-syntactic/PF phenomena). Crucially, ellipsis has the capacity to disrupt both of these operations, something which would be impossible if ellipsis were strictly a PF non-realization rule (e.g.). First, we have known since Ross (1969) that phrasal movement out of ellipsis sites is in principle possible. However, Aelbrecht (2010) shows that certain kinds of ellipsis can bleed certain kinds of phrasal movement. For example, object wh-extraction is prohibited out of otherwise well-formed Modal Complement Ellipsis sites in Dutch:

(1) Ik weet niet wie Jan MOET uitnodigen, maar ik weet wel **wie** hij niet MAG *(uitnodigen ~~wie~~).
    I know not who Jan must invite   but I know AFF who he not may to.invite
    'I don't know who Jan HAS to invite, but I do know who he isn't ALLOWED to invite.'

Likewise, in a language that normally requires object agreement on T (Hocąk: Johnson 2015), this agreement is blocked if the transitive predicate is elided, again suggesting that ellipsis (of VP, containing the object) precedes a decidedly syntactic operation (Agree, between T and the now-missing object):

(2) Cecil-ga   nee hį-hojį   anąga Hunter-ga   šge (*hį')-ųų
    Cecil-PROP me 1OBJ-hit and   Hunter-PROP also (*1OBJ)-do
    'Cecil hit me, and Hunter did too.'

This logic extends even to head movement, which some have argued to be a purely post-syntactic / PF phenomenon. Sailor (2018) shows that predicate ellipsis in certain verb-second languages (here, Norwegian) can prevent the main verb from moving into second position, again in what looks like a bleeding configuration of just the sort seen above:

(3) a. *Johan leste   ikke *Lolita*, men Marie leste.
       Johan read.PAST not *Lolita*, but Marie read.PAST
       Intended: 'Johan didn't read *Lolita*, but Marie did.'
    b. Johan leste   ikke *Lolita*, men Marie **gjorde**.
       Johan read.PAST not *Lolita*, but Marie do.PAST
       'Johan didn't read *Lolita*, but Marie did.'

Given that ellipsis can destroy the input environment for these syntactic operations, it follows that ellipsis is itself syntactic, as proposed elsewhere in the literature (*idem* for head movement, given (3)).

If this conclusion is correct, it makes a heretofore under-explored prediction: if ellipsis is triggered during the syntactic derivation (as Aelbrecht proposes, and the above facts attest), then uncontroversially postsyntactic processes should uniformly follow it; i.e., they should only operate on the output of ellipsis. The second half of the talk presents novel data involving external sandhi phenomena and allomorphy that confirm this prediction.

First consider *raddoppiamento fonosintattico* (RF), a sandhi process within the Italo-Romance family in which certain word-initial consonants undergo gemination when preceded by a lexically-specified RF trigger (Maiden 1995:72-76). The extent to which RF is (in)sensitive to syntactic structure varies substantially across varieties (Fanciullo 1986); examples here come from an upper-southern Italian regional variety in which RF is essentially phonological. In our terms, that means RF in this variety applies "late",

so we predict it should apply to the output of ellipsis, not its input. This is indeed what we find. Compare the form of a potential RF target when its would-be trigger is present vs. when it is elided, e.g. by nominal ellipsis (RF triggers are <u>underlined</u>; the geminated output of RF is illustrated with **dd**oubling):

(4) a. Maria <u>ha</u> **vv**isto alcune <u>città</u> **pp**iccole <u>e</u> alcune <u>città</u> **gg**randi.
Maria has seen some.F.PL city.F.PL small.F.PL and some.F.PL city.F.PL big.F.PL
'Maria has seen some small cities and some big cities.'

b. Maria <u>ha</u> **vv**isto alcune <u>città</u> **pp**iccole <u>e</u> alcune [città] g(*g)randi.
Maria has seen some.F.PL city.F.PL small.F.PL and some.F.PL big.F.PL
'Maria has seen some small cities and some big (ones).'

Likewise, ellipsis of a potential target creates a new adjacency relation, and with it a new target for RF:

(5) a. Maria <u>ha</u> **vv**isto <u>tre</u> **cc**ani piccoli <u>e</u> **tt**re **cc**ani grandi.
Maria has seen three dog.M.PL small.M.PL and three dog.M.PL big.M.PL
'Maria has seen three small dogs and three big dogs.'

b. Maria <u>ha</u> **vv**isto <u>tre</u> **cc**ani piccoli <u>e</u> **tt**re [cani] **gg**randi.
Maria has seen three dog.M.PL small.M.PL and three big.M.PL
'Maria has seen three small dogs and three big (ones).'

Thus, RF in this variety does not apply vacuously to the elided nominal; rather, it "waits" until after ellipsis has taken place. Overall, whether we elide an RF trigger or an RF target, this sandhi phenomenon always <u>follows</u> ellipsis. This follows straightforwardly if ellipsis is triggered during the derivation, but not if it is strictly postsyntactic: some ad-hoc ordering statement would be required. In the talk, I will present additional data from a southern Italian variety in which RF is highly constrained by syntactic structure (and thus "earlier" in the postsyntax), and in which the same result holds.

Further evidence comes from tone sandhi in Taiwanese (Chen 2000). Roughly, if a syllable bearing a lexical tone is in non-XP-final position, it undergoes a predictable tonal alternation. Since ellipsis can create new surface XP-final positions, we expect to see non-application of sandhi adjacent to such an ellipsis site, which is confirmed (sandhi syllables appear in **bold**):

(6) a. **A**-Ying chang **b-o** **khi hak**-hau, **tan-si** A-Ha **u** **khi hak**-hau.
A-Ying yesterday NEG-PERF go school but A-Ha PERF go school
'A-Ying didn't go to school yesterday, but A-Ha did go to school.'

b. **A**-Ying chang **b-o** **khi hak**-hau, **tan-si** A-Ha { u / ***u** } [khi hak-hau].
A-Ying yesterday NEG-PERF go school but A-Ha PERF
'A-Ying didn't go to school yesterday, but A-Ha did.'

The crucial contrast is between *u* 'PERF' in (6a) vs. (6b): in the former, *u* is in a non-XP-final position, and thus undergoes sandhi; in the latter, *u* finds itself in an XP-final position, and thus must appear with its lexical tone. This is clear evidence that ellipsis precedes tone sandhi (and the above facts replicate with e.g. nominal ellipsis in the language). In the talk, I present evidence that such tone sandhi is in fact a case of allomorphy (an "early" postsyntactic process), strengthening the case for ellipsis as a narrow-syntactic operation, and not a strictly PF phenomenon.

References. Aelbrecht, Lobke. 2010. *The syntactic licensing of ellipsis*. Benjamins. ● Chen, Matthew Y. 2000. *Tone sandhi: Patterns across Chinese dialects*. CUP. ● Fanciullo, Franco. 1986. Syntactic reduplication and the Italian dialects of the Centre-South. *Journal of Italian Linguistics* 8:67–103. ● Johnson, Meredith. 2015. Ellipsis is derivational: Evidence from Hocąk VPE. In *Proceedings of CLS 49*. ● LaCara, Nicholas. 2018. Head movement does not feed ellipsis. Presented at the Workshop on the Timing of Ellipsis, 51st Annual Meeting of the SLE. ● Maiden, Martin. 1995. *A linguistic history of Italian*. Routledge. ● Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. OUP. ● Ross, John R. 1969. Guess who? In *Proceedings of CLS 5*. ● Sailor, Craig. 2018. The typology of head movement and ellipsis: A reply to Lipták and Saab (2014). *NLLT* 36:851–875.