Ellipsis in a modular perspective

Introduction. Johnson (2008:1) characterizes ellipsis as "the consummate crowd-pleaser", because its empirical footprint spans roughly every domain of grammatical description (syntax, semantics, phonology, pragmatics, etc.). But within a Strictly Modular grammatical architecture, the broad empirical footprint of ellipsis in fact poses a serious analytical challenge: mainstream approaches – especially those concerned with how ellipsis sites become silent – have tended to rely on mechanisms (e.g. 'deletion at PF') that require intermodular cross-talk of just the sort that Strict Modularity prohibits.

This talk has two main goals, both relating to the status of ellipsis at the syntax-phonology interface. First, I use the strictures imposed by Strict Modularity to adjudicate among existing theories of elliptical silence, e.g. deletion at PF vs. non-insertion, showing that they all fall short of this standard. Second, in their place I propose a Modularity-respecting alternative: namely, elliptical silence as null exponence (i.e., Late Insertion of silence at the ellipsis site). I explore some consequences of this approach, including the dissociation between [E]-licensing (in the syntax) and null exponence (at Vocabulary Insertion).

Starting Assumptions. I adopt the following initial assumptions. **(i)** *Strict Modularity* (inc. the feed-forward *inverted-Y* model): the language faculty comprises discrete modules, including at least distinct syntax and phonology modules (Chomsky 1965, et seq.; Jackendoff 1997, Scheer 2011, Curtiss 2013, a.o.). A *module* is a specialized cognitive system dedicated to carrying out a single narrowly-construed computation (Fodor 1983), characterized by two main properties: **(i-a)** *Domain Specificity* (each module works only with its own proprietary alphabet; one module cannot understand the alphabet of another module) and **(i-b)** *Encapsulation* (a module's computation is input-bounded; no new information can be added during the course of that computation) (Scheer 2012:§36). Concretely, by (i-a) the syntax module works with an alphabet that is entirely illegible to the phonology module and vice versa (meaning the output of the former must be *translated* into the alphabet of the latter: Scheer 2012:§29). **(ii)** *Late Insertion of Vocabulary Items*: phonological features are absent from the input to syntax; they are added post-syntactically during Vocabulary Insertion (henceforth *VI*; Halle and Marantz 1993).

Ellipsis isn't deletion at PF. Following Merchant (2001), it is now widely held that ellipsis involves *deletion at PF* (henceforth *DPF*). This follows from Merchant's [E]-feature (see below). In addition to its role in the syntactic licensing of ellipsis, [E] provides a set of instructions for LF and PF: the LF instructions impose conditions on identity/recovery (left aside here), while the PF instructions impose the silence of ellipsis; i.e., DPF. However, both theoretical and empirical arguments militate against DPF.

First, to the extent that it is defined at all, DPF is said to involve phonological deletion/syncope of a prosodic constituent corresponding to the ellipsis site (e.g. Merchant 2004:671), thus requiring [E] to persist from the syntax into the phonology where its instructions can be executed. It is therefore a *diacritic*: a device for smuggling bits of untranslated information through one module into another, violating Domain Specificity (see Scheer 2012:§93 for Modularity-based arguments against diacritics in particular, and against the Prosodic Hierarchy in general).

Second, any version of DPF makes the wrong empirical predictions: because both prosodic mapping and the phonology proper necessarily follow VI, DPF predicts (a) that the silence of ellipsis should arise too late to have an effect on allomorph selection (effected at VI), contrary to fact (Sailor, to appear); and, (b) that ellipsis should be unable to salvage cases of morphological ineffability for similar reasons, again contrary to fact (Merchant 2015, Abels 2019, Mendes and Nevins, to appear). In sum, there is no DPF account of elliptical silence that respects Strict Modularity.

Ellipsis isn't non-insertion at VI. An alternative to DPF is detailed in Saab (to appear; see also citations therein). Rather than deletion *per se*, ellipsis involves non-insertion: the terminals inside the ellipsis site fail to undergo VI, such that they never receive phonological features (*qua* List 2 exponents). This can be implemented in different ways; however, all violate Strict Modularity (as well as the *Exhaustive Lexicalization Principle* of Fábregas 2007).

One version sees the syntax mark ellipsis-internal terminals with "don't insert on me" features (Saab 2008, Merchant 2015), violating Encapsulation (and Domain Specificity: see below).

The alternative, which assumes a *replacive* (rather than *additive*) model of VI, involves deletion of the placeholder variable [Q] (which VI takes as its input, replacing [Q] with a List 2 exponent as its

output) on each ellipsis-internal terminal (Saab, to appear). However, this violates Domain Specificity: [Q] is not an item of the syntactic alphabet, so the syntactic computation cannot delete or otherwise manipulate it. This is because VI is not a syntactic operation (so there can be no [Q] present in the syntax): following Scheer (2012:§169), VI is *intermodular*—its job is to interpret the output of syntax and translate it into the phonological alphabet, meaning it necessarily applies between the two modules (but within neither of them). In sum, there is no non-insertion account that respects Strict Modularity.

Toward a null exponence approach. I propose an alternative theory of elliptical silence that respects Strict Modularity: in brief, elliptical silence reflects non-terminal insertion of a null exponent, /Ø/, at the ellipsis site. On this view, /Ø/ is simply an allomorph of an XP valued with [E], following Agree with the ellipsis licensor (Aelbrecht 2010, Landau 2020). I adopt Radkevich's (2010:§3.1.2) proposal for non-terminal VI, motivated on entirely ellipsis-independent grounds (in the talk I also discuss compatibility with a Nanosyntactic approach to VI, based on Vanden Wyngaerd 2018):

(1) **The Vocabulary Insertion Principle (VIP)** (adapted from Radkevich 2010:62)
The phonological exponent of a vocabulary item is inserted at the minimal node dominating all the features for which the exponent is specified. If insertion targets a non-terminal node XP, then any exponents inserted on nodes dominated by XP are overwritten.

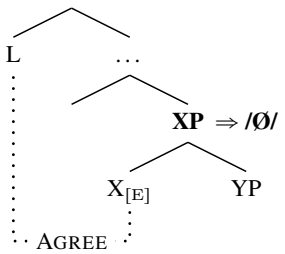
Thus, for a structure $[_{\alpha P}\ \alpha\ [_{\beta P}\ \beta]]$, the VIP calls for insertion at αP rather than at α *iff* there is a List 2 exponent specified for [α, β]: in such a case, αP is the minimal node dominating all the specified features (for insertion of an exponent that overwrites a lower item whose features that exponent is not specified for, see *ibid.*:65). Following Aelbrecht (2010), ellipsis is licensed *iff* AGREE relates an [E]-bearing head X with a higher ellipsis-licensing head L. Whereas Aelbrecht takes this to result in non-insertion/DPF of X's complement YP, I suggest that XP itself is rendered silent, following non-terminal insertion of /Ø/.

As such, the ellipsis site is still a regular constituent in the syntax. If a language allows elliptical silencing of YP, this amounts to a statement about its Vocabulary (in addition to licensing): namely, that it contains an exponent specified for [E, Y] which is null: /Ø/. This null exponent and its context of insertion are illustrated in (2) (assuming Aelbrecht-style licensing): by the VIP, /Ø/ will be inserted on the minimal node dominating both the ellipsis feature [E] and the category feature [Y], namely XP. Due to the overwriting property of the VIP, insertion of /Ø/ can silence much more structure than just the heads bearing the relevant conditioning features: it can also silences e.g. any YP-internal structures (see (1)). Essentially, this casts elliptical silence as a dramatic case of portmanteau suppletion: a single exponent realizes features spread across more than one head. The silencing effect of ellipsis is therefore mundane, requiring no special PF/phonological mechanism beyond what can be justified on ellipsis-independent grounds. (In the talk I also discuss compatibility with Landau's 2020 licensing account, as well as the role of cyclicity and bottom-up VI, neither of which pose a problem for the present proposal.)

(2) **Ellipsis as null exponence**

a. List 2 item yielding a silent XP in an ellipsis context:
/Ø/ ⇔ [E, Y]

b.



This proposal makes several predictions that I explore in the talk. For example, it predicts a language in which [E]-licensing takes place (inducing PIC and identity effects on YP), but YP isn't silenced because the language happens to lack /Ø/ as an exponent of [E, Y]. If it has an overt exponent for [E, Y], then we automatically derive surface anaphora: a domain that behaves like an ellipsis site (tolerating limited subextraction, etc.), but looks on the surface like a pronominal. Indeed, this prediction appears to be confirmed: Bentzen et al. (2013) note that surface anaphora in Norwegian and German have just such mixed properties (overt "pronominals" in e.g. predicate position that nevertheless tolerate subextraction).

Selected references. Aelbrecht, L. 2010. *The syntactic licensing of ellipsis*. Benjamins. • Fodor, J. 1983. *The modularity of mind*. MIT Press. • Merchant, J. 2001. *The syntax of silence*. OUP. • Radkevich, N. 2010. *On location: The structure of case and adpositions.* Ph.D. diss., UConn. • Saab, A. To appear. Ellipsis: its way from syntax to morphology. In *The derivational timing of ellipsis*, OUP. • Sailor, C. To appear. The morphophonology of ellipsis: evidence for Segregated Transfer. In *The derivational timing of ellipsis*, OUP. • Scheer, T. 2012. *Direct interface and one-channel translation*, Mouton.