

VP Ellipsis and morphosyntactic features

An attractive feature of the derivational approaches to syntax is that computational complexity is reduced by imposing severe restrictions on what counts as an active, accessible part of the derivation, i.e. by limiting the search space available to syntactic operations. In minimalist theorizing (cf. Chomsky 2000, 2001), several claims concur to achieve this result: (i) derivations proceed by phases; (ii) the complement of a phase head ceases to be accessible once another (phase) head starts to project (Phase Impenetrability Condition, henceforth PIC); (iii) derivations have a cyclic access to the LF and PF interfaces, regulated by the PIC. The ultimate goal of this talk is to evaluate the implications of this strongly cyclic view of syntax for the analysis of VP-ellipsis constructions in the languages where they occur. There are two ways in which phases turn out to be relevant to the VP-ellipsis phenomenon. First, it appears that only phase heads (*v* in the case of VP ellipsis) can trigger the deletion of their complement. Second, the difference between the languages (and constructions) that display VP ellipsis and those that do not will be shown to be a question of timing: in the former, finite verbal forms are morphologically/featurally complete at the *v*-level, at the completion of the *v*P phase; in the latter, verbal forms are complete only at the T-level, hence after the completion of the *v*P phase.

For this program to be achieved, it is first necessary to draw a clear distinction between the various questions raised by VP ellipsis. A central one concerns the status of the VP category that seems to be missing. The fact that *wh*-extraction appears to be possible from the ellipsis site strongly supports the view of ellipsis as a PF-deletion process defended by Chomsky & Lasnik 1993 and more recently by Merchant 2001. In this view, VP ellipsis involves the deletion (or non-pronunciation) at PF of a fully articulated syntactic structure as one of its crucial components. But the deleted VP is actually present at all stages of the narrow syntactic derivation.

A second question concerns the nature of the identity requirement between the elided part and the VP antecedent. If one takes for granted that some kind of semantic isomorphism/parallelism is necessary for an ellipsis structure to converge, the question is whether this is all that is needed. The answer appears to be negative. But, contrary to Lasnik's 1995 claim, strict morphosyntactic identity at PF is not required either. The relevant condition is stated in (1):

(1) A deleted/elided constituent cannot contain any non-recoverable interpretable feature.

(1) appears to draw the correct distinction between the morphemes and affixes that appear to be relevant in the computation of identity and those that are not. For example, English *-ing* belongs to the first class, *-ed* to the second one, as examples (2) show:

- (2) a. Mary will leave and John already has
b. *John won't enter the competition, but Peter is

It will be shown that the [perfect] feature underlying *-ed* is indeed contextually recoverable in (2a), while the [progressive] one spelled out as *-ing* in (2b) is not. (1) also makes the right predictions for the languages in which the progressive marker looks as if it were "transparent". Welsh is such a language.

It is now possible to consider the third question raised by VP ellipsis, namely that of the licenser of ellipsis. Lobeck 1995, Merchant 2001, van Craenenbroeck 2004 argue that only heads with certain properties can license the ellipsis of their complement. Can the set of licensing categories receive a natural characterization? It is at this point that the notion of phase becomes relevant. The analysis consists of two parts. First, a careful study of ellipsis in some V-stranding VPE languages (cf. Goldberg 2005) - European Portuguese, Welsh are such languages - reveals that, once certain specific assumptions are made concerning the internal make-up of verb phrases, VP ellipsis can be characterized as involving the deletion of the complement of the phase head *v* (whether a VP or an AspP). More generally:

- (3) Only phase heads can trigger deletion/non-pronunciation of their complement
(van Craenenbroeck 2004, Gengel 2007, Rouveret 2006)

(3) is shown to open the way to a natural characterization of the phrases and heads that survive ellipsis and those that do not. Only the syntactic objects that have access to the edge of vP or are directly merged there do. By definition, the elements directly merged at the edge do not fall under the Identity Condition. This is the case of subject arguments and also, we argue, of tense and agreement specifications in some languages. What about the elements that originate in v's complement and raise to the edge of vP? The correct generalization seems to be that these elements are not exempted from the Identity Condition, unless they are focalized. In other words, Focus overrides Identity. This is clearly the case in (4), where the focalized phrases in the two members of a coordinate structure are distinct:

- (4) NUTS, she likes, but ALMONDS, she doesn't.

The fact that the verbal heads which, in V-stranding VPE languages, raise to v, then to T, are not required to be lexically identical to the verbal heads in the antecedent conjunct - in European Portuguese, they can be distinct provided that they form with the antecedent verb an antinomic pair, cf. Santos 2006 -, should probably be connected to the phenomenon illustrated in (4).

- (5) O João VENDEU livros à Teresa ontem e a Ana OFERECIU. [European Portuguese]
the João sold books to-the Teresa yesterday and the Ana offered

This phenomenon has implications both for the characterization of the identity condition relevant to ellipsis and for the proper characterization of head movement, which will be considered in detail. Finally, (3) also makes interesting predictions concerning the distributional and interpretive properties of the various types of adjuncts.

But (3) sheds no light on the reason why some languages display VP ellipsis, while others do not. v is a phase head in both VPE- and non-VPE languages. Adopting the popular view that v can come in different flavors, I will argue that the availability of VP ellipsis in some languages reflects a differential featural endowment of v's in these languages - Tense is featurally represented on the v head. The effect of the presence of [tense] on v is that (finite) inflected forms are morphologically/featurally complete when the vP phase is completed.

- (6) The availability of VPE in a given language depends on whether inflected verbal forms are morphologically/featurally complete at the v-level.

Empirical evidence in favor of (6) is provided by clitic syntax in Portuguese and Welsh. The claim that only the languages which have [tense] v at their disposal display VP ellipsis has many ramifications which will be considered in detail. In particular, it opens the way to an analysis of the ellipsis behavior of complex auxiliary-verb constructions in English, explains why the Portuguese auxiliary *ter* only licenses ellipsis when it is finite, provides a status for English *to* and *do* (which are argued to originate in v).

In conclusion: A relation seems to exist between the derivational history of inflected verbal forms in a language and the availability of VP ellipsis in this language. If this result is correct, the morphosyntactic dimension must be part of any account of VPE.

Time permitting, I will offer speculations on why (6) should hold at all, show that for ellipsis to be licensed, the verbal root and the pieces of inflection that constitute a complete verbal form at the v-level must be syntactically merged, but not necessarily morphologically merged, and, on the basis of ellipsis data, ask whether access to the semantic component is also a phasal operation, as access to the phonological component is, or is a one step operation, taking place at the very end of the derivation, as Nissenbaum 2001 proposes.