# Bleeding restructuring by ellipsis New hopes for a motivated verbal ellipsis parameter<sup>1</sup>

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Abstract: This paper offers a new account of the lack of head stranding XP-ellipsis in Spanish and related Romance languages. The observation is that those Romance languages that lack verbal ellipsis or, more specifically, Auxiliary/V-stranding XP-ellipsis in the relevant sentential domains also lack syntactic head movement. Concretely, those languages make use of what I call *Generalized Restructuring*, a morphological mechanism of periphrasis formation. Absence of head stranding ellipsis in the relevant languages is stated, then, in the form of a conditional clause of the following type: if a language L makes use of restructuring between  $T^0$  and  $V^0$ , then L's VPs are frozen for narrow syntactic computations (namely, VP-ellipsis, VP-movement, or any other syntactic computation bleeding the context for restructuring). This interaction between restructuring and VP-frozenness follows from the Ellipsis-Morphology Generalization as formulated in Saab & Lipták (2016), according to which syntactic ellipsis bleeds morphological operations. In addition to bring new light on the verbal ellipsis parameter, the theory predicts some important correlations that are indeed attested. For instance, Spanish *does* have X-stranding ellipsis in cases in which X is a member of the set of optional restructuring predicates, but only in absence of restructuring.

Keywords: Ellipsis, Restructuring, X-stranding ellipsis, Spanish, Portuguese

#### 1. Introduction

Perhaps, the most recalcitrant issue for the theory of verbal ellipsis is the lack of any answer, even of a partially intuitive one, as for why Spanish and other related Romance languages do not have verbal ellipsis of the type we find in English or in other closer Romance languages like Portuguese. In effect, as is very well-know, Spanish lacks *auxiliary-stranding VP-ellipsis*. Thus, sentences like the following ones will result indubitably ungrammatical to most, if not all, Spanish native speaker:

(1) a. \* Juan había leído este libro Pedro también había. had read this book Pedro also had Juan and 'Juan had read this book and Pedro had, too.'

(Depiante 2001:215)

b. \* Juan está cantando y María también está. Juan is singing and María also is 'Juan is singing and María is, too.'

c. \* había estado trabajando Juan la casa de María y en Juan working had been the house of María and in Pedro también había estado

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<sup>&</sup>lt;sup>1</sup> This paper is an important reconsideration of the last section of chapter 6 of my book manuscript *Gramática de los silencios. Balance y propuesta*. This reconsideration owes a lot to the comments, criticisms and suggestions of the participants of the seminar *You're on mute: an online seminar on ellipsis* organized by Gary Thoms from NYU, in particular, although not only, to Klaus Abels, Richard Kayne, Idan Landau, Rodrigo Ranero, Laura Stigliano, Gary Thoms and Susi Wurmbrand. I have tried to incorporate several of their insights here, but I am sure I failed in my attempt to answer many of their concerns or in simply making justice to many details. My hope is that, as usual, my failure becomes a great opportunity for further inquiry. Gary, of course, deserves a special mention for keeping our ellipsis enthusiasm alive even under pandemic times.

Pedro also had been 'Juan had been working at María's home and Pedro had been, too.'

If a Spanish speaker would like to put herself in the skin of a speaker of certain verbal ellipsis language, let's say of English or Portuguese, she should put herself in a world, maybe not too far away, where she speaks some variant of her own language in which all sentences in (1) are completely acceptable. Alternatively, she could have a good idea of what means to be a speaker of a verbal ellipsis language, if she says to herself the sentences in (2):

(2) hacerlo Paula también a. Ana puede puede. Paula also Ana do.INF-CL and can 'Ana can do it and Paula can, too.' b. Ana quiere ir al cine Paula también quiere. wants go.INF to.the cinema and Paula also wants Ana 'Ana wants to go to the cinema and Paula also wants to.'

The same speaker could also want to put herself in the shoes of a speaker of a V-Stranding XP-ellipsis language. A very close language is Brazilian Portuguese, which, like English, admits Aux-stranding VP-ellipsis:

(3) Paula também Α Ana tinha lido este livro e a tinha. the had read this book the Paula also had Ana and 'Ana had read this book and Paula had too.'

But in addition, the language also admits V-Stranding XP-Ellipsis<sup>2</sup>:

(4) Você deu A: o livro pra Ana? the book to.the Ana you gave 'Did you give the book to Ana?' B: sim. gave.1PL yes 'Yes, I did.'

We already know that the silence following *dei* is an impossible ellipsis in Spanish:

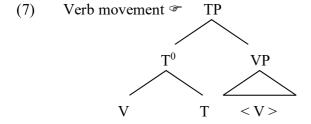
diste Ana? (5) A: Le el libro a CL.DAT.2SG gave the book to Ana 'Did you give the book to Ana.' B: \*Di, sí. gave.1sG yes 'Yes, I did.'

<sup>2</sup> I avoid call this construction *V-Stranding VP-ellipsis* for reasons to be commented in section 4.1., when I bring into the discussion Landau's recent arguments against the existence of this phenomenon.

This lack is not exclusive to Spanish, but it occurs in almost all Romance languages and in other Germanic languages closer to English, such as German. In this study, I focus on Spanish in an attempt to answer the following question:

(6) Why does Spanish not have ellipsis of the auxiliary or verb stranding type?

The question is particularly pressing in view of the fact that the language is canonically conceived of as a verb movement language, in which V vacates the verbal domain to reach at least the tense node, as shown in the following simplified tree (< ... > = deleted material):



In principle, and all things being equal, X-movement out of XP should not affect the constituency of XP. But it turns out that in modern Spanish, VPs are frozen constituents not only for elision but also for movement, as attested by the ban of Aux-stranding VP-fronting:

In Portuguese or English, instead, this type of fronting is possible:

Thus, the question in (6) could be generalized as:

(10) Why are Spanish VPs frozen, i.e., they cannot be the target of phrasal operations like movement or deletion?

I know no good answer to this question in the literature. Shortly, my own answer to (6) and (10) essentially consists in abandoning the head movement premise. My claim is that Spanish does not have syntactic verbal movement, but a rule of morphological restructuring requiring sisterhood between T<sup>0</sup> and the VP. Moving or deleting VPs bleeds the context for morphological restructuring. Put differently, absence of Aux- or V-stranding XP-ellipsis in the language follows from a broader generalization, according to which ellipsis, understood here as a narrow syntax operation, destroys the context for the application of certain morphological rules (Saab 2008 and Saab & Lipták 2016). Many intricate facts related to the interaction between restructuring and ellipsis are directly deduced under this theory. In addition, the proposal makes sense of the periphrastic nature of analytic tenses in Spanish, which is hard to account under mere syntactic head movement.

The paper is organized as follows. In section 2, I introduce Martins' observation, according to which VP-ellipsis in Romance correlates with enclisis in finite tenses, perhaps one of the most robust generalizations regarding the VP-ellipsis parameter in Romance. The importance of Martins' generalization is that it clearly indicates that the presence or absence of VP-ellipsis cannot be derived by mere licensing through an ellipsis feature, which is nowadays the received view (Merchant 2001 and much subsequent work). If it were the case, there would not be any expectation of finding correlations as Martins' and other related ones I will discuss opportunely. In section 3, Martins' observation is accounted for through the Generalized Restructuring Theory, according to which uniform proclisis in finite tenses is the direct byproduct of a rule of restructuring, similar, although not identical, to Rizzi's (1982) original rule proposed for deriving the particular distribution of certain nonfinite complements to certain class of predicates (the socalled *restructuring* ones, after Rizzi). Then, the fact that Spanish shows proclisis in finite tenses is derived from the same mechanism that produces "optional" proclisis with those predicates (e.g., lo puedo hacer 'I it-can do' vs. puedo hacerlo 'I can do-it'). In section 4, I account for the absence of Aux- and V-stranding XP-ellipsis in Spanish (and also the absence of Aux-stranding VPfronting) making reference to the morphological nature of restructuring which requires immediate locality between T<sup>0</sup> and the vP. The theory makes the neat prediction that, in absence of restructuring, V-stranding XP-ellipsis might in principle be available and, in fact, it is, as the existence of Modal-stranding ellipsis of the type illustrated in (2) demonstrates. Interestingly, those ellipses are only possible to the extent that restructuring does not apply. This explains Depiante's (2001) observation that modal ellipsis is impossible under clitic climbing and other related operations triggered by restructuring. Such facts led Depiante to propose a Null Complement Anaphora analysis for the same set of data. Yet, such a conclusion is directly refuted by other robust ellipsis tests, which diagnose ellipsis (Saab 2008, Dagnac 2010 and Fernández-Sánchez 2021). Section 5 discusses some remaining empirical issues, within and beyond Spanish, and section 6 concludes.

# 2. Martins' observation: Clitic placement and ellipsis in Romance

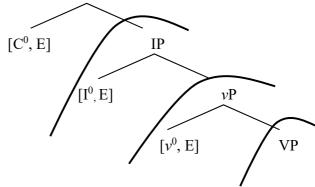
To the best of my knowledge, the few attempts of offering a minimally reasonable answer to the questions in (6) and (10) have been unsuccessful. One of the most articulated theories of ellipsis licensing is that of Lobeck (1995), who proposes to correlate the presence or absence of verbal ellipsis to the timing of verbal head movement. On her account, Spanish, which has overt head movement, does not admit verbal ellipsis, but English, which does not have verbal movement, does license verbal ellipsis. The problem with Lobeck's account is that there are languages with verb-stranding ellipsis, which obviously falsify her expectations. Zagona's (1982, 1988) attempts have not been more successful, although many of the thoughts I will offer here follow many of her original insights.

In current minimalism, the best-known implementation of ellipsis licensing is Merchant (2001, 2004), according to whom ellipsis is licensed by the presence of a formal feature. More concretely, Merchant, elaborating on Lobeck (1995) and, more generally, on the Borer/Chomsky's conjecture, suggests that we should encode the parameter in lexical properties of (mainly) functional heads.

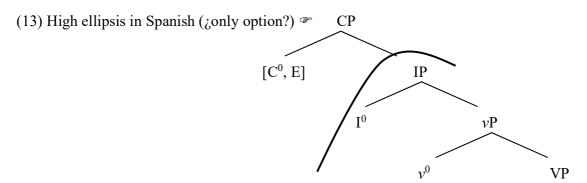
(11) The [E]-feature theory: particular functional heads can enter the syntax with a particular [E(llipsis)]-feature, which, essentially, licenses the ellipsis of the complement of the [E]-bearing head.

The types of ellipsis in the sentential domain that are predicted under Merchant's account are essentially the following ones (curved lines indicate ellipsis):

(12) High and low ellipses in the sentential domain © CP



On this perspective, we say that neither  $I^0$  or  $v^0$  bear an [E]-feature in Spanish; otherwise, it would license the relevant ellipses. Therefore, it seems that Spanish only makes very high ellipses available, perhaps, just different varieties of IP-ellipses.



Evidently, this is not an integral theory of ellipsis licensing that could legitimately bear the rubric of "a grounded answer" to the fundamental question in (6). But why not? We already know that, on occasions, grounded answers, those that attempt to answer *why*-questions, have the following general answer: "because it is just part of the lexical repository of the language". And lexical repositories have fortuitous properties. Indeed, one indication that perhaps this is the right answer is the lack of obvious parametric correlations, which would demand other type of answers, now grounded on linguistic regularities. The problem with the [E]-feature approach to ellipsis licensing is that, without further assumptions, it misses the following crucial fact:

(14) <u>Observation</u>: only a subset of languages has Aux/V-stranding XP-ellipsis, although most, if not all, have higher ellipses of the TP-ellipsis type without Aux- or V-stranding (Sluicing, Gapping, Fragments, etc.)

Under a theory along the lines of (11), there is no expectation for this state of affairs: since the placement of the [E]-feature depends on lexical options of particular languages, we should expect a random distribution of ellipsis sizes across languages (see Thoms 2012 for a very similar

criticism). But this is not the general case. For instance, whereas fragments or sluicing are wellattested in a great number of languages, VP-ellipsis is only attested in a reduced set of languages. But there is more. It is also the case that the distribution of VP-ellipsis is not entirely casual. In the Romance realm, for instance, Martins (1994) made the important observation that Romance languages with productive enclisis in finite sentences concomitantly license XP-ellipsis both of the Aux- and of the V-stranding type. Respecting the spirit of Martins' observation, I state this in the following way:

Martins' Generalization (to be revised): If a Romance language has enclisis as the (15)byproduct of syntactic head movement, then the language has also verbal ellipsis.

Here is Martins' original paradigm:

#### European Portuguese: (16)

- Lhe deste libro? \*proclisis o book
- CL.DAT.3SG gave.2sG the b. Deste-lhe libro? enclisis
  - gave.2SG-CL.DAT.3SG the book 'Did you give him/her the book?'
- Sim. dei. verbal ellipsis c.
  - yes, gave.1sG
    - 'Yes, I did.'
- d. Sim, dei-lho.
  - gave.1SG-CL.DAT.3SG.CL.ACC.3SG yes,
    - 'Yes, I gave it to him/her.'

#### (17)*Galician*:

- a. \* Lle dechés libro? \*proclisis o CL.DAT.3SG gave.2sG the book
- b. Décheslles libro? enclisis

gave.2SG-CL.DAT.3SG the book 'Did you give him/her the book?'

- Si, din. verbal ellipsis c.
- gave.1sG yes, 'Yes, I did.'
- d. Si, dinlho.

gave.1SG-CL.DAT.3SG.CL.ACC.3SG yes,

'Yes, I gave it to him/her.'

#### Spanish: (18)

el libro? proclisis a. diste CL.DAT.3SG gave.2sG the book

'Did you give him/her the book?'

- b. \* ¿Dístele libro? \*enclisis gave.2SG-CL.DAT.3SG the book
- c. \* Sí, \*verbal ellipsis dí.

yes, gave.1sG d. ďí. Sí, lo CL.DAT.3SG CL.ACC.3SG gave.1sG ves. 'Yes, I gave it to him/her.' (19)*Catalan*: donat el llibre? Li has proclisis CL.DAT.3SG have.2sg given the book 'Did you give him/her the book?' b. \* Has-li llibre? \*enclisis donat el have.2sg-cl.DAT.3sg given the book c. \* donat. \*verbal ellipsis Si, he have.1sG given yes d. Si, l' hi donat. he CL.ACC.3SG-CL.DAT.3SG have.1sG given yes, 'Yes, I gave it to him/her.' (20)*French*: Lui donné le livre? proclisis a. as-tu CL.DAT.3SG have.2sG-you given the book 'Did you give him/her the book?' b. \* donné le livre? \*enclisis As-lui have.2SG-CL.DAT.3SG you given the book c. \* Oui, j'ai donné. \*verbal ellipsis I-have.1sG yes given d. Oui, je le lui ai donné. Ι CL.ACC.3SG CL.DAT.3SG have.1sG given yes, 'Yes, I gave it to him/her.' (21) Italian: Gli hai il libro? proclisis a. dato have.2sg given the book CL.DAT.3SG 'Did you give him/her the book?' b. \* Hai il libro? \*enclisis gli dato have.2sG CL.DAT.3SG given the book c. \* sì, ho dato. \*verbal ellipsis yes have.1sG given d. Sì, gliel' dato. ho CL.DAT.3SG.CL.ACC.3SG-have.1SG given 'Yes, I gave it to him/her.'

Martins proposes to explain the correlation in (15) from the length of verbal movement in each language. Simplifying, in those languages in which there is enclisis and ellipsis, the verb moves to  $\Sigma^0$  (i.e., the functional head that introduces polar values in the sentence) passing cyclically by  $\Gamma^0$ , which encodes inflectional information. This high verbal movement licenses deletion of the entire

(Martins 1994: 174-175)

complement of  $\Sigma^0$ . Saab (2008) presents some critical arguments regarding this analytical option, which puts the burden of the explanation on the scope of head movement in Romance languages, although he does not offer, on the other hand, any solution to the verbal ellipsis parameter. In the next two sections, I offer a new solution to Martins' observation, which, in addition, resolves the more general problem of VP-frozenness in Spanish and related languages (see the question in (10)).

## 3. Generalized restructuring

I would like to suggest that the correlation between clitic placement and the possibility of Aux/V-stranding XP-ellipsis correlates with two ways of composing morphologically complex forms in the syntax or in the morphology: (i) syntactic head movement, or (ii) generalized restructuring at PF. The first option gives rise to some of the languages that, as we have seen, have Aux/V-stranding XP-ellipsis. Now, suppose that languages can make use of other complex mechanisms, one of which is morphological restructuring, that is, the formation of a periphrastic object by means of a morphological relabeling procedure. The notion of *restructuring* has its origin in the theory of Rizzi (1982), according to which Italian has a special complex predicate formation rule that, among other things, would allow to explain the fact that certain modal verbs that take infinitival clauses as complements optionally admit clitic climbing, among other important distributional facts (object preposing, for instance). The phenomenon, as is known, is general in Romance languages. For example, Spanish also supports clitic climbing with some verbs that take infinitive clauses as complements:

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(22) a. Ana quiere comprar<u>lo</u>.
Ana wants buy.INF-CL.ACC.3SG
b. Ana <u>lo</u> quiere comprar.
Ana CL.ACC.3SG wants buy.INF
'Ana wants to buy it.'
```

Very roughly described, Rizzi's theory attributes the difference between the two sentences in (22) to the fact that, in the second, a restructuring rule applies. Such a rule essentially converts a biclausal structure like the one in (22a) into a monoclausal one by forming a complex predicate. This restructuring process, then, induces proclisis. Schematically, the analysis would proceed as shown in (23).

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(23) Restructuring and clitic climbing:

Step #1: [Sentence1 quiere [Sentence2 comprar lo...

Step #2 (restructuring): [Sentence1 [x<sup>0</sup> quiere+comprar] lo ...

Step #3 (clitic climbing): [Sentence1 Lo-[x<sup>0</sup> quiere comprar] ...
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Step 2 should not be confused with any syntactic movement rule. While Rizzi does not elaborate much on the formal aspect of his proposal, he does give several indications that what is at stake in step 2 is a rebracketing process that dissolves the boundary between the two basic sentences. My conjecture is that a restructuring rule can -and should- be generalized to the formation of finite forms in proclitic languages like Spanish or Italian, although the implementation I suggest considerably differs from Rizzi's in many respects. Strictly speaking, at least in the case of synthetic tenses, the process involves two different steps: one of restructuring and another one of

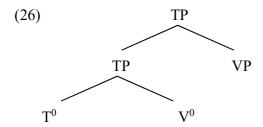
Local Dislocation (in Embick & Noyer's 2001 sense), as I illustrate below (\* = a precedence statement):

- (24) Synthetic verbal forms in proclitic Romance languages:
  - a. Restructuring:  $[TP ... T^0 ... [VP ... V ...]] \rightarrow [TP ... [T^0] [V^0] ... [VP ... ...]]$
  - b. Local dislocation:  $[TP \dots [T^0] * [V^0] \dots \rightarrow [TP \dots [T^0 V + T] \dots$

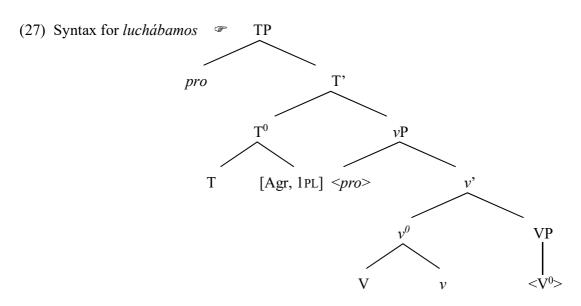
Adopting some aspects of the bare phrase structure model (Chomsky 1995a,b) and the taxonomy of "words" in Embick & Noyer (2001), the rule of restructuring in (24a) could be seen - descriptively speaking- as a case in which a maximal T node dominates two morphosyntactic words in the morphology. The relevant definitions of "word" crucial to the present study are from Embick & Noyer (2001):

- (25) a. Morphosyntactic word: At the input to Morphology, a node  $X^0$  is (by definition) a morphosyntactic word (MWd) iff  $X^0$  is the highest segment of an  $X^0$  not contained in another  $X^0$ .
  - b. *Subword*: A node X<sup>0</sup> is a *subword* (SWd) if X<sup>0</sup> is a terminal node and not an MWd. (Embick & Noyer 2001: 574)

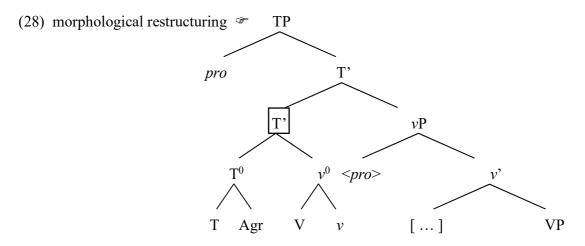
In what follows, I will use the superscript <sup>0</sup> for MWds, nothing for SWds, and XP for maximal projections (equivalent to Chomsky's <sup>max</sup> superscript). More technically, the output of restructuring would then look like follows:



In the case of synthetic tenses, as *luchábamos* 'we used to fight', the idea is that there is, on top of restructuring, a further last step of local dislocation (see (24b)). This is precisely the step that obscures the underlying restructuring mechanism and produces the "illusion" of syntactic head movement. Let's take for granted that something in the spirit of (26) is what underlies the formation of a given synthetic form, for which I propose a derivational stage in the syntax that has to give the result in (27), after *Agree* between  $T^0$  and the subject and after verbal movement from  $V^0$  to  $v^0$  (only assumed for expository convenience). I also assume that the pronominal subject was moved to Spec,TP (a convenient simplification, as well):



In the morphology, restructuring between  $T^0$  and the complex head  $v^0$  applies. Regardless of how restructuring is finally defined, it leaves no trace (which is what [...] indicates in (28)), although superficially it has similar effects to those left by syntactic head movement:

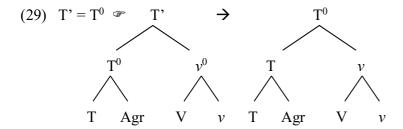


What is the phrasal status of the lower T' in this representation? In bare phrase structure terms, such objects have no theoretical status and must be reduced to maximal or minimal specifications, which are determined by means of their syntactic distribution<sup>3</sup>. From the definition in (25a), if  $T^0$  and  $v^0$  are MWds, then prime = maximal, i.e., it is a TP. Yet, I conjecture that, by virtue of the fixed head status of its daughters, on occasions, PF can read this T' as a MWd (a  $H^{0max}$  object)<sup>4</sup>.

<sup>&</sup>lt;sup>3</sup> Although it seems that the phrasal vs. head status is primitive in some cases. For instance, the notion of complex head or MWd cannot derive from bare phrase structure premises alone. Indeed, Chomsky (1995b) acknowledges this by stipulating an additional level of projection labeled as H<sup>0max</sup>. According to Embick & Noyer, it seems that this level of projection collapses with their MWd, as defined in (25a) (see Embick & Noyer 2001: 574, footnote 23).

<sup>&</sup>lt;sup>4</sup> Note that this phrasal ambiguity is impossible for the higher T' in (28), since in this case, v is maximal (i.e., a vP).

Morphological interpretation of lower T' as a MWd amounts to lowering the categorial status of its daughters, which lose their MWd nature:



I think that having this hybrid status is a general property of many verbal periphrases, whose constituents seem to have a paradoxical distribution, behaving sometimes as compound constituents (e.g., coche-cama 'sleeping car' or lavaplatos 'dishwasher') but also as independent heads in particular environments. I will come to this issue when discussing analytic tenses. For synthetic tenses, as I said, an additional process of Local Dislocation between  $v^0$  and  $T^0$  applies, reordering the output of restructuring. This step, illustrated below, opaques the hybrid nature of restructured  $T^{5}$ :

Finally, at this stage of the morphological derivation, the vocabulary items are inserted through different instances of Vocabulary Insertion, probably concomitantly with the linearization of the SWds contained in  $T^0$ , a process I omit here:

(31) Vocabulary insertion 
$$\mathscr{F}[T^0 \quad v \quad + \quad T \quad ]$$

$$[luch-, V] \quad [\acute{a}, v] \quad [-ba-, T] \quad [-mos, Agr]$$

The externalized result is a simple linear sequence of four morphological pieces, but whose derivational history is much more complex, since it contains, at least, some of the steps that we illustrated from (27) onwards:

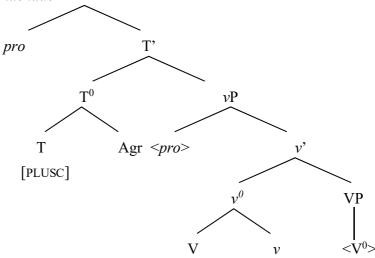
As for analytic tenses, there are only two differences, namely, absence of Local Dislocation and a process of auxiliary insertion, which consists of the insertion of auxiliary *haber* into the T node<sup>6</sup>. But the initial steps are identical. First, consider the syntax of *habiamos luchado* 'we have fought',

<sup>&</sup>lt;sup>5</sup> I am assuming with Embick (2007) that Local Dislocation only makes reference to linearization statements, which are introduced before Vocabulary Insertion. This is not the position in Embick & Noyer (2001), as is well-known.

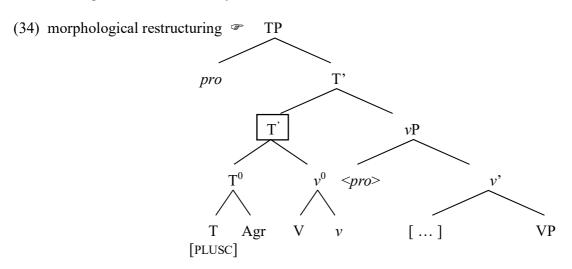
<sup>&</sup>lt;sup>6</sup> Although other alternatives for the realization of *haber* are perfectly compatible with my own assumptions here.

which includes a T node specified for a [PLUSC] feature, the trigger of auxiliary insertion at PF (PLUSC = pluscuamperfecto):

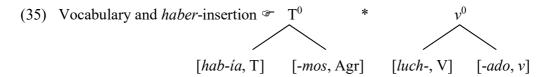
(33) Syntax for habíamos luchado & TP



Restructuring is also identical to synthetic tenses:



As I said, in this case, Local Dislocation does not apply after restructuring. The remaining derivational steps consist of the insertion of *haber* into de T node and Vocabulary Insertion, two steps I collapse in a unique tree for simplification:



Besides the absence of Local Dislocation, analytic tenses, like synthetic ones, also trigger proclisis. Put differently, and in the spirit of Rizzi's original proposal, proclisis correlates with restructuring. The examples in (36) illustrate mandatory proclisis both in synthetic and analytic finite tenses:

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(36) a. Lo hicimos.

CL did

'We did it.'

b. Lo habíamos hecho.

CL had.1PL done

'We had done it.'
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But unlike Rizzi, on my account, restructuring does not reduce any biclausal structure, but essentially applies in already reduced ones. Effectively, along the lines of Wurmbrand (1998), I claim that in cases in which there is optionality in restructuring effects (e.g., proclisis vs. enclisis: *puede hacerlo* vs. *lo puede hacer*), clausal size matters, i.e., non-restructuring predicates are those in which their complements are TPs or CPs, and restructuring ones are those selecting vP or VP complements.

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(37) a. Non-restructuring complements: [poder [CP/TP ... INF ... ]] b. Restructuring complements: [poder [VP/VP ... INF ... ]]
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The restructuring process applies, then, when a given functional head from the T domain has a vP/VP complement. In synthetic and analytic tenses, this is always the case and, consequently, restructuring effects are also always observed. According to Wurmbrand, the size of (non-)restructuring complements is enough to account for classical distributional facts (proclisis and other locality effects), so an additional restructuring rule is unnecessary. Yet, abandoning restructuring as a process of morphological reanalysis misses important generalizations regarding the syntactic distribution of vPs. One of such generalizations is related to what I call here vP-frozenness effects, of which absence of Aux- or V-stranding XP-ellipsis is just an instance (see the introduction). Another related one is vP immobility. Traditional restructuring predicates make the point clear. Consider an optional restructuring verb like poder 'can'. Proclisis vs enclisis is a traditional test to know whether the complement size is CP/TP or vP/VP (under Wurmbrand's theory) or whether restructuring applies (under Rizzi's). Now, it turns out that presence of enclisis or proclisis has crucial effects regarding vP-frozenness. Concretely, the vP can be elided or fronted only under enclisis:

#### (38) Absence of VP-ellipsis under restructuring:

- puede comprarlo Ana también puedo. У yo buy.INF.CL and Ana can I also can b. \* Ana lo puede comprar yo también lo puedo. У can buy.INF I Ana CLand also CLcan 'Ana can buy it and I can too.'
- Absence of VP-fronting under restructuring:
- (39) a. \* Comprar, lo puedo. buy.INF CL can.1SG
  b. Comprarlo, puedo. buy.INF.CL can.1SG
  '...buy it, I can.'

I have still to demonstrate that Modal-stranded ellipsis is indeed ellipsis, but I will relegate that demonstration to the following section. For the time being, let me take the facts for granted and conclude that mere size differences for complements to restructuring predicates are not enough to derive this type of freezing effects. A morphological rule of restructuring seems unavoidable and, as I will show in the next section, assuming it has a beneficial impact in accounting for some aspects of the VP-ellipsis parameter.

At any rate, the crucial conjecture is that restructuring generalizes to synthetic and analytic tenses in Spanish, and probably in other Romance languages. As already suggested, restructuring is mandatory with these tenses, which always select  $\nu$ Ps. Both in synthetic and analytic tenses,  $T^0$  and  $\nu^0$  ends being adjacent MWds  $\nu ia$  restructuring, which is triggered whenever  $T^0$  has a  $\nu$ P complement (it is immediately local to it, in Embick & Noyer's 2001 sense):

(40) <u>Contextual condition</u>: restructuring at PF requires immediate locality between  $T^0$  and  $\nu$ P.

Whenever this condition is not met, restructuring fails and the resulting configuration is filtered out as illicit at PF, for reasons we have still to determine. Descriptively, we can write the following Filter:

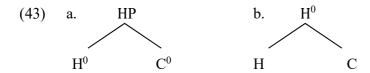
(41) Filter: \*[TP (X<sup>0</sup>) T<sup>0</sup> (Y<sup>0</sup>) [
$$_{vP}$$
 ...  $_{v}$ <sup>0</sup>... ]], unless X<sup>0</sup> =  $_{v}$  or Y<sup>0</sup> =  $_{v}$ 

There are various ways in which the filter in (41) can be understood, although, crucially, it cannot be interpreted as an instance of the Stranded Affix Filter (Lasnik 1981) for two basic reasons: (i) Spanish T<sup>0</sup> is not always an affix (only with synthetic tenses), and (ii) there are cases in which it is indeed stranded or at least too far from its putative verbal host. Therefore, a plausible way to think of (41) is not as a morpho-phonological deficiency of T<sup>0</sup> itself but as a morphological selection failure. Let's assume, for instance, that in addition to syntactic category selection of the type that produces head-complement structures in the syntax, some heads require that the phrasal status of their complement be of the head level at PF. The Spanish tense node is such a category. I call this morphological requirement *Head-Selection*, which I state as follows:

## (42) Head-Selection:

A category  $C^{(0)}$  (i.e., a MWd or a SWd) is head-selected by  $H^0$ , if and only if a projection of H *immediately dominates*  $C^{(0)}$  and  $H^0 \neq C^0$ .

From an abstract point of view, Head-Selection is satisfied by trees like (43a) or (43b). In the first one,  $H^{max}$  immediately dominates  $C^0$ , a MWd (or a category of the  $H^{0max}$  level in Chomsky's 1995b sense). In (43b), another projection of H, now  $H^0$ , immediately dominates C, a SWd in this case. Both alternatives are contemplated under the definition in (42).



Now, I conjecture the following:

(44) In Spanish,  $T^0$  head-selects  $v^{(0)}$ .

This morphological requirement is not satisfied in a regular head-complement configuration. In the bracketed structure in (45), for instance,  $T^0$  immediately dominates vP, not  $v^0$ , so  $T^0$  does not head-selects  $v^{(0)}$ :

(45) \* 
$$[TP T^0 [vP ... [V+v] ...]]$$

Head-Selection is satisfied if  $T^0$  and  $v^0$  are restructured at PF, as suggested in this study:

(46) Generalized restructuring: 
$$[TP T^0 [vP ... [v^0 V+v] ...]] \rightarrow [T^0 V^0 V+v] [vP ... ...]]$$
 (it applies whenever  $T^0$  has a  $vP$  sister. See (40))

Here T' (a  $T^{max}$  projection) *does* immediately dominate  $v^0$ . On this view, restructuring is a way of satisfying selectional requirements imposed at PF. Now, the proposed mechanism of generalized restructuring has two important properties. First, it induces word orders that look like those produced by syntactic head movement (postverbal adverb placement for certain types of adverbs, for example).

Second, and now unlike syntactic head movement or morphological lowering, restructuring produces  $\nu$ P-frozenness, as we have already seen in (39a). As an additional example, consider again the absolute ban of (modern) Spanish  $\nu$ P-fronting with analytic tenses:

Fronting the  $\nu P$  in the syntax bleeds restructuring at PF and gives rise to the illicit configuration that the filter in (41) sanctions, concretely understood here as selectional failure. Importantly, once selection is satisfied at PF,  $T^0$  can be dislocated under very restricted morpho-phonological conditions. In the general case, restructuring produces a verbal periphrasis. For instance, insertion of additional material between the auxiliary and the verb gives ungrammatical results:

Certain adjacency interruptions are allowed in extremely marked contexts, probably related to processes of stylistic reordering at PF. Thus, the reordering in (50a) in which the subject is contrastively marked is marginally accepted for some speakers, in particular when compared to (50b), a canonical instance of subject inversion under contrastive focus:

(50) a. Había PAULA ido. (non-canonical reordering)

had.3SG PAULA gone
b. Había ido PAULA. (canonical reordering)
had.3SG gone PAULA
'PAULA ha gone.'

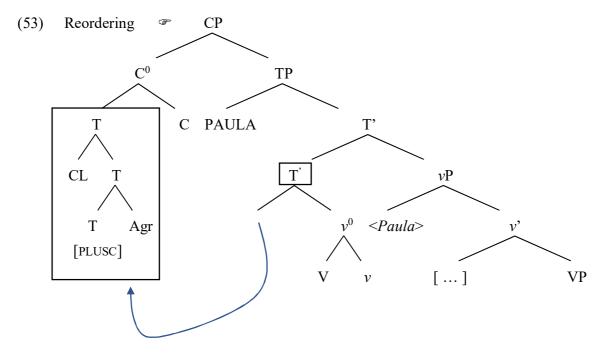
Interestingly, those who tend to accept this stylistic reordering also accept it with proclisis, an indication that this stylistic reordering applies *after* restructuring:

(51) Lo había PAULA comprado.
CL had.3SG PAULA bought
'PAULA had bought it.'

There are, however, important restrictions regarding these marked word order possibilities. For instance, the perfect auxiliary, an unstressed one, does no admit it, confirming the spread intuition that this auxiliary has more the status of a clitic:

(52)a. \*? **PAULA** Ha comprado eso. has **PAULA** bought that Intended: 'PAULA has bought that.' b. \*? ha PAULA comprado. **PAULA** bought has Intended: 'PAULA has bought it.'

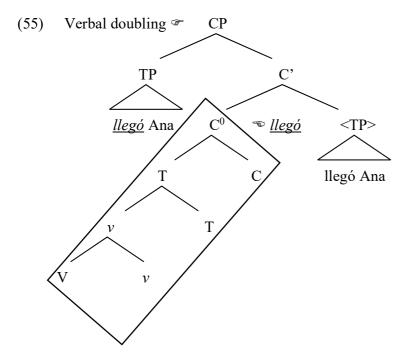
In any case, we have still to determine which grammatical operation is responsible for these marked rearrangements. There are two general lines of inquiry, (i) true syntactic head movement (i.e., head copy) from  $T^0$  to  $C^0$  in another cycle of syntactic derivation after transfer, or (ii) a PF rule of prosodic inversion or cliticization, which perhaps places the  $T^0$  node on a peripheral  $C^0$  head. Whichever be such mechanism, it would output a tree like (53) (assuming both processes happen before linearization):



A perhaps relevant case to evaluate the nature of this type of post-restructuring reordering, and to set apart different analytical options, is verbal doubling in Rioplatense Spanish, which Saab (2008, 2011, 2017) analyzes as a case of multiple copy realization. Illustrative examples are provided below (the underlying indicates prosodic prominence, not to be confused with contrastive focus):

(54)Cerrá puerta, cerrá! a. close.IMP the door close.IMP 'Close the door!' Llegó Ana, b. llegó! arrived Ana arrived 'Ana arrived!' Estás estás! c. loco, are.2sG crazy, are.2sG 'You are crazy!'

The analysis defended by Saab in the aforementioned works proceeds, very broadly, as follows. First, all the examples in (54) consist of mono-clausal underlying structures in which the verb moves high, perhaps to  $C^0$ , and then the entire complement of  $C^0$ , that is, the TP, moves to Spec,CP. The tree in (55) illustrates the analysis in a rather schematic way for a case like (54b):



Now, a remarkable aspect of these constructions is that auxiliaries can be stranded after the pause/comma. Consider, first, the following data set:

(56) a. *Había venido* Ana, *había*. had come Ana had

'Ana had come!'

b.	Voy a	cerrar	<u>la</u>	ventana,	voy.
	go.1sG to	close.INF	the	window	go.1sG
	'I am going	to close the wi		· ·	

c. Fuimos reprimidos los docentes, fuimos.
were.1PL repressed the teachers were.1PL
'We teachers were repressed!'

These are all cases of verbal periphrases in which only the initial element survives in the right copy after the comma. To my knowledge, this is the only case in Spanish in which auxiliaries can be fully isolated/stranded. As we already know, we do not find similar grammatical examples in contexts of short fragment answers or coordinated structures, not even marginally acceptable:

(57)	A:	~		eseñado eviewed		-				
	B: *	Yo I	había. had			1				
(58)			reseñado reviewed		<i>Capit</i> Capita		,	Paula Paula	también also	había. had

The question, then, is what makes the stranded auxiliaries licit in (56). If the considerations made in this section are minimally correct, in (56) there is a process of post-restructuring movement/dislocation, maybe the same mechanism that allows for the non-canonical rearrangements in (50). But before taking any analytical decision, there is more to be said about the interaction between verbal doubling and auxiliary stranding. Consider, for example, that some of the sentences in (56) admit alternatives with repetition of the full verbal periphrasis:

(59)	a.	Había venido Ana, había had come Ana had 'Ana had come!'			venido. come					
	b.	•	cerrar close.I	NF		ventana, window	<i>voy</i> go.1sg	a to	cerrar.	
		'I am going to	o close t	he winc	low!´					

The alternation between (56) and (59) is fascinating for several reasons. On the one hand, it shows, as I have already advanced, that there are syntactic environments in which Spanish admits stranded auxiliaries. But on the other hand, the same type of construction does not block the possibility of generalized restructuring. As suggested, on the basis of these facts, one would be tempted to conclude that the underlying mechanism that rules in the stranded material in verbal doubling is identical to the one that produces the non-canonical orders in (50a) and (51), repeated below:

(60)	a.	Había		PAULA		ido.	
		had.3s	G	PAUL	A	gone	
		'PAULA ha		gone.'			
	b.	Lo	había		<b>PAUL</b>	A	comprado.
		CL	had.3s	5G	Paula		bought

## 'PAULA had bought it.'

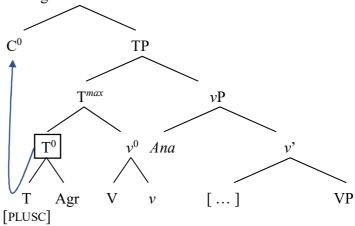
However, it turns out that verbal doubling does not admit stranding of the CL-auxiliary sequence with exclusion of the past participle:

```
(61)
      a.
              *Lo
                           había comprado
                                                Ana,
                                                       lo
                                                                     había.
             CL.ACC.3SG
                           had
                                  bought
                                                       CL.ACC.3SG
                                                                     had
                                                Ana
      b.
                           había
                                  comprado
             Lo
                                                Ana,
                                                       lo
                           had
                                  bought
             CL.ACC.3SG
                                                Ana
                                                       CL.ACC.3SG
             había comprado.
                    bought
             had
              'Ana had bought it!'
```

Thus, we face the paradoxical fact that CL-auxiliary sequences can be isolated from the past participle in cases of non-canonical word orders as (60b), but not in verbal doubling environments. As far as I can tell, this is a novel observation. I will not attempt to give any definitive solution to this problem, but only highlight that post-restructuring movements/dislocations might have different sources. On my view, verbal doubling is amenable to an analysis according to which an entire MWd is placed on C<sup>0</sup>. This placement can be implemented in the syntax after restructuring, depending on many assumptions regarding transfer and the Phase Impenetrability Condition (Chomsky 2000, 2001), or in PF through an instance of *amalgamation*, along the lines suggested by Harizanov & Gribanova (2019). Non-canonical inversions like those in (60b), instead, are an instance of stylistic reordering at PF, a post-syntactic operation that manipulates phonological words and not directly MWds. This is why stylistic reordering can break the internal constituency of verbal periphrasis, but verbal doubling cannot. Importantly, neither non-canonical reordering or verbal doubling affect head-selection by T<sup>0</sup> through restructuring, because both happen late, after restructuring. Therefore, it seems that (syntactic or morphological) movement after restructuring is attested, as expected under the theory I am sketching here. What the system prohibits is vPmovement or T<sup>0</sup> movement before restructuring, and the reason, as suggested, is that both movements would bleed the context for restructuring with the dramatic selectional failure already discussed.

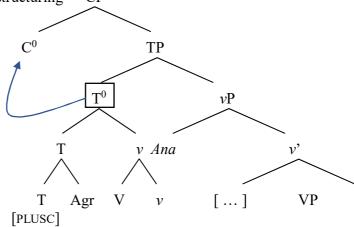
To conclude this section, and for explicitness' sake, I show how the present system derives verbal doublings with auxiliary-stranding or periphrasis-stranding. This is important, because an essential property of restructuring is that it delivers objects with perplexing phrasal properties. In effect, we have seen that periphrasis are hybrid objects. The result of restructuring is that the lower T' in a tree like (34) ends dominating two MWds, with the consequence that T' is read as max or as a MWd, depending on conditions that must be determined after syntax. This ambiguity allows for two types of verbal doublings. Recall that one crucial requirement of these doublings is that  $T^0$  cliticizes onto  $C^0$  (or another higher projection of the C domain). If T' = max, then verbal doubling outputs an auxiliary stranded sentence by placing  $T^0$  in  $C^0$ , as shown in (62):

- (62) a. Había venido Ana, había. had come Ana had 'Ana had come!'
  - 'Ana had come!' b. Placing  $T^0$  in  $C^0$  after restructuring  ${}^{\mbox{\tiny \ensuremath{\sigma}}}$  CP

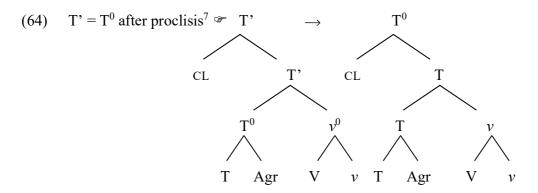


If, on the contrary,  $T' = T^0$ , then full periphrasis reduplication is obtained:

- (63) a. Había venido Ana, había venido. had come Ana had come 'Ana had come!'
  - 'Ana had come!' b. Placing  $T^0$  in  $C^0$  after restructuring  ${}^{\text{ce}}$  CP

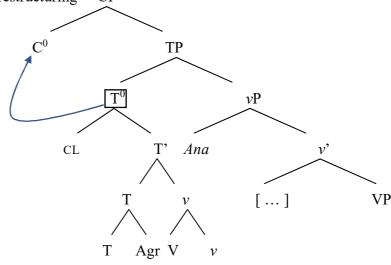


Crucially, proclisis, which involves a head clitic attached to lower T', requires that T' be labeled as  $T^0$ :



This obviously impacts in the derivation of verbal doubling sentences, which now cannot give rise to auxiliary stranding, but to stranding of the full verbal periphrasis:

- (65)a. \*Lo había comprado había. bought CL.ACC.3SG had CL.ACC.3SG had Ana b. Lo había comprado Ana, lo had bought CL.ACC.3SG Ana CL.ACC.3SG había comprado. bought had 'Ana had bought it!'
  - c. Placing T<sup>0</sup> in C<sup>0</sup> after restructuring PCP



Summarizing, in this section I have illustrated how the Generalized Restructuring Theory should look like from a broad perspective. The basic idea is that in languages of the Spanish type  $T^0$  and  $v^0$  always form a periphrasis through morphological restructuring. The operation is triggered by selectional requirements of  $T^0$ , which in addition to select vP in the syntax, must also be in a stricter locality relation with the head of such a vP at PF. The effects of restructuring are obscured in synthetic tenses by a further instance of Local Dislocation with merges  $v^0$  into  $T^0$ . Yet, there is still

<sup>&</sup>lt;sup>7</sup> Probably, the clitic and T are subject to an additional instance of *leaning* (i.e., vacuous string displacement), as defined by Embick & Noyer (2001), but this is of no particular interest here.

a weak residual effect of restructuring, which is uniform proclisis in finite tenses. In the case of analytic tenses, or other verbal periphrasis not contemplated here, restructuring effects are easier to detect. Shortly, we observe:

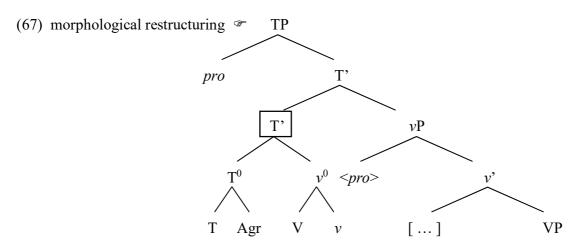
- (66) a. uniform proclisis in finite tenses
  - b. lack of syntactic autonomy of the vP, i.e., vP-frozenness effects
  - c. adjacency effects between the auxiliary and the past participle, only disrupted by very constrained operations affecting  $T^0$  and  $C^0$  after restructuring

The focus of this study is on property (66b), which is at the core of the VP-ellipsis parameter in Romance. Effectively, in languages with generalized restructuring the system prohibits Aux- or V-stranding XP-ellipsis as a subcase of vP-frozenness. In what follows, I unfold the details of such a conclusion and other important implications and predictions for the theory of verbal ellipsis and verbal morphosyntax.

## 4. Generalized restructuring and the VP-ellipsis parameter

4.1. Deriving Martins' Generalization and VP-frozenness from the Ellipsis-Morphology Generalization

Let's, then, come back to the crucial derivational point of restructuring in (28), repeated below as (67):



I understand that it is exactly at this point where it is possible to draw the dividing line in terms of what could be the beginning of an explanation of the correlation observed by Martins (1994), repeated below (see (15)):

(68) <u>Martins' Generalization (to be revised)</u>: If a Romance language has enclisis as the byproduct of syntactic head movement, then the language also has verbal ellipsis.

Let us assume that Portuguese and Galician are languages that, unlike most of their other Romance relatives, do in fact have head movement in the syntax, regardless of whether such movement is

head movement by adjunction or plain phrasal movement<sup>8</sup>. To my understanding, this difference is essential and its consequence can be expressed as follows: syntactic ellipsis of the type traditionally known under the rubric of *verbal ellipsis*, *nominal ellipsis*, etc. cannot be affected by any type of syntactic movement. In other words, moving/copying and then eliding all or part of the sentence that contains the traces / copies of the moved element is a perfectly licit result, as long as other possible variables are considered. All that has been said is equivalent to supporting the thesis that ellipsis does not affect syntactic movement and vice versa. However, this is not the case when it comes to evaluating other types of interactions involving morphological processes that, given the design of the grammar assumed here, always "come after" syntactic ellipsis. The following figure, in which the timing of the movement is plotted in relation to the ellipsis operation, makes the point even more evident:

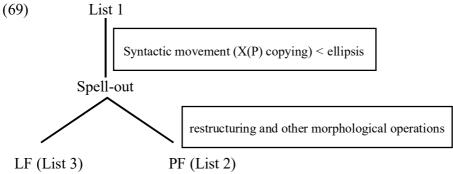


Figure 1. Timing and interactions between ellipsis and other grammatical operations

The languages that I call *proclitic* are languages, then, in which the formation of finite forms has been "morphologized" entirely. This creates certain opacity effects that are not always easy to detect. One, which I have already pointed out, involves the null autonomy that verb phrases have in proclitic Romance languages (see (66b)). Unlike Portuguese, Spanish, as we have seen in the previous section, does not have *v*P-fronting with stranded auxiliaries:

This (im)possibility of vP-fronting has led some researchers to suspect that perhaps the relevant correlation behind the parameter of verbal ellipsis can be formulated as an implication of the type: if a language has vP-fronting, then it has verbal ellipsis (see Johnson 2001 and Authier 2011). For instance, according to Johnson, vP-ellipsis involves topicalization through A'-movement of a null vP; therefore, for a language to have verbal ellipsis, it must first have an independent operation of vP-fronting, a non-existent operation in Spanish and, apparently, in all languages without verbal ellipsis (in contradiction to the position of Vicente 2007, cf. Saab 2017). Yet, to my knowledge, there is not enough evidence for the postulation of a null topicalization operation. In my view,

<sup>8</sup> I will not discuss the many analytical options discussed in the literature regarding the nature and taxonomy of head movement. See, among others, Matushansky (2006), Vicente (2007), Arregi & Pietraszko (2018, 2021), and Harizanov & Gribanova (2019) for different approaches.

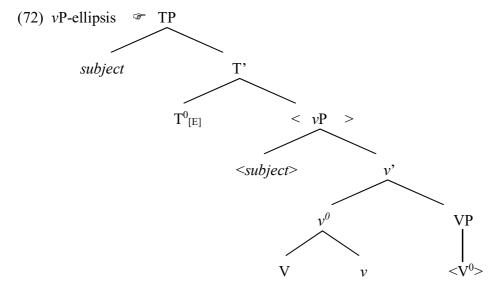
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what happens is that  $\nu$ P-fronting prevents generalized restructuring as outlined here (see the previous section). Let me put the conclusion we reached from the previous section into a broader perspective.

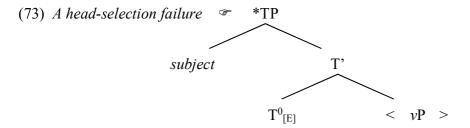
As it is clear, the key property is vP-frozenness (see (66b)), which put absence of vP-fronting and vP-ellipsis as a side effect of the interaction between head-selection by  $T^0$  and restructuring: bleeding the context for restructuring produces a non-convergent output at PF by virtue of a head-selection failure. Put differently, vP-frozenness is deduced from the timing of the ellipsis graphed in Figure 1, according to which ellipsis, a syntactic operation, can destroy the context for other operations coming after. Focusing now only on absence of vP-ellipsis, it would seem that this lack is a consequence of some version of the Ellipsis-Morphology generalization from Saab (2008) and Saab & Lipták (2016):

(71) <u>Ellipsis-Morphology Generalization (Elmo)</u>: For every morphological operation MO that affects the domain of X, where X contains the target of MO, MO cannot apply in X if X is subject to ellipsis.

For the case at hand, Elmo predicts that a possible instance of verbal ellipsis in languages like Spanish blocks restructuring. Indeed, this is so, because in Spanish the verbal base, the target of a morphological operation (in this case, generalized restructuring), is also contained within an elliptical site, the  $\nu$ P. To see this point more clearly, let's assume that Spanish has the option of  $\nu$ P-ellipsis, which for convenience I implement in terms of the [E]-feature theory briefly discussed in section 2:



By the Elmo in (71),  $T^0$  and  $v^0$  cannot be restructured, a situation that leads to a non-convergent output in which the head-selection requirement of  $T^0$  is not satisfied:



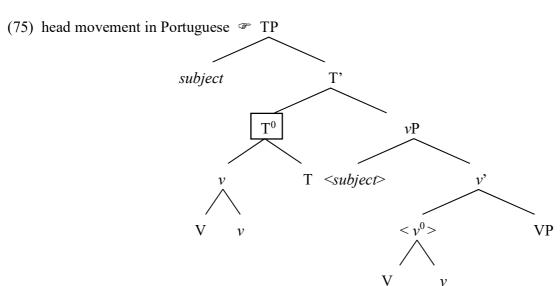
Effectively, as the reader can check by herself, this result bleeds head-selection of  $v^0$  by  $T^0$ :

# (74) <u>Head-Selection</u>:

a. A category  $C^{(0)}$  (i.e., a MWd or a SWd) is head-selected by  $H^0$  if and only if a projection of H *immediately dominates*  $C^{(0)}$  and  $H^0 \neq C^0$ 

b. In Spanish,  $T^0$  head-selects  $v^{(0)}$ .

In summary, the absence of head stranding ellipsis is explained by the interaction between morphological selection and ellipsis. In turn, in languages like Portuguese, syntactic head movement applies before ellipsis (as follows from Figure 1):

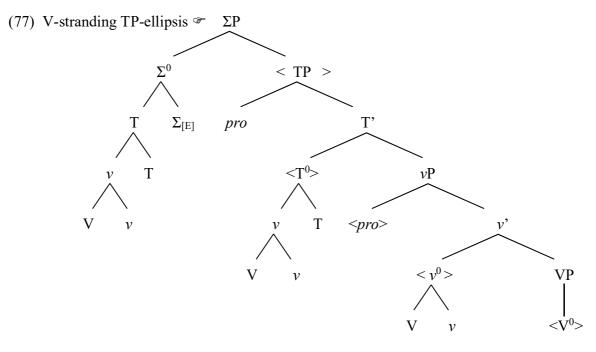


All things being equal, V-stranding ellipsis is predicted as possible depending on V's final position. That V-stranding TP-ellipsis is allowed in languages like Portuguese seems beyond any doubt. Short answers in which the verb head-moves to  $\Sigma^0$  or some related polarity position are massively attested, as noted originally by Martins (1994) (see also subsequent work by the author, in particular, Martins 2007 and 2013):

(76) A: Você deu o livro pra Ana? you gave the book to.the Ana 'Did you give the book to Ana?'

B: Dei, sim <[TP] o livro pra Ana]>.
gave.1PL yes the book for Ana
'Yes, I did.'

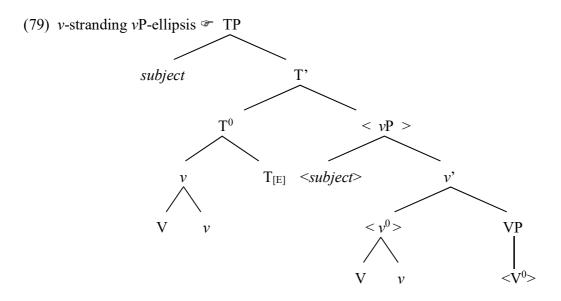
A more detailed analysis is deployed in the following tree, in which there is syntactic head movement from  $V^0$  to  $\Sigma^0$  followed by TP-ellipsis:



In addition, an important part of the literature has argued that the language also has V-stranding  $\nu$ P-ellipsis (i.e., Cyrino & Matos 2002, 2005, Nunes & Zocca 2009, among others):

Pedro também (78)Eu dei livro Maria e deu. um pra I gave book for Maria and the Pedro also gave 'I gave a book to Maria and Pedro also did.' (Nunes & Zocca 2009: 182)

The tree in (79) graphics how a *v*-stranding *v*P ellipsis structure looks like:



Again, all things being equal, my analysis of Portuguese as a syntactic head movement language predicts absence of vP-frozenness effects of the type attested in Spanish. Yet, recently, Landau (2020b) has argued that *not all things are equal* when it comes to evaluating the possible existence of v-stranding vP-ellipsis across languages. Concretely, he states the following general constraint of Head-Stranding Ellipsis:

(80) Constraint on Head-Stranding Ellipsis
If X-movement crosses a Spell-out domain, XP cannot be the target of ellipsis.

(Landau 2020b: 289)

I will not enter into the theoretical motivations Landau provides for deriving this observation. I content myself in noting that according to his viewpoint, Portuguese could have V-stranding TP-ellipsis of the type illustrated in (76), but not  $\nu$ -stranding  $\nu$ P-ellipsis as illustrated in (78). As it is clear,  $\nu$ -movement out of  $\nu$ P, such that  $\nu$ P is a spell-out domain, triggers the conditions for the constraint in (80). Of course, Landau's constraint does not rule out the existence of true Aux-stranding  $\nu$ P-ellipsis. And indeed, the phenomenon is attested in the language. I have already presented an example in (3), repeated as (81a), but many other auxiliaries license Aux-stranding  $\nu$ P-ellipsis in the language:

(81)a. A Ana tinha lido Paula também tinha. este livro e a Paula also the Ana had read this book and the had 'Ana had read this book and Paula had too.' Ana vai estudar eu também. vou will study.INF Ana I will also and 'Ana will study and I will too.' estudando Ana está também c. e eu estou. Ana is studying and Ι also am 'Ana is studying and I am too.'

Aux-stranding TP-ellipsis is also attested, as the following examples illustrate:

```
(82) A: A Ana tinha lido este livro? the A. had read this book 'Had Ana read this book?'
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B: Tinha, (sim). had yes 'Yes, she had.'

(83) A. Ana vai estudar?

Ana will study.INF

'Will Ana study?'

B. Vai, (sim). will yes 'Yes, she will.'

So, there is full consensus regarding the existence of head-stranding ellipses of at least three kinds in the language: Aux-stranding vP-ellipsis or vP-ellipsis, or vP-ellipsis. The point of controversy is the existence of v-stranding vP-ellipsis, which, as we have already seen, could not exist across languages, at least according to Landau. Such controversy is the byproduct of what seems contradictory empirical evidence. For instance, the absence of missing antecedents with creation verbs in languages like Hebrew, Hindi or Portuguese is, Landau argues, conclusive evidence against the existence of v-stranding vP-ellipsis $^9$ :

(84)0 João escreve poemas desespero. por the João writes out.of despair poems O Pedro não escreve. # Os dele são alegres. the Pedro not writes those of.him are cheerful

'João writes poems out of despair. Pedro doesn't write (poems). His are cheerful.'

(Landau 2020a: 334)

Other putative evidence to the contrary is reassessed by Landau (2020a) (for instance, adjunct inclusion effects or the verbal identity requirement), who concludes that either it is spurious evidence or is fully compatible with an argument ellipsis analysis, according to which, instead of eliding the full  $\nu$ P, the relevant languages can elide individual arguments independently (PPs, direct and indirect objects and so on). I do not agree with the radical conclusion about the universal inexistence of  $\nu$ -stranding  $\nu$ P-ellipsis and I do not share either the way in which the evidence is evaluated by Landau. In general, negative results for tests stated in conditional form are largely inconclusive, as we all know. Therefore, the only thing one can effectively conclude from facts like those in (84) is that they do not support a  $\nu$ -stranding  $\nu$ P ellipsis analysis, not that the language lacks the relevant mechanism of deletion. In turn, the existence of other facts, largely expected under the  $\nu$ -stranding  $\nu$ P-ellipsis analysis, are not convincingly refuted by Landau. Consider the fact of adjunct inclusion in cases like this one:

\_

<sup>&</sup>lt;sup>9</sup> Crucially, the missing antecedent reading appears when only *não* 'not' is stranded (i.e., *O Pedro não*), indicating that there is a true instance of ellipsis in this case, probably, TP-ellipsis.

 $<sup>^{10}</sup>$  See Portelance (2020) on Lithuanian and Gribanova (2020) on Uzbek for recent evidence in favor of genuine instances of  $\nu$ -stranding  $\nu$ P-ellipsis.

(85)Mané limpou banheiro cuidadosamente 0 o Mané cleaned the bathroom carefully the Mara também limpou banheiro <0 cuidadosamente> e a Mara also cleaned the bathroom carefully and the 'Mané cleanded the bathroom carefully and Mara also did.'

(Tescari-Neto 2012: 154)

Here, as it is very well-known, the sentence in the second conjunct is read including the modification the adjunct introduces (or is strongly interpreted as such). Yet, Landau argues that "sentences constructed with too or also are not informative with regard to the syntactic issue of adjunct inclusion, because they very easily facilitate and even favor that reading solely for pragmatic reasons" (Landau 2020a: 353). But this is incorrect. If it were on track, adjunct inclusion would be a broader phenomenon cross-linguistically, but it is not. Consider the following sentence in Spanish:

limpió e1 baño cuidadosamente (86)Ana cleaned the bathroom carefully Ana Pedro también limpió el baño. y Pedro also cleaned the bathroom and

'Ana cleanded the bathroom carefully and Pedro also cleaned the bathroom.'

There is no entailment that Pedro cleaned the bathroom carefully; Pedro just cleaned the bathroom. Therefore, the adjunct inclusion reading is not allowed here or is strongly disprefered. Of course, Spanish is a language without VP-ellipsis or definite null objects, but by Landau's reasoning, the mere inclusion of también 'also' in the sentence should "easily facilitate and even favor that reading solely for pragmatic reasons" 11. In addition, consider the fact that the same absence of adjunct inclusion is attested in null bare object constructions, a construction that Spanish does permit:

(87)A. Yo ahorro plata religiosamente. money religiously safe 'I safe money religiously.' В. también Yo ahorro. also safe 'I also safe money.'

Again, there is no adjunct inclusion reading, and now even in the presence of an object gap in the underlying structure. Similar conclusions obtain in cases of secondary predication, a fact not discussed by Landau. Consider the following sentence from Brazilian Portuguese:

(i) cuidadosamente pero no but carefully not

Otherwise, the sentence feels pragmatically awkward, against Landau's expectations.

<sup>&</sup>lt;sup>11</sup> Interestingly, what the presence of *también* does in cases like this is forcing a continuation of the type:

roqueiro canta bêbado, (88)Esse não mas aquele canta <... bêbado ...> this rocker NEG sings drunk, but sings drunk 'This rocker doesn't sing drunk, but that one sings drunk.'

(Panitz 2019: 65)

Translating this sentence into Spanish does not allow for a reading in which the second rocker sings drunk. Moreover, adding *también* in a similar construction does not help to get the relevant reading. Indeed, the sentence in (89) is pragmatically rare because of the inclusion of *también* that, against Landau's expectation, does not force or favor the reading according to which I sing drunk (I have added a possible continuation with *pero* here; see footnote 11):

(89) Ana canta borracha y yo también canto, pero...

Ana sings drunk and I also sing but

'Ana sings drunk and I sing too, but....'

Since the difference between Spanish and Portuguese cannot be pragmatic (how could it be?), there are only two alternatives to consider, namely: (i) either Portuguese has *v*-stranding *v*P-ellipsis, or (ii) in addition to allow argument omission for any type of argument, the language also allows for predicate and adjunct omission. But of course, the second alternative makes no sense and can be easily rejected on the basis of facts like the following ones, in which there is no secondary predication or adjunct inclusion in each of B's replies:

- (90) A: Ana foi para a festa bêbada. Ana went to the party drunk 'Ana went to the party drunk.'
  - B: Paula também foi para a festa.
    Paula also went to the party
    'Paula went to the party, too.'
- (91) A: Eu vou consertar cuidado. meu carro com will fix my car with care 'I will fix my car carefully.'
  - B: Eu também vou consertar meu carro. I also will fix my car 'I will fix my car, too.'

I think that, after all, there are reasons to think that perhaps Portuguese, in addition to Auxstranding vP-ellipsis, has v-stranding vP-ellipsis, as well. But of course, then, an analysis along these lines must account for absence of the missing antecedent readings in cases like (84) and related ones (discussed by Landau 2020a). I will not make any attempt to resolve the apparently contradictory nature of the empirical evidence here, but just keep myself on the safe side and assume that Portuguese has at least Aux-stranding vP/TP-ellipsis, V-stranding TP-ellipsis and probably v-stranding vP-ellipsis. A different conclusion, e.g., Portuguese does not have v-stranding vP-ellipsis, does not alter my main point regarding the interaction between X-stranding ellipses and verbal morphosyntax. And as for this interaction, the facts discussed so far clearly point out to the conclusion that the presence of verbal ellipsis in Portuguese reduces in part to absence of

vP-frozenness effects. Thus, the language allows both for vP-fronting and vP-ellipsis (see the relevant examples repeated below), in clear contradistinction to proclitic languages:

(92)a. e estudado, еи tinha < estudado and studied I had studied b. A Ana tinha lido este livro a Paula também tinha. the Ana had read this book the Paula also had and 'Ana had read this book and Paula had too.'

On the present account, absence of freezing effects with respect to the  $\nu P$  correlates with absence of morphological head-selection by  $T^0$  (cf. (74)):

# (93) <u>Head-Selection</u>:

a. A category  $C^{(0)}$  (i.e., a MWd or a SWd) is head-selected by  $H^0$ , if and only if a projection of H *immediately dominates*  $C^{(0)}$  and  $H^0 \neq C^0$ .

b. In Spanish,  $T^0$  head-selects  $v^{(0)}$ .

The direct consequence is that the language does not restructure  $T^0$  and  $v^0$  at PF. Synthetic tenses are formed, then, by syntactic head movement. European Portuguese shows enclisis as a byproduct of (long) head movement (at least according to Martins), but, as is well-known, Brazilian Portuguese is losing third person clitics and first and second clitics are proclitics. In any case, the language has verbal movement according to classical tests, as manner adverbs follow verbs canonically:

(94) O João acabou [Adv completamente]  $t_V$  seu trabalho. the Juan finished completely his work 'John completely finished his work.'

(Galves 1994: 46 apud Landau 2020a: 350)

In view of what I have argued through this paper, the moral is that canonical head movement tests must be complemented now with absence or presence of freezing effects for the  $\nu P$ . Thus, both Spanish and Portuguese look very similar regarding V-raising effects, but only Spanish shows, in addition,  $\nu P$ -frozenness. In clear contradistinction, English is a language without head-selection by  $T^0$ , but also without verb raising.

Let me conclude this section by coming back to the original question that frames this study:

(95) Why does Spanish not have ellipsis of the auxiliary or verb stranding type?

I have provided explicit reasons for this lack. To repeat, Spanish is a generalized restructuring language. This means that a process of morphological verbal composition, triggered by morphological needs (Head-Selection), places  $T^0$  and  $v^0$  under a projection of  $T^0$  itself, giving rise to what we descriptively call a *verbal periphrasis*. This restructuring requires  $T^0$  and  $v^0$  locality as a contextual condition (see (40)). Therefore, any attempt to move or delete the  $v^0$  in the syntax bleeds restructuring at PF with the dramatic consequence that  $T^0$ 's selectional requirement is not satisfied at PF, leading to a non-convergent output at that interface.

Now, if something along the lines of what I have argued here is on the right track, then Martins' observation must be revised by making reference not to enclisis or head movement, but to restructuring.

(96) <u>Martins' Generalization (revised)</u>: If a Romance language has T<sup>0</sup> and v<sup>0</sup> restructuring, then the language shows vP-frozenness effects (i.e., absence of vP-ellipsis or vP-fronting).

Note that this not just a restatement of Martins' generalization. By avoiding any reference to head movement, the new formulation captures Martins' intuition that there is a correlation between clitic placement and ellipsis, but only in an indirect way. First, as stated now, the observation remains neutral regarding possible interactions between head movement and ellipsis. As I have already said, there is no expectation that head movement licenses ellipsis (although see Thoms 2011and below for a theory that strongly correlates movement to ellipsis); it is just that head movement cannot sanction or affect ellipsis of the domain containing the trace of the moved head, at least *a priori* (see the discussion around (80)). In order to obtain what I think is the only robust conclusion, Martins' observation must be inverted: it is restructuring, an operation triggering proclisis, what blocks ellipsis (or *v*P-movement). By stating the observation in this way, we obtain a more faithful representation of the basic facts, but, in addition, we also make an important prediction. Concretely, the theory predicts that V-stranding XP-ellipsis should be allowed even in Spanish whenever restructuring is not required. In the next section, I turn my attention to the paradoxical distribution of modal ellipsis in this language to conclude that those paradoxical effects vanish under the present analysis.

#### 4.2. Modal ellipsis and optional restructuring

As advanced, the theory that I am outlining resolves a series of paradoxical effects related to the possible existence of modal ellipsis in the language. As it is known, Spanish, while not displaying verbal ellipsis of the type that occurs productively in Portuguese or English, does have null predicate complements with certain verbs traditionally cataloged within the class of restructuring verbs, like *poder* 'can' or *querer* 'to want':

- (97) a. Ana pudo hacerlo y Paula también pudo.
  Ana could do.INF-CL and Paula also could 'Ana was able to do it and Paula was able too.'
  - b. Ana quiere ir al cine y Paula también quiere.
    Ana wants go.INF to.the movies and Paula also wants
    'Ana wants to go to the movies and Paula also wants to.'

The nature of the silence in the sentence in (97) is controversial, although the received view, in particular, since Depiante (2000, 2001), is that they are null anaphora complements (NCA), that is, some kind of deep anaphora. Depiante's analysis has roughly this form, in which  $\emptyset$  stands for a null proform:

(98) Juan pudo hacerlo y María también pudo ø. Juan could do.INF-CL and María also could 'Juan was able to do it and María also was able to.'

The strongest evidence that Depiante uses in favor of this analysis has to do with two effects related to the restructuring process. The first is that, although (98) is perfectly licit, any attempt to raise the clitic in the second conjunct is frankly ungrammatical, regardless of the presence or absence of restructuring in the first conjunct:

```
(99)
       a. *
              Juan
                     pudo
                            hacerlo
                                                  María también lo
                                                                       pudo.
                                          y
              Juan
                     could do.INF-CL
                                          and
                                                  María also
                                                                       could
                                                                CL
                            quiso hacer, aunque
                                                         finalmente
                                                                       no (*
       b.
              Ana
                     10
                                                                              lo)
                                                                                     pudo.
                            wanted do.INF although
                                                         finally
                                                                                     could
              Ana
                     CL
                                                                       not
                                                                              CL
              'Ana wanted to do it, although finally she was not able to.'
```

The second fact is related to the impossibility of having NCA in cases of object preposing. For Italian, Rizzi (1982) already observed that restructuring allows for the object of the infinitive to agree with the restructuring verb. The same happens in Spanish in contexts of the so-called passive *se* construction:

```
(100) a. Se puede(n) vender estos libros fácilmente.

SE can.(PL) sell.INFthese books easily

b. Estos libros se pueden vender fácilmente.

these books SE can.PL sell.INFeasily

'These books can be sold easily.'
```

Note that in postverbal position the plural object *estos libros* may or may not induce agreement with the modal verb, but, in cases of object preposing, agreement is mandatory, as shown by the contrast between (100b) and the following ungrammatical sentence:

```
(101) * Estos libros se puede vender fácilmente. these books SE can.SG sell.INFeasily
```

At any rate, agreement with the modal indicates restructuring, obligatory in the case of object preposing or optional in cases of canonical postverbal objects. Now, Depiante notes that, in object preposing contexts, NCA is illicit:

(102) *	Estos	libros se	pueden	vender	fácilmente	У
	these	books se	can.PL	sell.INF	easily	and
	estas	revistas	también	se p	ueden.	
	these	magazines	also	SE C	an.PL	

According to Depiante's account, the two aforementioned effects are the byproduct of the atomic nature of null anaphoric complements, which lack internal structure and, consequently, cannot contain either clitics or internal objects to extract. In effect, if the silent complements of certain restructuring verbs were cases of ellipsis, we would expect that both clitic climbing or object preposing would be as licit operations as they are in the non-silent counterparts of the same sentences. Depiante's reasoning is impeccable, but incomplete. Indeed, Saab (2008) showed that other types of extractions are perfectly licit with modal verbs such as *poder* or *querer*:

```
(103) a.
                      estudiante
                                                            quisiste
                                                                           desaprobar
               La
                                             la
                                                     que
                                                                           fail.INF
               the
                      student
                                                     that
                                                            wanted
                                     DOM
                                             the
                      la
                              estudiante [
                                                     la
                                                                           pudiste
               y
                                                            que
                                                                   no
                              student
                                                                           could.2sG
                      the
                                                    the
                                                            that
               and
                                             DOM
                                                                   not
                      desaprobar t≥]
                                             presentaron
                                                            ambas una
                                                                           queja.
                      fail.INF
                                                                           complaint
                                             filed
                                                            both
```

'The student who you wanted to fail and the student who you were not able to filed both a complaint.'

```
b.
       A
              Ana,
                     puedo
                                   desaprobarla,
                                                       pero [ a
                                                                     Paula no
                                   fail.INF-CL.ACC.3SG
                                                                     Paula not
       DOM
              Ana
                     can.1SG
                                                              DOM
              desaprobarla >]
puedo <
              fail.INF
can.1SG
```

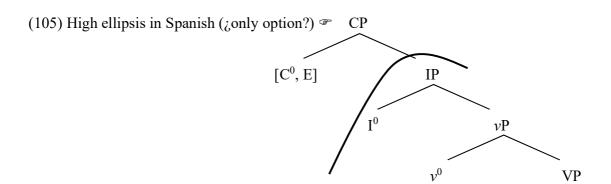
'Ana, I can fail her, but Paula, I cannot.'

The first example is a case of relativization by means of an explicit relative operator like *la que*. The second is a case of topic extraction. Both the relative operator and the topic are differentially marked with a. By uniformity considerations, such differential marking has to be obtained in the same way it obtains in the non-elliptical counterparts of the same sentences. The bottom line is that the silent sites in (103) must contain underlying structures and cannot be treated as atomic proforms. Put differently, it has to be the case that we are dealing with cases of modal-stranding XP-ellipsis.

This is the same conclusion that Dagnac (2010) and, very recently, Fernández-Sánchez (2021) reach. In addition, Fernández-Sánchez claims that examples such as those of (99) and (102) are ungrammatical for the simple reason that Spanish does not have VP-ellipsis. His key assumption is that the difference between restructuring and non-restructuring predicates is not in a Rizzi-style rule, but rather in a "size difference", as argued originally by Wurmbrand (1998). Indeed, as commented in section 3, Wurmbrand argued that the effects of Rizzi's rule can be understood in terms of different projection levels in the functional spine of nonfinite complements. In her terms, restructuring verbs are ambiguous between a structure that contains at least one TP or CP projection and a smaller structure that only projects one vP or VP.

```
(104) a. Non-restructuring complements: [poder [CP/TP ... INF ... ]]
       b. Restructuring complements: [poder [vP/VP ... INF ... ]]
```

Greater or lesser functional structure would correspond, then, to other typical effects traditionally attributed to Rizzi's restructuring rule. For example, clitic climbing or object preposing are only licit in configurations in which no sentence boundary intervenes, which is the case in (104b). According to Fernández-Sánchez, these are precisely the configurations in which Spanish does not have modal ellipsis. In other words, the author's explanation belongs to that family of lexicalist theories of ellipsis licensing, according to which whether or not a phrase of any category type can be elided depends essentially on some idiosyncratic lexical property of the [E]-bearing head. From this point of view, Fernández-Sánchez ascribes to the idea outlined in the tree of (13), repeated below:



More specifically, Spanish only admits ellipsis of an inflectional phrase, perhaps TP, or even some higher category. Of course, as the author himself acknowledges, this returns us to the original problem of the verbal ellipsis parameter without much novelty. In principle, as I have already argued, this cannot be evaluated conceptually. After all, languages have idiosyncratic phenomena that any grammatical theory must simply list. The problem, in this case, is that a lexicalist explanation such as the one that Fernández-Sánchez suggests does not allow capturing the entire set of properties that I listed in (66). For example, a Romance language with uniform proclisis and Aux- or V-stranding XP-ellipsis of the type productively attested in different dialects of Portuguese and Galician would be quite to be expected, contrary to the facts. On my explanation, as we have already seen, proclisis in the set of relevant finite forms is a definitive indication of morphological restructuring. Note that, even though it is not an explanation of the correlation, it does at least allow a sufficiently robust heuristic determination criterion. The step I have taken is simply to assume that in a sentence like

(106) Ana <u>lo</u> reseñó. Ana CL.ACC.MASC.3SG reviewed 'Ana reviewed it.'

proclisis is produced by whatever is the reason that produces sentences like

(107) Ana <u>lo</u> quiso/pudo reseñar. Ana CL.ACC.MASC.3SG wanted/could review.INF 'Ana wanted/was able to reviewed it.'

The only difference is that in (106) proclisis is mandatory, that is, in the relevant Romance languages sentences such as:

(108) \* Ana reseñó<u>lo</u>. Ana reviewed-CL.ACC.MASC.3SG

are illicit even if enclisis is perfectly licit as an alternative for (107):

(109) Ana quiso/pudo reseñar<u>lo</u>.

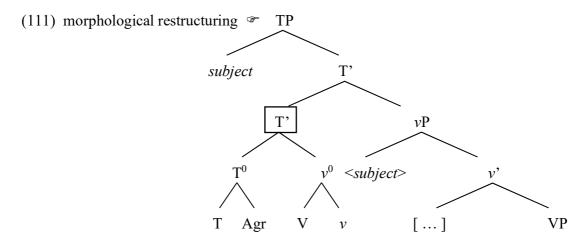
Ana wanted/could review.INF-CL.ACC.MASC.3SG

'Ana wanted/was able to reviewed it.

Having this background in mind, let us see, then, what is wrong with sentences such as (99b), repeated below, in which there is proclisis under Modal-stranding ellipsis:

(110) \* Ana lo quiso hacer, aunque finalmente no lo pudo Ana CL wanted do. INF although finally not CL could 
$$< \frac{hacer}{do. INF} t_{lo} >$$
.

The cause of the ungrammaticality of this example should now be transparent: proclisis is simply impossible in the absence of a previous restructuring step, like the one we tentatively suggested in (67), repeated again for the convenience of the reader



Effectively, in the case of (110), the infinitive in the ellipsis site and the modal verb cannot be subject to restructuring due to an infraction of the Elmo as formulated in (51), repeated below:

(112) <u>Ellipsis-Morphology Generalization (Elmo)</u>: For every morphological operation MO that affects the domain of X, where X contains the target of MO, MO cannot apply in X if X is subject to ellipsis.

The result is, then, that the clitic does not climb in absence of such a restructuring step in the morphology. If there is no restructuring -which, as we saw, is "optional" with certain predicates-, then ellipsis of the infinitival complement is perfectly licit:

'Ana wanted to do it, although finally she was not able to.'

A similar explanation can be extended to the incompatibility between object preposing and the modal ellipsis illustrated in (102), repeated below:

(114) *	Estos	libros se	pueden	vender	fácilmente	У
	these	books se	can.PL	sell.INF	easily	and
	estas	revistas	también	se pue	eden	
	these	magazines	also	SE can	.PL	
	<	vender	fácilmente	$t_{estos\ libros}>$ .		
		sell.INF	easily			

Again: a restructuring environment is a precondition for object preposing to apply successfully. Yet, by the Elmo, ellipsis blocks restructuring, rendering any attempt of extracting the object illicit. These considerations lead us to what is perhaps another important correlation of the verbal ellipsis parameter, namely:

(115) Romance languages with generalized restructuring have modal ellipsis with some verbs that show optional restructuring, only in case restructuring does not apply.

As we have already seen, the extraction data in (103) show that, in fact, Spanish has head stranding ellipsis with certain optional restructuring predicates (see Fernández-Sánchez 2021 for more evidence). The theory of generalized restructuring explicated in the previous pages resolves the paradox involving apparently contradictory evidence for detecting true deletion in Modal-stranding ellipsis. It essentially reduces the impossibility of clitic climbing and object preposing in contexts of modal ellipsis to the bleeding effects that ellipsis produces on restructuring.

### 5. Further issues and considerations

5.1. Restructuring and ellipsis beyond Spanish: Implications for the verbal ellipsis parameter So far, I have argued that Spanish allows for certain stranding ellipses in very restricted scenarios involving modal verbs or related restructuring predicates. In effect, as we have seen in section 4.2, enclisis vs. proclisis in canonical restructuring environments correlates with presence or absence of ellipsis, respectively.

(116)	a. *	Ana	lo	quiso	hacer,	aunque	finalmente	no	<u>lo</u>	<u>pudo</u>
		Ana	CL	wante	ddo.INF	although	finally	not	CL	could
		<	<u>hacer</u>	$t_{lo}$	>.					
			do.INF							
	b.	Ana	lo	quiso	hacer,	aunque	finalmente	no	<u>pudo</u>	
		Ana	CL	wante	ddo.INF	although	finally	not	could	
		<	<u>haceri</u>	<u>'o</u>	>.					
			do.INF	-CL						
		'Ana wanted to do it, although finally she was not able to.'								

To repeat: the reason why (116a) is ungrammatical follows from the Elmo in (112). In this case in particular, what ellipsis bleeds is restructuring. Unlike synthetic or analytical tenses, canonical restructuring verbs have a broader distribution, allowing for different complement sizes. Whenever they take TPs or higher projections as complements, two things happen: (i) there is no restructuring, and (ii) ellipsis of the infinitival complement is now licensed, as in (116b).

These facts, and the theory that accounts for them, have an implication of great importance for the verbal ellipsis parameter, namely, we cannot think of it as a matter of *yes/no* specification over an abstract universal property (of the classical type: *VP-ellipsis [yes/no]*), but we must attend to particular grammatical factors that must be determined on the basis of language-internal properties, in occasions, in a case-by-case manner. To illustrate this point beyond Spanish, consider the case of Hungarian, a language which, unlike Spanish, has Aux-stranding ellipsis (see (117)), V-stranding ellipsis (see (118)), and Particle-stranding ellipsis (see (119)):

## **Aux-Stranding ellipsis**:

- (117) a. Péter alszik, és én is fogok < aludni >. Péter sleep.3sG and I also FUT.1sG sleep.INF 'Péter is sleeping and I will, too.'
  - b. Péter alszik, de nekem nem kell < aludni >.
    Péter sleep.3sG but 1sG.DAT not need sleep.INF
    'Péter is sleeping but I don't need to.'
  - c. Többet aludtam ma, mint amennyit máskor more slept.1sG today than how.much.ACC otherwise szoktam < aludni >. HABIT.1sG sleep.INF

'I have slept more today than I usually do on other days.'

(Lipták 2019: 821)

## V-stranding ellipsis:

- (118) A. Fel hívta Bea a szüleit tegnap?

  PV called.3sG Bea the parent.Poss3sG.PL.ACC yesterday
  'Did Bea call her parents yesterday?'
  - B. Fel hívta.
    PV called.3sG

(Lipták 2019: 823)

# Particle-stranding ellipsis:

- (119) A. Fel hívta Bea a szüleit tegnap?

  PV called.3sG Bea the parent.Poss3sG.PL.ACC yesterday
  'Did Bea call her parents yesterday?'
  - B. Fel.
    PV
    'She did.'

(Lipták 2019: 825)

Yet, the language does not have reduplicated particle-stranding ellipsis, even when it *does* have particle reduplication (see (120A) and Lipták & Saab 2019 for extensive discussion and references) and, as we have just seen, stranding ellipsis of various sorts. Thus, leaving the reduplicated particles stranded leads to ungrammaticality (see (120B)). In such scenario, Part-Part-V-stranding ellipsis is, instead, a grammatical alternative (see (120B')):

## No Reduplicated Particle-stranding Ellipsis:

(120) A: <u>Be-be</u> kukkant azért a nagyszülőkhöz Peti néha? IN-IN peep.3SG still the grandparent.PL.ALL Peti sometimes Peti a veces

'Does Peti visit his grandparents sometimes?'

B: \* <u>Be-be</u>.

IN-IN

B': <u>Be-be</u> kukkant. IN-IN peep.3SG

'He does.'

(Lipták & Saab 2019: 540)

This ban of Part-Part-stranding ellipsis correlates with the lack of syntactic autonomy of reduplicated particles in general. Among other relevant facts, Lipták & Saab show that, unlike regular part-verb constructions (see (121)), particle reduplication does not allow for contrastive focus on the reduplicated particles (see (122)):

(121) A: BE nézett az ablakon? IN look.PST.3SG the window.SUP

'Did he look IN the window?'
B: Nem. KI nézett.

B: Nem. KI nézett. no OUT look.PST.3SG

'No. He looked OUT the window.'

(Lipták & Saab 2019: 538)

(122) A: \* BE-BE nézett az ablakon? IN-IN look.PST.3SG the window.SUP

'Did he look IN the window?'

B: Nem. \*KI-KI nézett. no OUT-OUT look.PST.3SG 'No. He looked OUT the window.'

(Lipták & Saab 2019: 538)

In the same vein, left dislocation of the reduplicated particles in verum focus constructions is disallowed, as the following contrast with regular part-verb constructions shows (small capitals on the verb indicates verum focus):

(123) a. Ki, NÉZTEM.
OUT look.PST.1SG
lit. 'Out, I did look.'

b. \* Ki-ki, NÉZTEM. OUT-OUT look.PST.1SG

lit. 'Out, I did look from time to time.'

(Lipták & Saab 2019: 539)

Finally, reduplicated particles cannot be inverted in contexts requiring particle inversion (typically, sentences with preverbal focus as in (124b) or negation as in (124c-d)), i.e., there is a left-adjacency requirement for reduplicated particles, absent with non-reduplicated ones, which are grammatical in exactly the same environments.

- (124) a. Peti bele-bele nézett a könyvbe.
  Peti INTO.3SG-INTO.3SG look.PST.3SG the book.ILL
  'Peti looked into the book from time to time.'
  - b. \* PETI nézett bele-bele a könyvbe.
    Peti look.PST.3SG INTO.3SG-INTO.3SG the book.ILL
    'It was Peti who looked into the book from time to time.'
  - c. \* Nem nézett bele-bele a könyvbe.
    not look.PST.3SG INTO.3SG-INTO.3SG the book.ILL
    'He did not look into the book from time to time.'
  - d. \* A kismackó nem állt meg-meg az erdőben. the little.bear not stop.PST.3SG PRF-PRF the woods.IN 'Little bear did not stop occasionally in the woods.'

(Lipták & Saab 2019: 534)

This type of evidence points towards the quite robust conclusion that particle reduplication requires some kind of morphological restructuring by virtue of which the reduplicated particle and the verb form a complex head. More concretely, Lipták & Saab conjecture that particle reduplication requires a previous instance of morphological reanalysis between the particle and the verb:

(125) <u>Conjecture</u>: Particle reduplication is possible iff reanalysis has formed a complex morphosyntactic word containing the verb and the particle.

(Lipták & Saab 2019: 548)

In a way similar to clitic climbing under restructuring, Hungarian has reduplication under a process of morphological reanalysis, which might be roughly decomposed in two basic steps: (i) particle and V reanalysis, and (ii) reduplication within the restructured word.

$$(126) \quad [\mathsf{Part}\,[_X{}^0\,\mathsf{Verb}\,\,\ldots\to[\,\,\ldots\,[_X{}^0\,\mathsf{Part}+\mathsf{Verb}\,]\,\ldots\to[\,\,\ldots\,[_X{}^0\,\mathsf{Part}\,[_X\,\mathsf{Part}-\mathsf{Verb}\,]\,]\,\ldots$$

Thus, any attempt to leave reduplicated particles stranded like in (120B) will destroy the constituency of  $X^0$ . The solution is, then, (120B), in which the stranded word is the complex MWd containing the verb and the reduplicated particles.

# 5.2. Copula-stranding ellipsis in Spanish?<sup>12</sup>

There are other issues regarding the licensing on ellipsis that should be at least mentioned. As I said, the theory only predicts absence of vP autonomy whenever the language is of the generalized restructuring type. As we have seen, even within a same language we can expect variation regarding the possibility of ellipsis depending on predicate types and other considerations connected to the very nature of restructuring. In this respect, there is little doubt that Spanish licenses X-stranding ellipsis whenever X is a member of the class of "optional" restructuring predicates. I have assumed that this "optionality" is the reflex of certain true optionality in nonfinite complementation. But this is not the only situation that might make head stranding ellipsis available. Consider a copulative sentence:

<sup>12</sup> This section owes a lot to Laura Stigliano and Matías Verdecchia, who suggested to me the PredP-ellipsis analysis.

Typically, Spanish does not have predicate ellipsis, but requires, instead, pronominalization by "neuter" *lo* 'it'.

This looks as expected: copulatives trigger proclisis and  $\nu$ P-frozenness, in a clear indication that there is underlying restructuring. Yet, this conclusion is challenged by the possibility of focus-fronting or even left-dislocation of the AdjP:

Importantly, both possibilities are incompatible with pronominalization by neuter *lo*:

Let's assume that the syntax of copulatives includes a PredP in which the subject-predicate relation is established, a quite standard assumption:

(131) [TP T
$$^0$$
 [ $vP$   $v^0$  to be [PredP ...AdjP....

Pronominalization by atomic *lo* replaces PredP. Then, since subextraction from a proform is banned, the ungrammatical cases in (130) are derived by basic principles of complementary distribution. The idea is that Spanish makes an operation of PredP-fronting licit, which is roughly represented as follows:

(132) [xp [predP ...AdjP....] 
$$X^0$$
 [TP  $T^0$  [ $\nu$ P  $\nu^0$   $t$ PredP

This analysis makes perfect sense of the possibility of PredP fronting and of restructuring between  $T^0$  and the head of the vP at the same time, a process that, as we already know, triggers proclisis

of neuter *lo* (see (128b)). Thus, given the ungrammaticality of (128a), one could conclude that Spanish does not have PredP-ellipsis. Yet, this is a hasty conclusion in view of the fact that PredP-ellipsis seems to be allowed in short answers and related grammatical and discursive contexts, at least in Rioplatense Spanish. Thus, in addition to allow short answers like (133B') with the pronominalization strategy, the language also makes (133B) available, with the copulative verb stranded.

The right observation, albeit still a preliminary one, is that Spanish has indeed PredP-ellipsis but only licensed by polarity focus. The situation is quite common in many languages that has VP-ellipsis but only under polarity focus<sup>13</sup>. A rough representation of the relevant derivational step for (133B) would run along the following lines<sup>14</sup>:

(134) PredP-ellipsis: 
$$\left[\sum_{P} \sum_{P} \sum_{P} \left[\sum_{P} \sum_{P} \sum_{P} \left[\sum_{P} \sum_{P} \sum_{P}$$

To the best of my knowledge, the possibility of PredP-ellipsis has never been noted in the Spanish literature, so there is a long way to go before extracting more robust conclusions. At any rate, the facts illustrate that *prima facie* we can find V-stranding XP-ellipses beyond Modal-stranding XP-ellipsis, even with restructuring predicates (copulatives are restructuring predicates, under the assumptions in this paper), a situation perfectly compatible with the theory I offered here. This is because the category elided, which in this case is lower than  $\nu$ P, does not participate in the restructuring process.

5.3. A final remark on syntactic head movement and ellipsis Recall Martins' original observation:

(i) Sarà bella. Almeno ERA. be.FUT beautiful at.least was 'She will be beautiful. At least, she was.'

(ii) Avrà mentito. \* Almeno aveva. have.FUT lied at.least had Intended: 'She must have lied. At least she had.'

Tentatively, I conjecture that Italian also makes use of PredP-ellipsis under conditions similar to Spanish.

<sup>&</sup>lt;sup>13</sup> See Lipták (2012, 2019) for an explicit analysis along these lines regarding Hungarian, which in some dialects only allows for VP-ellipsis in polarity focus environments.

<sup>&</sup>lt;sup>14</sup> It seems that a similar situation obtains in Italian. Attributing judgments to Guglielmo Cinque, Richard Kayne (pers. comm.) reports the following contrast, in which stranding the copulative *essere* is allowed if contrastively stressed. The same alternative is impossible with *avere*:

(135) <u>Martins' Generalization</u>: If a Romance language has enclisis as the byproduct of syntactic head movement, then the language also has verbal ellipsis.

One way to corroborate or refute the hypothesis would be, first, to construct licit examples in Spanish for which an analysis in terms of the head movement of the verb is a necessary condition and, then, constructing examples of V-stranding ellipsis. Martins (1994) and Saab (2008) argue that perhaps morphological imperatives of the type exemplified in (136), for which head movement analyses have been proposed (Laka 1990 and Rivero & Terzi 1995), provide the relevant syntactic context of evaluation.

(136) Cerrá la puerta! close.IMP the door 'Close the door!'

As is well known, morphological imperatives: (i) require enclisis, and (ii) are incompatible with negation:

(137) a. Cerrála! \*La cerrá! VS. close.IMP-CL.ACC.3SG CL.ACC.3SG close.IMP 'Close it!' b. No cierres! VS. \*No cerrála! close.SUBJ-CL.ACC.3SG close.SUBJ CL.ACC.3SG not not 'Don't close it!'

For reasons like these it is that, as I mentioned, several authors have proposed that morphological imperatives move like heads to a position above  $T^0$ . Suppose along the lines of Rivero & Terzi (1995) that the relevant position is, in fact,  $C^0$  itself. According to this analysis, enclisis would be accounted for as an effect of high head movement, which leaves the clitic attached to  $T^0$  behind the verb, while the incompatibility with negation would be explained as an intervention effect, in which the negation blocks verb raising and forces the insertion of a subjunctive verbal form:

This analysis is in line with the proposal that Martins (1994) made to account for her observation that enclisis in Portuguese and Galician correlates with V/Aux-stranding XP-ellipsis. Saab (2008) argue that, if Rivero & Terzi's analysis is correct, then Martins' theory predicts effects of V-stranding XP-ellipsis (more specifically, of the TP-ellipsis type) in contexts of morphological imperatives. The prediction, however, is not fulfilled, against Martins' own observation<sup>15</sup>. It is

(i) [Pointing to an open window]
Cerrá!
close.IMP
'Close it!'

<sup>&</sup>lt;sup>15</sup> Effectively, Martins (1994) also tested the prediction with Spanish imperatives and reached the opposite conclusion. The problem is that she based her conclusion in cases like (i), which can hardly be conceived of as cases of ellipsis. See Silva (2021) for arguments against ellipsis in imperative contexts like those in (1).

simply impossible in Spanish to have V-stranding ellipsis leaving a stranded verb with the morphological imperative form:

There are two options: either Martins' analysis is deficient or the premise that morphological imperatives are generated by verbal movement does not hold. It is not easy to provide a conclusive answer to the question. Indeed, Harris (1998), who still assumes imperative head movement, proposes -and for very good reasons, I believe- that the imperative form is the result of a morphological impoverishment rule that deletes the feature [+subjunctive] when the verbal complex in C<sup>0</sup> encodes a [2person] feature:

(140) [+subjunctive] 
$$\rightarrow \emptyset /$$
 [2pers] ]<sub>C</sub> (Harris 1998: 40)

It is not clear, then, if enclisis with imperatives is, rather than being the result of V movement, the visible consequence of the conversion of a finite form into a nonfinite one; after all, nonfinite forms are incompatible with proclisis (e.g., hacerlo vs. \* lo hacer). Or alternatively, we can see imperative formation as the result of PF amalgamation in Harizanov & Gribanova's (2019) sense. In the absence of more definitive evidence, I understand that there is no way to know if morphological imperatives can really be used as an evaluation criterion for determining genuine head movement. Facts like (139) seem to point out in the opposite direction, but the way in which I revised Martins' observation in (96), repeated below, does not allow to extract relevant information with respect to possible interactions between head movement and ellipsis. The observation only correlates presence of restructuring with lack of syntactic autonomy for the  $\nu$ P.

(141) <u>Martins' Generalization (revised)</u>: If a Romance language has T<sup>0</sup> and v<sup>0</sup> restructuring, then the language shows vP-frozenness effects (i.e., absence of vP-ellipsis or vP-fronting).

As I have already claimed, the theory only says that, all things being equal, head movement, like any other type of syntactic movement, should not affect ellipsis of the phrasal domain from which a given head is extracted, i.e., X-movement out of XP should not affect XP-ellipsis or ellipsis of another lower category contained within XP.

Finally, let me point out that the theory is also weaker than the movement theory of ellipsis licensing proposed in Thoms (2011, 2012). According to it, ellipsis is triggered when an illicit non-deleted copy survives after movement inducing deletion of the sister of the moved element. See the following rough analysis for a sluicing example, in which the underlined lower *wh*-copy is undeleted, a fact that triggers ellipsis of the entire TP as way to produce a linearizable object at PF:

(142) I saw someone but I don't know [ $_{CP}$  who < [ $_{TP}$  I saw  $\underline{\text{who}}$ ]>]

As far as head movement, Thoms speculates that "the availability of generalized V-to-T verb movement should correlate with the availability of VPE" (Thoms 2012: 5). On this account, *do*-support under ellipsis is seen, in reality, as a case of *v*-to-T movement with the trace of *v* undeleted and triggering deletion of T's complement:

(143) I study and Anne [TP do+es <[ $\nu$ P  $\underline{do}$  study]>] too.

At least at first sight, absence of ellipsis with imperatives in Spanish would lead Thoms to reject the head movement theory of Spanish imperatives, since like Martins' theory his theory strongly correlates head movement with ellipsis. And absence of head movement would lead exactly to the opposite direction, i.e., to absence of ellipsis. In this regard, his account would be perfectly compatible with the Generalized Restructuring Theory of verbal morphosyntax I have sketched through this study for languages of the Spanish type. Yet, my theory, unlike Thoms', remains neutral with respect to other ways of composing verbal forms. For instance, it would compatible with Thoms' reconsideration of English *do*-support in terms of *v*-to-T movement or with the more canonical view of *do*-support as a true morphological strategy for salving a stranded affix. Indeed, this well-known behavior of English verbal morphosyntax under ellipsis can be taken as another instance predicted by the Elmo (see Saab 2008 and Saab & Lipták 2016).

(144) <u>Ellipsis-Morphology Generalization (Elmo)</u>: For every morphological operation MO that affects the domain of X, where X contains the target of MO, MO cannot apply in X if X is subject to ellipsis.

Assuming that in English T<sup>0</sup> lowers to  $v^0$  in the morphology, the Elmo predicts that ellipsis should bleed lowering. As it is very well-known, this situation obtains giving rise to do-insertion<sup>16</sup>.

(145) a. I study and Anne [ $_{TP}$  T[ $_{[3SG]}$  <[ $_{\nu P}$  stud-]>] too. *Ellipsis bleeds lowering* b. I study and Anne [ $_{TP}$  *do*-T[ $_{3SG]}$  <[ $_{\nu P}$  stud-]>] too. *Do*-support

This view of English vP-ellipsis is incompatible with Thoms' approach. From a broader perspective, unexpected scenarios for the type of correlations predicted by Thoms' theory are those in which we find "no ellipsis when there is verb movement, ellipsis when there is no verb movement" (Thoms 2012:11). The analysis in (145) would instantiate the second undesired scenario (i.e., no movement, but ellipsis), but, in any case, we already know Thoms' reconsideration in terms of  $v^0$ -to- $T^0$  movement. Beyond English, unexpected anti-correlations in both directions seem attested in many Scandinavian languages<sup>17</sup>. Yet, Thoms offers very plausible reasons to reassess those patterns and to turn them compatible with the movement theory of ellipsis licensing. In some cases, something that was analyzed as head movement turns out to be fake head movement, whereas in other cases apparent absence of movement can be reinterpreted in movement terms.

<sup>17</sup> Thanks to Susi Wurmbrand for pointing out to me the importance of the Scandinavian patterns and to Gary Thoms for some discussion and materials.

<sup>&</sup>lt;sup>16</sup> The analysis is also compatible with the support being part of narrow syntax, as in Embick & Noyer (2001).

To conclude, I would like to notice that, unlike Thoms's theory, the Scandinavian patterns do not challenge what I have said through this study regarding the interaction between ellipsis and verbal morphosyntax. Similar to what I have observed with respect to the Spanish imperative, my theory is compatible both with a situation in which there is no head movement and there is ellipsis, but also with a situation in which there is genuine syntactic head movement but there is no ellipsis. Therefore, I do not need enter into further details, at least not at this stage of my own research, and the reason is that the way in which I have formulated the relevant part of the verbal ellipsis parameter (through (141)) is simply uninformative with respect to all these issues. To reiterate, the theory merely prohibits ellipsis before restructuring. It does not prohibit or license anything else.

### 6. Conclusion

The last two decades of intensive inquiry in the theory of ellipsis, in particular, since the pioneering works by Merchant (2001, 2004) have provoked a great progress in our understanding of the syntax and semantics of ellipsis, specifically, regarding its syntactic structure and the identity condition (or conditions) made available by Universal Grammar. To my knowledge, little progress has been done, instead, on the theory of ellipsis licensing, which should account for cross-linguistic variation of ellipsis phenomena, among other important aspects. In this regard, the lack of Aux- or V-stranding XP-ellipsis in languages like Spanish has produced more perplexity than true scientific progress. I think that part of this perplexity is due to the *syntactic head movement dogma*, according to which languages like Portuguese or Spanish count with exactly the same underlying mechanism of verb formation. But it turns out that the head movement premise is only compatible with the Portuguese patterns of verbal ellipsis, a language that allows for both V-stranding XP-ellipsis or Aux-stranding XP-ellipsis:

(147) a. 
$$[YP V < [XP ... tV ...] > ]$$
  
b.  $[YP Aux < [XP ... V ...] > ]$ 

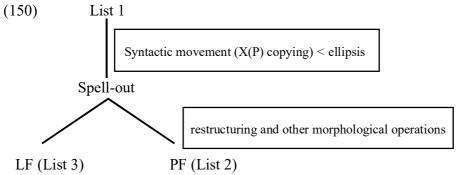
There is *a priori* no obvious reason why Spanish (and most Romance languages, indeed) does not allow for any of the two options in (147) with the vast majority of its verbal predicates. The [E]-feature theory accounts for this perplexity by putting the burden of the explanation in lexical properties of functional heads, which can or cannot code a particular licensing feature (see (11)):

(148) The [E]-feature theory: particular functional heads can enter the syntax with a particular [E(llipsis)]-feature, which, essentially, licenses the ellipsis of the complement of the [E]-bearing head.

Such a solution has been challenged here by the mere constatation that the distribution of Aux- or V-stranding XP-ellipsis is not random. Taking as inspiration the initial insights in Martins' work, I have identified three general properties which clearly distinguishes Portuguese and Spanish (see (66)):

- (149) Generalized restructuring languages:
  - a. uniform proclisis in finite tenses (i.e., Martins' observation)
  - b. lack of syntactic autonomy of the vP, i.e., vP-frozenness effects
  - c. adjacency effects between the auxiliary and the past participle, only disrupted by very constrained operations affecting  $T^0$  and  $C^0$  after restructuring

In order to account for this set of properties, I have suggested that we abandon the head movement dogma for Spanish and look for an alternative theory of verbal morphosyntax for languages of the Spanish type. Concretely, I have outlined a theory of generalized restructuring, whose main premise is that the verbal base and T<sup>0</sup> are composed by placing them together under a maximal projection of T<sup>0</sup> itself. This simple operation explains many of the intricate properties of periphrastic forms, which, as is well-known, look hybrid regarding their phrasal status. More importantly, restructuring produces the attested lack of syntactic autonomy of Spanish vPs, which is behind the absence of Aux- and V-stranding XP-ellipsis in the language. Ultimately, the interaction between restructuring and ellipsis follows from the architectural premise that sees ellipsis as an operation of narrow syntax and restructuring as a PF operation:



**Figure 1.** Timing and interactions between ellipsis and other grammatical operations

With this in place, absence of the relevant type of ellipsis follows as another instance of the Elmo:

(151) <u>Ellipsis-Morphology Generalization (Elmo)</u>: For every morphological operation MO that affects the domain of X, where X contains the target of MO, MO cannot apply in X if X is subject to ellipsis.

If ellipsis applies in the syntax, then morphological restructuring cannot take place in the morphology giving rise to a selectional failure requiring that a T node must immediately dominate  $v^0$  (not only  $v^{\text{max}}$ ). Thus, the theory derives what I have called here vP-frozenness effects, of which absence of vP-ellipsis is just a subcase, with the important corroborated prediction that languages of the Spanish type do have indeed Modal-stranding XP-ellipsis as a grammatical output, but only in absence of restructuring. The general solution offered to remedy the abovementioned perplexity finds important support in other cross-linguistic facts that also connect ellipsis to morphological reanalysis or to the Elmo. But in addition, the proposal makes sense of many not well-behaved properties of periphrastic verbal forms (e.g., "semi" adjacency effects in analytic tenses), which cannot be easily accounted for either by mere head movement or other similar mechanisms of complex head formation.

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