

# Phase Effects in Iberian Romance

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## 1. Introduction

The Minimalist Program (MP) seeks to reduce substantive principles from virtual conceptual necessity and interface (or bare output) conditions. Focusing on the former, the MP works with the hypothesis that economy considerations play a leading role in core syntactic processes. In recent work (cf. Chomsky 2000), this idea has been embodied by arguing that computational complexity is avoided if languages make one-time selections of *Lexical Items* (LI) and stores them in a pre-syntactic domain called *Lexical Array* (LA). In order to reduce the computational burden even more, Chomsky (2001) claims that LAs are accessed *phase by phase*, with subarrays of LIs placed in ‘active memory’. Under this scenario, one important question emerges, right from the beginning: what kind of derivational metrics must be invoked when identifying *phases*? This issue has been debated in the recent literature, with no general consensus, so far as I know<sup>1</sup>. In this paper, I would like to argue that Iberian Romance’s first-phase domain is not  $v^*P$ , but TP. The intuition behind this claim is simple: T is a *Locus* of parametrical variation.

Before we start, one caveat is in order: my claim here concerning a parametrization of phases might seem stipulative and theoretically worrisome: if phases are domains of computation and *Transfer*, shouldn’t they behave alike cross-linguistically? That is, isn’t the notion of *phase* itself being corrupted the minute one argues for parametric cuts of this sort? Although it appears to be so, this is not a logical necessity, for note that I am not going to argue that any domain can be a phase, but rather that the Locus of certain first-phase computational operations can minimally differ cross-linguistically. The present proposal shares important points with a parametrization of ‘bounding nodes’ along the lines of Rizzi (1982), the GB-era claim that SPEC-T is an A’ position (cf. Jaeggli 1982, Goodall 1993; 1999, Masullo 1992, and Uribe-Etxebarria 1992, *i.a.*), and even the possibility for T to L-mark the VP (cf. Kayne 1989) –obviously, technical details differ, but the theoretical connection is still there. Even if such parallelism is accurate, it appears to me that the present formulation is both theoretically and empirically superior, for it does not restrict its attention to isolated facts, accounting for a bunch of diverse (and at first glance unrelated) linguistic phenomena.

The paper is divided as follows: section 2 presents Pesetsky & Torrego’s (2001; 2004a; 2004b) Case system. Section 3 focuses on inversion in interrogative clauses, which will provide evidence to support an approach to phases in terms of Case (i.e., morphological) convergence. Section 4 provides a review of previous analyses of preverbal subjects in NSLs (and a brief *excursus* on the EPP); it will be claimed that preverbal subjects are not (Clitic) Left Dislocated topics, but DPs moved to T’s *edge* yielding an effect in the outcome. Finally, section 5 summarizes the main conclusions.

## 2. The Nature of Case

Since the advent of the Principle & Parameters framework (cf. Chomsky 1981), Case has played a key role in the development of syntactic theory, up to the point that it can be said to be the first step towards Minimalism. In Chomsky’s (2000; 2001) system, Case in nominals is valued and deleted by  $\phi$ -

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<sup>1</sup> Cf. Chomsky (2000; 2001; 2005b), Epstein & Seely (2002), Uriagereka (1999), and references therein.

Probes located in T and  $v^*$  respectively<sup>2</sup>. In Pesetsky & Torrego (2001), an appealing alternative approach to Case is put forward. In particular, these authors claim that what we call ‘Case’ is actually an uninterpretable tense feature on D heads.

### (1) *The Nature of Case*

Case is [ $uT$ ] on D

Pesetsky & Torrego (2001) concentrate on nominative Case, but in Pesetsky & Torrego (2004a) it is suggested that the same logic carries over to accusative Case, for which they posit an additional (object) Tense Phrase between  $v^*P$  and VP.

This departure from mainstream analyses (where agreement and case are different names for the same phenomenon) nicely fits with Chomsky’s Probe-Goal relation, for both Case and  $\phi$ -features find an appropriate feature-mate. In Pesetsky & Torrego’s (2001) system feature valuation is always a one-to-one relation.

The [Minimalist Inquiries]/[Derivation by Phase] framework does not view structural case as the uninterpretable counterpart of an otherwise interpretable feature. Instead, it is a *sui generis* feature with a special relation to the  $\phi$ -features: it gets valued only as a by-product of  $\phi$ -feature agreement. Thus, when unvalued  $\phi$ -features of finite T probe, on this approach, and find a suitable goal [...] the unvalued case features of that DP gets valued as a kind of ‘bonus’. Pesetsky & Torrego (2004b: 10)

Pushing this line of argumentation further, Pesetsky & Torrego (2004a) convincingly argue that prepositions are a species of T heads, thus accounting for why they are also Case checkers. Putting all the pieces together, Pesetsky & Torrego’s (2004a) system is as depicted in (2), where the second T head could correspond to what some scholars have called Aspect (cf. Torrego 1998):

(2) [<sub>CP</sub> C [<sub>TP</sub> T<sub>SUBJECT</sub> [ <sub>$v^*P$</sub>   $v^*$  [<sub>TP</sub> T<sub>OBJECT</sub> [<sub>VP</sub> . . . ]]]]]]

Capitalizing on robust evidence stemming from Den Besten (1983) which shows how some T-like elements move to C (mainly in V2 languages), Pesetsky & Torrego (2001) make the simplest (but still interesting) assumption about the C-T connection:

### (3) *Motivation for T-to-C Movement*

C bears an uninterpretable T feature (henceforth [ $uT$ ]) (with the ‘EPP property’).

Two conclusions can be drawn from Pesetsky & Torrego’s (2001) hypothesis: first, Case depends exclusively on T (which has, by assumption, an interpretable [T] feature, responsible for valuing and deleting D’s [ $uT$ ]); and second, as a consequence of both having [ $uT$ ], C and D may be seen as belonging to the same supercategory turning predicative-like expressions (e.g., nouns and prepositions) into arguments.

Going back to (3), by the ‘EPP property’ Pesetsky & Torrego (2001) understand a trait of a feature, not a feature itself; thus, if a feature F is endowed with the EPP property, it will trigger overt movement.

In order to see how this system works, consider the paradigm in (4):

### (4) *T-to-C Asymmetry in Matrix Interrogative Clauses*

- a. What did Mary buy?
- b. \*What Mary bought?
- c. \*Who did buy the book? [\*unless *did* is focused]
- d. Who bought the book?

<sup>2</sup> This approach to Case is modified in Chomsky (2004; 2005b), where it is claimed that  $\phi$ -features are generated in C, not T.

Descriptively speaking, what is going on in (4) is very clear: *do*-insertion is blocked whenever a subject DP undergoes *wh*-movement. What must be answered is why *wh*-movement of the subject does not trigger *do*-insertion (which is itself an instance of T-to-C movement, within this system); according to Pesetsky & Torrego's (2001), *do*-insertion is barred in these cases because the nominative Case feature (that is, its [*uT*] feature) of the subject DP can delete C's [*uT*], rendering *do*-insertion as redundant. Graphically<sup>3</sup>:

- (5) a. [<sub>CP</sub> Who<sub>i</sub><sub>[*uT*]</sub> C<sub>[*uT*, EPP] [*uWh*, EPP]</sub> [<sub>TP</sub> t<sub>i</sub> bought the book]]  
 b. \* [<sub>CP</sub> Who<sub>i</sub><sub>[*uT*]</sub> did<sub>j</sub> C<sub>[*uT*, EPP] [*uWh*, EPP]</sub> [<sub>TP</sub> t<sub>i</sub> T<sub>j</sub> buy the book]]

Under the facts in (5) we find a core property of the system: economy. As the reader may see, if one movement suffices to value two uninterpretable features (i.e., [*uT*] and [*uWh*]), no extra movements occur. In (5) the T feature of the subject DP is closer to C than T itself (taking 'strict c-command' to signal closeness), and, in addition, it can also be used to satisfy the [*uWh*] feature: by some general principle of computational efficiency like (6), adapted from Pesetsky & Torrego (2001), moving the subject DP should be enough to satisfy C's requirements –an it is indeed.

### (6) *Economy Condition*

A head H triggers the minimum number of operations to satisfy the properties (including EPP) of its *uFF*.

On the other hand, when object DPs move, T is always closer to C, so pure T-to-C movement (i.e., *do*-insertion) must occur<sup>4</sup>. This accounts for the paradigm in (4).

Pesetsky & Torrego (2001) extend the basics of their proposal to *that*-trace effects. In their system, *that* (like *do*) is not a complementizer, but a clitic launched from T. Taking this analysis to be essentially correct, then it follows why subject extraction and *that* are incompatible in English: given that they can both delete C's [*uT*], on economy grounds, only one should do the job.

- (7) a. [<sub>CP</sub> Who<sub>i</sub><sub>[*uT*]</sub> did C<sub>[*uT*, EPP] [*uWh*, EPP]</sub> John say [<sub>CP</sub> t<sub>i</sub> C<sub>[*uT*, EPP]</sub> [<sub>TP</sub> t<sub>i</sub> T called Mary]]]]?  
 b. \* [<sub>CP</sub> Who<sub>i</sub><sub>[*uT*]</sub> did C<sub>[*uT*, EPP] [*uWh*, EPP]</sub> John say [<sub>CP</sub> t<sub>i</sub> that<sub>j</sub> C<sub>[*uT*, EPP]</sub> [<sub>TP</sub> t<sub>i</sub> T<sub>j</sub> called Mary]]]]?

If *that* deletes C's [*uT*] and deletion of uninterpretable features is required for convergence at the interfaces, one might now wonder what to do with *that*-deletion (cf. (8) below): how is C's [*uT*] deleted in those cases? Pesetsky & Torrego (2001) argue that both TP and the DP in SPEC-T<sup>5</sup> are equally able to delete C's [*uT*], since, c-command-wise, both are equally close to C (that is, they are 'equidistant')<sup>6 7</sup>.

- (8) a. John thinks [<sub>CP</sub> that<sub>j</sub> C<sub>[*uT*, EPP]</sub> [<sub>TP</sub> Mary T<sub>j</sub> is gorgeous] ]  
 b. John thinks [<sub>CP</sub> Mary<sub>i</sub><sub>[*uT*]</sub> C<sub>[*uT*, EPP]</sub> [<sub>TP</sub> t<sub>i</sub> T is gorgeous] ]

<sup>3</sup> In this paper I will assume the mainstream view that matrix interrogative C bears an uninterpretable [*Wh*] feature with the EPP property.

<sup>4</sup> At first glance, there is a non-trivial drawback to this proposal: how can it be the case that C's [*uT*] be valued by the subject's [*uT*], since both features are unvalued? First of all, it must be noted that this possibility is severely restricted, for an unvalued feature can be used to value another unvalued feature only within the phase it has been marked for deletion, as Pesetsky & Torrego (2004a) argue. Second, in Pesetsky & Torrego (2004b), a possible way out is sketched: all instances of T features form a sort of abstract syntactic dependency (technically, *Agreement* is regarded as *Feature Sharing*; cf. Frampton & Gutmann 2000) so that an unvalued link is not 'alone' when valuing another unvalued feature appearing upstairs in the tree: the chain works 'together', as a whole, in valuation.

<sup>5</sup> Although I say TP here, it is actually the T head that can move to C, being spelled-out as *that*. Cf. Pesetsky & Torrego (2001) for details about 'equidistance' between TP and SPEC-T.

<sup>6</sup> Another possibility would be for C to delete its [*uT*] feature by mere *Agree*. I assume this is what happens in matrix declarative clauses.

<sup>7</sup> Cf. Chomsky (1993; 1995; 2000; 2001) on 'equidistance'.

Importantly, Romance seems to lack the possibility of using subject DPs to delete C's [ $uT$ ]. Unsurprisingly under Pesetsky & Torrego's (2001), *that*-trace effects (in (9)) and *que*-deletion (in (10)) are not attested<sup>8</sup>.

(9) [<sub>CP</sub> Qui<sub>i[ $uT$ ]</sub> C<sub>[ $uT$ , EPP]</sub> [<sub>wh, -EPP</sub>] dius [<sub>CP</sub> t<sub>i</sub> que<sub>j</sub> C<sub>[ $uT$ , EPP]</sub> [<sub>TP</sub> t<sub>i</sub> truca T<sub>j</sub> la Maria]]]? (Catalan)  
 Who say-2SG that call-3SG the Maria  
 'Who do you say calls Maria?'

(10) \*En Joan va dir [<sub>CP</sub> la Maria<sub>i[ $uT$ ]</sub> C<sub>[ $uT$ , EPP]</sub> [<sub>TP</sub> t<sub>i</sub> se'n va T anar] ] (Catalan)  
 The Joan AUX-3SG to-say the Maria CL-CL-from-there AUX-3SG to-go  
 'Joan said Maria left'

As will become clear in the next section, I take (11), from Pesetsky & Torrego (2004a), to be the key to the facts:

**(11) *Timing of Deletion of Uninterpretable Features***

An uninterpretable feature [ $uF$ ] marked for deletion (i.e., [ $uF$ ]) within a completed phase P, is deleted the moment a new head H is merged to P.

In plain English, (11) can be paraphrased as follows: uninterpretable features can enter in checking processes within the phase in which they have been 'marked for deletion', but not beyond –when a new phase starts, all the features of the previous one become useless for computational purposes. With (11) in mind, the data in (5), (7), and (8) follow straightforwardly: in English, the [ $uT$ ] feature of subject DPs is marked for deletion in the CP-phase, remaining 'alive' within this syntactic domain. As is obvious from (9) and (10), something else is at stake in Romance, an issue I return to in the next section.

Let us recap: here I have presented the main points of Pesetsky & Torrego's (2001) analysis of Case and the C-T interaction. As we have seen, their proposal nicely accounts for some well-known phenomena in a unitary fashion, with the advantage of giving Case a more coherent treatment within a Probe-Goal system.

### 3. Phases and T-to-C Movement in Iberian Romance

As I said at the outset, the first question one must consider in the context of the present discussion is what kind of computational metrics must be invoked to define phases. There is more than one possibility. Consider, for instance, the ones in (12):

- (12) a. Phases are propositional objects. (cf. Chomsky 2000; 2001; 2004)  
 b. Phases are convergent objects. (cf. Uriagereka 1999)  
 c. Phases correspond to transformational rules. (cf. Epstein & Seely 2002)

In the last years, Chomsky has provided both conceptual and interface/output motivations supporting the claim that  $v^*P$  and CP constitute the strong phases: conceptually, phases should constitute small syntactic objects (so that computational load is avoided), whereas, interface-wise, phases tend to manifest easily detectable semantic and phonetic properties indicating a sort of independence. Importantly for my purposes, phases have also been intimately related to uninterpretable morphology, such as Case:

<sup>8</sup> As first noted by Torrego (1983; 1984), the Spanish complementizer *que* can be deleted if the verb is inflected in subjunctive mood (and conditional or modal-future tense too). I Gallego (2004; 2006) I analyze those cases as involving direct verb movement to C.

As discussed elsewhere (Chomsky 2001), the size of phases is in part determined by uninterpretable features [...] These observations provide further support for the conclusion that  $v^*P$  and CP are the phases, the locus of determination of structural Case and agreement for object and subject. Chomsky (2005b: 21)

A morphological based approach to phases has also been pursued by Uriagereka (1999), who claims that preverbal lexical subjects of rich inflectional languages induce islands effects as a consequence of morphological integrity. In this paper I present a proposal that will arrive at the same conclusion.

Consider the data in (13), to start with this issue:

- (13) a. \*Que intel.ligent la Maria és! (Catalan)  
 What clever the Maria be-3SG  
 ‘How clever Maria is!’
- b. \*No sé què la Maria va dir. (Catalan)  
 Not know-1SG what the Maria AUX-3SG to-say  
 ‘I don’t know what Maria said’

These data are out because of inversion. Note that their word-by-word English translations are fine:

- (14) a. How clever Maria is!  
 b. I don’t know what Maria said.

If we take (11) seriously, every piece of evidence we have seen up to this point suggests that subject DPs have a longer lifespan in English than in Iberian Romance, as I said. Technically, we need for the [ $uT$ ] of subject DPs to ‘die’ at an earlier stage in Iberian Romance. I want to argue that the key has to do with at what derivational point the T head (the Locus of nominative) is selected: within either the first or the second phase.

If my reasoning is right, first phase domains must be as in (15), where  $\alpha$  stands for the *edge domain* of a phase, and  $\beta$  for the complement domain (the domain that gets transferred to the Interface Levels). As (15) shows, I would like to argue that T is within the first phase in Iberian Romance –that way, nominative Case is checked within that phase, rendering subject DPs totally inert when the CP phase starts.

- |         |   |                        |
|---------|---|------------------------|
| (15) a. | $[_{v^*P} \alpha [_{v^*} v^* [_{VP(=\beta)} \dots ]]]$                  | <i>English</i>         |
| b.      | $[_{TP} \alpha [_{T'} T [_{v^*P(=\beta)} [_{v^*} v^* [_{VP} \dots ]]]]$ | <i>Iberian Romance</i> |

According to (14), TP is a strong phase in Iberian Romance. Let us test this consequence within Pesetsky & Torrego’s (2001) system. Consider (16) vis-à-vis (17), to begin with:

- (16) a. ¿Por qué Isabel no te llama? (Spanish)  
 For what Isabel not CL-you call-3SG  
 ‘Why doesn’t Isabel call you?’
- b. No te imaginas hasta qué punto Isabel me ha criticado. (Spanish)  
 Not CL-you imagine-2SG to what point Isabel CL-me have-3SG criticized  
 ‘You don’t imagine how much Isabel has criticized me’
- c. ¿Desde cuándo Isabel habla contigo? (Spanish)  
 From when Isabel talk-3SG with-you  
 ‘Since when does Isabel talk to you?’

- (17) a. \*¿Qué María dijo? (Spanish)  
 What María said-3SG  
 ‘What did María say?’
- b. \*No te imaginas cuánto María me ha criticado. (Spanish)  
 Not CL-you imagine-2SG how-much María CL-me have-3SG criticized  
 ‘You don’t imagine how much María has criticized me’
- c. \*¿Cuándo María habla contigo? (Spanish)  
 When María talk-3SG with-you  
 ‘When does María talk to you?’

The data in (16) and (17) take us to realm of obligatory inversion within interrogative questions in Spanish<sup>9</sup>. What I want to highlight here is that, as the examples in (16) prove, inversion is not always obligatory. In Gallego (2004) I analyzed these data at length, arguing that inversion in interrogative clauses do involve T-to-C movement (*contra* Barbosa 1997; 2001, Guasti 1996, Ordóñez 1998, and Suñer 1994, *i.a.*). The main objection raised in Gallego (2004) to analyses in which there is no T-to-C movement in interrogative clauses had to do with the fact that they adopt either Rizzi’s (1996) ‘Wh-Criterion’ or a notational variant of it; accordingly, for those non-T-to-C approaches to obligatory inversion, [Wh] features must enter in a specific checking configuration: a SPEC-Head one. Note that this is not a *sine qua non* if Chomsky’s (2000) *Agree* is assumed<sup>10</sup>, and, given the system I am adopting here, it is actually problematic for T to be endowed with [Wh] features (as Rizzi 1996 originally claimed): if *did* checked a [Wh] feature in C, the Superiority effect in (18) would not be accounted for: movement of *did* should eliminate Superiority, for it is closer to C than *what*.

- (18) a. [<sub>CP</sub> Who<sub>i</sub> C<sub>{[uT, EPP] [uWh, EPP]}</sub> [<sub>TP</sub> t<sub>i</sub> T bought what ] ]?  
 b. \* [<sub>CP</sub> What<sub>i</sub> did<sub>i</sub> C<sub>{[uT, EPP] [uWh, EPP]}</sub> [<sub>TP</sub> who T<sub>i</sub> buy t<sub>i</sub> ] ]?

In Gallego (2004) I further reviewed Spanish data from Suñer (1994) and Ordóñez (1998) dealing with adverbs, negation, and auxiliary verb movement, showing that they did not constitute a real problem for a T-to-C movement analysis –not only in Spanish, but also in other Iberian Romance varieties like Galician and European Portuguese. It is important to note that if Gallego’s (2004) approach to interrogative clauses was correct, then *v*\*-to-T movement cannot be phonological: if it was, once in T, the verb should not be able to continue its way up to C, since the first operation would have rendered it ‘out of sight’ for syntactic operations<sup>11 12</sup>.

In Gallego (2006) I try to provide an explanation as for why some *wh*-phrases do not obligatorily trigger inversion, thus trying to account for the facts in (16) and (17). As I argued, the crucial cut has nothing to do with Torrego’s (1984) idea about the adjunct vs. argument asymmetry. To my ear, all adjuncts need inversion<sup>13</sup>:

<sup>9</sup> Cf. Goodall (1993), Torrego (1984), Uriagereka (1999), Uribe-Etxebarria (1992), and references therein.

<sup>10</sup> Cf. Boeckx (2003a; 2003b) for relevant discussion.

<sup>11</sup> This assumes that phonological operations, like extraposition, are phonological (cf. Chomsky 2001).

<sup>12</sup> To the best of my knowledge, the main facts regarding obligatory inversion hold in Catalan, European Portuguese, French, Galician, and Italian (cf. Barbosa 2001, Boeckx 2002, Gallego 2004, Rizzi 1996; 2001, and Uriagereka 1999).

<sup>13</sup> When adjuncts do not trigger inversion, a semantic import obtains. Consider the following data:

- (i) Pero, a ver: ¿cuándo Juan ha dicho eso? (Nunca lo ha dicho...) (Spanish)  
 But, to to-see: when Juan have-3SG said that? (Never CL-it have-3SG said...)  
 ‘So, tell me: When has Juan said that? He never did so...’
- (ii) Pero, a ver: ¿dónde Juan es capaz de hacer esas cosas? (En ningún sitio...) (Spanish)  
 But, to to-see: where Juan be-3SG able of to-do those things? (In no place...)  
 ‘So, let us see: where would Juan be able to do such things? (Nowhere whatsoever...)’

The judgements are subtle, but the general pattern seems clear to me: (i) and (ii) are rhetorical questions. In (i), the speaker does not expect an answer; actually, the speaker seems to be questioning the truth value of a previous assertion. I will assume that in these cases C’s [uT] is valued by *Agree*, without T-to-C movement, and that, as a consequence, an interpretive difference obtains.

- (19) a. \*¿Cuándo Leticia vino? (Spanish)  
 When Leticia came-3SG  
 ‘When did Leticia come?’  
 b. \*¿Dónde Leticia cantó? (Spanish)  
 Where Leticia sang-3SG  
 ‘Where did Leticia sing?’

But regardless of (19), some adjuncts discussed by Torrego (1984) do prevent inversion. Importantly, all of them, just like (16a,b), pied-pipe a preposition.

- (20) a. ¿Por qué Sheila llamó a su hermano? (Spanish)  
 For what Sheila called-3SG to her brother  
 ‘Why did Sheila call her brother?’  
 b. (?)¿En qué medida la Constitución ha contribuido a esto? (Spanish)  
 In what measure the Constitution have-3SG contributed to that  
 ‘In which sense has the Constitution contributed to that?’

Among the examples in (20), only the case of *por qué* (Eng. *why*) has been noticed in the literature (cf. Uriagereka 1988; 1999, Rizzi 1996, *i.a.*), without receiving a principled account. Spanish speakers accept both (21a) and (21b), and they actually feel that there is a subtle difference in their semantics:

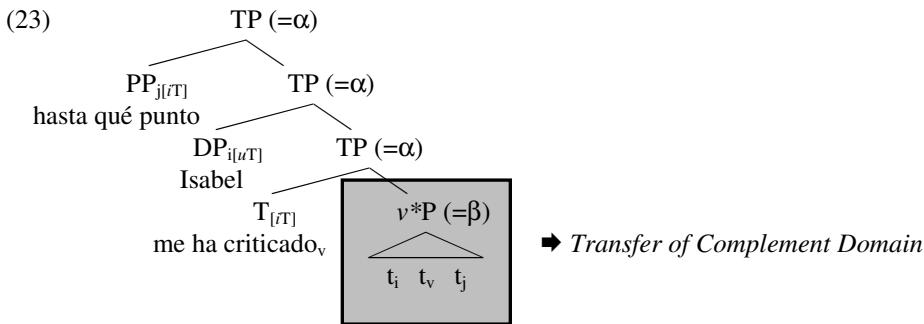
- (21) a. ¿Por qué Sheila llamó a su hermano? (Spanish)  
 For what Sheila called-3SG to her brother  
 ‘Why did Sheila call her brother?’  
 b. ¿Por qué llamó (Sheila) a su hermano (Sheila)? (Spanish)  
 For what called-3SG (Sheila) to her brother (Sheila)  
 ‘Why did Sheila call her brother?’

The semantics in (21b) has no mystery: there is a reason *x*, such that Sheila did not call her brother for that *x*. The semantics of (21a) is more difficult to grasp, though. It seems that (21a) can mean either ‘Why was it Sheila (and not María, say) who called her brother?’ or else ‘Why was it (true) that Sheila called her brother?’. It appears to me that the second reading is closely related to the interpretation of evidential *cómo* (Eng. *how come*) in ¿Cómo Juan hizo eso? (Eng. *How come Juan did that?*), for it could be roughly translated as follows: ‘How is it (possible) that Juan did that?’; such interpretations could be taken as evidence to suppose that we are asking about the truth-value of the sentence, and, consequently, that we are moving some complex (modal-like) *wh*-phrase to C. Be that as it may, the important thing to note is that the semantics of these expressions is not that of *bona fide* questions, a fact I take to follow from the absence of T-to-C movement.

Happily, the general pattern in which *wh*-phrases pied-piping prepositions block obligatory T-to-C movement seems to hold even in embedded contexts:

- (22) a. \*No te imaginas [CP cuánto tu padre me ha ayudado] (Spanish)  
 No CL-you imagine-2SG how-much your father CL-me have-3SG helped  
 ‘You cannot imagine how much your father helped me’  
 b. No te imaginas [CP hasta qué punto tu padre me ha ayudado] (Spanish)  
 No CL-you imagine-2SG until what point your father CL-me have-3SG helped  
 ‘You cannot imagine how much your father has helped me’

After having seen the data, let us now address them. Unless some phonological complexity process is relevant in the previous examples (less words vs. more words, presumably involving phonological phrasing effects), one wonders what could be at stake here. I think the preposition is the key, so I will pursue this intuition to see where it leads. Let us ‘freeze’ the derivation of (16b) by the end of the TP phase to see what happens.



Recall that, in (16b), the embedded C has two features:  $[uWh]$  and  $[uT]$ , both with the EPP property.  $[uWh]$  is eliminated by the *wh*-phrase *hasta qué punto*, but, how is  $[uT]$  deleted? In Pesetsky & Torrego's (2001) system three possibilities would yield the desired result:

- (24) a. *Internal-Merge* of the subject DP.  
 b. *Internal-Merge* of the T head.  
 c. *Internal-Merge* of the *wh*-phrase pied-piping the PP (Ps being a species of T).

As a result of (15), Spanish lacks the first option (remember, the Case/Tense feature of subject DPs is deleted sooner), so (b) and (c) could in principle work –and, actually, they do. That, is, (b) is the unmarked option (T-to-C movement is always possible), and it always yields a convergent derivation; as for (c), it can also yield a correct outcome: the *wh*-phrase *hasta qué punto* is closer to C than the T head and can delete both the  $[uWh]$  and the  $[uT]$  features at once<sup>14</sup>.

For the purposes of this section, we can stop here. In the previous lines, I have argued that Iberian Romance's first phase is TP a Case-convergence domain. The proposal is consistent with Uriagereka's (1999) findings, and makes interesting predictions with respect to inversion.

#### 4. Edge Effects and the EPP

Given the nature of the topics under investigation here, one real challenge is to assess the role of preverbal subjects and the EPP in NSLs. The literature on these issues is so vast that I cannot do it justice here, so I will simplify. Let us start by considering the examples in (26):

- (26) a. Sheila baila. *PREVERBAL SUBJECT* (Spanish)  
 Sheila dance-3SG  
 'Sheila dances'
- b. Baila Sheila. *POSTVERBAL SUBJECT* (Spanish)  
 Dance-3SG Sheila  
 'Sheila dances'

What is the status of preverbal subjects in NSLs? Two main proposals have been put forward in the literature: a) they are (Clitic) Left Dislocated DPs in a TopP (cf. Ordóñez 1998); b) they are non-argumental DPs first-merged in SPEC-T and coindexed with a referential *pro* occupying the SPEC- $v^*$ . The first option is wrong, for otherwise there would be no way of differentiating between (27a) and (27b), or (28a) and (28b):

<sup>14</sup> I suspect that this implementation can also shed some light with respect to the fact that some complex DPs noted in Ordóñez (1998) do not trigger inversion: *cuál de tus amigas* (Eng. *which one of your friends*), *cuántos de esos libros* (Eng. *how many of those books*), etc. I want to argue that the key for those DPs to prevent T-to-C movement is the preposition they all contain, which, plausibly, is the head of the structure (i.e., the label). Cf. Gallego (2006) for a more fine grained analysis.

- (27) a. La Maria ha plorat. (Catalan)  
 The Maria have-3SG cried  
 ‘Maria has cried’  
 b. La Maria,  $t_i$  ha plorat. (Catalan)  
 The Maria, have-3SG cried  
 ‘Maria, she has cried’
- (28) a. Ningún jugador del Real Madrid merece lo que gana. (Spanish)  
 No player of-the Real Madrid deserve-3SG it that earn-3SG  
 ‘No Real Madrid player deserves what he earns’  
 b. \*Ningún jugador del Real Madrid, merece lo que gana. (Spanish)  
 No player of-the Real Madrid, deserve-3SG it that earn-3SG  
 ‘No Real Madrid player, he deserves what he earns’

As for the second option, endorsed by Barbosa (1997), Rosselló (2000), and Solà (1992), though better than the first one, has problems. First of all, it states that DPs can behave like expletives in that they are directly merged in SPEC-T, having a  $v^*$ P-internal ‘associate’, crucially without definiteness effects. Secondly, it has to assume (at least tacitly) that preverbal DPs receive no theta-role nor Case value (unless some kind of Chain-assignment mechanism is stipulated). Thirdly, this account disregards the fact that *external-Merge* is associated with theta-theory, not *edge-semantics* (cf. Chomsky 2004): clearly, preverbal subjects are interpreted as a species of ‘internal topic’ (cf. Rizzi 2004), which entails a semantics that goes beyond theta affairs.

Things being so, I would like to argue that preverbal subjects involve a process of Subject Shift. Differently put, if T is indeed a phase head, we expect for DPs landing in its outer SPECs to yield surface/*edge*-semantics effects, according to Chomsky’s (2001) principle about interpretations arising at the phonological border of phases (cf. Fox 2000). This is expressed in (29) and (30), both taken from Chomsky (2001: 33-34):

(29) *Optionality of Operations*

Optional operations can apply only if they have an effect on the outcome: in the present case,  $v^*$  may be assigned an EPP-feature to permit successive-cyclic  $\bar{A}$ -movement or Int[erpretation] (under OS).

(30) The EPP position of a phase *Ph* is assigned Int.

Chomsky (2001) applies both (29) and (30) to  $v^*$  in order to account for Object Shift; in this paper I would like to push the same logic to T. For Object Shift, the relevant interpretation seems to be related to specificity. What is the interpretation in the case of preverbal subjects in NSLs? According to (27) and (28), I conclude that preverbal subjects receive a topic or categorical-like interpretation (cf. Raposo & Uriagereka 2002, Rizzi 2004, *i.a.*), involving a species of Subject Shift. On the other hand, when the subject is postverbal, it is interpreted as a non contrastive focus (cf. Belletti 2004):

- (31) A: ¿Quién se ha ido? (Spanish)  
 Who CL have-3SG left  
 ‘Who left?’  
 B: #Juan se ha ido. B’: (Se ha ido) Juan. (Spanish)  
 Juan CL have-3SG left CL have-3SG left Juan  
 ‘Juan (left)’ ‘(It was) Juan’

At the same time, as a immediate consequence of (30), we also get (32):

- (32) a. A DP in the EPP position of TP is assigned *Categorical Interpretation*.  
 b. A DP not in the EPP position of TP is assigned *Thetic Interpretation*.

Under (32), the facts of (33) receive a natural explanation: note that (33a) can get an absolute or standing reading, paraphrasable as ‘María is a singer’. This is not possible with (33b), which can only receive a non-standing paraphrase, anchored to the *hic et nunc* of the speech act: ‘Now, María is singing’.

- (33) a. *María canta.*                      *CATEGORICAL JUDGEMENT*                      (Spanish)  
       *María sing-3SG*  
       ‘María sings’ (=María is a singer)
- b. *Canta María.*                      *THETIC JUDGEMENT*                      (Spanish)  
       *Sing-3SG María*  
       ‘María sings’ (=María is singing / It is María who sings... and not Isabel)

What about the A/A’ distinction and the EPP in Iberian Romance? Both topics directly bear on the nature of T. Within the GB-literature, an A position was defined either as a potential theta position (cf. Chomsky 1981) or as a potential Case position (cf. Chomsky 1995). In Chomsky (2005b), these notions are recast through the type of feature that acts as Probe: EPP/*edge*-Probes create A’ configurations, while  $\phi$ -Probes create A ones. SPEC-T has been said to have A’ properties in Iberian Romance (cf. Uribe-Etxebarria 1992), and that is surely consistent with the discourse-related semantics we have seen. In current terms, that means that T has EPP/*edge*-Probes. Nonetheless, it is clear that it has A properties as well: as (34), (35), and (36) show, preverbal subjects (which I take to be in SPEC-T), can bind, control and do not reconstruct, typical tests for A-Movement:

- (34) *En Joan<sub>i</sub> es pentina a si mateix<sub>i</sub>*                      (Catalan)  
       The Joan CL comb-3SG to himself  
       ‘Joan combs himself’
- (35) *En Joan<sub>i</sub> vol [ PRO<sub>i</sub> sortir amb la Maria]*                      (Catalan)  
       The Joan want-3SG to-go-out with the Maria  
       ‘Joan wants to go out with Maria’
- (36) a. *[El xicot de la Maria<sub>i</sub>]<sub>j</sub> no li’ha trucada<sub>z</sub> [<sub>v\*P</sub> t<sub>j</sub> t<sub>z</sub> t<sub>i</sub>]*                      (Catalan)  
       The boyfriend of the Maria not CL-her-have-3SG called  
       ‘Maria’s boyfriend has not called her’
- b. *\*No li’ha trucada<sub>z</sub> [<sub>v\*P</sub> el xicot de la Maria<sub>i</sub> t<sub>z</sub> t<sub>i</sub>]*                      (Catalan)  
       Not CL-her-have-3SG called the boyfriend of the Maria  
       ‘Maria’s boyfriend has not called her’

The conclusion, therefore, is that SPEC-T has both A and A’ properties in Iberian Romance (in Chomsky’s 2005b terms, T has both EPP/*edge* and  $\phi$ -Probes).

One last issue must be assessed: what is the status of the EPP in NSLs? This label has been understood in different ways in the literature, going from the requirement for SPEC-T to be filled in (cf. Chomsky 1981; 1982) to simply a feature mechanically creating extra-SPECs in phase heads (cf. Chomsky 2000; 2001). Note that if, as I have argued here, T defines a phase domain in Iberian Romance, the latter view of the EPP is supported by the data in (33): the EPP would be an optional property of phase heads. Some authors, though, have claimed the EPP is universal in T, being satisfied either by merging a null indexical (cf. Torrego’s 1989) or else by *v\**-to-T movement (cf. Alexiadou & Anagnostopoulou 1998)<sup>15</sup>.

Let us focus on the latter analysis, which seems to have received much attention in the literature. Putting aside the plausible phonological nature of verb movement (cf. Chomsky 2001), robust empirical evidence indicates that Alexiadou & Anagnostopoulou’s (1998) approach cannot be correct.

<sup>15</sup> A problem for an analysis along the lines of Alexiadou & Anagnostopoulou (1998) is that it takes it that verbal morphology stands for a (clitic) pronoun, thus being interpretable; as Holmberg (2005) shows, this view cannot be correct on both empirical and theoretical grounds.

First, if the EPP reduces to the checking of a [person] feature in T (cf. Chomsky 2001), a head-movement account of the EPP disregards the fact that, as a matter of simple logic, external arguments are potential interveners, blocking *Agree* between T and the  $v^*$ -V complex. Second, if as just said the EPP is really a [person] feature, then it cannot be the case that T's [person] be valued by  $v^*$ -V's [person]: that would predict that the  $\phi$ -features of subjects and objects must always be the same, for under Chomsky's system T's  $\phi$ -features are valued by the subject, while  $v^*$ -V's  $\phi$ -features are valued by the object. A trivial example like *I love Beyoncé* would be impossible to generate.

A third argument is provided by Torrego's (2002) analysis of Spanish raising verbs. As Torrego (2002) notes, *Agree* between matrix T and the subject DP within the embedded clause is blocked by experiencer clitics:

- (37) a. Juan<sub>i</sub> parece [<sub>TP</sub> t<sub>i</sub> leer mucho] (Spanish)  
 Juan seem-3SG to-read much  
 'Juan seems to read a lot'
- b. \*Juan<sub>i</sub> me parece [<sub>TP</sub> t<sub>i</sub> leer mucho] (Spanish)  
 Juan CL-to-me seem-3SG to-read much  
 'Juan seems to me to read a lot'

As Esther Torrego (p.c.) has pointed out to me, it must be the case that a null counterpart of *it* (call it *pro<sub>it</sub>*) undergoes *external-Merge* with T in (38): that would explain the intervention effect that emerges.

- (38) a. Parece [<sub>TP</sub> *pro<sub>it</sub>* llover] (Spanish)  
 Seem-3SG to-rain  
 'It seems to be raining'
- b. \*Me parece [<sub>TP</sub> *pro<sub>it</sub>* llover] (Spanish)  
 CL-to-me seem-3SG to-rain  
 'It seems to me to be raining'

However, (38) does not prove that matrix T must create a SPEC: it just shows that *Agree* is blocked by the experiencer clitic. Interestingly enough, indirect evidence from Cecchetto (2000) undoubtedly indicates that matrix T does satisfy the EPP by means of a *bona fide* SPEC. In particular, in his analysis of Clitic Left Dislocation, Cecchetto (2000) shows that those dependents reconstruct into a position below preverbal subjects, but above postverbal ones (an outer-SPEC- $v^*$ , I assume). Such a reconstruction possibility is certified by (39), which indicates that the subject DP, *Juan*, can bind the clitic pronoun *le* only when in preverbal position.

- (39) a. [<sub>CP</sub> [Los libros que le<sub>z</sub> diste]<sub>j</sub>, [<sub>TP</sub> Juan<sub>z</sub> no los<sub>j</sub> ha leído [<sub>v\*P</sub> t<sub>j</sub> [<sub>v\*P</sub> t<sub>z</sub> t<sub>j</sub>]]]] (Spanish)  
 The books that CL-to-him gave-2SG Juan not CL-them have-3SG read  
 'The books you gave him, Juan has not read them'
- b. \* [<sub>CP</sub> [Los libros que le<sub>z</sub> diste]<sub>j</sub>, [<sub>TP</sub> no los<sub>j</sub> ha leído [<sub>v\*P</sub> t<sub>j</sub> [<sub>v\*P</sub> Juan<sub>z</sub> t<sub>j</sub>]]]] (Spanish)  
 The books that CL-to-him gave-2SG not CL-them have-3SG read Juan  
 'The books you gave him, Juan has not read them'

The crucial empirical test is (40): the Principle-C effect of this structure indicates, under Cecchetto's (2000) analysis, that a covert subject has undergone *internal-Merge* from SPEC- $v^*$  to SPEC-T.

- (40) \* [Los libros de María<sub>j</sub> ]<sub>i</sub>, *pro<sub>j</sub>* los<sub>i</sub> ha leído. (Spanish)  
 The books of María, CL-them have-3SG read  
 'María's books, she has read them'

## 5. Conclusions

In this paper I have tried to rephrase the GB-era claim that SPEC-T is an A' position in Iberian Romance, arguing that TP is a *strong phase*, under the assumption that phases are derivational domains of morphological convergence. To be precise, I have shown different evidence suggesting that subject DPs check their Case within the first phase in Iberian Romance, a fact that determines their derivational fate, rendering them computationally inert within the CP. From this very derivational imbalance, it follows that Iberian Romance lacks *that*-trace effects and *que/che*-deletion. I have also explored the consequences of this hypothesis with respect to obligatory inversion in interrogative clauses and preverbal subjects, claiming that the latter move to T's *edge* in order to yield a semantic-effect: a topic or categorial interpretation.

## References

- Alexiadou, A. & E. Anagnostopoulou (1998): "Parametrizing Agr: Word Order, V-Movement and EPP-Checking", *N*, 16, 491-539.
- Barbosa, P. (1997): "Subject Positions in the Null Subject Languages", *Seminários de Linguística*, 1, 39-63.
- Barbosa, P. (2001): "On Inversion in *Wh*-questions in Romance", in A. Hulk & J. I. Pollock (eds.), *Subject Inversion in Romance and the Theory of Universal Grammar*, Oxford (New York): OUP, 20-59.
- Belletti, A. (2004): "Aspects of the Low IP Area", in L. Rizzi (ed.), *The Structure of CP and IP*. Oxford: OUP, 16-51.
- Boeckx, C. (2001): "Scope Reconstruction and A-Movement", *NLLT*, 19, 503-519.
- Boeckx, C. (2002): "French complex inversion in the light of a minimalist program", in J. Camps and C. Wiltshire (eds.), *Proceedings of Linguistic Symposium on Romance Linguistics (LSRL) 30*, Amsterdam: John Benjamins, 43-56.
- Boeckx, C. (2003a): *Islands and Chains*. Amsterdam: John Benjamins.
- Boeckx, C. (2003b): "Case Matters and Minimalist Concerns", *Harvard Working Papers in Linguistics*, 8, 159-187.
- Cecchetto, C. (2000): "Doubling structures and reconstruction", *Probus*, 12, 93-126.
- Chomsky, N. (1981): *Lectures on Government and Binding*, Dordrecht: Foris.
- Chomsky, N. (1982): *Some Concepts and Consequences of the Theory of Government and Binding*, Cambridge: MIT Press.
- Chomsky, N. (1993) "A Minimalist Program for Linguistic Theory," in K. Hale & S. J. Keyser (eds.) *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, Cambridge (Mass.): MIT Press, 1-52.
- Chomsky, N. (1995): *The Minimalist Program*, Cambridge (Mass.): MIT Press.
- Chomsky, N. (2000): "Minimalist Inquiries: The Framework", in R. Martin et al. (ed.), *Step by Step. Essays on Minimalist Syntax in Honour of Howard Lasnik*, Cambridge (Mass.): MIT Press, 89-155.
- Chomsky, N. (2001): "Derivation by Phase", in M. Kenstowicz (ed.), *Ken Hale: A Life in Language*, Cambridge (Mass.): MIT Press, 1-52.
- Chomsky, N. (2004): "Beyond Explanatory Adequacy", in A. Belletti (ed.), *Structures and Beyond*. Oxford: OUP, 104-131.
- Chomsky, N. (2005a): "Three Factors in Language Design", *LI*, 36, 1-22.
- Chomsky, N. (2005b): "On Phases", Ms., MIT.
- Den Besten, H. (1983): "On the interaction of root transformations and lexical deletive rules", in W. Abraham (ed.), *On the Formal Syntax of Westgermania*, Amsterdam: John Benjamins.
- Epstein, S. & D. Seely (2002): "Rule Applications as Cycles in a Level-free Syntax", in S. Epstein & T. Seely (eds.), *Derivation and Explanation in the Minimalist Program*, Malden (Mass.): Blackwell, 65-89.
- Fox, D. (2000): *Economy and Semantic Interpretation*, Cambridge (Mass.): MIT Press.
- Frampton, J. & S. Gutmann (2000): "Agreement is Feature Sharing", Ms., Northeastern University.
- Gallego, A.J. (2004): "T-to-C and  $\Sigma$ -to-C Movement in (Peninsular) Spanish and Catalan", paper presented in the *XIV Colloquium on Generative Grammar*, Universidade do Porto, Porto (Portugal).
- Gallego, A.J. (2006): "Phase Sliding", Ms., UAB/UMD.
- Goodall, G. (1993): "Spec of IP and Spec of CP in Spanish *Wh*-Questions", in W. Ashby, M. Mithun, G. Perissinotto, & E. Raposo (eds.), *Linguistic Perspectives on the Romance Languages*, Amsterdam: John Benjamins, 199-209.
- Guasti, M.T. (1996): "On the controversial status of Romance interrogatives", *Probus*, 8, 161-180.
- Hale, K. & S. Keyser (2002): *Prolegomenon to a Theory of Argument Structure*, Cambridge (Mass.): MIT Press.

- Holmberg, A. (2005): "Is There a Little *Pro*? Evidence from Finnish", *LI*, 36, 533-564.
- Jaeggli, O. (1982): *Topics in Romance Syntax*, Dordrecht: Foris.
- Kayne, R. (1989): "Null Subjects and Clitic Climbing", in O. Jaeggli & K. Safir (eds.), *The Null Subject Parameter*, Dordrecht: Kluwer, 239-103.
- Masullo, P. (1992): "Quirky Datives in Spanish and the Non-Nominative Subject Parameter", in A. Kathol & J. Beckman (eds.), *MIT Working Papers in Linguistics*, 89-103.
- Ordóñez, F. (1998): "The inversion construction in interrogatives in Spanish and Catalan", in J. Lema & E. Treviño (eds.), *Theoretical analyses on Romance languages*, Amsterdam: John Benjamins, 329-350.
- Pesetsky, D. & E. Torrego (2001): "T-to-C Movement: Causes and Consequences", in M. Kenstowicz (ed.), *Ken Hale: A Life in Language*, Cambridge (Mass.): MIT Press, 355-426.
- Pesetsky, D. & E. Torrego (2004a): "Tense, Case, and the Nature of Syntactic Categories", in J. Guéron & J. Lecarme (eds.), *The Syntax of Time*, Cambridge (Mass.): MIT Press, 495-537.
- Pesetsky, D. & E. Torrego (2004b): "The Syntax of Valuation and the Interpretability of Features", Ms. MIT/U.Mass Boston.
- Picallo, M.C. (1998): "On the EPP and Null Expletive Subjects", *Probus*, 10, 219-241.
- Raposo, E. & J. Uriagereka (2002): "Two Types of Small Clauses", in J. Uriagereka, *Derivations*. London: Routledge.
- Rizzi, L. (1982): *Issues in Italian Syntax*, Dordrecht: Foris.
- Rizzi, L. (1996): "Residual verb second and the *Wh*-criterion", in A. Belletti & L. Rizzi (eds.), *Parameters and functional heads: essays in comparative syntax*, Oxford (New York): Oxford University Press, 63-90.
- Rizzi, L. (2004): "On the Forms of Chains: Criterial Positions and ECP Effects", Ms., U.Siena.
- Rosselló, J. (2000): "A Minimalist Approach to the Null Subject Parameter", *CatalanWPL*, 8, 97-128.
- Solà, J. (1992): *Agreement and Subjects*, Ph.D. Dissertation, UAB.
- Suñer, M. (1994): "V-Movement and the Licensing of Argumental *Wh*-Phrases in Spanish", *NLLT*, 12, 335-372.
- Torrego, E. (1983): "More Effects of Successive Cyclic Movement", *Linguistic Inquiry*, 14, 361-365.
- Torrego, E. (1984): "On Inversion in Spanish and Some of Its Effects", *Linguistic Inquiry*, 15, 103-129.
- Torrego, E. (1989): "Unergative-Unaccusative Alternations in Spanish", *MIT WPL*, 10, 253-272.
- Torrego, E. (1998): *The Dependencies of Objects*, Cambridge (Mass.): MIT Press.
- Torrego, E. (2002): "Arguments for a Derivational Approach to Syntactic Relations Based on Clitics", in S. Epstein & T. Seely (eds.), *Derivation and Explanation in the Minimalist Program*, Malden (Mass.): Blackwell, 249-268.
- Uriagereka, J. (1988): *On Government*, Ph.D. Dissertation, U.Conn.
- Uriagereka, J. (1999): "Minimal Restrictions in Basque Movements", *NLLT*, 17, 403-444.
- Uribe-Etxebarria, M. (1992): "On the Structural Positions of the Subject in Spanish, their Nature and their Consequences for Quantification", J. Lakarra & J. Ortiz de Urbina (eds.), *Syntactic Theory and Basque Syntax*, San Sebastian: ASJU.

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