

Preverbal subjects in null subject languages are not necessarily dislocated

JOÃO COSTA
INÊS DUARTE

Abstract

In recent work on null subject languages it has been claimed that preverbal subjects are always (clitic-)left dislocated. In this paper, we argue against this claim, on the grounds of empirical evidence from European Portuguese concerning agreement facts, asymmetries between preverbal subjects and clitic-left dislocated XPs with respect to minimality effects, the existence of languages with a mixed system (null expletive subjects and full referential ones), language acquisition data, the behavior of negative QPs and interpretation facts, and propose a non-uniform analysis of preverbal subjects and clitic-left dislocated XPs that derives their topic interpretation from a predication rule stated configurationally (section 2). Our account of the SVO and VSO orders displayed in European Portuguese relies on a specific formulation of the EPP parameter, on the locality constraint Attract Closest X and on the independently motivated claim that V-movement targets T in European Portuguese (section 3). Under our analysis, the computational system generates equally economical SVO and VSO derivations and discourse considerations, at the appropriate interface, rule out the unfelicitous ones.

1. Introduction and questions

In recent work, it has been suggested that preverbal subjects in null subject languages are always (clitic-)left-dislocated (*e.g.*, Barbosa, 1995; Ordoñez & Treviño, 1995; Alexiadou & Anagnostopoulou, 1996). This hypothesis raises

several questions related to its empirical adequacy. Among such questions, we would like to emphasize the following two:

- i. Is it empirically adequate for all null subject languages?
- ii. Since (Clitic-)Left Dislocation is associated with specific discourse contexts, what are the consequences of this proposal for the relation between discourse and subject positions?

In an attempt to provide answers to these two questions, the goals of this paper are the following:

- i. To further argue that this hypothesis makes wrong empirical predictions for European Portuguese, a null subject language (following up on Costa, 1996b, 1998, 2001a; and Duarte, 1997, 2001).
- ii. To show that licensing conditions for preverbal subjects and non-subject topics are different, which is presumably connected to their different syntactic positions.
- iii. To claim that the topic interpretation of some preverbal subjects in *Spec,IP* is not different from the interpretation of non-subject topics.
- iv. To derive the fact that some preverbal subjects are **not** interpreted as topics from properties of EPP-licensing.

2. Further arguments for preverbal subjects in *Spec,IP*

Let us start by reviewing some of the arguments independently advanced in Costa (1996b, 1998, 2001a) and Duarte (1997, 2001) for claiming that preverbal subjects in European Portuguese are in *Spec, IP*. These arguments simultaneously serve as arguments against the claim put forward by the authors cited in the introduction that preverbal subjects in all null subject languages are instances of (clitic-)left-dislocated XPs.

Three types of arguments will be presented: agreement facts, syntactic facts, and interpretation facts. As it will be shown, these three types of facts converge into the conclusion that preverbal subjects in European Portuguese are not (clitic-)left-dislocated.

2.1. Agreement facts

In this subsection, we provide evidence in favour of two claims: first, unlike subjects, (clitic-)left-dislocated elements do not trigger verbal agreement. As such, verbal agreement may be used as a valid diagnosis to know whether a constituent is left-dislocated or not. Second, for Barbosa's (1995) and Alexiadou and Anagnostopoulou's (1998) analysis of EPP-licensing to work, it

must be assumed that *Agr* is pronominal in null subject languages. It will be shown that this claim is hard to maintain for European Portuguese.

A. As shown in (1) and (2), in colloquial European Portuguese, in unaccusative contexts, subject-verb agreement is obligatory with preverbal subjects only (Costa, 1999):

- (1) a. Chegaram três pessoas.
arrived-3pl three people
b. Chegou três pessoas.
arrived-3sg three people
- (2) a. Três pessoas chegaram.
three people arrived-3pl
b. *Três pessoas chegou.
three people arrived-3sg

These data provide strong evidence to claim that preverbal subjects obligatorily trigger agreement on the verb. If preverbal subjects were (clitic-) left-dislocated, this correlation between subject position and agreement would be surprising, since left-dislocated and (clitic-)left-dislocated XPs do not trigger agreement effects (see the contrast between (3) and (4)):

- (3) a. *Os miúdos, foram-lhes dados uma bola.
the kids were-3pl-them-DAT given-masc-pl a ball
b. *Aos miúdos, foram-lhes dados uma bola.
To-the kids were-3pl-them-DAT given-masc-pl a ball
- (4) a. Os miúdos, foi-lhes dada uma bola.
the kids was-3sg-them-DAT given-FEM-sg a ball
b. Aos miúdos, foi-lhes dada uma bola.
To-the kids, was-3sg-them-DAT given-FEM-sg a ball

B. The second piece of agreement evidence comes from cases in which overt agreement morphology is not strong enough to license null subjects with disjoint reference. This is clearly the case with inflected infinitives in complement clauses, as shown in (5):

- (5) a. [Os pais]_i pensaram *ec*_i irem à praia.
[the parents]_i thought *ec*_i to-go-3pl to the beach
b. *[Os pais]_i pensaram *ec*_j irmos à praia.
[the parents]_i thought *ec*_j to-go-1pl to the beach

(5b) shows that the presence of overt 1st person plural morphology is not enough to license a disjoint reference for the subject. If, as suggested by the authors quoted above, in null subject languages Agr were pronominal, (5b) should be grammatical.

A similar pattern may be reproduced for dialectal European Portuguese (dialectal EP), as argued by Ribeiro (2002) in her study of inflected gerunds.

As shown in (6), as far as the licensing of null subjects is concerned, dialectal and standard European Portuguese (standard EP) behave alike, in spite of the presence *vs.* absence of overt Agr morphology in the two dialects:

- | | | | |
|-----|----|---|--------------|
| (6) | a. | Estandes ec_i cansado, tu_i podes ir.
being-2sg tired, you may \emptyset | Dialectal EP |
| | | Estando ec_i cansado, tu_i podes ir.
being tired, you may go. | Standard EP |
| | b. | Estandes tu cansado, eu posso ir.
being-2sg you tired, I may go | Dialectal EP |
| | | Estando tu cansado, eu posso ir.
being you tired, I may go | Standard EP |
| | c. | *Estandes ec_i cansado, eu_j posso ir.
being-2sg tired, I may go | Dialectal EP |
| | | *Estando ec_i cansado, eu_j posso ir.
being tired, I may go | Standard EP |

If, as proposed by the authors referred to above, rich Agr morphology were sufficient to license and to identify referential null subjects, there should be a contrast between dialectal and standard. Instead, the behaviour in (6) for inflected gerunds shows that they pattern like control structures.

2. 1. Syntactic facts

Let us now review some of the syntactic arguments to show that preverbal subjects in European Portuguese are not (clitic) left-dislocated.

A. As argued in Duarte (1987, 1996, 2001), Raposo (1997), Costa (1996b, 1998, 2001a) and Costa & Gonçalves (1999), there are subject-topic asymmetries with respect to minimality effects. This fact is easily detectable in two types of contexts: embedded *wh*-questions and untensed complement clauses.

As shown in (7a), in embedded *wh*-contexts, there is no problem for a subject to intervene in between the *wh*-phrase and the verb. However, if the same position is occupied by a (clitic) left-dislocated element, ungrammaticality arises (see (7b)). This contrast between subjects and (clitic) left-dislocated items is straightforwardly explained, if one assumes that only the latter occupy an A-bar position, yielding minimality effects.

- | | | |
|-----|----|--|
| (7) | a. | Perguntei que livro <i>o Pedro</i> leu.
(I) asked which book Pedro read |
|-----|----|--|

- b. *Perguntei que livro, à *Maria*, lhe deram.
(I) asked which book, to *Maria*, her-DAT (they) gave

The same pattern may be reproduced for relative clauses and untensed complement clauses, as shown in (8), and (9):

- (8) a. Já li o livro que o *João* ofereceu ontem à *Maria*.
(I) already read-1sg the book that the *João* gave-3sg yesterday to-the *Maria*
b. *Já li o livro que, à *Maria*, lhe ofereceu ontem o *João*.
(I) already read-1sg the book that to-the *Maria* her-DAT gave-3sg yesterday the *João*
- (9) a. A mãe lamenta os *miúdos* não verem o espectáculo.
the mother regrets the kids not to-see-3pl the show
b. *A mãe lamenta o *espectáculo*, não o verem (os *miúdos*).
the mother regrets the show, not it-ACCUS to-see-3pl (the kids)

As (8) shows, clitic-left-dislocated XPs create topic islands for *wh*-movement (see Culicover, 1993; Duarte, 1996), whereas preverbal subjects do not. This contrast remains unexplained under Barbosa's (1995) and Alexiadou and Anagnostopoulou's (1998) analysis, which in fact predicts that preverbal subjects induce minimality effects, just as clitic-left-dislocated XPs do.

As shown in (9), preverbal subjects are available in inflected infinitive complement clauses selected for by a certain subclass of higher verbs, whereas clitic-left-dislocated topics are not, a contrast that is not predicted in Barbosa's (1995) and Alexiadou and Anagnostopoulou's (1998) analysis. However, assuming Raposo's (1987) analysis of the licensing conditions for inflected infinitives, this contrast is straightforwardly accounted for if one assumes that clitic-left dislocated XP's are in the left periphery of the clause, whereas preverbal subjects occupy the *Spec,IP* position.

Summarizing, under Barbosa's (1995) and Alexiadou and Anagnostopoulou's (1998) analysis, there should be no contrast between the a. and b. sentences of (7)-(9). However, this contrast follows once one assumes that (clitic-)left dislocated XP's are in the left periphery of the clause and preverbal subjects occupy the *Spec,IP* position: under this assumption, it is expected that (clitic-)left dislocated topics induce minimality effects, whereas preverbal subjects do not.

B. The proposal advanced in Barbosa's (1995) and Alexiadou and Anagnostopoulou's (1998) works predicts the existence of a binary null subject parameter, since it reduces this parameter to a choice between pronominal *vs.* non pronominal *Agr* in a language. According to this proposal, there should be no mixed null subject systems, a prediction that is not borne out. In fact, Brazilian Portuguese (Coelho, Costa, Figueiredo Silva and Menuzzi, 2001) and

Cape Verdean Creole (Pratas 2002) are instances of mixed null subject systems, in which referential null subjects are not licensed, but expletive *pro* is available, as shown in (10-13):

(10)	a. Chegou Pedro. arrived Pedro	Brazilian Portuguese
	b. *Viajou Pedro. travelled Pedro	Brazilian Portuguese
(11)	Está chovendo. is raining	Brazilian Portuguese
(12)	a. Txiga tres pessoa. arrived three people	Cape Verdean Creole
	b. *Papia tres pessoa. talk three people	Cape Verdean Creole
(13)	Txobi. rains	Cape Verdean Creole

As shown in the data above, inversion is possible in Brazilian Portuguese and Cape Verdean Creole, in contexts in which *Spec,IP* is occupied by expletive *pro* (see (10a), (11); (12a), (13)); however, these languages do not allow referential *pro* (see (10b); (12b)). If the availability of null subjects were a consequence of the status of pronominal *Agr* responsible for EPP-checking, there should be no mixed systems, since once pronominal *Agr* is the value fixed for the null subject parameter, no contrast should arise between referential and non-referential null subjects.

What seems to be at stake for mixed null subject systems like those of Brazilian Portuguese and Cape Verdean Creole is the interaction of different constraints, as predicted under Rizzi's (1986) licensing conditions for *pro*. In Coelho *et al.* (2001), it is suggested that the null subject parameter must be factorized into different constraints.

C. A third piece of syntactic evidence for the claim that preverbal subjects are in *Spec, IP* comes from language acquisition facts studied by Adragão (2001). If preverbal subjects were (clitic-)left-dislocated in null subject languages, it should be expected that VSO was the unmarked word order, since this should be the order where the subject and the object are in their A-position, given V-movement. However, the study of the acquisition of subjects by a Portuguese child between 24 and 36 months carried out in Adragão (2001) shows that inversion is both highly marked and rare in the child's early productions:

- (14) European Portuguese data from a child between 24 and 36 months
 % of SV/VS utterances in the child's productions:
 SV – 93
 VS – 7 (out of 1060 sentences)

Adragão (2001) took into account the eliciting discourse, in order to make sure that the *corpus* included contexts in which inversion would be felicitous in adult language. Amongst the 7% of VS sequences found, the majority corresponds to passives, unaccusatives (79%), and predicative structures. Interestingly, all these structures have an unaccusative common basis, allowing for felicitous unmarked VS order in adult language.

The findings of Adragão (2001), and their consequences for the evaluation of the status of preverbal subjects, are further corroborated by the fact that, at the stage of acquisition studied, there are very few OV sentences, and hardly any evidence for strategies of Clitic Left Dislocation, since the acquisition of clitics is quite late in European Portuguese (cf. Duarte, Matos and Faria, 1995).

These data provide additional evidence for the unmarked status of the preverbal position for subjects. Furthermore, the correlation between VS and unaccusativity makes it impossible to claim that children do not know whether *Spec, IP* is projected.

D. The last piece of syntactic evidence we would like to point out comes from the behaviour of negative QPs in preverbal position. As shown in Costa (1996a), preverbal subject negative QPs may occur in this position (even separated from the verb by a sentence adverb) without having to be associated with a specific focus or exclamative intonation:

- (15) Ninguém provavelmente leu esse livro.
 nobody probably read that book

This behaviour contrasts with Italian. As shown in Belletti (1990), negative QPs in preverbal pre-adverbial position may only surface if they bear heavy stress (see (16)). The Italian data may be explained if one assumes that such negative QPs are focalized, since negative QPs cannot be (clitic-)left-dislocated, as shown in (17):

- (16) NESSUNO/*Nessuno probabilmente ha sbagliato.
 nobody probably failed
- (17) *Niente, probabilmente (l') hai letto.
 nothing, probably (you) have-2sg read (it-ACCUS)

In European Portuguese, the ban against (clitic-)left-dislocated QPs also holds (in fact, negative QPs do not qualify as fronted topics of any kind, as shown in Duarte, 1987).

- (18) *Nada, provavelmente leste(-o).
nothing, probably read-2sg (it-ACCUS)

The lack of evidence for assuming some type of focalization strategy, along the lines proposed for Italian, for the behaviour of the negative QP in sentences like (15), comes from the fact that sentences in which there is QP-fronting, such as (19a), are exclamative or evaluative. This interpretation may be tested by the fact that the polarity of the sentence cannot be reversed with a question tag (see (19b)). This type of interpretation is not associated with (15), as (20) shows:

- (19) a. Muito vinho bebeu o capitão!
much wine drank the captain!
b. */??Muito vinho bebeu o capitão, não bebeu?
much wine drank the captain, not drunk?
- (20) a. */??Nem um barco comandou o capitão, pois não?
not even one ship commanded the captain, did he
b. Ninguém provavelmente leu esse livro, pois não?
nobody probably read that book, did he?

2.3. *Interpretation facts*

Let us finally consider arguments concerning interpretation facts. As it will become obvious, the assumption of this section is that (clitic-)left-dislocated XPs are associated with a specific interpretation (as extensively discussed in Duarte, 1987). However, the relevant interpretation is not matched by preverbal subjects.¹

A. In sentence-focus contexts, found in answers to *what happened?*, all sentence constituents are focused, since they all convey new information. In this context, in transitive structures, SVO word order is obligatory and (clitic-)left-dislocation is impossible, as shown in the examples below:

- (21) O que é que aconteceu?
what happened?
a. O Pedro partiu o braço.
the Pedro broke the arm

¹ These tests have been independently proposed in Costa (1996b, 1998, 2001a) and Duarte (1997, 2001).

- b. #Partiu o Pedro o braço.
broke the Pedro the arm
- c. #O braço, o Pedro partiu-o.
the arm, the Pedro broke it
- (22) O que é que aconteceu?
what happened?
- a. O João espirrou.
the João sneezed
- b. #Espirrou o João.
sneezed the João

If preverbal subjects were left-dislocated, we would expect that they would be impossible in this context, just like clitic-left-dislocated objects in (21c), and that they would be able to surface in their base-generated position (*Spec,VP*), contrary to fact, as (21b) and (22b) attest.

B. As argued by Barbosa (2000), there are constructions that must involve subject-clitic-left-dislocation. Apparent cases of hyper-raising, as in (23), are instances of such a context:

- (23) a. Os homens parece que viram um monstro.
the men seems that saw-3PL a monster
- b. A bicicleta parece que está partida.
the bicycle seems that is broken-FEM-SG

The fact that the subject is raised out of the tensed complement clause provides evidence in favour of Barbosa's (2000) suggestion. As emphasized by Costa (2001a), the existence of constructions in which the subject may be (clitic-)left-dislocated does not provide compelling evidence for analysing all preverbal subjects as (clitic-)left-dislocated. Instead, it is natural that, just like any other constituent, subjects may be left-dislocated or not. For the particular case of apparent hyper-raising contexts, it is worth noticing that definiteness effects corroborate the (clitic-)left-dislocation analysis. As shown in (24), specific indefinites, which are not easily (clitic-)left-dislocated, do not surface well in this type of construction:

- (24) a. *Umas meninas parece que estão doentes.
some girls seems that are sick-PL
- a'. Parece que umas meninas estão doentes.
- b. *Apenas uma criança parece que ficou ferida.
only one child seems that was hurt-FEM-SG
- b'. Parece que apenas uma criança ficou ferida.

This type of effects provides a good diagnosis for testing the status of preverbal subjects in other constructions; if every preverbal subject was (clitic-)left-dislocated, similar definiteness effects should arise in any SV sentence. However, this prediction is not borne out, since, in “normal” SV sentences, analysed without resorting to (clitic-)left-dislocation, definiteness effects do not come about, as shown in (25):

- (25) a. O homem foi assassinado.
the man was murdered
a'. Um homem foi assassinado.
a man was murdered
b. As meninas estão doentes.
the girls are sick
b'. Umas meninas estão doentes.
some girls are sick
c. A criança ficou ferida.
the child was hurt
c'. Apenas uma criança ficou ferida.
only one child was hurt

This contrast in interpretation provides clear evidence to the claim that preverbal subjects are not necessarily (clitic-)left-dislocated.

2.4. Summary and the interpretation of preverbal subjects

The arguments presented above provide compelling evidence to the conclusion that, in European Portuguese, preverbal subjects, apart from those in well defined contexts such as apparent hyper-raising ones, are not (clitic-)left-dislocated. In fact, it was shown that they do not share properties with elements in A-bar position, hence there is no reason to challenge the standard analysis claiming that they are in *Spec, IP*.

Since *Spec,IP* is a legitimate position for subjects, it is expected that, like in English, this position hosts subjects with interpretations other than topic. This is confirmed, for instance, by the availability of N-words and non-specific indefinites in preverbal subject position. Nevertheless, most preverbal subjects do have a topic interpretation. In Barbosa's (1995) and others' analysis, this follows from the proposal that preverbal subjects are (clitic-)left-dislocated topics. However, as shown above, from a semantic point of view, (clitic-)left-dislocated topics are much more restricted than preverbal subjects (recall, *e.g.*, unavailability of topic N-words and non-specific indefinites). Likewise, we have shown that (clitic-)left-dislocated topics and preverbal subjects do not share the same distribution (*e.g.*, in untensed clauses preverbal subjects are possible, whereas (clitic-)left-dislocated topics are not).

Based on the facts presented above, we propose, as standardly assumed, a non-uniform analysis for (clitic-)left-dislocated topics and for preverbal sub-

jects in European Portuguese. Therefore, we have the burden of explaining why, in most cases, their discourse interpretation is the same.

We assume that the interpretation of clause-initial non-subject topics is established through a predication rule, in the spirit of Williams (1980), Rothstein (1985) and Bowers (1993), among others. As it is well known, this rule establishes a predication relation under sisterhood. Thus, in (26), the configuration presented predicts that the displaced topic/operator is the subject of the predicate IP:

$$(26) \quad [\text{Topic}_i / \text{Op}_i \text{ } [_{\text{IP}} \dots \text{vbl}_i \dots]]$$

The same analysis holds for preverbal subjects in *Spec*, IP. When they move, they leave a trace in *Spec*, VP, and end up in a sisterhood configuration with I', yielding a configuration similar to the one in (27):

$$(27) \quad [_{\text{IP}} \text{Subj}_i \dots [_{\text{I}'} \text{t}_i \dots]]$$

The rule of predication predicts that the preverbal subject will be interpreted as the topic about which the phrase contained within I' predicates.

So far, this analysis makes the right predictions. However, it is not exempt of problems. In particular, there are two issues that remain to be explained. First, in some more restricted contexts, there is alternation between SV(O) and VS(O) in European Portuguese, as in the case of unaccusatives. This type of alternation must be accounted for. Also, one of the arguments for the non-uniform analysis for subjects and topics is that some preverbal subjects are interpreted as foci in sentence-focus contexts. If the predication rule in (27) applies across-the-board, it must be explained why it is the case that not all preverbal subjects are interpreted as topics.

In the next section, we will provide an answer for these two questions, relating them with EPP-licensing. Notice that this is an option compatible with our argumentation, since we have claimed that EPP is not licensed by pronominal *Agr*.

3. EPP-licensing, the difference between SVO and VSO, and interpretation

Elaborating on Marantz' (1991) proposals, we contend that EPP-checking is universal and that all functional heads bear an EPP-feature. Following Alexiadou and Anagnostopoulou (1998) and Bailyn (2001), we assume the following formulation for the EPP parameter:

$$(28) \quad \text{EPP Parameter:} \\ \text{EPP can be checked either by an XP in } \textit{Spec}, \textit{YP} \text{ or a raised head.}$$

(28) stipulates that there are two mechanisms for EPP-licensing on a specific functional domain: either XP raises to the specifier position, or head-raising obtains. Crucially note that this is a more general statement than stating that EPP may be licensed by a pronominal Agr. For (28) to be satisfied, it suffices that there is head movement, no matter the content of the head. As proposed in Bailyn (2001) for Russian, we assume that a given language may display the two options: in certain constructions XP raises, whilst in others there is head movement.

Two further independently motivated assumptions must be made in order to solve the issues listed at the end of the previous section. Assuming a Split-IP analysis of European Portuguese in which *AgrS* dominates T, we follow Costa's (1996) proposal that in the tensed clauses of this language, V-movement targets T, and not the highest functional head (*AgrS*). Costa's argumentation comes from a comparison between Portuguese, French, Italian and English, in what concerns the distribution of adverbs and their relative ordering with respect to subjects and tensed verbs. Further, we will assume the following locality constraint proposed in Pesetsky and Torrego (2000):

- (29) Attract Closest X (ACX):
If a head K attracts X, no constituent Y is closer to K than X.

When ACX is combined to the attraction of elements able to check EPP, it straightforwardly derives the effects of the EPP parameter in (28). Let us see how this combination of assumptions accounts for the European Portuguese facts.

Recall the assumption spelled out above that both T and *AgrS* bear an EPP-feature. This assumption is independently motivated by the observation that both T and *AgrS* may attract the subject to its specifier (Duarte, 1997; Costa, 1998, 2001b). Since, as proposed in Costa (1996a), V-to-I movement targets T, the EPP feature in this head is deleted by head raising, in compliance with (28). Accordingly, EPP deletion is partly constrained by the target of V-movement in each language. For instances, if, in a specific language, V targets *AgrS*, EPP on T and *AgrS* may be deleted, if the language allows head raising for EPP checking. On the contrary, if in a language V-movement does not target a specific functional head, the EPP feature on that head remains undeleted and XP-movement is needed. In such a case, XP-movement operates as a last resort mechanism for EPP-deletion. In other words, (28) is to be interpreted as a disjunction just in so far as the target of V-movement permits its satisfaction. The latter mixed case is the relevant one for analysing European Portuguese. In fact, under ACX, the EPP feature in *AgrS* may be deleted in the following ways: either the DP in *Spec,TP* raises to *Spec,AgrSP* or the verbal complex in T raises to the *AgrS* head, as shown in (30):

- (30) a. [_{AgrSP} DP Agr [**EPP**] [_{TP} t_{DP} V-T [_{VP}.....
b. [_{AgrSP} V-Agr [**EPP**] [_{TP} DP t_V [_{VP}.....

The two options are available, since both DP and V+T count as the closest constituent with respect to *AgrS*. Hence, both options are derivationally identical with respect to economy.

This proposal makes the following predictions. If EPP-deletion is done via DP-raising to *Spec,AgrSP*, that is, if (30a) is chosen, a predication relation obtains, and the sentence is interpreted as a categorical judgement. The topic or non-topic interpretation of the preverbal subject depends on its inherent semantic properties and/or on the properties of the discourse context. If (30b) is chosen instead, VSO obtains, and the sentence is interpreted as athetic judgement. No topic interpretation for the subject is available, since no predication relation obtains. It is important to notice that under this option, no focus interpretation for the subject obtains as well, since the subject is scoped out of the VP. In other words, we are assuming that the obtained VSO configuration in (30b) differs from VSO orders in which the subject is interpreted as information focus. In this case, there is evidence to claim that the subject is in *Spec,VP*².

The analysis sketched above is based on the assumption that V occupies different positions in each of the cases predicted by (30): T in (30a), Agr in (30b). For the analysis to be empirically supported, one must find independent evidence for the different position of V in the two cases. Adverbs provide such an evidence. In (31a), it is shown that, in an SV sentence, the adverb *ontem*/yesterday may intervene between the subject and the verb. As argued in Costa (1996a), this follows from the analysis under which the subject is in *Spec,AgrS* and the verb in T. In the presentational construction with VS order in (31b), it is shown that the adverb is no longer preverbal.

- (31) a. O PM ontem morreu.
the PM yesterday died-3SG
b. Morreu ontem o PM.
Died-3SG yesterday the PM

By itself, the difference between (31a) and (31b) does not provide compelling evidence for the different verb positions. In fact, the order in (31b) may be involving a VP-internal position for the DP, and a lower adjunction site for the adverb. Such an interpretation is legitimate, since temporal adverbs distribute quite freely in European Portuguese.

In order to discard this type of analytical ambiguity, a different type of adverb must be chosen. The monosyllabic manner adverb *bem* / well has been argued in Costa (1996a) to be a reliable diagnostic for marking the left edge of VP. As such, it does not surface preverbally, as shown in (32c). The lack of grammaticality contrast between (32a) and (32b) provides clear evidence for

² For independent evidence for the necessity to assume two ways of deriving VSO, see Costa (1998) on different distributions of adverbs in different types of VSO sentences.

the need to assume that two postverbal positions are available for the subject in European Portuguese: *Spec,VP* in (32b), and *Spec,TP* in (32a).

- (32) a. *Comeu o João* [_{VP} *bem as maçãs*.
ate the João well the apples
b. *Comeu* [_{VP} *bem o João as maçãs*.
ate well the João the apples
c. **Bem comeu o João as maçãs*.
well ate the João the apples

These facts further confirm Costa's (2001b) observation that for a subject to surface in *Spec,TP*, the verb must move higher than T, which explains the ungrammaticality of (33):

- (33) **Bem o João comeu as maçãs*.
well the João ate the apples

Concluding, the postulation of two different positions for the verb is confirmed by standard diagnostics for detecting the landing site of the verb. Notice that the major difference between European Portuguese and other null subject languages is the target of V-movement. If the verb moved all the way up to *AgrS* in all constructions, the EPP feature on this head would be deleted by head-raising.

4. Concluding remarks

In this paper we have provided compelling evidence against the analysis of preverbal subjects as (clitic-)left-dislocated topics in European Portuguese. We have shown that agreement facts of European Portuguese and the existence of mixed null subject systems such as those of Brazilian Portuguese and Cape Verdean Creole argue against the claims that the null subject parameter reduces to the choice between pronominal *vs.* non pronominal *Agr* and that pronominal *Agr* is responsible for EPP checking. We have presented data from language acquisition, asymmetries between preverbal subjects and clitic-left dislocated XP's in what concerns minimality effects and distributional properties which are unexpected and unaccounted for under the analysis of preverbal subjects as (clitic-)left-dislocated.

Based on the evidence presented, we have argued for a non-uniform analysis of preverbal subjects and (clitic-)left-dislocated XP's in European Portuguese, explaining the topic interpretation of most preverbal subjects as the effect of a predication rule, stated configurationally, provided the subject has the relevant intrinsic semantic properties.

The analysis we proposed relies on a particular formulation of the EPP parameter and on the independently motivated claim that in European Portuguese-

se V-movement targets T, unlike other null subject languages, in which V-movement targets *AgrS*. The combination of these assumptions derives the observed variations of SVO and VSO in European Portuguese and allows us to assign two different structures to surface identical VSO sentences: one structure with V in *AgrS* and the subject raised to *Spec,TP*, to which a presentational interpretation is assigned; another one with V in *AgrS* and the subject in *Spec,VP*, to which a focus interpretation of the subject is assigned.

Finally, notice that the kind of non-uniform analysis we argued for provides an elegant answer to the most general problem of the interface between the computational system and discourse constraints.

As it is well known, European Portuguese is amongst the languages using word order to encode discourse concepts such as topic and (information or presentational) focus. Under the analysis we proposed, given *Attract Closest X*, the computational system generates equally economical SVO and VSO derivations, irrespective of discourse considerations. In the syntax-discourse interface, such considerations will rule out the unfelicitous derivations.

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João Costa
FCSH, Universidade de Nova de Lisboa, Portugal
jcosta@fcsh.unl.pt

Inês Duarte
Faculdade de Letras da Universidade de Lisboa, Portugal
aij@mail.telepac.pt