# Symmetry and antisymmetry in syntax ${ }^{1}$ 

Xavier Villalba


#### Abstract

New evidence is provided that Romance Clitic Right-Dislocation cannot be the mirror image of Clitic Left-Dislocation nor its covert counterpart. It is also shown that an analysis postulating two leftward topic positions (Split-Topic Analysis) is more adequate on both conceptual and empirical grounds, since it complies with the highly restrictive view of syntax imposed by Kayne's Linear Correspondence Axiom, and offers a principled explanation of the consistent set of similarities and differences between Clitic Right-Dislocation and Clitic Left-Dislocation.


## 0. Introduction

Clitic Right-Dislocation (CLRD), when considered at all, has been analyzed as the mirror image of Clitic Left-Dislocation (CLLD) at the syntactic level (see Benincà et al., 1988; Vallduví, 1990, among others). Against such a view, Kayne (1994) proposes that CLRD is the covert counterpart of CLLD, that is, that right-dislocated elements appear in complement position and move to the left at Logical Form. The brunt of his argumentation is the compatibility of the covert analysis with a more restrictive theory of word order and phrase structure. He raises the strong hypothesis that a rigid mapping exists between hierarchical structure and linear order. This mapping is formulated as the Linear Correspondence Axiom (LCA), which ensures that linear order is just a corollary of asymmetric c-command. Such a strong hypothesis obviously brings out the issue of CLRD, a crucial construction for testing the empirical coverage of the LCA. However, appealing as it might be, Kayne's analysis of CLRD -as the symmetric one- contains several conceptual and empirical drawbacks. This paper is aimed to develop an analysis of CLRD empirically adequate and committed to the restrictive
vision of syntax entailed by the LCA. This approach, which I labeled the Split-Topic Analysis elsewhere (Villalba, 1996, 1997, 1998), strongly argues for two different landing sites for dislocated elements: the specifier of the Internal Topic Phrase in the left periphery of the VP area for CLRD, and that of the External Topic Phrase in the left periphery of sentence for CLLD.

In section 1, a snapshot of dislocation structures is offered. Afterwards, I will show that neither the symmetric analysis of CLRD (section 2) nor Kayne's (section 3) can withstand scrutiny: none of them can explain the bulk of common and contrasting properties of CLRD and CLLD. Finally, in section 4 , I will show that the Split-Topic Analysis can deal with empirical data in a principled and straightforward way, so that this approach is more adequate than the previous ones on both empirical and conceptual grounds. Catalan is the main source of empirical material for discussion since it allows CLRD at full. It has to be shown if the empirical generalizations and the conclusions directly extend to closely related Romance languages like Spanish, French or Italian.

## 1. Clitic Right-Dislocation and Clitic Left-Dislocation

### 1.1. Resumptive strategy

Both CLRD and CLLD show a clitic-resumptive strategy: the dislocate behaves as an element external to the clause, and it is the clitic that fulfills the syntactic and semantic relations (the same pattern is found in other languages; see Benincà et al., 1988 for Italian; Jones, 1990 for Sardinian, or Joseph \& Philippaki-Warburton 1987 for Modern Greek): ${ }^{2,3}$
[Catalan]
(1) (a) Els llibres ${ }_{1}$, al Pere $_{2}$, els $s_{1}$ bi vam donar.
the books to-the Pere them there past-2pl give
(b) Els $s_{1}$ bi $_{2}$ vam donar, els llibres ${ }_{1}$, al Pere ${ }_{2}$.
'We gave the books to Pere.'
[Spanish]
(2) (a) Los libros, a Pedro $_{2}$, se $e_{2}$ los $_{1}$ dimos. the books to Pedro him them gave-2pl
(b) $\mathrm{Se}_{2} \operatorname{los}_{1}$ dimos, los libros ${ }_{1}$, a $\mathrm{Pedro}_{2}$.
'We gave the books to Pere.'
[French: Kayne, 1975]
(3) (a) $\bar{A}$ ce chat , elle $y_{1}$ ressemble pas mal. to this cat she to-it ressembles not bad
(b) Elle $y_{1}$ ressemble pas mal, à ce chat ${ }_{1}$.
'She resembles that cat quite a bit.'
Spanish CLRD minimally contrasts with clitic doubling constructions:
(4) (a) Le di un libro a Pedro.
'I gave Pedro a book.'
(b) Le di un libro, a Pedro.
'To Pedro, I gave a book.'
In (4a), a Pedro is doubled but not right dislocated: this sentence is a fine answer to the question 'Who did you give a book to?', which shows that this element is in focus. On the other hand, (4b) can only answer the question 'What did you give to Pedro?, which shows this element is a right dislocate.

There is not consensus on the relationship between CLRD and clitic doubling. Jaeegli's (1986) influential proposal considers the contrast just shown above, and concludes that clitic doubled elements are not right dislocates. Nevertheless, he considers that a link between both constructions exists, namely that CLRD is a subset of doubling structures. However, several authors have argued against such a link on different grounds. First of all, Cinque (1990) shows the incoherence of such an analysis for a language like Italian, a non doubling one: here we have CLRD but no clitic doubling (but see Kayne, 1994, for a quite radical depart from standard assumptions on this subject). Moreover, even in the context of a clitic doubling language, like Spanish, we find asymmetries quite surprising for an analysis linking both constructions. On the one hand, we have instances of doubling which cannot have a dislocated counterpart:
(5) (a) No se lo dijo a nadie.
'(S)he said it to nobody.'
(b) *A nadie, no se lo dijo.
(c) *No se lo dijo, a nadie.

Even with this evidence it could be argued that dislocation is an instance of doubling but with a supplementary set of conditions. Nonetheless, this doesn't help us explain the converse situation: there exist instances of dislocation with no well-formed doubling structure. Consider (6) (see Franco, 1993, who is the source of (7)):
(6) (a) Vi la casa.
'I saw the house.'
(b) La casa, la vi./La vi, la casa.
(c) ${ }^{*}$ La vi la casa.
(7) (a) Cualquiera puede comprar un bote.
'Anybody can buy a boat.'
(b) Un bote, lo puede comprar cualquiera./Lo puede comprar cualquiera, un bote.
(c) Cualquiera lo puede comprar un bote.

Note that the ill-formed doubling sentences are rejected even in the Spanish dialects allowing direct object doubling. Obviously, if dislocation is to be linked to doubling, a contradiction results. On the one hand, examples like those in (5) suggest that dislocation must fulfil some extra requirements in addition to the ones imposed by doubling; hence doubling is not a sufficient condition for dislocation. On the other hand, (6)-(7) show that it is not a necessary condition either: we have dislocation but doubling is not allowed. We may conclude that dislocation and clitic doubling should be set apart (at least provisionally).

### 1.2. Recursivity

Both CLRD and CLLD may apply more than once in a sentence. In Catalan this allows quite complex sentences. Witness:
(8) $D^{\prime} a i x \tilde{o}_{3}$, $a m b$ ella $a_{4}, l i_{1} b_{2}$ dius, a ell , lque $n_{3}$ 'bi $i_{4}$ parlij2. of this with her Dat3 it say-2 to him that of-it-there talk-SUBJ-1 'Tell him to talk with her about this.'

In (8), we have a sentential nucleus (li bo dius) with both the clausal direct object and the indirect object right dislocated, and with two complements of the right-dislocated clausal direct object also dislocated, but to the left.

The contrast with wh and focused elements is quite sharp: only one element can be questioned/focused.
(9) (a) "Què on vam amagar? what where past-2pl hide 'What did we hide where?'
(b) *AQuest llibre al despatx vam amagar. this book in-the study past-2pl hide '*It is this book in the study that we hide.'

## 2. The symmetric analysis

Several authors (Benincà et al., 1988; Vallduví, 1990, among others) have suggested that CLRD is the mirror image of CLLD, i.e. they occupy the same structural positions, the difference just being lineal order. This approach is grounded on the bulk of common properties showed by CLLD and CLRD. However, many unnoticed empirical facts seem to disfavor such an analysis. In this section a review will be made of the empirical arguments for and against the symmetric analysis.

### 2.1. Evidence favoring the analysis

### 2.1.1. Free word order

Order is free for right- and left-dislocates:
(10) (a) Els llibres $_{1}$, al Pere $_{2}$, els bi $_{1}$ vam donar.
(b) Al Pere $e_{2}$, els llibres ${ }_{1}$, els ${ }_{1} b i_{2}$ vam donar.
(c) Al Pere ${ }_{2}$, els $s_{1}$ i $_{2}$ vam donar, els llibres ${ }_{1}$.
(d) Els llibres ${ }_{1}$, els $s_{1} b i_{2}$ vam donar, al Pere ${ }_{2}$.
(e) $E l s_{1}$ bi $i_{2}$ vam donar, els llibres $_{1}$, al Pere ${ }_{2}$.
(f) $E l s_{1}$ bi $_{2}$ vam donar, al Pere ${ }_{2}$, els libres ${ }_{1}$. 'We gave the books to Pere.'

Such a freedom is contingent on the presence of the resumptive clitic. Complements, which cannot be doubled in Catalan (with the exception of datives), show a quite strict order if compared with dislocates (neuter intonation is assumed):
(11) (a) Vam donar els llibres al Pere. past-2pl give the books to-the Pere
(b) *Vam donar al Pere els llibres.
(c) *Els llibres vam donar al Pere.
(d) *Al Pere vam donar els llibres.
(e) *Al Pere els llibres vam donar.
(f) *Els llibres al Pere vam donar. 'We gave the books to Pere.'

It is worth noting that the Spanish equivalent of (1b) (Le di a Pedro los libros) is perfectly grammatical. Indeed, Spanish allows a wider range of rearrangement of complements than Catalan. This behavior has been analyzed by Ordóñez (1998) in terms of scrambling. This scramblingoriented character of Spanish nicely correlates with its more restricted use of CLRD. Compare:
(12) (a) ¿Compró Juan el libro?
'Did Juan buy the book?'
(b) ¿¿Compró el libro, Juan?
'Did Juan buy the book?'
(13) (a) "Va comprar el Joan el llibre?
'Did Joan buy the book?'
(b) Va comprar el llibre, el Joan?
'Did Joan buy the book?'
The fact that Spanish has a more reduced clitic system might have favored this reordering behavior, for which Catalan relies on CLRD. In any case, it is an unexplained fact that Spanish does have CLRD, but to a lesser extent than Catalan. Nevertheless, it is less clear whether the issue is a matter of competence or of use. Consider the case of morphological passive, which is far more used in a language like English than in Spanish or Catalan. However, no attempt has been made to derive this difference from a different parameter setting or something alike. I would like to suggest the same for Spanish CLRD, namely that its lower productivity is a matter of concern for researchers on language use.

### 2.1.2. Dislocates are opaque domains for extraction

Both left- and right-dislocates are opaque domains for extraction of a wh-element:
(14) (a) *De què ${ }_{1}$ creus que, /(de) responsable $t_{1} J$, no bo és pas. of what think-2 that responsible not it is NEG
(b) *De què ${ }_{1}$ creus que no bo és pas, [(de) responsable $t_{1}$ ]. 'What do you think ( $s$ )he is not responsible of?'
(15) (a) *Tinc un amic de qui ${ }_{1}$ [responsable $t_{1}$ ], no m'bi considero pas. have-1 a friend of who responsible not me-there consider neg
(b) *Tinc un amic de qui ${ }_{1}$ no m'bi considero pas, [responsable $t_{1}$ ]. 'I have a friend that I do not consider myself responsible of.'

Thus, dislocates sharply contrast with complements, and with elements in the Spec, CP, which allow further extraction (see Lasnik and Saito, 1992):
(16) (a) ?De quin autor ${ }_{1}$ no saps [quins quadres $t_{1}$ ] exposen al Louvre. of which author not know-2 which pictures expose-3pl in-the Louvre
'Of which author don't you know which pictures they expose at the Louvre.'
(b) ?De quin poeta ${ }_{1}$ preguntava [quines traduccions $t_{1}$ ] s'han publicat recentment?
of which poet asked which translations SE-have-3pl published recently

- Of which poet did (s)he ask which translations have recently been published?'

Even though the symmetric analysis doesn't offer an explanation for this behavior, it is at least compatible with the available data.

### 2.2. Evidence against the analysis

### 2.2.1. Upward boundedness

It is a well-known fact that CLLD is unbounded, like wh-movement:
(17) (a) D'aixó, vaig dir que volia que tothom en parlés.
of this past- 1 say that wanted- 1 that everybody of-it talk-stbj-3 'I said that I wanted everybody to talk about this.'
(b) De què ${ }_{1}$ vaig dir que volia que tothom parlés $\mathrm{t}_{1}$ ? of what past- 1 say that wanted- 1 that everybody talk-stbj-3 'About what did I say that I wanted everybody to talk?'

In contrast, since Ross' thesis (Ross, 1986: 258), it is assumed that CLRD is bounded to its own sentence. However, standard examples don't allow us to test this claim directly as long as the contexts commonly provided are themselves islands for extraction:
(18) (a) ?*[That they spoke to the janitor about that robbery yesterday] is terrible, the cops.
(b) ?*[That the cops spoke to the janitor about it yesterday] is terrible, that robbery.
(Ross, 1967)
(19) *Les filmes [qui le passionent tant] ont tous été interdits, celui-là. (French, Kayne, 1975)
"'The films that turn him on so much, have all been banned, that guy.'
(20) *[Cando las appo vistas], so ghiratu a domo, sas nues. (Sardinian, Jones, 1993)
'"When I saw them, I returned home, the clouds.'
It is easy to test that each of the preceding sentences is ill formed independently of the upward boundedness condition: (18a-b) violate the Sentential Subject Constraint, (19) violates the Complex NP Constraint, and (20) violates the Condition on Extraction Domain.

Nevertheless, there is an indirect way of testing Ross' claim. Consider the following sentence:
(21) [ O 1 Van confirmar a la Maria [ O 2 que anirien cap a casall. past-3pl confirm to the Maria that go-subj-3pl toward to home 'They confirmed Maria they would go home.'

If CLRD is upward bounded, right-dislocation of both italicized constituents will result in a fixed order of the dislocates: a la Maria to Mary' must appear to the right of cap a casa 'toward home'. If both were at the same level, a free ordering between them would arise, which is a typical property of both CLRD and CLLD (see 2.1.1.). Data confirm Ross' claim:
(22) (a) * $L i_{1}$ van confirmar que $b i_{2}$ anirien, [a la Maria $]_{1}$, [cap a casa] ${ }_{2}$. to-him/her past-3pl confirm go-subj-Loc to the Maria toward to home
(b) $L i_{1}$ van confirmar que $b i_{2}$ anirien, [cap a casa] $]_{2}$, a la Maria $]_{1}$. 'They confirmed Maria they would go home.'

CLRD is really upward bounded, an unexpected contrast for the symmetric analysis.

### 2.2.2. IsLAND EFFECTS

It is a well-known fact that CLLD and closely related constructions create island effects in several languages (see Rochemont, 1989 for Italian and English; Borer, 1995 for Hebrew, and Müller and Sternefeld, 1993 for German):
(23) (a) ${ }^{*} \mathrm{Qui}_{1}$ creus que, de Cuba, $\mathrm{t}_{1}$ en parla al seu llibre? whom believe-2 that of Cuba of-it talk-3 in-the his/her book 'Who do you believe talks about Cuba in his/her book?'
(b) *[Amb quil $]_{1}$ creus que, de Cuba, en parla $\mathrm{t}_{1}$ Chomsky? with whom believe-2 that of Cuba, of-it talk-3 Chomsky 'With whom do you believe that Chomsky talks about Cuba?'
(c) * $\mathrm{Com}_{1} /$ ?On $n_{1} /$ "En quin llibre ${ }_{1}$ creus que, de Cuba, en parla $\mathrm{t}_{1}$ Chomsky?
how/where/in which book believe-2 that of Cuba of-it talk-3 Chomsky
'How/Where/In which book do you believe that Chomsky talks about Cuba?

In contrast, CLRD creates no island effect, against the prediction the symmetric analysis raises:
(24) (a) Qui $i_{1}$ creus que $t_{1}$ en parla al seu llibre, de Cuba?
(b) Amb qui $i_{1}$ creus que en parla $\mathrm{t}_{1}$ Chomsky, de Cuba?
(c) $\mathrm{Com}_{1} / \mathrm{on}_{1} /$ en quin llibre ${ }_{1}$ creus que en parla $\mathrm{t}_{1}$ Chomsky, de Cuba?

### 2.2.3. Antireconstruction (1): Principle C

CLRD and CLLD show an interesting contrast with respect to coreference relations. Consider the following sentences:*
(25) (a) *pro va dir convençuda les mentides que la Maria ${ }_{1}$ va inventar. ${ }^{*}{ }^{*} \mathrm{Sh}_{1}$ said convinced the lies that Maria ${ }_{1}$ invented.
(b) * $\mathrm{pro}_{1}$ no va confirmar després les aptituds que la Maria ${ }_{1}$ apuntava de jove.
'She ${ }_{1}$ didn't confirmed later the aptitudes that Maria ${ }_{1}$ suggested when young.'

Here we have a typical Principle C violation: the null pronominal subject binds the proper name. Consider now what happens when we left-dislocate the complex NP in object position:
(26) (a) Les mentides que la Maria $a_{1}$ va inventar, pro ${ }_{1}$ les va dir convençuda.
'The lies that Maria ${ }_{1}$ invented, she ${ }_{1}$ said convinced.'
(b) Les aptituds que la Maria apuntava de jove, pro $\mathrm{m}_{1}$ no les va confirmar després.
'The aptitudes that Maria ${ }_{1}$ suggested when young, she ${ }_{1}$ didn't confirmed later.'

The proper name within the relative clause may corefer with the null pronominal subject of the matrix clause. Cinque (1983, 1990) has argued that left dislocates are interpreted as if they were reconstructed in their original position at Logical Form (LF). So then, at LF (26) should be identical to (25), and hence yield the same improper coreference relation, contrary to fact. This unexpected behavior is known as the antireconstruction effect (see Chomsky, 1995, and references therein) because, since (26) is grammatical, it cannot be the case that the leftdislocate reconstructs at LF (see Villalba, 1999).

Now compare the sentences in (26) with their CLRD counterparts:
(27) (a) *pron les va dir convençuda, les mentides que la Maria va inventar. '*She ${ }_{1}$ said convinced the lies that Maria ${ }_{1}$ invented.'
(b) *pro ${ }_{1}$ no les va confirmar després, les aptituds que la Maria ${ }_{1}$ apuntava de jove.
${ }^{*}$ She $_{1}$ didn't confirmed later the aptitudes that Maria ${ }_{1}$ suggested when young.'

The right-dislocated version doesn't show antireconstruction. This contrast is unexpected for any analysis assuming that CLRD and CLLD are the mirror image of each other. Note that data rather point to a position for CLRD lower than that of CLLD. See section 4 below.

### 2.2.4. ANTIRECONSTRUCTION (2): BOUND PRONOUNS

Consider the following sentences:
(28) (a) Ningú ${ }_{1} /$ Tothom $_{1}$ recorda totes les pel-lícules que pro ha vist. 'Nobody/Everybody remembers all the films that he has seen.'
(b) Qui ${ }_{1}$ recorda totes les pel-lícules que pro ha vist? 'Who remembers all the films that he has seen?'

In both cases the null pronoun may receive a bound variable interpretation. The standard interpretation of this fact (see Reinhart, 1983), is that (the trace of) the quantifier/wh-element c-commands the pronoun. So then, if in the previous sentences the whole internal argument undergoes CLLD, the result must be out. The prediction is borne out:
(29) (a) *Totes les pel-licules que pro ba vist, ningú ${ }_{1} /$ tothom $_{1}$ les recorda. 'Nobody/Everybody remembers all the films that he has seen.'
(b) *Totes les pel-lícules que pro ${ }_{1}$ ba vist, qui les recorda? 'Who remembers all the films that he has seen?'

Here, the null pronoun is not c-commanded by the quantifier/whelement, so it cannot receive a bound variable interpretation (coreference is independently banned since operators do not even refer).

Let us now test the corresponding CLRD cases. A symmetric analysis predicts that no difference will arise because the structural position of right-dislocates is as high as that of left-dislocates. However, the prediction fails, for CLRD patterns with non dislocated sentences:
(30) (a) Ningú ${ }_{1}$ Tothom $_{1}$ les recorda, totes les pel-licules que pro ${ }_{1}$ ba vist. 'Nobody/Everybody remembers all the films that he has seen.'
(b) Qui les recorda, totes les pel-licules que pro ${ }_{1}$ ba vist? 'Who remembers all the films that he has seen?'

The null pronoun within the right-dislocate may receive a bound operator interpretation, a clear proof that it is under the c-commanding domain of the operator. Obviously, that amounts to saying that the position of right-dislocates is considerably lower than that of left-dislocates. In addition to that, note that an account based on radical reconstruction of dislocates into their base position at LF cannot explain the contrast: both the CLLD and CLRD versions should be grammatical, as the nondislocated version, which is clearly against the facts (see Villalba, 1999).

### 2.2.5. InFORMATIONAL STATUS

Until here we have just taken into account the syntactic differences between CLRD and CLLD. However, the proposal that they are the mirror image of each other is weakened as well when we analyze their pragmatic properties. It has been pointed out by several authors (Benincà, 1988; Vallduvi, 1990, 1995, among others) that whereas CLLD can introduce a new topic in the discourse, CLRD cannot (I follow the convention of marking pragmatically inadequate sentences with \#):
(31) A: On va posar les coses? where Past-3 put the things 'Where did (s)he put the things?'

B: Em sembla que... to-me seems that 'It seems to me that...
(a) els llibres, els va posar al despatx. the books them-masc past-3 put in-the study
(b) "els va posar al despatx, els llibres. them-masC past-3 put in-the study the books '...(s)he put the books in the study.'

In (31) CLRD is not felicitous because els llibres 'the books' has not been previously introduced in the discourse. Compare with the following:
(32) A: On va posar els llibres? where past-3 put the books
'Where did (s)he put the books?'
B: Em sembla que...
to-me seems that 'It seems to me that...'
(a) els llibres, els va posar al despatx.
the books them-masc past-3 put in-the study
(b) els va posar al despatx, els llibres.
them-masC Past-3 put in-the study the books
Here CLRD becomes perfect as long as els llibres 'the books' has already been introduced in the discourse.

A similar informational contrast arises with shift-topics (also called 'contrast topics'). Consider the following contrast:
(33) Hi havia un home i una dona.
'There was a man and a woman.'
(a) A ell, li van regalar un cotxe però a ella, li van comprar un vestit. to him to-him/her PAST-3pl give a car but to her to him/her past-3pl buy a dress
(b) ${ }^{=} A$ ell, $l i$ van regalar un cotxe però $l i$ van comprar un vestit, $a$ ella.
(c) ${ }^{2}$ Li van regalar un cotxe, a ell, però li van comprar un vestit, a ella.
'They gave him a car but they bought her a dress.'
Shift topics are only possible with CLLD.
Having these differences in mind, it seems quite plausible to assume Vallduvís $(1990,1995)$ proposal that CLRD is a focalization process, in the sense that it removes an element (a tail in his terms) from its original place, allowing another element to receive focus -we'll show in section 4.1. that something more has to be added. The following example illustrates the process:
(34) Què va trobar la Joana a casa?
'What did Joana find at home?'
(a) \#Va trobar un llibre a casa.
past- 3 find a book at home
'It was at home that she found a book.'
(b) Hi va trobar un llibre, a casa. there past-3 find a book at home
(c) A casa, bi va trobar un llibre.
at home there past- 3 find a book
'It was a book that she found at home.'

Focus is assigned to the last element in the sentence. (34a) is not felicitous because a thematic element, a casa 'at home', receives focus interpretation. For the correct element, un llibre a book, to receive focus, the disturbing element a casa appears in a right-dislocated position, as in (34b). It is in this very special sense that we say that CLRD is a focalization process. CLLD, on the other hand, has this role as well, as (34c) shows. Nevertheless, it also fulfills other tasks at the informational level, namely, introducing a new or shift topic.

### 2.3. CONClusion

In sections 1. and 2.1. we have made a brief revision of the common properties of CLRD and CLLD in Catalan. The empirical evidence shown there has led many scholars to conclude that CLRD is just the mirror image of CLLD (see, for example, Vallduví, 1990, 1995), or a derivation of it (see Hernanz \& Brucart, 1987 or Zubizarreta, 1998).

Notwithstanding, it has been shown that such a conclusion is built on a sketchy approach to CLRD. In section 2.2 another bulk of coherent data -only partially taken into account in the literature- has been presented undermining such a conclusion.

## 3. Clitic Right-Dislocation as covert Clitic Left-Dislocation: Kayne (1994)

Kayne (1994) rejects a symmetric analysis of CLRD on theoretical grounds: the symmetric analysis doesn't comply with the Linear Correspondence Axiom (LCA). In essence, the LCA sets a direct relationship between asymmetric c-command and linear precedence, so that if a nonterminal node $A$ asymmetrically c-commands a nonterminal node $B$, then the set of terminal nodes dominated by $A$ must precede the set of terminal nodes dominated by $B$. Conversely, if $A$ precedes $B$, then $A$ necessarily occupies a higher position in the tree than B. Such a hypothesis strongly restricts the set of permissible syntactic structures, and is thus a welcome result for any restrictive model of human language. Obviously, if we accept that the LCA has a role in the way human language works, a symmetric analysis is to be discarded on conceptual grounds. This
drives Kayne to a new proposal: CLRD is the covert counterpart of CLLD. According to Kayne (1994), right-dislocates are in fact elements in complement position that only at Logical Form would move to the same (leftward) position overtly occupied by left-dislocates. His analysis is conceptually appealing since it traces a parallel between dislocation and other constructiqns involving an overt/covert contrast (the most notable $w h$-movement, but see Kayne (1994: 8.7) for an extension to relative clauses). In this section $I$ offer a critical review of the evidence pro and against his proposal.

### 3.1. Evidence favoring the analysis

### 3.1.1. Upward boundedness

Kayne (1994) highlights that his analysis directly accounts for the upward-boundedness of CLRD: since the right-dislocate is in complement position, the issue of moving it out of its clause doesn't even arise.

### 3.1.2. Island effectis

If right-dislocates are in complement position in overt syntax, we expect them not to interfere with extraction. So then, Kayne's analysis correctly explains the contrast between CLRD and CLLD with respect to the creation of island effects: since no visible movement is involved in the case of CLRD, there is no way it can create an island for further extraction.

### 3.2. Evidence against the analysis

### 3.2.1. Free word order

Recall from 2.1.1. that complements in Catalan show a fixed order. Under Kayne's analysis, we only expect CLLD to display free word order: if right-dislocates were in complement position, we would wrongly predict that they should pattern with complements, displaying a fixed order. Data are clear in this point: right-dislocates show free ordering (see the contrast between (10) and (11) in 2.1.1.).

### 3.2.2. DISLOCATES ARE OPAQUE DOMAINS FOR EXTRACTION

If right-dislocates were in complement position in overt syntax, they wouldn't be opaque domains for extraction (see 2.1.2.): Kayne's analysis
incorrectly predicts that extraction from a right-dislocate should be as good as from a complement, since both occupy the same position. ${ }^{5}$ Again, data are conclusive, and there is no difference between CLRD and CLLD with respect to extraction domains.

### 3.2.3. Antireconstruction (1): Principle C

We have seen in 2.2.3. that CLRD and CLLD differ with respect to the antireconstruction effect:
(35) (a) *pro va dir convençuda les mentides que la Maria ${ }_{1}$ va inventar. '*She ${ }_{1}$ said convinced the lies that Maria ${ }_{1}$ invented.'
(b) Les mentides que la Maria $\mathrm{m}_{1}$ va inventar, pro les va dir convençuda.
'The lies that Maria ${ }_{1}$ invented, she ${ }_{1}$ said convinced.'
(c) "pror les va dir convençuda, les mentides que la Maria va inventar. $\left.{ }^{*}{ }^{*} S^{2}\right)_{1}$ said convinced the lies that Maria ${ }_{1}$ invented.'
(35a) is a typical violation of Principle C: the null pronominal subject binds a proper name. Since dislocates are interpreted as if they were in situ -they reconstruct at LF , in generative terms-, we expect the dislocated versions of ( 35 a ) to be ill formed as well. CLRD complies with this expectation, but the CLLD version is grammatical. This contrast is unexpected under Kayne's analysis because left- and right-dislocates occupy the same position when reconstruction applies at LF. Since he explicitly assumes, following Chomsky (1995) that Principle C applies under reconstruction, he should assume some ad boc stipulation to ban reconstruction of CLLD.

### 3.2.4. Antireconstruction (2): Bound pronouns

The behavior of CLRD and CLLD with respect to binding of pronouns is another problem for Kayne's analysis. Consider again the contrast:
(36) (a) Ningú $_{1} /$ Tothom $_{1}$ recorda totes les pel-lícules que pro $_{1}$ ha vist. 'Nobody/Everybody remembers all the films that he has seen.'
(b) *Totes les pel-lícules que pro ${ }_{1}$ ba vist, ningu $1_{1} /$ tothom $_{1}$ les recorda. 'Nobody/Everybody remembers all the films that he has seen.'
(c) Ningú ${ }_{1} /$ Tothom $_{1}$ les recorda, totes les pel-lícules que pro ba vist. 'Nobody/Everybody remembers all the films that he has seen.'

The pronominal cannot have a bound variable interpretation in the CLLD version, so the pronoun is not c-commanded by the quantifier at LF (see 2.2.4. for similar examples with a wh element). If we assume, following Kayne's analysis, that CLRD is the covert counterpart of CLLD, the contrast is unexpected since both left- and right-dislocates occupy the same position at LF.

### 3.2.5. Informational status

Kayne's analysis faces serious conceptual problems when it is confronted with the informational status of dislocates. Left- and rightdislocates bear different informational roles: whereas the former introduces a new/shift topic, the later is simply a focalization process (see 2.2.5). With this in mind, it is not clear how two dislocates which are identical at $L F$ have so different informational roles. Kayne's assumption of an optional feature forcing both visible -invisibility for the mechanism assigning focus and a special intonation- and invisible effects -movement at LF- is just a machinery without clear motivation. On a minimalist view of language the covert movement of the rightdislocate is suspect, at least. Note to finish this section that Kayne himself in subsequent work (Kayne, 1998) expresses his doubts on the existence of covert movement at all.

### 3.3. Conclusion

Kayne (1994) proposes that CLRD is the covert version of CLLD. His proposal is committed to the ban on right-movement imposed by the LCA, so it is very appealing on conceptual grounds. Notwithstanding, Kayne's proposal is not empirically motivated. A new analysis compatible with the LCA and capable of accounting for the bulk of empirical evidence is needed.

## 4. The Split-Topic Analysis

In this section I will argue that the basic difference between CLRD and CLLD lies in the different position they occupy in the clause not in the level at which they move. Whereas CLRD overtly moves to the specifier of the Internal Topic Phrase (IntTopP) just over the VP, CLLD overtly moves to a higher one, that of the External Topic Phrase (ExtTopP) in the CP area (the Split Topic Hypothesis; see Villalba, 1997, 1998; cf. Rizzi, 1997). Schematically: ${ }^{6}$
(37)


I think the structure proposed is the most plausible one both on theoretical and empirical grounds. On the one hand, empirical evidence has been given that right dislocates occupy a lower position in the sentence tree than left dislocates. So it seems that two topic positions are needed anyway. That might be just a stipulative device to account for our data, but it also nicely correlates with the information-based differences reviewed in paragraph 2.2.5. In fact, on minimalist assumptions, once right and left dislocates move for different reasons, we expect them to move to different positions as well. We can formalize this process in terms of feature attraction. Let us assume, following ideas by Choi (1996), that sentence elements are specified for features [new], [prominent]. If we combine these features, we obtain:

|  | +NEW | -NEW |
| :--- | :---: | :--- |
| +PROMINENT | contrastive focus | CLLD |
| -PROMINENT | non-contrative focus | CLRD |

The resultant picture is as follows. All [-new] elements-clitic left and right dislocates- move to IntTopP for checking such a feature; later on, those [-new] elements also marked as [+prominent] -clitic left dislocateswill move to ExtTopP for checking purposes (see Postal, 1993 for a previous proposal that CLLD is derived via CLRD; cf. Zubizarreta, 1998). A similar derivation would extend to focus (i.e. [+new]) elements, under the assumption that two Focus Phrases exist: all [+new] elements -contrastive and non-contrastive focus- move to FocP for checking such a feature; later on, those [+new] elements also marked as [+prominent] -contrastive focus- will move to CP for checking purposes (for the existence of a FocP see Belletti and Shlonsky, 1995, and references cited in). Interestingly enough, such a sketchy proposal offers an explanation for very well established facts. First of all, [-prominent] elements seem to form a natural class, which correlates with a lower position in the sentence: non-contrastive focus and CLRD are the rightmost elements in the sentence (i.e. the lowest ones in Kayne's terms). Furthermore, something similar is true for [+prominent] elements, which appear in a quite high position in the tree. Secondly, the lower focus position doesn't interfere with wh-movement, whereas contrastive focus does:
(38) (a) Què farà la Maria?
'What will Mary do?'
(b) *MARIA què farà?
‘*What MARY will do?’

Let us see now how this clause structure can easily derive the whole bulk of empirical contrasts presented in the preceding sections.

### 4.1. CLRD AND WORD ORDER

The basis for the distinction between CLRD and CLLD is their position in the clause: whereas CLLD appears in the specifier of ExtTopP, CLRD appears in the specifier of IntTopP, which is lower in the structure. All the differences between these two structures will be derived from this contrast. Nevertheless, such an analysis raises interesting questions with respect to word order. Once we assume that the LCA is a principle of Universal Grammar, if CLRD is movement, it must be left-movement. ${ }^{7}$ However, the resultant linear order must have the right-dislocate in the right boundary of the sentence. How is this conflict to be solved?

Right dislocates are marked as [-new, -prominent], so they get attracted by IntTopP for checking. Afterward, the remnant VP, which is marked
as [+new] will be attracted to the Spec, FocP, rendering the correct word order, and the illusive effect that right-dislocated element move in order to allow the constituent carrying new information to receive focus (which would be a violation of Greed: see Chomsky, 1995). ${ }^{8}$ Schematically:
(39)


### 4.2. RECURSIVITY AND FREE WORD ORDER

The fact that both right- and left-dislocates may appear more than once and in any order is unproblematic for our analysis. Following Kayne (1994), I consider that dislocation is substitution into the specifier of either of the topic projections (note that in Kayne's framework there is no difference between substitution into a specifier and adjunction). However, even though only one XP may occupy the specifier position, more than one dislocate may appear. The solution goes as follows (see Kayne, 1994: 3.5): the first dislocate moves to the specifier of, for example, IntTopP, the second moves to the specifier of (i.e. adjoins to) the first dislocate, and so on. The next tree depicts the outcome of the sketched process:
(40)


Recursivity is hence unproblematic and the free word order follows on the different ordering of the dislocation movements. Note that this analysis is compatible with the very strong conditions imposed by the LCA: ZP asymmetrically c-commands XP, which would be at the grounds of the asymmetries between right dislocates shown in Villalba (1999).

### 4.3. Dislocates and islands

Consider now the lack of island effects created by CLRD in contrast to CLLD. Prima facie, the island created by CLLD might be an effect of Relativized Minimality: [Spec, ExtTopP] is an $\mathrm{A}^{\prime}$-specifier, so, when filled, it will create a minimality barrier for A'-movement from within IP, blocking wh-movement. However, something has to be said about CLRD, which also involves a filled A'-specifier: [Spec, IntTopP]. Both movements should block A'-movement, because, in the upshot, they are identical for relativized minimality. The crucial point is that the minimality barrier created by a filled [Spec, IntTopP] is bypassed when the VP moves to [Spec, FocP] to receive focus: extraction from within the moved VP will be unaffected by the presence of a right-dislocate. Obviously, we have to make sure that the movement of the VP itself is allowed. The solution may have to do with L-relatedness: whereas Foc is commonly assumed to be a head with V-features, this cannot be extended to IntTop. Then, we may say that L-related movement to FocP is unaffected by the presence of the non-L specifier of IntTop. Schematically:


To sum up, CLRD does create a barrier, but its low position permits the bypassing strategy just suggested. Such an option is not available for CLLD, since ExtTopP is too high in the structure.

Besides, the non-L character of the position occupied by dislocates has another consequence: it entails that dislocates are opaque domains to extraction. We have seen in 2.1.2. that dislocates, unlike wh-phrases in the specifier of CP , do not allow subextraction:
(42) (a) *De què ${ }_{1}$ creus que, [(de) responsable $t_{1}$, no bo és pas.
(b) *De què̀ creus que no bo és pas, [(de) responsable $t_{1}$ ]. 'What do you think (s)he is not responsible of?'
(43) ?De quin autor ${ }_{1}$ no saps [quins quadres $t_{1}$ ] exposen al Louvre. 'Of which author don't you know which pictures they expose at the Louvre.'

Again, the crucial contrast might be the L-related character of the specifier of CP. The issue merits further study. ${ }^{\text {. }}$

### 4.4. Upward boundedness

To begin with, let us make the plausible assumption that dislocation is constrained by economy principles, hence its application must be as cheap as possible. In the case of CLRD, the dislocate -a [-new] elementmust check its features and the shortest position for it to do it is [Spec, IntTopP], which qualifies as non-Lexical position hosting presupposed material. Since this movement is the shortest, it must be the only one possible, according to general economy principles (e.g. the Minimal Link Condition of Chomsky 1995). As a result, CLRD must be upward bounded: movement to the [Spec, IntTopP] of a higher sentence (i.e. unbounded CLRD) would be less economical since it would fulfill the same function with a longer movement. In the case of CLLD, things are different. The placement of the left-dislocate is driven by checking of [+prominent]: it has to do with other discourse requirements (like being a new/shift topic; see 2.2.5.), making it appear in the [Spec, ExtTopp] either of the lower sentence or of a superior one, depending on its scope (obviously, a more refined analysis is to be pursued).

### 4.5. Antireconstruction

In 2.2.3. and 2.2.4. we have considered the following (simplified) configurations:


```
    (b) \(\left[_{\mathrm{IP}} w h_{1} / \mathrm{QP}_{1}\left[_{\mathrm{VP}} \mathrm{V}\left[_{\mathrm{NP}} \mathrm{N}\left[\mathrm{CP}\right.\right.\right.\right.\) (relative) \(\ldots\) pro \(\left.\left._{1} \ldots\right] I\right]\)
```

Configuration a is a typical Principle $C$ violation and configuration $b$ is a typical instance of bound pronoun. Let us now consider what the configuration would be if CLRD and CLLD apply, according to the SplitTopic Analysis. If we right-dislocate the object, we obtain

(b) $\left[_{\text {IP }} w h_{1} / \mathrm{QP}_{1}\left[\right.\right.$ IntTopp $\left.\left[_{\mathrm{NP}} \mathrm{N}\left[\mathrm{CP} \text { (relative) } \ldots \text { pro }_{1} \ldots \mathrm{I}\right]\right]_{\mathrm{VP}} \mathrm{V} \mathrm{t}_{\mathrm{SN}} \mathrm{J}\right]$
where the c-commanding relations are identical to that of the original configuration. Hence, no contrast in grammaticality arises between the sentence with the non-dislocated object and the one with the rightdislocated object.

Witness now what happens when we left-dislocate the object:

In these configurations, c -commanding relations do change: the null pronominal subject no longer c-commands the proper name Maria, allowing coreference, and $w h_{1} / \mathrm{QP}_{1}$ ceases to $c$-command the null pronominal, so the bound pronoun interpretation is not available. Note that the Split-Topic Analysis offers a principled account to the puzzling antireconstruction effects found in dislocation structures without postulating either a reconstruction process or an additional level of representation (i.e. LF). This is a welcome result since it contributes to developing a more restrictive model of Universal Grammar along the lines of Kayne (1998). See Villalba (1999) for a more developed view.

## 5. Conclusions

This article has offered a comprehensive analysis of dislocation processes in Catalan. It has been shown that CLRD and CLLD have a set of distinguishing properties which can be explained neither by an analysis taking CLRD to be the mirror image of CLLD nor by one taking CLRD to be the covert counterpart of CLLD (like that of Kayne 1994). Instead, it has been shown that the Split-Topic Analysis, which postulates two topic positions -Internal Topic Phrase in the periphery of the VP, and ExtTopP in the CP area-, is capable of giving a principled answer to the surprising asymmetries between CLRD and CLLD. Moreover, the analysis gives support to a more restrictive view of syntax.

Xavier Villalba
Departament de Filologia Catalana Facultat de Lletres (Edifici B) Universitat Autònoma de Barcelona 08193 Bellaterra (Barcelona)

SPAIN
xvillalba@seneca.uab.es
http://ggt.uab.es/xavier

## NOTES

1. I thank the comments and suggestions of Albert Fontich, Richard Kayne, Gemma Rigau and an anonymous reviewer. Usual disclaimers apply. Previous versions of this work were presented at 'Going Romance 1995' (December 1995. Amsterdam), the 'Sixth Colloquium on Generative Grammar' (March 1996, Valencia) and the 'Third Workshop on the Syntax of Central Romance Languages' (November 1996. Girona).
2. Glosses: $1,2,3=1 \mathrm{st}$, 2 nd , 3rd person, fem $=$ feminine, loc $=$ locative. masc $=$ masculine, NEG $=$ negation, $P L=$ plural, subj $=$ subjunctive. $I$ assume the common labels for phrase markers.
3. It is quite uncontroversial that CLRD is associated with a typical intonation pattern. However, it is not clear in the literature what is the correct description of such a pattern. Zubizarreta (1998) suggests for Spanish that, on the grounds of acoustic analysis results. right dislocates form a different intonational phrase with its own pitch accent. subordinated to that of the sentence -hence less prominent. Moreover, the right dislocate may, but need not, be separated from the sentence by a salient pause -a fact also described by Jones (1993:318) for Sardinian. To my ear. this is a quite accurate description of CLRD in Catalan, as well. Obviously, experimental research is needed to determine the exact intonational pattern. In any case, I will not attempt to offer an explanation for the correlation between this intonational pattern on the one hand and the informational and syntactic status of right dislocates on the other. See Zubizarreta (1998) for discussion.
4. I follow the convention of representing phonetically null pronouns by means of pro.
5. As Kayne (p.c.) points out, this argument would not follow if islandhood were determined at LF, where both CLLD and CLRD occupy the same position. However. I don't know of any proposal in the literature making such a move, which contradicts all common assumptions on the issue. Note also that an analysis along these lines would not explain the contrast between CLRD and CLLD with respect to the creation of island effects (3.1.2.). Kayne (1994) remains silent on the problem.
6. I remain neutral on the respective position of ExtTopP and CP because it is quite controversial and it doesn't affect the discussion. The reader is referred to Rizzi (1997) for a comprehensive analysis of the set of elements occupying the left periphery of sentence.
7. I assume without discussion that dislocation is derived by movement rather than being base-generated. See Kayne (1994), Rizzi (1997), and Villalba (1997. 1998) for arguments favoring a movement analysis. It is also controversial whether the clitic is just a visible trace of the dislocate or rather the head of a projection including the dislocate (before it moves). I remain neutral on this issue here since it doesn't affect the core of the analysis.
8. I thank an anonymous reviewer for pointing this out to me.
9. It is still to be explained why dislocates are opaque domains for $w h$-movement but not for dislocation.

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