## The Null Subject Parameter

Null subjects are permitted in all and only languages with morphologically uniform inflectional paradigms.
(where a paradigm is uniform "if all its forms are morphologically complex or if none of them are" Jaeggli \& Safir 1986: 30). This formulation covers the main Romance paradigm, which is formed by complex forms only, as well as the Japanese or Chinese one, which lacks any complex form. In the middle, we find languages like English, with mixed paradigms, which do not freely allow null subjects. The similarity with the CLRD case is too much striking to dissuade us from trying to derive it from a common source. Nevertheless, note that we cannot concede the same privileged theoretical status to the Null Subject Parameter and to our generalization: whereas we can consider languages like English or Catalan to have a negative or positive value respectively with respect to the former, nothing similar can be said regarding the latter, for (clitic) right-dislocation appears in both languages. In other words, as far as (clitic) right-dislocation is concerned, our cross-linguistic considerations just talk about tendencies (which in many cases correspond more to intuitive perceptions than to studies with a statistical ground). Obviously, tendencies can hardly be derived from parameter setting. So then, for the time being, any crosslinguistic consideration regarding (clitic) right-dislocation can only be considered speculative at best.

## Appendix B: Verbal right-detachments

In this appendix, I will be concerned with the main properties of verbal rightdetachments, particularly under the light of the description offered of their leftward counterparts in the companion Appendix of Chapter 2. As happens with all kind of right detachments, verbal right detachments are more poorly studied than their leftward parallel constructions. In this case we don't have the help of a previous detailed description, so much of what will be said here will be quite new in the modest landscape of Catalan linguistics.

## B.1. Syntactic properties

## B.1.1. The detached element

VPs can be right-detached without problems, up to the restrictions imposed by the pro-verb fer-ho (see B.1.2): ${ }^{13}$
(81) A: M'has d'escriure aquesta carta a màquina.
'You have to type this letter for me.'
B: Home, la veritat és que no ho he fet mai, d'escriure a màquina.
'Well, in fact I have never typed before.'
(82) A: Quan rentaràs els plats?
'When will you wash the dishes?'
B: Mira, no m'atabalis, que jo ja ho fet moltes vegades, de rentar els plats.
'Look, don't burden me, because I have washed the dishes many times.'

In contrast, rightward V-detachment is impossible:

[^0](83) A: M'has d'escriure aquesta carta a màquina.
'You have to type this letter for me.'
B: *Home, la veritat és que, a màquina, no he escrit mai, d'escriure.
'Well, in fact I have never typed before.'
(84) A: Quan rentaràs els plats?
'When will you wash the dishes?'
B: *Mira, no m'atabalis, que jo, els plats, ja els he rentat moltes vegades, de rentar.
'Look, don't burden me, because I have washed the dishes many times.'

## B.1.2. The resumptive element

We have just seen that only VPs can be right-detached. Consequently, we will only find the pro-verb fer-ho lit. 'do it'. The use of this agentive pro-verb renders this construction impossible with stative verbs:
(85) a. *En Joan ho fa des dels quinze anys, de tenir canes.
'Joan has white hair since he was fifteen.'
b. *Tothom ho fa, de saber anglès.
'Everybody knows English.'
c. *La Maria ho farà, de ser-hi.
'Maria will be there.'
d. *A l'altra habitació ho fa, d'haver-hi cadires.
'There are chairs on the other room.'

This restriction is a direct consequence of the lexical incompatibility between the stative verb that heads the detached VP and the agentive pro-verb, and is found also in VP-ellipsis:
*En Joan té canes des dels quinze anys i el seu germà també ho fa.
'*Joan has white hair since he was fifteen and his brother does so.'

## B.1.3. Combinatory aspects

Rightward VP-detachments concur with CLRD:
(87) a. No ho fa amb gaire entusiasme, de rentar els plats, en Joan.
'Joan doesn't wash the dishes with enthusiasm.'
b. No ho fa ningú, en aquesta casa, de rentar els plats.
'In this house nobody washes the dishes.'

Note that the right-detached VP freely permutes with a CLRDed element, which suggests we are dealing with an instance of CLRD as well, and not with an afterthought. This conclusion seems confirmed by other properties, such as upward boundedness:
(88) a. Van suggerir [a la Maria] [que anés cap a casa] PAST-3PL suggest to the Maria that go-SUBJ-3SG toward to home 'They suggested Maria to go home.'
b. *Li van suggerir que ho fes, [a la Maria], [d'anar cap a casa]
c. Li van suggerir que ho fes, [d'anar cap a casa], [a la Maria].

Here, we right-detach the VP of the embedded clause and the indirect object of the main clause. If the detached VP violated the RRC, we would expect a free ordering with respect to the CLRDed element coming from the main clause. However, this is not borne out, which suggests that VP-detachment is indeed upward bounded, namely it is an instance of CLRD. The examination of its interpretative properties will add more evidence to this conclusion.

## B.2. Interpretive aspects

The application of the standard question-answer test reveals that VP rightdetachment conveys old information:
(89) A: Què farà la Maria a casa?
'What will Maria do at home?'
B: a. Llegirà.
'She will read.'
b. \#Ho farà, de Ilegir.

The adequate context for such construction is to be found in a dialogue where the information conveyed by the detached element have been introduced in the previous discourse:
(90) A: En Pol estudia molt, oi?
'Pol studies a lot, didn't he?'
B: T'equivoques, ultimament no ho fa gaire, de estudiar.
'You are wrong, lately he doesn't study quite much.'

This correlates very nicely with the properties of CLRD surveyed in 3.1.2. The fact that this construction shares with CLRD the property of allowing the focusing of other elements makes the argument stronger. This becomes more apparent when particles associated with focus like només 'only' are taken into account. Observe:
(91) A: Se suposava que la Maria havia de portar el vi i les postres.
'Maria was supposed to bring the wine and the dessert.'
B: *Només ho va fer, de portar el vi.
'She only brought the wine.'

Només must associate with the element carrying focus but the only element available is the pro-verb, which cannot be focused on independent grounds, hence the illformedness. If an adverbial is stranded and focused, the presence of només turns unproblematic: ${ }^{14}$
(92) A: Se suposava que la Maria havia d'estudiar més.
'Maria was supposed to study more.'
B: Només ho fa els caps de setmana, d'estudiar.
'She only studies on weekends.'

Here només associates with the adverbial els caps de setmana 'on weekends', without unwanted consequences. So then, from an information-based perspective,

[^1]VP-detachment conveys given information, just as CLRD does. The need for a salient and highly available antecedent makes this point clear:
(93) A: La Maria és una jugadora molt temerària.
'Maria is a very audacious player.'
B: \#Sí, (però et puc assegurar que,) no ho fa mai, de perdre.
'Yes, (but I can assure you that) she never loses.'

This is an example of inferable relation: the CLRDed element perdre 'lose' is new but inferable from the sentence uttered by A together with the common knowledge of the world the speaker B has -which tends to associate audacious playing with losing. However, CLRD -unlike CLLD- cannot be used to mark such a relation. Nor can it express a contrast or topic-shift:
(94) A: El teu gos és perillós: podria mossegar algú.
'Your dog is dangerous: it could bite someone.'
B: \#Reconec que ho fa sovint, de bordar, ara segur que no ho farà mai, de mossegar ningú.
'I agree that it often barks, yet it surely doesn't bite anybody.'

See 3.1.2 for details.

## Chapter 4. Clitic Left Dislocation vs. Clitic Right Dislocation: three analyses

Catalan linguistics has devoted very little attention to CLRD. Since the few spare comments raised by Pompeu Fabra in his posthumous grammar (Fabra 1956), Catalan grammarians have disdained CLRD. A significant example is brought to us by a quite recent Catalan descriptive grammar of almost 900 pages, where not a single mention of CLRD is done. Among this quite desolate bibliographical landscape, reference to CLRD is in general a brief mention within a broader analysis of CLLD, basically to show the small pragmatic differences between both constructions (in this respect it is very important the work by Enric Vallduví basically Vallduví 1990, 1994, 1995-; it is also worth the price consulting Bartra 1985, Laca 1986, and Solà 1990). However, the syntactic side of CLRD has received less attention. Up to now, the most complete description of CLRD -albeit an incomplete one- is the series of papers I have developed during the second half of the nineties (Villalba 1996, 1997, 1998, 1999).

This little interest is also found when a cross-linguistic perspective is taken. Very few works offer a formal characterization of this construction. French is probably the best-studied Romance language. Larsson (1979) offers an extensive description of French CLLD, HTLD, and CLRD. Other notable works are Ashby (1986), Lambrecht (1981) and Postal (1991). As for Italian, after the seminal work by Antinucci \& Cinque (1977), the three pages Benincà et al. (1988: 1.4) devote to CLRD leave the reader unsatisfied. Nowadays the work by Carlo Cecchetto (Cecchetto 1999) came to partially supply this meager landscape with new data and insights. As for Spanish, the classic Contreras (1983) offers a very morose description of CLRD, only improved by the nonetheless brief characterization found in Zubizarreta (1994, 1998).

In this chapter we will enter into the properties of CLRD with respect to CLLD and will review three basic analyses proposed to accounting for them: the Symmetric Analysis (Vallduví 1990, 1995; Valiouli 1994), the Covert Movement Analysis (Kayne 1994), and the Double Topicalization Analysis (Zubizarreta 1998). ${ }^{1}$ The first

[^2]focuses on the set of properties shared by CLLD and CLRD. The second, instead, concentrates on the theoretical inadequacies of the symmetric analysis and offers a different approach supported by some sharp differences between the two constructions. Finally, the latter tries to avoid some theoretical and empirical inadequacies of the Covert Movement Analysis. It will be shown that neither of them can offer a fully and principled account for the behavior of CLRD.

The more detailed content of this chapter is as follows. Section 4.1 is devoted to the discussion of the symmetric analysis, with a description of its advantages and problems. The same structure is applied to the Covert Movement Analysis and the Double Topicalization Analysis in sections 4.2 and 4.3 respectively. Finally, in 4.4, some conclusions will be addressed, particularly those concerning the features a new analysis (to be provided in Chapter 5) should have.

### 4.1. The Symmetric Analysis

Besides its title, very little content is given to this analysis in the literature. The works that explicitly advocate for it use little effort to word it at length. Benincà et al. (1988: 1.4.1) make a quite evasive remark suggesting a symmetric analysis: "Possiamo dire che abbiamo in questo caso una topicalizzazione a destra simmetrica di quella a sinistra che abbiamo visto." Vallduví (1990: 103f) is more explicit, and words out the analysis as follows:
[...] right-detached phrases are found outside the core clause. It will be assumed, therefore, that leftdetachment and right-detachments are the mirror image of each other, both being clause-external but different in their directionality.



Richard Kayne's Harvard University classes (fall 1995). Unfortunately, I have not been able to consult such material.

A similar characterization is found in Valiouli (1994: 55), who endorses the idea to Ellen Prince.

In the remaining of this section, it will be shown that even though this analysis handles with some common features of CLLD and CLRD, there is much stronger evidence arguing against it (see also Villalba 1996, 1997, 1998).

### 4.1.1. Evidence favoring the analysis

### 4.1.1.1. The resumptive strategy and free word order

In Catalan complements, which cannot be doubled (with the exception of datives), show a quite strict order (neuter intonation is assumed):
(1) 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.'

In contrast, both CLLD and CLRD show a free word order of the dislocates (see 2.1.1 and 3.1.1 respectively):
(2) a. Els llibres 1 , al Pere ${ }_{2}$, els hi $_{2}$ vam donar.
b. Al Pere ${ }_{2}$, els llibres ${ }_{1}$, els hi $_{2}$ vam donar.
c. Al Pere $2_{2}$, els $_{1}$ hi $_{2}$ vam donar, els llibres ${ }_{1}$.
d. Els llibres ${ }_{1}$, els hi $_{2}$ vam donar, al Pere ${ }_{2}$.
e. Els $_{1}$ hi $_{2}$ vam donar, els llibres ${ }_{1}$, al Pere $2_{2}$.
f. Els $_{1}$ hi $_{2}$ vam donar, al Pere ${ }_{2}$, els llibres ${ }_{1}$.

It seems thus that the free word order we find in Catalan has very much to do with the presence of the clitic fulfilling the argumental tasks.

The behavior of Catalan nicely parallels that of a quite different language, Chichewa. Chichewa shows an obligatory S (ubject) M (arker) and an optional O (bject) M (arker) in all verbal finite forms (all Chichewa examples are from Bresnan and Mchombo 1987):
(3) a. Njûchi zi-ná-lúm-a alenjie.
bees SM-PAST-bite-INDIC hunters
'The bees bit the hunters.'
b. Njûchi zi-ná-wá-lum-a alenjie.
bees SM-PAST-OM-bite-INDIC hunters
'The bees bit them, the hunters.'

What is more interesting for us is that the position of the object is contingent on the presence of the OM; if there is no OM, the complement must immediately follow the verb (compare with the Catalan counterpart in (1)):
(4) a. Njûchi zinálúma alenjie. SVO
b. *Zinálúma alenjie njûchi. VOS
c. *Alenjie zinálúma njûchi. OVS
d. *Zinálúma njûchi alenjie. VSO
e. *Njûchi alenjie zináluma. SOV
f. *Alenjie njûchi zináluma. OSV

Notwithstanding, when the OM is present, all orders become possible (compare with the Catalan counterpart in (2)):
(5) a. Njûchi zináwáluma alenjie. SVO
b. Zináwáluma alenjie njûchi. VOS
c. Alenjie zináwáluma njûchi. OVS
d. Zináwáluma njûchi alenjie. VSO
e. Njûchi alenjie zináwáluma. SOV
f. Alenjie njûchi zináwáluma. OSV

The behavior of Catalan and Chichewa arguments is thus identical with respect to word order: the presence of a resumptive element (a clitic in Catalan, an OM in Chichewa) is a prerequisite for free ordering.

For the symmetric analysis, this is a welcome result: the detached phrases may left- or right-adjoin to the IP recursively, yielding the different outcomes.

### 4.1.1.2. Dislocates are opaque domains for extraction

Both left- and right-dislocates are opaque domains for extraction of a wh-element (see also Villalba 1996, 1997, 1998):
(6) a. *De què ${ }_{1}$ creus que, [(de) responsable $\left.t_{1}\right]$, no ho és pas. of what think-2 that responsible not it is NEG 'What do you think (s)he is not responsible of?'
b. *De què ${ }_{1}$ creus que no ho és pas, [(de) responsable $\left.t_{1}\right]$.
a. *Tinc un amic de qui ${ }_{1}$ [responsable $t_{1}$ ], no m'hi considero pas. have-1 a friend of who responsible not me-there consider NEG 'I have a friend that I do not consider myself responsible of.'
b. *Tinc un amic de qui $i_{1}$ no m'hi considero pas, [responsable $t_{1}$ ].

Thus, dislocates sharply contrast with complements, and with elements in [Spec, CP], which allow further extraction (see Chomsky 1986, 1995; Lasnik and Saito 1992):
(8) a. ${ }^{?}$ De quin autor, no saps [quins quadres $\mathrm{t}_{1}$ ] 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 have-3PL SE-published recently 'Of which poet did (s)he ask which translations have recently been published?'

The evidence presented in this section nicely correlates with the symmetric analysis, for it predicts that both left and right dislocates should pattern with adjuncts with respect to extraction, a prediction that is borne out. ${ }^{2}$

### 4.1.2. Evidence against the analysis

### 4.1.2.1. Boundedness

It is a well-known fact that CLLD is unbounded (like whovement): ${ }^{3}$

[^3](i) a. *A cada niño ${ }_{1}, \mathrm{su}_{1}$ madre piensa que María $\mathrm{lo}_{1}$ acompañará el primer día de escuela.

ACC each child his mother thinks that María ACC.CL will-accompany the first day of school
b. A cada niño ${ }_{1}$, su $u_{1}$ madre $l_{1}$ acompañará el primer día de escuela. ACC each child his mother will-accompany the first day of school

Zubizarreta suggests that the contrast might be due to the different kind of movement involved, namely A'-movement in (i)a and A-movement in (i)b. However, this contrast is reminiscent of the fact (see Rossello 1986a,b and section 5.1.2.3) that the presence of the clitic amnesties WCO violations in Catalan:
(ii) A qui $i_{1}$ van enviar un llibre els seus, pares?
'*Whom ${ }_{1}$ did his, parents send a book to?'
Interestingly enough, WCO effects reappear when successive cyclic movement is involved:
(iii) *A qui ${ }_{1}$ es van adonar els seus ${ }_{1}$ pares que $\mathrm{li}_{1}$ havien enviat un llibre?
'*Whom ${ }_{1}$ did his ${ }_{1}$ parents realized that they had sent a book to?'
Zubizarreta's account doesn't explains case (ii), under the current standard assumption that whmovement is A'-movement. Consider both configurations schematically (I remain neutral on the exact representation of clitics, a controversial issue, at best):

b. [CP CLLD/wh $\quad \ldots$ pronoun $_{1} \ldots$ clitic $\left.\left.\left._{j} \ldots\left(\mathrm{t}_{1}\right)\right]\right]\right]$
(iv)a is a standard WCO configuration: CLLD/wh binds both the pronoun and its intermediate trace without the mediation of the clitic. In (iv), instead, the clitic does have such a mediator role, rescuing the WCO violation (however, it does it, which is another intriguing issue). So then, what rescues WCO in Zubizarreta examples does the same job in (ii). Whether such analysis is correct remains unclear (leaving aside the fact that it departs from other analyses of the lack of WCO in CLLD, which are based to the non-quantificational nature of the left-dislocate; see e.g. Postal 1991). See Zubizarreta (forthcoming) for a different solution.
a. D'això, vaig dir que volia que tothom en parlés.
of this PAST-1 say that wanted-1 that everybody of-it talk-SUBJ-3
'I said that I wanted everybody to talk about this.'
b. De què̀ vaig dir que volia que tothom parlés $t_{1}$ ?
of what PAST-1 say that wanted-1 that everybody talk-SUBJ-3
'About what did I say that I wanted everybody to talk?'

In contrast, since Ross' thesis (Ross 1967: 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 adduced are islands for extraction of a dislocate (namely, relative clauses or subject sentences). Nevertheless, there is an indirect way of testing Ross' claim. Consider the following sentences:
(10) a. [s1 Van suggerir a la Maria [s2 que anés a casa]] PAST-3PL suggest to the Maria that go-SUBJ-3 to home 'They suggested Maria to go home.'
b. [sıVam trobar la resposta [ $s 2$ sense haver de fer preguntes]].

PAST-2PL find the answer without have of make questions
'We find the answer without making any question.'

If we dislocate to the right the underlined constituents, even though they will both appear in final position, the supposed upward boundedness of CLRD will result in a fixed order of the dislocates, since each occurs in a different sentence. If both were at the same level, a free ordering between them would be expected (this is indeed a typical property of both CLRD and CLLD, as we have just seen in 4.1.1.1). The data confirm Ross' claim: ${ }^{4}$
(11) a. [sı Li van suggerir [s2 que hi anés, a casa], a la Maria]
a'. *[sı Li van suggerir [s2 que hi anés], a la Maria, a casa]
b. [s1 La vam trobar [s2 sense haver de fer-ne, de preguntes], la resposta]
b'. *[s1 La vam trobar [s2 sense haver de fer-ne], la resposta, de preguntes].

[^4]It seems clear that CLRD is certainly upward bounded, an unexpected contrast for the symmetric analysis.

### 4.1.2.2. Creation of island effects

It is a well-known fact that CLLD - and topicalization- induces island effects (see Rochemont 1989 for Italian; regarding topicalization, see Borer 1995 for Hebrew, Lasnik and Saito 1992 for English, and Müller and Sternefeld 1993 for German):
(12) a. ?? Qui $1_{1}$ creus que, de Cuba, $t_{1}$ 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 qui $]_{1}$ creus que, de Cuba, en parla $t_{1}$ Chomsky?
with whom believe-2 that of Cuba, of-it talk-3 Chomsky
'With whom do you believe that Chomsky talks about Cuba?'
c. ${ }^{*} \mathrm{Com}_{1} l{ }^{l ?} \mathrm{On}_{1} / l^{? ?}$ 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?
(13) *Conec un noi [amb qui] (crec que), d'aquest tema, se n'ha de parlar $t_{1}$. know-1 a boy with whom (think-1 that) of-this subject, SE of-it-have-3 of talk 'I know a boy with whom (I think that) someone has to talk about this subject.'

However, it has gone unnoticed until Villalba (1996), and subsequent work, that the same effect is absent in CLRD, against the prediction the symmetric analysis raises:
(14) a. Qui creus que $t_{1}$ en parla al seu llibre, de Cuba?
b. Amb qui $i_{1}$ creus que en parla $t_{1}$ Chomsky, de Cuba?
c. Com $_{1} / \mathrm{on}_{1} /$ en quin llibre $_{1}$ creus que en parla $\mathrm{t}_{1}$ Chomsky, de Cuba?
(15) Conec un noi amb qui ( crec que) se n'ha de parlar $\mathrm{t}_{1}$, d'aquest tema.

This contrast is bad news for the symmetric analysis, unless some non-structural explanation is assumed for islandhood, which seems for the time being unwarranted.

### 4.1.2.3. Licensing of negative polarity items

Consider the following examples:
(16) a. La Maria *(no) és responsable de res/ningú.

Maria not is responsible of nothing/nobody
'Maria is not responsible of anything/anybody.'
b. La Maria *(no) és amiga de cap lingüista.

Maria not is friend of no linguist
'Maria is not friend of any linguist.'
c. La Maria *(no) confia en els consells de gaire gent.
the Maria not trust- 3 in the advice of many people
'Maria does not trust the advice of many people.'

Negative polarity items (NPIs) -in boldface for the sake of clarity - are licensed by negation. What would happen if the phrase containing them were dislocated? ${ }^{5}$ CLLD destroys the context for licensing NPIs:
(17) a. *(De) responsable de res/ningú, la Maria no ho és. of responsible of nothing/nobody the Maria not it is
b. *(D')amiga de cap lingüista, la Maria no ho és pas.
of friend of no linguist the Maria not it is
c. *En els consells de gaire gent, la Maria no hi confia.
in the advice of any people the Maria not loc trusts

On the contrary, CLRD maintains the context for the licensing of NPIs, against the expectations of a symmetric analysis:

[^5](i) A: La Maria només es casarà amb algú tan intel-ligent com ella.

B: a. *A ningú prou intel-ligent per ella, la Maria no el trobarà mai.
b. La Maria no el trobarà mai, a ningú prou intel-ligent per ella.

For the dislocability of non-referring NPs, see Cinque (1990) and Quer (1993).
(18) a. La Maria no ho és, (de) responsable de res/ningú.
b. La Maria no ho és, (d')amiga de cap lingüista.
c. La Maria no hi confia, en els consells de gaire gent.

Again, if the only syntactic difference between CLLD and CLRD is linear order with respect to IP, some unorthodox principle for the licensing of NPIs is called for that despises c-commands in favor of linear precedence. Actually, I know of no account along these lines.

### 4.1.2.4. Principle $C$

CLRD and CLLD show an interesting contrast with respect to coreference relations. Consider the following well-known antireconstruction effect (also called anticrossover effect; see Riemsdijk \& Williams 1981):
(19) a. Les mentides que la Maria ${ }_{1}$ va inventar, pro $_{1}$ les va dir convençuda.
'The lies that Maria, invented, she ${ }_{1}$ said convinced.'
b. Les aptituds que la Maria, apuntava de jove, pro ${ }_{1}$ no les va confirmar després.
'The aptitudes that Maria ${ }_{1}$ suggested when young, she ${ }_{1}$ didn't confirmed later.'

The R-expression within the relative clause may corefer with the null pronominal subject of the matrix clause. We say that these sentences show antireconstruction because reconstruction of the dislocated phrase would yield a Principle C violation. ${ }^{6}$ Consider the corresponding non-dislocated sentences:

[^6](20) a. ${ }^{*} p r o_{1}$ va dir convençuda les mentides que la Maria ${ }_{1}$ va inventar.
'*She ${ }_{1}$ said convinced the lies that Maria ${ }_{1}$ invented.'
b. *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.'

Having this in mind, compare the sentences in (19) with their CLRD counterparts (see Cecchetto 1999 for a similar contrast in Italian):
(21) a. *pro ${ }_{1}$ les va dir convençuda, les mentides que la Maria ${ }_{1}$ 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, didn't confirmed later the aptitudes that Maria ${ }_{1}$ suggested when young.'

The contrast is totally unexpected for any analysis assuming that CLRD and CLLD are one the mirror image of the other, unless some ad hoc restriction on reconstruction is imposed based on linear precedence.

### 4.1.2.5. Pronouns bound by a quantifier

The binding of pronouns by a quantifier also poses a tough test for the correctness of the symmetric analysis. Consider the following sentences:
(22) a. Ningú $/$ Tothom $_{1}$ recorda totes les pel-lícules que pro ${ }_{1}$ ha vist.
'Nobody/Everybody remembers all the films that he has seen.'
reconstruction in terms of trace copies, we would have the following (schematic) derivation, where I conventionally represent trace copies between square brackets:

D-S: pro $_{1}$ va dir convençuda les mentides.
S-S $\mathrm{S}_{1}$ :les mentides, pro ${ }_{1}$ les va dir convençuda [les mentides]
S-S $\mathrm{S}_{2}$ : les mentides que la Maria va inventar, pro $_{1}$ les va dir convençuda [les mentides]
LF: les mentides que la Maria ${ }_{1}$ va inventar, $\mathrm{pro}_{1}$ les va dir convençuda [les mentides]
Since the null pronoun doesn't bind the R-expression at LF, no Principle C violation arise, and consequently the sentence is perfect with the intended reading.
b. Qui ${ }_{1}$ recorda totes les pel-lícules que pro $_{1}$ 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 description of this fact (see Reinhart 1983, Hornstein 1995) is that the trace of the quantifier/wh-element must c-command the pronoun at LF. Interestingly, when the whole internal argument undergoes CLLD, the outcome is ungrammatical:
(23) a. *Totes les pel-lícules que pro $_{1}$ ha vist, ningú $1 /$ tothom ${ }_{1}$ les recorda. 'Nobody/Everybody remembers all the films that he has seen.'
b. *Totes les pel-lícules que pro $_{1}$ ha vist, qui ${ }_{1}$ les recorda?
'Who remembers all the films that he has seen?'

Here, the bound variable interpretation is not available (coreference is independently banned since operators do not even refer), so it must be concluded that the null pronoun is not c-commanded by the quantifier/wh-element at LF. The next step is testing the corresponding CLRD cases. A symmetric analysis predicts that no difference will arise since the structural position of right dislocates is as high as that of left dislocates. However, the prediction fails, for CLRD patterns with nondislocated sentences in allowing a bound variable reading of the pronoun:
(24) a. Ningú $/$ Tothom ${ }_{1}$ les recorda, totes les pel lícules que pro $_{1}$ ha vist. 'Nobody/Everybody remembers all the films that he has seen.'
b. Qui, les recorda, totes les pel.lícules que pro $_{1}$ ha vist? 'Who remembers all the films that he has seen?'

Obviously, that amounts to saying that the position of right dislocates cannot be structurally identical to that of left dislocates, against the assumptions of the symmetric analysis.

### 4.1.2.6. Interactions between CLRD and CLLD

An interesting asymmetry follows when we take into account the interaction between CLRD and CLLD. Whereas we can always left-dislocate a constituent from within a right-dislocate, the converse is never true:
(25) a. ${ }^{?}$ [Del meu avi $]_{2}$, me les ${ }_{1}$ han explicat totes, [les (seves) històries $\left.t_{2}\right]_{1}$. of-the my grandfather to-me them-FEM have-3PL told all the his stories 'They have told me all the stories of my grandfather.'
b. *[Les (seves) històries $\left.\mathrm{e}_{2}\right]_{1}$, me les $\mathrm{s}_{1}$ han explicat totes, [del meu avi $]_{2}$. the his stories to me them-FEM have-3PL told all of-the my grandfather
a. ${ }^{?}[\text { Del llibre }]_{2}$, me $n_{1}$ 'he llegit tres, [de capítols $\left.t_{2}\right]_{1}$.
of-the book to.me of.it-have-1 read three of chapters
'I have read three chapters of the book.'
b. *[De capítols $\left.\mathrm{e}_{2}\right]_{1}$, me $\mathrm{n}_{1}$ 'he llegit tres, [del llibre] ${ }_{2}$.
of chapters to.me of.it-have-1 read three of-the book

The generalizations that follow are:
A) both CLRD and CLLD are possible from a complement;
B) CLLD is possible from a right- or left-dislocate;
C) CLRD is not possible from a left-dislocate.

Observe that here neither CLRD nor CLLD move outside their sentence, so then the illformedness of the sentences in $(25) \mathrm{b} /(26) \mathrm{b}$ cannot be due to a violation of the boundedness condition. The contrast remains without explanation for the symmetric analysis.

### 4.1.2.7. Non-finite clauses

As Solà i Pujols (1992) points out, CLLD cannot freely apply in nonfinite clauses: ${ }^{7}$
(27) a. *Confiava a, d'aquest tema, parlar-ne.
expected-1 to of-this subject talk-of-it
'I expected to talk about this subject.'
a'. *Confiava, d'aquest tema, a parlar-ne.

[^7]b. *La Joana anava cap a casa, d'aquest tema, parlant-ne.

Joana went-3 toward to house of-this subject talking-of-it
'Joana went home talking of this subject.'

CLRD, however, can freely apply in the same contexts:
(28) a. Confiava a parlar-ne, d'aquest tema.
b. La Joana anava cap a casa parlant-ne, d'aquest tema.

Once more, the contrast remains a mystery for the symmetric analysis. ${ }^{8}$

### 4.1.2.8. A theoretical remark

It is evident that symmetric analysis is at odds with the framework expounded with detail in Chapter 1, namely the Hypothesis of the Antisymmetry of Syntax. The core of this proposal is that syntactic representation is intrinsically asymmetrical, forbidding right-movement or right-adjunction. The most impacting consequence of such a move is the achievement of an extremely more restricted model of universal grammar, for the set of available phrase markers gets drastically limited. With this in mind, the symmetric analysis is to be discouraged a priori unless strong empirical evidence points to the contrary, which is not the case, according to the evidence provided through section 4.1.2.

[^8]
### 4.1.3. Conclusions

In this section, we have considered an analysis of CLRD that takes it as the mirror image of CLLD, like the one proposed in Vallduví $(1990,1995)$ or Valiouli (1994). The basis of this analysis has to be sought in the properties shared by both constructions, discussed in 4.1.1. However, much strong empirical evidence has been provided -either unknown or only partially considered in the literature- to show that such an analysis is untenable on empirical grounds. The compelling series of contrasts discussed through 4.1.2 rather suggests the difference between CLLD and CLRD must be stated in structural terms, namely CLRDed elements occupy a lower position than CLLDed ones. Besides the serious empirical inadequacies of the symmetric analysis, it has been suggested a theoretical drawback: it doesn't comply with the Hypothesis of the Antisymmetry of Syntax.

### 4.2. The Covert Movement Analysis

The publication of Kayne (1994) supposed a major impact on the current visions on the form of syntactic objects (Cinque 1996: 463 qualifies it as "our closest approximation to a revolution"). The main thesis of Kayne's work is that a direct relationship exists between linear precedence and asymmetric c-command, which he formulates as the Linear Correspondence Axiom (LCA). Remind from chapter 1, that in essence, the LCA states 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 of CLRD is to be discarded on conceptual grounds. This drives Kayne to a new proposal: CLRD is the covert counterpart of CLLD. In Kayne's (1994: 83) own words:

In conclusion, then, Romance right-dislocation does not involve right-adjunction. The right-dislocated phrase is in complement position. It differs from an ordinary complement in that it undergoes LF movement of the CLLD type.

The way Kayne implements this analysis is assuming that CLRD involves an optional feature forcing both visible -invisibility for the mechanism assigning focus and a special intonation - and invisible effects - movement at LF. ${ }^{9}$ One of the most appealing aspects of this analysis of CLRD is that it traces parallels with other constructions (it easily comes to mind the much studied case of multiple-wh, where one or more than one wh-element appear in situ, but move at LF, under standard assumptions, which have been challenged within the Minimalist Program: see Chomsky 1995, Hornstein 1995; cf. the behavior of multiple-wh in 4.2.2.1 below). Such a parallelism is extremely suggestive, but it has to be shown whether it is warranted as well.

In this section I offer a critical review of the evidence pro and against his proposal, with the understanding that much of the discussion builds on a quite laconic piece of theoretical work, for Kayne's monograph doesn't attempt a detailed analysis of all the constructions considered, but rather a guideline for searching solutions. That has forced me to pursue his analysis far beyond he did, a task I have attempted interpreting his ideas as faithfully as possible. With this proviso in mind, let us proceed.

### 4.2.1. Evidence favoring the analysis

### 4.2.1.1. Upward boundedness

Kayne (1994: 81) highlights that his analysis directly accounts for the upwardboundedness of CLRD:

Taking right-dislocated phrases to be in complement position, rather than right-adjoined to VP or IP, provides an immediate answer to the question raised by the fact that right-dislocation is "upwardbounded."

[^9]Que Jean lui ait parlé, à Marie m'attriste. that Jean her ${ }_{\text {DAT }}$ has spoken to Marie me makes-sad
(58) Que Jean lui ait parlé m'attriste, à Marie.

The strong ungrammaticality of (58) is now expected. In the absence of right-adjunction, à Marie can occur in the matrix sentence only as a complement of the matrix verb attrister, but that leads to a theta-violation.

This explanation is highly desirable from a theoretical standpoint, for it directly follows from independently motivated principles. The symmetric analysis, instead, must fall back on a mere stipulation.

### 4.2.1.2. Creation of island effects

Even though he doesn't takes this argument into account, Kayne's analysis gets support from the contrast between CLLD and CLRD with respect to the creation of island effects. We do know (see section 4.1.2.2) that CLRD, unlike CLLD, doesn't create island effects for extraction. This is in accordance with Kayne's proposal: if right-dislocates are in complement position in overt syntax, we expect them not to interfere with extraction, just as happens with complements.

### 4.2.1.3. Licensing of negative polarity items

It has been shown in 4.1.2.3 that CLLD, unlike CLRD, breaks the configuration originally licensing negative polarity items. Witness:
(29) a. La Maria no confia en els consells de gaire gent. the Maria not trusts in the advice of any people 'Maria doesn't trust in the advice of any people.'
b. *En els consells de gaire gent, la Maria no hi confia.
c. La Maria no hi confia, en els consells de gaire gent.

This contrast is good news for the covert movement analysis, which correctly predicts that only CLRDed elements are under the c-commanding domain of
negation at the point in which NPI must be licensed. However, this success is contingent on the level assumed for NPI-licensing. In the present case, it is crucial that NPI elements get licensed in overt syntax, otherwise no contrast would arise (unfortunately, Kayne 1994 is not explicit on this issue). This is consistent with the proposal in Kayne (1998), which crucially assumes overt movement of negative elements to (either a lower or a higher) [Spec, Neg]. ${ }^{10}$

### 4.2.1.4. Theoretical advantages

As long as Kayne's analysis respects the LCA without sacrificing empirical coverage, it is undoubtedly to be preferred to the symmetric analysis discussed in 4.1. Rethinking standard analysis in terms of the LCA is not just a formal exercise, but a serious attempt to built a more restrictive theory of Universal Grammar. Kayne's analysis makes a strong hypothesis on the formal restrictions UG imposes on CLRD, building up a more restrictive account. Moreover, as long as its restrictiveness correlates with correct empirical predictions, which the symmetric analysis cannot make, it must be concluded that Kayne's analysis is to be preferred altogether.

Note that it cannot be argued that Kayne's analysis is also conceptually desirable because it traces a parallel between dislocation and other constructions involving an overt/covert contrast (the most notable wh-movement, but see Kayne 1994: 8.7 for an extension to relative clauses). This parallelism is a purely theoryinternal factor. If the theory allows overt/covert contrasts, the possibility of such an analysis is expected. Nevertheless, this doesn't make it theoretically superior, for example, to an analysis resorting to overt movement only: both analysis are equally coherent and compatible with the model, so deciding between them is an empirical issue. Note that the converse is not necessarily true: it can be argued on theoretical grounds that in a model without covert movement (as the one advocated by Kayne 1998, 1999; see also Villalba forthcoming), an analysis of CLRD and CLLD resorting only to overt movement is preferable to one making use of both overt and

[^10]covert movement. I will turn back to this issue in 4.2 .7 below (see also Villalba forthcoming).

### 4.2.2. Evidence against the analysis

### 4.2.2.1. Free word order

We have seen in 4.1.1.1 that complements in Catalan show a fixed order (I repeat the examples for the ease of reference):
(30) a. Vam donar els llibres al Pere.

PAST-2PL give the books to-the Pere
'We gave the books to 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.

Kayne's analysis predicts that we will only find free word order in CLLD, which is overt movement, but not in CLRD, which are in complement position. However, this prediction is only partially fulfilled, for both CLLD and CLRD show a free word order of the dislocates (see 2.1.1 and 3.1.1 respectively):
(31) a. Els llibres, al Pere, els hi vam donar.
b. Al Pere, els llibres, els hi vam donar.
c. Al Pere, els hi vam donar, els llibres.
d. Els llibres, els hi vam donar, al Pere.
e. Els hi vam donar, els llibres, al Pere.
f. Els hi vam donar, al Pere, els llibres.
'We gave the books to Pere.'

Another argument against the analysis of right-dislocates as complements is found in Vallduví (1990: 103). He compares the behavior of CLRD and
complements with respect to typical right-peripheral particles like the vocative xec 'man' and the tag-particle oi 'right' (Vallduvi's ex. 122):
a. Fica (*xec) el ganivet (*xec) al CALAIX, xec!
'Put the knife in the drawer, man!'
b. Ficarem (*oi) el ganivet (*oi) al CALAIX, oi?
'We'll put the knife in the drawer, right?'
c. Fica'l al CALAIX, xec, el ganivet (xec)!
d. El ficarem al CALAIX, oi, el ganivet (oi)?

The possibility of being separated from the core of the sentence by either xec or oi is natural for right-dislocates but impossible for complements. This behavior is a strong empirical argument against the hypothesis that right-dislocates are in complement position in overt syntax.

The argument is even more compelling if we compare CLRD with multiplewh. Standardly, it has been argued that wh-in-situ should be analyzed in a parallel way to wh-movement, but in a covert fashion (see Hornstein 1995 for discussion and references, and for a new proposal eliminating covert movement). It is apparent that this analysis of multiple questions parallels Kayne's analysis of CLRD. Notwithstanding, the behavior of these constructions is clearly different, for whereas CLRD allows free ordering, wh-elements in situ show a rigid word order (see Ordóñez 1997: 2.4.2 for similar facts in Spanish):
(33) a. Qui va comprar què a qui?
'Who bought what to whom?'
b. *Qui va comprar a qui què?
'Who bought to whom what?'
a. Qui va comprar què on?
'Who bought what where?'
b. *Qui va comprar on què?
'Who bought where what?'

The contrast with respect to CLRD is sharp enough to be suspicious about assuming CLRD is covert movement. It might be argued that the difference is due to some
additional factor, and to be fair Kayne (1994) doesn't establish a parallelism between CLRD and wh-elements in situ. Yet, the contrast is quite significant in the context of his book, for he makes a crucial use of the overt/covert distinction to explain several contrasts, as in the case of restrictive vs. nonrestrictive relatives.

### 4.2.2.2. Dislocates are opaque domains for extraction

It has been shown in 4.1.1.2 that right-dislocates are opaque domains for extraction. However, this is unexpected for Kayne's analysis: if right-dislocates were in complement position in overt syntax, they wouldn't be opaque domains for extraction, at least to the same degree that standard complements. 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. Again, data are conclusive, and no difference follows between CLRD and CLLD.

Obviously, 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 (4.1.2.2 and 4.2.1.2). Kayne (1994) remains silent on the problem.

### 4.2.2.3. Principle C

We have seen in 4.1.2.4 that CLRD and CLLD differ with respect to the violation of the Principle C of Binding Theory (the antireconstruction effect):
(35) a. *pro ${ }_{1}$ 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 ${ }_{1}$ va inventar, pro $_{1}$ les va dir convençuda.
'The lies that Maria ${ }_{1}$ invented, she ${ }_{1}$ said convinced.'
c. $\quad$ pro $_{1}$ les va dir convençuda, les mentides que la Maria ${ }_{1}$ va inventar.
'*She ${ }_{1}$ said convinced the lies that Maria ${ }_{1}$ invented.'
(35)a 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-, 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 $a d$ hoc stipulation to ban reconstruction of CLLD.

### 4.2.2.4. Pronouns bound by a quantifier

The behavior of CLRD and CLLD with respect to binding of pronouns is another problem for Kayne's analysis. Consider again the contrasts offered in 4.1.2.5:
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 $_{1}$ ha vist, ningú ${ }_{1} /$ tothom $_{1}$ les recorda. 'Nobody/Everybody remembers all the films that he has seen.'
c. Ningú ${ }_{1} /$ Tothom $_{1}$ les recorda, totes les pel $\cdot$ lícules que pro $_{1}$ ha vist. 'Nobody/Everybody remembers all the films that he has seen.'
a. Qui ${ }_{1}$ recorda totes les pel-lícules que pro $_{1}$ ha vist? 'Who remembers all the films that he has seen?'
b. *Totes les pel-lícules que pro $_{1}$ ha vist, qui les recorda?
'Who remembers all the films that he has seen?'
c. Qui ${ }_{1}$ les recorda, totes les pel.lícules que pro $_{1}$ ha vist?
'Who remembers all the films that he has seen?'

In the nondislocated versions, the pronoun may have a bound variable interpretation, which entails that it is c-commanded and bound by the quantifier/wh-element at LF (see Reinhart 1983, Hornstein 1995). Such possibility is no longer available in the CLLD version, which to preserve a unitary analysis of the phenomenon, suggests that the pronoun is not c-commanded by the quantifier/wh-element at LF. 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.

Again, such counterevidence might be addressed in Kayne's analysis with some additional assumptions. The point is deciding whether they are warranted. One
possibility, suggested by Cecchetto (1999: fn. 12), would be assuming that the rightdislocate moves at LF, later reconstruction applies and only then Principle $C$ is evaluated. That would explain why CLRD and complements behave alike with respect to Principle C. However, this entails that, against standard assumptions, reconstruction may apply not only to overt movement, but to covert movement as well. It is unclear whether such possibility is available in Kayne's (1994) system. Indeed, he explicitly assumes that covert movement may follow reconstruction (see Kayne 1994: 142 fn. 21 for an analysis along these lines for wh-in-situ in SOV languages). Another possibility would be that the evaluation of Principle C be evaluated in overt syntax (see Villalba forthcoming for such a suggestion). However, he explicitly assumes that Principle C applies under reconstruction (Kayne 1994: 123). It is thus unclear how Kayne's analysis would deal with this contrast.

### 4.2.2.5. Interactions between CLRD and CLLD

We have seen in 4.1.2.7 that whereas CLRD may feed CLLD, the converse is never true:
a. $\quad{ }^{[ }$Del meu avi $]_{2}$, me les ${ }_{1}$ han explicat totes, $\left[\text { les (seves) històries } t_{2}\right]_{1}$. of-the my grandfather to-me them-FEM have-3pl told all the his stories 'They have told me all the stories of my grandfather.'
b. *[Les (seves) històries $\left.\mathrm{e}_{2}\right]_{1}$, me les han explicat totes, [del meu avi $]_{2}$. the his stories to.me them-FEM have-3PL told all of-the my grandfather ${ }^{?}$ [Del llibre $]_{2}$, me $n_{1}$ 'he llegit tres, [de capítols $\left.\mathrm{t}_{2}\right]_{1}$. of-the book to.me of.it-have-1 read three of chapters 'I have read three chapters of the book.'
b. $\quad$ [De capítols $\left.\mathrm{e}_{2}\right]_{1}$, me $\mathrm{n}_{1}$ 'he llegit tres, [del llibre] $]_{2}$. of chapters to.me of.it-have-1 read three of-the book

Under Kayne's analysis, the configuration in which CLRD feeds CLLD is analyzed as a normal instance of CLLD from a complement position. However, treating rightdislocates as complements has an unwanted consequence: the case in which CLLD feeds CLRD becomes a standard stranding configuration, similar to Kayne's analysis of relative extraposition. Nevertheless, this configuration is impossible, against the prediction. Furthermore, besides the strong ungrammaticality of (38)b/(39)b, another
connected fact suggests that this analysis cannot stand scrutiny. Kayne (1994: 123f) suggests that stranded relatives are not islands for $w h$-extraction, but it has been shown in 4.1.1.2/4.2.2.2 that right-dislocates are opaque domains for extraction. ${ }^{11}$

### 4.2.2.6. Non-finite clauses

It has been shown in 4.1.2.7 that whereas CLLD cannot freely apply in nonfinite clauses, CLRD is always possible:
(40) a. *La Joana anava cap a casa, d'aquest tema, parlant-ne. Joana went-3 toward to house of-this subject talking-of-it 'Joana went home talking of this subject.'
b. La Joana anava cap a casa parlant-ne, d'aquest tema. Joana went-3 toward to house talking-of-it of-this subject

It is unclear how Kayne's analysis could integrate such a contrast. From a descriptive standpoint, it seems like if nonfinite clauses lacked enough room for hosting CLLDed elements. This seems confirmed by the possibility of having CLLD with infinitival interrogative clauses:
(41) No sé, d'aquest pernil, on comprar-ne./*No sé on, d'aquest pernil, comprar-ne. 'I don't know where to buy this ham.'

Under such analysis, however, it is difficult for Kayne's analysis to cope with the contrast in (40): if there is no place for the CLLDed in overt syntax, the same must be true for CLRD in covert syntax, under standard assumptions on the preservation of structure.

In order to preserve Kayne's analysis, some mechanism must be conceived capable of applying in overt syntax only. Some kind of blocking effect easily come to mind: it might be that the presence of the left-dislocate blocks some relation between the nonfinite verb and the head selecting the clause, maybe one having to do

[^11]with tense. Nonetheless, this line of reasoning cannot be maintained when sentences like (41) are considered: the presumed blocking effect should be even stronger, against facts.

### 4.2.2.7. Informational status

Kayne's analysis faces serious conceptual problems when it is confronted with the informational status of dislocates. On the one hand, I have shown at length that CLLD and CLRD bear different informational roles (see 2.1.2 and 3.1.2 respectively). On the other hand, under the standard architecture of grammar he assumes, LF feeds the interpretative component. With this in mind, it is not clear why two dislocates which are identical at LF have different informational roles.

### 4.2.3. Conclusions

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. Furthermore, it traces extremely suggesting parallelisms between CLLD/CLRD and other constructions standardly analyzed as involving overt/covert contrasts. Notwithstanding, it has been established that Kayne's proposal is not empirically motivated, and shows theoretical drawbacks. A new analysis compatible with the LCA and capable of accounting for the bulk of empirical evidence is needed.

### 4.3 The double topicalization analysis

According to Cecchetto (1999), the original formulation of the double topicalization analysis is to be credited to Richard Kayne's Harvard University classes held in the fall of 1995. Unfortunately, I have not been able to consult such material, so my discussion of Kayne's proposal will rest on Cecchetto's description together with the extremely succinct characterization in Zubizarreta (1998: ch. 3 fn. 57), who doesn't mention Kayne's proposal.

The gist of the double topicalization analysis is deriving CLRD from CLLD. In a nutshell, both CLLD and CLRD involve overt movement to the specifier of a Topic
phrase in the left periphery. What distinguishes them is the supplementary movement of the material below this TopicP to a higher position. Schematically:
2)


This is in essence the analysis Zubizarreta (1998: ch. 3 fn. 57) assumes for CLRD (she uses TP instead of IP). In what follows I will survey evidence in favor and against this proposal.

### 4.3.1. Evidence favoring the analysis

### 4.3.1.1. Free word order of the dislocates

The double topicalization analysis correctly predicts that free word order of the rightdislocates should be possible, depending on the ordering of movements involved. Observe that under the strict antisymmetric approach to syntactic representations pursued in this work, multiple instances of CLRD must involve the following analysis (see 1.2.4). First, one phrase moves to Spec, TopicP, and a further instance of CLRD must imply movement to the spec of the first CLRDed phrase. Schematically:


Further movement of another right-dislocate must target [Spec, YP], and so on.

### 4.3.1.2. Creation of island effects

The rejection of the idea that CLRD occupy the complement position in overt syntax allows us to seek for an explanation of the fact it doesn't creates island effects, unlike CLLD. Let us consider CLLD and assume that a CLLDed phrase in [Spec, TopicP] is an $\mathrm{A}^{\prime}$-position that blocks $\mathrm{A}^{\prime}$-movement. When we turn to CLRD, the things change radically. Since IP has moved to the higher TopicP, the CLRDed in the lower TopicP doesn't count as a barrier for extraction anymore. ${ }^{12}$ Obviously, this bypassing strategy renders the correct result if [Spec, TopicP], which is a minimality barrier for A'-movement, doesn't blocks IP-topicalization. Nevertheless, this is extremely implausible, for they both involve A'-position of the very same kind. Let us pursue a possible solution to this problem (note that this analysis is not Kayne's, but just one possibility I judge compatible with the double topicalization analysis and standard assumptions on movement and barrierhood).
It has been argued in 4.3.1.1 above that multiple dislocation must be analyzed in terms of multiple adjunction to the specifiers of the dislocates in [Spec, TopicP]. Let us assume thus that the dislocated IP firstly adjoins to the dislocate in the blocking [Spec, TopicP] as an intermediate step, and uses this position as a escape hatch for further movement to the higher [Spec, TopicP]. Once there, extraction should be possible without violating the minimality barrier. Such a possibility seems unavailable for wh-elements on independent grounds -namely, they cannot
dislocate-, which would explain the fact that wh-extraction is impossible from a sentence with CLLD.

Even though technically plausible, this proposal raises one doubt: why should IP move to the higher [Spec, TopicP]? Note that feature checking cannot be the reason, for such a task can be fulfilled in the intermediate step. This has quite an ad hoc flavor. We will return to this theoretical flaw in 4.3.2.1 below.

### 4.3.1.3. Dislocates are opaque domains for extraction

It has been shown in 4.1.1.2 and 4.2.2.2 that both left and right stand as islands for subextraction. Regardless of the exact nature of this opaque behavior, this fact is certainly compatible with the double topicalization analysis, which treats both CLLD and CLRD as movement to the same position.

### 4.3.2. Evidence against the analysis

### 4.3.2.1. Licensing of negative polarity items

Consider again the evidence provided by negative polarity items already discussed in 4.1.2.3 and 4.2.1.3:
(44) a. La Maria no confia en els consells de gaire gent. the Maria not trusts in the advice of any people 'Maria doesn't trust in the advice of any people.'
b. *En els consells de gaire gent, la Maria no hi confia.
c. La Maria no hi confia, en els consells de gaire gent.

The ill-formedness of the CLLD version is certainly expected on purely structural grounds: the NPI within the dislocate is removed from the c-commanding domain of its licenser. The problem has to do with the CLRD version. According to the double topicalization analysis, the structure underlying (44)c would be as follows:

[^12](45) [TopicP [ip La Maria no hi confia] [Topic Topic [TopicP [Dp en els consells de gaire gent] [Topic Topic $t_{\mathrm{PP}}$ ] $]$ ]]

Obviously, it can hardly be assumed that the negation c-commands the NPI in this configuration, which renders the grammaticality of the sentence surprising. The double topicalization analysis cannot give a proper answer to the contrast in (44).

### 4.3.2.2. Dislocates are opaque domains for extraction

Although the double topicalization analysis is compatible with the fact that dislocates stand as islands for subextraction (see 4.3.1.3), it runs into trouble when the movement of IP to Spec, TopicP is considered. It predicts the IP would not allow extraction, which is factually wrong.

### 4.3.2.3. Principle C

Consider the following pattern (already discussed in 4.1.2.4 and 4.4.2.3):
(46) a. $\quad \mathrm{Li}_{1}$ vam regalar el llibre que llegia la Maria ${ }_{1}$.
*'We gave her ${ }_{1}$ the book that Maria ${ }_{1}$ was reading.'
b. El llibre que llegia la Maria ${ }_{1}$, l'hi, vam regalar per Nadal.
'The book that Maria ${ }_{1}$ was reading, we gave her, for Christmas.'
c. *L'hi $1_{1}$ vam regalar, el llibre que llegia la Maria ${ }_{1}$.
*'We gave it to her ${ }_{1}$, the book that Maria ${ }_{1}$ was reading.'

The double topicalization analysis correctly predicts that CLLD doesn't yield a Principle C violation: the dislocate is in the [Spec, TopicP], which removes the name from the c-commanding domain of the pronoun. Let us see now which the prediction is for CLRD, according to the double topicalization analysis. The (simplified) structure underlying (46)b would be the following:

In this structure the pronoun hi doesn't c-commands the proper name, so no Principle C violation should arise, against the facts (see Cecchetto 1999 for similar facts in Italian). ${ }^{13}$

### 4.3.2.4. Pronouns bound by a quantifier

The c-commanding relations the double topicalization analysis yields also affect the binding of pronouns by a quantifier/wh-element in a crucial way. Consider the relevant paradigm, already discussed in 4.1.2.5 and 4.2.2.4 (again, the placement of the quantifier in postverbal position is crucial for c-commanding purposes: in the crucial examples it doesn't c-command outside of the moved IP —see fn. 13):
(48) a. Tothom ${ }_{1}$ va dir que pro $_{1}$ tenia gana.
'Everybody said that he was hungry.'
b. *Que pro $_{1}$ tenia gana, ho va dir tothom ${ }_{1}$.
'Everybody said that he was hungry.'
c. Ho va dir tothom ${ }_{1}$, que pro $_{1}$ tenia gana.
'Everybody said that he was hungry.'

The double topicalization analysis can easily explain the ill-formedness of the CLLD version: the quantifier doesn't c-command nor bind the pronoun. Let us see now what happens in CLRD. The resultant simplified structure would be

$$
\begin{equation*}
\left[\text { TopicP }\left[\mathrm{IP} \ldots \mathrm{QP}_{1} \ldots\right]\left[\text { Topic' } \text { Topic }\left[\text { TopicP }\left[\mathrm{DP} \ldots \text { pro }_{1} \ldots\right]\left[\text { Topic }{ }^{\prime} \text { Topic } t_{\mathrm{IP}}\right]\right]\right]\right] \tag{49}
\end{equation*}
$$

It is obvious that in such a structure the quantifier doesn't c-command nor bind the pronoun, hence the double topicalization analysis wrongly predicts that the bound reading would be impossible.

[^13]
### 4.3.2.5. Interactions between CLLD and CLRD

As Cecchetto (1999) notes, the double topicalization analysis cannot rule out several cases of ill-formed interactions between CLLD and CLRD. Consider a typical example (the marginal afterthought reading is ignored):
(50) *Que se l'havia comprat, m'ho va dir, el llibre.
'*That (s)he had bought it, told me, the book.'

Let us see how the double topicalization analysis would derive this sentence. First, the right-dislocate moves to [Spec, TopicP] (I numerate the several TopicP for the ease of reference):
(51) [TopicP1 [DP el llibre ] [Topic1' Topic $_{1}$ [IP em va dir que se l'havia comprat]]]

Afterward, the whole IP moves to the specifier of a higher Topic $\mathrm{P}_{2}$ :
(52) [TopicP2 [IP em va dir que se l'havia comprat] [Topic2' Topic 2 [Topicpl [DP el llibre ]
[Topic! ${ }^{\prime}$ Topic ${ }_{1} t_{\mathrm{IP}}$ ]] $]$

Finally, the embedded CP involves CLLD to a higher $\operatorname{TopicP}_{3}:{ }^{14}$
 Topic $_{2}[$ TopicP1 [DP el llibre $]\left[\right.$ Topic 1 Topic $_{1} t_{\mathrm{IP}}$ ] $\left.\left.\left.\left.]\right]\right]\right]\right]$

This derivation yields a wrong result, so it should be avoided. Unfortunately it is unclear what would be the reason blocking it, for every step is independently motivated. The first one is a direct consequence of deriving CLRD from CLLD: since CLLD is unbounded, nothing prevents this operation. The second step is unproblematic. Finally, witness that the last step, which might seem problematic, must be assumed independently for deriving well-formed interactions between CLLD and CLRD, namely:

[^14](54) Que tenia gana, li ho va dir, a la Maria.
'That (s)he was hungry, (s)he said to Maria.'

The derivation of this sentence proceeds as follows:
(55) a. [TopicP1 [pp a la Maria] [Topicl’ Topic $_{1}[$ IP $l i$ va dir que tenia gana $\left.]\right]$ ]
b. [TopicP2 [IP li va dir que tenia gana] [Topic2' Topic ${ }_{2}$ [TopicP1 [pp a la Maria] [ ropicl Topic $_{1} t_{\mathrm{IP}}$ ]] $]$ ]



The double topicalization analysis incorrectly assigns the same derivation to both cases. Therefore, in order to avoid such overgeneration problem, some mechanism should be adopted to block the first step. However, as far as I can see, once it is assumed that CLRD is derived from CLLD, such a mechanism would be just a stipulation without any motivation.

### 4.3.2.6. Non-finite clauses

We have another surprising asymmetry here. We have seen in 4.1.2.8 and 4.2.2.6 the following contrast:
(56) a. *Confiava a, d'aquest tema, parlar-ne. expected-1 to of-this subject talk-of-it 'I expected to talk about this subject.'
a'. *Confiava, d'aquest tema, a parlar-ne. expected-1 of-this subject to talk-of-it
b. Confiava a parlar-ne, d'aquest tema. expected-3 to talk-of-it of-this subject
(57) a. La Joana anava cap a casa parlant-ne, d'aquest tema. Joana went-3 toward to house talking-of-it of-this subject 'Joana went home talking of this subject.'
b. *La Joana anava cap a casa, d'aquest tema, parlant-ne. Joana went-3 toward to house of-this subject talking-of-it

As far as I can see, this contrast is unexpected for the double topicalization analysis. Note that it crucially derives CLRD from CLLD, so it must assume that the position hosting CLLD exists in non-finite clauses (otherwise CLRD would be impossible to derive). However, consequently it is forced to assume that the IP must raise over the dislocate. The crucial question is why this movement should be obligatory at all with non-finite clauses. The question is even more pertinent when $w h$-infinitives are considered:
(58) a. No sé, d'aquest pernil, on comprar-ne.
'I don't know where to buy this ham.'
b. No sé on comprar-ne, d'aquest pernil.

Here the presence of the wh-element licenses CLLD, which would entail under the double topicalization analysis that IP need not raise. Nevertheless, the connection between the wh-element and raising of the IP remains as obscure as before.

### 4.3.2.7. Theoretical motivation

The first question the double topicalization analysis raises is what the motivation would be of the movement of the IP past the dislocate. It seems plausible that CLLDed phrases move to the Spec, TopicP for the checking of some feature say [top]. However, this line of reasoning does not extend to the IP, which cannot be a topic nor needs be part of the presupposition. Focus might be another option: the IP moves to the specifier of FocusP above TopicP, yielding the correct order besides the correct Topic-Focus Articulation of the sentence. Such a proposal is suggestive, but runs into trouble for CLLD. We know that the informative character of the IP is basically identical in both CLRD and CLLD, as the possibility of free alternation between these two constructions in some contexts suggests. However, the double topicalization analysis treats it very differently in either case: raising to [Spec, FocusP] in the former, in situ in the latter. This is a quite undesirable outcome on theoretical grounds.

These theoretical drawbacks become even more painful when we consider the derivation of a simple sentence involving both CLLD and CLRD, as the one discussed in 4.3.2.5:

The derivation of this sentence proceeds as follows: ${ }^{15}$

b. [Topicp2 [ip li va dir que tenia gana] [topic2' Topic ${ }_{2}$ [TopicP1 [pp a la Maria] [Topicl ${ }^{\cdot}$ Topic $t_{1} t_{\mathrm{IP}}$ ]I]]



This derivation poses an interesting theoretical problem regarding the simplicity of the analysis. Part of the theoretical appeal of the double topicalization analysis is that CLLD and CLRD have a common landing site, Spec, TopicP, the difference following from the application or not of IP-movement. However, this is not really so, not even in the case under consideration: CLLD must land in a higher TopicP $\mathrm{P}_{3}$. As it will become clearer in Chapter 5, this is a correct solution. However, in this derivation the only possible explanation for the common properties of CLLD and CLRD is the fact that they both land in a Spec, TopicP, which seems quite contradictory for the non-presupposed material in the IP lands in a Spec, TopicP as well. To wind up, besides the overgeneration problems discussed in 4.3.2.5, this analysis seems heavily loaded with insurmountable theoretical drawbacks.

### 4.3.3. Conclusions

The double topicalization analysis developed by Richard Kayne in unpublished work and adopted in Zubizarreta (1998) is a serious attempt to offer an empiricallymotivated account for CLRD that respect the ban on right-movement imposed by the

[^15]This derivation avoids many of the shortcomings of the double topicalization analysis, and will be pursued in a slightly different form in the Chapter 5.

LCA. In essence, it states that CLRD is derived from CLLD by leftward movement of the material below the CLLDed element(s). Notwithstanding, it has been established that such a proposal suffers from strong empirical and theoretical drawbacks, which make it an unsuitable account of the complex nature of CLRD.

### 4.4. Conclusions

In this chapter a critical review of the current analyses of CLRD has been carried out. It has been shown that the symmetric analysis, which considers that CLRD is just the mirror image of CLLD cannot handle with a relevant set of data, and it further suffers from a serious theoretical drawback: it is incompatible with the restrictive framework derived from the LCA, which is assumed in this work. The covert movement analysis and the double topicalization have been shown to offer a more promising alternative compatible with the LCA. Yet, they are undermined by empirical and theoretical shortcomings, which call for a different analysis. In the next chapter, the basic features are discussed of an optimal analysis of CLRD and CLLD.

## Chapter 5. A new analysis for CLRD: the Split-Topic Analysis

As made apparent in Chapter 4, previous approaches to CLRD were unable to offer an integrated vision of dislocation both empirically and theoretically adequate. In all the cases, the problem had to do with an oversimplified look at CLRD, which emphasized the common properties of this construction and CLLD without recognizing its own distinctive features. In this chapter I will strive for a different approach to the issue, strongly committed to the spirit of Kayne's (1994) Hypothesis of the Antisymmetry of Syntax, and to the Minimalist Program pursued in Chomsky (1995, 1998, 1999). With these two theoretical frameworks as the standards guiding our inquiry, I will argue that an optimal analysis of dislocation should display the basic features of the split-topic analysis (see Villalba 1997, 1998, 1999). ${ }^{1}$ In a nutshell, the split-topic analysis defends that CLRD overtly moves to the specifier of a topic phrase position immediately dominating the $v \mathrm{P}$ for feature-checking purposes. In contrast, CLLD surfaces in a higher topic position in the CP-area, along the lines suggested in Rizzi (1997). Schematically: ${ }^{2}$

[^16]

This chapter will be devoted to address the following issues:
A) The structural issue: Which position do CLRD and CLLD occupy in the sentence?
B) The movement issue: Do dislocates move or are they base-generated? If they move, why should they?
C) The derivational issue: How do we get the correct derivation of CLRD and CLLD?
D) The interface issue: How do we get the semantic and prosodic interpretation of CLRD and CLLD?

As for A), the consistent bulk of asymmetries between CLLD and CLRD presented in Chapter 4 strongly suggests that the former makes use of a higher position in the sentence than the latter. In 5.1.1, this evidence will be discussed together with several theoretical consequences. In 5.1.2, it will be studied how the two topic positions integrate in a highly articulated architecture of sentence like the one defended in Rizzi (1997), and developed in Benincà \& Poletto (1999).

The controversial issue B) will be discussed in 5.2. In 5.2.1, the movement approach to dislocation will be defended against those generating topics in their final position. I will argue that dislocates are instances of feature-driven movement (5.2.2) that leave a minimal non-null copy. I will also argue that it is movement to the specifier of a topic phrase (section 5.2.2). Finally, in 5.2 .3 , I will suggest that dislocation is an instance of obligatory movement, assuming minimalist guidelines.

Issue C) will be considered in 5.3. In particular, it will be shown that the conclusions reached in 5.1 and 5.2 entail a motivated and elegant derivation of sentences involving CLRD and/or CLLD. Specifically, in 5.3 .1 it will be shown that movement of CLLDed elements to [Spec, ExtTopP] necessarily passes through [Spec, IntTopP], in other words, I will make the strong statement that CLLD derives from CLRD, and not conversely, an idea that can be traced back to Postal (1991). In 5.3.2, I will consider some technical issues stemming from multiple CLRD/CLLD.

Beyond its basic syntactic character, I will also show that the split-topic analysis encompasses some desirable consequences for the interface levels. Henceforth, in 5.4 it will be connected with issue D), particularly with semantic interpretation in 5.4.1 and with prosody in 5.4.2.

Finally, in 5.5 the main conclusions of the chapter will be addressed. There it will be shown that beyond the success at handling with CLRD and CLLD in a principled way, the split-topic analysis gives solid support to the highly restrictive model of grammar the LCA entails.

### 5.1. The structural issue

When discussing the symmetric analysis in 4.1 , the most compelling and pervasive evidence against it came from the unexpected asymmetries between CLLD and CLRD with respect to phenomena crucially involving c-command (licensing of negative polarity items, Principle $C$ effects, binding of pronouns by a quantifier, and the interactions between CLLD and CLRD). The key of the critique was that the assumption that CLRD is the mirror image of CLLD couldn't give a proper account of such overwhelming evidence, besides of having the theoretical drawback of implying a system of universal grammar not constrained by the LCA.

Both the covert movement analysis and the double topicalization analysis are an attempt to solve these problems. The former claims that CLRD and CLLD occupy two very distinct positions in overt syntax, although the very same position at LF, which has proved untenable on empirical and theoretical grounds (see 4.2.2). The latter claims that CLLD and CLRD occupy the same position but in the latter case a further operation takes place which alters c-commanding relations radically, a proposal that, beyond theoretical problems, cannot deal with the consistent bulk of data distinguishing CLRD from CLLD (see 4.3.2). In spite of being problematic in their formal expression, I think
that the intuition they encompass should be preserved, although under a quite different formulation, of course.

The split-topic analysis preserves such intuitions but under a distinct formulation. As for the structural issue, the core of the proposal is that CLLD ends in a higher structural position than CLRD. This point will be discussed in 5.1.1, where empirical and theoretical arguments will be provided. The exact implementation of this quite raw characterization merits some discussion as well. Two points will be considered. On the one hand, some justification is in order for the existence of IntTopP and ExtTopP as functional categories hosting CLRD and CLLD, respectively. On the other hand, the exact incarnation of IntTopP and ExtTopP in the architecture of sentence should be considered. The first aspect will be discussed under the heading of section 5.1.2 under the light of Rizzi's (1997) illuminating work on the encoding of semantic interpretation in syntactic structure. Finally, paragraphs 5.1.2.1 and 5.1.2.2 will be devoted to place ExtTopP and IntTopP in the fine-grained clause structure assumed.

### 5.1.1. Topic-splitting

### 5.1.1.1. Empirical arguments

The heart of the split-topic analysis is that CLRD surfaces in the specifier of a functional projection - IntTopP—immediately dominating $v \mathrm{P}$, in contrast with CLLD, which entails movement to the specifier of a higher functional position -ExtTopP- in the CP-area. Pending further technicalities, this rough-and-ready characterization is consistent with the following solid empirical evidence:
A) Negative polarity items are licensed by negation when in a CLRDed constituent, but not when in a CLLDed one $(\rightarrow 4.1 .2 .3,4.2 .1 .3,4.3 .2 .1)$;
B) CLLD, unlike CLRD, rescues Principle C violations (i.e. antireconstruction effects) $(\rightarrow 4.1 .2 .4,4.2 .2 .3,4.3 .2 .3) ;$
C) Pronouns within a CLLDed constituent cannot, whereas pronouns within a CLRDed constituent may, be bound by a quantifier, $(\rightarrow 4.1 .2 .5,4.2 .2 .4,4.3 .2 .4)$; and
D) CLRD feeds CLLD, but CLLD doesn't feed CLRD ( $\rightarrow$ 4.1.2.6, 4.2.2.5, and 4.3.2.5)
E) CLRD is possible in non-finite clauses, CLLD isn't ( $\rightarrow$ 4.1.2.7, 4.2.2.6, 4.3.2.6).

Generalization A ) is illustrated by the following example:
(2) a. La Maria no confia en els consells de gaire gent.
the Maria not trusts in the advice of any people
'Maria doesn't trust in the advice of any people.'
b. *En els consells de gaire gent, la Maria no hi confia.
c. La Maria no hi confia, en els consells de gaire gent.

This paradigm receives a proper and simple explanation under the split-topic analysis: IntTopP is low enough in the sentence to fall under the scope of negation. This is quite consistent with current views of negation as involving a NegP in the IP-area (see Pollock 1989, Moritz \& Valois 1994; cf. Laka 1990 and Zanuttini 1991). Schematically:


This configuration handles with Generalization A) in a simple and elegant manner: an NPI within a CLRDed constituent falls under the c-command domain of negation, whereas one within a CLLDed constituent doesn't. ${ }^{3}$

[^17]Consider now generalization B ), which is illustrated by the following example:
(4) a. *pro ${ }_{1}$ 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 ${ }_{1}$ va inventar, pro $_{1}$ les va dir convençuda.
'The lies that Maria ${ }_{1}$ invented, she ${ }_{1}$ said convinced.'
c. *prol les va dir convençuda, les mentides que la Maria ${ }_{1}$ va inventar.
${ }^{\prime}$ SShe $_{1}$ said convinced the lies that Maria ${ }_{1}$ invented.'
(4)a is a typical violation of Principle $C$ : the null pronominal subject binds a proper name. Under the split-topic analysis, it is predicted that dislocation of the complex NP will have different consequences regarding whether it is CLLD or CLRD: only the former will remove the offending proper name from the c-commanding domain of the pronoun. This prediction is totally confirmed by (4)b-c. ${ }^{4}$

Witness now data supporting generalization C ):
a. Ningú $/$ /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 $\cdot$ lícules que pro $_{1}$ ha vist, ningú ${ }_{1} /$ tothom $_{1}$ les recorda.
c. Ningú $/$ /Tothom ${ }_{1}$ les recorda, totes les pel-lícules que $\mathrm{pro}_{1}$ ha vist.
a. Qui ${ }_{1}$ recorda totes les pel-lícules que pro ${ }_{1}$ ha vist?
'Who remembers all the films that he has seen?'
b. *Totes les pel-lícules que pro $_{1}$ ha vist, qui les recorda?
c. Qui ${ }_{1}$ les recorda, totes les pel-lícules que pro $_{1}$ ha vist?

In the nondislocated versions, the pronoun may have a bound variable interpretation, which entails that it is c-commanded and bound by the quantifier/wh-element. Again, the split-topic analysis predicts a contrast: CLLD will remove the pronoun from the c commanding domain of the quantifier/wh-element, making the bound reading

Criterion are essentially equivalent to the c-command ones, for one thing: whereas movement of the NPI within the CLRDed constituent to [Spec, NegP] is unproblematic, the parallel derivation for CLLD would entail illicit (lowering) movement.
${ }^{4}$ Note that I am assuming that reconstruction, understood in terms of 'undoing operations' at LF, has no role in the explanation of these examples, but rather we can simply rely on surface configurations. See Villalba forthcoming for a more developed proposal dispensing with reconstruction and covert movement altogether.
impossible, whereas CLRD will preserve the c-commanding relations. The prediction is borne out.

Generalization D ) is illustrated by the following contrast, where the afterthought reading must be carefully avoided in (7)b:
(7) a. [Del llibre] $]_{2}$, m'ho $_{1}$ va dir, [que la Maria $n_{2}{ }^{\prime}$ havia parlat $]_{1}$. about.the book to.me-it PAST-3 that the Maria of.it-had-3 talked '(S)he told me that Maria had talked about the book.'
b. *[Que la Maria $n_{2}{ }^{\prime}$ havia parlat $]_{1}, \mathrm{~m}^{\prime} \mathrm{ho}_{1}$ va dir, [del llibre] $]_{2}$. about.the book to.me-it PAST-3 that the Maria of.it-had-3 talked

The contrast comes without surprise under the split-topic analysis: since CLRD targets IntTopP, further movement to ExtTopP (= CLLD) is an open possibility, correctly allowing that CLRD feed CLLD. However, the converse situation (CLRD feeds CLLD) is correctly excluded, for it would entail a lowering -and hence illicit— movement.

Finally, consider generalization E):
(8) a. *Confiava a, d'aquest tema, parlar-ne. expected-1 to of-this subject talk-of-it
a'. *Confiava, d'aquest tema, a parlar-ne. expected-1 of-this subject to talk-of-it 'I expected to talk about this subject.'
b. *La Joana anava cap a casa, d'aquest tema, parlant-ne.

Joana went-3 toward to house of-this subject talking-of-it 'Joana went home talking of this subject.'
(9) a. Confiava a parlar-ne, d'aquest tema.
expected- 3 to talk-of-it of-this subject
b. La Joana anava cap a casa parlant-ne, d'aquest tema.

Joana went-3 toward to house talking-of-it of-this subject

No solution has been provided so far for this problem, which was firstly noted (to my knowledge) by Solà i Pujols (1992: 306-7). My modest contribution to it will be simply suggest a path for a future research, rather a fully-fledged solution. Let us take as a point of departure the idea that the [-finite] clauses under discussion lack part of the
functional structure in the left-periphery of sentence. If so, the prediction can be made that CLRD will be unaffected, for it occupies a quite low position in the sentence, whereas it might have important consequences for CLLD. Certainly, this fits the splittopic analysis, but is it motivated at all? We do have some evidence that an approach along these lines might be on the right track. Observe the following examples, where CLLD is compatible with a [-finite] clause:
(10) a. No sé, d'aquest pernil, on comprar-ne. cf. *No sé on, d'aquest pernil, comprar-ne.
not know-1 of-this ham where buy-of-it
'I don't know where to buy this ham.'
b. No sé, d'aquest nen, què fer-ne. cf. *No sé què, d'aquest nen, fer-ne.
not know-1 of-this child what do-of-it
'I don't know what to do with this child.'

The presence of the wh-element and probably of a richer functional structure over the nonfinite verb seems to license CLLD. ${ }^{5}$ More research is needed to offer a more articulated account than this succinct conjecture; however, it seems to me that the splittopic analysis opens us a promising line of research for a future fully satisfactory solution.

To wind up this section, it is indisputable that data strongly support one of the major features of the split-topic analysis, namely the placement of CLLD and CLRD in two distinct topic positions: the IntTopP in the VP-area, and the ExtTopP in the CP area.

### 5.1.1.2. Theoretical arguments

From a theoretical standpoint, topic-splitting merits a comment. The crucial question that should be answered is: why should topic-splitting be necessary at all? I think the most plausible answer to this question should follow from a general view of the syntax-

[^18]semantics interface. Current visions of clause structure in the generative mainstream assume that sentence structure should be viewed as a series of layers of functional projections, each layer contributing to some aspect of linguistic computation. This hypothesis gained a decisive impulse in Rizzi (1997), which offers a finer-grained articulation of the functional and lexical material of sentence (similar ideas are defended from different perspectives in Diesing 1992 for the interpretation of indefinites, in Cinque 1999 for the distribution of adverbs, and in Chomsky 1999: 25-30 for Icelandic object shift). Rizzi argues for three layers: ${ }^{6}$

1. The lexical layer, mainly concerned with theta assignment
2. The inflectional layer, mainly concerned with the licensing of morphological features
3. The complementizer layer, where clause-type (i.e. force) properties and topic-focus relations are expressed

The main motivation underlying Rizzi's hypothesis is empirical, particularly the necessity to integrate the rich array of elements appearing in the left-periphery of sentence in a highly restrictive system that only allows binary branching. Restricting our attention to the complementizer layer, Rizzi's proposal is the following (where Top=Topic, Foc=Focus, Fin=Finite, and the asterisk stands for free recursion): ${ }^{7}$
(11) [Forcep Force [Topp* Top [FocP Foc [Topp* Top [Finp Fin [ip ... ]] $]$ ]]]

Nevertheless, beyond its empirical motivation, this proposal pursues a theoretical goal: a strict mapping between syntactic positions and semantic/pragmatic interpretation crucially based in the specialization of functional projections. Specifically, Rizzi (1997)

I have no explanation for this fact.
${ }^{6}$ A precursor of this line of research is Solà i Pujols (1990), where it was already argued that sentence is divided in three layers, each corresponding to a scope domain:
a) the argument-predicate layer;
b) the operator layer (interrogatives, focus); and
c) the topic layer

Currently, similar insights can be found in many works: see e.g. Grohmann's (to appear) and Platzack (1999), who crucially involve (a version of) Chomsky's $(1998,1999)$ notion of phase, which will be discussed in 5.4 below.
argues that the system in (11) captures the Topic-Focus Articulation of the sentence in the following way: ${ }^{8}$
A) the specifier of TopP is interpreted as the topic; the complement of TopP is interpreted as the comment;
B) the specifier of FocP is interpreted as the focus; the complement of FocP is interpreted as the presupposition.

This strict mapping between structural position and semantic/pragmatic interpretation is the most convincing theoretical argument for pursuing a fine-grained functional sentence structure.

It is worth noting that the extreme complexity of the left-periphery gets accommodated at the cost of a functional explosion, which might raise suspicions under minimalist guidelines. On the one hand, it is a standard complexity argument that the number of functional projections should be kept to a minimum. On the other hand, their postulation must be based on strong empirical support. Let us consider the complexity argument in detail. Undoubtedly, adding functional projections doesn't come for free, and their use entails a certain cost in terms of complexity. However, this fact cannot be fully evaluated without taking into account their contribution to the analysis. This is exactly the point of Hoekstra (1995) theoretical evaluation of functional categories. This scholar observes that the introduction of functional categories is a prerequisite for the formulation of more restricted hypotheses on the structure of phrases, such as the binary branching X-bar schema (see 1.2.7, where it is discussed the crucial role they play in Kayne's 1994 framework). Moreover, Hoekstra (1995) points out that functional projections are the soul a more direct mapping between syntax and semantics: functional projections directly contribute to the construction of the meaning of sentences. Rizzi's (1997) proposal adheres to both theoretical desiderata, so any fair criticism invoking complexity should take this fact into account.

As for the empirical argument, even though there is no morphological evidence for the assumption of a topic projection in languages like Italian or Catalan, we have

[^19]compelling cross-linguistic evidence: take for example topic-marking in Japanese or Korean. Furthermore, although it seems plausible that we seek for some formal evidence underlying functional projections, such evidence should not be necessarily morphological. Indeed, the 'morphological justification' of functional categories is a side effect of the conception of movement as morphologically driven, the standard position in the Minimalist Program. However, this is an empirical issue, not one of conceptual necessity, so it would be unfair to say that an analysis making use of functional categories for hosting topics is less committed to the principles of the Minimalist Program than one dispensing with them. To wind up, even though the proliferation of functional projections might be viewed as an undesirable increasing of complexity, there are good reasons to believe that they are a crucial part of an empirically adequate and theoretically restrictive theory of phrase structure. ${ }^{9}$

Given such insights, it is unsurprising that CLLD and CLRD, which incontrovertibly bear different informational content, occupy different positions in the sentence as well. Furthermore, it comes without surprise that CLLD appear higher in the sentence that CLRD, for it has been shown in 2.1.2 that CLLD functions as a link to previous discourse. CLRD, instead, doesn't fulfill such a function, so it needs not occupy the left-periphery of sentence. Obviously, it remains to decide exactly where left- and right-dislocates surface, but this is an empirical matter that will be discussed at length in the next section.

### 5.1.2. Clausal architecture

### 5.1.2.1. The placement of ExtTopP

The specialization task pursued in Rizzi (1997) transforms into a extremely prolific leftperiphery in Benincà \& Poletto (1999), who translate Rizzi's TopP and FocP in three subfields, namely frame, left dislocation, and focus (where HT=hanging topic left dislocation, $\mathrm{ScSett}=$ scene setting, $\mathrm{LD}=$ (clitic) left dislocation, $\mathrm{LI}=$ list interpretation, Int.Focus=intonationally focalized focus, and UnmFocus=unmarked focus):
(12) $\left\{_{\text {frame }}[\mathrm{HT}][\mathrm{ScSett}]\right\}\{$ LD $[$ Topic $][\mathrm{LI}]\}\{$ Focus $[$ IntFocus] [UnmFocus] $\}$

Here the distinct interpretative properties of topic and focus constructions correlate with fixed positions in sentence structure, as made apparent in the following example (from Benincà \& Poletto 1999):
(13) a. Mario, in queste circonstanze, a noi, l'appartamento non (ce) lo può prestare Mario under these circumstances to us, the apartment, he cannot lend it to us
b. $\{$ frame [ht Mario], [scsett in queste circonstanze] $\}$, LLd $^{\text {[Topic }}$ a noi], [LI l'appartamento]\} non (ce) lo può prestare

Let us see how ExtTopP fits this typology. ${ }^{10}$ Hanging topics have been studied at length in 2.2 , and they have been shown to be always to the left of CLLD. Witness:
(14) a. La Maria ${ }_{1}$, d'aquest tema $a_{2}$ no en $n_{2}$ parlis amb ella ${ }_{1}$. the Maria of this subject not of.it talk-SUBJ-2 with her
'Maria, do not talk with her about this subject.'
b. *D'aquest tema ${ }_{2}$, la Maria ${ }_{1}$, no en $\mathrm{en}_{2}$ parlis amb ella ${ }_{1}$. of this subject the Maria not of.it talk-SUBJ-2 with her

Scene setting seems to correspond to the notion of stage topic developed by Erteschik-Shir (1997) on Kratzer's (1995 [1988]) notion of spatiotemporal argument (which in turns stems from work by the philosopher Donald Davidson). Under a more

[^20](i) A en Joan (rai) com vols que el suspenguin?
'How on earth do you want that they fail Peter?'
It would be extremely interesting to ascertain whether rai may function as a landmark for confirming Benincà \& Poletto's (1999) partition of the left-periphery, especifically with respect to the categories of scene setting, topic and list interpretation. However, it is unclear whether this is tenable, for Solà i Pujols offers the following pair (his ex. 25):
(ii) a. Tu rai els exàmens els aproves.
'You do pass the exams.'
b. Els exàmens tu rai els aproves.

Here the particle rai functions as a topic marker of $t u$ 'you' only, rather than as a landmark of the LD field. Indeed, this particle seems to convey an intrinsic contrastive interpretation, which suggests that this particle follows elements with list interpretation. However, it is unclear how this fact affects their proposal, for Solà i Pujols (1990) doesn't offer a fully-fledged typology of 'rai topics'. I leave this issue open to further research.
traditional perspective, this category corresponds to free adjuncts. However, it is unclear whether it must precede CLLD:
(15) a. D'aquest tema, amb aquest professor, tothom en pot parlar amb tothom.
'With this teacher, everybody can talk about this subject with everybody.'
b. Amb aquest professor, d'aquest tema, tothom en pot parlar tothom.

It is beyond doubt that amb aquest professor 'with this teacher' is a free adjunct that should occupy the Scene Setting field. Nevertheless, no difference is perceived between one order and another. I leave the issue for further research.

As for topic and list interpretation, they are equivalent to CLLD with or without contrastive reading (see 2.1.2). ${ }^{11}$ Below them we find focused material and whinterrogatives:
(16) a. Il tuo amico, A MARIA, lo presenterò!

Your friend, To M., I will introduce him!
a'. *?A MARIA, il tuo amico, lo presenterò!
тo M., Your friend, I will introduce him!
b. Tu sorella, a chi la presentano?

Your sister, to whom do they introduce her?
b'. *A chi, tua sorella, la presentano?
To whom, your sister, do they introduce her?

[^21](i) a. Agli amici, la prima gliela vendiamo, la seconda gliela regaliamo. to the friends the first to.them.it sell, the second to.them.it give for free 'To the friends, the former we sell, the latter we give for free.'
b. \%La prima a Gianni gliela regaliamo, la seconda gliela vendiamo. the first to Gianni to.him.it give for free the second to.him.it sell 'We give the former to G. for free, we sell the second.'

According to them, the CLLDed element preceding the LI constituent is interpreted as the topic of the sentence. However, cases of multiple CLLD indeed exist. Catalan offers us clear examples;
(ii) Amb la Maria, el Joan, d'història, en parla rarament, però de lingǘstica molt.
'With Maria, Joan seldom talks about history, but about linguistics a lot.'
Here, we have two CLLDed constituents besides the one having LI. Yet, under the restrictions imposed by the LCA, we can derive cases of multiple CLLD having a unique projection for hosting them. Note that since multiple adjunction is forbidden, only the innermost left-dislocate occupies the specifier of

This is exactly the behavior of Catalan, where CLLD always precedes focus and interrogative items: ${ }^{12}$
(17) a. D'aquest tema, AMB LA MARIA, en va parlar!
'About this subject, (s)he talked with Maria!'
a'. *Amb MARIA, d'aquest tema en va parlar!
b. D'aquest tema, amb qui en va parlar?
'About this subject, who did (s)he talk with?'
$a^{\prime}$. *Amb qui d'aquest tema en va parlar?

From this application of Benincà \& Poletto (1999) to Catalan, it can be concluded that ExtTopP is part of the LD frame.

### 5.1.2.2. The placement of IntTopP

In the previous paragraph, ExtTopP has been shown to fit in the fine-grained sentence architecture proposed in Benincà \& Poletto (1999). However, unlike the left-periphery of sentence, the typology and structure of the material in the right periphery is a completely unexplored territory. Indeed, the extremely interesting claims for a partition of sentences in three domains à la Rizzi (1997) (see e.g. Grohmann to appear, Platzack 1999) do not even consider the placement of CLRD. This seems unsurprising on the basis of the empirical evidence offered so far that CLLD must occupy a relatively low position in the sentence with respect to CLLD. So then, how is IntTopP to be incorporated to the sentence architecture? Let us consider the issue in some detail.

We know that both subjects and objects may enter into CLRD, so the place hosting right-dislocates must be accessible to both. As a consequence, IntTopP must be

TopP: the outermost left-dislocate must have adjoined to the innermost one (see 1.2.4). I will turn to this issue in 5.2.2.
${ }^{12}$ Surprisingly, sluicing offers a counterexample to this claim:
(i) a. *Sé que del llibre, en va parlar a en Pere, però no sé, del vídeo, a qui. 'I know that (s)he talked with Pere about the book, but I don't know with about the videotape.'
b. Sé que del llibre, en va parlar a en Pere, però no sé a qui, del vídeo.
c. Sé que del llibre, en va parlar a en Pere, però del vídeo, no sé a qui.

This fact is certainly unexpected under Benincà \& Poletto's analysis of the distribution of material in the left-periphery of sentence. Nevertheless, it seems to me that unless a clear analysis of sluicing is provided, we should be cautious in our conclusions, for independent factors might have an influence. I leave the issue open.
above $\nu \mathrm{P}$. Now, it remains to be seen whether some functional projections intervene between them. Let us study some possible landmarks that may help us in establishing the exact placement of IntTopP. ${ }^{13}$

Consider in the first place negation. We have seen that negative polarity items within a right-dislocate are licensed by sentential negation, which suggests that IntTopP is under the c -commanding domain of negation. Witness:

La Maria no ho ha sigut mai, amiga de cap lingüista.
'Maria has never been friend of any linguist.'

Although some controversy exists on the exact placement of negation and whether it is identical cross-linguistically, two main proposals exist, with small variations. One proposal argues that NegP occupies a rather high position in the sentence, dominating the inflectional layer (see Laka 1990, cf. also Zanuttini 1991, who distinguishes two different NegP, one above IP and another dominating the VP). Another proposal argues for a position closer to the VP-area (see Moritz \& Valois 1994, Pollock 1989, Zubizarreta 1998). I am not siding with any proposal in this controversy, but it is clear enough that my proposal that IntTop immediately dominates $v \mathrm{P}$ is compatible with both proposals.

A more promising landmark for placing IntTopP is brought to us by adverbs occurring in final VP-position. As Cinque (1997: 1.4) points out for Italian, adverbs

[^22](ii) *Amb la Maria no hi parlaré, i tampoc, amb la Carme.
'With Maria I won't talk, nor with Carme either.
So then, the influence the pragmatics of CLRD has in the illformedness of (ii) disguises any evidence regarding its structural position.
occupying the right-edge of the VP must bear heavy stress, and consequently tend to be reinforced by a modifier (Cinque's exs. 61e/g):
(19) a. Gianni vede Maria ANCORA.

Gianni is seeing Maria still
b. Gianni ha rifatto i compiti BENE

Gianni has redone his homework well

The same holds for Catalan:
(20) a. En Joan veu la Maria EnCARA.
b. En Joan ha refet els deures BÉ.

Clitic right-dislocates must appear to the right of these adverbs:
(21) a. En Joan la veu \{EnCARA, la Maria / *la Maria EnCARA\}.
the Joan her saws \{still the Maria / the Maria still\}
b. En Joan els ha refet $\{$ BÉ, els deures / *els deures bÉ $\}$.
the Joan them has redone \{well the homework / the homework well\}

Given our proposal that CLRD entails movement to [Spec, IntTopP], it cannot be the case that the focused constituent stays in situ. Rather, it must be assumed that it moves to some FocusP above the VP, a clearly different position from the one hosting emphatic focus. This is in essence the analysis adopted in Belletti \& Shlonsky (1995), who argue for a Foc(us)P sandwiched between the higher VP and $\mathrm{Agr}_{0} \mathrm{P}$ in both Romance and Hebrew. ${ }^{14}$ I cannot consider here the arguments for this 'focus-split' at length, so I refer the reader to Belletti \& Shlonsky (1995) for details (see also Ambar 1999, Cecchetto 1999, and Ndayiragije 1999). Observe however that this proposal has a high theoretical appeal, for it adheres to our hypothesis that there is a direct

[^23]syntax/semantics projection. Particularly, it captures the clear distinction between unmarked focus and marked focus: ${ }^{15}$
(22) a. Ahir vaig comprar el cotxe.
'Yesterday I bought the car.'
b. El cotxe, vaig comprar ahir.
'It was the car that I bought yesterday.'

Following the hierarchical specialization program, the necessity of a FocusP close to the VP-area comes for granted in the case of (22)a. So then, let us follow Belletti \& Shlonsky (1995) and assume that this lower focus position hosts unmarked focus and immediately dominates $v \mathrm{P}$. Now, we can give IntTopP a final position between FocP and $\nu \mathrm{P}$ :


This configuration derives the right-edge phenomena involving focus and CLRD in a straightforward way: focus lands higher than CLRD, and hence it will surface to its left.

[^24](i) a. Ahir vaig comprar el cotxe, no pas la moto.
'Yesterday I bought the car, but the motorbike doesn't.'
b. El cotxe, vaig comprar ahir, no pas la moto.
'It was the car that I bought yesterday.'

Obviously, much more is needed to obtain the correct surface order, but this should wait until section 5.3, where a detailed analysis of the derivation will be provided. ${ }^{16}$

### 5.2. The movement issue

### 5.2.1. Movement vs. base-generation

Much of the theoretical debate on CLLD (and CLRD) constructions dwells on the way we can better explain the displacement of the dislocate and the fact it leaves a resumptive element backward. There are two outstanding proposals: ${ }^{17}$

## Base-generation analysis

The dislocate is base-generated in its peripheral position and it is linked somehow with a clitic pronoun. (Anagnostopoulou 1997, Cinque 1983, 1990, Iatridou 1990, Montapanyane 1994)

## Movement analysis

The dislocate is moved to its peripheral position, leaving a RP. (Cecchetto 1999,
Cinque 1977, Escobar 1995, Kayne 1994, Rizzi 1997, Villalba 1999)

Prima facie, both proposals offer a good explanation for some facts, but can hardly account for others. The properties under question are the following:
(A) the presence of a resumptive clitic;
(B) the iteration of CLLD;

[^25](C) the lack of WCO effects;
(D) the failure of CLLD in licensing parasitic gaps;
(E) the sensitivity to (strong) islands; and
(F) the existence of reconstruction/connectivity effects.

Properties (A)-(D) are the main empirical evidence adduced by the defendants of the base-generation analysis. Properties (E)-(F), instead, provide the fuel that nourishes the advocates of a movement analysis. In the remainder of the section, I will single out the posture of each analysis with respect to these properties, and I will show that from an empirical standpoint, the movement analysis offers a better alternative than the basegenerated one. Finally, some issues of a more theoretical character will be substantiated that will also favor a movement approach.

### 5.2.1.1. The presence of a resumptive clitic

We have discussed this property at length in 2.1.1. Let us consider the position of the base-generation approach to CLLD, as stated in Cinque (1990), his most conspicuous advocate. Cinque's main objection to treating resumptive clitics in CLLD as the spellout of a trace is that they behave quite differently from resumptive pronouns (RPs) in $w h$-interrogatives in languages like Swedish (see Cinque 1990: 180 fn .9 ). He considers that only RPs in Swedish wh-interrogatives really count as A'-variables, and hence as the spell-out of traces. However it is noteworthy that he doesn't ground his conclusion on island-sensitivity, but on their (presumed) non-gap-behavior, on the lack of licensing of parasitic gaps, and on the lack of WCO effects. The last two properties will be considered in detail below, so let us concentrate now on the gap behavior of RPs. Cinque claims that the RPs of CLLD do not display across-the-board (ATB) dependencies, but he doesn't offer any example supporting his claim. Yet, it is a conspicuous empirical fact that CLLD and CLRD behave just like wh-extraction in coordinate structures:
(24) a. *D'aquest llibre a la Maria li agraden les novel•les i en Pere en parla elogiosament.
'*About this book, Mary likes novels and Pere talks laudatorily.'
b. D'aquest llibre la Maria no en parla i en Pere en parla elogiosament.
'About this book, Mary doesn't talk and Pere talks laudatorily.'
(25) a. *En Pere en parla elogiosament i a la Maria li agraden les novel•les, d'aquest llibre.
'*Pere talks laudatorily about it and Mary likes novels, this book.'
b. La Maria no en parla i en Pere en parla elogiosament, d'aquest llibre.
'Mary doesn't talk about it and Pere talks about it laudatorily, this book.'
(26) a. *De quin llibre a la Maria li agraden les novel-les i va parlar en Pere?
'*About which book does Mary like novels and did Pere talk?'
b. De quin llibre va parlar la Maria i també (en) va parlar en Pere?
'About which book did Mary talk and did Pere talk also?'

Both CLLD/CLRD and wh-movement respect the Coordinate Structure Constraint and hence require ATB extraction. Similar examples are found in other Romance languages like French or Italian:
(27) a. *De ce livre, hier j' avais le temps et je n'ai lu la moitié.
'This book, yesterday I had time and I read half of it.'
[Cinque 1977: ex. 40a]
b. A Georgette, je sais que Marcel lui a parlé directement et que Claude lui a écrit.
'To Georgette, I know that Marcel spoke directly and that Claude wrote.' [Postal 1991: ex. 12b]
(28) a. *Je l'ai vu et Marie m'a entendu, Hervé. 'I saw Hervé and Marie heard me.'
b. Je l'ai vu et Marie l'a entendu, Hervé.
'I saw and Marie heard, Hervé.'
[Postal 1991: fn. 15]
(29) *Di quel libro, mi son seduto in poltrona e ne ho letta una metà, ieri.
'Of that book, I sat in the armchair and read half of it yesterday.'
[Cinque 1977: ex. 31]

The data show that as far as coordination is involved, RPs of CLLD and traces behave alike: they are only possible under ATB extraction. This is certainly surprising for a base-generation approach. Observe also that the corresponding HTLD versions, which
are widely accepted as involving base-generation (see e.g. Cinque 1977), are possible without the necessity of ATB extraction:
(30) a. Ce livre, hier j'avais le temps et je n'ai lu la moitié.
'This book, yesterday I had time and I read half of it.'
b. Quel libro. mi son seduto in poltrona e ne ho letta una metà, ieri.
'Of that book, I sat in the armchair and read half of it yesterday.'
(Cinque 1977: exs. 40b, 35)

When this piece of evidence is added to the puzzle, little doubt remains that, as far as ATB extraction is concerned, CLLD is closer to wh-movement than to HTLD, namely to movement than to base-generation.

In this respect, it becomes relevant Cinque's analysis of the fronting of certain non-nominal phrases. Observe two representative examples of the set he discusses (Cinque 1990: ch. 2 ex. 84a, 85b):
(31) a. Fredda, credo che l'abbia mangiata solo lui.
cold I think that only he ate it
b. Ad Aiaccio, credo che sia nato Napoleone.
in Aiaccio I think that Napoleon was born

Cinque cannot analyze these sentences as instances of CLLD, for it would entail the presence of a null resumptive pronoun, an option forbidden to the AP and the PP under question, which don't receive a referential index. He is thus forced to conclude they are instances of (successive cyclic) wh-movement: resumptive preposing the former and adverb preposing the latter. However, this analysis cannot be extended to a language like Catalan, where the resumptive clitic is possible or even obligatory in those cases (as Postal 1991 previously pointed out for French):
(32) a. Freda, crec que només la hi va menjar ell.
'Cold, I think that only he ate it.'
b. A Aiaccio, crec que hi va néixer Napoleó.
'In Aiaccio, I think that Napoleon was born.'

This is bad news for Cinque's analysis, for even though it doesn't undermine his description of the Italian data, it casts doubts on its generality. If the non-movement analysis of CLLD he defends for Italian is applied to Catalan (or French), which would seem highly desirable, an insurmountable difficulty appears. On the one hand, maintaining that the constructions in (32) involve wh-movement leads us to the unwanted consequence of assuming that $w h$-movement of a non-referential element may leave a RP without the presence of an island. In other words, it leaves without explanation why the following sentences are impossible:
(33) a. *Qui el vas veure?
'Who did you see?'
b. *El llibre el vaig robar.
'It was the book that I stole.'

Here clear instances of wh-movement cannot leave a RP, which is in sharp contrast with the sentences under question. Moreover, unlike what Cinque claims for Italian, the Catalan version allows the subject to appear preverbally, which would be surprising if wh-movement were involved:
(34) a. Freda, crec que només ell la hi va menjar.
'Cold, I think that only he ate it.'
b. A Aiaccio, crec que Napoleó hi va néixer.
'In Aiaccio, I think that Napoleon was born.'

We are then forced to conclude that the sentences in (32)a-b are cases of CLLD. Observe, for instance, that the phrases under question can be freely permuted with clear instances of CLLD:
a. Crec que freda, la sopa, només ell la hi va menjar.
b. Crec que la sopa, freda, només ell la hi va menjar.
'I think that only he ate the soup cold.'
(36) a. A Aiaccio, d'enemics, crec que Napoleó n'hi va deixar molts.
b. D'enemics, a Aiaccio, crec que Napoleó n'hi va deixar molts.
'I think that Napoleon leave many enemies in Aiaccio.'

These data resolutely suggest that we are not dealing with a construction involving whmovement, but rather with an instance of CLLD, for it is a property of CLLD to appear always to the left of wh-elements (see 5.1.2.1) and freely permute with other leftdislocates (see 2.1.1, 4.1.1.1, 4.2.2.1). This solution, however, is hardly incompatible with an analysis of CLLD in Cinque's terms, for one thing: the dislocates are not referential, which forbids them to enter into binding chains. To sum up, Cinque's (1990) analysis of CLLD fails to explain the behavior of these constructions in Catalan (or French) properly. Obviously, this doesn't undermines directly his analysis of Italian CLLD, but since we expect prima facie to find a similar behavior in closely related languages, his failure in accounting for Catalan and French data raises well-grounded doubts on their adequacy altogether, particularly on his claim that CLLD doesn't involve movement plus a resumptive clitic.

Once it has been shown that Cinque's non-movement analysis suffers from severe empirical drawbacks and that his criticisms to the movement analysis are far from being compelling, consider now how a movement analysis may deal with the presence of the resumptive clitic in the extraction site. Two solutions have been proposed, which I summarize as follows:

The doubling analysis (Jaeggli 1986, Kayne 1994, Cecchetto 1999)
CLLD/CLRD are two instances of a more general construction of 'cliticdoubling, ${ }^{18}$

The resumptive pronoun analysis (Postal 1991, Escobar 1995, Villalba 1999)
CLLD/CLRD are movement operations that leave behind a resumptive element.

Let us consider now the basic points of each proposal.
In a nutshell, the classical doubling analysis (Jaeggli 1986) assumes the Dstructure configuration in (37)a for CLLD/CLRD and clitic-doubling (see fn. 18 for a summary of a slightly different position on clitic doubling):

[^26]a. $\quad \mathrm{cl}_{\mathrm{i}}-\mathrm{V} \ldots \mathrm{DP}_{\mathrm{i}}$
b. $\left(\mathrm{DP}_{\mathrm{i}}\right) \ldots \mathrm{cl}_{\mathrm{i}}-\mathrm{V} \ldots t \ldots\left(\mathrm{DP}_{\mathrm{i}}\right)$

What distinguishes the dislocation constructions from clitic doubling is that at S structure, the DP moves to a peripheral position in the former, as represented in (37)b. In sum, the gist of this proposal is that clitic doubling is a prerequisite for dislocation. However, it is unclear whether such a statement is empirically motivated.

First of all, it is a fact that CLLD/CLRD is much more pervasive than clitic doubling (I illustrate this contrast with CLRD only, for it makes the point even more clear):
(38) a. L'he llegit molt ràpidament, el llibre.
'I have read it very fast, the book.'
a'. *L'he llegit molt ràpidament el llibre.
'I have read very fast the book.'
b. Hi vaig parlar ahir, amb la Maria.
'I spoke with her yesterday, Maria.'
b'. *Hi vaig parlar ahir amb la Maria.
'I spoke with Maria yesterday.'

If the sentences in (38)a/b derive from the ones in (38) $a^{\prime} / b^{\prime}$, we must ask ourselves what makes doubling ungrammatical, and hence dislocation obligatory. This contrast is even more striking in languages like Italian or French, which are much less permissive than Catalan or Spanish regarding the possibility of doubling a lexical argument, which is practically restricted to dislocation structures. Bonet (1991: 221f) provides us with another interesting contrast. She notes that Catalan allows clitic doubling with datives:
(39) En Pau li ha presentat en Josep a la Maria.
'Pau introduced Josep to Maria.'

Furthermore, in certain contexts, the typical dative clitic $l i$ changes to the clitic $h i$ (the *me lui/I-II constraint):
(40) a. *En Pau me li ha presentat.
'Pau introduced me to him/her.'
b. En Pau m'hi ha presentat.
'Pau introduced me to him/her.'

Interestingly enough, when the dative clitic is represented by means of $h i$, it cannot have a double, in contrast with what happened with (39) (the locative interpretation of the clitic $h i$ and the CLRD analysis of a la Maria must carefully be avoided):
(41) a. *M'hi ha presentat a la Maria.
'(S)he has introduced me to Maria.'
b. M'ha presentat a la Maria.
'(S)he has introduced me to Maria.'

It is of central importance that the corresponding version with CLLD (the same is true of CLRD, which Bonet doesn't consider) shows no incompatibility between hi and the dislocate:
(42) A la Maria, m'hi ha presentat.
'To Maria, (s)he has introduced me.'

As Bonet observes, whereas clitic doubling demands a strict matching of features between the clitic and the double, CLLD requires compatibility only. ${ }^{19}$ Consequently, Bonet's examples reinforce our statement that there are clear instances of CLLD that cannot be derived from clitic-doubling. So then, it can be concluded that clitic-doubling is not a necessary condition for CLLD/CLRD (see Iatridou 1990 for a similar conclusion based on Greek CLLD).

[^27]Furthermore, it is not a sufficient condition either, as the following examples show (I restrict the comparison to CLRD for commodity, but CLLD displays the same behavior):
(43) a. Li ho comentaré a altra gent demà mateix.
'I will comment it to other people tomorrow.'
b. *Li ho comentaré demà mateix, a altra gent.
(44) a. Tots dos li ho vam dir a la mateixa persona immediatament.
'We both told it to the same person immediately.'
b. *Tots dos li ho vam dir immediatament, a la mateixa persona.
(45) a. Cada un li ho va dir a una persona diferent.
'They told it to a different person each.'
b. *Cada un li ho va dir, a una persona diferent.

The doubled element cannot be dislocated, which suggest that the properties legitimating CLLD/CLRD are independent from the ones allowing clitic doubling. However, if clitic doubling is neither a necessary nor a sufficient condition for dislocation, it makes little sense assuming that the former is at the basis of the latter.

A different approach to the issue is called for, and it remains to be seen whether the resumptive pronoun analysis is a better solution. Let us word out in some detail the technical implementations of this idea. Chomsky (1995: 261ff) raises the idea that if what motivates movement is the checking of a feature F , then on minimalist grounds, a principle like the following should hold: ${ }^{20}$
(46) F carries along just enough material for convergence. (Chomsky 1995: 262)

In other words, if the movement of a phrase is forced by the checking of a feature of, say, Case, then the operation only affects this feature. Obviously, syntactic movement is not a pure displacement of features, so factually the movement of features carries along some extra material. Chomsky distinguishes two possible motivations for such nonoptimal solution. On the one hand, the movement of a feature cannot yield an output that is ininterpretable at the interfaces (indeed he only has in mind PF). So then

[^28]convergence at the interfaces (pronunciation for Chomsky) would force pied-piping of more material than needed for checking purposes. He notes for example the case of covert movement, which not being constrained by the PF-interface, would allow pure feature movement. On the other hand, Chomsky argues that feature movement involves another instance of pied-piping that it is not forced by convergence at the interfaces, but by conditions of the computational system itself. He claims that movement of features entails the movement of all the formal features of the item, where by formal features he understands those that are accessible to the computational system. Even though he claims that " $[t]$ here are strong empirical reasons for assuming that Move F automatically carries along FF(LI), the set of formal features of LI [=lexical item; XV]" (Chomsky 1995: 264), this is a clear departure from an optimal situation. As Epstein et al. (1998: 86) note:

One question arises immediately: Why does the entire set $[\mathrm{FF}]$ move, and not simply the feature F that creates the Checking Relation, clearly the more minimal assumption? In other words, why does a feature F "pied-pipe" the entire bundle of formal features? And why then are not all features of the lexical item also pied-piped, including semantic and phonetic features (if any)? At least then, the atomic nature of lexical items would be maintained: it is, after all, lexical items, and not features, that are drawn from the lexicon and enter syntactic computation. Whether movement of the $[F F]$ is in fact the correct analysis would [be] a matter for empirical research, though clearly a "nonminimal assumption" is being made.

On minimalist grounds, the only constraints on pied-piping should be those imposed by the interfaces. So let us dispense for the moment with Chomsky's (1995) assumption that move F carries along the whole subset of formal features of a lexical item, and consider as a logical possibility that a moved element can leave behind a subset of its features, namely that "feature stranding" is possible. Is this logical possibility factual? I think that the answer must be positive and that the resumptive clitic in dislocation structures is a perfect candidate for this job (see Picallo 1999 for an analysis of word order in Catalan involving feature movement). Let us consider this in more detail.

A priori, the features of the clitic are purely grammatical, arguably case and $\phi$ features, whereas the dislocate retains interpretative features -i.e. features that matter at the interfaces-, such as lexical, phonologic and semantic/pragmatic features (see Zubizarreta 1998: 189 fn . 28, who suggests that "the clitic is simply the copy of the $\phi$ features of the DP with which it agrees, and therefore does not count as a distinct lexical item'). This division of the feature-checking task nicely correlates with the role
intuitively assigned to the clitic in dislocation constructions: it is the resumptive element that fulfills the grammatical requirements within the sentence, whereas the dislocate carries content aspects, such as topichood, specificity, etc. Schematically (copies are conventionally italicized):

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F[+int] ... [xP < F[-int],F[+int]>]
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$\mathrm{F}[$-int] is spelled out as a resumptive clitic and will also move for checking purposes (for arguments that cliticization counts as case-checking see Villalba 1994). This division of features would explain the inertness of clitics in process of focus assignment: even though the clitic is under existential closure, it doesn't count as new information. The issue is still problematic and many questions ask for an answer. For example, if the dislocate carries along the phonologic features, why do the stranded features have a phonologic reflex? It is intuitively clear that on the one hand, clitics are the minimal spell-out of Case and $\phi$-features, and on the other hand, their spell-out is obligatory as long as the language allows for the corresponding clitic form, as a comparison between Catalan and Spanish clearly shows. So then, what's the drivingforce underlying this pattern of pronunciation? One rough-and-ready answer is convergence. We have seen that feature movement must respect the legibility conditions imposed by the interfaces. The crucial step is to motivate a link between the spell-out of Case and $\phi$-features and interface conditions. ${ }^{21}$ For the time being, I cannot shed much light on the way to bridge this gap, but just speculate on a possible solution. Under a copy theory of traces, we expect the resumptive element to reflect somehow the basic properties of the moved element. In the case under discussion, the dislocate has proved to display characteristic semantic features, specifically those standardly associated with specificity (or genericity). This property usually contrasts with the semantic features of elements involved in operator chains, which tend to show non-specificity features. Let us assume that the copy of a moved referential element has pronominal characteristics generally, along the lines suggested by Postal (1994, 1998), which builds on

[^29]Perlmutter's (1972) Shadow Pronoun Hypothesis. Postal argues that there is a set of extractions -his B-extractions, including topicalization and left-/right-dislocationthat obligatorily involve RPs (the other subset, A-extractions may allow a RP under certain circumstances). Postal $(1994,1998)$ offers a quite impressive bulk of data pointing to such direction. He grounds his analysis of the incompatibility between Bextractions and antipronominal contexts. Take for instance the case of existential there sentences (Postal 1998: ch. 2 ex. 28):
(48) a. There are such apples on the table.
b. *There are them on the table.
c. *[Such apples $]_{1}$, there are $t_{1}$ on the table.

In Catalan, the internal argument of the existential verb haver-hi 'there be' is clearly an antipronominal context as well:
a. A casa hi ha la Maria.
'Maria is at home.'
b. *A casa hi ha ella.
'She is at home.'
c. A casa hi és ella.
'She is at home.'

Even though haver-hi doesn't show the definiteness effect, it cannot admit a pronominal. When a pronominal is present, the sentence must resource to ser 'to be', which doesn't create an antipronominal context. The immediate prediction is that haver$h i$ should be incompatible with dislocation. The prediction is borne out, as the following paradigm makes clear (the judgments hold for CLRD as well): ${ }^{22}$

[^30](50) A: Que hi ha la Maria?
'Is Maria there?'
B: a. *La Maria, (la) hi havia fa un moment.
'Maria was here a moment ago.'
b. La Maria, hi era fa un moment.
'Maria was here a moment ago.'

Once we have make it clear that CLLD and CLRD leave a pronominal gap inherently, the question of the conditions regulating the pronunciation of this gap reduce to the conditions regulating the identification of pronouns more generally. In other words, the pattern of pronunciation of resumptive elements involved in CLLD/CLRD is just the one applying generally to pronouns: they spell-out as clitics whenever possible. Arguably, the place where such conditions are to be stated is morphology. We have just seen that Bonet (1991) describes a morphologic constraint, the *me lui/I-II constraint, which directly bears on the way the third person singular dative clitic $l i$ is realized in certain contexts. Another fact that aims at the same direction is the cross-linguistic variation found in the clitic system of Romance languages. Take for instance the unavailability in Spanish of prepositional clitics. Bonet (1991) argues that beyond the appearance, syntax generates the same set of pronominal clitics universally, the difference being in the treatment clitics receive from morphology: prepositional syntactic clitics in Spanish have no morphologic correlate, and hence lack phonologic content. Bonet argues that this offers us a more homogeneous analysis of CLLD. Witness:
(51) a. Les sabates, *(les) ficaré a l'armari.
'The shoes, I will put in the closet.'
a'. Los zapatos, *(los) meteré en el armario.
b. A l'armari, *(hi) ficaré les sabates noves.
'In the closet, I will put the new shoes.'
b'. En el armario, meteré los zapatos nuevos.

Even though, Catalan requires the presence of the prepositional clitic hi, no such element is even possible in Spanish. However, a close examination of data shows that CLLD in Catalan and Spanish doesn't display significant differences beyond the
availability of the clitic in question. So then, the analysis applied to Catalan should be maintained for Spanish, leaving the regulation of the exact realization of clitics to morphology. This restatement of the problem links the question of resumptive clitics to the more general problem of pronominal clitics: why are clitics obligatory at all in languages like Catalan? Bonet (1991) suggests that an approach based on morphology can shed more light on this issue than a purely syntactic approach. Whether this kind of solution should extend to the case under question remains a matter of future research. ${ }^{23}$

To sum up, it seems that a clear distinction exists between purely grammatical features and interpretative features and that the computational system (or for that matter Move $\alpha$ ) is sensitive to it. This move is quite appealing and the evidence suggested by dislocation fits nicely in the picture, but much research is needed in order to test its empirical coverage. From a theoretical standpoint, the distinction between features that we are outlining here is akin to Chomsky's (1998: 21-22) subdivision of indirect feature-driven movement into A-movement when the attracting head has $\phi$-features and into A '-movement when the attracting head has P-features, i.e. of the peripheral system (force, topic, focus). From a completely different perspective, Optimality Theory, Pesetsky (1997) also argues that pronouns are the pronunciation of the $\phi$-features of a DP, which results from the tension between the competing constraints that regulate the phonetic realization of copies. In any event, also in this regard much research is needed.

### 5.2.1.2. The iteration of CLLD

An argument provided by Cinque (1990) against the possibility of a movement analysis of CLLD concerns the iterability of the construction. In essence, he claims that instances of multiple CLLD are expected to violate either subjacency or the strict cycle. Let us consider his claim in detail. Cinque uses as a point of departure the example in (52) a, which he assumes that has the simplified structure in (52)b, where underlining indicates a barrier for subjacency:

[^31]a. Loro, il libro, credo che a Carlo sia sicuro che non glielo daranno mai. them the book credo that to Carlo it is certain that they will never give it to him
 [도 che non glielo daranno mai $t_{1} t_{2} t_{3}$ []]]]]]]]]]

Here, he argues, whichever derivation we choose, either the strict cycle or subjacency is violated. Cinque's point is I think correct, the well-formedness of the Italian sentence seems a good argument against the movement analysis. However, persuasive reasons lead us to sustain a different position, namely that although Cinque's premises are correct, his conclusion isn't. First of all, both the Catalan and the French versions of Cinque's sentence are deviant:
(53) a. ?"Ells, el llibre, crec que al Carles és segur que no l'hi donaran mai.
b. *(A) Eux, le livre, je crois qu'à Charles il est sûr qu'ils ne (le) lui donneraient jamais. [Postal 1991: 76b]

Indeed, it is an incontrovertible fact that CLLD does display subjacency effects in Catalan. Consider for instance, the ill-formedness of the following cases of multiple CLLD originating in the same sentence but landing in different clauses: ${ }^{24}$
(54) a. *D'això, crec que en Pere, tots volem que en parli.
'I think that we all want Pere to talk about this.'

[^32](i) a. D'això, crec que tots volem que en parli, en Pere. 'I think that we all want Pere to talk about this.'
b. Crec que en Pere, tots volem que li parli, a la Maria. 'I think that we all want Pere to talk to Maria,'
c. Crec que a la Maria, tots volem que li'n parlis, d'això. 'I think that we all want you to talk to Maria about this.'
d. Crec que d'això, tots volem que li'n parlis, a la Maria. 'I think that we all want you to talk to Maria about this.'

Notably, these sentences are just as implausible from a pragmatic point of view as the ones in (54), but they are nonetheless judged as plainly acceptable.
b. *A la Maria, crec que en Pere, tots volem que li parli.
'I think that we all want Pere to talk to Maria.'
c. ${ }^{? ? / *}$ D'això, crec que a la Maria, tots volem que li’n parlis.
'I think that we all want you to talk to Maria about this.'
d. ${ }^{? ? f^{*}}$ A la Maria, crec que d'això, tots volem que li'n parlis.
'I think that we all want you to talk to Maria about this.'

This effect is unexpected under Cinque's approach, but is in harmony with a movement analysis, for it reduces to a typical minimality effect: a dislocate in a lower specifier blocks movement of other dislocates to a higher one. ${ }^{25}$ Again, Cinque's proposal can hardly translate to relative languages like Catalan and French, for it incorrectly predicts that no subjacency effects should be attested in multiple CLLD in those languages. The lack of generality of the base-generated analysis is a clinching argument for abandoning it in favor of a movement one.

### 5.2.1.3. The lack of WCO effects

In (55) it can be seen that CLLD creates no WCO effects, in contrast with whmovement:
a. De la Maria ${ }_{1}$, en ${ }_{1}$ parlen els seus ${ }_{1}$ pares. of the Maria of.it talk the his/her parents 'Her parents talk about Mary.'
b. $\quad$ De qui ${ }_{1}$ parlen els seus ${ }_{1}$ pares?
of who of.it talk the his/her parents
'About who do her parents talk?'

This is taken by Cinque (1990) as solid evidence against a movement analysis of CLLD. His argumentation is the following. Were CLLD an instance of movement, it would qualify as $A$ '-movement. So then, since well-known instances of A'-movement, namely wh-movement, yield WCO effects, and CLLD doesn't, he concludes that CLLD cannot

[^33]be an instance of movement. However, Cinque's argumentation is problematic. First of all, his conclusion is not warranted, for the comparison of $w h$-movement and CLLD with respect to WCO only allows us to conclude that CLLD is not an instance of whmovement. Cinque doesn't take into account the possibility that CLLD be an instance of non-operator/A'-movement, along the lines suggested by Webelhuth (1989) for German scrambling. This failure reveals itself even clearer when WCO is considered from a wider perspective.

Stemming from Lasnik and Stowell (1991), Postal (1993) shows that WCO facts should be analyzed taking into consideration not only the kind of element moved (the main achievement of Lasnik \& Stowell's work), but also the characteristics of the element containing the pronoun. Let us consider the nature of the extracted phrase. Under normal circumstances, the following two generalizations hold (taken from Postal 1993):

## Generalization 1 (Weak crossover)

In a configuration where a pronoun P and a trace T are bound by a quantifier $\mathrm{Q}, \mathrm{T}$ must c-command P .

Generalization 2 (Weakest crossover)
The WCO effect arises only when the Q of Generalization 1 represents semantically a "true quantifier phrase."
["true quantifier phrase" = a phrase with an element that quantifies over a set of at least two members]

This is the gist of Lasnik \& Stowell (1991), whose value can be tested against the following pattern (Postal 1993: ex. 3): ${ }^{26}$
(56) a. $\quad * \mathrm{Who}_{1}$ did his ${ }_{1}$ sister call $\mathrm{t}_{1}$ a moron?
b. *the kid $_{1}$ who $_{1}$ his ${ }_{1}$ sister called $\mathrm{t}_{1}$ a moron...
c. Frank ${ }_{1}$, his $s_{1}$ sister called $t_{1}$ a moron.

[^34](i) a. *Who ${ }_{i}$ does his mother like $\mathrm{e}_{\mathrm{i}}$ ?
b. John ${ }_{i}$ his $_{\mathrm{i}}$ mother likes $\mathrm{e}_{\mathrm{i}}$ ?

She claimed that the crucial difference was the referential status of the moved phrase: whereas a topic is referential, an operator element isn't. According to Guéron, it is referentiality what makes coreference possible in (i)b, which is in essence Lasnik \& Stowell's (1991) proposal.
d. Frank $1_{1}$ was easy for his ${ }_{1}$ sister to outshine $t_{1}$.
e. Who ${ }_{1}$ did they convince $t_{1}$ that his ${ }_{1}$ sister called $p g_{1}$ a moron?
f. John ${ }_{1}$, who they convinced his ${ }_{1}$ sister that you called $t_{1}$ a moron, ...

Only in (56)a-b does the extracted phrase qualify as a true quantifier, and consequently yields WCO effects.

However, Postal (1993) shows that this description of facts is incomplete. On the one hand, we have instances of true quantifier phrases that do not yield WCO. Witness the contrast reported by Postal (1993: ex. 31):
(57) a. *Which lawyer did his $_{1}$ clients hate $t_{1}$ ?
b. Which lawyer ${ }_{1}$ did even his ${ }_{1}$ clients hate $t_{1}$ ?
c. Which lawyer ${ }_{1}$ did only his ${ }_{1}$ older clients hate $t_{1}$ ?
d. Which lawyer ${ }_{1}$ did his $s_{1}$ own clients hate $t_{1}$ ?

The WCO effect in (57)a disappears in the presence of even, only and own (for reasons to be discovered). A similar fact obtains when the extraction involves a RP:
(58) a. the boy who $_{1}$ we don't know whether his ${ }_{1}$ parents died after sending him ${ }_{1}$ to college... (Cinque 1990: 151)
b. Ze ha-baxur še-yidafti ?et ha-horim šel-o $o_{1}$
this the-guy that-(I).informed ACC the-parents of-him
še-ha-more yaxšil Roto $_{1}$. (Shlonsky 1992: ex. 30b)
that-the-teacher will flunk him
'This is the guy that I informed his parents that the teacher will flunk him.'
c. (A) qui $l_{1}$ 'estima la seva ${ }_{1}$ mare? (Rosselló 1986b: ex. 6a)
'Who does his mother love?'
d. ¿[A quiénes $]_{1}$ no *(les) dejó $\mathrm{su}_{1}$ madre ningún dinero $\mathrm{e}_{1}$ ? (Suñer 1988: ex. 71)
'To whom didn't their mother leave any money?'

Here it seems rather unmotivated to argue that the lack of WCO is due to the nonquantificational nature of the wh-element (see Zubizarreta forthcoming for an account of Spanish data).

On the other hand, there are instances of non-true quantifier phrases that induce WCO effects:
(59) a. *Harry ${ }_{1}$, a picture of him ${ }_{1}$ fell on $t_{1}$.
b. *Harry ${ }_{1}, I$ am quite sure that a picture of him ${ }_{1}$ fell on $t_{1}$.
c. *De Gaulle ${ }_{1}$, that description of him ${ }_{1}$ annoyed $t_{1}$ more than you know. [Postal 1993: ex. 20]

Furthermore, beyond the nature of the extracted phrase, certain contrasts exist that have to do with the nature of the phrase containing the offending pronoun. Witness the following contrast observed by Zubizarreta (1998: 189 fn. 26):
(60) a. A cada niño ${ }_{1}$, su u madre $\mathrm{lo}_{1}$ acompañará el primer día de escuela. ACC each child his mother ACC.CL will-accompany the first day of school
b. *A cada niño ${ }_{1}, \mathrm{su}_{1}$ madre piensa que María $\mathrm{lo}_{1}$ acompañará el primer día de esçuela.

ACC each child his mother thinks that María ACC.CL will-accompany the first day of school

She notes that although, as a rule, CLLD doesn't yield WCO effects, long-distance CLLD of a quantifier phrase cannot bind a pronoun belonging to a higher clause. Interestingly, similar contrasts are reported for Japanese by Saito (1992: fn. 40) and for Hebrew by Borer (1995: ex. A4):

| a. | Dono hon-ni-mo which book-on-also | [[sono ${ }_{1}$ tyosya]-ga $t_{1}$ keti-o tuketa] its autor-NOM threw-cold-water |  |
| :---: | :---: | :---: | :---: |
| 'Every book ${ }_{1}$, its ${ }_{1}$ author threw cold water on $t_{1}$.' |  |  |  |
| b. | Dono hon-ni-mo, | [[sono, tyosya]-ga [cP [ip Hanako | -ga $t_{1}$ |
|  | which book-on-also | its autor -NOM | -NOM |
| keti-o tuketa] to] itteiru] |  |  |  |
| threw-cold-water COMP is-saying |  |  |  |
| 'Every book $_{1}$, its ${ }_{1}$ author says that Hanako threw cold water on $t_{1}$.' |  |  |  |
| a. | 'et ha-yeled ha-ze ${ }_{3}$ | ran $x a S a v S^{\text {Se-mor-av }}$ | he'erixu $\mathrm{t}_{3}$ |
|  | ACC the-boy the-this | Ran thought that-his teachers | respected $\mathbf{t}$ |

$\begin{array}{llll}\text { b. *'et ha-yeledha-ze } 3 \text { ran 'amar } & \text { le-im-o } O_{3} & \text { Se-ha-morim } \\ \text { ACC the-boy the-this Ran told } & \text { his mother } & \text { that-the teachers }\end{array}$ he'erixu $\mathrm{t}_{3}$ respected $\mathbf{t}$

Moreover, in Catalan a contrast is perceived in the following series:
a. Amb la Maria $i_{i}$, el seui pare hid va ballar un tango. 'With Maria, his father danced a tango.'
b. "?Amb la Maria ${ }_{j}$, el seu $u_{i}$ pare m'ha confessat que el director hi $i_{i}$ va ballar un tango.
'With Maria, his father confessed me that the director danced a tango.'

Even though rather subtle, the judgments suggest that long-distance CLLD may yield a WCO effect when crossing over a phrase in a higher sentence that contains a pronoun. See Mahajan (1990) for a similar pattern in Hindi; cf. Saito (1992) for Japanese.

It is thus clear that WCO is less monolithic a phenomenon than traditionally assumed, involving the kind of element moved, the presence of a RP or the position of the phrase containing the pronoun. Once this fact is recognized, the lack of WCO effects in CLLD cannot count as an argument against the movement analysis.

### 5.2.1.4. The failure of CLLD in licensing parasitic gaps

Consider now parasitic gaps, which are standardly assumed to be licensed by an A'movement chain. Consider the relevant paradigm ( $p g$ stands for parasitic gap):
(64) a. ?Quins articles, vam distribuir $\mathrm{t}_{1}$ sense haver revisat/grapat $p g$ ? which articles (we) distributed without have reviewed/stapled 'Which articles did we distribute without having reviewed/stapled?'
b. ?Els articles que vam distribuir sense haver revisat/grapat $p g .$. the articles that (we) distributed without have reviewed/stapled 'the articles we distributed without having reviewed/stapled...'
c. *Els articles, els vam distribuir sense haver revisat/grapat $p g$. the articles them (we) distributed without have reviewed/stapled 'We distributed the articles without having them reviewed/stapled.'
d. *Els vam distribuir sense haver revisat/grapat $p g$, els articles.

Even though parasitic gaps are inherently unnatural in Catalan and the version with the pronoun is strongly preferred, wh-movement licenses them. CLLD and CLRD, in contrast, don't. Such evidence pushes Cinque $(1983,1990)$ to conclude that CLLD cannot be an instance of movement. Nevertheless, it is unclear whether this conclusion is totally warranted. We do know that movement is not a sufficient condition for the licensing of parasitic gaps, for NP-movement doesn't license them (Engdahl 1983: exs. 31-32):
(65) a. John $n_{1}$ was killed $\mathrm{t}_{1}$ by a tree falling on $* p g_{l} /$ him $_{1}$.
b. Mary ${ }_{1}$ tried $\mathrm{t}_{1}$ to leave without John's hearing *pgl/her ${ }_{1}$.
c. Mary ${ }_{1}$ seemed $\mathrm{t}_{1}$ to disapprove of John's talking to ${ }^{*} \mathrm{pg}_{/} /$her $_{1}$.

The standard explanation for this fact in the recent generative literature hinges on the inadequacy of the NP-trace, which doesn't count as a variable. A similar explanation might hold for CLLD. Given that CLLD/CLRD is not quantificational in nature, it is expected not to leave a variable, which would explain the failure of CLLD in licensing parasitic gaps. Indeed, beyond CLLD, other (clear) movement constructions do not license parasitic gaps either. Postal (1994: fn. 3) observes that exclamatives do not license parasitic gaps in English:
(66) [What awful grapes $]_{1}$ she bought $\mathrm{t}_{1}\left(\right.$ ? ${ }^{*}$ without tasting $\left.p g_{1}\right)$ !

This is valid for Catalan as well:
(67) a. *Els llibres ${ }_{1}$ que he hagut de comprar $\mathrm{t}_{1}$ sense haver demanat $p g_{1}$ ! the books that have- 1 had of buy without have asked
b. *Quina casa ${ }_{1}$ que tenen $t_{1}$ sense haver comprat $p g_{1}$ ! the house that sell-2PL without have restored

Moreover, other undiscussed instances of A'-movement, such as focus preposing, do not license parasitic gaps either:
> a. *El LLIBRE DE CHOMSKY $y_{1}$ vaig trobar a la taula $t_{1}$ sense haver encarregat $p g_{1}$. the book of Chomsky PAST-1 find on the table without have ordered
> b. *CAFÈ DE COLÒMBIA $A_{1}$ em van servir $\mathrm{t}_{1}$ sense haver sol-licitat $p g_{1}$. coffee of Columbia to.me past-2 serve without have requested

Given this, it cannot be argued that the failure in licensing parasitic gaps is a necessary condition for a construction to qualify as movement. Consequently, Cinque's argument against a movement analysis of CLLD based on parasitic gaps loses all its strength.

### 5.2.1.5. The sensitivity to (strong) islands

It is a well-known fact that CLLD doesn't fit properly in the typology of transformation rules defined by Ross (1967). Ross distinguishes between chopping transformations and copying transformations, where the basic difference is that the former leave a gap and the latter a copy (basically a pronoun). Furthermore, the constructions differ with respect to island sensitivity, which lead Ross to state the following generalization:

Chopping rules are subject to the constraints of Chapter 4 [ $=$ the Complex NP Constraint, the Coordinate Structure Constraint, the Left Branch Condition and the Sentential Subject Constraint; XV]; copying rules are not.

Ross (1967: 257) [I quote from the 1986 version published with the title Infinite syntax! Norwood, N.J.: Ablex]

Obviously, CLLD qualifies as a copying transformation, for it leaves a clitic pronoun, but against Ross' generalization, it is sensitive to strong islands, a property of chopping rules (see Cinque 1977, 1990: 59 for Italian, and Postal 1991 for French):
(69) a. *Al Pere, conec només [sN les persones [CP que $l i$ diuen hola]]. to-the Pere know-1 only the persons that to-him/her say-3PL hello 'I will only introduce you to the people that say hello to Pere.'
b. *Ric, suposo que [cp ser-ho] ajuda a ser feliç. rich guess- 1 that be-it help- 3 to be happy 'I guess that being rich helps people to be happy.'
c. *Ric, aniré al dentista quan ho sigui.
rich go-FUT-1 to the dentist when it be-SUBJUNC-1
'I will go to the dentist when I shall be rich.'

In (69) we have three violations of strong islands: a complex NP, a sentential subject, and an adverbial adjunct, respectively. Furthermore, remember that we have already seen that CLLD/CLRD necessarily display ATB extraction out of a coordinate (see exs. (24)-(29) above). As Cinque (1977) argues, this behavior is a standard and incontrovertible test for movement. However, Cinque (1983), (1990) questions such a conclusion, arguing that CLLD involves a base-generated binding chain. Consequently, he is forced to claim that island-sensitivity is not a property of movement but rather of chains, whether they are created by movement or base-generated. The basic point, however, is why a binding chain should be affected by a strong island? Unlike CLLD, binding relations are immune to islandhood:
(70) a. En Pere ${ }_{1}$ va anar amb el noi que el $l_{1}$ va ajudar.
'Pere went with the boy that helped him.'
b. En Pere ${ }_{l}$ va comentar que la Maria és jove però lil agrada.
'Pere commented that Maria is young but he likes her.'

The contrast with CLLD is certainly striking:
(71) a. *D'en Pere ${ }_{1}$ vaig anar amb el noi que en $\mathrm{en}_{1}$ va parlar.
'About Pere, I went with the boy that talked.'
b. *A en Pere, sé que la Maria és jove però lif parla.
'To Pere, I know that Maria is young but she talks.'

Obviously, it cannot be simply said that a strong island blocks binding. So then, what is the factor underlying such a contrast. Taken the definition of binding he assumes ( X binds Y iff (i) X c-commands Y and they have the same index), there is no clear reason for it: the binding relation is interfered by the strong island in both cases. Does the notion of chain make a difference here? It could be argued that only in (71) a chain is formed, and that only chains are affected by barriers. This seems a reasonable
conclusion, but then the question of HTLD becomes relevant: why doesn't the relation between a hanging topic and the resumptive element count as a binding chain?

Another severe empirical problem is brought to us by the consideration of CLLD in comparison with CLRD, a construction he doesn't even mention. I have shown in 4.1.1 that CLLD and CLRD share the obligatoriness of the resumptive clitic (when available): ${ }^{27}$
(72) a. El llibre, l'he llegit amb molt de gust.
'The book, I have read with great pleasure.'
b. L'he llegit amb molt de gust, el llibre.
'I have read it with great pleasure, the book.'

What does Cinque's analysis of CLLD tell us about CLRD? Prima facie, we might extend the binding chain mechanism to CLRD as well. Yet, this extension would be extremely problematic, for it leads to a dead end. Even though, binding chains are known to entail a 'long-distance' link only broken by strong islands, CLRD, unlike CLLD, is clause-bound (see 3.1.1, 4.1.2.1, 4.2.1.1). The upward-boundedness of CLRD is hardly compatible with an analysis in terms of binding chains. Clearly, some other mechanism is called for. This fact reveals itself as a major empirical failure, for even though CLLD and CLRD are two distinct constructions, it would be highly desirable to offer a unitary explanation for their common properties. Undoubtedly, Cinque (1990) cannot offer any valuable insight on the partial parallelisms between CLLD and CLRD (see also Postal 1991 for a criticism along these lines).

Moreover, beyond these inadequacies, the very same notion of binding chain is called into question, or to put it in more proper terms, it turns out that the notion of binding chain has really nothing to do with binding. That Cinque introduces a new mechanism becomes clear when we take into account its place in the system and

[^35]compare it with that of binding. On the one hand, binding chains must be computed before reconstruction applies, otherwise they would not get affected by islands. On the other hand, binding must apply after reconstruction takes place, in order to explain connectedness (see 5.2.1.6 below). Obviously, were it the same relationship, Cinque's analysis would introduce a redundancy in the system that should be avoided unless strong empirical evidence is adduced.

To make things worse, the notion of binding chain is at odds with current views of binding conditions as principles imposed by the interface, particularly with minimalist guidelines. Take for example Chomsky's (1995: ch. 3 fn. 53) opinion on the elimination of indices in binding principles:

A theoretical apparatus that takes indices seriously as entities, allowing them to figure in operations (percolations, matching, etc.), is questionable on more general grounds. Indices are basically the expression of a relationship, not entities on their own right. They should be replaceable without loss by a structural account of the relation they annotate.

However, some kind of coindexing is necessary to connect base-generated topics with their corresponding clitics in Cinque's system. This is a serious theoretical flaw with respect to the movement hypothesis, which must be considered the null hypothesis under minimalist assumptions: it doesn't requires any additional device to give an account of the connection between the dislocate and the resumptive element, for the later is simply a trace/copy of the former. The base-generation hypothesis, instead, must assume some ad hoc mechanism to ensure this connection.

Unfortunately, Cinque's $(1983,1990)$ proposal for CLLD suffers from empirical flaws in this point as well. Cinque explicitly states in several places that referentiality is a prerequisite to form binding chains:
[T]he only elements that can be clitic left dislocated are those that can enter a binding relation. In other words, no element that can only be moved via successive cyclic movement in wh-constructions can be clitic left dislocated [...].
(Cinque 1990: 164 fn . 15) [Italics in the original; X.V.]

[^36][ P$]$ hrases that can enter only into a successive cyclic derivation will appear not to be able to be dislocated in CLLD-whence the conclusion that the construction enters only into binding chains.
(Cinque 1990: 57)

Given this, consider now the case of measure phrases and idiom chunks, which Cinque (1990: 162-3 fn. 8 ) shows that cannot be resumed by an object clitic in discourse:
(73) a. A: Io peso 70 chili.
'I weigh 70 kilos.'
B: *Anch'io li peso.
'Even I weigh them.'
b. A: Farà giustizia.
'He will do justice.'
B: * Anch'io la farò.
'I will do it too.'

Cinque argues that the ungrammaticality of these sentences is a consequence of "the clash between their [= measure phrases and idiom chunks] nonreferential status and the referential status of object clitics." Consequently, neither measure phrases nor idiom chunks will be able to create binding chains, which nicely correlates with the fact that they cannot undergo long wh-movement, but only show successive cyclic wh-movement (Cinque 1990: exs. 15a, 17, 19a and 20a, respectively):

| a. *Quanti chili ti ha chiesto se pesavi? |  |
| :--- | :--- | :--- |
| how many kilos | has he asked you whether you weighed |
| b. *GiustiZIA, | mi domando quando faranno finalmente! |
| justice | I wonder when they will do finally |

a. Quanti chili credi che riuscirà a pesare dopo questa dieta? how many kilos do you think that he will be able to weigh after this diet
b. Giustizia, dice di voler fare! justice he says he wants to do

Therefore, Cinque concludes that the non-referentiality of this kind of phrases makes them untenable as heads of a binding chain, which entails the prediction that neither
measure phrases nor idiom chunks would be able to enter into CLLD. Nevertheless, this prediction is factually wrong, for the corresponding CLLD versions are possible, as he himself recognizes (Cinque 1990: 162-3 fn. 8):
a. $\quad 70$ chili, non li pesa.
'70 kilos, he doesn't weigh them.'
b. Giustizia, non la farà mai.
'Justice, he will never do.'

Hence, Cinque's analysis of CLLD in terms of binding chains leaves without explanation the fact that measure and temporal phrases or (certain) idioms enter into CLLD. Note also that his suggestion (p. 89) that "[b]eing in the scope of negation licenses a null operator in CLLD, and in fact is another means to dislocate an idiom chunk" is very questionable, for idiom chunks can hardly be uttered in out-of-the-blue contexts regardless of the presence of negation (see Benincà 1988: 151). In the appropriate context, measure phrases and idiom chunks may be affected by CLLD, as the following Catalan examples show:
(77) a. A: Jo no crec que estigui gras. Només pesa 70 quilos. 'I don't think he is fat. He only weighs 70 quilos.'

B: 70 quilos, els pesava jo quan era jove i em notava gras.
' 70 kilos, I weighed them when young and I find me fat.'
b. A: Que no tenies son aquesta nit?
'Weren't you sleepy last night?'
B: Sí que en tenia, però no sé per què aquesta nit, el son m'ha costat d'agafarlo.
'I was, but I don't know why I could hardly get asleep last night.'

We cannot assume that a null operator is at work here to rescue the sentences. ${ }^{28}$ Finally, note that Cinque's (1990) approach still leaves unexplained the fact that an element whose meaning is non-compositional is generated into two parts, without losing its

[^37]idiosyncratic meaning. This point was a cogent argument adduced by Cinque (1977: 1.4) to reject a base-generation analysis of CLLD and assume instead a movement one.

### 5.2.1.6. The existence of reconstruction/connectivity effects

Consider now reconstruction/connectivity facts:
(78) a. D'ella mateixa $1^{*}$ d'ell $^{\text {mateix }}{ }_{2}$, en Pere $_{2}$ creu que la Maria ${ }_{1}$ no $n$ 'ha parlat mai.
of herself of himself Pere thinks that Maria not of-it has talk never
'Pere thinks that Maria has never talk about herself.'
b. *De la Maria ${ }_{1}$, crec que pro $_{1}$ no en parla mai.
of-the Maria (I) think that not of-it talks never
*'I think that she ${ }_{1}$ doesn't talk of Mary.'

In (78)a, even though the reflexive appears in a position where it is not bound by its antecedent, it is licensed by la Maria as if it were in situ. In (78)b, CLLD doesn't rescue the Principle C violation. It seems thus that dislocates are interpreted as if they were in situ, a fact that can be made explicit by means of a mechanism of reconstruction, be it syntactic or semantic (see among others Chierchia \& Cecchetto 1999, Sternefeld 1997, Vat 1981; cf. Villalba forthcoming). Nevertheless, reconstruction is standardly applied to A'-movement -and controversially to A-movement; see Hornstein 1995, 1999, and Fox 2000 -, not to base-generated chains. Obviously, there is nothing intrinsically wrong in Cinque's point, for the extension of reconstruction to non-movement binding chains is ultimately an empirical issue. Yet, it remains to be seen whether this extension is harmless for the system. Consider in some detail the way Cinque's account works.

As he puts it in Cinque (1983: 104ff) - see also Cinque 1990: 182-3 fn. 23-, a sentence like (79) a should receive the analysis in (79)b:

| a. A Giorgio, Piero non | gli ha scritto. |
| :--- | :--- | :--- |
| To G. P. not | to-him-has written |

b. [s [Top [pp a Giorgio] $\left.]^{3}\right]\left[\mathrm{s}\right.$ Piero non $\left[\mathrm{PP}\right.$ gli] ${ }^{3}$ ha scritto $\left.\left.\left.[\mathrm{PP}]^{3}\right]\right]\right]$.

In his own words:

The categorially identical sentence internal phrase is an empty phrase (which may itself be bound by a clitic pronoun). Such superscript coindexing has the effect of building up a 'chain' of like categories where the 'chain' can be conceived of as the dilation of a single category. In other words, the chain counts as one argument position in that it contains a single contentive element (the content of the category in TOP) even though such content is 'linked' to two categorial positions: the one in TOP position and the sentence internal empty phrase.
(...) [S]o that the full 'chain' consisting of the lexical phrase in TOP, the clitic pronoun and the empty sentence internal phrase still counts as a single argument position spread in three categories.
Cinque (1983: 105)

Beyond its theory-internal coherence, Cinque's solution presents many problems. The most evident one is the theoretical plausibility of the coindexing mechanism used, a point discussed in 5.1.2.5. Furthermore, Cinque's analysis presents empirical problems as well. Consider for instance the consequences of the assumption that CLLD forms a three-membered chain. The first question that comes to mind is about the behavior of this 'chain' with respect to binding: which member of the chain should count for binding conditions? Reconstruction/connectedness facts suggest that it is the position of the tail that determines the characteristics of the whole chain as a binder or bindee, as shown in (78) above. However, this doesn't seem to be always true. In 4.1.2.4, 4.2.2.3, and 4.3.2.3, I have discussed the existence of so-called antireconstruction effects with CLLD:
(80) a. * $\operatorname{pro}_{1}$ va dir convençuda les mentides que la Maria ${ }_{1}$ va inventar.
'*She ${ }_{1}$ said convinced the lies that Maria, invented.'
b. *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.'
a. Les mentides que la Maria ${ }_{1}$ va inventar, pro $_{1}$ les va dir convençuda.
'The lies that Maria ${ }_{1}$ invented, she $_{1}$ said convinced.'
b. Les aptituds que la Maria ${ }_{1}$ apuntava de jove, pro $_{1}$ no les va confirmar després.
'The aptitudes that Maria ${ }_{1}$ suggested when young, she ${ }_{1}$ didn't confirmed later.'

Here, CLLD changes binding relations, which is surprising under Cinque's approach, which assumes that the binding possibilities of the chain are those of the tail. In contrast, a movement approach may take advantage of the Lebeaux-Chomsky analysis of this contrast (see Chomsky 1995: chs. 3-4). The key is that adjuncts may be added to
the structure during the derivation. That amounts to saying that the relative clause can be merged with the DP after it has moved, so that the resumptive element is a copy of the DP only. As a consequence, the material in the relative clause doesn't count as if it were in the position of the resumptive element for binding purposes. It is unclear how Cinque's system would derive these facts.

Finally, consider the way reconstruction facts interact with the resumptive pronoun strategy displayed in CLLD. In Cinque (1983) it is argued that the dislocate acts as if it were in situ because it is linked to a resumptive clitic in sentence internal position, without resorting to syntactic reconstruction (i.e. an LF 'undoing' operation). However, this system doesn't entail that the resumptive element must be a clitic obligatorily: nothing prevents a lexical pronoun to fulfill this function. In order to avoid this drawback, Cinque (1983: 105) must assume that lexical pronouns, unlike clitics, cannot enter into chains, but this is merely stipulative and leaves without explanation what the analysis would be for CLLDed subjects, which lack clitic correlates generally. Cinque (1990: 182-3 fn. 23) makes an attempt to repair this problem, resorting to the principle of Full Interpretation:

The fact that the resumptive element must be a clitic pronoun on the verb, rather than a tonic pronoun filling the A-position, is possibly a consequence of the need to reconstruct the CLLD phrase into the IPinternal position for Full Interpretation purposes.

However, it is unclear which role such principle should have in CLLD. The content of the resumptive element is out of danger even in the absence of the dislocate, which is optional in many cases:
(82) A: On has posat el llibre?
'Where have you put the book?'
B: Sempre estàs igual: (el llibre,) l'he posat al seu lloc.
'It's always the same story: the book, I put in its place.'

The identification of the resumptive element takes place independently of the presence of the dislocate: the context may fulfill this task efficiently enough. So then, it seems that invoking the Full Interpretation principle is a stipulation deprived of any real content.

To wind up this section, Cinque's (1990) arguments against the movement hypothesis of CLLD (and consequently of CLRD) are less compelling than they seemed. Indeed they don't prove the point, but rather that CLLD is not wh-movement. Besides this incontrovertible evidence, there are influential reasons for still maintaining a movement analysis, which will lead us to develop a more complex typology of movement chains, along the lines suggested by Borer's (1995).

### 5.2.2. The trigger for dislocation

Section 5.2.1 has provided enough evidence supporting a movement approach to CLLD/CLRD, but little has been said on the exact motivation underlying this operation. If we take as a line of inquiry the basic insights of Chomsky's Minimalist Program (Chomsky 1995, 1998, 1999), where the operation Move has been assumed to follow from the necessity to check formal features of lexical items, it must be concluded that a feature underlies also CLLD/CLRD. ${ }^{29}$ This is the conclusion that Cecchetto (1994, 1999), Grohmann (to appear), Villalba (1999) or Zubizarreta (1998) subscribe (see Grewendorf \& Sabel 1999 and Sauerland 1999 for a similar position concerning German and Japanese scrambling). Let me word out a possible analysis. ${ }^{30}$

Under standard minimalist assumptions, the trigger for CLRD must be a feature, which, since CLRD is associated with background information, I will label [background]. The dislocate, thus, moves to [Spec, IntTopP] to check this feature,

[^38]yielding CLRD. In the case of CLLD, since the interpretation involved is different, other feature must be at stake, if we want to maintain the semantic specialization of sentence positions argued for in 5.1.1.2. Hence, I will assume that CLLDed constituents move to [Spec, ExtTopP] to check a feature conventionally labeled [link]. As I will argue in 5.3, the features [background] and [link] are by no means incompatible: both CLRD and CLLD involve the feature [background], but only CLLD involves the feature [link]. This entails that our system will derive CLLD from CLRD, which will be argued to be a highly desirable upshot on empirical and theoretical grounds in 5.3.1.

This system is extremely suggestive on conceptual grounds for it takes CLRD to be less marked an operation than CLLD, allowing an interesting parallel to be traced with focus. It has been shown in 5.1.2.2 that several authors (see Belletti \& Shlonsky 1995, Cecchetto 1999, and Ndayiragije 1999, among others) have proposed two hierarchically distinct projections for hosting focused phrases: a lower one for unmarked focus, and a higher one for marked/emphatic focus. This suggests a common pattern that relates unmarked operations (CLRD/unmarked focus) with lower positions in the sentence (i.e. the right-periphery), and more marked operations (CLLD/marked focus) with higher positions (i.e. the left periphery). ${ }^{31}$

Let us concentrate now on the overall picture arising from the integration of the [background] and [link] features in the derivation of sentences. Pending many details that will be discussed in the next section, the feature-driven approach straightforwardly fits an extremely simple model of the syntax-pragmatics interaction like the one defended in Reinhart (1981, 1995). According to Reinhart, syntax provides pragmatics with a set of topic-focus configurations, which will be evaluated by discourse principles or felicity conditions, determining whether each configuration is adequate in a given context. This proposal fits properly the standard conceptions of the minimalist program,

[^39]|  | -background | +background |
| :--- | :--- | :--- |
| -prominent | ummarked focus | CLRD |
| +prominent | marked focus | $C L L D$ |

The proposal is very suggestive, for a clear correlation arises between [prominence] and the placement in the sentence structure. However, many questions remain to be answered, mainly regarding the exact content of the feature [prominent] (which I borrow from Choi 1996). It cannot refer to 'pitch prominence', for CLLD is known to be pronounced with a rather flat intonation contour (see Solà i Pujols 1992, Zubizarreta 1998). Another possibility is 'pragmatic prominence', but it is unclear whether this notion may apply to both marked focus and CLLD in a principled way. Consequently, even though illuminating, I will consider for the moment that the preceding table is a convenient characterization of discourse-based constructions rather than an analysis in terms of formal features (I refer the reader to Choi 1996 for discussion).


[^0]:    ${ }^{13}$ Observe that rightward VP-detachments require the marker de lit. 'of', which was optional to some degree in leftward VP-detachment. This contrast extends to bare nominals as well:
    (i) a. (De) tigres, n' he vist molts.
    b. N'he vist molts, *(de) tigres.
    'I have seen many tigers.'
    To my knowledge, no principled account has been proposed for this contrast, which stands, thus, as an unsolved issue.

[^1]:    ${ }^{14}$ Here become pertinent the questions raised in Ch. 2 fn .42 , which concerned the position of adverbs within the VP.

[^2]:    ${ }^{1}$ None of these names is explicitly assumed by the authors cited, so they are to be taken as helpful descriptive labels. As for the double topicalization analysis, Cecchetto (1999) credits its origin to

[^3]:    ${ }^{2}$ Baker (1996: 2.1.5) shows a similar behavior in Mohawk: both subject and object nominals are always islands for extraction. Baker assumes nominal arguments in polysynthetic languages always surface as instances of CLLD/CLRD, namely they occupy an adjoined position, and their position within the clause is occupied by a null pronoun.
    ${ }^{3}$ Zubizarreta (1998: 189 fn . 26) observes that Spanish unbounded CLLD, unlike the CLLD bounded to its own clause, show WCO effects:

[^4]:    ${ }^{4}$ It is worth noting that (11)a-b are far from being perfect sentences. Note they are instances of centerembedding, which is known to make processing difficult. In any case, while the speakers consulted showed doubts on the exact degree of grammaticality of (11)a-b, they all agreed on the clear ungrammaticality of their prime versions (i.e. the ones violating upward boundedness).

[^5]:    ${ }^{5}$ Dislocation of the NPI itself is deviant as long as it can hardly establish a poset relation with a previous referent. If the poset relation can be established, namely if we make the NPI partitive, CLLD is still impossible, but CLRD is OK:

[^6]:    ${ }^{6}$ The explanation offered for this effect by Lebeaux (1988) and Chomsky (1995) crucially relies on the adjunct status of the relative clause as opposed to that of complement clauses, which do not show antireconstruction:
    (i) a. *La possibilitat que la Maria ${ }_{1}$ vingués, pro $_{1}$ la va suggerir convençuda.
    '*The possibility that Maria ${ }_{1}$ came, she ${ }_{1}$ suggested convinced.'
    b. $\quad$ La idea que la Maria era una assassina, pro ${ }_{1}$ no la va acceptar mai.
    '*The idea that Maria ${ }_{1}$ was a murderer, she,$_{1}$ never accepted.'
    It is obvious that arguments must be present at D-Structure for thematic reasons. However, this is not the case of adjuncts, like the relative clause. Lebeaux (1988) suggests that adjuncts may be inserted at $S$-structure by means of a generalized transformation. This entails that the relative clauses in (19) are inserted after the DP has been dislocated. If we combine this with Chomsky's (1995) approach to 190

[^7]:    ${ }^{7}$ Note, however, that CLLD is fine if the dislocate is in the periphery of the main clause:
    (i) D'aquest tema, confiava a parlar-ne.
    of-this subject expected-1 to talk-of-it
    'I expected to talk about this subject.'

[^8]:    ${ }^{8}$ There is an exception to this treatment: nonfinite interrogatives, which are possible with both CLLD and CLRD. Observe:
    (i) a. No sé, d'aquest pernil, on comprar-ne.
    'I don't know where to buy this ham.'
    a'. *No sé on, d'aquest pernil, comprar-ne.
    b. No sé on comprar-ne, d'aquest pernil. 'I don't know where to buy this ham.'

    Interestingly enough, this symmetry doesn't extend to relatives:
    (ii) a. *No tinc ningú amb qui, d'aquest tema, parlar-ne. 'I don't have anybody to talk about this subject.'
    b. No tinc ningú amb qui parlar-ne, d'aquest tema. 'I don't have anybody to talk about this subject.'

    I will suggest an explanation for this exception in Chapter 5.

[^9]:    ${ }^{9}$ Kayne is very unexplicit regarding the properties of the feature at the roots of CLRD. On the one hand, given that it entails covert movement, it should be weak in Chomsky's (1995) terms. On the other hand, such a feature is interpretable at the interface levels, as Kayne himself notes. Until now, nothing heterodox. The problem appears when CLLD is taken into account. What would be the feature forcing CLLD, namely overt movement of a dislocate? Obviously, a feature should be at the roots of such an operation, but in this case, the feature must be strong, for it forces overt movement. Since the strength of features is a parametric option, it must be concluded that the feature involved in CLLD and the one involved in CLRD must be distinct. However, at this point the crucial question is: why should two different features force movement to the same position? It should be assumed thus that the head of the projection hosting CLLD and CLRD bears both features, but this sounds more as a

[^10]:    ${ }^{10}$ Current analyses of NPI that take LF as the level in which they get licensed would not explain the contrast (see Hornstein 1995 for a review and for a proposal along the lines of the Minimalist Program). See Villalba forthcoming. A semantic/pragmatic account seems more promising; see Ladusaw (1996).

[^11]:    ${ }^{11}$ It might be argued that the problem has nothing to do with stranding, but with the fact that CLRD undergoes covert movement, yielding a configuration in which the trace isn't bound by its antecedent. This might be a plausible explanation, given the fact that nonrestrictive relatives do not strand (which remains unexplained under Kayne's 1994: 8.7 analysis of nonrestrictives in terms of covert movement). Nevertheless, the generality of such a conclusion is still to be evaluated.

[^12]:    ${ }^{12}$ Obviously, this analysis is at odds with the fact that dislocates are opaque domains for extraction (see 4.1.1.2 and 4.2.2.2). This drawback will be discussed in 4.3.2.2 below.

[^13]:    ${ }^{13}$ Note it is important that the crucial examples don't have the pronoun in subject position. As Cecchetto (1999) observes, under Kayne's (1994) version of c-command, the specifier of IP would ccommand the dislocate, yielding a Principle $C$ violation. Our choice of the examples in the text avoids such a possibility.

[^14]:    ${ }^{14}$ This last step in the derivation raises a theoretical problem that will be discussed in 4.3.2.7 below.

[^15]:    ${ }^{15}$ A different derivation comes to mind:
    
     Topic, $t_{\text {IP }}$ 1]]]
    
    

[^16]:    ${ }^{1}$ The name of this analysis has nothing to do with the following German construction, which Diesing (1992: 33ff) labels split-topic (her ex. 27a from page 33):
    (i) Ameisen haben ja einen Postbeamten viele gebissen. ants have PRT a postman many bitten
    'As for ants, many have bitten a postman.'
    Other names are found in the literature. For example, den Besten \& Webelhuth (1990: 79) consider this construction as an instance of remnant topicalization and label it DP-split; and Kratzer (1995: ex. 20b) prefers the term quantifier-split. In any case, no connection should be traced between this construction and the split-topic analysis.
    ${ }^{2}$ The labels Internal Topic Phrase and External Topic Phrase are just convenient names. It might be argued that 'topic' has some unwanted connotations (i.e. aboutness), at least in the case of CLRD. Maybe Background Phrase or Presupposition Phrase would be more adequate for CLRD, regarding its informational status. In any case, the issue of the label is not substantive.

[^17]:    ${ }^{3}$ This is not the end of the story for NPIs, of course. Several intricacies and analyses are at work, particularly regarding the necessity that NPIs move to [Spec, NegP], either overtly or covertly, i.e. the 'Neg Criterion' (see Zanuttini 1991: ch. 5). As for the split-topic analysis, the requirements of the Neg

[^18]:    ${ }^{5}$ Nevertheless, note that a $w h$-relative doesn't rescue CLLD:
    (i) *No tinc ningú amb qui, d'aquest tema, parlar-ne. not have-1 nobody with who of-this subject talk-of-it 'I don't have anybody to talk about this subject.'

[^19]:    ${ }^{7}$ Several scholars have pursued this line of research for different languages. For the assumption of a topic projection see e.g. Müller \& Sternefeld (1993) and Grohmann (to appear) for German, Zubizarreta (1998) for Spanish, Ambar (1999) for Portuguese, Cecchetto (1999) and Frascarelli (1999) for Italian.
    ${ }^{8}$ Chomsky (1999: 28) expresses a similar idea, where the EPP position of a $\phi$-complete light verb receives a special interpretation (focus, specificity). López \& Villalba in progress, pursue this line of research for CLRD and CLLD.

[^20]:    ${ }^{10}$ In this point, Solà i Pujols' (1990) study of the particle rai becomes very relevant. This author shows that in some Catalan dialects (of Catalonia) the topic position appears distinctively marked by means of rai (his ex. 26c):

[^21]:    ${ }^{11}$ Poletto \& Benincà (1999) make a crucial use of this distinction in order to eliminate multiple CLLD. They take as evidence favoring their proposal contrasts like the following:

[^22]:    ${ }^{13}$ A priori, a strong test for determining the placement of IntTopP would be VP-ellipsis. We do know that CLLD can appear in an elliptical clause (see Ordóñez 1997: ch. 3, and Ordóñez \& Treviño 1999 for Spanish):
    (i) Amb la Maria no hi parlaré, i amb la Carme tampoc.
    'With Maria I won't talk, nor with Carme either.
    This seems indicative that ExtTopP is above the elided material. It would be interesting then apply such a test to CLRD. Unfortunately, independent factors invalidate the proof. As the perspicacious reader may have noticed, the use of CLLD in the elliptical contexts provided is inherently contrastive, involving incontrovertible instances of shift-topics. This is far from being surprising since the remnants in elliptical constructions are known to be new information or at least to bear a contrastive reading, regardless of the fact they are dislocated or not. Given this, the predictions for CLRD are quite clear: since CLRD cannot convey a contrastive reading, it should be impossible in clauses with VP-ellipsis. This prediction is fulfilled:

[^23]:    ${ }^{14}$ Belletti \& Shlonsky's (1995) proposal is incompatible with the framework developed by Kayne (1994), for it assumes the specifier of FocP is to the right in Italian (but to the left in Hebrew; see Ndayiragije 1999 for a similar proposal for Kirundi and Icelandic). However, their analysis can be adapted to a framework respecting the LCA with minor adjustments.

[^24]:    ${ }^{15}$ The terminology for foci phenomena is extremely diverse and confusing, as much as the one for topic phenomena. I have chosen the extremely neutral terms 'unmarked' and 'marked' focus, for they express the pragmatic value each construction has: only unmarked focus is possible in an out of the blue utterance. Moreover, note that using terms such as 'contrastive focus' are extremely confusing, for both kinds of focus may indeed convey a contrastive reading:

[^25]:    I leave the issue as it stands, otherwise it would lead us too far afield. See Gundel (1999) and Kiss (1998) for two lucid reflections on the matter.
    ${ }^{16}$ In 5.2.3.2, below, it will become apparent on the basis of relativized minimality phenomena that probably several functional projections appear sandwiched between FocusP and IntTopP.
    ${ }^{17}$ The label 'base-generation analysis' is somewhat misleading, for although all works classified under this heading assume that the dislocate is base-generated in its peripheral position, they differ in the way to link the dislocate with the resumptive element. On the hand, works like Cinque (1983, 1990), Iatridou (1990) or Montapanyane (1994) argue that the connection between the dislocate and the clitic is a binding chain involving neither movement nor any operator. On the other hand, several works assume the basegeneration of the dislocate together with the use of an operator, along the lines suggested by Chomsky (1977) for English topicalization: see Anagnostopoulou (1997) and Demirdache (1997), where it is assumed that the resumptive pronoun is an operator-like element that must move either overtly or covertly. Furthermore, there are several proposals that fall within both categories either by lack of decision (as in the case of Rochemont 1989, where a movement analysis is assumed in the text, but an analysis à la Cinque 1983, 1990 is suggested in footnote) or consciously (as in Aoun \& Benmamoun 1998, where it is defended that CLLD may be the result of base-generation or of movement).

[^26]:    ${ }^{18}$ The exact analysis depends, of course, of the analysis of clitic doubling that each author has in mind. Jaeggli (1986) or Kayne (1994), for example, take the dislocate to be generated in complement position and the clitic to be an affix-like element adjoined to the verb. Cecchetto (1999), in turn, adopts an idea suggested by Esther Torrego in the late eighties, and developed in Torrego (1995) and Uriagereka (1995, 1996), according to which the clitic is a determiner heading a DP in complement position and the doubling element is generated in the specifier of this DP.

[^27]:    ${ }^{19}$ Franco (1993: 189) discusses a different contrast that bears on this question:
    (i) a. *Cualquiera lo compra un bote hoy en día.
    'Anyone (can) buy a boat nowadays.'
    b. Un bote lo compra cualquiera hoy en día. 'A boat, anyone (can) buy one nowadays.'

    Here, the ungrammaticality of (i)a is also a direct consequence of the incompatibility between the properties of the clitic and those of the doubled phrase, which goes against deriving CLLD/CLRD from doubling.

[^28]:    ${ }^{20}$ Cf. Chomsky (1998: 34), who explicitly denies the possibility of moving or attracting features. Unfortunately, he doesn't offer any clear empirical nor theoretical motivation for such a move.

[^29]:    ${ }^{21}$ This line of reasoning has many parallels in Nunes (1999) approach to the phonetic realization of chains. This author argues that the phonetic realization of traces is driven by independent principles of grammar, basically the LCA and economy conditions, as well as by interface conditions. As a rule, the conspiracy of the LCA and economy conditions imposes the deletion of all links of a chain except the head. However, crucially, Nunes (1999: 245 fn. 8) shows with data from different languages that interface conditions may override those conditions and allow a discontinuous realization of a constituent

[^30]:    ('scattered deletion' in his terms). This approach might extend to our discussion of resumptive clitics in interesting ways yet to be investigated.
    ${ }^{22}$ Note that it cannot be claimed that the contrast is due to the incompatibility of haver-hi with clitics, for examples like the following are possible:
    (i) De llibres, n'hi havia quatre.
    'There were four books.'
    Here, a partitive clitic is possible. Furthermore, observe that the possibility of ne-cliticization is not incompatible with the fact that haver-hi counts as an antipronominal context, for the clitic is a subpart of the internal argument, not the internal argument itself.

[^31]:    ${ }^{23}$ Much more remains to be said on the behavior of verbal detachments (see Chapter 2 Appendix, and Chapter 3 Appendix B), which encompass a double resumptive strategy depending on the kind of element detached: either they make use of the pro-verb fer-ho when a VP is CLLD/CLRDed or they employ an infinitival copy, when a verbal head is CLLDed. Intuitively, both strategies display a default copy of some kind, but such an intuition remains to be formalized properly, probably in within the morphological component. I leave the issue aside.

[^32]:    ${ }^{24}$ It might be claimed that what really makes these sentences so awkward is the difficulty to use them in a normal discourse interaction. It is certainly true that providing a pragmatically adequate context for any of the variants in (54) seems a hard work. Therefore, can we reduce the discussion to performance factors? I am not denying that pragmatics may have a role here, but I think the answer cannot reduce to such factors. For one thing, if the intermediate dislocate gets CLRDed, the sentence becomes perfect. Witness:

[^33]:    ${ }^{25}$ Aoun \& Benmamoun (1998) report that CLLD in Lebanese Arabic displays a pattern of intervention effects partially similar to the one under discussion. Nevertheless, a close comparison of both paradigms would lead us too far afield, for it would require previous discussion of the properties of Lebanese Arabic CLLD, which seems to be closer to Romance HTLD (e.g. it lacks island effects and affects NPs only) than to CLLD.

[^34]:    ${ }^{26}$ This fact was already noticed by Guéron (1984: 153ff), who pointed out the following contrast:

[^35]:    ${ }^{27}$ Note however that standard descriptions of Italian CLRD consider the presence of the resumptive clitic optional in many cases, as it has been shown in the Appendix A of Chapter 3. See for instance the examples collected in Benincà et al. (1988: 4.1.1):
    (i) a. (L)'ho portato lo, il dolce.
    'I have brought it, the sweet.'
    b. (Glie)(1)'ha prestata CARLO, \{a Giorgio, la tua macchina / la tua macchina, a Giorgio \}. 'Carlo have lent your car to Giorgio.'

[^36]:    However, this description has been called into question by Cecchetto (1999), who argues that it conceals two different constructions, CLRD, where the clitic is obligatory, and deaccenting, where the clitic is impossible. I leave the issue open.

[^37]:    ${ }^{28}$ This doesn't mean that negation has no role in making the dislocation of an idiom chunk more plausible. Indeed, Villalba (forthcoming) and Zubizarreta (forthcoming) convincingly show that the modality of sentence is certainly important for dislocation matters (see also Fox \& Sauerland 1996 for the role of genericity in scope assignment). I leave the issue open to further research.

[^38]:    ${ }^{29}$ From a slightly different framework, Rizzi (1997) argues that movement of discourse-relevant phrases is triggered by the necessity to satisfy several criteria, which require, for instance, that a topic occupy the specifier of a topic phrase. As far as I can see, this formulation is basically equivalent to the featuredriven one assumed here.
    ${ }^{30}$ In contrast with this analysis, Aoun \& Benmamoun (1998) take CLLD in Lebanese Arabic to be just a kind of stylistic movement taking place in PF, hence not involving feature-checking. They claim that it is triggered by the necessity to satisfy Sportiche's (1992) Doubly Filled Voice Filter, which essentially bans the concurrence of a clitic and a phrase in its specifier if the property licensed by this relation is overtly encoded in both elements. Unfortunately, Aoun \& Benmamoun don't elaborate their claim beyond this mere stipulation, which assumes without discussion Sportiche's (1992) system. Moreover, their interpretation and crucial use of this filter seems at odds with Sportiche's original conception, for he (p. 29 fn . 25) explicitly mentions Lebanese Arabic as a language that may lack this filter. However, the hardest problem for their account has to do with a consequence of assuming that CLLD is movement at PF: the dislocate is interpreted as if it were in situ. Nevertheless, it has been shown extensively in 2.1.2 and 3.1.2 that dislocation does have an impact on semantic interpretation. Moreover, on the basis of data in 4.1.2.4-4.1.2.5, it can be shown that the radical reconstruction approach doesn't hold generally (see Villalba forthcoming for arguments against reconstruction in CLLD/CLRD). Aoun \& Benmamoun also acknowledge this fact, and argue that the lack of reconstruction effects only arise when a island forces the base-generation of the dislocate. However, Aoun \& Benmamoun get confused by not recognizing that this configuration standardly corresponds to an instance of HTLD, which is insensitive to islands and doesn't show reconstruction/connectedness. Crucially, the construction they label CLLD can only affect NPs, which makes a proper characterization extremely difficult. On these grounds, Aoun \& Benmamoun (1998) conclusions for Lebanese Arabic should be taken watchfully.

[^39]:    ${ }^{31}$ This pattern might be described in the following way (adapted from Choi 1996):

