Clitic Climbing from Finite Clauses and Long Head Movement
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A number of accounts of clitic climbing have regarded it a phenomenon correlating exclusively with infinitives. This paper shows that the above correlation should not be taken to argue that restructuring configurations must be monoclausal. By presenting instances of clitic climbing from finite subordinates, it also demonstrates that proposals which associate clitic climbing with lack of Tense (or Tense raising) are not satisfactory either. I claim that while clitic climbing is an instance of head movement, thus subject to the HMC/SCP, it is also constrained by the requirement that the specifier positions of the heads through which the clitic moves be coindexed. This requirement I attribute to the fact that clitic climbing is followed by an XP movement at LF, which proceeds via the respective specifier positions. The possibility of such coindexing in finite contexts makes clitic climbing available in Romance languages with Balkan clausal structure, but is nonexistent in the rest of the Romance, where control and raising is restricted to infinitival.

This paper explores a number of issues related to the phenomenon of clitic climbing (henceforth CC), illustrated below with a typical example from Spanish:  

\[ \begin{align*}
(i) \quad & a. \quad \text{María lo leyó.} \\
& \quad \text{María 3sgAcc leer-PAST-3sg} \\
& b. \quad \text{María leyó el libro.} \\
& \quad \text{María leer-PAST-3sg el libro} \\
\end{align*} \]

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In the traditional literature CC has been associated with infinitival complement clauses. Here, I focus on this correlation and investigate the factors that underly it. By introducing data from languages that employ finite clauses in standard restructuring configurations, I show that CC does not depend crucially on the presence of infinitival subordinates. Rather, it is the coreference of matrix and embedded subjects (manifested in subject control or raising contexts) that is of critical importance. Consequently, the cooccurrence of CC and infinitives is only a result of the fact that raising and control configurations are associated exclusively with infinitives in the majority of the well-known languages with CC.

The data discussed in this paper provides new evidence against which various approaches to CC are evaluated. From those, I will consider two types distinguished mainly along the following lines: first, analyses which claim that restructuring configurations involve a VP subordinate clause and therefore make direct predictions for the issue I am addressing and, second, those which argue for a more elaborate clausal structure of restructuring complements but do not provide a clear answer to the question of why CC out of finite clauses is not attested.²

Thus, I will avoid debates over whether lo is a base-generated element or has moved from the position occupied by el libro 'the book'. I consider an approach along the lines of Sportiche (1992) to provide a complete account of the above issues and also to offer the possibility of disassociating CC from the process that takes place within the VP and gives rise to (i).

² The term restructuring is used here as a mnemonical device rather than as a commitment to Rizzi's (1982) approach to CC.
I provide evidence against the first type and follow analyses that consider restructuring complements to be full IPs (or perhaps CPs). Subsequently, I argue that the reason why CC is not commonly observed in the presence of finite subordinates is because in the majority of relevant languages finite clauses do not involve obligatorily coreferent subjects (namely, they are not control or raising contexts). I propose that in order for CC to be possible, the specifier positions of the phrases crossed by the moved clitic have to be coindexed and that coindexing cannot hold if some specifier hosts a contentful operator (such as a wh-operator in [Spec, CP]). Likewise, coindexing of specifiers cannot hold when matrix and embedded subjects are disjoint in reference (as in Romance subjunctives) but is a possibility in the Balkan type of subjunctives which can be control configurations.

1. Clitic Climbing and the Structure of the Embedded Clause

Clitic climbing has attracted a considerable amount of research mainly within the Romance literature (Luján 1980), Rizzi (1982), Burzio (1986), Kayne (1989, 1991), Rivero (1992), Roberts (1992, 1993) to mention some recent studies). While these accounts investigate to different degrees the syntactic structure of the complement clause, none has explicitly addressed the significance of the fact that all attested cases of CC are associated with infinitivais. In other words, is CC out of finite subordinates to be expected and if not, what exactly precludes this possibility?

Nevertheless, a number of approaches to the clausal structure of restructuring configurations make clear predictions with respect to the above question: restructuring configurations are monoclausal thus CC out of finite clauses is excluded as the latter involve more syntactic structure than a bare VP (Zagona (1982), Piccallo (1990), Moore (1992)). Piccallo (1990), for instance, argues that restructuring complexes are monosentential in both D-structure and S-structure. Had poder ('may') in (2) taken an IP complement, CC would be rendered impossible according to her analysis, since VP would constitute a barrier for movement of the clitic from its lower position.
(2) a. La Joana \[ _{[\text{Inf}]} \text{ pot [VP enviar-li cartes]} \] 
the Joana may-3sg send-3sgDat letters

b. La Joana \[ _{[\text{Inf}]} \text{ li pot [VP enviar-ei cartes]} \] 
the Joana 3sgDat may-3sg send letters

'Joana may send letters to him/her.'

In the same vein, Moore (1992), adopting the distinction between T and T' heads proposed by Li (1990), argues that Infl (as a T'-head) prevents the clitic (also a T'-head) from head-governing its lower position. Therefore, as in Picallo (1990), it is crucial for him that complements of restructuring verbs be VPs, as indicated in (3b), or else CC is rendered impossible.

(3) a. Curro quiere conocer-te.
Curro wants know-2sgAcc

b. Curro te, quiere [VP conocer ei].
Curro 2sgAcc wants know

'Curro wants to know you.'

On the basis of independent considerations, however, other studies of the syntactic structure of infinitival clauses indicate that it is rather implausible that they are bare VPs. Raposo (1987) and Kayne (1991), for instance, propose that infinitives are associated with the inflectional head Infl, which hosts the infinitival suffix. Kayne (1991) argues, more specifically, for the existence of another functional head immediately above Infl. This is a nonlexical head dominating T* and its existence is independently supported by the presence of clitics which attach to it. Furthermore, according to Chomsky and Lasnik (1991), T* is present in infinitival clauses and allows PRO to check null Case in its specifier position.3

3 See Martin (1993) for evidence supporting the presence of a functional projection dominating Tense in English control infinitivals.
Finally, Agr⁸, according to some proposals, is also indispensable for accusative Case checking.

Therefore, by concentrating on standard Romance languages, accounts which view restructuring configurations as monoclausal because of the lack of overt morphological inflection on the infinitival verb are only superficially justified. Nevertheless, if we take clitics to undergo head movement from the relevant argument position, as in (2) and (3), such accounts are the only ones to offer a direct explanation for the absence of CC from finite subordinates. By presenting evidence as to why infinitives involve a more elaborate clausal structure than a bare VP we are leaving the issue open again.

Approaches such as Kayne's (1989) differ in various respects from the approaches just described. Kayne considers CC to be an instance of head movement, subject to antecedent government and attributes the ungrammaticality of sentences like (4b) to the blocking effect of the lexical complementizer.

(4) a. Non so se farli.
   not know-lsb if do-3plAcc
   'I don't know whether to do them.'

b. *Non li so se fare ei
   not 3plAcc know-lsb if do

His account touches on the issue of CC from finite clauses less directly than the previous approaches, yet, it does not seem to exclude it. As already mentioned, Kayne (1991) argues that Romance infinitivals involve the functional head Infn which hosts the infinitival suffix and the nonlexical To to which clitics attach. It is, therefore, expected that infinitival Infl should not be significantly different from finite Infl in its interaction with CC. Furthermore, if Kayne

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⁸ To these arguments we should perhaps add the Extended Projection Principle which according to Chomsky (1992) reduces to morphological properties of Tense.
(1991) is right in considering Romance clitics to left-adjoin to the embedded Agr, the embedded Infl (or, more precisely, the different functional heads which Infl is currently taken to consist of) should not interfere with movement of clitics, since clitics do not move past it. Nevertheless, CC over finite clauses is not possible as the following example illustrates (from (Kayne 1989)).

(5) *Gianni li vuole che (Maria) veda.

Gianni 3plAcc wants that  Maria see-SUBJ-3sg

Kayne attributes the status of (5) to an ECP violation induced by che ('that'). But notice that his explanation cannot extend to comparable sentences in Spanish which are equally ungrammatical.

(6) *Juan los quiere que (Maria) vea.

Juan 3plAcc wants that  Maria see-SUBJ-3sg

This is because CC over que is possible in Spanish infinitives as (7) shows. On the other hand, attributing the well-formedness of (7) to the fact that que occupies [Spec, CP] (as in Kayne (1991)) would leave (6) unexplained.

(7) Juan los tiene que ver.

Juan 3plAcc has that see

'Juan has to see them.'

Concluding, it appears that Kayne's account does not have a clear way to account for contrasts such as (6) and (7), except by resorting to the nonfiniteness of the latter structure, and thus utilizing an option that does not follow naturally from the rest of his analysis. This is perhaps why other accounts which, just like Kayne's, do not have an internal mechanism able to bar CC from finite clauses, have to stipulate at some point that only infinitival Agr (or Tense) is in some
way associated to the presence of CC. Roberts (1992), for instance, relates CC to the ability of infinitival Agr to properly govern the clitic trace in C°.

In the following sections I will show that such stipulations are not necessary, as CC from finite subordinates is indeed possible. More precisely, I will offer evidence that the occurrence of an IP node does not act as a minimality blocker for CC, thus providing independent support for those analyses which do not view restructuring complements as bare VPs. Evidently, the area to turn to are languages which have clitics but in which potential CC contexts involve finite subordinate clauses.

2. Balkan Subjunctive Subordinates and Clitic Climbing

Such are the languages of the Balkans. Structures like (8), often referred to as subjunctives in the Balkan literature, are control configurations in Greek and Romanian, as argued in Terzi (1991, 1992). Similar claims for Greek are found in Iatridou (1988), Felix (1989) and Hornstein and Varlokosta (1992).

(8) a. Maria însearca PRO să scrie. (Romanian)
    b. I Maria prospathise PRO na grapsi. (Greek)

    the Maria tried PRT writes

    'Maria tried to write.'

The clausal structure of Balkan subjunctives appears in (9).

(9)  V ... [CP[ C [MP PRO [M PRT [IP [VP V ... ]]]]]]

Rivero (1988), Tsimpli (1990), and Terzi (1992) argue that the particle that precedes the finite verb in (8) or (9) is not a complementizer, but the inflectional head M° that heads the maximal
projection Mood Phrase (MP). The subordinate clause is headed by a nonlexical C° and, according to Terzi (1991, 1992) the specifier position of Mood Phrase is occupied by PRO.

Object clitics are available in the Balkan languages. Furthermore, Greek and Romanian clitics are not second-position clitics as in the northern Balkan/Slavic languages, but rather, they precede the finite verb, as shown in (10), as is standardly the case among Romance finite structures.

(10) a. Maria încearcă să o scrie. (Romanian)
   b. I Maria prosathise na to grapši. (Greek)

   the Maria tried PRT 3sgAcc writes

   'Maria tried to write it.'

Furthermore, CC is attested in Romanian, in some of the rare instances where true infinitives are still encountered.

(11) 11 pot minca.

3sgAcc can-1sg eat

'I can eat it.'

Nevertheless, clitic climbing out of the complement clause in (10) is impossible, as (12) shows, despite the absence of a lexical C° in the embedded clause.

(12) a. *Maria o încearcă să scrie. (Romanian)
   b. *I Maria to prosathise na grapši. (Greek)

   the Maria 3sgAcc tried PRT writes

The ungrammaticality of (12) is well-accounted for by the two types of approaches we have reviewed. For those accounts that propose that restructuring verbs take a VP complement the
mere presence of IP rules out CC in the Balkan languages. For accounts such as Kayne's and Roberts' the presence of a finite IP is rather irrelevant, the minimality blocker is presumably $M^e$.

To conclude this section, I have to admit that the data from Greek and Romanian are not particularly illuminating with respect to the possibility of CC over finite subordinates. This is because in the Balkan languages, potential restructuring contexts are always associated with the so-called subjunctive particle which itself blocks CC (in ways we will elaborate in following sections) with the result that the role of the finite Infl $per se$ in the process of CC cannot be isolated.

3. **Salentino Subjunctive Subordinates and Clitic Climbing**

The crucial evidence for the issue we are addressing comes from Salentino, a Southern Italian dialect which also lacks infinitives to a large extend. Calabrese (1991) points out that complements of control verbs in this dialect share the clausal structure of their Balkan counterparts, that is, they fall under the representation in (9). As illustrated in (13), sentential complements of subject control and object control verbs are introduced by a particle comparable to that encountered in the Balkan languages, with the embedded verb to the right of the particle being inflected for subject agreement and tense.

(13) a. Karlu voli ku vveni krai.
   Karlu wants PRT comes tomorrow
   'Karlu wants (him/her) to come tomorrow.'

   b. Karlu c convintu Maryu ku vveni.
   Karlu has persuaded Maryu PRT comes
   'Karlu persuaded Maryu to come.'
As in other Romance languages, Salentino clitics precede the finite verb as shown in (14a). The ungrammaticality of (14b) patterns with that of (12), and shows that CC is impossible, presumably because of the blocking effect of M°.

(14) a. Voggyu ku lu kkattu.
   want-1sg PRT 3sgAcc buy-1sg

   b. *Lu voggyu ku kkattu.
      3sgAcc want-1sg PRT buy-1sg

   'I want to buy it.'

Yet, Brindisi Salentino is minimally different from the 'mainland' Balkan languages in an important respect: when matrix and embedded subjects are coreferent, M° can be omitted, (15b).

(15) a. Voggyu ku kkattu.
   want-1sg PRT buy-1sg

   b. Voggyu kkattu.
      want-1sg buy-1sg

   'I want to buy.'

Omission of M° is an option which, for reasons that are not clear, is never available in the standard Balkan languages, (cf. (15b) vs. (16b)).

(16) a. Maria însearca să scrie.  (Romanian)
    a'. I Maria prospathise na grapsi. (Greek)

    the Maria tried PRT writes

    'Mary tried to write.'
(16) b. *Maria însearca scrie.  
    (Romanian)

   b'. *I Maria prospathise grapsi.  
    (Greek)

   the Maria tried writes

In Terzi (1992) it is argued that the clausal structure of (15) (and (16a)) is as in (17), with the specifier position of $M^o$ (which in (15b) is nonlexical) occupied by PRO, that is, both (15) and (16a) are control structures.

(17) Voggyu [CP [C [MP PRO [M ku [IP [VP katu.

It is also claimed there, that the subjunctive particle plays a crucial role in licensing a PRO subject, a fact which is by no means paralleled by Romance subjunctives.

(18b) below from Brindisi Salentino shows that omission of the subjunctive marker when matrix and embedded subjects are not coreferent results in an ill-formed sentence.

(18) a. Voggyu ku vvyeni krai.
    want-1sg PRT come-2sg tomorrow
    'I want you to come tomorrow.'

b. *Voggyu vvyeni krai.
    want-1sg come-2sg tomorrow

Finally, as shown in (19b), CC can take place in Salentino when $M^o$ is absent and provides, to my knowledge, the only attested case of clitic climbing from finite subordinate clauses.

(19) a. We ku kkatti.
    want-2sg 3sgAcc buy-2sg
Thus, (19b) clearly argues against accounts that consider restructuring configurations monoclausal, in so far as monoclausality is taken to reflect the absence of inflectional material above VP within the complement clause and subsequent CC violations to be due to the ECP.5 Put differently, Salentino demonstrates that inflectional heads such as Agr and Tense do not block CC. On the other hand, heads such as the subjunctive marker are shown to act as minimality blockers. In the following section I will address the different properties of these functional heads and account for the varied results when they interact with CC.

4. Clitic Climbing as (Long) Head Movement

Following substantial line of research in the area, I will consider CC to be an instance of head movement. In particular, in an attempt to capture the well-attested fact that clitic movement is less constrained than the familiar types of local head movement (Ouhalla (1988)), I will attribute the status of Long Head Movement (LHM) to CC, as in Roberts (1992). A typical case of LHM, discussed in Rivero (1988) occurs in Bulgarian and is shown in (20). The nonfinite verb has moved over the finite auxiliary, which is inflected for subject Agreement and Tense.

5 A reviewer brings up the possibility of considering (19) an instance of serial verb construction, thus take it to be monoclausal. A complete answer to this question would take us too far afield, and I will only limit myself here to speculating why this is not so. First, in most serializing languages, only one of the two verbs is inflected (Baker (1988)). This is not true, however, for Akan where both verbs are inflected for (the same) Aspect/Agr/Tense and, according to Baker, support the claim that the VP of serial constructions is headed by two verbs. But notice that this possibility is excluded in Kayne's (1993) system where the well-known 'axiom' that no projection can be headed by two X's is offered an explanation. For the latter approach, some inflectional element has to interfere between the V-V complex of serial constructions which amounts to saying that they are not monoclausal. Salentino seems to strengthen this line since clitics may precede the embedded verb (presumably left adjoning to an inflectional head) as in all other finite constructions, (19a).
LHM is not morphologically triggered and it appears to violate the ECP selectively, namely, it skips over certain types of heads only. Thus, it is subject to the relativized minimality version of head movement formulated in Roberts (1992).

This is how LHM applies to CC: clitic movement originates from an adjoined position and, moving via CO, ends up in another adjoined position, forming a uniform non L-related chain, in the sense of Chomsky and Lasnik (1991) and Chomsky (1992). As claimed in these works, the functional heads Agr⁰ and T⁰ are L-related heads by virtue of incorporating features of the verb. Agr⁰ and T⁰ do not interfere with CC, as it proceeds only via non L-related head positions.

The presence of a lexical C⁰, however, has a blocking effect on the movement of clitics. Complementizers do not contain a verb feature (except in V-to-C configurations) and therefore are non L-related heads (Chomsky (1992)). As such, they are predicted to interfere in the chain formed by CC and render it impossible. CC via C⁰ is obviously not possible when this position is occupied by the complementizer. Furthermore, adjunction of the clitic to C⁰ with subsequent excorporation is also ruled out (Roberts (1992)).

Along the above lines, CC is predicted to also be impossible in the Balkan languages, as it is blocked by M⁰, which is present in all potential restructuring contexts. Note that although M⁰ is an inflectional head, it does not incorporate features of the verb. The verb does not have to adjoin to M⁰ in order to check relevant features and thus M⁰ should also be considered a non-L-
related head. As such, it interferes in the non-L-related chain formed by CC, just like C. It thus follows, that the absence of CC in Balkan languages, follows directly from the blocking effect of the subjunctive particle, while it is not at all clear if and how the lack of infinitives per se can exclude it.

(22) a. *Maria o însearca să scrie. (Romanian)
   b. *I Maria to prospathise na grapsi. (Greek)

the Maria 3sgAcc tried PRT writes

This line of reasoning predicts that when a language of the Balkan type has the option of omitting an intervening non L-related functional head such as M* in restructuring contexts, CC should be possible. This prediction was borne out by Salentino and argues against accounts which consider complements of restructuring verbs to be bare VPs and finite IP to constitute a minimality blocker for CC.8

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6 Here I depart from Terzi (1992) where MP was considered an A-head, a term roughly corresponding to the notion L-related head. This departure is not surprising given the problems associated with the notions of A or A' position, over which a distinction along the lines of L-related vs. non-L-related head is to be preferred, and is actually empirically justified in the case of M*. It should be pointed out, for instance, that M* also blocks other instances of LHM (of the type in (18)) in languages where LHM is otherwise available.

7 The status of M* as a non-L-related head (or else, a head that does not contain verbal features) is also supported by the fact that the lexical verb is only minimally inflected for subjunctive mood in the Balkan languages.

8 A reviewer points out that the existence of the paradigm in (19) from Salentino does not necessarily establish that all restructuring configurations are monoclausal. Even if one is willing to accept a 'parametrized' view of restructuring contexts (but see also the discussion in p. 4) and consider representations such as (1) from standard Romance monoclausal, I believe I have demonstrated that it cannot be true that restructuring configurations have to be monoclausal, because the presence of inflectional material blocks clitic movement. Recall furthermore, that according to Kayne (1991) clitics are taken to left-adjoin to infinitival Inf (and the order infinitive-clitic arises from the infinitive having moved over the clitic) and proceed moving up from this position (also according to Sportiche (1992)). This implies that the structure of the subordinate clause (finite or not) plays less of a crucial role in the issue of CC than previously thought.
To summarize the contents of this section, I adopt a line that considers CC an instance of head movement (more precisely, LHM). From this perspective, I have investigated the role and interaction of the different types of inflectional heads in the process of the nonmorphologically triggered head movement involved in CC. Agr*, T* and M* are all inflectional heads; only the first two are L-related, however, and thus do not interfere with CC, as this is a process forming non-L-related chains.

But my main purpose is not to elaborate on the advantages of regarding CC as an instance of X* (vs. XP) movement.9 Rather, I want to focus on another interrelated fact that was paid little attention in the discussion of the above issues. The data in (19) from Salentino indicated that CC is possible only when M* is absent. In order for ku to be omitted, however, it is crucial that matrix and embedded subjects are coreferent (18b). Moreover, as Calabrese (personal communication) points out, ku cannot be omitted in object control contexts. Thus, although the option of clitic climbing is available to either infinitival (standard Romance) or finite (Salentino) complement clauses, the requirement that the subjects of restructuring configurations are coreferent holds across both types of restructuring contexts. This fact seems to have been taken for granted by almost all approaches to CC, as they have always studied CC in the presence of infinitivals which are usually associated with coreferent matrix and embedded subjects.

5. Clitic Climbing and Spec-to-Spec Coindexing

The significance of the coreference of matrix and embedded subjects, which appears to correlate with all instances of CC has been pointed out by Kayne (1989) and is accordingly captured by

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9 It should be noted, for instance, that the facts of this section can also be explained in some way or another by accounts which consider CC to involve XP movement, such as Treviño (1991), Sportiche (1992). Roberts (1993). In particular, Roberts' account could exclude C* over M* by suggesting that M* is not in the Extended Projection of the main verb. Irrespective of which approach to the status of clitic movement is adopted, however, difficulties arise in providing a straightforward account of the lack of CC in standard Romance subjunctives as opposed to those in Salentino.
the specific details of his analysis. There it is proposed that it is the embedded I, rather than the
critic itself, which moves to the matrix I in restructuring contexts and the result of this
movement is that matrix and embedded Agr end up being coindexed. This idea is consistent
with subsequent proposals (Kayne (1991)) according to which Romance infinitives involve a
nonlexical inflectional head (the highermost functional head of the subordinate clause) with
which V is not obliged to merge and to which clitics attach.10

(23) V... Cl+T ... [InfV+InfT [VP [V e]]]

It is presumably by virtue of this functional head being empty that the correct surface order critic
– matrix verb – infinitive is obtained after the embedded I moves to matrix I in the standard
Romance languages.

The above process does not carry over to languages like Salentino, however, since the
highermost functional head (for concreteness, let us take it to be Agr) is lexical, and the verb
has to raise to it. Therefore, movement of embedded Agr to matrix Agr — of the type that
Kayne proposes to capture critic climbing — would carry along the verb in finite configurations,
thus, give rise to the unacceptable surface order critic-embedded verb-restructuring verb.

(24) V... Cl+[Agr V+T+Agr [T e [VP [V e]]]]

In the following, I will sketch out an analysis which captures the coreference of matrix and
embedded subject manifested by restructuring configurations but avoids the technical problems
that Kayne's account faces when it comes to finite restructuring complements.

I would like to attribute the coreference of matrix and embedded subjects, which correlates with
all instances of CC, to a condition that requires the specifier positions of the functional

10 We will overlook here the discrepancy between Kayne (1989) and Kayne (1991) with respect to the nature of
the higher functional head (i.e., Agr* or T*) since it is of minor importance for our central concerns.
projections which clitic movement crosses to be coindexed. Considering clitics to move via C°, the relevant specifiers are [Spec, AgrS] of the embedded clause, [Spec, CP] of the embedded clause and [Spec, AgrS] of the matrix clause. More specifically, I propose that in order for CC to be possible, the following two conditions must be met:11

a) non L-related heads may not intervene in the chain formed by CC (a fact that is captured in one way or another by all accounts which consider CC to involve head movement and to be subject to the ECP, and which was discussed in the previous section), and

b) coindexing of the specifier positions in the path of CC must be established (or, more precisely, no contraindexing may be possible).

Both conditions are met in a typical case of CC such as (1), repeated below. The specifier positions of the heads through which the clitic is found are coindexed. Moreover, C° is empty and the clitic can move through it.

(25) Lo quiero leer.

3sgAcc want-lsg read

'I want to read it.'

Considering que ('that') to occupy [Spec, CP], as in Kayne (1991), we see why CC is also possible in instances as the following:

(26) Lo tengo que hacer.

3sgAcc have-lsg that do

'I have to do it.'

11 In this respect my analysis is partially reminiscent of Uriagereka's (1988) in that CC is taken to be accounted for not on the basis of the ECP alone but also by means of some other independent condition. However, while for Uriagereka this condition has to do with the event matrix of the relevant structure I consider it to be related to the obligatorily coreferent subjects involved in restructuring configurations.
The clitic is able to move via the empty C* position and coindexing of specifiers presumably holds although [Spec, CP] is occupied by que. Que does not seem to prohibit coindexing of specifiers because it has no semantic content. Now contrast (26) with the ungrammatical (27), where just as in (26), [Spec, CP] is occupied by que and C* is empty.

(27) *No te sé qué decir.
    not 2sgDat know-1sg what say

Obviously there is no clear reason why (27) is ill-formed if qué ('what') is in [Spec, CP] and clitics move via head movement, as proposed in Kayne (1989). The contrast of (26) vs. (27) follows from the second of the conditions I propose, namely, from the fact that coindexing of specifiers cannot take place. I take this to be related to the fact that [Spec, CP] in (27) does not host a complementizer devoid of semantic content, as in (26), but a wh-operator.

Although ungrammatical, (27) is slightly better than the sentence that follows.

(28) *No lo sé si hacer.
    not 3sgAcc know-1sg if do

The sharp ungrammaticality of (28) is due to the fact that neither of the conditions I proposed is met. Clitics cannot move via C*, as it is occupied by si ('if') and no specifier coindexing can take place because [Spec, CP], is occupied by a nonlexical wh-operator.12

12 The slightly different status of the following two ungrammatical sentences from Italian patterns that of (27)-(28) from Spanish and can be analyzed along the same lines.

(i) a. *Non ti saprei che dire.
    not 2sgDat would-know-1sg that say

b. *Non li so se fare.
    not 3plAcc know-1sg if do
To sum up, I argued that irrespectively of the structure of the embedded clause (finite or nonfinite) matrix and embedded subjects of restructuring configurations must be coindexed in order for CC to take place. I proposed, although somewhat more tentatively, that this amounts to a condition on the coindexing of the specifier positions of the projections through which CC proceeds and appears not to obtain if a specifier is occupied by a contentful operator.¹³

An explanation for the reasons behind Spec-coindexing may be available if one views CC as an instance of X′ movement followed by XP movement at LF. This idea is actually similar to

Notice that simply considering CC an instance of X′ movement is not able to explain the status of (iia). On the other hand, (iib) remains unexplained if the XP movement approach to CC is adopted. Thus, in light of contrasts such as the one above, it appears that a condition on coindexing of the specifier positions present of restructuring configurations is necessary, irrespectively of the type of movement one adopts for CC.

¹³ An apparent counterexample for the Spec-to-Spec coindexing proposal is the following instance of CC from earlier and literary French (from Kayne (1989)), where coindexing of the impersonal matrix subject and PRO is presumably not possible, yet CC may take place.

(i) Il le faut faire.
   1sgDat is-necessary do

In view of structures such as (ii) it may be suggested that the dative subject has moved to the position of the impersonal at LF in (i) and rendered Spec-to-Spec coindexing possible (which suggests that the proposed Speo-to-Spec coindexing actually takes place at LF).

(ii) Il m'e faut ces livres.
    1sgDat is-necessary these books

Notice, that the same process seems not to be able to save the Spanish example in (iii). This can be attributed to the fact that hacer falta 'to be necessary' (contrary to falloir) agrees with a postverbal subject (iv), and thus the matrix subject has to be coindexed with it instead.

(iii) *Me le hace falta leer.
    1sgDat 3sgAcc is-necessary read

(iv) Me hacen falta dos libros.
    1sgDat are-necessary two books
Sportiche's proposal concerning the initial step of cliticization. Recall that Sportiche proposes that in (b) of the run-off-the mill pairs as the following: a) *Quiero comprar un libro* ('I want to buy a book') b) *Lo quiero comprar* ('I want to buy it'), a covert NP has moved to the specifier position of H (the functional head that dominates the clitic) in satisfaction of his Clitic Criterion. CC (a less important issue for his proposals) is then considered an instance of XP movement, without explaining why the Clitic Criterion does not have to hold any more. By extending his initial proposal to CC we offer an answer to this question capturing at the same time the requirement on coindexed specifiers for CC. Furthermore, see fn. 13 for evidence as to why the XP movement that amounts to Spec-coindexing takes place at LF.

According to my analysis, the contrast in (6) and (7) from Spanish, repeated below as (29) and (30), which is left essentially unexplained by a head movement approach to CC, is now easier to understand.

(29) Juan los tiene que ver.
(30) *Juan los quiere que (María) vea.

Assuming que ('that') to occupy [Spec, CP], the clitic can presumably move via C* in both cases. Furthermore, que is not the wh-operator that we encountered in (26) and therefore coindexing of [Spec, CP] with [Spec, Agr] should be possible. Finally, (1) has demonstrated that querer ('want') is a restructuring verb. Nevertheless, (30) is sharply ungrammatical.

In light of the Salentino facts, it is not clear whether the contrast of (29) vs. (30) should be attributed to the Tensed status of the latter structure (as in Rivero (1992) where the [+Tense] C* of finite clauses was held responsible for the impossibility of CC). A comparable type of C* would presumably have to be postulated for the Salentino example in (19), yet it does not exclude CC (19b). Moreover, Salentino subjunctive subordinates appear to demonstrate fewer Tense dependencies than their standard Romance counterparts — i.e., they are not subject to the
usual Tense dependencies of Romance subjunctives— and thus justify the postulation of a 

\([+\text{Tense}]\) C*.

(31) Vulia ku vveni.  
want-PAST-1sg PRT come-PRES-3sg  
(Salentino)

(32) \(\begin{array}{ll}
\text{a.} & *\text{Quise que venga ahora.} \quad \text{(Spanish)} \\
& \text{want-PAST-1sg that come-PRES-SUBJ-3sg now} \\
\text{b.} & \text{Quise que viniera ahora.} \\
& \text{want-PAST-1sg that come-PAST-SUBJ-3sg now} \\
\end{array}\)

Furthermore, it is undesirable to associate CC with the Tense properties of the infinitival subordinate clauses that demonstrate the phenomenon (see, Roberts (1993), for instance, and his idea of Tense raising as related to CC). In recent work on English infinitivals, Martin (1993) argues for the different Tense properties of control vs. raising infinitives, that is, while the former are associated with \([+\text{Tense}]\) (correlating with the requirement for PRO to check its null Case) the latter are not. Providing that Martin is on the right track and that his claims can be transposed to Romance, it is not clear how precisely CC depends on Tense, since it is a phenomenon manifested in the context of both types of infinitival complements.

According to the analysis I have suggested, the status of (30) follows from the fact that coindexing of specifiers cannot take place. This time, however, it is not [Spec, CP] that prevents coindexing but rather the fact that the null subjects occupying the two [Spec, AgrS] are disjoint in reference (a typical case of subject obviation in Romance languages, as in Picallo (1985)). In other words, the ungrammaticality of (31) follows from the same reasons that exclude CC from an object control configuration.\(^{14}\)

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\(^{14}\) A reviewer asks what the difference between a restructuring verb like 'want' is, and verbs that do not allow CC. Here, I would have to stipulate that only restructuring verbs are able to govern the clitic trace in the intermediate C position.
Additional support for the above proposals is provided by (33), one of those rare instances where $C^e$ can be empty in Spanish subjunctives.

(33) *Lo espero comas.
    3sgAcc hope-1sg eat-SUBJ-2sg

It is not clear how the ill-formedness of (33) can be explained by evoking an ECP violation alone.\textsuperscript{15} The status of (33) clearly follows from my analysis, since matrix and embedded subjects cannot be coindexed. On the other hand, in a comparable structure in Salentino, shown in (19b) and repeated in (34), the subject of the so-called subjunctive complement clause is coreferent with the matrix subject when the particle $ku$ is absent (or else, the embedded subject of (34) is PRO) and thus coindexing of specifiers is possible.

(34) Lu voggyu kkattu.
    3sgAcc want-1sg buy-1sg
    'I want to buy it.'

Put differently, while Salentino subjunctives may be involved in control configurations (35), this is never the case in standard Romance, where control and raising (and, subsequently, CC) is confined to infinitives (36).\textsuperscript{16}

(35) Maryu voli $lu$ pro$_{ij}$ kkatta.
    Maryu wants 3sgAcc buy-3sg

(36) a. Mario quiere que $lo$ pro$_{ij}$ compre.
    Mario wants that 3sgAcc buy-SUBJ-3sg

\textsuperscript{15} We will follow Kayne (1989) in attributing the status of hidden causatives to those instances of object control configurations where CC seems to be possible in Spanish.

\textsuperscript{16} Unless one adopts Rizzi's (1982) proposals that complements of subjunctives in Italian (and presumably in Spanish) involve I-to-C movement, and consider CC an instance of head movement.
7. Conclusions

This paper has investigated the role of the Infl components in restructuring configurations. I offered empirical and theoretical support for the claim that cooccurrence of CC and infinitival subordinates cannot be attributed to the VP status of restructuring complements. I relied on approaches that consider CC an instance of head movement and elaborated on the clausal structure of restructuring configurations and the interaction of the different types of functional heads with CC.

Subsequently, I showed that what is crucial for CC and holds across both finite and infinitival restructuring contexts is that the subject positions of matrix and embedded clause be coreferent and I proposed to capture this fact by a condition on coindexing of the specifier positions crossed in the process of CC. I suggested that coindexing follows from the fact that although CC is an instance of head movement, it is followed by an XP movement at LF, that proceeds via the specifier positions.

I have shown that it is control (more precisely coreference of matrix and embedded subjects as manifested in subject control, and also in raising contexts) which is crucial for CC, while the type of clausal structure (infinitival or not) may differ from language to language. The Balkan type of subjunctive clauses can be control configurations, and thus, providing no intervening functional heads are present, are able to manifest CC. On the other hand, the possibility of coreferent subjects is never available in standard Romance subjunctives, and consequently CC is not a possibility in their presence.17

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17 This should not be taken to associate CC with those restructuring verbs that have the option of selecting for a nonfinite clause (as in Quicoli (1976)). Rizzi (1982) has offered evidence from Italian which demonstrates that
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due to the fact that this is not the case. From our point of view, the requirement on CC is coindexation of the relevant specifier positions, while the complementarity issue of (36) should be treated separately.

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