

# There is no need to climb! Clitic climbing as a facultative epiphenomenon of restructuring

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## Abstract

This paper explores the correlation between clitic climbing and restructuring. In particular, it offers evidence from Catalan and cross-linguistic data to demonstrate that restructuring is universal and that clitic climbing is a facultative epiphenomenon of restructuring. In this sense, the proposal presented here claims that restructuring verbs select an embedded clause headed by a  $C_{\text{def}}/T_{\text{def}}$ . It also shows that languages triggering clitic climbing display a higher degree of transparency and that the (un)availability of clitic climbing in a particular language is derived by the nature of the embedded *v*.

**Keywords:** clitic climbing, restructuring, infinitives, long-distance dependencies.

## 1. Introduction

Ctic climbing (CC hereinafter) is a well-known phenomenon, widely explored in the literature (since the seminal studies by Rizzi 1976, 1982, Aissen & Perlmutter 1976 and Kayne 1975) attested in different Romance varieties,<sup>1</sup> whereby the clitic belonging to the non-finite form is hosted by the matrix verb (1b). In principle, no matter how many infinitives appear in the structure, the clitic can occupy different positions, as is depicted in (2) and (3).

(1) Catalan, Bonet (2002: 984)

- a. Comença a fer **-ho**.  
begins to do.INF CL.ACC.NEUT.
- b. **Ho** comença a fer  
CL.ACC.NEUT begins to do.INF  
'(S)he begins to do it'

(2) Catalan

(**Hi**) vaig haver (-hi) de continuar (-hi) anant.  
CL.LOC go-PRES.IND.1SG have.INF CL.LOC of continue.INF CL.LOC go.GER  
'I had to continue going there'

(3) Occitan, BatelÒC

Las estelas casudas a molons que se 'n  
the stars fallen to stacks that CL.SE.3SG CL.PART.  
tornan al cèl lusir jamai (**o**)  
come-back.PRES.IND.3PL to-the sky bright.INF never CL.ACC.NEUT  
aurián degut (**o**) aturar de (**o**) far.  
have.COND.3PL had.PPT CL.ACC.NEUT stop.INF of CL.ACC.NEUT do.INF  
'The many fallen stars which come back to the sky to shine as they should  
have never stopped doing so'

CC has different patterns of variation across languages: as the examples above show, CC can be optional in some languages, like Occitan or Catalan;<sup>2</sup> in other languages it becomes mandatory, like in Neapolitan (4) or Sardinian (5); and there are some languages, such as Brazilian Portuguese (6) or French (7), in which CC is ruled out.

(4) Neapolitan, Ledgeway (2000: 88)

**'o** jamm' a chiammà.  
CL.ACC.3SG go.PRES.1PL to call.INF  
'I'll go to call him'

<sup>1</sup> CC is also attested in non-Romance languages, like Croatian (Progrovac 1993; Paradís 2019) or Czech (Dotlacil 2008). In this paper I only analyse CC in Romance languages.

<sup>2</sup> In Northern Occitan varieties the clitic occupies a position in the non-finite domain (Romeu & Bianchi 2005: 208).

(5) Sardinian, Jones (1993: 142)

Juanne **lu** potet fákere.  
 Juanne CL.ACC.NEUT can.PRES.IND.3SG do.INF  
 'Juanne can do it'

(6) Brazilian Portuguese, Cyrino (2010:189)

\***Me** quis telefonar ontem.  
 CL.1SG want.PERF.IND.3SG call.INF yesterday  
 '(S)he wanted to call me yesterday'

(7) French, Kayne (1989: 239)

\*Jean **les** veut voir  
 Jean CL.ACC.M.PL want.PRES.IND.3SG see.INF  
 'Jean wants to see them'

In the case of Catalan, the phenomenon has been considered optional (Fabra 1933; Hernanz & Rigau 1984; Picallo 1990; Solà-Pujols 2002, a.o), although there is a strong tendency towards CC (Paradís 2018, 2019).

From a formal perspective, what is interesting about CC is that it constitutes an example of cyclic movement;<sup>3</sup> it is, therefore, a revealing scenario to explore a crucial notion in linguistic theory: locality. One of the most extended formal approaches in the literature to explain the apparent anti-locality of CC argues that CC contexts are monoclausal structures, involving a bare VP or vP (Rizzi 1982; Zubizarreta 1982; Manzini 1983; Rosen 1990; Picallo 1990; Wurmbrand 2001, 2004; Cardinaletti & Shlonsky 2004; Grano 2015). In this paper, I will argue in favour of a biclausal approach to restructuring. I will also show that CC is not mandatory in restructuring contexts.<sup>4</sup> Finally, I will claim that restructuring is universal and the (im)possibility of CC is derived by the nature of the embedded *v*.

The structure of the paper is as follows: in section 2, I will offer a description of CC and restructuring in Catalan; in section 3, I will explore the correlation between CC and restructuring; in section 4, I will analyse restructuring contexts as involving biclausal structures headed by a  $C_{def}/T_{def}$  and I will present an analysis to explain the different CC patterns attested in Romance languages. I present some concluding remarks in section 5.

## 2. Clitic climbing and restructuring in Catalan: extending the scope of triggering verbs

In Catalan, CC is triggered by the core class of restructuring verbs, that is, modals, aspectuals and verbs of motion (Aissen & Perlmutter 1976; Rizzi 1976, 1982;

<sup>3</sup> Cardinaletti & Shlonsky (2004) claim that CC does not involve cyclic movement. I will provide here evidence against this view.

<sup>4</sup> I use here the term *restructuring* as a descriptive label that refers to those contexts in which there are interclausal phenomena and long-distance dependencies.

Wurmbrand 2001; Cardinaletti & Shlonsky 2004; Cinque 2004, 2006).<sup>5</sup> These three verbal classes may also trigger different transparency effects across languages. Another traditional test associated with restructuring is auxiliary switch (8), whereby the matrix auxiliary is selected by the infinitive. In the case of Catalan, the phenomenon was widely attested in Old Catalan (9) and it has been preserved in Algherese (10) and Majorcan.

(8) Standard Italian, Rizzi (1976: 2)

- a. Gli invitati **hanno** cominciato ad *arrivare* alle cinque.  
the guests have.PRES.IND.3PL start.PPT to arrive.INF at-the five
- b. Gli invitati **sono** cominciati ad *arrivare* alle cinque.  
the guests be.PRES.IND.3PL start.PPT.M.PL to arrive.INF at-the five  
'The guests began to arrive at 5'

(9) Old Catalan, *Diàlegs [St. Gregori]*, XIV

qui no **era** volgut *romanir* per grat, romàs per força.  
who NEG be.IMPF.IND.3SG wanted stay.INF by-hook, stay.PRET by-crook  
'who did not want to stay by hook stayed by crook'

(10) Algherese, Etnotext3, *Corpus Francesc Ballone*

Los algueresos no hi **són** volguts anar.  
the Algheresi NEG CL.LOC be.PRES.IND.3PL wanted.PPT.M.PL go.INF  
'The Algheresi didn't want to go there'

Long object movement (11)-(12) is another test that has been attributed to restructuring configurations. In these contexts the object of the embedded clause appears as the matrix subject (Rizzi 1976, 1982; Burzio 1986: §1.6.2; Rochette 1988: § 2.2.2.2).

(11) Spanish

**Más de cien proyectos** se volvieron a presentar en esa  
more of hundred projects CL.REFL.3 came-back to present.INF in that  
convocatoria.  
call  
'More than one hundred projects were submitted again to that call'

(12) Catalan

**Els problemes ambientals** s' han pogut resoldre.  
the problems environmental CL.REFL.3 have can.PPT resolve.INF  
'The environmental problems were able to be solved'

A similar transparency effect is SE-agreement in pronominal structures headed by the clitic *se*. In these contexts the matrix verb agrees with the embedded object (13b)-(14a). This phenomenon is optional in different Romance languages, like in

<sup>5</sup> Due to space restrictions, in this paper I leave aside causative and perception structures. In these structures, CC shows different patterns to the one attested in restructuring verbs. See Paradís (2019: ch. 2 and references therein) for a description and analysis of these structures.

European Portuguese (13a,b). However, it is important to note that in Catalan —with the exception of North-Western Catalan— agreement is always mandatory (14a). In fact the same scenario is found in simple structures (14b) in this language (see Alonso & Suïls 1998).

(13) European Portuguese, Gonçalves (1999: 334)

- a. Quer -se resolver os problemas sociais do  
want.PRES.IND.3SG CL.REFL.3 solve.INF the problems social of-the  
bairro.  
neighbourhood
- b. **Querem** -se resolver **os problemas sociais do**  
want.PRES.IND.3PL CL.REFL.3 solve.INF the problems social of-the  
**bairro.**  
neighbourhood  
'One wants to solve the social problems of the neighbourhood'

(14) Catalan

- a. **Es començaven** / \*començava a fer  
CL.REFL.3 start.IMPV.IND.3PL/ IMPV.IND.3SG to make.IMP  
**reformes profunes** llavors.  
reforms deep then  
'Deep reforms started to be made then'
- b. Es fan / \*fa reformes profunes.  
CL.REFL.3 make.PRES.IND.3PL/ PRES.IND.3SG reforms deep  
'Deep reforms are made'

All the aforementioned tests are considered the *traditional* tests for restructuring. In Catalan, other phenomena can be included as part of the repertoire of transparency effects. As shown in Llop & Paradís (2023), the possibility to license the presuppositional negative marker *pas* in the embedded clause (15) is a reliable test for restructuring.

(15) Catalan

No {vol/pot/intenta} (**pas**) fugir (**pas**) quan té problemes.<sup>6</sup>  
NEG wants/can/tries NPI escape.IMP NPI when has problems  
'(S)he does not want/can/try to escape at all when (s)he has problems'

Subject inversion, which is available in Catalan, Spanish and E. Portuguese, might also be considered a restructuring phenomenon. In these structures the matrix subject appears in the embedded clause (Solà 2002; Ordóñez 2007, 2018; Herbeck 2013; Paradís 2018, 2019), as the following examples from Catalan (16) and E. Portuguese (17) show. The position of the explicit subject in the embedded clause might be analysed as deriving from remnant movement of the infinitive into the matrix clause, which would occupy a position above the subject of the main clause (18). Note

<sup>6</sup> *Pas* is analysed as a strong negative polarity item (NPI) and a presuppositional negative marker (PresNeg) (Llop 2020; Llop & Paradís 2023). For the sake of clarity, in this paper it is glossed as NPI.

that, if one adopts this perspective, the explicit subject in the embedded clause would represent a case of apparent backward control —for an analysis along these lines see Ordóñez (2007), Bok-Bennema (2010), Gallego (2011), Herbeck (2013, 2015).<sup>7</sup>

(16) Catalan, Paradís (2018: 283)

Al final, hi (=amb ell) va poder contactar  
 at-the end, CL.LOC (=with him) go-PRES.IND.3SG can.INF contact.INF  
**la Mariona** per correu.  
 the Mariona by mail  
 'In the end, Mariona was able to contact him by mail'

(17) European Portuguese, Costa (2004: 98)

{Querem/tentam} ler **todos os alunos** esse livro.  
 want/try.PRES.IND.3PL read.INF all the students that book  
 'All students want/try to read that book'

(18) a. [<sub>vP</sub> la Mariona va poder [CP [TP PRO [<sub>vP</sub> contactar per correu ]]]]  
 b. [TP va poder<sub>i</sub> [<sub>vP</sub> la Mariona t<sub>i</sub> [CP [TP PRO [<sub>vP</sub> contactar per correu ]]]]]]  
 c. [TP va poder<sub>i</sub> contactar<sub>j</sub> [<sub>vP</sub> la Mariona t<sub>i</sub> [CP [TP PRO [<sub>vP</sub> t<sub>j</sub> per correu]]]]]]

So far, all the examples used to illustrate the different transparency phenomena involve modals, aspectuals and verbs of motion, which have often been analysed in the literature as functional heads (Napoli 1981, Rochette 1988, Rosen 1989, Cinque 2001 and subseq., Cardinaletti & Shlonsky 2004, Grano 2015);<sup>8</sup> however, restructuring goes beyond the aforementioned verbs. Indeed, according to the literature, in the case of CC, the phenomenon is attested in a large group of control verbs (Hernanz & Rigau 1984; Llinàs 1990-1991; Solà-Pujols 2002; Herbeck 2013; Paradís 2018, 2019: § 3.5, § 4.2) that cannot be analysed as functional heads (see Paradís 2018, 2019: § 3.5.3).<sup>9</sup>

(19) Catalan

N' han planificat/decidit fer dos, de viatges.  
 CL.PART have.PRES.IND.3PL planned/decided.PPT make.INF two, of trips.  
 'They planned/decided to make two (of trips)'

<sup>7</sup> I adopt here the analysis presented by Gallego (2011), who departs from Ordóñez's approach (2007). Note that a backward control analysis of these structures is also compatible with the approach to restructuring presented in this paper.

<sup>8</sup> There are some authors who postulate a lexical nature for some restructuring verbs (Gonçalves 1999 and subseq., Balza 2012, Wurmbrand 2004, a.o.). For a review of the different approaches, see Paradís (2019: § 3.5).

<sup>9</sup> The scope of triggering verbs is subject to not only cross-linguistic variation but also inter-speaker variation. In this sense, see Paradís 2019 (ch. 3 and references therein). This paper offers a broad picture of the phenomenon in Romance, but the main focus is on Catalan. As pointed out by one reviewer, the functional vs lexical nature of matrix verbs may also have an impact on the properties of the embedded complements. For an analysis of this, see Paradís (2019: § 5.3).

## (20) Catalan

La Marina m' **hi** ha recomanat anar.  
 the Marina CL.DAT.1SG CL.LOC has recommended.PPT go.INF  
 'Marina has recommended me to go there'

## (21) Catalan

M' **hi** ha semblat veure la Maria,  
 CL.1SG CL.LOC have.PRES.IND.3SG seem.PPT see.INF the Maria,  
 al restaurant.  
 at-the restaurant  
 'It seemed to me that I saw Maria at the restaurant'

Likewise, it is important to note that, as shown in Paradís (2019), the extension of the class of restructuring verbs is also visible in other transparency phenomena, like long object movement (22), SE-agreement (23), and the embedded presuppositional negative marker *pas* (24).

## (22) Catalan

**Els problemes ambientals** s'/es {*aconseguiran/necessitaran/*  
 the problems environmental CL.REFL.3SG manage /need/  
*decidiran}*} resoldre aviat.  
 decide.FUT.3PL resolve.INF soon  
 lit.'The environmental problems will {manage/need/decide} to be resolved  
 soon'<sup>10</sup>

## (23) Catalan

S' **han** planificat /decidit aplicar **més lleis** per regular  
 CL.SE have.3PL plan /decide.PPT apply.INF more laws to regulate  
 els preus de l' habitatge.  
 the prices of the housing  
 lit.'More laws were planned/decided to be applied to regulate house prices'  
 'It was projected/decided to apply more laws to regulate house prices'

## (24) Catalan

No **ho** aprèn a fer **pas**.  
 NEG CL.ACC.NEUT learn.PRES.IND.3SG to do.INF NPI  
 '(S)he does not learn to do it at all'

This scenario is not unique to Catalan; other Romance languages display similar patterns, as the examples below from European Portuguese (25) (Magro 2005), Spanish (26) or Occitan (27) show.<sup>11</sup>

<sup>10</sup> (22) might be translated into English as follows: 'They will soon decide to resolve the environmental problems'.

<sup>11</sup> As one reviewer points out, it is important to note that in the case of European Portuguese the scenario is more complex: proclisis triggers (such as the adverb *já* 'already' in (25)) favour CC.

(25) European Portuguese, Magro (2005: 18)  
 Eu já **me** aprendi a controlar.  
 I already CL.1SG learn.PRET.IND.1SG to control.INF  
 'I already learnt how to control myself'

(26) Spanish, Alarcos-Llorach (1970: 138)  
**La** prometen escribir.  
 CL.ACC.F.3SG promise.PRES.IND.3PL write.INF  
 'They promise to write it'

(27) Occitan, Paradís (2019: 176)  
**lor** aprendriá a placar a las cambas.  
 CL.DAT.3PL learn.COND.1SG to tackle.INF to the legs  
 'I would learn to tackle them to their legs'

Thus, cross-linguistic data reveal that the class of restructuring verbs also includes implicative verbs, verbs like *try*, and desiderative and directive verbs. In the next section I will explore the correlation between CC and restructuring.

### 3. Clitic climbing as a facultative epiphenomenon of restructuring

CC is considered one of the most reliable tests for restructuring. One of the major correlations defended in previous literature is the one stated in (28):

(28) Presence of CC → presence of restructuring  
 Absence of CC → absence of restructuring

According to (28), the presence of CC is taken as a necessary and sufficient condition for restructuring (Aissen & Perlmutter 1976; Napoli 1981; Rizzi 1982; Burzio 1986; Rochette 1988; Rosen 1989; Picallo 1990; Bok-Bennema & Kampers-Mahne 1994; González-López 2008, among others). Contrary to this analysis, I claim that CC is a facultative epiphenomenon of restructuring and, therefore, its absence does not imply the absence of restructuring. If we take into consideration the analysis of the intersection between CC and other transparency phenomena, we can see that Catalan data offer evidence in favour of this claim. As illustrated in (29) below, the long-distance licensing of the embedded presuppositional negative marker *pas* takes place regardless of CC. Likewise, in structures involving subject inversion, CC is not mandatory (30a).

(29) Catalan

- a. No vull anar **-hi** pas.  
 NEG want.PRES.1SG go.INF CL.LOC NPI
- b. No **hi** vull anar pas.  
 NEG CL.LOC want.PRES1SG go.INF NPI  
 'I don't want to go there at all'

## (30) Catalan

- a. Va poder contactar **-hi** la Mariona per correu.  
go.PRES.3SG can.INF contact.INF CL.LOC the Mariona for mail
- b. **Hi** va poder contactar la Mariona per correu.  
CL.LOC go.PRES.3SG can.INF contact.INF the Mariona for mail  
'Mariona was able to contact him by mail'

The optionality of CC is also attested in other languages like some Italo-Romance varieties (Cardinaletti & Shlonsky 2004; Manzini & Savoia 2005: §7.1.2; Cinque 2006: 29-30). In these varieties it has been claimed that CC is not mandatory in the presence of auxiliary switch (31).

## (31) Some Italo-Romance varieties, Manzini &amp; Savoia (2005: 386)

Sono voluto andarci per forza.  
be.PRES-IND.1SG wanted.M.SG go.INF CL.LOC by force  
'I just had to go there'

Further evidence comes from languages that, despite blocking CC, may trigger other transparency effects. For instance, long-distance licensing of NPIs in Brazilian Portuguese (32) (Modesto 2016), *L-tous* —also known as leftward quantifier movement— in French (33) (Kayne 1975; Taraldsen 1981: 254; Rochette 1988: 15; among others).

## (32) Brazilian Portuguese, Modesto (2016)

Ele *não* quer [o fazer *nunca*]  
he NEG want.PRES.3SG CL.ACC.M.SG do.INF never  
'He never wants to do it'

## (33) French, Taraldsen (1981: 254)

Elle aurait *tout* voulu comprendre.  
she have.COND.3SG all want.PPT understand.INF  
'She would have wanted to understand everything'

Interestingly, transparency effects may also involve morphological phenomena. For instance, in Swedish, restructuring effects involve copying/agreeing matrix tense features onto the embedded verb (34) (Wiklund 2007: 37-46). This phenomenon is of particular interest because it reveals that restructuring is linked to tense; in other words: the embedded clause constitutes a defective domain regarding the temporal features in C and T. I will return to this idea later.

## (34) Swedish, Wiklund (2007: 37)

- a. Han började att steka en fisk.  
he started.PAST COMP fry.INF a fish
- b. Han *började* o *stekte* en fisk.  
he begin.PAST COMP fry.PAST a fish  
'He started to fry a fish'

All the aforementioned facts lead us to reinforce the hypothesis that the absence of CC does not imply the absence of restructuring; I argue that restructuring is universal and what differentiates languages is the way in which it becomes visible, that is, the set of transparency phenomena. At this point, it is necessary to consider what defines restructuring. In other words: are restructuring verbs an accidental class, or do they share a specific property? In order to answer this question, I will adopt the opposite perspective: which verbs block systematically restructuring phenomena? As defended in Paradís (2019), propositional and factive verbs do not trigger transparency effects. The following examples from Catalan illustrate the non-restructuring nature of these verbs: the embedded *pas* (35), long object movement (36), SE-agreement (37) or CC (38) cannot be licensed if the matrix verb belongs to these verbal classes.

## (35) Catalan

- a. No lamenta            **pas** fugir            quan té            problemes.  
NEG regret.PRES.3SG    NPI go\_away.INF when has problems
- b. \*No lamenta fugir    **pas** quan té            problemes.  
NEG regrets go-away.INF NPI when has problems  
'(S)he does not regret going away when (s)he has problems'

## (36) Catalan

- \*Els **problemes ambientals** s'            han            defensat  
the problems    environmental CL.REF.3SG have.PRES.3PL defend.PPT  
resoldre  
solve.INF  
'Enviromental problems are claimed to be solved'

## (37) Catalan

- \*S'            **han**            lamentat/afirmat proposar    **lleis noves**.  
CL.SE have.PRES.3PL regret/claim.PPT propose.INF laws new  
'One regrets proposing/claims to propose new laws'

## (38) Catalan

- \*La Núria **hi**            va            afirmar            haver            anat            la            nit  
the Nuria CL.LOC go.PRES.3SG affirm.INF have.INF go.PPT the night  
anterior.  
before  
'Núria affirmed she had gone there the night before'

The non-restructuring nature of propositional and factive verbs is also visible across languages: for instance, the copying phenomenon in Swedish is ruled out (39) (Wiklund 2007: 37), as well as the *L-tous* phenomenon in French (40) (Rochette 1988: 15; also Taraldsen 1981: 254) and the long-distance licensing of the NPI *nunca* in B. Portuguese (41).<sup>12</sup>

<sup>12</sup> These observations match the Implicational Complementation Hierarchy (ICH) proposed by Wurmbrand & Lohninger (2019)—which departs from Givón's (1980) Binding Hierarchy—, according to which propositional and factive verbs are expected to be the least transparent class.

(39) Swedish, Wiklund (2007: 37)

\*Han var **ledsen** över o miste jobbet.  
 he be.AUX.PAST regret.PPT PREP COMP loss.PAST job  
 'He regretted losing his job'

(40) French, Rochette (1988: 15)

\*Jean a **tous** {cru/déclaré} les avoir  
 Jean have.PRES.3SG all believe/declare.PPT CL.ACC.M.3PL have.INF  
 lus.  
 read.PPT.M.PL  
 'Jean believed/declared having read them all'

(41) Brazilian Portuguese

\*A Lina não afirma estudar **nunca**.  
 the Lina NEG claim.PRES.3SG study.INF never  
 '\*\*Lina does not claim to ever (=never) study'

In order to explain the asymmetries between triggering verbs and non-triggering verbs, I argue that the relevant property to define restructuring verbs is that they select for an embedded clause with a rigid temporal orientation. More precisely, restructuring verbs are those constraining the temporal orientation of the embedded clause, so that the embedded event can only have a simultaneous reading—as in the case of aspectual or implicative verbs (42)—or a prospective reading—as in the case of desiderative or directive verbs (43).

(42) Catalan

\***Ahir** {vaig aprender a / intentar} dir -ho **avui**.  
 yesterday go.PRES.1SG learn.INF to / try.INF say.INF CL.NEUT today  
 '\*\*Yesterday, I learnt/tried to say it today'

(43) Catalan

\***Avui** {he decidit / proposat} dir -ho **ahir**.  
 today have.PRES.1SG decide.PPT / propose.PPT say.INF CL.NEUT yesterday  
 '\*\*Today I decided/proposed to say it yesterday'

Conversely, propositional and factive verbs display a neutral temporal orientation—or unselected in Landau's (2004) and Wiklund's (2007) terms—so that their embedded clause can have all possible readings: simultaneous (44a), prospective (44b) and also anteriority (44c).

(44) Catalan

- Ahir** va afirmar venir **avui**.  
 yesterday go.PRES.3SG claim.INF come.INF today  
 'Yesterday (s)he claimed to come today'
- Afirma fer -ho sovint.  
 claim.PRES.3SG do.INF CL.NEUT often  
 '(S)he claims to do it often'

c. **Aquest matí** ha confessat haver -ho dit  
 this morning have.PRES.3SG confess.INF have.INF CL.NEUT say.PPT  
**ahir.**  
 yesterday  
 ‘This morning (s)he agreed to have said it yesterday’

#### 4. A bi-clausal approach to clitic climbing

So far I have shown that what defines restructuring is tense defectiveness; more specifically, the property shared by restructuring verbs is that they select an embedded clause with a rigid temporal orientation. This makes the infinitival clause a transparent domain from which it is possible to establish long-distance dependencies. In particular, I claim that restructuring verbs select a  $C_{\text{def}}/T_{\text{def}}$  embedded clause that is phi-defective [–person] and has unvalued tense features, which have to be valued by the matrix clause. It is interesting to note that this approach echoes previous analyses of restructuring in which tense played a salient role (Kayne 1989; Terzi 1994; Roberts 1997; Gonçalves 1999).<sup>13</sup> I provide below evidence for the biclausal analysis.

a) In Catalan, the presence of negation in the embedded clause is possible despite the presence of transparency effects. However, contrary to what has been suggested in the literature (Cardinaletti & Shlonsky 2004; Magro 2004; Andrade 2010), these cases do not involve constituent, but sentential negation, since they may license NPIs, such as *enllloc* ‘nowhere’, as shown in (45).

(45) Catalan  
 S' intenten **no** fer concerts **enllloc**.  
 CL.SE try.PRES.3SG NEG do.INF concerts in-any-place  
 ‘One tries to not do concerts anywhere’

b) As previously noted in the bibliography, many control verbs select for an embedded clause headed by a complementiser —also called prepositional complementisers (Luján 1978; Rizzi 1982: §4; Kayne 2000; Landau 2000: §6.2; Manzini & Savoia 2005). As shown in (46), the presence of these elements does not block CC in Catalan.

(46) Catalan  
 a. **Ho** miraré **d'** acabar.  
 CL.ACC.NEUT try.FUT.1SG COMP finish.INF  
 ‘I’ll try to finish it’

<sup>13</sup> Apart from the lexical/functional nature of the matrix verb, temporal properties also play an important role in determining the properties of clausal complements. As mentioned in footnote 8, the class of triggering verbs may vary from language to language. In this paper I do not delve into cross-linguistic variation (see Paradís 2019). See also Gonçalves, Cunha and Silvano (2010) for a fine-grained analysis of the temporal properties of (non-)restructuring verbs in European Portuguese.

b. **Ho** va proposar **de** fer aleshores.  
 CL.ACC.NEUT go-PAST.3SG propose.INF COMP do.INF then  
 '(S)he proposed to do it then'

c) One of the main lines of analysis adopted in the literature is to assume that, in the presence of transparency effects, there is an eventual unification between the matrix and the embedded verb (Napoli 1981; Rochette 1988; Rosen 1989, among others). Thus, this hypothesis predicts the impossibility of having different temporal modifiers in the two domains, given that, according to this approach, the non-finite clause constitutes a VP. However, as evidenced by (47), the presence of CC does not block the appearance of adverbs denoting different events in each clause.

(47) Catalan

Ahir es va decidir matricular a filosofia  
 yesterday CL.REFL.3SG go.PRES.3SG decide.INF enroll.INF to philosophy  
 el curs vinent.  
 the course coming  
 'Yesterday (s)he decided to enrol to a Philosophy degree next year'

Furthermore, examples like the one in (48) support the presence of—at least—T in the embedded clause. Note that the position of the infinitive to the left of the adverb, which is located in the VP, reveals that the verb has moved from V-to-T (see Bok-Bennema 2006:§ 3.3.2 for a similar analysis in other languages).

(48) Catalan

Ahir la vaig decidir visitar sovint.  
 yesterday CL.ACC.F.3SG go.PRES.1SG decide.INF visit.INF often  
 'Yesterday, I decided to visit her often'

At this point the question that arises is where the *locus* of variation is, in order to explain the different CC patterns attested in Romance languages. One might hypothesise that in the absence of CC the embedded clause is a full CP. However, as I have shown, CC is not mandatory in the presence of other transparency effects, and, furthermore, languages without CC may also trigger other restructuring phenomena (see also Wurmbrand 2015). Thus, if we adopted this approach, we could not explain the presence of other transparency phenomena. I will therefore argue that the embedded clause is always headed by a  $C_{def}/T_{def}$  but the clitic may be licensed in the infinitival clause. Put in other words:  $C_{def}/T_{def}$  is not a sufficient condition for CC to occur. In this sense, I claim that there are two kinds of restructuring and some languages display a higher degree of transparency in the embedded clause. In particular, I argue that the (im)possibility of CC is derived from the nature of the embedded  $v$ , which leads to the two following scenarios, assuming a probe-goal relation between clitics and their verbal host (Roberts 2010; Mavrogiorgos 2010; Gallego 2016):

i) *CC scenario*: The embedded  $v$  is  $\phi$  defective, [-person], and therefore it cannot license the clitic, which remains active — i.e., its Case must be valued and deleted in order to proceed with the transfer to the

interfaces.<sup>14</sup> The clitic, located at the edge of the embedded  $v_{def}$ , is still accessible to the computational system and is attracted to the main clause by the matrix probe  $v^*$ , which is  $\phi$  complete.

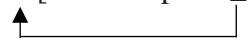
ii) *Non-CC scenario*: the embedded  $v^*$  is full, i.e. [+person], and can license the clitic. The deletion of Case renders the clitic ‘frozen’ in the embedded clause, from where it is no longer accessible for further computation.

Following this phase-based approach, the anti-locality of CC is merely apparent since it does not violate the Phase Impenetrability Condition (Chomsky 2001). Restructuring contexts involve a non-phrasal complement headed by a  $C_{def}/T_{def}$  and, therefore, the movement of the clitic to the higher  $v^*$  takes place within the same phase. This approach entails that the clitic is spelled out in the same clause in which it is licensed. Hence, it correctly predicts the possibility for the clitic to be spelled out in intermediate positions as well, as shown in (50a) and (50b) (*pace* Cardinaletti & Shlonsky 2004).

(49) Catalan

La pintora volia intentar evitar exposar **-la** [l’ obra]  
 the painter wanted try.INF avoid.INF exhibit.INF CL.ACC.F.3SG the work  
 al museu.  
 at-the museum  
 ‘The painter wanted to try to avoid exhibiting it [her work] at the museum’

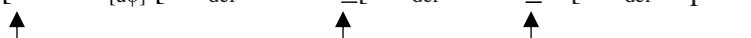
(50) a. [volia [intentar [evitar<sub>[uφ]</sub> **-la** [... $v_{def}$  exposar\_ al museu ]]]]



b. [volia [intentar<sub>[uφ]</sub> **-la** ... [... $v_{def}$  evitar\_ ... [... $v_{def}$  exposar\_ al museu ]]]]



c. [**la** volia<sub>[uφ]</sub> [... $v_{def}$  intentar\_ [... $v_{def}$  evitar\_ ...[... $v_{def}$  exposar\_ al museu]]]]



A revealing fact that supports the analysis presented here is that languages in which the clitic cannot escape from the embedded clause are those which also block long object movement and SE agreement, as in French or Brazilian Portuguese. Further evidence in favour of this approach comes from the fact that in long passive structures, CC is mandatory (51).

(51) Catalan

El càrrec **li** va ser tornat a  
 the position CL.DAT.3SG go-PRES.3SG be.INF go-back.PPT.M.SG to  
 assignar sense que ningú no s’ hi oposés.  
 assign.IMPFV.SUBJ.3SG without that nobody no CL.SE CL.LOC oppose.IMP.FV.SUBJ.3SG  
 ‘The position was assigned to him again without anyone opposing it’

<sup>14</sup> I assume clitics have Case and are subject to the Activity Condition (Chomsky 2001), according to which a syntactic object cannot move if it is rendered inactive, that is, once its features have been valued (Chomsky 2001). See Paradís (2019: 1.2) for evidence in favour of this formal approach to clitics.

Thus, by adopting this formal approach we can explain the different degrees of transparency displayed by languages. Having now demonstrated that restructuring is universal, I propose that the *traditional* transparency effects —that is, the ones collected in the first works (Rizzi 1976, 1982; Aissen & Perlmutter 1976): long object movement, SE-agreement and (most saliently) CC— constitute a subtype of restructuring, attested in those Romance languages which display a higher degree of transparency (the embedded *v* is  $\phi$ -defective). This approach also offers a straightforward explanation for why certain languages, like French or Brazilian Portuguese, present other types of transparency phenomena, like A'-movements and long-distance NPIs-licensing, but CC is ruled out. Indeed: in these languages, the blocking effects regarding ‘classical’ transparency phenomena are expected, since in these languages restructuring verbs contain an embedded *v\** [ $\phi$ -complete].

## 5. Conclusions

The Catalan and cross-linguistic data presented here lead us to reconsider some of the major claims made in the literature on restructuring; in particular, that restructuring is only present in some languages, and CC is a necessary condition for restructuring. I have shown that restructuring is universal. Languages vary in the way restructuring becomes visible; that is, each language has its own repertoire of transparency effects. I have shown that CC is a facultative epiphenomenon of restructuring; hence, the absence of CC does not entail the absence of restructuring. As we have seen, languages display other transparency effects without CC being mandatory. Furthermore, languages without CC display different sets of transparency effects. In order to define restructuring, I have shown that the salient property shared by restructuring verbs is that they constrain the temporal orientation of the embedded clause, unlike non-restructuring verbs (i.e. propositional and factive verbs). I have argued in favour of a biclausal analysis whereby restructuring verbs select for a  $C_{def}/T_{def}$  (defective  $\phi$ -features [-person] and unvalued tense features). However, as we have seen, the presence of  $C_{def}/T_{def}$  is not sufficient to explain CC. In other words: a redefinition of restructuring is needed to account for the fact that some languages block CC. I have thus argued that some languages display a higher degree of transparency. In particular, I claim that they present an embedded *v* which is defective [-person]. This structure makes CC possible: the clitic cannot be licensed by the embedded *v*, so it must climb in order to be licensed by the matrix *v*.

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## Corpora

Alturo, Núria, & Lluís Payrató. 2002. *COC: Corpus Oral de Conversa Col·loquial*. Barcelona: Dipòsit Digital de la Universitat de Barcelona.

BaTelÒc: *Basa Textuala per la lenga d'Òc*. Laboratori de lingüística CELLE-ERSS, Unitat Mixta de Recerca del CNRS de l'Universitat de Tolosa Joan Jaurés (Myriam Bras, dir.): <http://redac.univ-tlse2.fr/bateloc/>

Grup d'Estudis de Prosòdia, Universitat Pompeu Fabra. *Corpus Oral de l'Alguerès*. <http://prosodia.upf.edu/coalgueres/>

Viaplana, Joaquim, Lloret, Maria Rosa, Perea, Maria Pilar, & Esteve Clua. 2007. *COD. Corpus Oral Dialectal*. Barcelona: Dipòsit Digital de la Universitat de Barcelona.

## References

Aissen, Judith, & David Perlmutter. 1976. Clause reduction in Spanish. In H. Thompson et al. (eds), *Proceedings of the Second Annual Meeting of the Berkeley Linguistics Society*, 1–30. Berkeley: Berkeley Linguistics Society.  
<https://doi.org/10.3765/bls.v2i0.2283>

Alarcos-Llorach, Emilio. 1970. Algunas construcciones del infinitivo. In *Estudios de gramática funcional del español*, chapter VII. Madrid: Gredos.

Alonso, Hector, & Jordi Suïls. 1998. La no concordança dels verbs intransitius en català nord-occidental. *Cahier d'Études Romanes* 10: 5–24.

Andrade, Aroldo. 2010. *A subida de clíticos em português: Um estudo sobre a variedade Europeia dos séculos XVI a XX*. PhD thesis, Universidade de Campinas.

Balza, Irene. 2012. On the functional vs. lexical nature of restructuring heads: Evidence for a fine-grained classification of restructuring modals. *Bucharest Working Papers in Linguistics* 14(1): 71–109.

Bok-Bennema, Reineke. 2006. Clitic climbing. In M. Everaert, & H. van Riemsdijk (eds), *The Blackwell Companion to Syntax*, 469–518. Oxford: Blackwell.  
<https://doi.org/10.1002/9780470996591.ch13>

Bok-Bennema, Reineke. 2010. Restructuring verbs and the structure of Spanish clauses. In C. J-W. Zwart, & M. de Vries (eds), *Structure Preserved: Studies in syntax for Jan Koster*, [Linguistic Aktuell/Linguistics Today], 164, 65–72. Amsterdam: John Benjamins. <https://doi.org/10.1075/la.164.08bok>

Bok-Bennema, Reineke, & Brigitte Kampers Manhe. 1994. Transparency effects in the Romance languages. In M.L. Mazzola (ed.), *Issues and Theory in Romance Linguistic*, 199–217. Washington D.C: Georgetown University Press.

Bonet, Eulàlia. 2002. Cliticització. In J. Solà, M. Lloret, J. Mascaró, & M. Pérez-Saldanya (eds), *Gramàtica del Català Contemporani*, volume 1, 933–989. Barcelona: Empúries.

Burzio, Luigi. 1986. *Italian syntax: A government-binding approach*. Dordrecht: Reidel.

Cardinaletti, Anna, & Ur Shlonsky. 2004. Clitic positions and restructuring in Italian. *Linguistic Inquiry* 35 (4): 510–557. <https://doi.org/10.1162/0024389042350523>

Chomsky, Noam. 2001. Derivation by phase. In M. Kenstowicz (ed.), *Ken Hale: A life in language*. Cambridge, Mass: The MIT Press.

Cinque, Guglielmo. 2001. Restructuring and the order of aspectual and root modal heads. In G. Cinque, & G. Salvi (eds), *Current Studies in Italian Syntax: Essays Offered to Lorenzo Renzi*, 137–155. Amsterdam: Elsevier.  
[https://doi.org/10.1163/9780585473949\\_009](https://doi.org/10.1163/9780585473949_009)

Cinque, Guglielmo. 2004. “Restructuring” and functional structure. In A. Belletti (ed.), *Structures and beyond: Cartography of syntactic structures*, 132–191. Oxford: Oxford University Press. <https://doi.org/10.1093/oso/9780195171976.003.0005>

Cinque, Guglielmo. 2006. Restructuring and Functional Heads. *The Cartography of Syntactic Structures* (volume 4). New York: Oxford University Press.  
<https://doi.org/10.1093/oso/9780195179545.003.0002>

Costa, João. 2004. *Subject Positions and Interfaces: the Case of European Portuguese*. Berlin: Mouton De Gruyter. <https://doi.org/10.1515/9783110197396>

Cyrino, Sonia. 2010. On Romance syntactic complex predicates: why Brazilian Portuguese is different. *Estudos da Língua(gem)* 8(1): 187–222.  
<https://doi.org/10.22481/el.v8i1.1120>

Dotlacil, Jakub. 2004. *The syntax of infinitives in Czech*, Master’s thesis, University of Tromsø.

Fabra, Pompeu. 1918/1933. *Gramàtica catalana*. Barcelona, Institut d’Estudis Catalans. <https://publicacions.iec.cat/repository/pdf/00000044%5C00000005.pdf>

Gallego, Ángel J. 2011. Control through multiple Agree. *Revue Roumaine de Linguistique* 56(4): 313–346.

Gallego, Ángel J. 2016. A phase-theoretic approach to cliticization in Romance. *Studies in Hispanic and Lusophone Linguistics* 9(1): 67–94.  
<http://doi.org/10.1515/shll-2016-0003>

Givón, Thomas. 1980. The binding hierarchy and the typology of complements. *Studies in Language* 4(3): 333–377. <https://doi.org/10.1075/sl.4.3.03giv>

Gonçalves, Anabela. 1999. *Predicados Complexos Verbais em Contextos Infinitivo não prepostionado do Português Europeu*. PhD thesis, Universidade de Lisboa.

Gonçalves, Anabela, Cunha, Luis F., & Patrícia Silvano. 2010. Interpretação temporal dos domínios infinitivos na construção de reestruturação do português europeu. In A. Brito, F. Silva, J. Veloso, & A. Fiéis (eds), *Textos Selecionados do XXV Encontro Nacional da Associação Portuguesa de Linguística*, 435–447. Porto: APL.

González-Lopez, Veronica. 2008. *Spanish Clitic Climbing*. PhD thesis, The Pennsylvania State University.

Grano, Thomas. 2015. *Control and Restructuring*. Oxford: Oxford University Press.

Herbeck, Peter. 2013. (Backward) control and clitic climbing – On the deficiency of non-finite domains in Spanish and Catalan. In M. Kohlberger, K. Bellamy, & E. Dutton (eds), *ConSOLE XXI: Proceedings of the 21st Conference of the Student Organization of Linguistics in Europe* (8–10 January 2013, Potsdam), 123–145. Leiden: Leiden University Centre for Linguistics.

Herbeck, Peter. 2015. *Unifying Pro-drop and control. The Derivation of Spanish (Null) Subjects*. PhD thesis, University of Salzburg.

Hernanz, Maria Lluïsa, & Gemma Rigau. 1984. Auxiliaritat i reestructuració. *Els Marges* 31: 29–51.

Jones, Michael. 1993. *Sardinian Syntax*. London: Routledge.

Kayne, Richard. 1975. *French syntax: The transformational process*. Cambridge, MA: The MIT Press.

Kayne, Richard. 1989. Null subjects and clitic climbing. In O. Jaeggli, & K.J. Safir (eds), *The Null Subject Parameter*, 239–261. Dordrecht: Kluwer.  
[https://doi.org/10.1007/978-94-009-2540-3\\_8](https://doi.org/10.1007/978-94-009-2540-3_8)

Kayne, Richard. 2000. *Parameters and Universals*. New York: Oxford University Press.

Landau, Idan. 2000. *Elements of Control: Structure and Meaning in Infinitival Constructions*. [Studies in Natural Language and Linguistic Theory]. Dordrecht: Kluwer. <https://doi.org/10.1007/978-94-011-3943-4>

Landau, Idan. 2004. The scale of finiteness and the calculus of Control. *Natural Language and Linguistic Theory* 22: 811–877. <https://doi.org/10.1007/s11049-004-4265-5>

Ledgeway, Adam. 2000. *A comparative syntax of the dialects of Southern Italy: A Minimalist approach*. Oxford: Blackwell.

Llinàs, Mireia. 1990-1991. Verbs de reestructuració o verbs de no-reestructuració. *Llengua & Literatura* 4: 265–276.

Luján, Marta. 1978. Clitic-promotion and mood in Spanish verbal complements. *Études linquistiques sur les Langues Romanes. Montréal Working Papers in Linguistics* 10: 103–190. <https://doi.org/10.1515/ling.1980.18.5-6.381>

Llop, Ares. 2020. *Perspectives diacròniques en la variació microsintàctica sincrònica. Reanàlisis i cicles en els sistemes negatius del català i d'altres varietats del continuum romànic pirinenc*. Lleida: Publicacions de la Universitat de Lleida.

Llop, Ares, & Anna Paradís. 2023. Clitic Climbing and Presuppositional Negative Markers in Occitano-Romance Verbal Complexes. Exploring the Crossroads of Micro-Syntactic Phenomena. In E. Gutiérrez, & I. Ortega-Santos (eds), *Catalan Journal of Linguistics*, Special issue *Language Contact in Theoretical Syntax: Methodological Issues and Recent Trends*, 22: 97–125.  
<https://doi.org/10.5565/rev/catjl.361>

Magro, Catarina. 2004. *O fenómeno de subida de clítico à luz de dados não-standard do PE*. Ms., Universidade de Lisboa.

Magro, Catarina. 2005. Introdutores de orações infinitivas – o que diz a sintaxe dos clíticos. In *Actas do XX Encontro Nacional da Associação Portuguesa de Linguística*, 649–664. Lisboa: Associação Portuguesa de Linguística.

Manzini, M. Rita. 1983. *Restructuring and Reanalysis*. PhD thesis, Massachusetts Institute of Technology.

Manzini, M. Rita, & Leonardo Savoia. 2005. *I dialetti italiani e romanci. Morfosintassi generativa*, volume 3. Alessandria: Edizioni dell'Orso.

Mavrogiorgos, Marios. 2010. *Clitics in Greek: A Minimalist Account of Proclisis and Enclisis*. [Linguistik Aktuell/Linguistics Today 160]. Amsterdam & Philadelphia: John Benjamins. <https://doi.org/10.1075/la.160>

Modesto, Modesto. 2016. Inflected infinitives and restructuring in Brazilian Portuguese. In M.A. Kato, & F. Ordóñez (eds), *Morphosyntax of Spanish and Portuguese in Latin America*, 157–176. Oxford: Oxford University Press.  
<https://doi.org/10.1093/acprof:oso/9780190465889.003.0007>

Napoli, Donna. 1981. Semantic Interpretation vs. Lexical Governance: Clitic Climbing in Italian. *Language* 57(4): 841–877. <https://doi.org/10.2307/414244>

Ordóñez, Francisco. 2007. Observacions sobre la posició dels subjectes postverbals en català i castellà. *Caplletra* 42: 251–272.

Ordóñez, Francisco. 2018. Verbal complexes and Overt Subjects in Infinitivals in Spanish. In Á.J. Gallego, & R. Martin (eds), *Language, Syntax, and the Natural Sciences*. Cambridge: Cambridge University Press.  
<https://doi.org/10.1017/9781316591529.003>

Paradís, Anna. 2018. Variation in the scope of clitic climbing: Evidence from Catalan dialectal data. *Revue Roumaine de Linguistique* LXIII 3: 281–295.

Paradís, Anna. 2019. *L'ascens dels clítics: reestructuració i control [Clitic Climbing: restructuring and control]*. PhD, Autonomous University of Barcelona.

Picallo, Carme. 1990. Modal verbs in Catalan. *Natural Language and Linguistic Theory* 8(2): 285–312. <https://doi.org/10.1007/bf00208525>

Progrovac, Lijljana. 1993. Locality and subjunctive-like complements in Serbo-Croatian. *Journal of Slavic Linguistics* 1(1): 116–144.  
<https://www.jstor.org/stable/24599042>

Rizzi, Luigi. 1976. Ristrutturazione. *Rivista Di Grammatica Generativa* 1: 1–54.

Rizzi, Luigi. 1982. *Issues in Italian Syntax*. Dordrecht: Foris.

Roberts, Ian. 1997. Restructuring, head movement and locality. *Linguistic Inquiry* 28(3): 423–460. <https://www.jstor.org/stable/4178986>

Roberts, Ian. 2010. *Agreement and head movement: Clitics, incorporation and defective goals*. Cambridge, MA: The MIT Press.  
<https://doi.org/10.7551/mitpress/9780262014304.001.0001>

Rochette, Anne. 1988. *Semantic and Syntactic Aspects of Romance Sentential Complementation*. PhD thesis, Massachusetts Institute of Technology.

Romeu, Maurice, & André Bianchi. 2005. *Gramatica de l'occitan gascon contemporanèu*. Pessac: Presses universitaires de Bordeaux.

Rosen, Sara. 1990. Restructuring verbs are light verbs. In *Proceedings of the Ninth West Coast Conference on Formal Linguistics*, 477–492. Stanford: Calif.

Solà-Pujols, Jaume. 2002. Clitic climbing and null subject languages. *Catalan Journal of Linguistics* 1: 225–255. <https://doi.org/10.5565/rev/catjl.60>

Taraldsen, Tarald. 1981. Remarks on government, thematic structure and the distribution of Empty categories. In R. May, & J. Koster (eds), *Levels of Syntactic Representation*, 253–292. Dordrecht: Foris Publications.

Terzi, Arhonto. 1994. Clitic climbing from finite clauses and long head movement. *Catalan Working Papers in Linguistics* 3: 97–122.

Wiklund, Lena. 2007. *The syntax of tenselessness: Tense/mood/aspect-agreeing infinitivals*. Berlin: Mouton De Gruyter.

Wurmbrand, Susi. 2001. *Infinitives: Restructuring and Clause Structure*. Mouton De Gruyter.

Wurmbrand, Susi. 2004. Two types of restructuring: Lexical vs. functional. *Lingua* 114(8): 991–1014. [https://doi.org/10.1016/s0024-3841\(03\)00102-5](https://doi.org/10.1016/s0024-3841(03)00102-5)

Wurmbrand, Susi. 2015. Restructuring cross-linguistically. In T. Bui, & D. Özyıldız (eds), *Proceedings of the North Eastern Linguistics Society Annual Meeting*, 227–240. Amherst, University of Massachusetts: GLSA.

Wurmbrand, Susi, & Magdalena Lohninger. 2019. An implicational universal in complementation: Theoretical insights and empirical progress. In J.M. Hartmann, & A. Wöllstein (eds), *Propositionale Argumente im Sprachvergleich: Theorie und Empirie. / Propositional Arguments in Cross-Linguistic Research: Theoretical and Empirical Issues*. [Studien zur Deutschen Sprache] Gunter Narr Verlag: Tübingen.

Zubizarreta, Maria Luisa. 1982. *On the relationship of the lexicon to syntax*, PhD thesis, MIT.