

Clitic Dislocations and Clitics in French and Greek: From Interpretation to Structure

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Abstract

This article focuses on Clitic Left Dislocation of XPs in French and Greek. By examining the interpretive properties of these XPs, primarily reconstruction properties, it concludes that they have been displaced from their first merge position via movement into (sometimes) a succession of hierarchically organized middle-field positions first above vP then above T and on to the left periphery via standard A or A-bar steps (no mixed options are needed). Furthermore, pronominal clitics have long raised questions regarding their surface distribution (external merge in situ only or not), and their interpretive properties. As these XPs are doubled by clitics, it becomes possible to allocate properties of the doublet (clitic, XP) to its individual members. This article concludes that these clitics all occur high above T, in designated positions and that clitics lack referential import, only the XPs that double them do.

Keywords— clitics, Clitic Left Dislocation, middle-field, reconstruction

1 Introduction

This article first attempts to understand the nature of the syntactic dependency instantiated by Clitic Left Dislocation (henceforth, CLLD). CLLD has received numerous analyses. Thus, it has been variously analyzed as a movement dependency (cf. Agouraki 1992; Cecchetto 2000; Cinque 1977; Kayne 1975; López 2009, i.a.), or a base generation one (cf. Alexopoulou and Kolliakou 2002; Anagnostopoulou 1994; Cinque 1990; De Cat 2007; Tsimpli 1995; Zagana 2002, i.a.), or as a combination of movement and base generation (cf. Iatridou 1995).

By leveraging interpretive properties, more specifically reconstruction properties of the XPs that can undergo CLLD such as DPs (Subjects, Direct Objects, Indirect Objects), PPs (Locative and Genitive) and APs. We reach the following conclusions about CLLD:

- CLLD of DPs is a movement dependency, which involves one A-movement step to the middle-field, like A-scrambling of the Hindi or the Germanic type, followed by one or more A-bar movement steps towards the left periphery.
- CLLD of PPs involves A-bar movement steps to the middle field and on.

These conclusions are shown to hold robustly in a Romance language, French and one non Romance language, Greek, suggesting that they may hold more widely crosslinguistically.

These conclusions are used to shed light to the syntax and grammatical contribution of pronominal clitics, (cf. recently Anagnostopoulou 2016; Baker and Kramer 2016; Kramer 2014 i.a.). Probing CLLD and aspects of other constructions such as Clitic Doubling where a clitic doubles an XP allows us to separate the properties of the clitics proper, from the properties of what they double. From a systematic comparison of different clitics (CL_{acc} , CL_{dat} , CL_{gen} , CL_{loc}), we conclude - contrary to many prevalent views (Anagnostopoulou 2003; Preminger 2017; Uriagereka 1995 i.a.) - that clitics must be first merged in, or XP moved to, a high position in the clausal spine, higher than T. Furthermore, the morphology and doubling possibilities of clitics as well as the reconstruction properties of doubled phrases leads us to conclude that the clitics at least French and Greek uniformly lack referential import i.e. they are not pronouns (pace Baker and Kramer 2016). On the other hand, some (dative clitics) may have interpretive import e.g. animacy.

Abbreviations: S = singular - P = plural - 1 = First person - 2 = Second person - 3 = Third person - F = feminine - M = masculine - N = neuter - NOM = Nominative - ACC = Accusative - GEN = genitive - DAT = Dative - LOC = Locative - PVF = Perfective - IMPVF = Imperfective.

A broader conclusion is one of theoretical economy of means. To account for the wide and complex range of interpretive and distributional data we examine, it suffices, if we are correct, to systematically apply what is standardly assumed: phrasal movement need only be A or A-bar movement, no need to postulate mixed movement; no long head movement, no feature movement, only standard strictly bounded head movement is necessary; a transparent syntax morphology interface consistent with the Mirror Principle; no countercyclicity needed; a transparent syntax to semantics mapping consistent with long established results on the binding theory.

The article is organized as follows. We first present some basics about CLLD constructions in Section 2, and basics about reconstruction and the theoretical assumptions we adopt in Section 3. In sections 4 and 5, we discuss short distance - single clause - CLLD and we establish the reconstruction patterns of CLLD-ed direct objects, indirect objects, predicates and PPs both under the subject of the clause and under each other. We show that all possible XPs that can surface in the left periphery can undergo total reconstruction, except for indirect objects in French. Section 6 discusses (i) similarities and differences in the way previous analyses have dealt with the dependency between clitics and doubled XPs and (ii) boundary conditions based on the distribution of clitics that acceptable analyses should meet. In this section, we also show that the apparent referential properties of clitics are due to the semantic import of their associate, which is an A-moved silent pronoun in bare cliticization. The discussion in this section also addresses the reconstruction asymmetries between CLLD-ed direct and indirect objects. Sections 8 and 10 track the possible movement steps of XPs, DPs or PPs, before they reach the left periphery. Section 11 shows that long distance CLLD patterns with plain *wh*-movement, and Section 12 concludes.

2 Basics on CLLD

In CLLD in French and Greek, an XP which can be associated with a clitic is found at the left periphery of a clause, to the left of the associated clitic:

- (1) French
 - a. **Jean, il** est parti
John 3.S.M.NOM. is left
'John is left'
 - b. **Jean, on le** connaît
John we 3.S.M.ACC. know
'John, we know'
 - c. **A Paris, on y** va souvent
to Paris we LOC. go often
'To Paris, we go often'
 - d. **Triste de te voir partir, Albert pourrait le** devenir
sad to see you go Albert could 3.S.M.ACC. become
'Sad to see you go, Albert could become'
 - e. **Que Marie est coupable, on le** sait
that Marie is guilty we 3.S.M.ACC. know
'That Maria is guilty, we know'
 - f. **Que Marie soit coupable, on en** doute
that Marie be guilty we GEN. doubt
'That Maria is guilty, we doubt'
- (2) Greek
 - a. **Ton Yorgho, i** Maria dhen **ton** aghapai
the George the Maria not 3.S.M.ACC. loves
'George, Maria does not love'
 - b. **Tu Yorghu,** i Maria dhen **tu** milai
the George.DAT. the Maria not 3.S.M.DAT. talks
'George, Maria does not talk to'
 - c. **Oti o Yorghos ine eksipnos, o** Adreas **to** ksere
that the George is smart, the Adreas 3.S.M.ACC. knew
'That George is smart, Adreas knew'

The elements that can be pronominalized by a clitic, and hence be CLLD-ed, in Greek are fewer than in French and

are listed below with 3rd person clitics for subjects, direct and indirect objects:¹

	Subject	DO	IO	Locative PPs	Possessors	Predicates	CPs	Gen. PPs
(3) French	il, elle	le, la	lui	y, en	✗	le	le	en
Greek	pro	ton, tin	tu, tis	✗	✗	✗	to	✗

2.1 Identifying CLLD

Left peripheral elements resumed by clitics need not exemplify CLLD. They may also be Hanging Topics (HTLD), for example. [Krapova and Cinque \(2008\)](#), building on previous literature, list the following criteria to control for the difference:

1. HTLD can be found only in root contexts, CLLD appears in both root and non-root contexts.
2. Presence (CLLD) vs. absence (HTLD) of connectivity/reconstruction effects - cf. in particular [Rudin \(2013, 33ff\)](#) which uses the terms Topic construction and Left Dislocation.
3. CLLD resumption is by a clitic only. In HTLD the resumptive element can be any DP (a clitic pronoun, a tonic pronoun, a definite description, a quantifier, an epithet, etc.). All of these possibilities exist in colloquial speech.
4. HTLD is limited to DPs, while CLLD is available with any category for which there is a clitic, e.g. PPs, CPs or APs in French.
5. There can be more than one CLLD-ed XP in a given clause but no more than one HTLD-ed DP.

These properties allows us to control away from HTLD. Left peripheral phrases meeting the CLLD criteria can be further subdivided. They need not be contrastive but they can. Inversely, left peripheral Contrastive Topics do meet the CLLD criteria. This is why all the data in French and Greek that follow have been systematically controlled for contrastive Topic interpretation (cf. [Arregi 2003](#); [Alexopoulou and Kolliakou 2002](#) i.a.) and embeddability (point 1 above). Furthermore, since we are systematically detecting the presence of connectivity/reconstruction effects, we must be dealing with CLLD given point 2 above.

2.2 CLLD Long and Short

CLLD can be long distance or short distance. In long distance CLLD, the clitic and its associate XP are in different clauses as shown below in French and Greek:

- (4) **La voisine de Jean**, on dit que tu **la** connaissais
the neighbor of John, we said that you 3.S.F.ACC. knew
'John's neighbor, we said that you knew'
- (5) **Ton Yorgho** i Maria ipe oti dhen **ton** aghapai
the George the Maria said that not 3.S.M.ACC. she.loves
'George, Maria said that she does not love'

3 Background Assumptions

3.1 Background on theoretical assumptions

In this short section, we spell out firmly grounded, we believe, theoretical and analytical assumptions that we adopt.

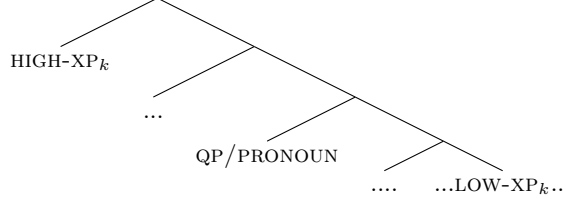
1. **Movement:** we assume movement is only to a c-commanding position, or to say it differently, that unless total reconstruction takes place - see below, a trace must be interpreted as variable bound by the moved phrase. This requirement is sometimes known as the *Proper Binding* requirement.
2. **Head Movement:** we assume head movement is strictly local in the sense of [Koopman \(1984\)](#), [Travis \(1984\)](#) or [Koopman and Szabolcsi \(2000\)](#) (see e.g. [Stabler 1996](#); [Stabler 1999](#) on complexity issues).
3. **Mirror Principle:** we accept [Baker's \(1985\)](#) Mirror Principle according to which the morphological hierarchy of heads within morphological units simply reflects the syntactic hierarchy in which these heads are merged. This assumption is a consequence of a broader one according which there is only one way to generate complex structures, namely syntactic Merge (or Remerge), as e.g. in [Marantz \(1997\)](#), coupled with the strict locality on head movement induced by the Head Movement Constraint.

¹ Greek is pro-drop. CLLD of a subject is possible without a visible clitic.

3.2 Background on Reconstruction

In this section, we summarize our assumptions regarding the properties of reconstruction. These assumptions are standard and justified elsewhere (see Sportiche 2017b, for a summary of justifications found in the literature). Consider the following structure S in which a high-XP behaves from an interpretive standpoint as if it occupied the low-XP position, an effect we will call a reconstruction effect:

Structure S:



We adopt the following assumptions:

- (6) a. Reconstruction is a property of movement dependencies only (except possibly for some pseudo-cleft constructions, cf. Sharvit 1999).
- b. Movement is modeled as copying (the copy theory of traces) or multidominance. Reconstruction arises when a trace is interpreted at LF: in other words, with low-XP the trace of high-XP, reconstruction of high-XP = interpret low-XP.
- c. Reconstructability (=displaced, lower interpretation) thus provides an independent diagnostic for movement. Reconstructability=evidence for the presence of low-XP as trace of high-XP.
- d. **Total** reconstruction refers to the situation in which only a low trace is interpreted at LF: total reconstruction = delete high-XP & interpret low-XP.

More specifically, to account for such representative examples as in (7), we adopt the assumptions in (8):

- (7) a. *[Which picture of **John**_j] did **he**_j sell [picture of John_j]?
- b. *~~[New pictures of **John**_j]_k~~ seem to **him**_j to be necessary [new pictures of **John**_j]_k
- c. [These pictures of **Picasso**_j]_k seemed to **him**_j to be t_k unattractive.
- d. [Which picture that **Picasso**_j owned]_k did **he**_j sell t_k?
- e. ~~[Which picture of his_k mother]_j~~ did **nobody**_k sell [picture of **his**_k]_j?
- (8) a. In S, if a pied piped complement in high-XP triggers a Condition C effect with the pronoun below it, this means that movement must be involved from a position - low-XP - below the position of the pronoun.
 1. Either this movement is A-bar movement from below the position of the triggering pronoun, e.g. from low-XP. This is illustrated in (7-a).
 2. Or A-movement took place but with total reconstruction of the movement into low-XP. This is illustrated in (7-b) (with the raised subject scoping under the adjective *necessary*). If total reconstruction is not required, we do not observe a Condition C (as A-movement can bleed Condition C).² This is illustrated below in (7-c) (where the raised subject outscopes the verb *seem*).
- b. Lack of reconstruction for Condition C of a pied piped adjunct means (either no movement or) that the moved constituent is structurally higher than the triggering pronoun and that reconstruction below the offending pronoun is not required. This is illustrated in (7-d). This pattern of data is classically handled by Late Merging the adjunct to the moved phrase in the moved position (cf. Lebeaux 1991, but see Sportiche 2016, for an alternative). This is the complement/adjunct asymmetry w.r.t. to Condition C. Importantly, this asymmetry can be used to detect the height of a phrase (as Cecchetto 1999 does). The moved phrase in (7-d) has undergone movement to a position higher than the pronoun, where the relative clause can late merge. A Condition C violation does not ensue because the proper name is not in the c-command domain of the pronoun.
- c. If in S, high-XP can reconstruct for scope below a quantifier, it means that a possible derivation involves movement from a low-XP position in the scope of this quantifier to the high XP position. Reconstruction for scope (e.g. pronominal binding) must be total (total reconstruction is required): only traces lower than

² On how to evaluate Condition C effects, see section 13, remark #1.

the binder of the pronoun can be interpreted, as shown in (7-e), (where the crossed out material is not interpreted).

Finally, in section 7.1, we will document the following (less discussed) generalization:

- (9) A-moved pronouns cannot totally reconstruct while A-bar moved pronouns may.

4 CLLD

We now turn to applying these reconstruction diagnostics to CLLD cases. In every case, a dislocated element is resumed by a matching clitic. We limit examples to cases involving a single clause for brevity's sake, but recall that all examples have been controlled for interpretation, embedability and they display connectivity effects. We return to long distance CLLD in section 11.

4.1 CLLD involves at least one A-bar movement step

We first show that CLLD of any non subject XP (here a DO and an IO but this extends to locative or genitives PPs, etc.) shows a Condition C effect below the subject: in (10) or (11), the pied piped name *Pierre, tu Yorghu* coindexed with the subject pronoun *il, pro* yields ill-formedness.

- (10) French DO and IO
- a. [La cliente de Pierre_j de Paris]_k, il_{*j,✓m} la_k traiterait bien
the client of Pierre from Paris, he 3.S.F.ACC. would treat well
'The client of Pierre from Paris, he would treat well'
 - b. [A la cliente de Pierre_j de Paris]_k, il_{*j,✓m} lui_k répondrait
to the client of Pierre from Paris, he 3.S.F.DAT. would reply
'To the client of Pierre from Paris, he would reply'
- (11) Greek DO and IO
- a. [Ton jítóna tu Yorghu_j]_k pro_{*j,✓m} dhén ton_k gnórizi kala
the neighbor of-the George he not 3.S.M.ACC. knows well
'George's neighbor, he does not know well'
 - b. [Tu jítóna tu Jorghu_j]_k pro_{*j,✓m} dhén tu_k milai
the neighbor.DAT. of-the George he not 3.S.M.DAT. talks
'To George's neighbor, he does not talk'

Now as we can see below, a DP (here *Pierre*) inside an adjunct to a preposed phrase does not have to trigger a Condition C effect with the subject pronoun *il*: this shows that total reconstruction is not required; the CLLD-ed object can be interpreted higher than the subject, in the left periphery. In such a position, the adjunct, here a relative clause, can be late merged, bleeding Condition C, as in (12) (cf. point (7-d)):

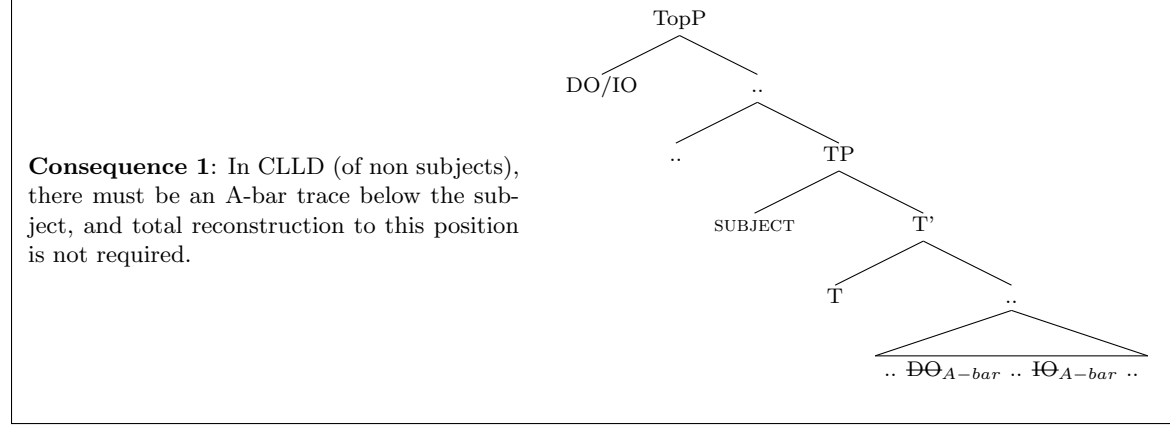
- (12) a. [La cliente que Pierre_j représente]_k, il_{✓j,✓m} la_k représente bien
the client that Pierre represents, he 3.S.F.ACC. represents well
'The client that Pierre represents, he represents well'
- b. [A la cliente que Pierre_j représente]_k, il_{✓j,✓m} lui_k répond toujours
to the client that Pierre represents, he 3.S.F.DAT. replies always
'To the client that Pierre represents, he always replies'

This shows that CLLD (of non subjects) need not totally reconstruct below the subject: the condition C effect seen in (10) and (11) cannot be due to mandatory reconstruction (e.g. of A-movement). The same facts hold of Greek.

- (13) a. [Ton pelati pu o Jorghos_j ekprosopi]_k, pro_{✓j,✓m} ton_k ekprosopi kala
the client that the George represents, he 3.S.M.ACC. represents well
'The client that George represents, he represents well'

- b. [Tu pelati pu o Yorghos_j tu eftiakse ti vivliothiki cthes]_k, simera pro_{✓_j,✓_m} tha
 the client.DAT. that the George 3.S.M.DAT. repaired the bookcase yesterday today he will
 tu_k ftiaksi to grafio
 3.S.M.DAT. repair the desk
 ‘For the client that George repaired the bookcase yesterday, he will repair the desk today’

In other words, scenario (8)a2 is excluded and scenario (8)a1 must hold: A-bar movement must have taken place from below the subject.



4.2 DOs vs IOs total reconstruction

4.2.1 CLLD-ed DOs and IOs can totally reconstruct below the subject

We just saw that **total** reconstruction of a CLLD-ed XPs to below a subject is not required, but is it possible? The answer is positive as illustrated below in (14) for French and (15) for Greek: the pronoun *sa*, *tu* can be bound by the quantified phrase *aucun/chaque parent*, *kanenas ghonios*:^{3,4}

- (14) French
- a. [La prof de son_j fils]_k, aucun/chaque parent_j la_k connait bien
 the teacher of his son, no/every parent 3.S.F.ACC. knows well
 ‘The teacher of his son, no/every parent knows well’
- b. [A la prof de son_j fils]_k, aucun/chaque parent_j lui_k a parlé
 to the teacher of his son, no/every parent 3.S.F.DAT. has spoken
 ‘To the teacher of his son, no/every parent has spoken’

³ Some comments on these examples:

We use these quantifiers because they do not outscope their surface positions in such cases (for example, they do not give rise to pair list readings in wh-questions). Binding of the pronoun thus cannot arise via (LF) movement of the quantifier phrase.

And in all cases of pronominal binding, we choose embedded pronouns rather than highest possessors (the possessor of the whole DP). Indeed, we are interested in documenting the possibility of total reconstruction and high possessors display ununderstood properties in this respect. For instance, the first example below is less acceptable (a WCO violation) than the second, which is fine:

- a. ?His_i grades persuaded every boy_i to work harder
 b. ✓The grades he_i got persuaded every boy_i to work harder

The contrast suggests that the subject can reconstruct under the QR-ed object in b but not in a.

⁴ The French examples are all given in a colloquial register. This means in particular that certain elements required in more formal registers are omitted, e.g. the negative particle *ne*, inverted subject clitics, etc.

(15) Greek

- a. [Ton kathijiti tis koris tu_j]_k kanenas ghonios_j dhen ton_k echi di
the professor of-the daughter of-his no parent not 3.S.M.ACC. has seen
'The professor of his daughter, no parent has seen'
- b. [Tu kathijiti tis koris tu_j]_k kanenas ghonios_j dhen tu_k echi milisi
the professor.DAT. of-the daughter of-his no parent_j not 3.S.M.DAT. has talked
'To the professor of his daughter, no parent has talked'

Given generalization (8)c, we can conclude:

Consequence #1 : CLLD-ed DOs and IOs can but do not have to - cf. (12) and (13) - totally reconstruct below the subject.

4.2.2 Can CLLD-ed DOs and IOs totally reconstruct under each other?

We start with some background on the interaction between direct objects and indirect objects. Without movement, French IOs and DOs behave as c-commanding each other.⁵ This is illustrated below where the pronoun *son* can be bound by the quantifier phrase *chaque danseuse* (see footnote 3, second comment):

(16) a. **IO c-commands DO**

Les chorégraphes avaient présenté l'habilleur de **son** partenaire à **chaque** danseuse
the choreographers had introduced the dresser of her partner to each dancer
'The choreographers had introduced the dresser of her partner to each dancer'

b. **DO c-commands IO**

Les chorégraphes avaient présenté **chaque** danseuse à **son** partenaire
the choreographers had introduced each dancer to her partner
'The choreographers had introduced each dancer to her partner'

This pattern remains unaffected by e.g. wh-movement:

(17) a. **IO c-commands DO**

Quel habilleur de **son** partenaire les chorégraphes avaient(-ils) présenté à **chaque** danseuse?
which dresser of her partner the choreographers have(-they) introduced to each dancer
'Which dresser of her partner had the choreographers introduced to each dancer?'

b. **DO c-commands IO**

Auquel de **ses** partenaires les chorégraphes avaient présenté **chaque** danseuse?
to which of her partners the choreographers had introduced each dancer
'To which of her partners the choreographers had introduced each dancer'

In Greek, while IOs (PPs or DPs) can license pronominal binding into DOs, (18-a), the opposite does not hold i.e. DOs cannot bind into DP-IOs in any of the two available linear orders, (18-b) and (18-c), (cf. Anagnostopoulou 2003, Michelioudakis 2012). Note that the unmarked order in the applicative frame with dative IOs is IO>DO. The possible order DO>IO_{Dat} is assumed to be derived due to A-bar movement of the DO across the IO (cf. Anagnostopoulou 2003). Being in an A-bar position in DO>IO_{Dat} orders, the DO cannot bind into the IO, (18-c). DO>IO is the unmarked order when the IO is a PP, like French. What is different from French is that the XPs which can be cliticized and CLLD-ed in Greek can only be DPs i.e. IO DPs but not PPs.⁶

⁵ Why this is is a question we are not addressing here. Sportiche (2017a) shows that the DO A-moves to its normal surface position from under an IO, if there is one (since no Condition C effect is triggered) and that the IO>DO c-command effects are due not to the IO surface c-commanding the DO, but to the possibility of reconstructing the DO under the IO.

⁶ Genitive case and dative case in Greek are morphologically syncretic. For ease of reference, we use the term dative for IOs and genitive for possessors.

(18) **IO c-commands DO & DO does not c-command IO**

- a. Ediksa tu kathe ghonju_j/ se kathe_j ghnonjo to pedhi tu_j
I.showed the every parent.DAT./ to every parent the kid.ACC. of-his
'I showed his kid to every parent'
- b. *Ediksa tu ghonju tu_j/ sto ghonjo tu_j to kathe phedi_j
I.showed the parent.DAT. of-its/ to-the parent of-its the every kid.ACC.
'I showed every kid to his parent'
- c. *Ediksa to kathe phedi_j tu ghonju tu_j
I.showed the every kid.ACC. the parent.DAT. of-its
'I showed every kid to his parent'

As in French, pronominal binding remains unaffected by *wh*-movement:⁷

- (19) a. Pjo vivlio apo ti siloghi tu_i edikses s-ton kathe kathijiti_i/ tu kathe kathijiti_i?
which book from the collection of-his you.showed to-the every professor/ the every professor.DAT.
'Which book from his collection did you show to every professor?'
- b. *Pjanu mathiti apo tin taksi tu_i edikses ton kathe kathijiti_i?
which student.DAT. from the class of-his you.showed the every professor
'To which student from his class did you show every professor?'

We now show that a **CLLD-ed DO can totally reconstruct under the IO** in both French and Greek. To do so, we show that a pronoun contained in a CLLD-ed DO, here the pronouns *son* and *tu*, can be bound by a quantifier contained in the IO, here *aucun/chaque professeur* and *kanena/ kathe fititi*.⁸

- (20) [La note de son_j dernier devoir]_k, le professeur (ne) l_k ' a rendue à aucun/chaque élève_j
the grade on his last assignment, the professor (Neg) 3.S.M.ACC. has given to no/every student
'The grade on his last assignment, the professor hasn't given to any/every student'
- (21) [Ton vathmo stin teleftea tu_k ergasia]_j den ton_j anakinosame se kanenan/kathe fititi_k
the grade in-the last of his assignment not 3.S.M.ACC. we announced to any/every student
'The grade on his last assignment, we did not announce to any/every student'

With the exception of indirect objects, to which we return below, the possibility to totally reconstruct extends to CLLD-ed subjects (in long distance CLLD, not shown here but cf. section 11), predicates as shown below in (22), clauses in (23) and PPs in (24) and (25).⁹ For predicates, this property can only be illustrated in French, and is shown below: in (22), the indefinite *un étudiant* inside the preposed predicate can be interpreted in the scope of the adverb *souvent*.

- (22) [Fier d' un étudiant]_j, Pierre l_j ' a souvent été ✓souvent >un étudiant
proud of a student Peter 3.S.M.ACC. has often been
'Proud of a student, Peter has often been'

The same holds of clauses in French (shown here) and Greek: a pronoun contained in a preposed clause, here *son*, can be bound by an unmoved quantifier, here *aucun/chaque electeur*.

- (23) a. [Que son_j candidat gagnerait]_k, on l_k ' a promis à aucun/chaque électeur_j
that his candidate would win, we 3.S.M.ACC. has promised to no/every voter
'That his candidate would win, we promised no voter'

⁷ Some speakers might prefer Clitic Doubling of the IO-DP in (19-b). With or without Clitic Doubling, the DO cannot bind into the IO.

⁸ *Kanenas* in (21) should not be read emphatically. See Giannakidou (1998), Giannakidou (2000) for discussion of the scope differences with emphatic *kanenas*.

⁹ We do not examine the reconstruction properties of CPs in French and Greek any further, however, it is worth noting that unlike what is reported for English (cf. Moulton 2013) they exhibit all kinds of reconstruction effects which show that they undergo movement to their surface position. As a matter of fact, CLLD-ed CPs and predicates must totally reconstruct in French and Greek, a behavior consistent, at least for predicates, with what is otherwise known, cf. Sportiche (2017b). This is explored in Angelopoulos (in progress) for Greek.

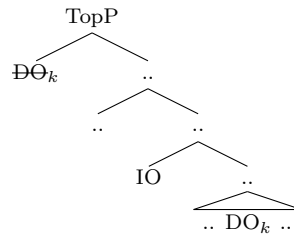
- b. [Que son_j candidat gagnerait]_k, les sondages en_k ont convaincu aucun/chaque électeur_j
 that his candidate would win, the polls GEN. have convinced no/every voter
 ‘That his candidate would win, the polls have convinced no voter of’

Similarly, for PPs, reconstructability can only be illustrated in French, and is shown below: in each case, the a example shows an unmoved phrase containing a pronoun bound by a QP; the b examples show that this is unaffected by CLLD-ing this phrase.

- (24) CLLD-ed gen. PPs in the scope of an unmoved DO Locative *en*
 a. On a éloigné aucune/chaque fille_j [de sa_j meilleure amie]_k
 we have removed no/every girl from her best friend
 ‘We have removed no/every girl from her best friend’
 b. [De sa_j meilleure amie]_k, on en_k a éloigné aucune/chaque fille_j
 from her best friend, we GEN. have removed no/every girl
 ‘From her best friend, we have removed no/every girl’
- (25) CLLD-ed gen. PPs in the scope of an unmoved IO ‘About’ *en*
 a. On a parlé à aucune/chaque fille_j [de sa_j meilleure amie]_k
 we have spoken to no/every girl about her best friend
 ‘We have spoken to no/every girl about her best friend’
 b. [De sa_j meilleure amie]_k, on en_k a parlé à aucune fille_j
 about her best friend, we GEN. have spoken to no girl
 ‘About her best friend, we have spoken to no/every girl’
- (26) CLLD-ed LOC. PPs in the scope of an unmoved DO Locative *y*
 a. On a conduit aucune/chqeu fille_j [chez son_j meilleur ami]_k
 we have led no girl to her best friend
 ‘We have led no girl to her best friend’
 b. [Chez son_j meilleur ami]_k, on y_k a conduit aucune/chaque fille_j
 to her best friend, we LOC. have led no/every girl
 ‘To her best friend, we have led no/every girl’

What these data illustrate is that apart from IOs, all XPs can reconstruct to the position they occupy when they have not moved.

Consequence 2: CLLD of an XP \neq IOs allows total reconstruction to its unmoved position: there is a trace of this XP in the position normally occurs. For example, as shown in the adjacent tree, there is a trace of CLLD-ed DO below IO to which a CLLD-ed DO can totally reconstruct.



Surprisingly however, as mentioned, CLLD-ed IOs **cannot** totally reconstruct. Without CLLD, the DO can bind into the IO as shown in (27-a): the QP DO *aucun/chaque professeur* can bind the pronoun *son* inside the IO. But this binding possibility disappears once the IO is CLLD-ed, as in (27-b):

- (27) *CLLD-ed IOs in the scope of an unmoved DO Indirect object *leur*
 a. On a présenté aucun/chaque professeur_j aux parents de son_j meilleur étudiant
 we have introduced no/every professor to-the parents of his best student
 ‘We have introduced no/every professor to the parents of his best student’
 b. *[Aux parents de son_j meilleur étudiant]_k, on leur_k a présenté aucun/chaque professeur_j
 to-the parents of his best student, we 3.P.M.DAT. have introduced no/every professor
 ‘To the parents of his best student, we have introduced no/every professor’

Consequence 3: CLLD of IOs does **not** allow total reconstruction below a DO.

5 CLLD and Clitics

5.1 Intermediate Summary

For simple clauses, we have seen that CLLD of non subjects must involve movement from below the subject. We also saw that this movement must be A-bar movement. This was based on the observation that all CLLD-ed non subject XPs can reconstruct below the subject. Furthermore, all CLLD-ed XPs except IOs can totally reconstruct to the position they occupy on the surface when they have not been dislocated. For ease of reference, let us call this their “**normal surface position**”.

The syntax of CLLD-ed IOs requires at least three positions: the left peripheral dislocated position, a position below the subject from which they A-bar moved to the left periphery and to which they can reconstruct, and their normal surface position (which sits below the normal surface position of a DO) which they occupy when they do not dislocate and to which they cannot reconstruct. Note that this behavior of IOs is not due to movement to the left periphery alone: this is shown by the examples (17) in which *wh*-movement of the IO does not alter binding relationships between DOs and IOs. It must be due a CLLD specific property: this suggests that the presence of the clitics, characteristic of CLLD, plays a crucial role in preventing total reconstruction of IOs.

For all other CLLD-ed XPs (that is all XPs except for IOs), minimally we need two positions: the left peripheral position to which such XPs A-bar dislocate, and their normal surface position. As we will see by investigating more precisely the interactions between dislocated and cliticized non subject XPs, the picture is in fact more complicated and we will in fact also need at least a third position for some of them. But before performing such an investigation, let us draw some conclusions from what has already been established.

6 Preliminaries and background on the syntax of Clitics

Our intent here is not to provide a comprehensive analysis of cliticization, a topic extensively studied in many publications. It is merely to impose boundary conditions which any analysis should meet, given the properties of CLLD documented here. [Cardinaletti and Shlonsky \(2004\)](#) argue that clitics (in Italian) can surface in high positions around T in the clausal spine, or in lower positions, at the periphery of VP. French and Greek (perhaps only) allow **high** clitics in this sense, and it is these high clitics that show up in CLLD. In the remainder of this paper, our discussion is limited to these.¹⁰

6.1 Analytical options

A unified analysis of pronominal clitics in French and Greek (and beyond) should be compatible with the fact that such clitics can routinely double full phrases, as is found in CLLD, Clitic Right Dislocation or Clitic Doubling, in which a clitic doubles an in-situ argument.¹¹ It should also be compatible with the observations above that these full phrases can behave as if they were in their normal surface position for interpretive purposes. This particular interpretive behavior does not depend in a direct way on the overt presence of clitics: it merely shows that these doubled phrases have moved from their normal surface position, and thus count as direct dependents of their predicates in the ordinary sense (that is arguments, or modifiers of these predicates, henceforth *dependents*).

What kind of analysis of clitics in French and Greek can account for the basic observation that **clitics can double phrases that act as ordinary dependents**?

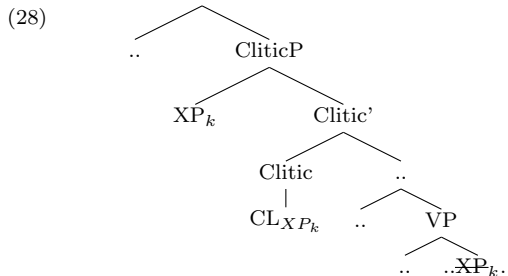
There are two candidate proposals that a priori have the right properties to handle this property because they postulate two distinct but simultaneous entities, namely a clitic and a phrase: the *big DP* hypothesis going back to [Kayne \(1972\)](#) based on the properties of French Complex Inversion, and developed by others in a variety of ways since¹² and [Sportiche’s \(1996\)](#) proposal in terms of Clitic Phrases in the clausal spine.

¹⁰ What matters here is the clear evidence that there are high clitics. We remain agnostic however as to how low the low clitics are, which depends on how precisely to analyze restructuring constructions of the type discussed in [Cardinaletti and Shlonsky \(2004\)](#).

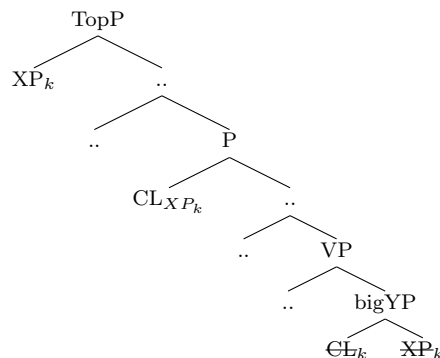
¹¹ What represents Clitic Doubling proper is discussed in [Krapova and Cinque \(2008\)](#) and does not always corresponds to what is called Clitic Doubling in the literature. It is mostly found with predicates which express emotion or perception in Bulgarian, in Greek and several other Balkan languages, so perhaps not to the extent usually assumed. We do not discuss it here in the context of our overall analysis.

¹² It is discussed in various forms in [Torrego \(1992\)](#), [Sportiche \(1996a\)](#), [Uriagereka \(1995\)](#), [Belletti \(1999\)](#), [Nevins \(2011\)](#).

According to Sportiche (1996a), (French) cliticization is an analogue of “definite” Scrambling typically found in SOV languages (such as German or Hindi). Clitics mark the scrambling sites, Clitic Phrases, in the clausal spine: they head a projection agreeing with and obligatorily attract, overtly or covertly, an associate XP. The XPs are dependents, the clitics are not: they merely agree with dependents.¹³ In plain cliticization XP is a silent *pro* (as we will show below); in CLLD, illustrated in the adjacent tree, XP is overt and moved. These Clitic Phrases are situated above vP/VP but (for non subjects) below the surface subject position of tensed clauses (so possibly above or below TP depending on how the surface position of subjects is analyzed). Under this view, the simplest assumption is that clitics are present if and only if corresponding Clitic Phrases are.



According to the *big DP* hypothesis, a clitic CL_{XP} has an associate XP with which it forms a constituent YP (labeled *bigYP* in the adjacent tree). YP is an ordinary dependent (so XP, part of YP only looks like it is an ordinary dependent). Clitics must move (leaving a silent trace). With the clitic moved, the options are similar to those listed above: XP may remain in situ, as in clitic doubling in varieties that allows it (e.g. Bulgarian), or be dislocated as in CLLD (shown in the adjacent tree) or CL(itic) R(ight) D(islocation). Call P the position a clitic moves to. The precise location of P must be stipulated. The simplest assumption is that P is a clitic attractor and/or licenser of some clitic property (as in Cardinaletti and Starke, 1999), deriving why clitics must move.¹⁴



These two approaches share a number of properties and differ in some.

Similarities: First, under both views - pending general principles about the clausal spine that would predict its internal organization - where clitics end up and in what order must be stipulated. Under the first view, the position and order of clitics is stipulated as the location and order of Clitic Phrases in the clausal spine. Under the second, the question is not as uniformly addressed by different authors but the position of P in (29) and order of clitics must be stipulated too (e.g. in terms of Case licensing projections as in Belletti (1999), or a combination of Case and ϕ -feature projections as in Cardinaletti 2008). This means that in principle, both approaches must assume designated projections like “Clitic Phrases”. The assumption that there are such designated positions hosting clitics is supported by a number of substantive and detailed studies of clitic distribution in French and Romance (e.g. Belletti 1990; Kayne 1991; Kayne 1994; Uriagereka 1995; Sportiche 1996a; Pollock 2003; Cardinaletti and Shlonsky 2004; Poletto and Pollock 2004; Cardinaletti 2008 *inter alia*), and in Greek (Terzi 1999).

Differences: One difference between (28) and (29) is that clitics themselves must move under the latter but not under the former, thus requiring some mechanism demanding movement. Another is that the Clitic/XP agreement between the clitic and its XP is established upon First Merge under (29) but must be done either long distance via Agree or post XP movement via spec/head agreement under (28).

An apparently more substantive difference is that clitics must be heads under the former but need not be under

¹³ DP clitics show agreement in 1st and 2nd person, number and gender with their associate. They default to the 3rd person singular masculine accusative clitic with APs and CPs, suggesting as per Preminger’s 2009 test, that they are agreement markers rather than pronouns, as we discuss below in section 6.3.

¹⁴ We know of no non stipulatory reason as to why clitics must move (but cf. Cardinaletti and Starke 1999, for a sophisticated attempt). For example, this cannot be due to (i) their being clitics as they could cliticize in situ (this is visible with accusative clitics which are consistently nothing else than articles); (ii) identification, since XP plays the requisite identifying role; (iii) labeling requirements as in Chomsky (2013) given that clitics must move even when XP is overt in-situ as in clitic doubling: YP can be labeled without the clitic moving (note however that moving both the clitic and XP does create labeling problems for YP, perhaps a reason to reject the *big DP* approach); (iv) a “doubly filled” projection prohibition (of the doubly filled comp filter variety) either, as this would require the clitic to be a head and move like a head, which clitics do not, as discussed below.

the latter: they could be phrasal themselves.¹⁵ This would in principle allow clitics to be either heads of CliticP or specifiers of CliticP, depending on the make up of the clitic itself (e.g. if a principle such as one feature/one head holds). But if multiple specifiers to a single head are allowed, a clitic in (28) could instead of being the head of its Clitic Phrase, be first merged as a specifier of the silent head of this phrase.

In conclusion, the differences between the two approaches, which are real, are subtle and will be, from our present concern, irrelevant, unless specifically discussed (cf. section 13.2). For presentation purposes we will adopt Sportiche’s (1996a) construal of the syntax of clitics as in (28).

6.2 Boundary conditions

The high clitics we are discussing do not cliticize on the main V or v of their VP:¹⁶ they can be separated from this v or V by several projections including one or more auxiliary verb, negation (e.g. *pas*, *plus*, *etc.*) in French, adverbial and aspectual projections (as in Cinque’s hierarchy, Cinque 1999) and Tense as illustrated for French in (30-a) below (see Sportiche 1996a, section 5.1.2, 238ff) and Greek, (31).¹⁷ Clitics can also be separated from their associated XP positions by determiners and nouns, as shown in (30-b) and (30-c):

- (30) a. Cela **lui**_k aura souvent été dit **t**_k
 this 3.S.M.DAT. will have often been said
 ‘This will have often been said to him’
 b. Il **en**_k aura mentionné [la [première partie [du [deuxième chapitre **t**_k]]]]
 he GEN. will have mentioned the first part (of the second chapter)
 ‘He will have mentioned the first part (of the second chapter)’
 c. Il **en**_k aura [été [lu [trois **t**_k]]], de livres
 it GEN. will have been read three, of books
 ‘As for books, three will have been read’
- (31) a. An o Petros to iche idhi diavasi to vivlio..
 if the Petros 3.S.M.ACC. had already read the book
 ‘If Peter had already read the book...’
 b. An i Maria tu iche idi milisi tu Jorghu..
 if the Maria 3.S.M.DAT. had already talked the George
 ‘If Maria had already talked to George...’

In addition, it is unclear that pronominal clitics are *syntactically* cliticized at all (rather than simply phonologically - that is post syntactically - dependent), and if they are cliticized, what they are cliticized to. In French or Greek, syntactic cliticization of third person or PP proclitics does not take place given e.g. that verb raising in imperatives strands clitics (see Pollock 2003, for French, Terzi 1999, for Greek and references therein for discussion). Thus compare the declaratives in (32-a-i)-(32-c-i) and (33-a) with the corresponding imperatives in (32-a-ii)-(32-c-ii) and (33-b), which involves Verb, or remnant VP, raising:

- (32) a. (i) Vous les lui renvoyez toujours lentement
 you 3.P.M.ACC. 3.P.M.DAT. send back always slowly
 ‘You always send them back to them slowly’
 (ii) Renvoyez les lui toujours lentement
 send back 3.P.M.ACC. 3.P.M.DAT. always slowly
 ‘Always send them back to them slowly’
 b. (i) Vous lui en parlez toujours lentement
 you 3.S.M.DAT. GEN. speak always slowly
 ‘You always speak to him about it slowly’

¹⁵ Thus the clitic could be either a head taking the XP as complement to form a big YP, or it could head its own phrase and be some kind of adjunct to XP to form a big YP (see e.g. Papangeli 2000 or Belletti 1999 for the first).

¹⁶ Unlike what Cardinaletti and Shlonsky 2004 argues are low clitics. Amharic clitics discussed in Baker and Kramer (2016) may well correspond to these low clitics as they are argued to show up structurally between the verb and the auxiliary.

¹⁷ Mavrogiorgos (2010, 40) notes that these adverbs can also precede clitics in Greek. Given standard assumptions, adverbs do not move themselves, thus, a reasonable assumption would be that they move along with an XP that they pied pipe when then surface before clitics.

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- (ii) Parlez lui en toujours lentement
speak 3.P.M.DAT. GEN. always slowly
‘Always speak to him about it slowly’
- c. (i) Vous les y lisez toujours lentement
you 3.P.M.ACC. LOC. read always slowly
‘You always read them there slowly’
- (ii) Lisez les y toujours lentement
read 3.P.M.ACC. LOC. always slowly
‘Always read them there slowly’
- (33) a. Tis to diavaze pada argha
3.S.F.DAT. 3.S.N.ACC. he.was.reading always slowly
‘He was always reading it to her slowly’
- b. Diavaze tis to pada argha
read 3.S.F.DAT. 3.S.N.ACC. always slowly
‘Read it to her always slowly’

Note that the post verbal order in both (32-a-i) and (32-a-ii) (resp. (32-b-i) and (32-b-ii), and (32-c-i) and (32-c-ii)) for French and (33-a) (resp. (33-b)) for Greek has the frequency adverb *toujours/ pada/ always* precede the manner adverb *lentement/ argha/ slowly*, which reflects their merge order *toujours/ pada* > *lentement/ argha*. If clitics were syntactically incorporated (or m-merged as in Matushansky, 2006), they would have to have been incorporated strictly cyclically as Matushansky (2006) (correctly) concludes: as proclitics, these clitics would have to have been incorporated to what follows them, that is, the verbal complex. If this were the case, they should not be strandable under movement of the verb, or of the verbal complex. But they are, as seen in (32-a-ii), (32-b-ii) and (32-c-ii), where the constant relative order of the adverbs shows that the verbal complex alone is what moved past the clitics. These facts lead to the conclusion that clitics *le, lui, y, en, etc.* and *tis, tos* are not syntactically incorporated (nor m-merged in Matushansky’s sense under a strictly cyclic view of m-merger). They also provide information about the morphological structure of the sequence *CI + V + Tense + AGR*. It must be *CI + [V + Tense + AGR]*, with, by Baker 1985’s Mirror Principle, the clitics higher than T. This means that Clitic Phrases are hierarchically higher than T (but obviously lower than the surface subject position). This is consistent with Terzi (1999), which postulates an additional head above T to which some clitics can adjoin. We return in section 8.5 to the hierarchical order of the Clitic Phrases with respect to each other. Finally, the relation between the surface position of clitics and their associated XP obeys movement constraints as has been established at least since Kayne, 1975, and is discussed e.g. in Sportiche (1996a, section 4.2, p.238ff). Movement in some form must thus be involved, as both analyses above postulate. Furthermore, this movement cannot solely be due to head movement pace e.g. Roberts (2010) i.a. if head movement is local in the sense of Emonds (1976), Koopman (1984) or Travis (1984), as we assume here (see Belletti, 1999). In conclusion, the relation between a clitic and its associate XP cannot be due to head movement alone; phrasal movement must be involved (possibly followed by head movement as in Sportiche 1990, Belletti 1999, i.a.).¹⁸

6.2.1 Conclusions

In sum, a number of essential properties are common to the approaches in (28) and (29) when it comes to the analysis of high clitics:

1. Clitic doubled phrases generally behave as undoubled phrases, hence clitics are not arguments by themselves.
2. There is a phrasal movement relationship between the surface clitic position and the base position of its associated XP (possibly in addition to head movement).
3. Clitic positions must be postulated as being higher than T in the clausal spine, but below the surface subject position.

6.3 On the content of Clitics

Are clitics referential pronouns? Clearly, under the view in Sportiche (1996a) in (28), they are not: they head a non pronominal projection. Under a *big DP* approach as in (29), they could be, if for example, they are DPs. If DP clitics are referential, they themselves should enter into referential relations and be subject to the binding theory conditions. However, given that clitics enter into a relation with an XP associate, the binding theoretic effects we

¹⁸ See appendix section 13.2 for further discussion of these points.

observe could be due to the binding theory applying to the XP and not to the clitic itself. As we now discuss, there are grounds both in French and Greek supporting this latter option, namely that clitics (except possibly for dative clitics) are not referential in the requisite sense to participate in binding relations, they are not individual denoting. The evidence comes in three varieties.

First, clitics are not pronouns by virtue of their intrinsic content, as some instances are demonstrably not pronominal. Second, assuming that clitics do not enter into binding relations explains the otherwise peculiar behavior of Clitic Doubled anaphors in Greek. Third, the fact that clitics can double indefinites shows that they cannot be definite pronouns. In turn, this shows that their apparent referential properties are due to what they double, their associate XP. We now go through the evidence:

1. In French, some instances of clitics clearly are not individual denoting: they are not pronouns bearing a referential index:

- (a) **Accusative clitics:** Examples (1-d), (1-e) and (1-f) show that an accusative clitic can double APs: APs are not referential. In addition, the predicates that accusative clitics can double occur in contexts not tolerating referential DPs: invoking DP resumption of some sort would not work. Furthermore, accusative clitics are nothing else than definite articles and as shown in Vergnaud and Zubizarreta (1992), articles can behave as expletives, hence need not be referential.
- (b) The fact that 3rd person masculine singular accusative clitics can double APs that are feminine or plural, and CPs which lack ϕ -features altogether (cf. e.g. Iatridou and Embick 1997) shows that such clitics behave like agreement markers, defaulting to the unmarked form in the absence of agreement (cf. Preminger, 2009).
- (c) **Nominative clitics** can be expletives (cf. *il semble que.../it seems that...*).
- (d) At least some **PP clitics** stand for PPs which are predicates (Kayne 1975), e.g. locatives, and are thus not individual denoting.¹⁹

2. In Greek, there is also evidence that some instances of clitics are not individual denoting.

- (a) Greek accusative clitics which, like French accusative clitics, are determiners, can also be expletives (cf. Alexiadou et al. 2007 i.a.).
- (b) Greek clitics can double anaphors in ways that suggest they are not referential as we now show:
 - i. In the Greek example (34) below, where the object is cliticized, we observe a Condition B effect if $j=k$. This is due either to the clitic or to its silent argument associate XP (or to both):

- (34) I Maria_j dhen tin perigrafi e_{*j,✓k} opos prepi
 the Maria not 3.S.F.ACC. describe_e like is required
 ‘Maria does not describe her like it is required’

- ii. Greek *ton eafto tu/lit. the self his* is a regular anaphor²⁰ that must be bound locally (see (35-a) vs. (35-b)):

- (35) a. I Maria_j dhen perigrafi [ton eafto tis]_j opos prepi
 the Maria not describes [the self her] like is required
 ‘Maria does not describe herself like it is required’
 b. *I Maria_j ipe oti o Adreas dhen perigrafi [ton eafto tis]_j opos prepi
 the Maria said that the Adreas not describes [the self her] like is required
 ‘Maria said that Adreas does not describe herself like it is required’

A priori, we do not know whether this mandatory binding arises through the binding of the pronoun *tis* or of the anaphor *ton eafto tis*. This anaphor can but need not be doubled by a clitic as in (36) (the clitic agrees with the head noun *eafto* which is masculine):

- (36) I Maria_j dhen (ton_j) perigrafi [ton eafto tis]_j opos prepi
 the Maria not (3.S.M.ACC.) describes [the self her] like is required
 ‘Maria does not describe herself like it is required’

¹⁹ Going beyond French, the possibility of clitic reduplication as documented for Italian e.g. in Cardinaletti and Shlonsky (2004, 525, fn6), also suggests that clitics are non argumental.

²⁰ Unlike what Iatridou (1986) and Anagnostopoulou and Everaert (1999) argue. Angelopoulos & Sportiche (in prep.) argue that it is a plain anaphor, which is subject to standard Condition A.

The anaphor needs a local antecedent but the clitic cannot count as this local antecedent. If it did somehow (without triggering a Condition C effect), it would have to be referential and:

- a. The anaphor (via the clitic pronoun) should be able to have a long distance antecedent. This is not possible:

(37) *I Maria_j ipe oti o Adreas_k dhen ton_j perigrapi [ton eafto tis]_j opos
 the Maria said that the Adreas not 3.S.M.ACC. describe [the self her] like
 prepi
 is required
 ‘Maria said that Adreas does not describe herself like it is required’

- b. There should be a condition B effect in (36), as in (34) forcing disjointness between the subject and the referent of the direct object. Clearly this is incorrect, in fact the opposite of the desired result.

- iii. What is needed from the point of view of the binding theory is to treat cases of doubled anaphors exactly like cases of undoubled anaphors: in (36), the anaphor must take the subject as antecedent to satisfy the binding theory and the clitic is not acting like a (individual denoting) pronoun. In other words, the doubling clitic plays no relevant binding theoretic role.

- (c) We conclude that such Greek clitics cannot be referential: all these examples are simply handled, their behavior following from the properties of their associated XP.²¹

- (d) Why then do we see a condition B effect in (35-a)? Each clitic standing for a contentful phrase is and must be associated with a contentful XP. In bare (= undoubled) cliticization of a subject, an object or an indirect object, this XP must be interpreted as a pronoun, hence be a *pro* as expected under either (28) or (29). As such it is subject to Condition B of the binding theory, deriving the ill formedness of (35-a).

3. There is a general argument applying across the board to all DP clitics suggesting that clitics are not pronouns. The reasoning goes as follows:

- (a) When used bare as in the examples below, the missing argument is interpreted as a definite pronoun:

(38) **il** viendrait, on **le** reconnaitrait, on **lui** parlerait
 3.S.M.NOM. would come, we 3.S.M.ACC. would recognize, we 3.S.M.DAT. would speak
 ‘He would come, we would recognize him, we would talk to him’

(39) **pro** dhen tha **ton** anagorize, **pro** dhen tha **tu** miluse
 he not would 3.S.M.ACC. recognize, he not would 3.S.M.DAT. speak
 ‘He would not recognize him, he would not talk to him’

- (b) If any of these clitics was determining the reference of the argument, clitics should always contribute the meaning that they contribute when used alone: that of a definite pronoun.

- (c) This is contradicted by the fact that nominative, accusative or dative clitics can in fact double indefinites as shown in (40) and (41):

(40) Un vieil ami, **il** viendrait/*est venu; un vieil ami, on l’accepterait
 An old friend, 3.S.M.NOM. would come/*came; an old friend, we 3.S.M.ACC.would accept
 /*a accepté; À un vieil ami, on voudrait/*voulait **lui** parler.
 /*accepted; To an old friend, we would want/*wanted 3.S.M.DAT. to speak.

In French, such indefinites must be interpreted as free choice indefinites (e.g. as roughly *any old friend/drink you pick*), and must be interpreted in the scope of a licenser, here, the conditional modal

²¹ The grammaticality of (35-a) poses a problem for Baker and Kramer (2016) who analyze Greek clitics as full pronouns with referential content. They claim (i) that examples like this are degraded, which they attribute to a Condition B violation, or (ii) that the doubled anaphors have a non-anaphoric status. The first is examined in parallelism with the corresponding cases of Clitic Doubling in Amharic, which are ruled out according to them as Condition B violations because the clitic is locally bound by the subject. But, cases like (35-a) simply do not have the status of Condition B violations, as they have been consistently reported, e.g. in Iatridou (1986), as fully grammatical, a judgment we and other Greek speakers share. Furthermore, we show above that under clitic doubling, the anaphor still needs to be locally bound, which casts doubts on the claim that the doubled anaphor has a special (non-anaphoric) status. This may show that indeed, Amharic clitics may be different from French or Greek clitics.

-er in *accept-er-ait*. Switching the verbs to say, past tense (with an episodic interpretation), produces ill-formedness, as shown. Free choice indefinites with a doubling clitic are also possible in Greek in non-episodic contexts, and preferably when *tha*, the future morpheme (or modal operator cf., Giannakidou and Mari 2018), is present.²² Switching to perfective aspect creates an episodic context, the indefinite cannot be interpreted as free choice but e.g. as specific indefinite.

- (41) a. Ena pote tha to epina/ ipja
a drink would 3.S.M.ACC. I.drink.IMPFV./ I.drink.PFV.
b. Enos fititi apo to panepistimio Athinon tha tu edine/
a student.DAT. from the university of-Athens would 3.S.M.DAT. he.give.IMPFV./
edhose mia kali sistatiki epistoli
he.give.PFV. a good reference letter

In sum both in French and Greek, some DP clitics are not referential, and some French PP clitics never are. In Greek, clitics doubling anaphors cannot be referential. And in both French and Greek, clitics cannot be seen as being definite pronouns, even when used bare.

We conclude with the simplest unified analysis that clitics never are referential. All binding theoretic relations such clitics may seem to enter into are in fact relations that their associate XPs enter into. In particular, a DP clitic (unlike regular pronouns) has no individual denoting reference; only its associate XP does, if it is a DP.

7 Bare cliticization and what it shows

7.1 A preliminary observation on pronoun reconstruction

We first need to note a generalization about pronoun movement and reconstruction. Quite generally, A-moved (definite) pronouns cannot totally reconstruct (see Sportiche, 2005, for discussion). This is illustrated in the following examples:

- (42) a. *He_k seems to John_k's father to be t_k happy.
b. *John_k believes him_k to have been seen t_k
c. *Jean_k le_k croit susceptible d' être battu t_k
Jean him believes liable to be beaten.
'Jean believes him liable to be beaten'

These sentences are all deviant. The first one is a condition C violation. If total reconstruction of the pronoun were possible, the pronoun could be interpreted only in its trace position and the sentence could thus be binding theoretically equivalent to *it seems to John_k's father that he_k is happy*, which is well formed. Similarly, the second is a principle B violation. If total reconstruction of the pronoun were possible in the second, the result would be binding theoretically equivalent to *John_k believes that someone saw him_k*, which is also well formed. The third illustrates the same Condition B violation in French, which cannot be undone via total reconstruction of the pronoun.

A-bar moved pronouns however **can** reconstruct: A-bar moved pronouns do not trigger Condition C (or a Strong Crossover effect), viz. the well formedness of the following sentences in both French and English.²³

- (43) ✓Lui_k, Jean_k pense que tu devrais l_k' inviter t_k.
✓Him_k, John_k thinks that you should invite t_k.

In conclusion, A-moved pronouns cannot totally reconstruct while A-bar moved pronouns may.

²² See also Iatridou (2000) for its use in counterfactuals. The fact that free choice indefinites can only be licensed in the scope of an operator and in non-episodic contexts is also noted in Giannakidou (2001) who examines the distribution of indefinites like *opjiosdipote, otidipote* 'anyone/anything' in Greek (and other languages). See also Alexopoulou and Folli (2011) for discussion of CLLD-ed pure indefinite DPs in Greek.

²³ As we note several times, accenting a pronoun can lessen Condition C effects especially when there is no surface c-command of the name by the pronoun. But this is not what makes (43) fine, viz. the strong deviance of *Lui_k mérite que Jean_k gagne* / *He_k deserves that John_k wins* / 'he deserves John's winning; *Lui_k est parti parce que Jean_k était fatigué* / *He left because John was tired*, where the pronoun is accented and does c-command the name as in the text examples, but from an A-position.

7.2 Bare cliticization

For ease of reference, call apparently undoubled cliticization **bare cliticization**. We saw that clitics do not participate in Binding theory, but have associate XPs that may. It follows that in bare cliticization of DPs, the associate of the clitic must be interpreted as a definite pronoun, i.e. be a silent *pro*. How does this *pro* distribute? We are now going to show that this *pro* is mandatorily attracted to its Clitic Phrase, yielding its binding theoretic behavior.

The following paradigm is built on example (44-a) in which a modified pronoun or an epithet is shown to c-command to its right, triggering a condition C effect.²⁴

- (44) a. *C'est hier qu'on a entendu [[que lui_m] / ce crétin_m [décrire Jean_m]]
 it's yesterday that we heard only him / this cretin describe John
 'It is yesterday that we only heard him / this cretin describe John / this cretin'
 b. C'est hier qu'on a décrit la voisine de Jean_m [qu'à lui_m] / à ce crétin_m
 it's yesterday that we described the neighbor of John only to him / to this cretin
 'It is yesterday that we described John's neighbor only to him / this cretin'
 c. *C'est hier qu'on lui_m a décrit la voisine de Jean_m
 it's yesterday that we 3.S.M.DAT. described the neighbor of Jean
 'It is yesterday that we described him John's neighbor'

Example (44-a) is deviant with the indicated coindexing: this shows that *que lui* or the epithet *ce crétin* c-commands like a pronoun and thus trigger a Condition C effect. Example (44-b) is fine and shows that the IO does not surface c-command the DO (cf. footnote 5). Example (44-c), the counterpart of (44-b) with the IO cliticized displays a Condition C effect. Since we concluded that clitics are not referential pronouns, the deviance must be attributed to the DP associate of the dative clitic.

Since the dative argument is interpreted as a definite third person pronoun, this DP associate must be a definite *pro*. To predict ill-formedness, it must be that this *pro* associate of the IO clitic is mandatorily attracted to its Clitic Phrase, higher than the DO. That the attracted *pro* must move there is in fact independently motivated as small *pro* must be locally identified (Rizzi 1986).²⁵

Now, as discussed above (see section 7.1 and the discussion of (42): A-moved pronouns can't reconstruct), *pro* triggers a Condition C on the DO but only if it is unable to totally reconstruct. This *pro* must thus be assumed to have transited through or landed in an **A-position** higher than the surface DO position to trigger a Condition C violation. We will see in section 8.5 that this conclusion is independently justified, and that this A-position is not the specifier of CliticP but a lower A-position (see the discussion around example (58)).

In sum, in bare cliticization, a *pro* associate of a clitic is mandatorily attracted to its Clitic Phrase for identification purposes. And, in the case of a dative *pro* as in example (44-c), this movement to Clitic Phrase must transit through an A-position higher than the DO. This A-position should in principle be available in Greek as well. But Greek is uninformative regarding its existence because the Condition C effect in (45-a) is also found in the underlying IO>DO and DO>IO orders, (45-b) and (45-c). There is some evidence though that the DO at least undergoes one A-movement step across the IO (see Section 8.5).

- (45) a. *I Maria tu_i sistise tin jineka tu Jani_i
 the Maria 3.S.M.DAT. introduced the wife of-the John
 'Maria introduced John's wife to him'
 b. *I Maria sistise aftu tu kretinu_i tin jineka tu Jani_i
 the Maria introduced this the cretin.DAT. the wife of-the John
 'Maria introduced this cretin to John's wife'
 c. *I Maria sistise tin jineka tu Jani_i aftu tu kretinu_i
 the Maria introduced the wife of-the John this the cretin.DAT.

²⁴ Throughout, to avoid accent on the pronoun *lui*, extraposition intonation etc... which can alleviate Condition C, we use cleft constructions which require accent on the focus of the cleft and also guarantee embeddability of the left peripheral Topic.

²⁵ Rizzi (1986) shows that silent pronouns are subject to two separate licensing requirements (see Rizzi 1986, p.519-520):

1. Formal Licensing: *pro* is governed by X (where X is a governing head of type y)
2. Content Identification: Let X be the licensing head of an occurrence of *pro*: then *pro* has the grammatical specification of the features on X co-indexed with it.
 In the present case, the formal licenser can be taken to be the clitic (or the head taking the clitic as second specifier) taking *pro* as specifier (the spec/head relation, an EPP property, is a subcase of local government. The content of *pro* is identified by the features on the clitic.

‘Maria introduced this cretin to John’s wife’

7.3 Interim Summary

- The syntax of clitics is basically as in (28) or (29).
- Clitics are not pronouns. A clitic doubles an XP, which is a *pro* in bare DP cliticization.
- The surface Clitic-XP dependency involves phrasal movement (possibly in addition to head movement).
- A clitic attracts a small *pro* (for identification), or a non silent XP, to its specifier.
- In French, a non silent XP associated with a clitic must dislocate via A-bar movement.
- Nominative, Accusative and PP clitics lacking relevant semantic content, CLLD-ed subject, direct objects and PPs can totally reconstruct.

8 CLLD-ed DOs, IOs steps to their surface position

We now turn to a more precise investigation of how DOs, IOs and PPs move to their surface position in CLLD. Recall that the syntax of IOs requires at least three positions: the dislocated position, a middle position below the subject from which they A-bar moved to the left periphery and to which they reconstruct, and a lower position, the normal surface position (which sits below the normal surface position of a DO) they occupy when they do not dislocate and to which they cannot reconstruct. We also saw that the IO moves via an A-position in the middle field; this position may a priori well be the specifier of a CliticP, but need not be. We will in fact conclude it is not.

For all other XPs (that is all XPs except for IOs), minimally we need two positions: the left peripheral position to which such XPs A-bar dislocate, and their normal surface position. We are now going to establish that we also need (at least) one middle position for DOs, and that movement to this middle position for DOs and IOs is A-movement.

8.1 How do CLLD-ed DOs move to the clitic (from their normal surface position).

We concluded that a *pro* associate of a dative clitic is mandatorily attracted to its Clitic Phrase for identification purposes and that this movement to Clitic Phrase of dative *pro* must transit through an A-position higher than the DO. This explains the deviance of (46-b) below. Now we add to the paradigm in (44) by CLLD-ing the DO as in (46-c):

(46) French

- C’est hier qu’on a décrit la voisine de Jean_m qu’à [lui_m / ce crétin_m]
it’s yesterday that we described the neighbor-fem of John only to him / this cretin
‘It’s yesterday that we described John’s neighbor only to him / this cretin’
- C’est hier qu’on lui_{*m/✓p} a présenté la voisine de Jean_m
it’s yesterday that we 3.S.M.DAT. have introduced the neighbor of Jean
‘It’s yesterday that we introduced John’s neighbor to him’
- C’est hier que [la voisine de Jean_m]_k, Marie la_k lui_m a présenté
it’s yesterday that the neighbor of John, Marie 3.S.F.ACC. 3.S.M.DAT. has presented
‘It’s yesterday that John’s neighbor, we introduced to him’

In such a case, the Condition C effect found in (46-b) disappears. The same pattern is found in Greek:²⁶ *Tis Marias* in (47-b) can bleed Condition C with a dative clitic, which leads us to the conclusion that Greek behaves exactly like

²⁶ But some care is needed because of case syncretism between genitive and dative. In (47-a), *tu Jorghu* can be a genitive possessor in which case *tis fotografies tu Jorghu* is a single constituent or it can be analyzed as a dative indirect object in which case there are two topics i.e. *tis fotografies* and *tu Jorghu* that have been preposed. Only the first structure with *tu Jorghu* as possessor is comparable to the French example in (46-c). In (47-b), the preposed phrase is a single Topic constituent in which *tis Marias* can only be a possessor argument because extraposition (here of the PP *ja ton Minimalismo*) is not allowed across an IO. The fact that extraposition of PPs across indirect objects is not allowed can be shown more clearly with PP indirect objects, like below:

- Epestrepsa to vivlio ja ton Minimalismo sti Maria
I.returned the book about the Minimalism to-the Maria
‘I returned the book about Minimalism to Maria’

French in this case as well.²⁷

(47) Greek

- a. [Tis fotografies tu Yorghu_j]_k i Maria dhen tu_j tis_k epestrepse
the pictures of-the George the Maria not 3.S.M.DAT. 3.S.F.ACC. returned
'The pictures of George, Maria did not return to him'
- b. [To vivlio tis Marias_j ja ton Minimalismo]_k pro dhen tis_j to_k echi epistrepsi
the book of-the Maria about the Minimalism he not 3.S.M.DAT. 3.S.F.ACC. have returned
'Maria's book about Minimalism, he has not returned to her'

The well formedness of (46-c), (47-b) shows that this CLLD-ed DO movement from its normal surface position to its surface position must involve an A-movement step past the highest A-position of the dative *pro* in order to bleed Condition C: this is because this dative *pro* cannot reconstruct lower from this A-position, so the DO must move higher. Since we already concluded that CLLD must involve an A-bar step from below the subject, this means that CLLD of the DO involves at least three positions:

- The normal surface position,
- An A-position higher than the highest A-position the dative *pro* associate of a dative clitic occupies, but still below the subject (this position could be but need not be the specifier of the Accusative CliticP),
- The left peripheral CLLD position reached by A-bar movement from below the subject.

Corroborating these results, note that the pattern above is duplicated even if we force reconstruction of the CLLD-ed DO under the subject by requiring pronominal binding:

- (48) a. C'est hier qu' aucun/chaque parent_m a montré [les notes de [son_m fils]_k]_p [qu' à lui_k] / à
it's yesterday that no/each parent has shown the grades of his son only to him / to
cet abruti
this moron
'It is yesterday that no/each parent showed the grades of his son only to him/ this moron'
- b. *C'est hier qu' aucun/chaque parent_m lui_k a montré [les notes de [son_m fils]_k]_p
it's yesterday that no/each parent 3.S.M.DAT. has shown the grades of his son
'It is yesterday that no/each parent showed the grades of his son only to him'
- c. C'est hier que [les notes de [son_m fils]_k]_p, aucun/chaque parent_m les_p lui_k a
it's yesterday that the grades of his son, no/each parent 3.S.F.ACC. 3.S.M.DAT. has
montré
shown
'It is yesterday that the grades of his son, no/each parent showed to him'

Exactly the same pattern holds of Greek, as shown in (49). In $IO_{Dat} > DO$ orders, the IO c-commands the DO triggering Condition C (50-a). Interestingly, when the DO is CLLD-ed, Condition C is circumvented (50-b). The trace below the IO has to be an A-trace.

- (49) [To vivlio tu ju_z tis_k ja ton Minimalismo]_i kamia mitera_k dhen tu_z to_i echi epistrepsi
the book of-the son her for the Minimalism no mother not 3.S.M.DAT. 3.S.F.ACC. has returned
'The book of her son about Minimalism, no mother has returned to him'
- (50) a. *Dhen tu to epestrepsa tu vlaka_i to vivlio tu Jani_i
not 3.S.M.DAT. 3.S.F.ACC. I.returned this idiot.DAT. the book of-the John
'I did not return the book of John to the idiot'
- b. [To vivlio tu Jani_i] dhen tu to epestrepsa tu vlaka_i
the book of-the John not 3.S.M.DAT. 3.S.F.ACC. I.returned this idiot.DAT.
'The book of John, I did not return the idiot'
- b. *Epestrepsa to vivlio sti Maria ja ton Minimalismo
I.returned the book to-the Maria about the Minimalism
'I returned the book about Minimalism to Maria'

²⁷ The lack of Condition C in examples like (47-a) led Anagnostopoulou (1994) to a base generation of CLLD: we reanalyze this as involving movement via an A-step.

Consequence #3: CLLD-ed DOs can undergo A-movement across the highest A-position occupied by an IO, whether the IO is cliticized or not.

8.2 How do CLLD-ed IOs move to their clitics?

We have shown that bare cliticization of an IO involves movement of a dative *pro* to dative Clitics Phrase via an A-position higher than the normal position of the direct object. We now extend this result to a CLLD-ed dative. Since IOs are surface c-commanded by DOs, we observe condition C effects as in (51) below.²⁸

- (51) *C'est hier que Marie a présenté ce crétin_m / [que lui_m] aux voisins de Jean_m
 It's yesterday that Marie has introduced this cretin / only him to-the neighbors of John
 'It is yesterday that Marie introduced this cretin/only him to the neighbors of John'

We can check whether IO CLLD involves an A-step above the DO, as in bare cliticization: if CLLD-ing the IO bleeds condition C, there must be such A-movement step. This is indeed what is observed:

- (52) C'est hier qu'[aux voisins de Jean_j]_k, Marie leur_k a présenté ce crétin_m / [que lui_j]
 it's yesterday that to-the neighbors of John, Marie 3.P.M.DAT. has introduced this cretin / only him
 'It is yesterday that to the neighbors of John, Marie introduced this cretin/only him'

CLLD of IOs and cliticization of the *pro* associate of a dative clitic thus proceed the same way, via an intermediate A-position higher than the normal surface position of the DO. In the previous section, we concluded that Cliticization or CLLD of a DO involve an A-position higher than the A-position used by movement of the datives. This predicts that cliticization of a DO should reinstate a condition C effect: this is in fact what is observed, as shown below:²⁹

- (53) C'est hier qu'[aux voisins de Jean_j]_k, Marie le_{*j/√p} leur_k a présenté
 it's yesterday that to-the neighbors of John, Marie 3.S.M.ACC. 3.P.M.DAT. has presented
 'It is yesterday that to the neighbors of John, Marie introduced him'

8.3 More reasons why clitics are not pronouns

In the preceding sections, we showed that bare cliticization involves an A movement step, of either a DO or an IO to a position higher than the normal surface position of DOs and IOs. This conclusion bears on whether clitics are pronouns. Indeed, if we assumed that the binding theoretical effects observed in bare cliticization were due to the clitic itself being a pronoun and moving, we would face a contradiction as pronouns moved to an A-position do not reconstruct: we would thus expect condition C violations where there is none. So consider the last two sentences of paradigm in (46) repeated below.

- (54) French
 a. C'est hier qu'on lui_{*m/√p} a présenté la voisine de Jean_m
 it's yesterday that we 3.S.M.DAT. have introduced the neighbor of Jean
 'It's yesterday that we introduced John's neighbor to him'
 b. C'est hier que [la voisine de Jean_m]_k, Marie la_k lui_m a présenté
 it's yesterday that the neighbor of John, Marie 3.S.F.ACC. 3.S.M.DAT. has presented
 'It's yesterday that John's neighbor, we introduced to him'

What is noteworthy is that the Condition effect found in (54-a) disappears in (54-b). If the dative clitic were a pronoun, it would have moved to an A-position c-commanding the direct object trace; this trace is a copy of the preposed phrase containing *Jean* which is not a late mergeable adjunct. Since the clitic pronoun could not reconstruct lower than this A-position, we wrongly expect a Condition C effect in (54-b). This shows that clitics (here datives) are not pronouns.

Recall now (see section 5.1) that we concluded all CLLD-ed XPs except IOs can totally reconstruct to their normal surface position. Consider again the case of (20) repeated below where the dislocated phrase can totally reconstruct:

²⁸ Recall that we use clefts and that we must test CLLD cases with pied piped complements to avoid late merged adjuncts.
²⁹ CLLD of a pronominal DO should too. This seems correct but contrastive accent on the CLLD-ed pronoun interferes, making Condition C effects judgments less secure. *C'est hier que lui_j, [aux voisins de Jean_j]_k, Marie le_{*j/√p} leur_k a présenté / it's yesterday that him, to-the neighbors of John, Marie him to-them has presented).*

-
- (55) [La note de son_j dernier devoir]_k, le professeur l_k ' a rendue à aucun/chaque élève_j
the grade on his last assignment, the professor 3.S.M.ACC. has given to no/each student
'The grade on his last assignment, the professor hasn't given to any/every student'

If the clitic *la* were a referential pronoun, we would have to assign it a reference, that is, interpret the indicated coindexation as coreference with the preposed DP *la note de son_j dernier devoir_k*. If there is coreference, the scope of this expression is given by the highest instance of these two elements. Since A-moved pronouns cannot reconstruct, the scope of this preposed phrase could not be narrower than that of the highest A-position occupied by the clitic pronoun. Since we just showed this position is structurally higher than the IO, this clitic is structurally too high to be in the scope of the indirect object QP. In other words, if clitics were referential pronouns, we would incorrectly exclude such examples. We take this to reinforce the conclusion that (accusative) clitics are not referential pronouns.

8.4 Why datives are different

The conclusion we just reached provides a way to describe the difference between CLLD-ed accusatives and datives, the latter not being able to totally reconstruct to their normal surface position.

This difference between datives on the one hand, and other clitics on the other is plausibly related to their morphological make up. Indeed, while accusative and nominative clitics are made up only of grammatical features (gender, number, case), datives include in addition to the bare D article *l-* (with agreement) found in all three, a morpheme visible in the singular - *ui* - otherwise having semantic import (person or personified) as noted in Rooryck (2000). This special status of dative clitics is further corroborated by the conclusions in Charnavel and Mateu (2015) which attribute mandatory logophoric properties to IO 3rd person clitics but not to DO 3rd person clitics.³⁰ The lack of total reconstruction would follow if the -*ui* morpheme appearing in the dative clitic signaled the presence of an intermediate, contentful projection - e.g. headed by a [+person] applicative head lending it logophoric properties - that CLLD-ed Datives (or dative *pro* in bare cliticization) must transit through and below which they cannot reconstruct: this option is discussed in detail in Sportiche (2017a).

8.5 DO and IO CLLD: conclusions and discussion

We are thus led to the following picture:

1. In French, DO superficially c-commands IO, but not vice versa in their normal surface position.
2. In bare cliticization of DO and IOs, a *pro* is mandatorily attracted to the corresponding Clitic Phrase via an A-position higher than the normal surface DP position.
3. In CLLD of DO and IOs, the dislocated phrase must move via this A-position too, and to its clitic Phrase, and on to the left periphery.
4. The A-position the DO moves to is higher than the A-position the IO moves to. In other words, these movements preserve normal surface position height.

We take the conclusions above to hold of Greek as well. Given the differences between the two languages, we have been able to directly discuss the following for Greek:

1. Dative IOs superficially c-commands DO, but not vice versa in any possible order between the two.
2. In CLLD of DOs, the dislocated phrase must move via an A-position higher than a cliticized or plain dative DP indirect object.

³⁰ In principle, if we could find cases of accusative clitics with relevant semantic import, we should be able to duplicate the pattern found with datives. The following case may suggest that 1st and 2nd person clitics, which we do not discuss here, exhibit such a pattern. Indeed, the following examples contrast as shown although perhaps not robustly enough to be conclusive (the same contrast is found in Clitic Right Dislocation).

- (i) a. [Pierre et le critique de son_j dernier livre]_k, on les_k a présentés à aucun/chaque auteur_j
Peter and the reviewer of his last book, they 3.P.M.ACC. introduced to no/every author
'They didn't introduce Peter and the reviewer of his last book to any/every author'
- b. *[Moi et le critique de son_j dernier livre]_k, on nous_k a présentés à aucun/chaque auteur_j
me and the reviewer of his last book, they 1.P.ACC. introduced to no/every author
'They didn't introduce me and the reviewer of his last book to any/every author'

If significant, this contrast would duplicate the third person dative/accusative contrast and could be attributed to the difference between *les/them* and *nous/us*, only the latter being specified for a person property (here 1st person). It would also show that the third person dative/accusative asymmetry under reconstruction is not plausibly due to cliticized datives originating strictly higher than accusatives, since 1st (or 2nd) person accusatives show the same pattern.

3. The A-position the DO moves to is higher than the A-position the IO moves to. Unlike French, this order does not reflect the unmarked surface IO>DO order.

To accommodate these findings, we need to postulate intermediate A-positions, call them K_{DO} and K_{IO} for ease of reference, with $K_{DO} > K_{IO}$, through which CLLD-ed DPs transit. The a priori most parsimonious assumption would be that K_{DO} is the specifier of $Cl_{acc}P$ and K_{IO} is the specifier of $Cl_{dat}P$. This would mean that the surface order of 3rd person accusative and dative clitics in French, namely, $Cl_{acc} > Cl_{dat}$, reflects the hierarchy of the corresponding Clitic Phrases. Else, K_{DO} and K_{IO} are additional positions, which would mean that movement to ClP takes place in two steps (at least) via such K positions.

There is in fact evidence in favor of this second conclusion over the first one as there is evidence for the existence of an A-position situated above the vP internal subject, but below T, as we now see. Consider the following examples in which an indefinite is CLLD-ed. Recall (cf. examples (40) and (41)) that such CLLD-ed indefinites must be interpreted as free choice indefinites, and must be licensed in the scope of an appropriate licenser, the conditional modal *-er* in French and other operators e.g. *tha* presumably in some cases in Greek:

- (56) a. [Un vieil ami]_k, un avocat connaissant ses_k problèmes le_k défendrait gratuitement
 an old friend, a lawyer knowing about his problems 3.S.M.ACC. would defend for free
 ‘An old friend, a lawyer knowing about his problems would defend for free’
 b. [À un vieil ami]_k, un avocat connaissant ses_k problèmes lui_k téléphonerait
 to an old friend, a lawyer knowing about his problems 3.S.M.DAT. would telephone
 ‘To an old friend, a lawyer knowing about his problems would telephone’
- (57) a. [Enan kalo skilo_i]_k o idhioktitis tu_i dhen tha ton_k chtipuse pote
 a good dog the owner of-his not would 3.S.M.ACC. beat ever
 ‘A good dog, his owner would never beat’
 b. [Enos kalu mathiti_i]_k i dhaskala tu_i dhen tha tu_k miluse pote aschima
 a good student.DAT. the teacher of-his not would 3.S.M.DAT. speak ever in a bad manner
 ‘To a good student, his teacher would never talk in a bad manner’

These free choice indefinites are quantificational, yet do not trigger WCO effects³¹ Why don’t they? The straightforward answer is that the CLLD-ed XP can reconstruct to an A-position from which it c-commands into the subject. This is not available on the surface but:

1. The subject can independently reconstruct as low as a vP/VP internal position P (see e.g. Fox 2000, Sportiche 2005).
2. As previously discussed (see section 6.2), the morphological structure of the string *lui téléphonerait* in (56)b is *[lui [[[téléphon]er]ait]]]*, thus with the modal affix *er* lower than the dative CliticP (by the Mirror Principle).
3. The CLLD-ed XP must reconstruct under the modal to a position Q.

If $Q > P$, we explain why no WCO effect is found. But, what is this position Q? It is an A-position through which CLLD XPs transit: the simplest conclusion obviously is that $Q = K$.³²

Now, we saw earlier that clitics are to the left of T. Could their respective projections be below T, with the clitics incorporating into T via Head movement (contradicting our earlier conclusion that such accusative and dative clitics are not syntactically incorporated)? The answer is negative: given the hierarchy of projections $CliticP_{acc} > CliticP_{dat}$, successive incorporation up to T would by the Mirror Principle, have to yield the opposite clitic order. This confirms that these clitics are not incorporated and that each sits within its own projection above T. In turn this means that the K positions, which sit lower than the conditional modal, hence lower than T, are additional positions, lower than the Clitic Phrases to which A-movement takes place. Given our earlier results, we can conclude that the CLLD movement step from CliticP to the left periphery must be an A-bar step. What kind of movement is the

³¹ Except possibly in such somewhat degraded examples as below, cf. the second remark in footnote 3:

i ?[Un vieil ami]_k, son_k avocat le_k défendrait gratuitement
 An old friend, his lawyer him would defend for free

³² Note that in principle, the CLLD-ed constituent C could be resumed by the pronoun within the subject, and bind the *pro* associated with the clitic. This is excluded because CLLD is movement and these pronouns are all within subject islands. But assume nevertheless that it could: C still needs to reconstruct under the modal to license the free choice interpretation. To achieve this, C would have to reconstruct into the subject, with the subject in turn reconstructing below the modal. But C would be too low (within the reconstructed subject) to bind the *pro* associated with the clitic. So this derivation is not available, and even if it were, it would be insufficient.

movement step from this K position to CliticP? We can show it has to be A-bar movement. Consider the following examples where the subject is a free choice indefinite introduced by *n'importe quel* / 'any':

- (58) N'importe quel ami de ce crétin_k l'_k inviterait sans hésiter
 any friend of this cretin 3.S.M.ACC. would invite without hesitating
 'Any friend of this cretin would invite him without hesitating'

This example is fine and in particular, it does not display a condition C effect. Now, the free choice indefinite subject must reconstruct below the modal, so below T, therefore to some position below the specifier position of Cl_{acc}P. This means that the specifier of Cl_{acc}P must be an A-bar position. Otherwise the accusative *pro* attracted to the specifier of Cl_{acc}P for identification purposes could not reconstruct and would trigger a condition C from its c-commanding A-position. This also means that this *pro* reconstructs to the position K_{DO}, an A-position (but can't go lower). But the position K_{DO} c-commands the vP/VP internal subject position. So the subject must have reconstructed in the scope of modal but higher than the position K_{DO}: the raised subject can reconstruct to different positions, a finding consistent with the conclusions of Sportiche (1988) which showed that subjects can raise to their surface position in several steps, stranding or licensing floated quantifiers in different positions along the way (see also Cardinaletti 2004).

The following additional observations support this hierarchy of the CliticP and K positions. Recall examples (27) repeated below showing that a CLLD-ed IO cannot reconstruct under a DO.

- (59) *CLLD-ed IOs in the scope of an unmoved DO
- a. On a présenté aucun/chaque professeur_j aux parents de son_j meilleur étudiant
 we have introduced no/every professor to-the parents of his best student
 'We have introduced no/every professor to the parents of his best student'
 - b. *[Aux parents de son_j meilleur étudiant]_k, on leur_k a présenté aucun/chaque professeur_j
 to-the parents of his best student, we 3.P.M.DAT. have introduced no/every professor
 'To the parents of his best student, we have introduced no/every professor'

If we modify these examples by making the DO a free choice indefinite (adding a conditional modal for licensing puposes), the facts remain identical:

- (60) *CLLD-ed IOs in the scope of an unmoved DO
- a. On présenterait certainement [un professeur du lycée]_j aux parents de son_j meilleur étudiant
 we would introduce certainly a professor from the high school to-the parents of his best student
 'We would certainly introduce any high school professor to the parents of his best student'
 - b. *[Aux parents de son_j meilleur étudiant]_k, on leur_k présenterait certainement [un professeur du lycée]_j
 to-the parents of his best student, we 3.P.M.DAT. would introduce certainly a professor from the high school
 'To the parents of his best student, we would certainly introduce any high school professor'

But suppose now we CLLD the DO, e.g. below the IO (the same result holds if the DO ends up higher than the IO):

- (61) [Aux parents de son_j meilleur étudiant]_k, [un professeur du lycée]_j, on le_j leur_k
 to-the parents of his best student, a professor from the high school, we 3.S.M.ACC. 3.P.M.DAT.
 présenterait certainement
 would introduce certainly
 'To the parents of his best students, any high school professor, we would certainly introduce him '
- (62) [Ton melodikon kathijiton tu_j]_k [enan mathiti me psihologjika provlimata]_j dhen tha tus_k
 the future professors of-his a student with psychological issues not would 3.P.M.DAT.
 ton_j sistiname pote choris kapja enimerosi
 3.S.M.ACC. we introduce ever without some notice
 'To his future professors, any student with psychological issues, we would never introduce without any prior notice'

The result is fine: the free choice indefinite DO can bind into the preposed IO and no WCO is observed. This shows that at the right level of representation, the DO can bind into the IO from an A-position. This in turns means that the CLLD-ed IO can reconstruct to an A-position L lower than some A-position occupied by the DO. Clearly L cannot be the IO's base position given example (27) but it can be K_{IO} (with the DO A-binding from K_{DO}).³³

Along similar lines we can also explain the absence of Condition C effects between a CLLD-ed DO and an indirect object clitic in Greek and French. This following example repeated from (47-b) shows that pronoun which is associated with the dative clitic can reconstruct from $Cl_{dat}P$ to a low A-position, and Condition C is bled because the DO undergoes movement to a higher A-position. If the dative *pro* moved to the $Cl_{dat}P$ via A-movement, reconstruction to the lower A-position would be blocked and coreference in turn below should be blocked too.

- (63) [To vivlio tis Marias_j ja ton Minimalismo]_k pro dhen tis_j to_k echi epistrepsi akoma
the book of-the Maria about the Minimalism he not 3.S.F.DAT. 3.S.N.ACC. have returned yet
‘Maria’s book about Minimalism, he has not returned to her yet’

Note that if, as in a *big DP* approach, clitics do move to their surface position, phrase-moving them only to K (followed by head movement) would not yield the right surface order of the clitics, for exactly the same reasons as above: it should be clear that the assumption that, if they do move from argument positions, clitics move by head movement only is untenable.

Finally, what are these K positions? It would be reasonable to take K positions to be the specifiers of projections licensing Case once dubbed AGR_{DO} and AGR_{IO} at the periphery of vP or VP. They could be viewed as the positions to which A-scrambling takes place in Germanic languages or Hindi, the Clitic Phrases now corresponding to A-bar scrambling positions.³⁴

At a last remark, note that A-movement involved in cliticization can skip past the subject of vP/VP, requiring a Relativized Minimality type of approach to A-movement (cf. Rizzi 1990a) (see discussion in Section 11.3).

9 Short Distance CLLD: summary of conclusions

We have reached a number of conclusions for French and Greek:³⁵

1. CLLD (of non subjects) involves an A-bar trace below the subject.
2. CLLD-ed XPs can, but do not have to totally reconstruct below the subject.
3. CLLD of DOs allows total reconstruction below a surface IO: there is a trace of the CLLD-ed DO below a surface IO to which a CLLD-ed DO can totally reconstruct.
4. CLLD of IOs does **not** allow total reconstruction below a surface DO.
5. CLLD-ed DOs and IOs both undergo A-movement to intermediate K positions preserving relative c-command relations.
6. CLLD-ed DOs and IOs A-bar move to Clitic Phrases (from the K positions): specifiers of Clitic Phrases are A-bar positions, preserving c-command relations: 3rd person Clitic Phrases are hierarchically organized, regardless of surface clitic order, as $CL_{acc} > CL_{dat}$
7. Clitic Phrases are higher than T, but below the surface subject position.
8. Subjects move from vp/VP internal subject position to their surface position via at least one intermediate A-step above the K positions (but below conditional modals).

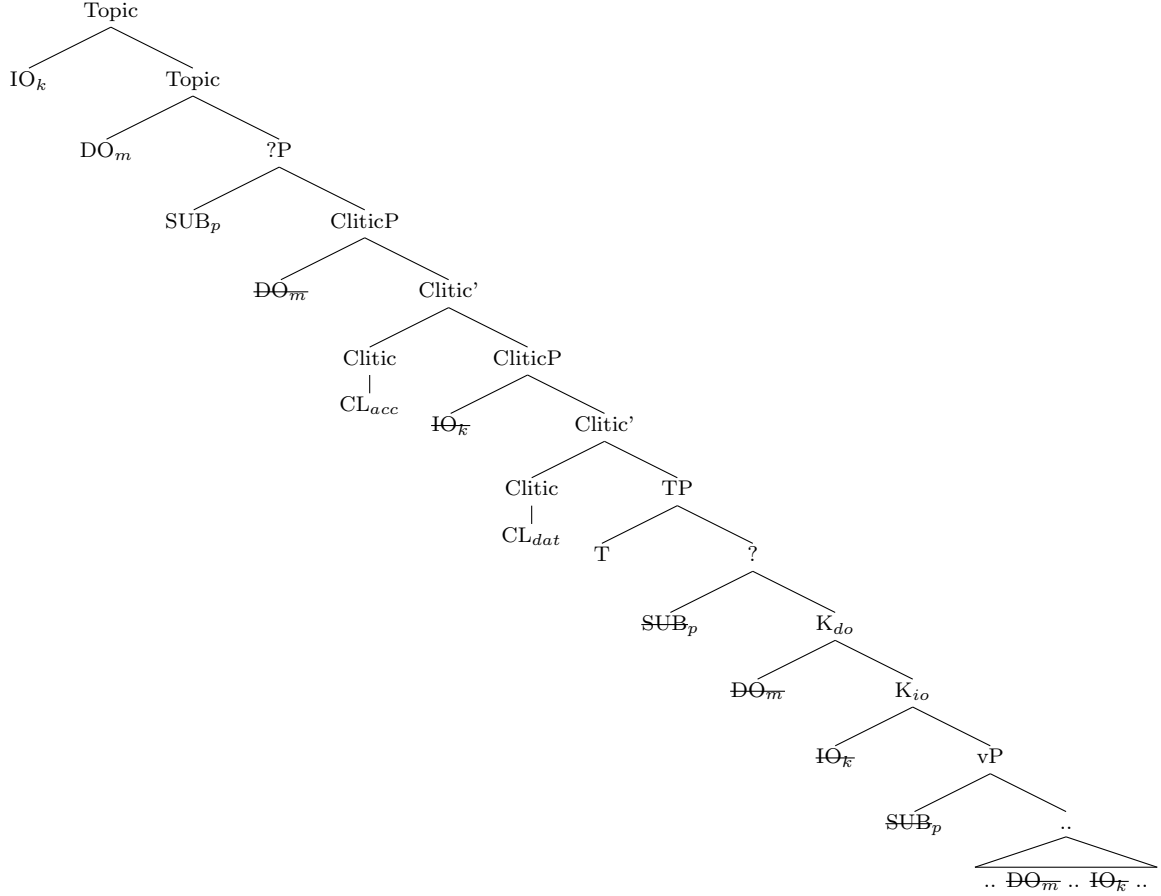
³³ If there is a *person applicative head* for Datives, as mentioned in section 8.4, its projection should be located between K_{DO} and K_{IO} .

³⁴ Plain arguments that undergo Focus movement should also transit through these low case positions, like CLLD-ed arguments. Nonetheless, if CLLD of a direct object can bleed Condition C with a dative clitic because of movement through these low positions, Principle C should also be bled in Focus movement. This prediction is not borne out, as shown below. More research is needed to sort this out.

(i) *To vivlio tu Jorghu_i tu_i epistrepsi i Maria
the book of-the George 3.S.M.DAT. returned the Maria
‘George’s book Maria returned to him’

³⁵ We have not discussed clitic doubling per se - but cf. footnote 11 - nor have we Harizanov’s 2014 proposal about clitic doubling. This proposal postulates two distinct entities - two chain links one of which is realized as a clitic which is m-merged as in Matushansky (2006). As discussed, the m-merge part is incompatible with our findings but the idea that the clitic spells out a chain link seem compatible with our analysis although challenges remain, e.g. (i) spelling out the realization rules (what determines the morphology of the clitic) and (ii) which chain link is spelled out as a clitic, which one as a full phrase (since movement takes place in several steps) and why.

(64)



Summary: CLLD first moves an DP first to K then to Spec CliticP, then to higher than the subject. The first step to K is A-movement, the second step to Spec CliticP and the third step to the left periphery is A-bar movement. Ignoring possible intermediate structures, this yields the following derivational history, where the dotted lines indicate A-movement steps, and the solid lines A-bar movement steps. Unlike any others, the two Topic positions are unordered w.r.t. to each other. The reconstruction properties observed follow from the A/A-bar nature of the movement steps involved.

Subject: We concluded that Clitic phrases are higher than T and that the clitics they host are not syntactically incorporated. This means that the normal surface position the subject occupies is even higher (?P in the above tree). A plausible option is that of Sportiche (1996b), which takes this position to be that of the specifier of a nominative Clitic Phrase the pronominal head (or specifier) of which is realized as e.g. *il* for definites and as *on* for indefinites.

Clitic ordering: The syntactic structure above puts the CliticP_{Acc} phrase higher than the CliticP_{Dat}. In French, 3rd person clitics are spelled out in the order that the CliticPs are merged i.e. *le_{Acc} lui_{Dat}*, however, the order is reversed in Greek *tu_{Dat} tin_{Acc}*. Given that the CL_{Acc} > CL_{Dat} hierarchical order matches the reconstruction effects in French and Greek CLLD despite the surface ordering of clitics, it may be a universal ordering. This leads to the conclusion that CL_{Dat} undergoes head movement into CL_{Acc}. Such conclusions are consistent with Cardinaletti (2008), which argues that French *le_{Acc} lui_{Dat}* reflects the merge order of the two clitics. They also are consistent with Pescarini's (2016) findings that, in Romance dialects, the CL_{Acc} > CL_{Dat} order exhibits transparent compositional morphophonology, unlike the mirror order. The latter is expected if head movement is taking place to derive the surface order, as suppletion is blocked by intervening maximal projections (cf. Bobaljik 2012).

10 Extension: PP clitics

The discussion in this section focuses on French, since Greek lacks PP clitics.

10.1 Preliminaries

From a variety of standpoints relevant to the present discussion, PP CLLD and PP clitics behave like their DP counterparts. First we saw that all CLLD-ed XPs undergo A-bar movement from a position below the subject. We illustrate this below: in each case, a PP containing a name (not inside an adjunct) coindexed with the subject yields a condition C effect whether or not it is CLLD-ed.

- (65) CLLD-ed GEN. PPs in the scope of an unmoved IO ‘About’ *en*
- a. *Il_j a parlé [du meilleur ami de Jean_j]_k
 He has spoken about the best friend of John
 ‘He has talked about John’s best friend’
- b. *[Du meilleur ami de Jean_j]_k, il_j en_k a parlé
 about the best friend of John, he GEN. has spoken
 ‘About John’s best friend, he has talked’
- (66) CLLD-ed LOC PPs in the scope of an unmoved DO Locative *y*
- a. *Il_j est allé [chez le meilleur ami de Jean_j]_k
 he is gone to the best friend of John
 ‘He is gone to John’s best friend’
- b. [Chez le meilleur ami de Jean_j]_k, il_j y_k est allé
 to the best friend of John, he LOC. is gone
 ‘To John’s best friend, he is gone’

Second, CLLD-ed PPs can reconstruct under the normal surface position of an XP that can bind into them unmoved as shown in examples (24),(25) and (26) repeated below:³⁶

- (67) CLLD-ed GEN. PPs in the scope of an unmoved DO Locative *en*
- a. On a éloigné aucune/chaque fille_j [de son_j meilleur ami]_k
 we have removed no/every girl from her best friend
 ‘We have removed no/every girl from her best friend’
- b. [De son_j meilleur ami]_k, on en_k a éloigné aucune/chaque fille_j
 from her best friend, we GEN. have removed no/every girl
 ‘From her best friend, we have removed no/every girl’
- (68) CLLD-ed GEN. PPs in the scope of an unmoved IO ‘About’ *en*
- a. On a parlé à aucune/chaque fille_j [de son_j meilleur ami]_k
 we have spoken to no/every girl about her best friend
 ‘We have talked to no/every girl about her best friend’
- b. [De son_j meilleur ami]_k, on en_k a parlé à aucune/chaque fille_j
 about her best friend, we GEN. have spoken to no/every girl
 ‘About her best friend, we have talked to no/every girl’
- (69) CLLD-ed LOC PPs in the scope of an unmoved DO Locative *y*
- a. On a conduit aucune/chaque fille_j [chez son_j meilleur ami]_k
 we have led no/every girl to her best friend
 ‘We have led no/every girl to her best friend’
- b. [Chez son_j meilleur ami]_k, on y_k a conduit aucune/chaque fille_j
 to her best friend, we LOC. have led no/every girl
 ‘To her best friend, we have led no/every girl’

Third, the PP clitics *en* and *y* distribute similarly to the DP clitics discussed earlier: in declaratives, they always precede the highest inflected verb of their clause, in the order *y* > *en* (as in: *il y en parlera/ he there of-it will talk*), always follow the 3rd person clitics (as in: *il leur y en parlera/ he to-them there of-it will talk*) and get stranded, order unchanged, in imperative verb raising (as in: *Parlez-y en / (You-pl) Talk there of-it*). In other words, the Clitic Phrases they are each associated with are higher than T, and the clitics are not syntactically incorporated either to

³⁶ This point and the previous one contradict the conclusion in [Cecchetto and Chierchia \(1999\)](#) that CLLD-ed PPs in Italian are base generated in their surface position.

T or V.

10.2 How do CLLD-ed PPs move to their clitics?

The behavior of PPs is illustrated below with PPs corresponding to genitive *en* and locative *y*.³⁷ Begin with a case in which the PP is a complement, here a *from* locative in *move X away from Y*. In (70-a), the surface PP position is c-commanded by the DO (the DO could bind into it) by the DO clitic in (70-b). Such cases are clearly deviant.

(70) CLLD-ed *from* PP with DO

- a. *C'est hier qu'on a éloigné ce crétin_m [du portrait de Jean_m]
it's yesterday that we have moved away this cretin from the portrait of John
'It is yesterday that we moved this cretin away from John's portrait'
- b. *C'est hier qu'on l'_m a éloigné [du portrait de Jean_m]
it's yesterday that we 3.S.M.ACC. have moved away from the portrait of John
'It is yesterday that we moved him away from John's portrait'

The following two examples are the counterparts of (70) with CLLD of the PP.

- (71) a. *C'est hier que [du portrait de Jean_m]_k, on en_k a éloigné ce crétin_m
it's yesterday that from the portrait of John, we GEN. have moved away this cretin
'It is yesterday that from John's portrait we moved this cretin away'
- b. *C'est hier que, [du portrait de Jean_m]_k, on l'_m en_k a éloigné
it's yesterday that, from the portrait of John, we 3.S.M.ACC. GEN. have moved away
'It is yesterday that from John's portrait we moved him away'

Significantly, example (71-a) minimally contrasts with the corresponding dative case as below in (72-a):

- (72) a. C'est hier qu' [aux critiques de Jean_j]_k, elle leur_k a présenté ce crétin_m
it's yesterday that to-the critics of John, she 3.P.M.DAT. has introduced this cretin
'It is yesterday that to the critics of John, she introduced this cretin'
- b. *C'est hier qu' [aux critiques de Jean_j]_k, elle le_m leur_k a présenté
it's yesterday that to-the critics of John, she 3.S.M.ACC. 3.P.M.DAT. has introduced
'It is yesterday that to the critics of John, she introduced him'

What could explain the ill formedness of (71-a)? One possibility could be that the CLLD-ed PPs must A-bar move from below the position of the DO without any A-step, unlike what happens in (72-a). This would be expected since PP movement can't be A-movement. Another possibility would be that A-movement is somehow involved, but with mandatory reconstruction. To discount this possibility, we must explore whether a CLLD-ed PP containing an adjunct is compatible with this adjunct being late merged. If yes, condition C should be bled. This is in fact what we observe:

- (73) a. C'est hier que [du tableau que Jean_m voulait détruire]_k, on en_k a éloigné ce
it's yesterday that from-the table that John wanted to destroy, we GEN. have moved away this
crétin_m
cretin
'It is yesterday that from the painting that John wanted to destroy, we moved this cretin away'
- b. C'est hier que [du tableau que Jean_m voulait détruire]_k, on l'_m en_k a
it's yesterday that from the painting that wanted to destroy, we 3.S.M.ACC. GEN. have
éloigné
moved away
'It is yesterday that from the painting that John wanted to destroy, we moved him away'

As expected then, CLLD of non DPs involve A-bar movement to the left periphery. As a result, we cannot directly document for PPs the existence of an intermediate step to the middle field.

³⁷ We limit ourselves here to Condition C triggered by epithets, which yield sharper judgments.

11 Long Distance CLLD is A-bar movement

We briefly examine long distance CLLD, that is CLLD of an XP to the left peripheral position of a clause distinct than the source clause containing the resumptive clitic. We show that such dependencies display the reconstruction properties diagnostic of movement dependencies.

11.1 Binding Effects

Beginning with pronominal binding, shown here with a CLLD-ed subject in French and an object in Greek, is allowed from a quantifier in a clause higher than the source clause.

- (74) French
- a. [Les critiques de son_j dernier livre]_k, aucun/chaque auteur_j pense qu' elles_k seront ignorées
the criticisms of his last book, no/every author thinks that 3.P.F.NOM. will be ignored
'The criticisms of his last book, no/every author thinks they will be ignored'
 - b. [Les critiques de son_j dernier livre]_k, je pense qu' aucun/chaque auteur_j les_k ignorait
the criticisms of his last book, I think that no/every author 3.P.F.ACC. ignored
'The criticisms of his last book, I think that no/every author has ignored'
- (75) Greek
- a. [Tis fotografies me ton kalitero tu_j mathiti]_k kanenas kathijitis_j den ithele na tis_k
the pictures with the best of-his student no professor not wanted na 3.P.F.ACC.
paralavi amesos
received immediately
'The pictures with his best student, no professor wanted to receive immediately'
 - b. [Tis fotografies me ton kalitero tu_j mathiti]_k i Maria ipe oti kanenas kathijitis_j den ithele
the pictures with the best of-his student the Maria said that no professor not wanted
na tis_k paralavi amesos
na 3.P.F.ACC. received immediately
'The pictures with his best student, Maria said that no professor wanted to receive immediately'

Similarly, a free choice indefinite left peripheral in the main clause can be licensed by an operator in the source clause containing the clitic but not by a lower operator:

- (76) Free choice indefinites are allowed
- a. French
 - (i) [un enfant]_k, il est clair qu' on lui_k dirait qu' il pleut
a child, it is clear that we 3.S.M.DAT. would tell that it is raining
'To a kid it is clear that we would not tell that it is raining'
 - (ii) *[un enfant]_k, il est clair qu' on lui_k a dit qu' il pleuvrait
a child, it is clear that we 3.S.M.DAT. told that it would rain
'To a child it is clear that he told that it would rain'
 - b. Greek
 - (i) [Enos pedju]_k tha tu eleghe psemata oti vrechi
a kid.DAT. would 3.S.N.DAT. he.told.IMPFV. lies that is raining
'To any kid, he would tell lies that it is raining'
 - (ii) [Enos kid]_k tu eleghe psemata oti tha evreche
a kid.DAT., 3.S.N.DAT. he.tell.IMPFV. lies that would rain.IMPFV.
'To a kid, he was telling lies that it would rain'

(76-a-ii) is ungrammatical because the licensing operator *-r-* in *pleuvrait* is not in the source clause containing the clitic from which the indefinite has been dislocated. Similarly, the indefinite in (76-b-i) can be interpreted as free choice indefinite in the scope of *tha* in the source clause. The free choice interpretation is not retained in (76-b-ii) where *tha* is not in the source clause.

Furthermore, Condition C effects are triggered by a pronoun c-commanding the normal surface position of the CLLD-ed constituent: e.g. a pronoun in subject position of the source or a pronoun in a clause higher than the source

clause in the same way as with *wh*-movement.³⁸

(77) French

- a. (i) *[La voisine de Jean_j]_k, il_j dit qu' elle_k est partie
the neighbor of John, he said that 3.S.F.NOM. is left
'John's neighbor he said that left'
- (ii) *[Quelle voisine de Jean_j]_k il_j dit t_k être partie?
which neighbor of John 3.S.M.NOM. said t has left
'Which neighbor of John's did he say that left?'
- b. (i) *[La voisine de Jean_j]_k, je lui_j ai dit qu' elle_k est partie
the neighbor of John, I 3.S.M.DAT. has said that she is left
'John's neighbor, I told him that left'
- (ii) *[Quelle voisine de Jean_j]_k, je lui_j ai dit t_k être partie
which neighbor of John, I 3.S.M.DAT. has said t has left
'Which neighbor of John's, did I tell him that left?'
- c. (i) *[La voisine de Jean_j]_k, on a dit qu' il_j la_k rencontrait souvent
the neighbor of John, we said that he 3.S.F.ACC. met often
'The neighbor of John's we said that he met often'
- (ii) *[Quelle voisine de Jean_j]_k, on a dit qu' il_j rencontrait souvent t_k
which neighbor of John, we said that he met often t
'Which neighbor of John's did we say the he met often?'

(78) Greek

- a. (i) *[Tin jitonisa tu Jorghu_j]_k, pro_j ipe oti pro tin_k misi
the neighbor of-the George, he said that he 3.S.F.ACC. hates
'George's neighbor he said that he hates'
- (ii) *[Pja jitonisa tu Jorghu_j]_k, pro_j ipe oti pro t_k misi
which neighbor of-the George he said that he t hates
'Which neighbor of George's did he say that he hates?'
- b. (i) *[Tis jitonisas tu Jorghu_j]_k, pro_j ipe oti i Maria dhen tis_k milai
the neighbor of-the George, he said that the Maria not 3.S.F.DAT. talks
'To George's neighbor he said that Maria does not talk'
- (ii) *[Pjas jitonisas tu Jorghu_j]_k, pro_j ipe oti i Maria dhen t_k milai?
which neighbor of-the George, he said that the Maria not t talks
'To which of George's neighbor did he say that Maria does not talk?'
- c. (i) *[Tin jitonisa tu Jorghu_j]_k, pro tu_j ipa oti pro tha tin_k anagnoriso
the neighbor of-the George, I 3.S.M.DAT. told that I will 3.S.F.ACC. recognize
amesos
immediately
'George's neighbor, I told him that I will recognize immediately'
- (ii) *[Pja jitonisa tu Jorghu_j]_k, pro tu_j ipes oti pro tha t_k anagnoriso
which neighbor of-the George, you 3.S.M.DAT. told that I will 3.S.F.ACC. recognize
amesos
immediately
'Which of George's neighbor, did you tell him that I will recognize immediately?'

Consequence #4: Examples (74), (75) and (76) show that long movement **can** totally reconstruct. The Condition C effect in (77) and (78) shows that long distance CLLD **must** always be A-bar movement from inside the source clause.

11.2 Parasitic Gaps

Agreeing with Iatridou (1995) for Greek, p(arasitic) g(ap) licensing takes place with CLLD. There is a clear contrast (possibly overstated as ✓ vs. *) between (79-a) and (79-b). Iatridou had concluded that CLLD is not movement in (79-a) and is in (79-b). But we can interpret the data differently: DO can routinely c-command into adjuncts (in

³⁸ See section 13, Remark #1.

addition to which CLLD (of an DO) involve an A-movement step to the clitic) so the licensing configuration is not present in (79-a). But it is in (79-b): the addition of the intensifier *soi-même* in the adjunct guarantees that its subject is controlled by the matrix subject, hence that the adjunct is in the main clause.³⁹

- (79) DO
- a. *Jean, on_k le [critique souvent] [sans PRO_k jamais nommer pg]
 Jean we 3.S.M.ACC. criticize often without PRO ever naming pg
 ‘Jean, we criticize often without ever naming’
 - b. Jean, [on_k [veut toujours que tu l’ invites] [sans PRO_k jamais inviter soi-même_k]]
 Jean, people want always you to 3.S.M.ACC. invite without PRO ever inviting themselves
 ‘Jean, people always want you to him invite without ever inviting themselves’

The same facts hold of Greek, as reported in (Iatridou, 1995, 40-41):

- (80) a. *Ton Jani i Maria tha ton padrefti [choris na aghapa]
 the John the Maria will 3.S.M.ACC. marry without na love
 ‘John, Maria will marry without loving’
- b. ?Ton Jani i Maria ipe [choris na aghapa] oti tha ton padrefti
 the John the Maria said without na love that will 3.S.M.ACC. marry
 ‘John, Maria said that without loving she will marry’
- c. *Ton Jani i Maria ipe oti tha ton padrefti [choris na aghapa]
 the John the Maria said that will 3.S.M.ACC. marry without na love
 ‘John, Maria said that she will marry without loving’

PPs do not license pgs, but we concluded that IOs can A-move so they *can* be analyzed as Case marked DPs (cf. Vergnaud, 1974). And indeed, *wh*-moved IOs license pgs and CLLD of IOs can license pgs the same way DOs do (note that (81-b)a is fine without pg - i.e. with the IO in the adjunct interpreted as unbound):⁴⁰

- (81) a. À qui fais-tu faire des courses t sans jamais donner de liste pg
 who have-you run errands t without ever giving a list (to) pg
 ‘Who do you have to run errands without ever giving a list to?’
- b. (i) *À Jean, on lui [[fait faire des courses t] [sans jamais donner de liste pg]]
 To Jean, we 3.S.M.DAT. have run errands t without ever giving a list pg
 ‘Jean, we have to run errands without ever giving a list to’
- (ii) À Jean, on [essaye de lui faire faire des courses t] [sans jamais donner de conseils
 to Jean, we [try to 3.S.M.DAT. have run errands t] [without ever giving advice
 pg]
 pg]
 ‘Jean, we try to have run errands without ever giving advice to’

In sum, we find that long distance CLLD shows reconstruction possibilities, condition C effects and licenses parasitic gaps, all supporting the conclusion that it is a movement relationship from the source clause containing the resumptive clitic to the surface left peripheral position in a different clause.

11.3 Relativized Minimality for A-movement

In previous sections we witnessed several instances of A-movement crossing over c-commanding A-positions. To mention a few, direct and indirect objects were shown to undergo A-movement to the middle field moving across the subject in Spec vP. Similarly, direct objects were shown to undergo A-movement across the highest A-position of the dative indirect object clitic, bleeding Condition C (cf. Section 8.1). Normally, these movement steps would have to be precluded as violations of well-known locality constraints such as Rizzi’s (1990b) Relativized Minimality or the Minimal Link Condition in Chomsky (1995).

In previous literature what looks like A-movement across an A-position has been argued to be possible via smuggling of the internal argument across the subject (as in causative constructions, cf. Kayne, 1975, or passives, cf.

³⁹ It should be possible to license pgs in single clauses if the adjunct containing the pg is high enough. But we have been unable to find felicitous examples in French (same with *wh*-movement of subjects).

⁴⁰ For datives, there has to be a Case match between the real gap and the pg. Unclear what happens for Accusatives/Nominatives.

[Collins, 2005](#)). It is conceivable that smuggling is involved in all these movement instances. An alternative would be to relativize Minimality in the case of A-movement so as to allow this type of movement. Further research is needed to decide.

12 Concluding Remarks

Probing interpretive properties, we showed that CLLD-ed XPs undergo several (A- or A-bar) movement steps through middle-field specifiers that are hierarchically organized as ACC>DAT. We propose this hierarchy as a candidate for a more general, perhaps universal structural principle, as it was shown to be responsible first, for interpretive effects in French and Greek CLLD and second, for the surface order of direct and indirect object clitics in French and Greek and the properties of the resulting clitic string. Clitics were also argued to merge as heads above T, attracting an agreeing XP. This XP rather the clitic itself is responsible for the binding relations clitics look like they enter into as clitics are not pronouns. This XP was shown to be allowed to undergo total reconstruction, if the doubling clitic is an accusative clitic. Dative clitics are different (at least in French) because they have extra interpretive import limiting the scope possibilities of their associate XP. Lastly, given the numerous instances of A-movement taking place across A-positions, a Relativized Minimality approach to A-movement seems required in some form.

As stated at the outset, it seems remarkable that the very complex array of distributional and interpretive data we have discussed can be straightforwardly accounted within a parsimonious set of assumptions at every level: transparent interfaces, economy of tools. In our view, this very much strengthens the validity of these assumptions.

Still, a number of questions arise in light of these findings: (i) is movement to the middle field required in other doubling phenomena such as Clitic Right Dislocation or Clitic Doubling? (ii) is there evidence for the ACC>DAT hierarchy in other functional domains? (iii) and if the latter proves to be true, why does this hierarchy posit this particular order? What is wrong with the reverse? We believe these are interesting directions that future research on doubling phenomena could explore. Finally, there is substantial literature on clitic interactions particularly literature on the P(erson) C(ase) C(onstraint) (e.g. [Béjar and Rezac 2003](#) or [Anagnostopoulou 2005](#)). Our conclusions suggest that these analyses should be cast or recast without losing their insights as involving not a clitic interaction but an interaction between their associates attracted to Clitic Phrases. This seems to us possible but is left here for a future project.

13 Appendix

13.1 Further Remarks on Reconstruction: controlling for Condition C

Condition C (always use CLLD (=contrastive Topic) intonation or embedded Topics). To evaluate condition C, there are a number of confounds to avoid, some of which mentioned in the course of what precedes. It is best to avoid accent on the pronoun (focus or contrast) as this can meliorate condition C effects. The most important precaution is to compare pairs of sentences of similar structure and complexity, one potentially violating condition C the other not, or both potentially violating Condition C, one already reported as such, the other being evaluated, that is pairs as minimally distinct as possible.

1. Benchmark for Condition C star. For simple cases (French (82), Greek (83)):

- (82) a. *quelle photo de Jean_k (de son enfance) il_k vend
which picture of John (from his childhood) he sell
'Which picture of John from his childhood does he sell?'
b. *quelle photo de Jean_k (de son enfance) tu lui_k a montrée
which picture of John (from his childhood) you 3.S.M.DAT. show
'Which picture of John from his childhood did you show to him?'
- (83) a. *pja fotografia tu Yorghu_k (apo tin pedhiki tu ilikia) pro_k pulise
which picture of-the George (from his childhood) he sold
'Which picture of George from his childhood did he sell?'
b. *pja fotografia tu Yorghu_k (apo tin pedhiki tu ilikia) pro tu_k edhikses
which picture of-the George (from his childhood) you 3.S.M.DAT. showed
'Which picture of George from his childhood did you show to him?'

2. For example, when evaluating the complement/adjunct asymmetry, it is important to keep the linear distance between the pronoun and the name as constant as linear distance lessens condition C effects (Adger et al., 2017).
3. Condition C effects decay with distance (both structurally and linearly, cf. Adger et al., 2017). Embedded cases (French (84-a), Greek (84-b)) are perceived as less deviant than simple cases above but as equally deviant as each other:

- (84) a. *quelle photo de Jean_k (de son enfance) tu penses qu'il_k a vendue
which picture of John (from his childhood) you think that he sold
'Which picture of John from his childhood do you think that he sold?'
b. *pja fotografia tu Yorghu_k (apo tin pedhiki tu ilikia) pro nomizis oti pro_k pulise
which picture of-the George (from his childhood) you think that he sold
'Which picture of George from his childhood do you think that he sold?'

13.2 Comparing approaches to the syntax of clitics

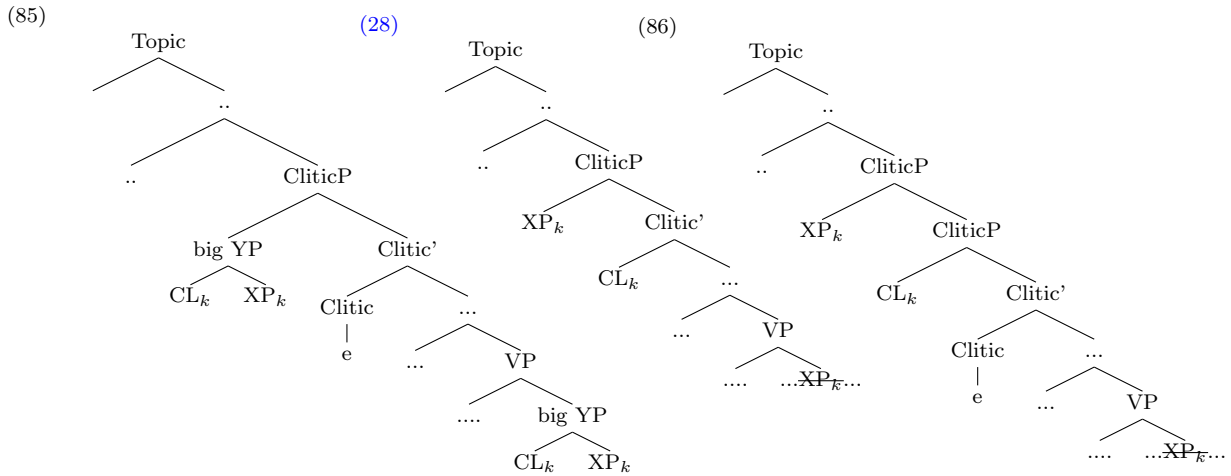
Clitic movement: There is a movement dependency between the position in which a clitic appear and the corresponding argument or modifier positions. It is quite difficult to decide whether such a movement dependency involves movement of a clitic, rather than movement of something else to the clitic. Let us assume for the sake of discussion, that it is movement of the clitic. What kind of movement dependency would it be? We conclude it is phrasal movement, fundamentally on locality grounds: we assume that non phrasal movement, either feature movement (if it exists at all, actually a doubtful assumption) or head movement are strictly bounded in a way that is simply incompatible with the distribution of clitics. We thus reject such analyses as expounded in (Roberts 2010, Preminger 2017) or feature movement (cf. Anagnostopoulou 2003, Marchis and Alexiadou 2013). The burden on such analyses is to show either that the formal devices used (e.g. feature movement, long head movement) are indeed needed, a motivation lacking credibility (see e.g. Cardinaletti 1997, for problems with feature movement, and work on remnant movement for long head movement), and to show that what motivates the head movement constraint can be accounted for, accounts also lacking at present.

Big DP analyses: Assuming a big DP analysis, clitic movement must be involved. How can such a movement proceed? Big DP analyses must postulate a relation between the clitic CL and its associate XP forming a big DP together. This relation has been postulated to either a head (CL) complement (XP) relation [CL XP]_{bigDP}, or a

relation between two phrases [[CL]_{DP} XP]_{bigDP}.⁴¹

If CL is a head taking XP as complement, CL cannot subextract except as a head. This contradicts the conclusion above so the clitic cannot move independently of XP. To get the clitic to end up in CliticP and XP higher, the big DP must move as a whole to CliticP, followed by subextraction of the XP as shown below in (85).⁴²

If both XP and CL are (independently) phrasal [CL XP]_{bigDP}, we assume that simultaneous subextraction of CL and of XP is prohibited on general grounds by constraints on movement,⁴³ so either one must move out of the big DP and the big DP moves containing its trace and the other. If CL moves by itself, CLLD will have to move the *big DP* containing XP and the trace of CL: this wrongly predict that CLLD must reconstruct to below CL to avoid a proper binding violation of the CL trace. The same prediction is made if XP moves alone first, and the CL is pied piped by the movement of *big DP* containing the trace of XP. Since XP ends up higher than CL, it should have to reconstruct below CL, contrary to fact.⁴⁴ Under a big DP approach, the only derivational option left is given below in (85), adjacent to the CliticP option (28) discussed earlier:



We return now to some of the questions discussed in the text, refining our conclusions:

1. How are clitics first merged, and built, if complex?
2. Are clitics heads or specifiers? Everything said is compatible with clitics being either heads as in (28) or ending up as phrasal specifiers of silent heads attracting as second specifier the associate XP of the clitic as in the leftmost tree above. As we discuss below, there may be advantages to having both options simultaneously available .
 - a. If clitics originate high, and mandatorily attract their associate DPs, the difference in clitic heights can be stipulated directly. If clitics originated low in argument position in *big DP* configurations moving as shown in the leftmost tree above, we still need hierarchically organized designated landing sites for them, to handle the relative height effects documented in section 8.

⁴¹ A subset (CL) superset (XP) relation is sometimes postulated as in Van Craenenbroeck and Van Koppen (2008), [X.. [CL]_{XP} but this is not plausible for French or Greek as the Clitic is a (high) determiner. At any rate, this version - XP contains the clitic as a substructure - is untenable for CLLD as the clitic ends up structurally lower than XP and, as we have shown, XP needs not reconstruct despite the fact that it contains the trace of CL: this violates proper binding.

⁴² Or via a more complicated derivation involving first subextraction of XP followed by remnant movement of the big DP.

⁴³ This holds if e.g. one in the specifier of some head and the other part of the complement structure of this head, or if they are in an adjunction relation.

⁴⁴ Such an analysis is found for instance in Cecchetto (2000) for Italian: CLLD in Italian is argued to be a movement dependency in which the CLLD-ed DP is base generated in an (argumental) *big DP* configuration as in (i). The dislocated DP directly moves to the left periphery from DP3 (inside the big DP) to DP1, and the big DP subsequently undergoes (countercyclic) A-movement to the middle field (that is to bigDP₂ in AGRP).

(i) [TOPICP DP1 [AGRP S ... bigDP2 ... [VP ... [bigDP DP3 CL]]]]

Cecchetto (2000) also assumes that A-movement cannot reconstruct, a conclusion that appears to be incorrect on general grounds and incompatible with the pattern of data we found.

- b. Clitics can be morphologically complex (see [Cardinaletti and Starke \(1999\)](#)). This could mean that they are first merged, or built, as specifiers to their designated heads. But not always as [Cardinaletti \(2010\)](#) writes:

“...two morphological classes of clitic pronouns, namely morphologically simple and morphologically complex clitic pronouns, should be distinguished: the former class consists of only one morpheme, the latter of two (or more) morphemes. On the basis of Italian data, I show that the two types not only differ in their morphological make-up, but also in their syntactic behaviour: while morphologically simple clitic pronouns can enter clitic clusters without any restrictions, morphologically complex ones cannot appear as the first element of true clitic clusters (but can occur in split clitic configurations, ([Kayne, 1994](#), p.21))...” This suggests a difference between head clitics (they can incorporate to the left of clusters) and phrasal clitics (they can’t).

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