

Subject Clitics and (Complex) Inversion

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Jamais des observations isolées, faites suivant les vues particulières de chaque observateur, ne peuvent remplacer un système de recherches, s'étendant sur les différents points du globe où les sciences ont pénétré, embrassant non la durée active de la vie d'un seul homme, mais celle de plusieurs générations.

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1 On the syntax of questions in French

As has often been noted in the generative literature over the last 30 years (see e.g. Kayne 1972; 1975; and their references), the syntax of yes/no and *wh*-questions in Modern French is bafflingly rich; whereas “well-behaved” languages like English treat their subjects, auxiliary verbs, and *wh*-phrases in all question types in a uniform fashion, as (1) shows, French has a much more intricate system that distinguishes syntactically pronominal subjects and non-pronominal subjects (cf. (2) vs. (4)), *wh*-questions and yes/no questions (cf. (3) vs. (4)), and different types of *wh*-words (cf. (5) vs. (6)):

- (1) a. (When, who) will {Yves, he} phone?
 b. I don't know whether/when/who Yves/he will phone
 c. *I don't know whether/when/who will Yves/he phone
- (2) a. (Quand) va-t-il téléphoner?
 when will-t-he phone
 b. *(Quand) va(-t-) {Yves, cet homme} téléphoner?
 when will(-t-) {Yves, this man} phone
 c. Quand va téléphoner {Yves, cet homme}?
 when will phone {Yves, this man}
 d. *Quand va téléphoner il?
 when will phone he
 e. À qui pense-t-il téléphoner?
 to who thinks-he (to).phone
 f. *À qui pense(-t-) {Yves, cet homme} téléphoner?
 to whom thinks {Yves, this man} (to).phone
 g. À qui pense téléphoner {Yves, cet homme}?
 to whom thinks to.phone {Yves, this man}
 h. *À qui pense téléphoner il?
 to whom thinks to.phone he
 i. Quand téléphoner a*(-t-)il?
 when will.phone* (-t-)he
 j. Quand téléphoner a*(-t-) {Yves, cet homme}?
 when will.phone (*-t-) {Yves, this man}
- (3) a. Va-t-il téléphoner?
 will-t-he phone
 b. *Va téléphoner {Yves, cet homme}?
 will phone {Yves, this man}
- (4) a. Je ne sais pas {quand, à qui} il va téléphoner
 I don't know {when, to whom} he will phone
 b. Je ne sais pas {quand, à qui} Yves va téléphoner
 I don't know {when, to whom} Yves will phone
 c. *Je ne sais pas {quand, à qui} va-t-il téléphoner
 I don't know {when, to whom} will-he phone

- d. Je ne sais pas {quand, à qui} va téléphoner {Yves, cet homme}
I don't know {when, to whom} will phone {Yves, this man}
- (5) a. {A qui, quand}, à ton avis, a téléphoné Yves?
{to whom, when}, in your opinion, has phoned Yves?
b. {A qui, quand}, à ton avis, a-t-il téléphoné?
{to whom, when}, in your opinion, has-t-he phoned?
- (6) a. *Que, à ton avis, lui a téléphoné Yves?
what, in your opinion, to.him has phoned Yves?
b. *Que, à ton avis, lui a-t-il téléphoné?
what, in your opinion, to.him has-t-he phoned?

(2a) versus (2b), and (2e) versus (2f), show that an auxiliary verb like *aller* or a main verb like *penser* can “invert” with pronominal subjects like *je*, *tu*, *nous*, *vous*, *il(s)*, and *elle(s)*, which thus come to precede infinitives or participles, although they cannot “invert” with non-pronominal proper nouns like *Yves*; on the other hand, (2c) versus (2d), and (2g) versus (2h), show that a proper noun like *Yves* and a full DP like *cet homme*, unlike pronominals like *il*, can occur in postinfinitival or postparticipial position.

In sentences with only one finite main verb like (2i)–(2j), the pronominal versus non-pronominal subject distinction shows up in another guise; third-person pronouns *il(s)* and *elle(s)* require the presence of the so-called *epenthetic* “-t-” that full NPs like *Yves* ban, even though *il* and *Yves* are minimal pairs phonologically ([il] vs. [iv]) and differ only in their final consonant, which simply could not be responsible for the required presence or absence of -t-.

Taking up a time-honored terminology (the justification of which we come back to presently), let us say that sentences like (2a), (2e), and (3a) are cases of Subject Clitic Inversion (SCLI) and (2c), (2g), and (4d) are cases of Stylistic Inversion (SI); facts like (1) to (4) show, then, that SCLI is restricted to main (yes/no or *wh*-) questions, while SI is restricted to (“local”; see Kayne and Pollock 1978; 2001, sect. 18) *wh*-contexts and can (optionally) occur in embedded clauses.¹

In addition to SCLI and (some; see note ²) SI sentences, French and Valdôtain² have a third type of monoclausal interrogative construction, the so-called complex inversion (CI) (see Kayne 1972; 1983; Rizzi and Roberts 1989;³ Roberts 1993a), which neither English nor most of the other Romance languages have; CI is exemplified in (7):

- (7) French
- a. (Quand) {Yves, cet homme} va-t-il téléphoner?
(when) {Yves, this man} will-t-he phone
- b. (A qui) {Yves, cet homme} va-t-il téléphoner?
(to whom) {Yves, this man} will-t-he phone
- Valdôtain, Aoasta
- c. Martin mindze-të de seuppa?
Martin eats-he the soup
- Valdôtain, St Nicholas
- d. Pequè lo mèinô medze-t-i la pomma?
why the child eats-t-he the apple

This construction has a number of very unexpected properties, especially (though not exclusively) for speakers of the Germanic languages, the most striking of these being that the subject is sandwiched between the *wh*-item and the inflected verb and “doubled” by an enclitic subject that shares all the properties such postverbal subject clitics display in the SCLI structures mentioned above.

As a “hors d’oeuvre” to our work, let us now provide a brief overview of the chief properties of CI.

1.1 Monoclausality

The first property worthy of note is that CI is a monoclausal construction, on a par with SI (on which see Kayne and Pollock 2001) and SCLI. In particular, it does not involve any extra layer of sentential subordination unlike the “est-ce que/qui” questions in (8) that, despite their interpretation, are arguably derived from clefts (see Obenauer 1981; 1994; Munaro and Pollock 2005):

- (8) a. (Quand) est-ce que {Yves, cet homme} va téléphoner?
 (when) is-it that {Yves, this man} will phone
 b. (A qui) est-ce que {Yves, cet homme} va téléphoner?
 (to whom) is-it that {Yves, this man} will (he) phone
 c. Qui est-ce qui a téléphoné?
 who is-it that has phoned

1.2 *Wh*-phrase > subject DP order

Taking a bird’s-eye view of CI constructions like (7), one might naturally be tempted to analyze it as a variety of left dislocation constructions. However, the second noteworthy property of CI makes any such take on (7) and the like impossible: as has been repeatedly emphasized in the literature (cf. e.g. Kayne 1972; 1983), it contrasts sharply with clitic left dislocations like (9) in terms of the position DPs like *Yves, cet homme*, and so on stand with respect to the *wh*-phrase:

- (9) a. {Yves, cet homme}, (Quand) va-t-il téléphoner?
 b. {Yves, cet homme}, (A qui) va-t-il téléphoner?

1.3 Prosodic contour

In addition, CI like (7) do not show any intonational break between the subject DP and the rest of the clause, unlike what obtains in (9), where there is a prosodic break between the dislocated DP and the rest of the sentence, indicated by the comma.

1.4 Type of subject DP

This prosodic property should be seen in the same light as our fourth fact: in CI constructions, quantified DPs like *tout le monde* and *chaque homme*, and bare QPs like *tout* and *rien*, can occur in the preverbal position in (7), though they are banned in the CLLD position preceding the (optional) *wh*-phases of (9), as (7’) and (9’) show:⁴

- (7') a. Pourquoi rien ne s'est-il passé?
 why nothing ne REFL-is-it happened
 'Why has nothing happened?'
- b. Pour qui tout est-il toujours un problème?
 for whom all is-it always a problem?
- (9') a. *Rien, pourquoi ne s'est-il passé?
 nothing, why ne REFL-is-it happened?
- b. *Tout, pour qui est-il toujours une problème?
 all for whom is-it always a problem?
- c. *Tout le monde, pourquoi est-il parti?
 everybody why is-he gone?
- d. *Chaque homme, pourquoi n'aime-t-il pas la linguistique?
 every man, why ne.likes-he not linguistics

This section and section 1.3 show beyond any doubt that, although CI and left dislocation do share the superficial property that their preverbal subject has a subject clitic copy, CI cannot be a case of clitic left dislocation. It would thus appear that *Yves* and *cet homme* in (7) and the like stand in much the same position as the "ordinary" subjects of embedded questions like (10):

- (10) a. Je ne sais pas quand {Yves, cet homme} va téléphoner
 I do not know when {Yves, this man} will phone
- b. J'ignore à qui {Yves, cet homme} va téléphoner
 I don't know to whom {Yves, this man} will phone
- c. On voudrait savoir pourquoi rien ne s'est passé
 one would like to know why nothing happened
- d. Dis moi pour qui tout est toujours un problème
 tell me for whom everything is always a problem

Put in another way, elementary facts like (7) versus (8), or (7') versus (8'), provide fairly direct evidence that the position in which *Yves*, *cet homme*, *tout*, and *rien* are standing in (7) and (7') is closer to the "ordinary" subject position of simple statements like (10a)–(10c) than to the CLLD position of (11d)–(11f):

- (11) a. {Yves, cet homme,} va téléphoner,
 {Yves, this man,} will phone
- b. Rien ne s'est passé,
 nothing happened
- c. Tout est toujours un problème pour Paul.
 everything is always a problem for Paul
- d. {Yves, cet homme,} il va téléphoner
 {Yves, this man,} he will phone
- e. *Rien, il ne s'est passé.
 nothing, it happened
- f. *Tout, il est toujours un problème pour Paul.
 everything, it's always a problem for Paul

1.5 Sensitivity to main versus embedded status

Still, the idea that the preverbal subject in CI cases is located in the ordinary subject position of affirmative clauses is easily demonstrated to be false by its fifth property, which it shares with SCLI but not with SI or, of course, simple statements like (11a)–(11c): it is restricted to root interrogative⁵ contexts:

- (12) a. *Je ne sais pas quand Yves va-t-il téléphoner?
I don't know when Yves is-he-going to.phone
b. *Dis-moi à qui Yves va-t-il téléphoner?
tell-me when Yves is-going to.phone
c. *L'homme à qui Yves va-t-il téléphoner s'appelle Jean
the.man to whom Yves will-he phone is.called Jean
d. *C'est Jean à qui Yves va-t-il téléphoner
it's Jean to whom Yves will-he phone

As standardly assumed for both residual and fully fledged V2 constructions, this main versus embedded asymmetry suggests that CI (on a par with SCLI) involves a verb-like movement blocked in subordinate contexts in addition to optional *wh*-movement.

The five properties we have just singled out in sections 1.1 through 1.5 must be accounted for by any theory of CI. In addition, CI raises at least two fundamental theoretical problems that cry out for a principled account if it is to be integrated into the overall picture of interrogative syntax that has been building up in generative grammar for at least 40 years.

The first problem is easily formulated: what is the status of the position of the preverbal subject DP? Clearly the fact that it can host any type of subject, including bare quantifiers and indefinites, shows that it is not one of the “ordinary” topic positions we know exist in the CP area. That fact suggests rather that it is an “ordinary” subject, that is, the Specifier of some inflectional head, *t(ense)*, and/or *agr(ement)* (see Pollock 1989 and below). And yet the fact that it can only surface in that position in main interrogative clauses and is excluded – together with its associate clitic – in embedded questions shows that it cannot be an ordinary subject after all. If it is neither of these two entities, what is it then? Under the standard analysis of SCLI (which should evidently be a subcomponent of any analysis of CI), typically viewed as involving head movement of V° to C° , the DP subject of CI would have to be moving from SpecInfl to some Spec(ifier of) C position lower than the landing site of *wh*-items and phrases. This, however, is not without problems, since we do not know what status this additional position might have in the inventory of the layers active in the CP area. This problem is all the more acute as we know, as pointed out above, that the DP subject of CI does display typical properties of IP internal subjects.

The second theoretical problem we shall have to face is conceptually related to the first, though it is technically distinct. We must characterize the clitic doubling at work in CI. As already implicitly stated, such doubling is otherwise only attested in French in clitic left dislocations, with the corresponding ban on quantified DPs and bare quantifiers. CI doubling, on the other hand, should rather be viewed in the same light as pronominal doubling in languages like Spanish or Romanian,

where DPs in an argument position can be associated with pronominal clitics under various restricting conditions. In such analyses, the resumptive clitic is either viewed as an expletive or an agreement morpheme (as originally proposed for Spanish doubling by Jaeggli 1982) or it and its associate DP start out as a complex DP and “scatter” in the course of derivation (see among others Kayne 1975; Uriagereka 1995; Poletto 2008). Our problem is thus easily stated: is “doubling” in CI to be seen as an instance of the first type or of the second type of construction, or should it rather be seen as a completely different beast?

The explanatory task of the linguist attempting to shed light on CI is thus by no means trivial: he must account for the properties shared by CI and SCLI – in particular, he must offer an account of the two constructions that explains their common restriction to root (interrogative) contexts, say why both require what we have dubbed *epenthetic -t-* on the finite verb with postverbal third-person pronouns. In addition, he should explain why the postverbal position of CI and SCLI is restricted to pronouns. Finally, since the preverbal subject is not a topic-like element, he should explain why doubling is allowed at all and why the preverbal subject shares so many properties with the ordinary subject of affirmative clauses. In short, he should somehow capture the traditional grammarians’ intuition that CI is at the same time a “non-inverted” structure. In addition, he should also say in what way and why CI and SCLI differ from SI.

We shall try to do justice to all of these problems in the present chapter. Before doing so, we would like to sketch out briefly in what way and why we feel past analyses have failed to provide convincing answers to them.

As we shall see below, there are two main types of approach to CI. One line of enquiry claims that the DP-V-cl. order of CI does not follow from any *overt* syntactic movement to the CP field (see e.g. Sportiche 1993). It is fair to say, and easy to see, that all such approaches have a hard time explaining why CI is restricted to root interrogative contexts and why in such root contexts CI – and SCLI – are banned if a complementizer is present.

The second line of enquiry does view the CI configuration as resulting from movement to the CP field, thus solving that first problem along lines that have been advocated since at least den Besten (1983). The idea that the finite verb moves to some C° position as a head is common to all analyses of this type we are familiar with. All of them therefore presuppose that the accusative, dative, locative, partitive, and negative clitics that may be dragged along with the verb in CI and SCLI derivations must be prefix-like entities syntactically. We shall show in this chapter that object clitics cannot be adequately characterized in those terms, which is enough, we believe, to put a nail in the coffin of all such attempts.

Rizzi and Roberts (1989) is a particularly influential and elegant illustration of this line of enquiry, and it deserves further comments. One interesting feature of the article is that it merges the two subjects of CI in two different positions: the DP subject in SpecVP and the subject clitic in the higher SpecInfl position. Both move to their final position for case-checking reasons. The full DP moves to an A-like SpecC’ position to the left of, and governed by, the nominative case assigner, Infl. As for the clitic, its incorporating into the verb checks off its case feature, à la Baker (1988). On its way to SpecC’, DP skips the clitic, in violation of binding theory principle A since its trace is an anaphor. However, the intervening clitic does locally bind that trace, thus saving

the structure representationally, though not derivationally. Despite its cunning, it is fair to say that most contemporary work would shun this way of maneuvering around minimality violations, particularly in the present dominant highly computational framework of generative grammar. Also, the article makes use of a directionality of case assignment parameter that would no longer be entertained by most comparative syntacticians. Finally, Rizzi and Roberts (1989) share with Kayne (1983) the crucial assumption that the subject clitic is an expletive. We shall show in this chapter that this is incorrect: not only would the putative expletives of complex inversion have to agree with the preverbal subject DP in person and number, but also they would have to be possibly first and second person, which, we believe, is unheard of in expletives.

Yet, in agreement with this second line of enquiry, we shall claim with Rizzi and Roberts (1989) that there is indeed movement to the CP field of the finite verb and its accompanying clitics, but we shall claim that that movement must be phrasal. Orthogonally but importantly, we shall make crucial use of an idea first put forward by Kayne (1972), though not adopted by Rizzi and Roberts, that the preverbal DP and its associate clitic are merged as a unit, known in the literature as “big” DP, though it probably is just a standard DP where the clitic instantiates a functional projection of the DP spine.

As its title indicates, the main feature of the analysis to be developed in this chapter will thus consist in claiming that the displacements to the left periphery at work in CI and SCLI share one important property with the computations that yield SI configurations on the analysis of Kayne and Pollock (2001): they are yet another instance of Remnant IP Movement to the Comp area. Sections 2, 3, and 4 lay the groundwork by providing an analysis of subject clitics and an account of their non-occurrence in SI. Sections 5 and 6 will introduce the Remnant Movement analysis of SCLI and CI and show in what way it is superior to previous head movement analyses, whether taken to involve overt or covert computations to the left periphery; section 7 will develop an account of the morphology–syntax interface in SCLI and CI that will shed light on further properties of these constructions in French and Valdôtain and explain why the two constructions yield the spell-out strings that they do. Section 8 concludes and summarizes the chapter.

2 Subject⁶ clitics

In saying that paradigms like (2), repeated here:

- (2) a. (Quand) va-t-il téléphoner?
when will-t-he phone
- b. *(Quand) va(-t-) {Yves, cet homme} téléphoner?
when will(-t-) {Yves, this man} phone
- c. Quand va téléphoner {Yves, cet homme}?
when will phone {Yves, this man}
- d. *Quand va téléphoner il?
when will phone he
- e. À qui pense-t-il téléphoner?
to who thinks-he (to).phone

- f. *À qui pense(-t) {Yves, cet homme} téléphoner?
to whom thinks {Yves, this man} (to).phone
- g. À qui pense téléphoner {Yves, cet homme}?
to whom thinks to.phone {Yves, this man}
- h. *À qui pense téléphoner il?
to whom thinks to.phone he
- i. Quand téléphoner a*(-t)il?
when will.phone* (-t)he
- j. Quand téléphoner a(*-t) {Yves, cet homme}?
when will.phone (*-t) {Yves, this man}

show that French SCLI and SI treat pronominal and non-pronominal subjects differently, we have been insufficiently precise, since this terminology would lead one to expect strong –or “tonic” – pronouns like *lui* or *toi* to behave like *il* in SCLI constructions, contrary to facts; such strong pronouns behave exactly like proper nouns and full DPs:

- (13) a. *Quand va {lui, toi} téléphoner?
when will {him, you} phone
- b. *Quand va(-t) {Yves, cet homme} téléphoner?
When will(-t) {Yves, this man} phone
- c. *À qui pense {lui, toi} téléphoner?
to who thinks {him, you} (to).phone
- d. *À qui pense(-t) {Yves, cet homme} téléphoner?
to whom thinks {Yves, this man} (to).phone

Pairs like (12a) versus (13a) and (12e) versus (13c) should, of course, be tied to other well-known differences between the two classes of pronominal forms: *je*, *tu*, *il*, *elle*, *nous*, *vous*, *ils*, and *elles* (also *ce* and *on*)⁷ are nominative *weak* or *clitic* pronouns, while *moi*, *toi*, *lui*, *eux*, and *elles* are strong or tonic pronouns.⁸ Independently of their specific role in SCLI or CI, *je*, *tu*, *il*, *elle*, *nous*, *vous*, *ils*, *elles*, *ce*, and *on* exhibit a number of characteristic properties that distinguish them from strong pronouns (cf. Kayne 1975, sect. 2.4):

1. Unlike strong forms, (nominative) clitics cannot be modified:⁹

- (14) a. Partiront-ils *(deux)?
will.go-they two
- b. Partirez-vous *(autres)
will.go-you others
- c. Ils *(deux) partiront demain
they (two) will.go tomorrow
- d. {Eux, nous} deux partiront(s) demain
{they, we} two will.go tomorrow

2. Unlike strong forms and full DP subjects, they cannot be conjoined:

- (15) a. Partiront-ils *(et elles)
will.go-they.MAS and they.FEM

- b. Viendrez-vous *(et Jean)
will.come-you and Jean)
- c. Ils *(et elles) partiront demain
they.MAS and they.FEM will.go tomorrow
- d. Eux et elles partiront demain
they and they will.go tomorrow
3. Unlike strong forms and full DP subjects, they cannot be felicitous answers to *wh*-questions:
- (16) a. Qui viendra?
'Who will come?'
- b. (i) *il, *tu, *on, (he, you, one)
(ii) lui, nous, vous, Jean (he, we, you, Jean)
4. Unlike strong pronouns and full DP subjects, they cannot be separated from the finite verb by anything except other (accusative: *le, la, les*, etc.; dative: *lui, leur*; subnominal: *en*;¹⁰ or locative: *y*) clitics. So, for example, parentheticals cannot occur in between clitics and the finite verb, while they can intervene between strong pronouns, full DPs, and the finite verb:
- (17) a. *Il, paraît-il, aime la linguistique
he, it-appears, likes linguistics
- b. *Tu, m'a-t-on dit, partiras bientôt en vacances
you, I have been told, will.go soon on vacation
- (18) a. Lui, paraît-il, aime la linguistique
him, it-appears, likes linguistics
- b. Yves, m'a-t-on dit, partira bientôt en vacances
Yves, I have been told, will.go soon on vacation
5. Unlike strong pronouns and full DP subjects, (nominative) clitics cannot occur in clitic left dislocated positions:
- (19) a. *Il, il viendra
he, he will.come
- b. *Tu, tu te trompes
you, you are mistaken
- (20) a. Lui, il viendra
him, he will.come
- b. Toi, tu te trompes
you, you are mistaken
- c. Yves, il est parti en vacances
Yves, he is (=has) gone on vacation
6. Plural nominative clitics trigger obligatory /-z/ liaison with the following finite verb, while ordinary singular /z/ "liaison" is impossible with proper nouns

(cf. (21b)) and plural liaison is never obligatory (cf. (21c)–(21d)); on (21c)–(21d), see note²⁸:

- (21) a. {Ils, elles, nous, vous}*(-z) {ont, avons, avez} compris
 {they, we, you} *(-z) have understood
 b. Yves (*-z) a compris
 Yves (*-z) has understood
 c. Mes amis (-z) ont compris
 my friends (-z) have understood
 d. Eux (-z) ont compris
 them (-z) have understood

3 Subject clitics, strong pronouns, “pro,” and stylistic inversion¹¹

We shall start our analysis of subject clitics with an account of the ungrammaticality of examples like (22):

- (22) a. *Quand va téléphoner il?
 b. *A qui ont téléphoné ils?
 c. *Où ai été je?
 d. *A qui as parlé tu?

which show that they cannot occur in SI; as in Kayne and Pollock (2001, sect. 6), we shall claim that (22) is to be seen in the same light as (19), on the one hand, and gerunds like (23) (= (58) in Kayne and Pollock 2001), on the other:

- (23) a. Jean ayant dit la vérité, tout va bien.
 Jean having told the truth, all goes well
 b. *{Il, tu, je, nous, vous} ayant dit la vérité, tout va bien.
 he, you, I, ...

Our claim is that these facts are tied to the overt case properties of the clitic forms *il(s)*, *elle(s)*, *je*, *tu*, and so on that distinguish them from morphologically caseless strong pronouns like *lui* and *eux*, or full DPs like *cet homme* and *Jean*. We shall suggest further that the case properties of those two different types of pronominal subjects should be tied to the respective syntactic status of the clitic forms and the strong forms: the former are heads, while the latter are phrases.¹²

As noted in Kayne and Pollock (2001, sect. 6), for a number of French speakers SI is compatible with strong *third-person* pronouns when they are accompanied by an explicit pointing gesture.¹³

- (24) a. Qu’a mangé LUI?
 what.has eaten he/him
 ‘What has HE eaten?’
 b. Quand ont téléphoné EUX?
 When have telephoned they/them

Deictic LUI and EUX can also surface in preverbal position:

- (25) a. LUI a téléphoné.
 he/him has telephoned
 b. EUX ont téléphoné.
 they/them have telephoned

First- and second-person strong pronouns are excluded both in postverbal position in SI, even on a strongly deictic use, and in preverbal “canonical” subject position:

- (26) a. *Quand ai téléphoné MOI?
 when have telephoned I/me
 b. *Qu’as mangé TOI?
 what.have eaten YOU
 c. *Quand avez téléphoné VOUS?
 When have telephoned you
 d. *Qu’avons mangé NOUS?
 what.have eaten we/us
- (27) a. *MOI ai téléphoné hier.
 I/me have telephoned yesterday
 b. *TOI as mangé un gâteau.
 you have eaten a cake
 c. *VOUS avez téléphoné hier.
 you have telephoned yesterday
 d. *NOUS avons mangé un gâteau.
 we/us have eaten a cake¹⁴

Any analysis of such contrasts should take into account the fact that (27) has an acceptable counterpart with an overt (nominative) subject clitic:

- (28) a. Moi, j’ai téléphoné hier.
 I/me I.have telephoned yesterday
 b. Toi, tu as mangé un gâteau.
 you you have eaten a cake
 c. Vous, vous avez téléphoné hier.
 you you have telephoned yesterday
 d. Nous, nous avons mangé un gâteau.
 we/us we have eaten a cake

The preverbal third-person strong pronouns of (25), although they do not need to, can co-occur with a subject clitic:

- (29) a. Lui, il a téléphoné.
 he/him, he has telephoned
 b. Eux, ils ont téléphoné.
 they/them, they have telephoned

(25) is somewhat *recherché*, whereas (29) is more colloquial. We now claim that (25) contains a covert subject clitic, while (28) and (29) contain an overt one. We can now make use of Kayne and Pollock's (2001) principle (45), repeated here as (30):¹⁵

(30) Silent clitics in French are limited to the third person.

to account for (24) versus (26) and (25) versus (27): these pairs follow if all of them necessarily contain a silent (preverbal) subject clitic; since (24) and (25) have third-person subjects, they can without difficulty contain one in SpecInfl. But in (26) and (27), that silent clitic would have to be first or second person, as (28) shows overtly. Therefore, (26) and (27) necessarily violate (30). Clearly, our use of (30) to explain pairs like (24) versus (26) crucially relies on the idea that SI involves leftward movement of the subject out of IP to the Specifier of a higher functional projection in the left periphery of the clause. What (30) says is that that movement leaves behind a covert subject clitic (on this and much else, see Kayne and Pollock 2001).

Adapting ideas about complex inversion in Kayne (1972),¹⁶ we say with Kayne and Pollock (2001) that the postverbal SI subject starts out as the DP specifier of a silent subject clitic that heads a larger DP, a clitic phrase. Once that larger DP reaches SpecIP, its DP specifier moves out into the Spec of another higher functional projection, FP. In SI constructions, IP itself moves past SpecFP to the Specifier of a still higher functional category, GP; see also Rizzi (1997) and Munaro, Poletto, and Pollock (1999) on the "split" Comp domain thus presupposed. Abstracting away from the *wh*-phrase and representing the covert subject clitic as "pro," a sentence like (31) would thus have the partial derivation in (32):¹⁷

(31) Le jour où a téléphoné Jean
the day when has telephoned Jean

(32) [IP Jean-pro a téléphoné] ⇒ [FP Jean_i F° [IP t_i-pro a téléphoné]] ⇒ [GP [IP t_i-pro a téléphoné]_j G° [FP Jean_i F° t_j]]

Granted this, we now come back to pairs like (33):

(33) a. Le jour où téléphoner a Jean
the day when will telephone Jean
b. *Le jour où téléphoner a il ('...he')

(33a) contains a silent clitic in addition to the postverbal lexical subject. As noted above, lexical subject and subject clitics also co-occur in cases like (34):

(34) a. {Jean, lui}, il mangera ce gâteau
Jean, HE, he will eat that cake
b. Il mangera ce gâteau, {Jean, lui}

Replacing the lexical subjects in (34) by a subject clitic leads to sharply ungrammatical sentences:

- (35) a. *Il, il mangera ce gâteau
 he, he, will.eat that cake
 b. *Il mangera ce gâteau, il

As in Kayne and Pollock (2001, sect. 6), though in a slightly different way, we attribute the unacceptability of (35) and (33b), which contains two subject clitics, one of which is covert, to a factor also at work in pairs like (23), which we repeat and enrich in (36):

- (36) a. Jean ayant dit la vérité, tout va bien.
 Jean having told the truth, all goes well
 b. {Eux, lui, elle} ayant passé l'examen, ...
 them, him, her having passed the.exam, ...
 c. *{Il, ils, je, tu} ayant dit la vérité, tout va bien.
 he, they, I, you ...
 d. *{Moi, nous, vous, toi} ayant passé l'examen, ...
 {me, us, you} having passed the exam, ...

The gerund form of the verb allows lexical subjects, including strong third-person pronouns, as in (36b), but no clitic subject or strong first- and second-person pronoun.¹⁸ It is worth noting that the first-second versus third-person contrast at work in (36) and SI pairs like (24) versus (26) does not show up in infinitives like (37):

- (37) {Eux, nous, vous, toi, moi} passer l'examen? Jamais!
 {them, us, you, me} to.take the.exam never

Let us start with the ungrammaticality of (36c); it will follow simply on the assumption that French subject clitics must check a nominative feature in an Agrs projection and that Agrs is missing in gerunds. If so, (36a)–(36b) require that the (non-morphological) case feature of third-person strong pronouns and full DPs be checked some other way; we posit it is because such subjects can be in (a chain with a null pronominal in) Spec (finite) TP, which gerunds unlike infinitives have, as sketched in structure (38):¹⁹

- (38) [_{FP} {Eux, lui, elle}_i [_{TP} [_{t_i} pro] [ayant T°]....]]

We say that the case feature (of pro, hence also that) of *eux*, *lui*, *Jean*, *cet homme*, and so on is checked off against that of finite T°; in (39), however,

- (39) [_{FP} {il, je, tu}_i [_{TP} [pro _{t_i}] [ayant T°]....]]

the morphological case feature of clitics *il*, *je*, *tu*, and so on cannot be checked since they are not in the checking relation with the Agrs° they require; this, then, accounts for (36c). We exclude (36d) by claiming that for (40) to be acceptable, clitic pro would have to be first or second person, which it cannot be, by (30).²⁰

(40) [_{FP} {moi, toi, nous, vous}_i [_{TP} [[_{t_i} pro][ayant T°] ...]]

As for (35), it has only one Agrs projection; one of the two subject clitics will therefore remain with an unchecked case feature, which results in the derivation crashing.²¹

Let us now at long last go back to unacceptable SI sentences like (33b); on the derivation sketched above, (33b) has the spell-out parse in (41):

(41) [_{GP} [_{AgrSP} _{t_i} Agrs] [_{TP} [_{DP} pro _{t_i}] [a T°] ... téléphoné]]_j G° [_{FP} _{il_i} F° _{t_j}]]

(41) contains a complex DP subject, Kayne's (1972) clitic phrase, in which *il* is the (displaced) head and phrasal *pro* the specifier. If phrasal *pro* always had to check its case feature in AgrsP, the unacceptability of (33b) would be accounted for since there would be one nominative pronoun too many in such sentences, just as there is in (35). But ordinary gerunds like, say, *Ayant compris le problème, (je suis allé au cinéma)* ('having understood the problem, (I went to the cinema)') almost certainly have a phrasal *pro* subject whose (non-morphological) case must have been checked in SpecTP; therefore, in SI sentences like (33b) as well, phrasal *pro* could be expected to check its case in SpecTP, as (41) shows; *il* could then check its own morphologically overt case in Agrs before moving up to SpecFP, which should incorrectly allow (41) to converge. In short, an account of the ban of nominative clitics in SI sentences like (33b) in purely case-theoretic terms requires that phrasal *pro* share all its case properties with overt nominative *clitics*, which would be unexpected for phrasal *pro* in the first place and which ordinary null subject gerunds show cannot be right.

We will correctly ban unwanted derivations like (41) if nominative clitics cannot undergo the movement to SpecFP at work in SI. In line with much previous work on nominative clitics, we claim that this is because they are heads²² at the relevant point in the derivation, which will disallow the final displacements in (41), on the assumption that checking [+F] (a topic-like feature; see Kayne and Pollock 2001, note 21) in derivations like (41) cannot be accomplished by head movement (in French).

4 (Subject) clitics as heads

Let us say that clitics like *il, elle, je*, and so on move as phrases from their input position in SpecvP²³ to specTP – because they are the head of a clitic phrase and it is the *clitic phrase* as a whole that moves from specvP to SpecTP – but have to adjoin to Agrs° as heads. We claim further that unless that final head adjunction to Agrs° takes place, a nominative clitic cannot check its uninterpretable case feature. We thus tie the case requirements of French nominative clitics to their status as heads: whereas phrases need only move to the Specifier position of finite IP (e.g. finite TP, as in gerunds), nominative clitics must head-adjoin to Agrs°. ²⁴ Let us now say that once a string has adjoined as a head to some functional projection, it can no longer move as a phrase to a higher functional projection, in the spirit of Emonds' (1969) structure-preserving constraint; it follows, as desired, that nominative clitics cannot move from their Agrs° position to SpecFP in (41).

In addition to this welcome result, we are now also in a position to account in the same terms for the properties of nominative clitics listed in A through D in section 2. Let us start with the assumption that modification by numerals like *deux*, *trois*, and so on or by *autres* (e.g. *nous deux*, and *vous autres*) requires *nous*, *vous*, or the like to move to the specifier of the numerals or *autres*, *tous*, and so on. This will exclude (14), repeated as (42), straightforwardly:

- (42) a. Partiront-ils *(deux)?
will.go-they *(two)
b. Partirez-vous *(autres)
will.go-you others
'Will you guys go?'
c. Ils *(deux) partiront demain
they (two) will.go tomorrow
d. Eux deux partiront demain
them (two) will.go tomorrow

Again, since *ils*, *vous*, and *ils* in (42a), (42b), and (42c) are clitics, they must adjoin to Agrs° ; if so, they can no longer move to the specifier of the numerals or *autres*, *tous*, and so on, since this would require them to be phrases, which they can no longer be after adjoining to Agrs° , again by some version of Emonds' (1969) structure-preserving constraint. Should they fail to adjoin to Agrs° , their uninterpretable nominative feature would survive at LF, causing the derivation to crash; sentences like (43),

- (43) a. Partiront-ils *(et elles)
will.go-they.MAS and they.FEM
b. Viendrez-vous *(et Jean)
will.go-you and John
c. Ils *(et elles) partiront demain
they.MAS and they.FEM will.go tomorrow
d. Eux et elles partiront demain
them.MAS and them.FEM will.go tomorrow

can be dealt with in essentially the same way if "et" conjunctions have the simplified structure in (44) (cf. Kayne 1994, ch. 6):

- (44) [ConjP XP Conj° YP]

Clitics like *il* and *elle* (in e.g. (43a)) would rather require the structure in (45):

- (45) [ConjP [cl° ils] [C° et] [cl° elles]]

However, Kayne's Linear Correspondence Axiom (LCA) bans all such configurations (see Kayne 1994, ch. 6). If the clitics were merged as XP or YP phrases in (44), they would not be able to check their uninterpretable case feature, since evidently the conjunct *phrase* cannot head-adjoin to Agrs° . This would prevent the case feature of the clitics from being adequately checked. In sum, none of the derivations that could yield (43a)–(43c) will ever converge.

The fact that clitics cannot occur in (46b) (= (16b)) follows likewise from the natural idea that utterances in general and short answers like (46b.ii) in particular can only be phrases. If *il*, *tu*, and *on* are so analyzed, they fail to check their case feature, thus leading to ungrammaticality once more.

- (46) a. Qui viendra?
 b. (i) *il, *tu, *on,
 (ii) lui, nous, vous

The fact that unlike strong pronouns and full DP subjects, nominative clitics cannot be separated from the finite verb by a parenthetical, as (47) (= (17)) shows, would follow if parentheticals can only merge with the maximal IP projection, AgrsP (and the maximal projection of the CP field, ForceP) (see Poletto and Pollock 2004a).²⁵

- (47) a. *Il, paraît-il, aime la linguistique
 b. *Tu, m'a-t-on dit, partiras bientôt en vacances

As for the final morphosyntactic property that nominative clitics trigger obligatory /-z/ liaison with the following finite verb (cf. (21)) while strong pronouns, proper nouns, and full DPs cannot or need not, it follows from the hypothesized spell-out parse under the assumption that subject–verb liaison can take place only between a head and its complement; on that view, subject–verb liaison is comparable to obligatory liaison between a plural article and the following AP or NP, as in *les* *(-z) *enfants* ('the children') and *les* *(-z) *autres solutions* ('the other solutions'); here, *les* is a head and the liaison is between the final /-z/ in that head and the initial vowel in the following lexical item. In *Eux ont compris*, where no obligatory liaison takes place, on the other hand, *eux* is not a head but a phrase standing in the specifier of (some functional projection above) TP.²⁶

In sum, it appears that all the specific (morpho)syntactic properties of (nominative) clitics reviewed above can be derived from their status as heads in conjunction with a set of fairly reasonable hypotheses concerning modification and coordination. We have also suggested a structural hierarchy for two different types of subjects: strong (third-person) pronouns and full DPs stand in Spec (finite) TP, while nominative clitics stand in Agrs° in a higher layer of the IP domain, missing in gerunds and infinitives.²⁷

5 SCLI, CI, and movement to the CP field

As noted in section 1, the first major syntactic property of SCLI and CI constructions like (48),

- (48) a. Quand ((Jean, Marie)) viendra-t-{il, elle}?
 when ((Jean, Marie)) will-come-{he, she}
 b. À quoi penses-tu?
 of what think-you

- c. Partirons-nous?
will.go-we
- d. Qu'avez-vous compris?
what.have-you understood

is that it is sensitive to the root versus non-root dimension:

- (49) a. *Sais-tu quand ({Jean, Marie}) viendra-t-{il, elle}?
know-you when ({Jean, Marie}) will-come-{he, she}
- b. *Dis moi à quoi penses-tu?
tell me of what think-you
- c. *J'ignore si partirons-nous?
I.do.not.know whether will.go-we
- d. *Qu'as-tu dit qu'avez-vous compris?
what.have-you said that.have-you understood

Since at least den Besten (1983), such contrasts have been taken to follow from the fact that the CP domain of embedded clauses does not make available the position(s) to which the inflectional projection and the finite verb it hosts move in root clauses like (48). Two variants of that idea have been explored in the literature on SCLI and CI in French; Kayne (1983), Rizzi and Roberts (1989), and Laenzlinger (1998, sect. 3.1), among others, claim that in both constructions Infl° and the V° it hosts move in overt syntax to a position typically occupied by *que* in embedded clauses; on usual recoverability of deletion assumptions (cf. Chomsky 1965), it follows that SCLI or CI cannot occur in embedded contexts, on the assumption that embedded C° is always lexically specified, even when it remains null (as in (49a)–(49b)). Hulk (1993), Kayne (1994, ch. 6), Sportiche (1993), and Friedemann (1997) claim, on the other hand, that some such constraint is only operative at LF in (48), and they account for pairs like (50) versus (51),

- (50) a. *Sais-tu quand Paul viendra-t-il?
know-you when Paul will-come-he
- b. *Dis moi à quoi Marie pense-t-elle?
tell me of what Marie thinks-she
- (51) a. Quand Paul viendra-t-il?
When Paul will-come-he
- b. À quoi Marie pense-t-elle?
of what Marie thinks-she

by stating that although *Paul* and *viendra* stand in SpecIP and I° in (51) at spell-out, I° must check some feature in the CP field at LF. Since no such feature is available in embedded contexts, (50) crashes, while its presence in root contexts allows (51) to converge.

In the present work, we will not make use of the overt versus covert distinction, in line with a radical interpretation of minimalist guidelines (see Chomsky 1995; 1998; 1999) attempting to eliminate feature movement, the last instance of covert movement (see Kayne 1998). Also, we will claim, as Kayne (1983), Rizzi and Roberts

(1989), and Laenzlinger (1998) did, that both CI and SCLI involve *overt* movement to the CP field;²⁸ like them, we shall maintain that the feature that triggers movement is nonexistent in embedded clauses, thereby adopting an account of (48) versus (49) and (50) versus (51) very close in spirit to den Besten's (1983). If this is right, both (48) and (51) do involve overt, *pre-spell-out* computations to the Complementizer area.

At the same time, we shall take seriously Kayne's (1994, sect. 4.6) arguments that negative, locative, subnominal, direct, and indirect object clitics are not adjoined to the verb in sentences like (52):

- (52) a. Pierre me l'a donné
 Pierre to.me it.has given
 b. Pierre ne lui a pas parlé
 Pierre ne to.him has not spoken
 c. Il ne m'en donnera pas
 he ne to.me.of.it will.give not
 d. Elle m'y conduira
 she me.there will.take

Rather, as in Kayne (1994) and Sportiche (1993), we shall claim that those clitics are heads adjoined to specific functional projections (which Sportiche calls *clitic voices*), distinct from that to which the verb has adjoined. This conclusion is forced by the LCA, which we made use of in section 4 and therefore cannot disregard, and by independent arguments developed in Kayne (1994, sect. 4.6); to mention just two, he points out that certain clitics can fail to be adjacent to the verb, as in literary examples like (53a) and Classical French examples like (53b)–(53d), from *Les lettres de Madame de Sévigné*,

- (53) a. Il a dû en fort bien parler
 he must have of it very well spoken
 b. elle dit qu'elle lui doit tout son bonheur, par le soin
 she says she owes all her happiness because of the care
 qu'elle a eu de la bien élever
 she has had to her well bring.up
 c. ils ont été affligés de ne vous point voir
 they were sorry to ne you not see
 d. Nous faisons une vie si réglée qu'il n'est quasi pas possible de se
 we lead such an orderly life that.it is almost impossible to se
 mal porter
 ill bear
 'We lead such an orderly life that it is almost impossible to be in poor health.'

which suffice to show that (French) clitics need not/have not always adjoin(ed) to the verb; in addition, Kayne (1994) notes that claiming that they sometimes do would leave us without an account for the fact that referential expressions are typically banned from appearing within words (compare OK a self-hater vs. *an {it, her, you} hater). Note also with Hulk (1993, sect. 3.3), Kayne (1994, 45), and Terzi (1999, sect. 2) that on the standard assumption that in Romance imperatives the verb *does*

move to some “high” (see Terzi 1999) head position in the CP field, the fact that in (54a), the clitics are obligatorily stranded by the verb is in itself an argument that no verb movement has applied in SCLI and CI sentences like (54b)–(54c):

- (54) a. Donne le lui!
 give it to.him
 b. Le lui donnera-t-il?
 it to.him will.give-you
 c. Pierre le lui donnera-t-il?
 Pierre it to.him will.give-t-him

Hulk (1993) (also Terzi 1999 and her references) observes further that the negative head *ne*²⁹ blocks head movement in imperatives, as (55) shows:

- (55) a. *Ne donne le lui pas
 b. Ne le lui donne pas

and points out that if head movement was involved in (54b)–(54c), one would expect, everything else being equal, perfectly fine SCLI and CI sentences like (56) to be ungrammatical, contrary to facts:

- (56) a. Ne le lui donnera-t-il pas?
 ne it to.him will.give-you not
 ‘Won’t he give it to him?’
 b. Pierre ne le lui donnera-t-il pas?
 Pierre ne it to.him will.give-you not

Finally, Hulk (1993) makes the important observation that on Sportiche’s (1988) account of Kayne’s (1975) ‘*r-tous*’ configurations, in which the floating quantifiers are stranded by (the rest of the) DP moving to some higher position, we would expect CI constructions like *Mes amis n’ont-ils pas tous téléphoné?* (‘My friends ne have they not all phoned?’) to have as an acceptable variant the ungrammatical **Mes amis n’ont-ils tous pas téléphoné?* (‘My friends *ne* have they all not phoned?’); if the quantified subject ‘*Tous mes amis*’ overtly moved from its subject position to some position in the Comp domain, as claimed in Kayne (1983) and Laenzlinger (1998), it is unclear why *tous* could not be stranded in the position it occupies in the well-formed *Tous me amis n’ont pas téléphoné*; so *tous* should be able to occur to the left of *pas* at spell-out, contrary to facts.

We conclude, then, like Hulk (1993), Kayne (1994), and Sportiche (1993), that SCLI and CI do *not* involve Verb movement to C and that the preverbal subject DP in CI is *not* independently attracted to some position in the CP field.

6 SCLI, CI, and Remnant Movement to the complementizer area

6.1 Remnant Movement

The two conclusions reached in section 5 are evidently paradoxical; we have claimed both that the root versus non-root asymmetry displayed by SCLI and CI is the reflex of an overt displacement to the CP domain and, at the same time, that

there is no verb movement to C° in SCLI or CI or subject movement to C in CI. Indeed, Hulk (1993), Kayne (1994), and Sportiche (1993) all concluded from the facts mentioned in section 5 and from the functional position of clitics in such sentences that no overt movement to the CP field could have taken place; they all resorted to the idea that movement took place after spell-out, at LF. Conversely, those linguists who have continued to claim that overt movement to the left periphery was involved in SCLI and CI, like Laenzlinger (1998), have attempted to deny that Kayne's or Sportiche's analyses of object clitics were correct.

Assuming they *are* correct, as our arguments in the previous section indicate, note that the conclusion reached by Hulk (1993), Kayne (1994), and Sportiche (1993) is the only logically valid one if and only if the computation to the CP field in SCLI and CI is head (i.e. I°/V°) movement. Suppose rather, extending to another syntactic context the spirit of the Remnant Movement analyses of Kayne and Pollock (2001); Munaro, Poletto, and Pollock (1999); and Poletto and Pollock (2004a; 2004b), that the entity displaced in those two constructions is in fact a phrase. Everything else being equal, nothing in the facts mentioned in section 5 would then prevent the XP phrase (57),

(57) [_{XP} le [_{YP} lui [_{ZP} donnera ...]]]

from being attracted to the specifier of some head in the CP field of root questions to check some (uninterpretable) feature.

Now, of course, on anyone's analysis, object clitic + finite verb strings are typically *not* constituents. They are not in (58), for example:

- (58) a. Pierre ne le lui donnera pas
 Pierre NEG it to.him will.give not
 b. Il ne m'a pas parlé
 he NEG to.me.has not spoken
 c. Je n'y suis pas allé
 I NEG.there am not gone

Therefore, for any such proposal to be a candidate for the analysis of SCLI and CI, it has to be the case that XP in (57) can move as a constituent because the elements included in the "... " have vacated their input position; in short, any overt phrasal movement analysis of SCLI and CI is necessarily a Remnant XP Movement analysis. The derivations that would have to be posited to yield the sentences in (59), for example, would of necessity involve previous displacement (topicalization) of the negative phrase *pas* in (59a), of the infinitival clause *lui prêter un livre* in (59b), or of the participial phrase *envoyé un livre à Paul* in (59c) followed by Remnant Movement, as sketched in the much-simplified derivations of (60):

- (59) a. Ne le lui donnera-t-il pas?
 NEG it to.him will.give.him not
 b. Va-t-elle lui prêter un livre?
 will-she to.him lend a book
 c. Avez-vous envoyé un livre à Paul?
 have-you sent a book to Paul

- (60) a. Il ne le lui donnera_i [pas [t_i]] ⇒ Il [pas [t_i]]_j [ne le lui donnera t_j] ⇒ [ne le lui donnera t_j]_k il [pas [t_i]]_k t_k
 b. Elle [va [lui prêter un livre]] ⇒ Elle [lui prêter un livre]_i [va t_i] ⇒ [va t_i]_j elle [lui prêter un livre] t_j
 c. Vous [avez [envoyé un livre à Paul]] ⇒ Vous [envoyé un livre à Paul]_i [avez t_i] ⇒ [avez t_i]_j vous [envoyé un livre à Paul]_i t_j

Of course, if such an analysis is to become more than just another technical trick, among many other conceivable ones, we will have to specify what types of constituents topicalize to what position and why. We shall tackle the problem in section 7. Before we do so, however, it is worth pointing out right away that the remnant T/XP analysis of SCLI and CI sketched out in (60) has a number of clear advantages over its head movement predecessors, whether taken to apply in overt syntax, as in Kayne (1983), Rizzi and Roberts (1989), and Laenzlinger (1998), or covert syntax, as in Hulk (1993), Kayne (1994), Sportiche (1993), and Friedemann (1997).

6.2 CI, preverbal subjects, and clitics

Given our analysis of clitic phrases in section 2 and what was said in section 3 of the way full DPs and nominative clitics check their respective case, the approach to SCLI sketched in (60) carries over naturally to CI sentences like (61a)–(61b):

- (61) a. Pierre ne le lui donnera-t-il pas?
 Pierre NEG it to.him will.give-him not
 b. Marie va-t-elle lui prêter un livre?
 Marie will.she to.him lend a book

Before the left periphery is merged, the possible parses for (61a)–(61b) are (61c)–(61d):

- (61) c. [_{Agrs°} il_i Agrs°][_{XP} [_{DP} Pierre t_i] ne le le lui donnera pas ...]
 d. [_{Agrs°} elle_i Agrs°][_{TP} [_{DP} Marie t_i] va [lui prêter un livre]]

Topicalization and adjunction of the constituents [pas ...] and [lui prêter un livre] to (a head immediately above) X/TP must also have taken place, followed by Remnant X/TP Movement to some projection (call it HP) in the left periphery; this yields (62):

- (62) a. [_{HP} [_{XP} [_{DP} Pierre t_i] [ne le le lui donnera t_j]_k H° [_{Agrs°} il_i Agrs°] [pas ...]_j t_k]
 b. [_{HP} [_{TP} [_{DP} Marie t_i] va t_j]_k H° [_{Agrs°} elle_i Agrs°] [lui prêter un livre]_j t_k]

Two prominent features of these structures deserve pointing out.

Firstly, the preverbal subjects *Pierre* and *Marie* are just standing in the same subject position as in sentences like *Pierre ne le lui donnera pas*, *Marie va lui prêter une livre*, and so on; in other words, (62) provides a natural way of expressing the traditional intuition (see section 1) that in CI constructions the preverbal subject *is* an ordinary

subject. As such, it can be a bare quantifier like *tout* or *rien*, a quantified DP like *chaque homme* or *tout le monde*, and so on. Furthermore, granted something like (62), there is no need to assume the CP field allows for some “special” A-bar-like A position to host the preverbal subject, a move forced on Kayne (1983), Rizzi and Roberts (1989), Laenzlinger (1998, sect. 2.11), and others by their head movement analyses. Also, note that on a remnant movement analysis, the preverbal subject of CI does not move to the CP field independently of the finite verb and its clitics. Therefore, we do not expect that the stranding of quantifiers in CI will be any different from what it is in simple sentences; in short, Hulk’s (1993) **Mes amis n’ont-ils tous pas téléphoné?* (‘My friends ne have they all not phoned?’) is excluded for the same reason **Mes amis n’ont tous pas téléphoné* (‘My friend ne have all not phoned’) is, despite the fact that the subject DP of CI constructions has indeed moved to the Comp area: a Remnant Movement analysis of CI allows one to have one’s cake and eat it!

Secondly, neither *Pierre* nor *Marie* c-command *il* and *elle* in (62), and this solves another major problem in past analyses of CI: why do CI constructions allow their preverbal subject to be interpreted as coreferent with a following pronominal in the same sentence? Why doesn’t that constitute a principle B violation, on the view, shared by Kayne (1983), Rizzi and Roberts (1989), and Friedemann (1997), that the preverbal subject in CI constructions c-commands the postverbal clitic? What the analysis underlying (62) does, rather, is deny that assumption; as a consequence, it clearly does not need to appeal to the idea that *il* and *elle* are (exceptional³⁰) expletives in such constructions, as Kayne (1983) did, or that in questions – and only in questions, for mysterious reasons as Laenzlinger (1998, sect. 3.1) observes – they are “pure” agreement markers of the NID variety, as Friedemann (1997) did. The Remnant Movement analysis of CI solves the problem by simply aligning it with the standard binding-theoretic account of the possible coreference of *Pierre* and *le* in sentences like *[la mère [de Pierre;]] [l; aime]*. This is clearly a step forward, out of reach of both the overt and covert head movement analyses of CI put forward in the literature.

In sum, our Remnant Movement analysis of CI immediately solves in a principled way three major empirical problems with all previous accounts known to us; this should be enough for anyone to take it very seriously. The three additional arguments to which we now turn will give it further weight.

6.3 CI and Restrictions on Preverbal Pronouns

CI inversion bans weak nominative clitics from the preverbal position:

- (63) a. *Où il est-il allé?
 where he is-he gone
 b. *Où je suis-je allé?
 ... I ... I ...
 c. *Où tu es-tu allé?
 ... you ... you ...
 d. *C’est-il vrai?
 that.is-it true

- e. *Où on est-on arrivé?
 where we are-we arrived?
- f. *C'est-ce fini?
 that.is-that finished

These facts follow as an automatic consequence from the analysis of subject clitics adopted in section 4: the input structure of such ungrammatical sentences would have to contain a complex clitic phrase of the form $[_{\text{CIP}} \text{il } [_{\text{CI}^\circ} \text{il}]]$, $[_{\text{CIP}} \text{je } [_{\text{CI}^\circ} \text{je}]]$, and so on. Since there is only one Agrs° position in the higher functional field of the sentences, one of the two will of necessity remain incapable of checking its case feature, causing the derivations of (63) to crash at LF.³¹

CI constructions also display a surprising pattern of strong preverbal pronouns. Third-person strong pronouns are acceptable, but first and second persons are banned:³²

- (64) a. Quel livre lui a-t-il apporté?
 what book him to-him has.he.brought
 b. Quel livre eux ont-ils apporté?
 what book them to-him has.they.brought
- (65) a. Quel livre toi as-tu apporté?
 What book you to-him have.you.brought
 b. *Quel livre moi ai-je apporté?
 ...me ... I ...
 c. *Quel livre nous avons-nous apporté?
 ...us ... we ...
 d. *Quel livre vous avez-vous apporté?
 ...you ... you ...

On the analysis of CI sketched above, the input structure of (64) and (65) would be something like (66) and (67), the spell-out parse resulting from topicalization and adjunction to (a head above) TP, remnant TP movement to HP, and *wh*-movement to the highest layer of the CP field, ForceP:

- (66) $[_{\text{Agrs}^\circ} \text{Clitic}_i \text{Agrs}^\circ] [_{\text{TP}} [_{\text{DP}} \text{strong pronoun } t_i] \text{a apporté } \dots]]$
- (67) $[_{\text{ForceP}} \text{Quel livre}_m \text{Force}^\circ [_{\text{HP}} [_{\text{TP}} [_{\text{DP}} \text{Strong pronoun } t_i] \text{V } t_j]_k \text{H}^\circ [_{\text{Agrs}^\circ} \text{clitic}_i \text{Agrs}^\circ] \text{[apporté } t_m]_j t_k]]]$

The idea that we would like to entertain is that the pairs in (64) versus (65) should be seen in the same light as (25) versus (27), repeated here as (68) versus (69):³³

- (68) a. LUI a téléphoné.
 he/him has telephoned
 b. EUX ont téléphoné.
 they/them have telephoned
- (69) a. *MOI ai téléphoné hier.
 I/me have telephoned yesterday

- b. *TOI as mangé un gâteau.
you have eaten a cake
- c. *VOUS avez téléphoné hier.
You have telephoned yesterday
- d. *NOUS avons mangé un gâteau
we have eaten a cake

We can easily achieve this result if we analyze such contrasts as resulting from the principle in (70), which is just (30) (repeated as (71)) seen in a “static” light:³⁴

(70) Only strong third-person pronouns can remain in SpecTP.

(71) Silent clitics in French are limited to the third person.

Note that only on a Remnant Movement analysis of CI, in which the preverbal subject of CI sentences *is* a real subject in SpecTP, can (68)–(64) and (65)–(69) be dealt with in a uniform fashion. We take it that the fact that it can express this generalization is a further argument in its favor. In addition, this analysis also explains contrasts like the following:

- (72) a. *Pourquoi vous ne viendriez-vous pas à la fête?
why you neg would-come you to the party
- b. Pourquoi ta femme et toi ne viendriez-vous pas à la
why your wife and you neg would-come you to the
fête?
party
- c. *Où nous sommes-nous invités?
where we are-we invited
- d. Où moi et mes enfants sommes-nous invités?
where me and my children are-we invited
- (Adapted from Friedemann 1997, 164)

They simply follow from the fact that coordinations like *moi et mes enfants* or *ta femme et toi* can remain in SpecTP, unlike strong first- and second-person pronouns.³⁵

6.4 Remnant movement to the CP field and clitic sequences in imperatives

The fact that some instances of verb movement to the Comp area can be (re)analyzed profitably as Remnant Movement to the specifier of various heads in that domain may be argued for independently of CI and SCLI on the basis of the clitic ordering in French imperatives; as is well-known, French affirmative sentences exhibit two dative accusative orderings, depending on the person versus non-person dimension:

- (73) a. Pierre me le donnera
Pierre to.me it will.give
- b. *Pierre le me donnera
Pierre it to.me will.give

- c. Pierre te le donnera
 Pierre to.you it will.give
- d. *Pierre le te donnera
 Pierre it to.you will.give
- (74) a. Pierre le lui donnera
 Pierre it to.him will.give
- b. *Pierre lui le donnera
 Pierre to.him it will.give

The corresponding clitic sequences in imperatives differ considerably; the “standard” order for first and second person is (75):

- (75) a. Donne le moi!
 give it me
- b. Mets le toi dans la poche!
 put it you in the pocket

which, modulo the *me* versus *moi* and *te* versus *toi* alternations, corresponds to the *le me*, *le te* orders of unacceptable affirmatives like (73b) and (73d). In colloquial French, however, (75) can also surface as (76), which displays the expected dative accusative ordering of (73a) and (73c).

- (76) a. Donne moi le!
 give me it
- b. Mets toi le dans la poche!
 put you it in the pocket

In third-person pronoun cases, Standard French imperatives show the expected ordering of (74a):

- (77) Donne le lui!
 give it him

However, colloquial French also has the order in (78),

- (78) Donne lui le!
 give him it

which is that of the unacceptable (74). How can one make sense of such data?

We shall make the null hypothesis that the underlying order of clitics in all French sentence types is the same, specifically that of affirmative sentences. For our present purposes, it will suffice to assume that there are two such orders, given in (73a) and (73c) and in (74a), respectively. Our second hypothesis is that some imperative feature high in the Comp area must be checked off by verb adjunction; in short, we follow Kayne (1994), Hulk (1993), Terzi (1999), and many others in claiming that the obligatory enclitic configuration in positive imperatives results from verb

movement to that high position, “stranding” the clitics. For the sake of clarity, let us call the high position to which the imperative verb must head-adjoin Imp° .³⁶

If “ordinary” verb movement was all there was to imperatives, these assumptions would only allow us to derive (77) and (76); we would have nothing to say concerning the “standard” French ordering of first and second person in (75) or the colloquial third-person order of (78).

Suppose rather that only the last leg of the displacement to Imp° is head movement, and that intermediate position(s) in the CP field can accommodate various (remnant) phrases; let us posit more specifically that (remnant) IP moves to the specifier of what we called HP in the previous sections;³⁷ and suppose, further, that ForceP stands between Imp° and HP. Adopting Sportiche’s terminology for the sake of illustration, we now say that the “accusative voice phrase” in (79a) and the dative voice phrase of (79b),

- (79) a. [HP [TP ... [Dative voiceP {me, te, nous, vous} [Accusative voiceP {le, la, les} V]]]]_i H° t_i]
 b. [HP [TP ... [Accusative voiceP {le, la, les} [Dative voiceP {lui, leur} V]]]]_i H° t_i]

can be pied-piped to the specifier of ForceP before the verb finally moves as a head to Imp° ; this will yield (80a)–(80b):

- (80) a. [Imp° donn_k{e, ons, ez}_k Imp°] [ForceP [Acc. voiceP {le, la, les}_k]_j Force^o[HP [Dative voiceP {moi, toi, nous, vous}_i t_i] H°] [t_i]]]
 b. [Imp° donne_k Imp°] [ForceP [Dative voiceP {lui, leur}_k]_j Force^o[HP [Acc. voiceP {le, la, les}_i t_i] H°] [t_i]]]

This, we claim, is how the standard order of first- and second-person imperatives and the colloquial order of third-person imperatives are derived (modulo the *me/moi* and *te/toi* suppletion).³⁸ When such pied-piping does not take place, we derive the non-standard (76) and the standard (77).

Naturally this is only a plausible sketch, and other conceivable executions of the same basic idea come to mind.³⁹ Nonetheless, the main point of this discussion should, we believe, be clear: even in imperatives, which, unlike CI and SCLI sentences, do seem to *require* verb movement to the (highest layer of the) Comp area, there is evidence that verb-related displacements to lower layers of the left periphery can take the shape of (remnant) phrasal movement. Without that assumption, it is difficult to see how all the possible clitic sequences of French positive imperatives could be derived syntactically.⁴⁰ The plausibility of our Remnant Movement approach to SCLI and CI is thus enhanced by the syntax of clitics in French imperatives.

7 Fine-tuning remnant movement in CI and SCLI⁴¹

7.1 V2 and remnant movement

Accepting the conclusions of section 6, we must now go back to our task of defining the properties of Remnant Movement to HP in CI and SCLI more precisely than we have done so far. There are two conceivable tacks one might take; one would

attempt to maximize the scope of the results reached in section 6, and the other would restrict it to Romance, perhaps even to French and Valdôtain.

On an approach of the first type (*a priori* the more appealing one, by far), CI and SCLI in French should most probably be seen in the same light as so-called *subject Aux inversion* in English and its various V2 analogs in the Germanic languages. It would argue that French CI and SCLI and English subject Aux inversion share too many properties – such as their root versus embedded asymmetry, the fact that in English as well the subject must immediately follow the “inverted” finite verb (an auxiliary for independent reasons) (see e.g. Pollock 1989; 1997; Chomsky 1995, ch. 1; Cinque 1999) – to warrant two different analyses. This would mean, then, that English subject Aux inversion too involves the sort of Remnant Movement operative in French CI and SCLI. One would then have to look for an explanation of the previous topicalization of the negative phrase, the infinitival phrase, or the participial phrase in examples like (81),

- (81) a. Has he not understood?
 b. Should he go?
 c. Has he phoned Mary?

that would carry over to the (almost) identical French cases in (82):

- (82) a. (Pierre) n’a-t-il pas compris?
 (Pierre) + (81a)
 b. (Pierre) devrait-il partir?
 (Pierre) + (81b)
 c. (Pierre) a-t-il téléphoné à Marie?
 (Pierre) + (81c)

The second approach would bank on the one major syntactic difference between English subject Aux inversion and French SCLI (*Has John phoned?* versus **A Jean téléphoné?*; see section 1), on the comparative diachronic facts alluded to in note⁴⁷ (on the analysis sketched there), and on the necessary presence of the evidently language-specific *epenthetic -t-* in French CI and SCLI to argue that the two types of languages and constructions should be construed differently, despite their common restriction to root contexts and the similarity in their spell-out strings. This may in turn lead one to wish to continue analyzing English subject Aux inversion in terms of I° (head) movement to the left periphery (in line with all work on that topic known to us) and to look for an account of the way previous topicalization works in the Remnant Movement process at work in French and Valdôtain SCLI/CI that would be specific to those languages (or to Romance).

In part for the sake of execution and in part because the more ambitious line clearly lies beyond the scope of the present pedagogical presentation, we shall now tentatively develop an analysis of the second sort, noting however that Poletto and Pollock (2004a) is a first attempt at sketching an account of the first, more ambitious type.

7.2 *-t-* in CI and SCLI

Let us start with the one prominent feature of CI and SCLI, which we have failed up to now to integrate into our analysis: the epenthetic *-t-* of examples like (83).

- (83) a. Où Pierre va *(-t-)il aller?
 where Pierre will *(-t-) he go
 b. À qui Marie va *(-t-) elle s'adresser?
 to whom Marie will *(-t-) she talk
 c. Où va *(-t-) elle?
 where goes *(-t-) she
 d. Où va (*-t-) Yves?
 where goes (*-t-) Yves

As (83) shows, *-t-* is obligatorily present in such sentences. That element is often taken to be a purely epenthetic consonant introduced at PF to avoid two consecutive vowels. This seems unlikely; if it was, as was noted in section 1, one would expect it to surface also in SI cases like (83d), especially since *liaison* is indeed possible in sentences like *Où vont (/t/) Yves et Marie?* Furthermore, the data in (88a)–(88b),

- (84) Morgeux, Provençal
 a. Ven-lo-li?
 come-INTERR.MARKER-they
 'Are they coming?'
 b. Ven-lo-lou? come-INTERR.MARKER-she
 'Is she coming?'

from Morgeux, a Provençal dialect, seem to show clearly that this purely morphophonological approach is insufficiently general; in Morgeux Standard French, *-t-* surfaces as *-lo*, but its insertion cannot be a purely PF phenomenon since neither *-li* (they) nor *-lou* (she) are in need of an epenthetic consonant.⁴²

We shall hypothesize rather that *-t-* in French and *-lo* in Morgeux have syntactic import and are the H° morphemes of main clause interrogatives. More precisely, we follow much traditional work in claiming that French *-t-* and Morgeux *lo* are *conjugation interrogative* markers, [+interrogative] finite tense morphemes merged in H° . They thus bear an uninterpretable [+interrogative] feature and attract a constituent so marked to their specifier. In CI and SCLI, the entire sentence – what we have called XP or TP in our analyses so far, save the constituents that have been extracted at previous stages of the derivation – moves to check it. Put slightly differently, French *-t-* and Morgeux *lo* are the elements that “type” the sentence in their specifier as (root) questions. A little bit more technically, we say that the head of the “sentence” – I° , $Agrs^\circ$, or T° , as the case may be – is marked [+interrogative] in the numeration; as a consequence, its maximal projection is so marked too, and it is attracted to Spec H° to delete H° 's uninterpretable [+interrogative] feature; in sum, CI and SCLI are cases of (obligatory; see below) pied-piping. This, we take it, provides the syntactic characterization of *-t-* (and Morgeux *lo*) we need here.⁴³

In addition, we claim that French $-t$ ⁴⁴ has two defining morphophonological characteristics:

- (85) a. $-t$ is a morphological enclitic; therefore, as a tense morpheme, it must be right adjacent to a finite verb at PF.
 b. $-t$ is a deficient morpheme at PF; in other words, it cannot in and of itself bear word-final stress – it must therefore be left adjacent to a term that can play the part of an additional stress-bearing suffix.

Concerning (85b), we will make the following hypothesis:

- (86) Nominative clitics can bear main stress and can be morphological suffixes.

Adopting the spirit of work by Bošković (cf. Bošković 2000) on Slavic clitics and Shlonsky on the construct state in Semitic (cf. Shlonsky 2000), but at variance with one aspect of much recent work in the distributed morphology literature, we will also make the following crucial assumption concerning the syntax–PF interface:

- (87) Morphophonological processes do *not* reorder terms.

(85), in combination with (87), will act as a PF filter on syntactic computations; whenever or not the syntactic output turns out to be inconsistent with the morphophonological requirements on $-t$ listed in (85), a PF violation will result, and so the whole derivation will crash.

Let us illustrate how the system works by considering ill-formed sentences like (88):

- (88) a. *Où a Yves mangé?
 where has Yves eaten
 b. *Où va-t Yves aller demain?
 where will-go Yves eat tomorrow
 c. *Où Pierre va aller demain -il?
 where Pierre will go tomorrow he
 d. *Où Pierre croit que je suis-t-il?
 where Pierre thinks that I am-t-he
 e. *Où sa femme mettra les livres qu'il lit t-elle?
 where his wife will.put the books that.he reads t-she
 f. *A qui il va-t parler?
 to whom he will-go-t speak

In (88a), $-t$ has failed to be merged in H° ; so, on our analysis so far, Remnant TP Movement to Spec HP should not have applied but has. Furthermore, for that sequence to be generated, Remnant Movement should have applied to a TP of the form $[_{TP} t a t]$, which in turn would have required the full DP *Yves* to move out of SpecT; on the assumption that no additional feature of *Yves* requires movement to the left periphery (as would be the case in SI constructions under the analysis of Kayne and Pollock 1999), this is impossible if our section 2 and 3 analysis of nominative case checking is correct; a full DP checks its (non-morphological) case in SpecTP. It is therefore “frozen in place” in TP, and (88a) is thus excluded for two reasons: the Remnant (TP) Movement we have developed so far is not defined here, and it could not yield the word order of (88a) if it was.

(88b) differs from (88a) in having merged *-t-* in H° , which allows Remnant TP Movement to apply licitly; *aller demain* has moved out of TP; but, again, the sequence *va-t Yves* could only have been generated if *Yves* had also moved out of SpecT, which is impossible in SCLI (though possible in SI), for the reasons just stated. In sum, neither (88a) nor (88b) can be generated on our analysis. In addition, in (88b), the PF requirement that *-t-* be adjacent to a stress-bearing suffix cannot be met: although *Yves* can evidently bear stress, it cannot become part of a morphological word (i.e. *Yves* and full DPs cannot be PF suffixes).

(88c) has *-t-* in H° , and Remnant TP Movement can thus licitly apply. The clitic head of the clitic phrase in SpecT has adjoined to $Agrs^\circ$, as it must; but nothing else has moved out of TP, so the complement of the finite verb is still part of TP when it is attracted to SpecHP, and that part of the sentence therefore stands in between the finite verb and *-t-*. As a consequence, one-half of the morphological requirements on *-t-* cannot be met: it should be a morphological enclitic on a (finite) verb (i.e. right adjacent to it), but cannot be in (88c), which consequently crashes at PF.

The monstrous ungrammaticality of (88d) and (88e) forces us to refine the meaning of the predicate *adjacent* as used in (85) ("*-t-* is a morphological enclitic; therefore, as a tense morpheme, it must be right adjacent to a finite verb at PF"). Clearly, if such examples are to be excluded, string adjacency will not suffice and some structural notion must be involved; we will say, then, that *-t-* can form a prosodic word with a finite verb if it is not separated from it by more than one sentence boundary. Granted this interpretation, such examples will be correctly excluded; the derivation of sentences built on the same numeration will thus have to involve previous topicalization of the sentential complement or the relative and its antecedent followed by the familiar Remnant Movement, yielding the grammatical *Où Pierre croit-il que je suis* ('Where P. thinks he that I am?') and *Où sa femme mettra-t-elle les livres qu'il lit?* ('Where his wife will-put-she the books that he reads?').⁴⁵

As for the ungrammatical (85f), it would be derived by topicalization of *parler à qui*, Remnant $AgrsP$ Movement to HP, and *wh*-movement. What goes wrong here is that (85b), the second morphological requirement on *-t-*, cannot be met; the derivation yielding (88f) therefore crashes at PF, once more. Finally, consider the outrageously ungrammatical (89b), (89d), and (89f):

- (89) a. Les a-t-il lus?
 them has-he read
 b. *a-t-les il lus?/*a-t-il les lus?
 has-them he read/he them read
 c. Y partira-t-il bientôt?
 there will-go-he soon
 d. *Partira-t-y il bientôt? Partira-t-il y bientôt?
 will-go-there he soon/will-go-he there soon
 e. En a-t-il parlé?
 of it-has-he spoken
 f. *A-t-en il parlé?/ A-t-il en parlé?
 has-of.it he spoken/ Has-he of.it spoken

There is a straightforward account for why SCLI cannot strand non-nominative clitics, as such sentences show. Suppose that SCLI and CI in Modern French⁴⁶ *never* involve head movement of the verb to the Comp area; then, for (89b), (89d), and (89f) to be acceptable, clitics like *les*, *y*, and *en* would have to topicalize out to XP before XP moves to spec H°. But, of course, we know that clitics can never topicalize out of their case-checking position (see section 3), so the relevant examples in (89) are excluded for the same reason the totally inconceivable sentences in (90) are:

- (90) a. *Le, j'ai lu
it, I.have read
b. *Y, il partira bientôt
there, he will.go soon
c. *En, il a parlé
of.it, he has spoken

Summarizing, the two morphophonological properties of *-t-* in (85) combine to require that the constituents following the finite verb in T/XP topicalize out of T/XP to a position in between T/XP and Agrs°; the same two properties converge to require T/XP to move to Spec HP and exclude Remnant AgrsP Movement. If CI and SCLI can never be instances of V movement to the Comp area in Modern French, the analysis also straightforwardly accounts for why non-subject clitics cannot be stranded in those two constructions.

7.3 *-ti* in CI and SCLI

On the analysis just summed up, the fact that the whole AgrsP cannot be attracted to SpecHP is a consequence of (85b). Suppose that (some variety of) French had a [+question] morpheme merged in H° like *-t-* that didn't have any such deficient property; everything else being equal, we would then expect AgrsP attraction to SpecH° to be possible; that morpheme does exist, as the facts in (91) show:

- (91) a. Elle viendra-ti?
she will-come ti
b. Pourquoi il vient-ti pas?
why he come-ti not
c. Je réussirai-ti?
I will-succeed-ti
d. Tu viendras-ti?
you will-come-ti
e. On est-ti prêt?
we are-ti ready
f. Ce serait-ti enfin la fin?
that will-be-ti at.last the end

Sentences like (91), common in Québec French (where *-ti* surfaces as *-tu*) and in a variety of regional (both rural and urban) dialects in France, share most of SCLI and CI's defining properties. In particular, they are restricted to root contexts

(cf. **Dis moi quand elle viendra-ti?*), but they contrast minimally with (92) in allowing preverbal nominative clitics:

- (92) a. *Elle viendra-t-elle?
 she will.come-she
 b. *Pourquoi il vient-il pas?
 why he come-he not
 c. *Je réussirai-je
 I will.succeed-I
 d. *Tu viendras-tu
 you will.come-you
 e. *On est-il prêt?
 We are-we ready
 f. *Ce serait-il enfin la fin?
 that will.be-it at.last the end

In our system, the root versus non-root sensitivity that (91) shares with Standard French SCLI and CI means that Remnant Movement to HP in the Comp domain must have applied. We can now say descriptively that in the sociolects and dialects that have (91), the sequence *-t(+i)* indeed works like the H° morpheme of Standard French; but because, unlike *-t-*, it does have the sufficient amount of vocalic structure for it to be a stressable syllable, it has no need for a(n extra) clitic to its right, which is why (91) are well-formed at PF.

Of course, the question arises of what the vowel *i* in *-ti* is. To answer that question, we capitalize on Poletto's (2000) analysis of the complex system of nominative clitics in the NIDs; more precisely, we hold that *i* is comparable to the invariable subject clitics present in many Veneto, Lombard, and Emilian dialects. The paradigm of the Lugano variety in (93) (from Poletto 2000, 12) illustrates how invariable the SCL pattern is:

- (93) a. A vegni mi (Inv. SCL come I = 'I come')
 b. A ta vegnat ti (Inv. SCL SCL come you = 'you come')
 c. A vegn luu (Inv. SCL come he = 'he comes')
 d. A vegnum (Inv. SCL come = 'we come')
 e. A venguf (Inv. SCL come = 'you come')
 f. A veng lur (Inv. SCL come they = 'they come')

On the view that *i* in the dialectal *-ti* construction of French is *-t- + i*, with *i* an invariable subject clitic analogous to the Lugano *a*,⁴⁷ we can furthermore use Poletto's (2000, 20) (much simplified) structural hierarchy in (94) to account for (91):

- (94) [_{FP1} Invariable SCLs [_{FP2} number SCLs/person SCLs [_{FP3}]]]

We say that the input structure of such sentences is something like (95),

- (95) a. [_{HP} [_{H°} -t] [_{FP1} i [_{FP2} elle [_{FP3}]]]]
 b. [_{HP} [_{H°} -t] [_{FP1} i [_{FP2} il [_{FP3}]]]]

- c. [_{HP} [_{H^o} -t] [_{FP1} i [_{FP2} je [_{FP3}]]]]
 d. [_{HP} [_{H^o} -t] [_{FP1} i [_{FP2} tu [_{FP3}]]]]

and that (Remnant) Movement to Spec H^o applies to FP2; of course, since *-t* (*+i*) continues to be an enclitic tense marker, it must abide by the morphophonological requirement in (85a) (*-t* is a morphological enclitic; therefore, as a tense morpheme, it must be adjacent to a finite verb on its left at PF), and consequently all phrases following the finite verb must move out FP2 before FP2 is attracted to Spec *-t*. This explains why the *-ti* Complex Inversion construction of Regional and non-Standard French also strands negation, participial clauses, and infinitives, as in, say, *Elle a-ti compris?* ('She has-*ti* understood?'), *Tu voudrais-ti pas m'aider?* ('You would-like-*ti* not me help?'), and so on.⁴⁸

7.4 Valdôtain SCLI and CI

Valdôtain SCLI and CI constructions share their French counterparts' sensitivity to the root versus non-root distinction (cf. Roberts 1993a, 324) and should therefore be amenable to essentially the same Remnant Movement analysis to the Comp area. They also conspicuously differ from French in that, in compound tenses (i.e. when auxiliaries *have* and *be* are present), all varieties of Valdôtain SCLI require a preverbal clitic, in addition to the Standard French-like obligatory postverbal clitic; similarly, Valdôtain CI in compound tenses may have its initial DP subject followed by pre- and post-auxiliary clitics:

(96) SCLI:

Ayas

- a. n'èn-**neuy** mîndja
 we.have-we eaten

(Roberts 1993a, (7b))

St Nicholas

- b. T'ò **heu** vu ton laon
 you.have you seen your uncle

(Roberts 1993a, (8b))

Aosta

- c. Cen que **dz'i** **dzo** fe
 what that I.have I done

(Roberts 1993a, (9a))

(97) Aosta

- CI: Ton ommo l'est-**e** dza torna?
 your man he.is-he already come.back

(Roberts 1993a, (41))

In simple tenses, the postverbal clitic is obligatory and has the same form as in complex tenses, but no preverbal clitic need appear, depending on whether the corresponding affirmative sentence has a preverbal clitic or not.⁴⁹ So, for example, the present tense forms of first and second plural persons of the verb *go* in St Nicholas

Aside from the question of complex tenses, nothing in what precedes directly covers examples like (101), in which both a preverbal and a *variable* postverbal clitic appear:

- (101) St Nicholas
 Dze medzo-dzò an pomma
 I eat.I an apple?

Roberts (1993a, (8a))

(101) is unexpected because it looks like the word-for-word analog of the ill-formed French example (102):

- (102) *Je mangerai-je une pomme? (same as (101))

We know what excludes (102): there are two nominative subject clitics and only one Agrs^o position, which means one nominative clitic too many since at least one uninterpretable (nominative) case feature will fail to be checked in such sentences. If, as claimed above, that is the correct way of looking at (102), we are forced to assume that one of the two clitics in (101) is *not* a “real” nominative clitic. Let us indeed claim that the preverbal *dze* in (101) has “migrated” into the TP domain, where it either checks its case like an ordinary DP or, more likely, has no case to check at all, just like the St Nicholas third-person singular, and second- and third-person plural endings; granted this, the spell-out parse of the St Nicholas affirmative sentence *Dze medzò* (‘I eat’) would be something like (103), and it thus contrasts minimally with (104), the spell-out parse of Standard French *je mange*.⁵⁰

- (103) [_{TP} [_{CIP} pro *dze*] [[_{T^o} medzò]...]]

- (104) [_{Agrs^o} je_i [_{TP} [_{CIP} pro *t_i*] [[_{T^o} mangerai]...]]]]

This difference in structure now accounts for (101) versus (102): if the [+interrogative] (null *-t-*) H^o morpheme is merged in the left periphery of (103) and (104), TP will be attracted to SpecHP in both cases, but although this will yield the well-formed *Mangerai-je?* in French, no acceptable structure will be derived from (103) since principle (85b), one of the two defining morphological properties of French and Valdôtain interrogative H^o (where “*-t-* is a deficient morpheme at PF in that it cannot in and of itself bear word-final stress; it must therefore be left adjacent to a term that can play the part of an additional stress-bearing suffix”), will not be met.⁵¹ The (much simplified)⁵² input structure to (101) must rather be (105),

- (105) [_{AgrsP} pro_i [_{Agrs^o} dzò] [_{TP} [_{CIP} *t_i* *dze*] [[_{T^o} medzò]...]]]

in which *dzò* is the Agrs^o counterpart of *dze* in TP; (105), contrary to (103), will yield a well-formed PF output after merging of H^o and TP attraction to SpecH^o; note in passing that in (105), *dzò* “agrees” with *dze* because it “agrees” with a (raised, phrasal) pro subject, which itself agrees with *dze*.

We can now come back to complex tenses and to the question of why *être* (‘be’) and *avoir* (‘have’) in Valdôtain always require a subject clitic, although their

morphology is “rich,” as St Nicholas paradigms like (106) (= (1c) in Roberts 1993a) show:

- (106) Valdôtain
 Dz’i medjà (I have eaten)
 T’ô medjà (you ...)
 L’a medjà (he ...)
 N’èn medjà (we ...)
 Vèi medjà (you ...)
 L’an medjà (they ...)

Despite the morphological variability of auxiliary verbs, complex tenses always have “SCL1 Aux SCL2 ...” sequences in SCLI, as (107) (= (8b) in Roberts (1993a)) shows:

- (107) Valdôtain
T’ô-heu vu ton laon
 you.have-you seen your uncle (French ‘t’as tu vu ton oncle?’)

In the spirit of (105), we say, fairly naturally I believe, that (107) is derived as sketched in (108):⁵³

- (108) [HP H°[[AgrsP pro_j [Agrs° **heu**] [TP [CIP t_j T’] [[T° ô] [t_j vu ton laon]]]]
 Topicalize [t_j vu ton laon] to TP ⇒
 [HP H°[[AgrsP pro_j [Agrs° **heu**] [t_j vu ton laon]_i] [TP [CIP t_j T’] [[T° ô] t_i]]]
 Attract [+question] to Spec H° ⇒
 [HP [TP [CIP t_j T’] [[T° ô] t_i]]_k H°[[AgrsP pro_j [Agrs° **heu**] [vu ton laon]_i t_k]]

Finally, to account for the necessary presence of the preverbal clitic in *T’ô* in (107), we use Roberts’ (1993a) idea that auxiliaries *être* and *avoir* are not θ -assigners (see also Pollock 1989, sect. 4.1) in the following way: suppose the person endings of Valdôtain finite verbs, where they exist, are only “residually” able to identify a pro subject in the sense that they also need to assign it a θ -role to do so. Since auxiliaries by definition do not have any (external) θ -role to assign, they necessarily require a lexical clitic in TP.

7.5 Keeping the house in order

Before concluding, let us briefly go back to French and spell out in more detail some consequences of our analysis of SCLI and CI for the syntax of simple affirmative sentences.

Suppose a subject clitic phrase is merged in some sentence and that no H° is merged in the left periphery; we would then expect totally ungrammatical sentences like (109a) to surface with the spell-out parse in (109b):

- (109) a. *Il Pierre a téléphoné
 he, Pierre has phoned
 b. *[Agrs° il_i Agrs°] [[CIP Pierre_i t_i] a téléphoné]]

What excludes such structures? Granted (109b), we shall say, fairly naturally, that (109a) is a Principle C violation. If so, what is the spell-out structure of (110)?

(110) Il a téléphoné
he has phoned

It would be unlikely to suggest that it is (111) since that structure should be a Binding Theory violation, too, with the null pronominal violating Principle B.

(111) * $[_{Agrs^\circ} il_i Agrs^\circ] [_{CIP} pro_i t_i] \dots]$

Let us say rather that its spell-out parse is (112):

(112) $[_{AgrsP} pro_i [_{Agrs^\circ} il_i] [_{CIP} t_i t_i] \dots]]$

and claim that in such configurations, the nominative clitic *il* (and, similarly, *je*, *tu*, etc.) counts as an agreement marker and is thus immune from the structures of Principle B; the null (phrasal) *pro* in their specifier of (112) is to be seen in the same light as the null (phrasal) *pro* the reanalyzed clitics of the NIDs license.

We note in passing that what undergoes Remnant Movement in SCLI is TP, as the parse of (113) in (114) shows:

(113) A-t-il téléphoné?
'Has-he phoned?'

(114) $[_{HP} [_{TP} [_{DP} t_i] a t_j]_k [_{H^\circ} -t-] [_{AgrsP} [pro il_i] Agrs^\circ] [téléphoné]_j t_k]]]$

In short, although Kayne and Pollock's (2001) claim that all sentences undergoing Remnant Movement have a null (*pro* or trace) subject is too strong if our analysis of CI is correct, it nonetheless seems true of SCLI and SI in Standard French (and Valdôtain).

Let us now ask whether a simple sentence like (115) has a complex clitic phrase as its subject. Suppose it does; the clitic phrase would then evidently have to have a null clitic as its head, as shown in (116);

(115) Pierre a téléphoné
'Pierre has phoned.'

(116) $[_{TP} [_{CIP} Pierre_i pro_i] a téléphoné]]$

Two possibilities arise at this point:

1. Clitic *pro* could attempt to check its null though the arguably morphological nominative case by moving up to $Agrs^\circ$, as (117) shows:

(117) * $[_{Agrs^\circ} pro_i Agr^\circ] [_{TP} [_{CIP} Pierre_i t_i] a téléphoné]]$

but (117) will yield a Principle C violation, as above; that violation could only be alleviated if the lexical DP itself could move to spec *pro*. We shall say that in

Standard French, this still yields an ungrammatical configuration because *pro* cannot be reanalyzed as an agreement marker; if the basic intuition underlying all work on the null subject parameter in Romance is correct, only an overt lexical head can be so reanalyzed;⁵⁴ therefore, moving *Pierre* to spec AgrsP, as in (118), will still run afoul of Binding Theory's Principle B, unlike what happens in (112) and the like.

(118) *_{[AgrsP Pierre_i [Agrs° pro_i Agr°] [TP [CIP t_i t_i] a téléphoné]]}

By the same token, (119) will also be excluded,

(119) *_{[AgrsP Pierre_i [Agrs° il_i Agr°] [TP [CIP t_i t_i] a téléphoné]]}

if, as we have just suggested, it is only when *pro* stands in the specifier of a nominative clitic that the clitics reanalyze as agreement markers, immune to Binding Theory; therefore, a fine sentence like *Pierre, il est venu* ('Pierre, he has come') is necessarily a Clitic Left Dislocation in standard French, in which *Pierre* has vacated its input position and moved to a position much further up in the IP or CP domains. It could be, of course, that that constraint on the reanalysis of clitics as agreement markers is lifted in the more innovative sociolects or dialects of French (which Anne Zribi-Hertz (1994) dubs "français avancé"), as it is in the NIDs. We would then expect bare quantifiers, negative quantifiers, quantified DPs, and so on to replace *Pierre* freely in (119), as they in fact do in many NIDs and in Valdôtain – compare, for example, Poletto's (2000, 142) Friulian example *Nisun al mi capiss* ('no-one he me understands'), and Chenal's (1986, 401) example *Gneun l'ayet inco vu de bataille parë* ('no-one he had yet seen a battle like it') cited in Roberts (1993a) – and as they typically don't do for speakers of Standard French even in the most colloquial varieties they can speak.⁵⁵

2. Assuming clitic *pro* was allowed to stay in its input position, we could say that it (exceptionally) checks its case in SpecTP; but then it would be impossible for the DP *Pierre* in its specifier to check its own case, on the standard view that the uninterpretable feature of T is deleted once it enters a checking relation with an appropriately marked specifier. In short, on that derivation, too, the input showed in (116) will fail to yield a converging LF output.

We see, then, that a simple statement like (115) cannot have a clitic phrase in its subject position; therefore, such sentences have a "simple" DP subject:

(120) [_{TP}[_{DP}Pierre] a téléphoné]]

We thus reach the same conclusion as Kayne (1972); in that article, the nominative clitics in the various clitic phrases were obligatorily deleted if the rules that derived CI did not apply. We are saying the same thing, although, evidently, the technical tools we have been using to express that basic intuition are very different from the rule-based algorithms Kayne made such fruitful and innovative use of 40 years ago.⁵⁶

8 Concluding remarks and summary

This chapter has capitalized on the rich body of empirical findings that the work on clitics, SCLI, and CI conducted in Generative Grammar over the last 30 years has made available to the linguistic community at large; it has also made crucial use of many of its insights and generalizations. Indeed, none of its new suggestions could have been made without that previous work, whence the quotation from Condorcet with which the chapter starts.⁵⁷

We started off by pointing out that the main contributions to the analysis of CI, although of great empirical and theoretical value, could be criticized on two counts. Those like Sportiche (1993), which do not posit any syntactic movement in overt syntax, have a hard time accounting for the fact that CI is incompatible in selected embedded contexts or when an overt complementizer surfaces as in Québec French. Those that do posit movement do so by appealing to head movement of the verb, and thus are not able to take into account the fact that pronominal clitics are not prefixes but stand in independent phrases to the left of the verb.

In order to solve the two problems, we have suggested here that, chiefly as claimed in sections 5 and 6, SCLI and CI do require pre-spell-out computations to the Comp area and that those computations can be profitably reinterpreted as Remnant Movement to the specifier of a functional projection in that layer of the sentence, specific to root interrogative clauses, which we have (arbitrarily) called HP.

On the analysis put forward here, IP (AgrP or TP) movement to HP is driven by the need to check an interrogative feature on the H° head of the left periphery of questions; thus, IP movement to HP is an ordinary instance of displacement as characterized in minimalist work. Put in slightly different, more neutral, terms, one may say that H attracts IP to its specifier to “type” it as a question.

As we have repeatedly stressed, it is not the whole IP that is attracted to HP, but rather *Remnant* IP. We have sketched a morphological, language-specific account of the *raison d’être* of this crucial property in section 7.2. It is argued there that the necessity to topicalize various constituents out of the phrase later moving to HP stems from the need to comply at PF with the *morphological* properties of the (overt or covert) H° head. More specifically, we have claimed that the *-t-* morpheme of SCLI and CI in French and Valdôtain is merged in H° and is both a morphological enclitic and a tense morpheme; as such, it must be right adjacent to a finite verb at PF. In addition, *-t-* has been claimed to be a prosodically “deficient” morpheme; as such, it must be (structurally) adjacent to a term that can be a stress-bearing suffix; this requires it to be left adjacent to nominative clitics at PF. On this account, then, it is the independent requirements on the LF and PF interfaces of syntactic derivations that combine to yield the correct spell-out strings of SCLI and CI constructions.

On the highly plausible view that the left periphery of the clause is the locus of the discourse–syntax interface where notions like *topic*, *focus*, *presupposition*, *ground*, and so on acquire syntactic import (see Rizzi 1997), our HP will ultimately have to find a principled position in the hierarchy of projections that define that conceptual domain, a task we have not undertaken here.⁵⁸ Still, our HP and the properties we have given it should be evaluated on their own ground, on the basis of the empirical and theoretical generalizations it makes possible. In that perspective, it

is worth noting that if we are right, all question-related verb movements in French are cases of Remnant Movement; in particular, Stylistic Inversion only differs from SCLI and CI in that its Remnant IP targets a different layer of the Comp domain, Kayne and Pollock's (2001) "GP" (see e.g. the derivation in (32)) rather than the HP layer specific to root questions that attracts Remnant IP in SCLI and CI. The unitary approach to the verb-related computations to the CP domain thus made possible by our analysis can be regarded as a step forward.⁵⁹

A specific view of the syntax–morphology interface is crucial to the system we have developed here; it claims that morphology does not reorder the strings that the syntactic computations feed to PF, although, evidently, it reanalyzes them;⁶⁰ if so, the alternations in clitic ordering mentioned in section 6.4, for example, must be a consequence of syntactic computations, as Bošković (2000) also argues for Slavic clitics in other contexts, extremely convincingly in our view. Like him, we have been defending the view that language-specific morphological properties can act as filters on the output of syntactic computations, although the two modules are completely blind to one another. If our tentative language-specific, morphological account of the restrictions on Remnant Movement in French SCLI and CI is on the right track, this is one important suggestion of this chapter. It must be pointed out, however, that the arguments put forward in sections 5 and 6 in favor of the Remnant Movement approach to SCLI and CI do not depend on this aspect of the analysis. It remains to be seen whether those facts and arguments do in fact require our Remnant Movement approach conceptually, as we have claimed. It is the task of the reader to check that they do.

Acknowledgments

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SEE ALSO: Remnant Movement; Resumption; Subject–Auxiliary Inversion; *Wh*-in-Situ

Notes

1. As is well-known, SI is not restricted to questions at all, as relatives and clefts like (i) and (ii) show:
 - (i) L'homme à qui a parlé Marie s'appelle Jean
the.man to whom has spoken Marie is.called Jean
 - (ii) C'est Jean à qui a parlé Marie
it.is John to whom has spoken Marie

This is why the “trigger” for SI is a *wh*-phrase in the left periphery, not some question feature as in SCLI and CI; on the (dispensable) notion of “trigger,” see Kayne (1972) and Kayne and Pollock (1978; 2001).

2. Valdôtain is a Franco-Provençal dialect spoken in the Italian Val d’Aoste; although the Val d’Aoste is in Italy, it is a subpart of the traditional Franco-Provençal area, which covers French-speaking Switzerland except the Jura Canton and the French Rhône-Alpes area; all the Valdôtain examples in this chapter are from Roberts (1993a).
3. Also appears as chapter 3 of Belletti and Rizzi (1996).
4. Those crucial facts were first noted and analyzed in Kayne (1972).
5. And “residual V2” constructions in the sense of Rizzi (1996) as in (i) (from Kayne 1972, 81):
 - (i) a. À peine (Jean) était-il parti que Marie est entrée
 hardly (Jean) had.he left that Mary walked in
 - b. Sans doute (cette fille) reviendra-t-elle
 no doubt (this girl) will.come.back-t-she
 - c. (Cette fille) reviendrait-elle que je ne serais toujours pas content
 (this girl) would.come.back-she that I still would not be happy
 ‘Even if that girl came back, I still wouldn’t be happy.’

Similarly, the regional *-ti* construction of French (on which, see section 7.3) has non-interrogative (e.g. exclamative) uses, as in (ii):

- (ii) C’est-ti pas malheureux!
 ‘Isn’t that shameful!’
6. Like quite a few other Romance languages (cf. Poletto 2000), French has both subject clitics and direct object, indirect object, locative, and partitive clitics. Most of the tests used in this section would treat all types on a par. That nominative clitics should be distinguished syntactically from the others is shown by a variety of further tests, the most prominent of which being coordination (cf. Kayne 1975; 1994; Poletto 2000): while one may fail to repeat subject clitics in coordinations like (i), it is impossible to omit non-subject clitics in the same way, as (ii) shows:
 - (i) Il a mangé de la viande et a bu du bon vin
 ‘He has eaten meat and has drunk good wine.’
 - (ii) a. Il les a lus et *(les) a commentés
 he them has read and *(them) has commented
 - b. Il en a acheté et *(en) a expédié par la poste
 he of.them has bought and *(of.them) has sent.off by post

In addition, of course, object clitics, unlike subject clitics, do not “invert” with the verb in SCLI and CI:

- (iii) a. Les as-tu lus?
 them have-you read
- b. (Pierre) Les lui a-t-il portés?
 (Pierre) them to.him has-t-he taken
- c. *As les tu lus?/ *As tu les lus?
 have them you read/ have you them read

- d. *(Pierre) A les lui-t-il portés/ *A-t-il les lui portés?
 (Pierre) has them to.him-the brought/ has-t-he them to.him brought?

- On the reason for this difference, see sections 6 and 7; our analysis of subject clitics will not rest on the tripartition between strong, weak, and clitic pronouns argued for in Cardinaletti and Starke (1999), which the reader is nevertheless strongly encouraged to read. When compared to many Northern Italian dialects, French is a relatively unsophisticated language since it does not (overtly) distinguish between invariable and deictic clitics and number and person clitics the way many NIDs do; on this, see Poletto (2000, chap. 2). French does show a person versus non-person distinction in strong subject pronouns, however; see Kayne and Pollock (2001) and the next section; that there is more than meets the eye in French subject clitic sequences is shown by the facts discussed in notes 36 and 44.
7. That *ce* and *on* are nominative clitics is shown by SCLI sentences like *est-ce vrai?* ('Is this true?') and *est-on arrivé?* ('Is one arrived?'), and by the ungrammaticality of **C'est-il vrai?* ('This, is it true?') and **On nous attend-il?* ('One (for) us waits he?') (see Kayne (1975, 89) and section 7.3). That they do not share all the properties of the other nominative clitics is shown by the fact that they do not yield acceptable CI sentences in Standard French: **Depuis quand cela est-ce connu?* ('Since when this is-this known?') and **A qui Marie et moi doit-on parler?* ('To whom Marie and me must one speak?') versus *Depuis quand cela est-il connu?* ('Since when this is-it known?') and *A qui Marie et moi devons-nous parler?* ('To whom Marie and me must we speak?'). On this, see note 37.
8. *Elle*, *nous*, and *vous* are ambiguous and function as clitics in SCLI constructions like *Partirez-vous?* and *Partirons-nous?* ('Will-go you' and 'Will-go we?', respectively) but can also be strong forms, as *nous* is in (14d). When so analyzed, they permit modification and are felicitous answers to *wh*-questions, as in *Qui viendra?* *Nous*, *vous*, *lui* ('Who will come? You/we/him'). When *nous* and *vous* are clitics, they cannot be modified, conjoined, and so on (see (14a), (14b), and (15b)). Strong pronouns, unlike clitics, can be used as *deictic* pronouns. Two other important properties of strong pronouns in French must be borne in mind: (a) they have no morphological Case distinctions; and (b) they never take (obligatory) liaison (see F below). So, except for *elle*, strong pronominal subjects can in principle always be distinguished phonetically from their nominative clitic counterparts.
9. The properties listed here under A, B, C, D, E, and F hold of all clitic forms, not only of nominative clitics, although nominative clitics differ syntactically from non-nominative ones in other respects (see note 8). As noted in Kayne (1975), the two sets of clitics also differ prosodically: while it is somewhat marginally possible to have (ib) as a well-formed continuation of (ia) in a dialog, the same is not true of non-nominative clitics, as the sharp ungrammaticality of (iib) shows:

- (i) a. Il va arriver en retard
 he is going to be late
 b. Qui ça il?
 who that he
 'Who do you mean he?'
- (ii) a. Pierre {les a rencontrés, lui a donné un livre,
 Pierre {them has met, to.him has given a book,
 en parlera, y part demain}
 of.it will.speak, there goes tomorrow}
 b. *Qui ça {les, lui}; *De quoi en; *Où ça y
 who that {them, to him}; Of what 'en'; Where that there}

We interpret this contrast as showing that nominative proclitics are not *prosodic* suffixes, unlike non-nominative proclitics: they can bear main stress and thus needn't form a prosodic word with a following element, unlike *les, lui, en, and y*. Because no such prosodic "prop" is present in (iib), the strings are ill-formed at PF, unlike (ib). In addition, on our analysis of case checking in section 3, (ib) is syntactically acceptable (i.e. it converges at LF) because *il* being a metalinguistic quote in (ib), it is exempted from having to check its uninterpretable nominative feature. Alternatively, it could be that *il* does check it by adjoining to some covert Agrs^c head specific to such elliptical contexts.

10. See Pollock (1998).
11. This section is essentially a partial rephrasing of Kayne and Pollock (2001, sect. 6).
12. For considerable elaboration of this idea, see Cardinaletti and Starke (1999). See also (text to) notes 27 and 28.
13. Postverbal strong pronouns in SI *must* be deictic (see Kayne 1972, n. 2; Kayne and Pollock 2001, sect. 6). For some, (24) are (very) awkward even on their strongly deictic use, but all the informants who the native speaker of French among us has asked agree that they contrast sharply with the totally unacceptable (26), although an anonymous reviewer states that this is not true for him/her; the analysis below will account for the (24) versus (26) contrast that holds for many speakers, and we will put aside the interesting question of why some seem to disagree on the status of (24). There is no disagreement on (25) versus (27), however: everybody perceives that very sharp contrast.
14. The liaison *-s* of *vous* and *nous* in (27c) and (27d) must *not* be pronounced. If it is, those examples become irrelevantly acceptable, with *nous* and *vous* then (the stressed variants of) nominative proclitics.
15. (30) is to be related to the fact that various instances of clitic pro in French, Italian, and English are also limited to third person; see Kayne (1999b). The silent clitic pro referred to in (30) should be carefully distinguished from the phrasal pro of null subject languages, which has no such restriction. On phrasal pro, see Cardinaletti (1997).
16. See also Kayne (1994; 2000, chap. 9), Pollock (1998), and Sportiche (1993) on clitic doubling in other contexts.
17. On this view, SI sentences crucially involve Remnant (IP) Movement (see Kayne and Pollock 2001); on Remnant Movement, see den Besten and Webelhuth (1987; 1990). On Remnant IP Movement, see also Munaro, Poletto, and Pollock (1999), Poletto and Pollock (2004a), and sections 6 and 7.
18. Despite the fact that *-ant* forms and finite verbs behave similarly with respect to the placement of adverbs (cf. Kayne (1975, sect. 1.3) and Pollock (1989, 408)).
19. (38) could in fact be analyzed as in (i) if one adopted (ii) as the "static" version of principle (30), as we shall do in section 6 (cf. (70)):

- (i) [TP [{Eux, lui, elle}] [T^o ayant] ...]
- (ii) Only strong third-person pronouns can remain in SpecTP.

On that analysis, *eux, lui, elle*, and so on simply check their (non-morphological) case feature by entering the usual checking relation with finite T^o, and they do not move to any higher functional projection. As shown in (i), they are not part of a clitic phrase; rather, they make up a "simple" subject DP; on the reason for this, see section 7.5.

20. On this analysis, the acceptable infinitives like (i) (= example (36)).

- (i) {Eux, nous, vous, toi, moi} passer l'examen? Jamais!
 {them, us, you, me} to.take the.exam, never

cannot have a pro subject in SpecInfl; this comes as no surprise if the subject of infinitives is the null pronominal anaphora PRO of Chomsky (1981). PRO cannot occur in gerunds

because if it did, it would have null case, which it bans (cf. Lasnik and Chomsky 1993), and *pro* cannot occur in infinitives since it can't have null Case. In the text example, *Ayant compris le problème, je suis allé au cinéma* ('Having understood the problem, I went to the movie'), the phrasal *pro* subject checks its case in SpecTP and the coreferential clitic *je* (similarly, *tu, il, nous*, etc.) checks its own morphological case in Agrs° in the main clause. So, in gerunds of this type, *je, tu, nous*, and so on can be interpreted as coreferent with an empty pronominal, despite Kayne's principle (30).

If this is right, the lexical subjects of examples like (i) must have a different Case and check it in a crucially different way; it would be tempting to say that such infinitives have a vocative subject (= [moi?, toi? lui?][PRO passer l'examen]] ...) and tie their existence to this. Gerunds should then exclude such vocative structures, for reasons unclear. Perhaps vocatives are too high for the gerunds to activate, a property that might be related to the more marked character of Aux-to-Comp constructions in infinitives compared to gerunds.

21. Because the LF form thus produced will contain an uninterpretable case feature; if clitics are only heads (see section 4 and note 28), the input of (33) would in addition have to contain two subject clitic phrases, which is independently banned by other Universal Grammar (UG) constraints (e.g. one of those two clitic phrases would have its EPP features unchecked).
22. On the idea that clitics are heads, see e.g. Kayne (1975; 1983; 1994, chap. 6), Rizzi and Roberts (1989), Cardinaletti and Stark (1999), and many others.
23. See Sportiche (1988), Larson (1988), and Koopman and Sportiche (1991).
24. This analysis thus rests crucially on the existence of a "split" in the IP field between TP and AgrsP, as argued originally in Pollock (1989) and much subsequent work in the same vein, leading over the years to a refined exploration of the functional structure of the sentence, and culminating in the detailed cross-linguistic investigation of Cinque (1999). Chomsky (1995) has proposed a significant step in the other direction and argued that what we have been calling Agrs should be eliminated from the inventory of functional categories, mostly because Agrs has no autonomous interpretive import. Assuming that LF interpretability does constrain the existence of functional categories, what we call Agrs in the text could be replaced by a higher substantive functional head, a move not entertained by Chomsky (1995) but consistent with his guidelines (cf. also Pollock 1997). The distribution of full DP/strong pronouns and clitic pronouns in gerunds in French is in itself an argument for the existence of (at least) two distinct positions in the higher functional field of the sentence, each with its specific case-checking properties. On the need for more than these two functional positions, see also Cardinaletti and Roberts (1990), notes 36 and 44, and Poletto (2000). Aside from the very many arguments in its favor in the comparative syntax literature over the last 15 years or so, the "split" between TenseP and AgrsP has been argued for by Guasti and Rizzi (1999) and Neidle and MacLaughlin (1999) on two other totally different bases, language acquisition and the syntax of American Sign Language, respectively; in itself, the convergence of these different fields of linguistic research provides strong confirmation for the Split-Infl hypothesis.
25. If this account of (47) is correct, the acceptability of (i),
 - (i) a. Pierre, paraît-il, aime la linguistique
Pierre, it-seems, likes linguistics
 - b. Lui, paraît-il, aime la linguistique
him, it-seems, likes linguistics

must mean that the strong pronouns and full DP of such sentences have been extracted from their SpecTP position to a position to the left of AgrsP (on this, see Belletti 1990),

which can host indefinites and quantified DPs and is thus *not* a clitic left-dislocated position (compare (8)); similarly, *wh*-phrases like *quand*, *à qui*, *comment*, etc., in sentences like (ii) must also have moved from their SpecForce position to some superordinate position in the CP field; the unacceptability of (iii) means, then, that *que* cannot move up to that position:

- (ii) a. Quand, à ton avis, partira Jean
 when, in your opinion, will.go Jean
 b. À qui, à ton avis, a-t-il téléphoné
 to whom, in your opinion, has-t-he phoned
 c. Comment, selon toi, Marie va-t-elle s'excuser?
 how, in your opinion, Marie will-t-she apologize
- (iii) *Que, à ton avis, a fait Jean
 what, in your opinion, has done Jean

(iii) might itself then be profitably tied to Bellunese pairs like (iv) – on which, see Munaro, Poletto, and Pollock (1999) and Poletto and Pollock (2004b):

- (iv) Bellunese
 a. a-tu magnà che?
 have-you eaten what
 b. *Che a-tu magnà?
 what have-you eaten

26. In extremely formal style, it is possible to say *Mes amis z-ont compris* or *Eux z-ont compris*. Such cases of liaison are never obligatory, even in highly conservative French; the “style” that has such exceptional cases of plural liaison is in fact plain snobbish, and it evidently relies on very different structural conditions.

In bare phrase structure terms (cf. Chomsky 1993; 1995), all lexical items, including strong pronouns like *eux*, *lui*, *moi*, etc., are heads in the numeration. What distinguishes them from pronominal clitic heads is that they “project” to a phrase, which clitic heads cannot do as a matter of course; they can if they merge with a designated class of lexical items (coreferential pro, strong pronouns, full DP), yielding a clitic phrase in the sense of Kayne (1972) and Sportiche (1993). That inability they share with articles, among other grammatical items; articles too fail to “project” a maximal projection unless they take a NP (or AP) complement. Put slightly differently, articles are part of the “extended projection” of the noun, just as clitics are part of the verb’s extended projection, in Grimshaw’s (1991) sense. It appears, then, that liaison – like reduced pronunciation in English – is sensitive to that property and ignores the fact that the structural relationship between a nominative clitic and the following verb or clitic phrase probably differs from that of an article and its AP or NP complements; (this refinement of) the text analysis (still) leaves unexplained the obligatory liaison in *Eux z-autres* and *Vous z-autres*, unfortunately. On the status and position of articles in the functional projections of the DP, which these inadequate remarks do not do justice to, see Giusti (2000) and her many references.

27. The structural hierarchy we have argued for here is at variance with that proposed in Cardinaletti (1997); we have in effect reversed the order of embedding of the two functional positions hosting clitics and full DP/strong pronouns, which she suggests (see e.g. her 1997, 53, ex. (73)). The contradiction may well only be apparent, however, and it is tempting to claim that in the simple affirmative sentences she examines, strong pronouns and full DPs (though not clitics) eventually move from the low position countenanced here up to a higher functional layer, perhaps akin to the Topic-like position to

which they alone move in SI on Kayne and Pollock's (2001) analysis. On this, see also note 27.

28. As Poletto (2000) demonstrates, the NIDs provide *empirical* arguments in favor of *overt*, pre-spell-out movement in SCLI; let us repeat two of these arguments here. First, in the dialect of Rodoretto di Prali, it is possible to coordinate SCLI constructions and *wh*-structures with an overt complementizer, as in (i) (cf. Poletto 2000, chap. 3, ex. (21):

- (i) Rodoretto di Prali
 L'achetà-tu ou qu' tu l'achette pa?
 it.buy-you or that you buy not

On the well-supported assumption that coordination is always coordination of two identical phrases, *l'acheta-tu* must have activated the Comp field whose presence in the second conjunct is overtly signaled by *qu-*; therefore, SCLI in Rodoretto di Prali must involve overt computation to the CP field.

Second, in Fassano (the dialects spoken in the Fassa valley), SCLI is only possible when the verb has crossed the position of a "new information" particle that has been shown to be a CP particle in Poletto (2000, 46–49):

- (ii) Fassano
 a. Olà vas-t pa?
 where go-you particle
 b. Olà pa tu vas
 where particle you go
 c. *Olà pa vas-t?
 where particle go-you
 d. *Olà tu vas pa?
 where you go particle

In (iia), SCLI has taken place, and both the verb *vas* and the subject clitic *-t* precede the Comp particle *pa*. In (iib), SCLI inversion has not taken place – as is possible in many varieties, including colloquial French (cf. *Où tu vas?* = 'Where you go?') – and *pa* precedes the subject clitic and the verb. (iic) shows that *pa* cannot precede the verb and the clitic when SCLI has taken place, and (iid) shows that the particle cannot follow them when it has not. Evidently, (ii) can be explained neatly if SCLI is a computation that *overtly* displaces the verb and the subject clitic to the Comp field, more precisely to a position higher than *pa*. On further arguments of this sort, see also Poletto and Pollock (2004a).

29. In colloquial French, *pas* does not block head movement in imperatives, as shown by the fact that at that stylistic level, (i) is acceptable for many speakers, including the native speaker of French among us:

- (i) Donne le lui pas!
 give it him not

(iia) is also fine in a slightly less colloquial style, and it alternates with the "standard" (iib):

- (ii) a. Le lui donne pas!
 it him give not
 b. Ne le lui donne pas!
 NEG it him give not

(i) should clearly be interpreted as missing *ne* altogether; speakers that accept (iia) have an invisible *ne* that, like its overt counterpart, blocks head movement. (i) then shows that

for speakers of colloquial French, *pas* can be generated as sentential negation, presumably in the “low” position described by Zanuttini (1997) for some NIDs. We return to imperatives from a different perspective in section 6.4.

30. Because they show gender and number distinctions, which expletives typically don’t – although the NIDs show that expletive pronouns can be morphologically masculine or feminine.
31. This analysis of (63) thus derives the effects of Kayne’s (1983) principle (59), repeated here under (i), without having to posit it belongs in UG.
- (i) Given a chain C with case K, K can be realized morphologically on at most one element of C.
32. Those facts were originally noted in Morin (1979), who gave contrasts like the following (see also Kayne 1983, 219):

- (i) a. Pourquoi lui seul a-t-il été prévenu?
 why he only has-t-he been told
- b. *Pourquoi toi seul as-tu été prévenu?
 why you only have-you been told

To Jean-Yves’ ear, (ia) becomes less acceptable if *elle* replaces *il* and if *seule* is dropped:

- (ii) a. ?Pourquoi elle a-t-elle été prévenue
 why she has-t-she been told

Weak but clear contrasts like (ia) versus (iia) have a garden path flavor; when it is not standing in a CLLD position, preverbal position *elle* seems to be preferably interpreted as a clitic pronoun, which its morphology makes possible (see note 10). The later occurrence of the postverbal clitic in CI makes this impossible for the reasons discussed in section 4, whence the garden path problem. This is why the presence of the modifier *seule* helps: it makes the analysis of *elle* as a clitic impossible (see section 4), so no parsing problem arises. Adding *autres* or *trois* to preverbal *nous/vous* in (65c) and (65d) does not make them totally acceptable in Jean-Yves’ French, probably because to his ear ?{*Nous, vous*} {*autres, seuls, trois*} {*avons, avez*} *apporté un livre* remain less than perfect; in this, they differ from their gerund counterparts: ‘{*Nous autres, moi seul, toi seul, vous deux*} *ayant passé l’examen ...*’ are fine and contrast minimally with *{*Nous, moi, toi, vous*} *ayant passé l’examen*’ (cf. discussion of (36d)); such contrasts will follow from principle (70) if strong first- and second-person pronouns can remain in SpecTP when modified by *autres, seuls*, and numerals.

33. On the unacceptability of (69c) and (69d), see note 16.
34. The idea that only third-person pronouns can remain in SpecTP goes in the same direction as the descriptive generalizations on clitic doubling in Poletto (2000, chap. 6). Although we have no conceptual explanation for why there is a special slot for first- and second-person pronouns in the structural hierarchy of the clause, it does appear that some such property also holds for object clitics; Zanuttini (1997, 18) observes that first- and second-person object clitics occur in front of a preverbal negative marker while third-person pronouns occur after it, as shown in (i):

- (i) Cairese
- a. U n li sent nen
 SCL not him hears not
 ‘He does not hear him.’

- b. U mi-n sent nen
 SCL me-not hears not
 'He does not hear me.'

On this basis, it would be tempting to say that (some principled reformulation of) (70) should carry over to all first- and second-person pronouns, independently of their subject/object status.

35. Compare (69a) and (69b) and, say, *Ma femme et moi avons téléphoné* ('My wife and I have phoned'), *Ta femme et toi avez téléphoné* ('Your wife and you have phoned'), etc. We therefore do not need to appeal to Kayne's (1983) thematic criterion account of (68) versus (69), which rested on his (74), repeated in (i):

- (i) A first- or second-person pronoun must necessarily be an argument.

(i) is falsified, as Friedemann (1997, 164) notes, by examples like (72b) and (72d); Kayne's (1983) idea that the postverbal clitic in CI (though not in SCLI) was an expletive also rested on contrasts like (i) versus (ii):

- (i) Depuis quand est-ce vrai?
 since when is-this true
 (ii) *Depuis quand cela est-ce vrai?
 since when this is-this true

which he analyzed as a theta criterion violation with *ce* and *cela* both arguments. Friedemann (1997, 164) notes that some speakers accept (ii); others perceive a clear contrast. For the latter class, our analysis may have to state that although *ce* and *on* are nominative heads in a clitic phrase, they only accept a null *pro* in their specifier, unlike *il* which accepts *cela*, bare quantifiers like *tout*, quantified DPs like *chaque homme* etc., as well as (phrasal) *pro*. Examples and contrasts like (iii):

- (iii) a. {Cela, tout} est-il bien attaché?
 {that, all} is-it well fastened
 b. {Cela, tout} va tomber parce que c'est mal attaché
 {that, all} will fall because that.is badly fastened
 c. *{Cela, tout} va tomber parce qu'il est mal attaché
 {that, all} will fall because it is badly fastened

must then mean that in (iiib), *cela, tout* are interpreted as coreferent to (phrasal) *pro* in the spec, *ce* of the subject clitic phrase in the subordinate clause:

- (iv) [CIP [NP {cela, tout}]i *pro*]... [CIP [NP *pro*]i *ce*]
 As for (v), the structure of the ill-formed (iiic),
 (v) *[CIP [NP {cela, tout}]i *pro*] ... [CIP [NP *pro*]i *il*]

might be excluded because of a conflict in gender or vagueness if the *pro* specifier of *il* has to be masculine or non-vague, which *cela, tout* are not; if so, [CIP [NP *pro*]i *ce*] in (iv) is fine because *ce* imposes no such requirement on *pro*, perhaps because of its deictic nature.

36. Perhaps to check some modal feature, as in Belletti (1990), Rivero (1994), Rizzi (1993), and Terzi (1999).

37. H° is a head that can only be merged in root sentences, and it can be associated with various (uninterpretable) features, like [+question] – which then triggers the CI and SCLI phenomenology for reasons discussed below – and [+imperative]; (true) imperatives are indeed restricted to root contexts.
38. In (very) colloquial French, that suppletion is not obligatory for first-person dative *me*, and most speakers of Standard French have probably caught themselves saying, half in jest, things like *donne le me* or *donne me le* ('Give it me' and 'Give me it'). The same does not appear to be true of the second-person dative; even as a joke, Jean-Yves doesn't think he could say **mets le te dans la poche*, **mets te le dans la poche* ('Put [it you, you it] in the pocket'). Suppletion is obligatory in simple imperatives like *aide moi*(**me*); see Kayne (2000, chap. 8).
39. Terzi (1999) develops a head movement account of a similar alternation in Standard and Cypriot Greek consistent with Kayne's LCA resting on two different input structures for clitic sequences. In one, the consecutive dative and accusative clitics are adjoined to two different functional heads, as in the text; in the other, the two clitics are adjoined to one another and are adjoined as a unit to a single functional projection (see Terzi 1999, 102–103); V° movement to the C domain above the clitic sequence must first adjoin to the closest functional projection because of Chomsky's (1995) "shortest move"; the relevant clitic projection is then "dragged along" by V° movement, and so the two input structures yield the two alternative orderings of Greek imperatives. Terzi refrains from extending her analysis of Greek to French and adopts Laenzlinger's (1998) morphological approach, which capitalizes on the tonic properties of *moi/toi/lui* in, for example, *Donne le moi*, *donne moi le*, etc. The latter approach is incompatible with our view of morphology (see next section), and it does not seem to carry over very easily to the clitic sequences variations in (very) popular French in which *moi* does not replace *me*, as in *donne me le* and *donne le me*. See note 38.
40. On the non-availability of morphological accounts, see section 7.
41. As the reader will obviously have understood by now, we have been relying throughout on the idea that Remnant Movement is an option of Universal Grammar. We have indeed been assuming that since movement – "internal merge" – affects constituents, displacement of constituents that subconstituents have vacated at previous stages in the derivation cannot be avoided. Implicitly questioning this line of thought, one anonymous reviewer raises the question of the ungrammaticality of cases of (so-called "quantitative") *en* cliticization from a (surface) subject position like (ib), which contrasts minimally with the acceptability of (ib):

- (i) a. Trois livres ont été publiés
three books have been published
b. *Trois en ont été publiés
three of.them have been published
- (ii) a. J'ai écrit trois livres
I.have written three books
b. J'en ai écrit trois
I.of.them have written three

His idea concerning (ib) is that the trace of *en* within the surface DP subject cannot be c-commanded by its antecedent since it has been moved to a higher position, unlike what obtains in (iib).

This cannot be the correct account of (ib) for the simple reason that it would incorrectly exclude perfectly fine instances of cases of (adnominal) *en* cliticization like (iii):

- (iii) a. Le premier chapitre de ce livre a déjà été publié
the first chapter of this book has already been published

- b. Le premier chapitre en a déjà été publié
 the first chapter of.it has already been published

For an early attempt to account for (ib) versus (iiib), see Pollock (1998), where it was already noted that (adnominal) *en* cliticization required a derivational approach to the universal c-command constraint on antecedent–trace pairs.

42. Laenzlinger (1998, 3.1 and 3.2.1) suggests that the *-t-* of SCLI and CI is related to the so-called *fausse liaison* or *pataques -t-* of popular French sentences like (i):

- (i) a. Il ira seul -/t/-à Paris
 he will.go alone /t/- to Paris
 b. Il devra- /t/-y avoir du monde
 it must -/t/-there be of people
 ‘Lots of people will be there.’

where *pataques -t-* is the marker of third-person agreement. This would then account for the absence of *-t-* in first- and second-person SCLI:

- (ii) a. Partirons (*t) nous
 will.go (*t) we
 b. Partirez (*t) vous
 will.go (*t) you

The clever “*rapprochement*” between the two sorts of *-t-s* we find unconvincing: first, as Laenzlinger (1998, ex. (112)) himself notes, */-z/* in popular French is an equally acceptable *fausse liaison* consonant for third person:

- (iii) Il reviendra -/z/ à Paris
 he will.go.back -/z/ to Paris

although it indeed is typically a first- or second-person agreement marker, as in *fausse liaison* examples like (iv) (= Laenzlinger 1998, ex. (110a)):

- (iv) J’irai/tu iras/nous irons finalement -/z/- à Paris
 I/you/we will-go finally -/z/- to Paris

On Laenzlinger’s (1998) analysis of SCLI and CI *-t-*, one should expect (v) to be a possible variant of (83c) and (83d), which they clearly are not:

- (v) a. *Parlera -/z/- {il, elle}?
 will.speak -/z/- {he, she}
 b. *Parlent -/z/- {ils, elles}?
 speak -/z/- {he, she}

If what accounts for (v) is that */z/* is preferably a second-person marker, we would still expect (vi) to surface, again contrary to facts:

- (vi) a. *Parlera -/z/- tu
 speak -/z/- you.SING
 b. *Parlerez -/z/- vous
 speak -/z/ you.PL

In any case, the Morgeux data show that the analysis is insufficiently general; this criticism of Laenzlinger's analysis of SCLI and CI-*t*- does not extend to his extremely interesting account of the "epenthetic" /z/ of imperatives like *Donne *(z) en*. See Laenzlinger (1998, sect. 3.1).

43. On the syntactic import of *-t-*, see also Kayne and Pollock (2012; 2013).
44. We shall say that *-t-* has a null counterpart \emptyset in first- and second-person pronoun SCLI sentences as in *Quand partons-nous* and *À qui parliez-vous?* ('When leave we?' and 'To whom spoke you?') and that *- \emptyset -* has the same morphophonological properties as its overt counterpart. The first-person singular clitic *je* can only invert in SCLI with auxiliaries *avoir*, *être*, and *aller*; with modals like *devoir* and *pouvoir* – the latter only in its otherwise obsolete *puis* form of *Puis-je?* ('can I') (cf. **peux-je*); and with main verbs in the future and conditional:
- (i) a. Suis-je arrive
am-I arrived
b. Ai-je compris
have-I understood
c. Vais-je partir
will-I go
d. Dois-je partir
must-I leave
e. Puis-je dormir
can-I sleep
- (ii) a. Arriverai-je?
will.arrive-I
b. Comprendrai-je
will.understand-I
c. Partirai-je
will.go-I
d. Dormirai-je
will.sleep-I
e. Partirais-je si je savais que...
would.leave-I if I knew that...
- (iii) a. ^{?*}{Arrive-je, Arrivais-je}
arrive{Prst, Past} I
b. ^{?*}{Comprends-je, comprenais-je}
understand{Prst, Past} I
c. ^{?*}{Pars-je, partais-je}
go{Prst, Past} I
d. ^{*}{Dorme-je, dormais-je}
sleep{Prst, Past} I

Such contrasts recall the parallel restrictions on Subject Aux Inversion in English (cf. Pollock 1989) and would follow on an analysis of that type if *je* moved or was merged "very high" in the IP field, to or in a position that only "auxiliary phrases" could cross over under remnant movement (see section 6) and if future/conditional verb forms moved up to that position in virtue of the fact that their future/conditional tense endings are identical to those of auxiliary *avoir* in the present tense and "imparfait." This would then be a very surprising reflex in synchronic syntax of the bimorphemic origin of the construction 2000 years ago, on which see Benveniste (1974) and Roberts and Rousou (1995).

45. The structural interpretation of the predicate “adjacent” just adopted comes dangerously close to building a syntactic property into morphology. This may well indicate that the language-specific morphological analysis entertained in this section is not optimal; if so, the more ambitious syntactic analysis alluded to in section 7.1 should be taken up seriously in future research; see Poletto and Pollock (2004a).
46. As is well-known, Old French had questions in which accusative and dative clitics did follow the verb; (i) from Foulet (1972, 116), provides relevant examples:
- (i) a. Si dist: Sire, ai le ge bien fait?
 thus said, Sire, have it I well done
 b. Conois la tu?
 know her you
 c. pere, avés les vos obliées?
 Father, have them you forgotten
 d. Plairoit vos oïr un son d’Aucassin, un franc baron?
 please you (to).hear a song by Aucassin, ...

Since Old French also allowed “Germanic” questions (see e.g. Rutebeuf’s famous *Que sont mes amis devenus?*, ‘What have my friends become?’; and, for much discussion, Rizzi and Roberts 1989; Cardinaletti and Roberts 1990; Roberts 1993b), it is tempting to say that both types involved (at least final) head movement to (some “high” head in) the CP field, a conclusion forced on us if Kayne (1994, 44) is right in assuming that such strings as *A Jean compris?* (‘Has John understood?’) only obtain via V° movement to a head in (some) Comp (layer). In this diachronic perspective, a reduction of the syntactic scope of verb movement to the CP field seems to have been a long-term tendency in French. Conversely, Old German and Old English had V3 (V4 etc.) structures like (ii), discussed in Cardinaletti and Roberts (1990) and Tomaselli (1995):

- (ii) a. erino portun ih firchnussu
 (iron doors I shatter)
 (Tomaselli 1995, ex. (1b))
 b. Dhes martyrunga endi dodh uuir findemes mit urchundin
 (His martyrdom and death we demonstrate with evidence of
 dhes heilegin chiscribes
 the Holy Writings)
 (Tomaselli 1995, ex. (1c))
 c. After his gebede he ahof that child up
 (after his prayer he lifted the child up)
 (Van Kemenade 1987, 110, ex. (3a))
 d. Thas thing we habbath be him gewritene
 (these things we have about him written)
 (Van Kemenade 1987, 110, ex. (3b))

It would be tempting to analyze such examples as cases of Remnant Movement to the Comp area of nominative clitic voice phrases – various non-nominative clitic voice phrases could also so move in Old English (see Van Kemenade (1987) for a head movement analog of this idea). This only obtained when the highest CP layer was not occupied by a *wh*-phrase, negation, and the adverbial *a* ‘then’; for such cases, one might hypothesize final V° movement to the head of forceP in the specifier of which *wh*-phrase, negation, and *a* would be standing, much as in the analysis of French imperative sketched out in section 6.4; if this is the right way to look at such facts –but see

- Cardinaletti and Roberts (1990) for an early alternative account exploiting a double Agr structure – then Romance and Germanic would seem to have taken two opposite courses, for reasons that would deserve an investigation that cannot be undertaken here.
47. On a similar view of *i* arrived at from a totally different angle (that of the “*que to qui*” rule), see Taraldsen (1998). In Piedmontese and Friulian dialects, *i* is what Poletto (2000) calls a “deictic” SCL (i.e. first- and second-person clitics), which jibes well with the view that at least Québec French *-tu* is historically derived from Standard French second-person singular clitic *tu* (see Vinet 2000). On Poletto’s analysis, deictic clitics are in the same structural position as invariable clitics.
48. This account evidently presupposes that *i* does not have any morphological case to check (in Agr^s), which should be tied to its complete lack of person features (see Chomsky 1999); one might wonder why on the *-t-(+i)* strategy just described, it is impossible to remnant move only FP3 in (95), yielding ill-formed strings like (i):

(i) *Viendra-t-i elle?
will.come-ti she?

(i) should, we believe, be excluded for the same reason (ii) is:

(ii) a. *i j'ai compris
i I.have understood
b. *i elle a compris
i she has understood

To our knowledge, no dialect of French allows Invariable SCL+Variable SCL strings to surface; in this respect, French differs from many NIDs. In the Italian dialects that do accept such sequences, Poletto (2000, 23) shows that the invariable clitics move to the CP domain and have pragmatic and discourse import. Suppose that it is only when they play such a derivative discourse role that invariable clitics can c-command lower level variable clitics, because they then cease being analyzed as referential entities. Assume French *ti* dialects do not allow for *i* incorporation into the CP domain; *i* therefore remains referential; since it is necessarily coreferential with the lower clitics, it will cause a Principle B violation unless the computations to the CP field create structures in which it is neither c-commanded by nor c-commands the variable clitics. This will exclude both (i) and (ii), as desired, by forcing the maximal FP2 in (95) to undergo Remnant Movement to SpecHP. On similar ideas in other contexts, see section 7.5.

What was said in section 3 predicts that in the *-ti* sociolects and dialects, sentences like (iii) should be well-formed but (iv) excluded:

(iii) a. Lui viendra-ti
him will.come-ti
b. Eux viendront-ti
them will.come-ti

(iv) a. Moi viendrai-ti
me come-ti
b. Toi viendras-ti
you come-ti

This is because *moi* and *toi* cannot remain in FP2, unlike *lui* and *eux*. To the (limited) extent that Jean-Yves’ intuitions about those sociolects are reliable, we are inclined to believe that the prediction is correct.

It is often said that the *ti/tu* dialects and sociolects ban *wh*-extraction altogether; the facts are not crystal-clear, however. Yves-Charles Morin (p.c.) and Québec French native speakers like Monique Lemieux and Marie Thérèse Vinet (p.c.) do seem to accept as perfectly grammatical only yes/no questions like (v) and find examples like (vi) fairly outlandish:

- (v) a. Il va-tu bien?
he goes-ti well
'How is he feeling?'
b. Je suis-tu arrivé?
I am-ti arrived
'Have I got there?'
- (vi) a. Quand tu pars-tu?
when you go-ti
'When are you leaving?'
b. Comment elle va-tu?
how she goes-ti
'How is she doing?'
c. Où je suis-tu arrivé?
where I am-ti arrived
'Where have I arrived?'

However, Yves Charles Morin notes (p.c.) that in his French *-ti* dialect, the counterpart of (vib) "s'améliore avec le complémenteur *qu*," and gives as acceptable (vii),

- (vii) Et comment qu'a va-ti, ta vache, à c'theure?
and how that.it goes-ti, your cow, now
'And how is your cow doing now?'

We will therefore refrain from attempting to speculate on why (vi) and the like in Québec French are often judged less than optimal; the remarks on Québec French *-tu* constructions in this endnote don't even scratch the surface of its complex properties, on which see Vinet (2000) and her references.

Aside from clear Topic drop cases like the famous question *Où qu'est-ti?* ('Where that is-ti?') – *Où qu'est-ti?* was asked by Michel Simon in an equally famous French movie in the 1930s – the null topic here is a card that Michel Simon keeps moving around and that onlookers must spot if they are to win their bets. The *ti* constructions require preverbal subjects, which simply follows from the EPP on our analysis, which also claims that the *que* of (vii) and of Michel Simon's question must be the surface realization of the head of a (very) "high" functional layer of the CP field, perhaps ForceP.

49. The different Valdôtain dialects can differ a lot in that respect; according to Roberts (1993a, 320), the Châtillon and Val Ferret dialects have only one second-person singular preverbal clitic in simple tenses, while the Ayas and St Nicholas dialects have three. Despite this considerable variation, all dialects require a proclitic on the auxiliary in all persons in compound tenses.
50. (104) is simplified. See section 7.5.
51. Most NIDs have subject clitics (cf. Poletto 2000), yet they do not allow for the SCL1 V SCL2 sequences of SCL1 of Regional French or Valdôtain. Similarly, they do not have CI constructions. So, for example, in Friulian **Al vegnial* ('He comes he?') and the like are excluded, although *vegnial* ('comes he') is fine; in our terms, that must mean that their

subject clitics have not been reanalyzed as TP elements (i.e. as “pure” agreement markers), as in Valdôtain, and that full DPs are in the specifier of the Agrs° nominative clitics (see next section). In short, full DPs are too high in the structure of the clause in most NIDs for Remnant TP Movement to the specifier of HP to drag them along, as Poletto (2000) already argued.

52. We have omitted the previous topicalization of the direct object *an pomme* (an apple).
53. We ignore the cycle here to make the derivations easier to read.
54. As is well-known, the basic assumption taken up here that the null subject agreement markers have to be overt raises tricky problems for Italian third singular and, more generally, for Chinese-type null subject languages, on which see Huang (1988).
55. See Poletto (2000, chap. 6) for the refinements that the NIDs require concerning what elements their nominative clitics can double. For a very convincing criticism of the informal notion of *français avancé* and the view defended by Zribi Hertz (1994) that in “colloquial” French, subject clitics are the spell-out at PF of Agreement markers, as in the NIDs, see Côté (1999).
56. In addition to their role in SCLI configurations, clitic phrases (with a non-lexical clitic head) play a major role in SI (see Kayne and Pollock 2001); the text analyzed allows for that since the null clitic *pro* fails to be c-commanded by the topicalized DP, and the latter fails to be c-commanded by the former in the spell-out structures generated by derivations like (i) (= (32) in text), at work in SI sentences like *À qui a téléphoné Jean?*

(32) [IP Jean-pro a téléphoné]
 ⇒ [FP Jeani F° [IP ti-pro a téléphoné]]
 ⇒ [GP [IP ti-pro a téléphoné] G° [FP Jeani F° tj]]

57. Unfortunately, the analysis developed here hasn’t much to contribute to the understanding of a mysterious set of robust facts uncovered in Morin (1985). Morin observes that what he convincingly analyzes as the (subjectless) verbs *voilà* and *voici* allow the postverbal clitic to “agree” with the objective feminine clitic *la/les*, as in sentences like (ib) and (ic),

- (i) a. Ne la voilà-t-il pas prisonnière de ses mensonges
 ‘Isn’t she a prisoner of her own lies?’
- b. Ne la voilà-t-elle pas prisonnière de ses mensonges
 ‘Isn’t she a prisoner of her own lies?’
- c. Ne les voilà-t-elles pas prisonnières de leurs mensonges
 ‘Aren’t they prisoners of their own lies?’

This comes in addition to the acceptable and expected SCLI pattern of (ia), in which *il* is arguably an expletive subject clitic comparable to that of, for example, *lui semblait-il que la terre était plate?* (to him appeared-it that the earth was flat = ‘Did it seem to him that the earth was flat?’), despite the subjectless form that *voici-voilà* affirmative sentences take at spell-out (see the account of a similar asymmetry in Valdôtain in section 7.4). The same pattern of exceptional postverbal clitic agreement holds in CI sentences like (iib) and (iic) with a verb like *gêner*:

- (ii) a. Cela la gêne-t-il?
 this her bother-t-it
 ‘Does that disturb/bother her?’
- b. Cela la gêne-t-elle
 this her bother-t-she
 ‘Does that disturb/bother her?’

- c. Cela les gêne-t-elles
 this them bother-t-they.PL
 'Does that disturb/bother them PL?'

Cases like (iib) and (iic) make it difficult to analyze the peculiar "agreement" pattern of (ib) and (ic) as resulting from the (exceptional) reanalysis of *la* as an objective subject clitic occupying the specifier position of a subject clitic phrase of the form in (iii),

- (iii) [CIP {la, les} [Cl° elle(s)]]

all the more so as sentences like, say, *Depuis quand cela la gêne-t-elle?* ('How long has this bothered her?') seem to have the same acceptability as (iib), unless it could be claimed that *qu*-phrases like *depuis quand* can move to a position further left (i.e. higher) than that to which object *wh*-phrases can move. Morin (1985, 796) notes that the acceptability of the feminine clitic in (iib), (iic), and the like seems to depend on the thematic roles and animacy of both subjects and objects; compare:

- (iv) a. Depuis quand Pierre la gêne-t-il?
 'How long has Pierre disturbed/bothered her?'
 b. *Depuis quand Pierre la gêne-t-elle?
 'How long has Pierre disturbed/bothered her?'
 c. Marie, cela va-t-elle la déranger?
 'Marie, is this going to disturb/bother her?'
 d. ?*La pièce, cela va-t-elle la déranger?
 'The room, is this going to put it in disorder?'

Morin (1985, 797) makes the further very important observation that the acceptable exceptional clitic agreement of (iib)–(iic) never extends to subject–verb agreement, whence contrasts like (v):

- (v) a. *Cela les gêneront-elles?
 this them bother.FUT.PL-they
 'Will that bother them?'
 b. Cela les gênera-t-elles?
 this them bother.FUT.SING-t-they
 'Will that bother them?'

In short, although (v), (iia), (iva), (iib), and (ivd) are straightforwardly explained by the analysis developed in this article, the (perfect) acceptability of (ib)–(ic) and (iib)–(iic) does not follow from anything we have said. On equally ill-understood contrasts in animacy with something of the same flavor in other constructions, see, for example, Kayne (1975, 320–323, 159, n. 107). On the problems raised by such cases and an account of what can be called *hyper-complex inversion*, see Kayne and Pollock (2012; 2013).

58. See Poletto and Pollock (2004a).
 59. For this to be a genuine breakthrough, one would need to explain why Remnant IP Movement to GP, as in SI, crucially depends on the previous topicalization of the subject while in CI and (regional *-ti*) SCLI, Remnant IP Movement to HP is not subject to this requirement; see Poletto and Pollock (2004a). In addition, our analysis raises the general problem of why UG should allow for two radically different types of computations, head movement and Remnant Movement, yielding identical strings at spell-out; see section 7.1.

60. So, for instance, the string *est-il* ('is he') in *Quand (Pierre) est-il venu?* ('When (Pierre) is he come?') is crucially analyzed as a morphological unit, a prosodic word, although it is not a syntactic object in our system.

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