

Subject Clitics in French and Romance

Complex Inversion and Clitic Doubling*

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The analysis of the French construction of Complex Inversion illustrated in (\$1) below raises difficulties with respect to current conceptions of available phrase structure:

- (\$N1) a. Jean est-il malade
Is John sick
b. Depuis quand Jean est-il malade
Since when is John sick

The problem arises from the conjunction of the following several factors. First, complex inversion is a root phenomenon. It is consequently reasonable, as suggested generally by Den Besten extrapolating from the classic V2 effect and adopted ever since, to suppose that it involves raising of I to C. Secondly, Wh-movement is to [spec,CP]. Third, it appears that the subject DP intervenes between the wh-phrase and the highest verb (as in (\$1b)). Where then is this DP subject? Finally, and to compound the problem, it appears that a pronominal copy of the subject may cooccur with a full DP subject, making complex inversion a construction with two subjects.

In this paper, I will propose an analysis of this construction (as well as of the simpler subject clitic inversion - *est-il malade/is he sick*) that builds on and complements two theoretical developments.

First, the theory of clitics constructions developped in Sportiche (1992) which focused primarily on object clitics. I will show that this theory naturally extends to Subjet Clitics (SCL). I will also show that it leads to simple analyses of Subject Clitic Inversion (SCI) and of Complex Inversion (CI), making Complex Inversion much less exceptional than other proposals have made it, in that no structure building is required. I will further suggest it entails a much greater deal of underlying similarity across Romance languages than most analyses have assumed.

* This article is dedicated to the memory of Osvaldo Jaeggli. Its content, I hope, is no mere "bourdonnement de mouches a ses oreilles".

Second, the conception of morphology alluded to in Chomsky (1992): this conception is meant to provide a principled account of the cases of affix lowering, whereby morphological concatenation of an inflectional morpheme with some other unit is not a syntactic operation, but checking of the properties of this inflectional morpheme is done through the syntactic operation of head movement.

1. Some Background

The approach to clitic constructions suggested in Sportiche (1992) can be summarized as follows.

In a Romance clitic construction, there is an inflectional head H^0 heading a projection within the inflectional system, call it CIP in the general case. I will take this H^0 to be the clitic itself generally.¹

Thus, a sentence like (\$2) receives the analysis in (\$3):

(\$N2) Marie les_i aura présentés XP_i^* à Nick
 them would-have introduced-AGR_i to Nic
 Marie would have introduced them to Nick

(\$N3) [AccP DP[^] [[Acc_{les}] [... aura presentes DP^{*}_{+acc} ...]]]

The XP associated with this clitic, that we will refer to as XP^* throughout (here a DP^* analysed as pro) must raise to the specifier position (here DP^{\wedge}) of CIP (here accusatively marked or AccP) by LF, thereby guaranteeing agreement between the two and explaining why the clitic/ XP^* relation (in fact the XP^{\wedge}/XP^* relation) can only occur between two entities over a syntactic context transparent to movement. In French, Raising of XP^* to XP^{\wedge} takes place overtly (as shown by the triggering of object agreement - see Sportiche, 1992 for detailed discussion). This XP^* may be required to be covert (*pro*) as in French, or may be overt, yielding various instances of clitic doubling. If it is overt, movement to XP^{\wedge} may be overt too yielding various cases of Scrambling (in the Germanic languages) or involved in Clitic Left Dislocation constructions.

¹Although this is not necessary for the conceptual basis of my proposals. However, it seems quite plausible for subject clitics as we will see later, and object clitics for the reasons discussed in Sportiche (1992). Alternatively, in certain cases, the clitic heads the XP (XP^* or the head of the specifier of XP^* , see Koopman, 1993) referred to below and the head H^0 is silent. Correlated changes to the text below would be necessary if this alternative were correct.

If there are several clitics, there are as many CIPs. The function of these CIPs is not necessarily uniform. Although clitics share a number of constructional properties, they may diverge on others as e.g. the interpretive consequences of their presence. Thus typical accusative clitics induce specificity of their associated XP while dative clitics do not. In Sportiche (1992), I have suggested that the function of Accusative CIP in Romance is to license Specificity and in this is a projection different from AGRoP the function of which is to license Case assignement, when available. The function of the Dative CIP does seem akin to AGRoP in licensing Dative Case and would thus best analyzed as AGRioP. Correlated with these differences is the A-bar status of the specifier position of the accusative CIP, making it analogous to an operator projection in keeping with its interpretive function. The specifier of AGRioP on the other hand is an A-position, as we would expect by analogy with the specifier of the agreement projections licensing Accusative or Nominative.

2. Questions about subject pronouns clitics

The set of elements referred to as pronominal clitics found in French is illustrated by the following template:

(\$N4) French Clitic Template

Nom	1st/2nd/Refl	3rdAcc predicate	3rdDat	Loc	Gen
il	me/te/se/nous	le/la/les	lui/leur	y	en

As Perlmutter (1972) describes it, for each column of the template, no more than one clitic is allowed (so for example, it is not possible to have a 1st person accusative object and a 2nd person dative object at the same time). Furthermore, the third and fifth column cannot be filled at the same time (e.g. * *Je me lui montre* / *I shows myself to him*). These restrictions are discussed to a limited extent in Sportiche (1992). For the most part, their existence and properties are not understood.

Clitics are so called because they are claimed not to constitute autonomous syntactic units. Rather, they seem to form a unit with some host either syntactically (syntactic clitics) or phonologically (phonological

clitics).² Henceforth, clitic without further specification always means syntactic clitic. Kayne (1975) argues that object pronominal clitics adjoin to V in French (a conclusion with substantial cross Romance validity). This is exemplified by the fact that they cannot be conjoined independently of their V host nor can their V host be conjoined independently of them. Disjunction is however more acceptable at least for 3rd pers items of the same column in the template.

- (\$N5)
- a. *Jean le et les presentera a Pierre
John will introduce him and them to Peter
 - b. *Jean le presente a Pierre et/ou envoie a Paris
John presents him to Peter and/or sends him to Paris
 - c. ?Pierre le ou les (le ou la) verra au concert
Pierre him or them (him or her) will see at the concert

Other properties typical of object clitics are their lack of stress and the impossibility to modify them by an adjacent modifier.

The subject "pronouns" *je, tu, il, ils, on* (*I, you-sg, he, they-mpl, one*) only occur as nominative. The other pronominal subjects *elle, elles, nous, vous* (*she, they-fpl, we, you-pl*) are not exclusively nominative. They may occur for example as object of prepositions (e.g. *avec *il/*tu/elle/nous* (*with he/you/she/we*)). Like objects clitics, subject clitics disallow being conjoined, i.e. the equivalent of (\$5a) is unacceptable as shown in (\$6a). Surprisingly, definite subject proforms allow the equivalent of (\$5b), i.e. their verbal host may be conjoined independently of them. The indefinite subject proform *on* (which we imperfectly gloss as "one" here - see Cinque, 1988, for relevant discussion), as well as the proform *ce*,³ disallow this option. These facts are illustrated in (\$6b). Disjunction as in (\$6c) seems more acceptable for subject forms than for object forms :

- (\$N6)
- a. *Il/tu/je.. et tu/je/elle... connaiss-ont/ez/ent Marie
He and she know Marie

²Syntactic clitics cannot be separated from their host by any syntactic process and are necessarily phonological clitics. Phonological clitics are syntactically autonomous if they are not syntactic clitics as well.

³On *on, ce* as Subject Clitics which we do not discuss here, see Kayne, 1972, Jaeggli, 1982 and Rizzi, 1986.

- b. Il/tu/*on mange du pain et boit du vin
He/you/one eats bread and drinks wine
- c. il ou elle connaît Marie
he or she knows Marie

Weak object pronouns clearly are clitics. If it is correct that they head an inflectional projection as described above, they are not pronominal in the sense that they do not stand for a regular DP. The same questions arise for subject clitic pronouns:

- What is their categorial status?
- Where in the structure are they generated?
- Are they syntactic clitics and/or phonological clitics?

Furthermore, since subject clitics may either appear preverbally (e.g. in statements) or postverbally (in SCI or CI constructions), the last question arises for both cases.

To anticipate the conclusions I will reach, I will argue that preverbal subject forms conform to the general picture of clitics argued for in Sportiche (1992) and described above: they are generated as heads of an Inflectional-like category, call it NomP and not of a DP; they are located above AGRsP in the structure of a clause; they are not necessarily, although they may be, clitics (except for *on*, *ce* which always are clitics). Postverbal clitics on the other hand always are clitics and not DPs. I will suggest they are treated as morphological affixes base generated on the verb itself and checked in the head position of NomP (much the way tense affixes are generated on the verb in English and checked in T).

3. Extending the analysis to Subject Clitics (SCL)

Suppose we extend the analysis offered in Sportiche (1992) for Accusative clitics to Nominative clitics. What then would we expect? Consider a sentence with an object clitic:

- (\$N7) Jean l'a repeinte
John has repainted it(FEM)

We analyze it as follows (details such as AGRs omitted, see Sportiche, 1992, for details):

- (\$N8) Jean T __ Cl avoir __ AGRo peint pro
ACC

The function of AGRo is to license Accusative Case. Because in French, *pro* raised to [spec,CIP] in the syntax, (optionally) transiting through [spec,AGRo], object agreement is (optionally) triggered on the participle. The head of CIP, *le*, ends up cliticized to *avoir* which has moved to T.

For a nominative clitic, we would expect two different projections, one responsible for subject agreement and sanctioning Nominative Case, and one for the clitic. Furthermore, given that the clitic is the head of the Nominative CIP, it should a priori be able to cooccur with an overt DP* in its specifier or with a covert one.

4. Trentino Italian

The former expectation is actually fulfilled as (a slight modification⁴ of) the analysis of subject clitics in some Northern Italian dialects presented in Rizzi (1986) or Brandi and Cordin (1989) illustrates. Consider for example Trentino as a representative of such dialects (which include at the very least Fiorentino):

(\$N9) El Gianni/O el magna
 Gianni/he eats

As Rizzi (1986) or Brandi and Cordin (1989) discuss in a pre-split-INFL framework, the subject clitic occupies the head of an inflectional projection (namely AGR in INFL for them) and the DP subject the regular subject position as follows:

(\$N10) [El Gianni [INFL el] [VP magna]]
 Gianni (he) eat-PRES-3SG

This analysis is inadmissible within the more restrictive current theoretical framework: this INFL projection cannot stand for the usual subject agreement. The property of (unsplit) INFL include both Tense specification and Subject/verb agreement. These properties do show up morphologically on the verb independently of the subject clitic exactly as they do in standard Italian or French. This suggests that this inflectional projection headed by *el* is an additional inflectional projection. We can immediately make sense of its existence within our general proposal for clitics by identifying this INFL node with Nominative CIP. Taking into account subject verb agreement (and ignoring Tense, which would, if

⁴The difference with the analyses mentioned has to do with the modernized treatment of subject/verb agreement that we adopt here

represented within the split INFL paradigm, require an additional TP projection lower than AGRs), we are led to enrich the structure as follows:

(\$N11) [NOMP El Gianni]_i/pro_i [NOM' [NOM el] [AGRs t_j ...magna

The DP subject has raised through [spec,AGRs] getting Nominative Case, and in [spec,NOMP] (where NOMP is CIP with Cl in the nominative), the clitic heads NOMP and the verb is in or is connected to AGRs thereby agreeing with the subject. This result is the exact analogy for nominative clitics of our conclusions for accusative clitics. In our view, then, the syntactic structure of Trentino subject clitics fits the general mold of the analysis of "pronominal" clitics (as in and in the form argued in Sportiche, 1983 or in Roberge, 1990).⁵.

5. French Preverbal subject clitics

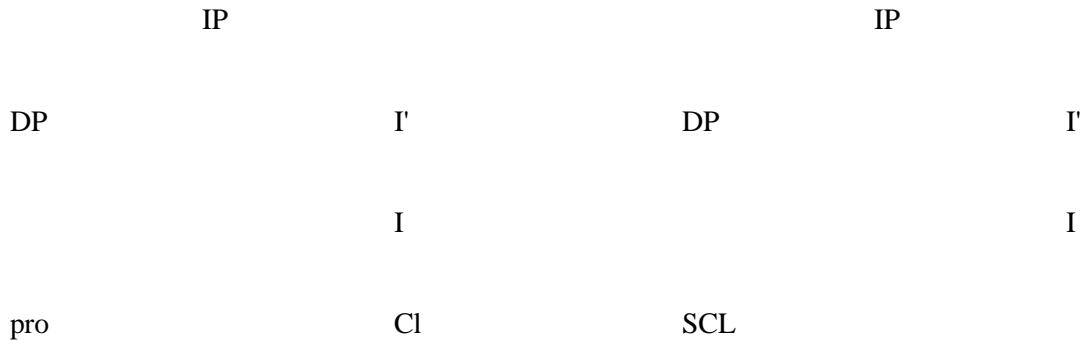
Can French preverbal subject clitics be analyzed along similar lines as Trentino's. If the analysis of Romance clitics is fully general, we expect a positive answer. Prior to Rizzi's or Brandi and Cordin's work on the northern Italian dialects, this was actually a dominant approach to the analysis of preverbal subject clitics. For example, Jaeggli (1982), Sportiche (1983) (or more recently Roberge, 1990) argue that they are generated as part of an complex INFL node. However, both Rizzi and Brandi and Cordin argue against this suggestion. Rather, they argue that French subject clitics head DPs, i.e. are generated in the same position as full DP subjects.

I will now argue that a modernized version of Jaeggli's analysis along the lines of the general analysis of clitics I offer is superior, i.e. that French can and should be analysed like Trentino is above. In this our analysis is extremely close to Safir's (1982) or Roberge's (1990).

Rizzi (1986), and Brandi and Cordin (1989), henceforth RBC, propose the following analysis for French and Trentino respectively (where Cl is the underlying position of the SCL):

(\$N12)	Trentino	French
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⁵One immediate and somewhat surprising consequence of this, which we do not discuss here, is the apparent position of the subject: the subject appears not to be in what is usually deemed to be the normal subject position, i.e. [spec,AGRs]. Rather, it appears higher in the structure in [spec,NomP].



The logic of their reasoning is as follows: there are systematic differences (mostly distributional, e.g. with respect to Complex Inversion) between northern Italian subject clitics and French subject clitics: since Northern Italian clitics sit in INFL (i.e. is subject agreement for them), French subject clitics cannot, and must thus be heads of the subject DP (which may eventually cliticize, as Kayne, 1972, 1975 or 1984 has suggested). I will show that their correct observations do not entail their conclusions and are completely compatible with an analysis of French along the lines of that of Trentino.

They consider three differences between Trentino and French:

- (i) Standard French SCLs, unlike Trentino's, cannot cooccur with a full DP subject.
- (ii) Some but not all French SCL may cooccur with a conjoined VP. Trentino SCL may not.
- (iii) French subject clitic paradigms are regular, unlike those of the northern Italian dialects.

Let us discuss them in turn.

5.1. Complementarity of Distribution

let us begin with the first difference: Standard French SCL cannot cooccur with a full DP subject. Some dialects of French allow cooccurrence but never with the full range of DPs that Trentino SCL allows. Furthermore, Trentino SCL are obligatorily present if possible, French SCL are not:

- (\$N13)
- a. */OK Jean il mange / Jean mange /il mange
 John he eats /John eats / il mange
 - b. El Gianni el magna/ *El Gianni magna/ el magna
 John he eats/ John eats/ he eats
 - c. *Personne il n'a rien dit
 Nobody he said anything

- d. Nessuno l'ha detto nulla
 Nobody he said anything

Note first, as indicated that (\$13a) is acceptable - without dislocation intonation - for certain French speakers (e.g. from Quebec).⁶ As noted by RBC, this distributional complementarity found in standard French is accounted for if the French SCL is the head of the DP subject: the clitic and the full subject would then be competing for the same position. Although this kind of explanation is plausible for cases in which two identical elements - as e.g. two heads, or two phrasal categories - are in complementary distribution, it is considerably weakened by the fact that complementarity is between a clear phrasal category - the subject - and a single word - the clitic. Indeed, it is reminiscent of other cases in which competition for the same position is less plausible: consider for example the doubly filled CP filter.⁷ This is a case of complementarity between a word (the head C of CP) and a phrase (a *wh*-phrase in [spec,CP]). There is no *apriori* reason to believe that the case of complementarity under discussion is of the first type (competition for the same position) rather than of this second type (a doubly filled phrase prohibition). This second type is of course immediately compatible with our proposal: if the French SCL heads a nominative CIP, i.e. NomP with the subject DP in [spec,NomP], the configuration would be ruled out by a doubly filled NomP filter prohibiting the head and the specifier of the nominative CIP from being lexically filled simultaneously in standard French. This filter would not operate in Trentino nor in certain dialects of French. Additionally, note that the complementarity found for SCL and its account exactly parallels the data for object Clitics and the account offered in Sportiche (1992): French Object Clitics (OCL) also are in complementary distribution with their associated XP*. It turns out then that this doubly filled CIP prohibition is fully general in standard French. Furthermore, handling those French dialects in which this prohibition does not hold for SCL is straightforward, and does not require analyzing SCL any differently from the way they are analyzed in standard French.

Of course, the preceding discussion only shows that the account we just outlined is a reasonable alternative to the one proposed in Rizzi (1986). We now turn to some independent evidence in its favor.

⁶(\$13c) is not ungrammatical throughout. Speakers who routinely accept (\$13a), as e.g. certain Quebec French speakers, also allow a quantifier. The basic point remains however for Standard French (although may be not for other varieties).

⁷Also known as the doubly filled COMP filter. Of course, why the doubly filled CP filter exists needs to be explained. The idea of competing for one particular entity could be preserved if the competition is for a particular property instead of a position.

As in the case of *wh*-movement to [spec,CP], the doubly filled CIP (resp. CP) prohibition does not hold if the specifier of the CIP (resp CP) contains a trace or a *pro* instead a lexical element.

(\$N14) Who do you think *t* that John saw

This situation with CIP is illustrated by Q-float structures. Consider the following sentences (read with continuous non dislocated intonation):

- (\$N15)
- a. Il a tous fallu qu'il les achètent
it is all necessary that he buys them
 - b. Il a tous fallu qu'ils partent
it is all necessary that they leave

The stranded Q *tous* appears in the main clauses but relates to the object or the subject of the embedded clause. A straightforward account of these data can be constructed if the SCL and OCL are analyzed as heading CIP and not the DP subject or object:

(\$N16) [tous *pro*]_j [CIP *t_j* [C_I ils/les].....

The presence in the main clause of the leftward moved quantifier, an operation only possible via A-bar movement of a phrase, suggests that this Q is part of a XP moved out of its clause. This XP is most simply and most plausibly analyzed as the subject (or the object) DP itself. Its structure may be [*tous pro*]⁸, which is a possible DP as shown by *Tous sont venus* (See Sportiche, 1983, 1988 for discussion). Of course, this implies that the SCL cannot be part of this subject DP.

Alternatively this XP may be [*tous t_j*], *t_j* the trace of the SCL cliticized prior to the leftward extra sentential movement of the Q. In this case, the "underlying" structure [*tous ils*] would have to be postulated, *ils* heading the DP modified by *tous*. This would leave unexplained the ungrammaticality of :

(\$N17) * Tous ils partent / Ils tous sont partis
All they left / They all have gone

⁸Or more precisely [*pro_j tous t_j*], given [*eux tous*] and *[*tous eux*], cf. Sportiche, 1992 for discussion.

Furthermore, in this case the preposed [*tous t*] in (\$15b) would contain an unbound trace. This potentially offending trace would require reconstruction of this DP into the lower clause at LF. It is clear however that these leftward moved Q's have matrix scope, not embedded scope. This illustrated by the following pair:

- (\$N18)
- a. Il aurait tous fallu que tu ne les aies pas vu
it would have been necessary that you see none of them
 - b. Il aurait fallu que tu ne les aies pas tous vu
it would have been necessary that you do not see all of them

As the paraphrases indicate, in the first sentence the Q must have scope wider than the embedded negation. If reconstruction was required, we would expect the Q to be able to take narrower scope than the embedded negation as in the second sentence. We conclude that the preposed DP cannot be of the form [*tous t*], hence that the SCL (or the OCL) cannot be part of the subject (resp. object) DP.

Another potential source of problems for the SCL as subject assumption is the existence of clitic doubling structures in questions: complex inversion does allow what appears to be a full subject and a SCL: *Jean est-il malade*, which we will discuss this later in section 7.

5.2. SCLs and Conjunction

Let us turn now to the second difference: some but not all French SCLs may cooccur with a conjoined VP. Trentino SCLs may not.

- (\$N19)
- a. Il/*on chante et danse
he/one sings and dance
 - b. Il/*on mange de la viande et boit du vin
he/one eats meat and drinks wine
 - c. la canta e *(la) balla
she sings and (she) dances

There is obviously a difference between *il* on the one hand and Trentino *la* on the other. Is this difference is an indication of different categorial status. Rizzi (1986) concludes so. Let us summarize briefly his treatment: he suggests that all these cases of conjunction are ambiguous between clausal conjunction with a null SCL in the second conjunct and VP conjunction.

- (\$N20)
- a. [SCL VP] and [[SCL e] VP]
 - b. SCL VP and VP

In Trentino, repetition of the SCL is forced because (i) either it is VP conjunction; then, the clitic character of the SCL forces it to cliticize in PF to the first member of the conjunction, violating the Coordinate Structure Constraint, or (ii) it is clausal conjunction but a general principle prohibits a zero pro form (here the null SCL) to survive if it is a minor category, but not if it is a major category.

In French, conjunction of VPs is disallowed, because SCL are always PF clitics and cliticization would violate the Coordinate Structure Constraint. Clausal conjunction on the other hand is possible because the null SCL in the second conjunct is a major category, a DP in modern terms. Left to explain is the behaviour of French *on*, akin to Trentino *la* and unlike French *il*. Here, Rizzi suggests that it is due to the inability of French *on* to act as a possible antecedent for the null SCL in the second conjunct. This contrast pointed out in Kayne (1972) between these two French pronouns is illustrated below:

- (\$N21)
- a. Il_i a dit que je l_i'ai insulté
He said I insulted him
 - b. *On_i a dit que je l_i'ai insulté
One said I insulted him
 - c. [on_i VP] and [e_i VP]

These differences may not be not fully conclusive: we can plausibly argue that the anaphoric pronoun in the second conjunct always receives a specific interpretation. We can expect non specific interpretation *on* not to be able to act as antecedent for it. If *on* is interpreted as *nous* (we) - see Cinque (1988) for discussion - as it may, then it may corefer with a pronoun is possible (*oni a dit que Jean nousi a insulté* (we said that John insulted us)) without any relevant changes to its syntactic properties. Rizzi's point concerning (\$21c) would remain if there were principled reasons why the null pronoun could not be indefinite. However, the same question arises for the impossibility of (\$5b): **Jean le presente a Pierre et envoie a Paris*. Ruling out a VP type conjunction ...*le* [[*presente a Pierre*] et [*envoie a Paris*]] would follow from the Coordinate Structure Constraint. Ruling out ...[*le_i presente a Pierre*] et [[*e_i*] *envoie a Paris*]] could not be attributed to the impossibility for *le* to act as antecedent (recall *le* is assumed to be a major category similar to that of French *il*).

I would like to suggest an analytically more uniform analysis for this array of data. We know that the syntactically realization of a particular property as head is subject to a degree of lexical arbitrariness cross linguistically. Thus the same function can be realized as a covert head or an overt head (e.g. French zero

Q morpheme vs Vata *la* Q-morpheme...). If overt, it may be realized as an autonomous word, or as a bound morpheme (cf. future of present in English - *will*- vs French -*er*).⁹ Taking this into account, we can construct an account of these differences that does not appeal to categorial differences but to an independently motivated diacritic, namely [+/-syntactically bound], i.e. [+/-clitic]. This parameter in the SCL systems is of a theoretically acceptable kind since it falls within the range of attested lexical variation. On this approach all subject clitics are consistently analysed as head of NomP. The difference in behaviour is due to the fact that French subject clitics like *il* do not have to be syntactic clitics at all, while Trentino *la*¹⁰ (see Safir, 1985 for discussion) or French *on* are, both fairly uncontroversial assumptions. The possibilities for conjunction discussed in (§19) follow (or rather they follow the same way they do for object clitics - see (§5), however that may be precisely): the verbal host of a clitic cannot be conjoined independently of this clitic.

This conclusion is corroborated for French by differential judgements of the following sort between (\$22a) and (22c):¹¹

- (\\$N22)
- a. ?* II, a mon sens, a besoin d'une bouffée d'air
 He, in my opinion, needs fresh air
- b. Elle, a mon sens, a besoin d'une bouffée d'air
 She, in my opinion, needs fresh air

⁹I will discuss later a further subdivision between lexically bound morpheme - regular inflectional morpheme- and syntactically bound morpheme - i.e. morpheme which become bound as a result of a syntactic operation of head movement and are therefore not as closely integrated in their host as the others: these I would call clitics.

¹⁰Note that Rizzi's 1986 discussion of reordering phenomena between SCL and negatives clitics in northern Italian only shows that SCLs belong to a different clitic clusters than object clitics. It does not show that they are not syntactically cliticized.

¹¹Kayne (1984) attributes to Hirschbuhler the report that some dialects accept (\$22a) as well formed. Another contrast is noted in Kayne (1984): *Ils sont partis. Qui, ils?* (They left. Who, they?); **Pierre les a vus. Qui, les?* (Pierre them saw. Who, them?). *Les* obligatorily being a clitic, it may not appear stranded. On the other hand, *ils* is not. There is more to say about this topic, suggesting further distinctions: *on* behaves like a syntactic clitic as suggested by the data in (\$6) but allows *on a mange mon gateau. Qui, on?* (someone ate my cake. Who, someone?); the ungrammaticality of (\$6b) with *on* is less sharp than that of of (\$5b). This suggests a more refined distinction amongst syntactic clitics, making clitic SCLs not as closely tied to their verbal host as OCLs.

- c. ** Jean le, a mon sens, respecte profondement
 John it, in my opinion, respects deeply
 John in my opinion respects it deeply

We mentioned earlier that subject "pronouns" can be further subdivided between exclusively nominative pronouns like *il*, *on*, *je* and others like *elle*, *nous*. As the pair (§22a,b) illustrate, this distinction seems reflected in their clitic behaviour. This second class of SCL are indeed clitics in some constructions at least (e.g. SCI or CI), and like other SCLs disallow modification. However, except for these constructions, they may be stressed. We can accomodate their properties by stipulating that unlike exclusively Nominative SCL, they do not require phonological cliticization (although phonological cliticization is certainly preferred), because they are ambiguous between head of NomP and Head of DPs. As head of NomP, they are phonological clitics and belong to the weak nominative paradigm *je*, *tu*, *il*, *elle*, *nous*, *vous*, *ils*, *elles*, *on*, *ce*. As head of DPs, they are not clitics at all and may be stressed, i.e. they belong to the paradigm of strong pronominal forms *moi*, *toi*, *lui*, *elle*, *nous*, *vous*, *eux*, *elles*, *ça* which are not clitics. This structural ambiguity would explain why non-exclusively nominative pronouns are optional phonological clitics.¹²

We end up with a three way distinction: exclusively nominative SCL are always phonological clitics. Some of them - *on* and *ce*, which we have not discussed - must also be syntactic clitics. Finally, some of them

5.3.SCLs, Paradigmatic Regularity and Null Subjects

A third difference concerns the compared regularity of the clitic paradigms in French and in the Northern Italian dialects. Rizzi (1986) citing work by Renzi and Vanelli (1982) on 27 northern Italian dialects with "uncontroversial subject clitics", reports that in 21 of those, some clitic form is lacking for at least one element of the pronominal paradigm and even in the last 6, native speakers "often seem to consider the specification of 1st sg and 1st pl and 2nd pl clitics as a matter of strong preference rather than one of strict obligatoriness". This situation contrasts markedly with the standard French situation in which the presence of a subject "clitic" if possible at all, is obligatory. Rizzi, correctly I believe, relates this observation to the difference between Standard Italian and French that allows the first, but not the second to have silent subjects without any other morphological indication of their presence that the subject/verb

¹²Left open is the deviance of CI *Elle est-elle partie* (*She is-she gone*) under normal stress and intonation, as compared to the acceptable *Marie et elle sont-elles parties* (*Marie and her are-they gone*).

agreement on the verb: "a gap in the clitic paradigm would amount to an S-structure representation with a null subject position in a non Null Subject Language"...

This difference then, can be attributed to the usual difference between French and Italian regarding silent subjects without any implication regarding the categorial status of SCL. We take Standard Italian or the Northern dialects to be Silent Subject languages in the following sense: nothing beyond the content of AGRs - i.e. the agreement properties showing up on the verb¹³ - is required to recover these Silent Subjects. SCL are in effect superfluous from this point of view. The phonetic gaps in the SCL paradigm do not interfere. French subject/verb agreement, on the other hand is not "strong" enough: Silent subjects are disallowed unless recoverable in some other way. It is not that silent subjects are disallowed in French. Their licensing conditions are different. Indeed, our analysis of French SCLs makes French a Silent Subject Language as well (see Bouchard, 1982, Safir, 1985, Sportiche, 1983): as we have argued, in the presence of an SCL in NOM, the DP is [spec,NomP] is silent and *pro*, in other words, a standard silent subject. Unlike in Italian, the SCL is phonetically required to license the appearance of this *pro*. Pushing one step further, we may adopt Safir's (1985) proposal that Italian (Spanish, etc..) and French differ precisely in that Italian SCLs may be silent (possibly due to the strength of AGRs), so that from the present perspective, all these languages have a full set of SCLs (i.e. NomP projections). They only differ as to whether or not the head of NomP is or must be phonetically realized, again an acceptable type of parametric variation.

6. Postverbal nominative clitics: SCI

We now turn to postverbal SCL. They occur in SCI and CI. Ever since Kayne (1972), it has been clear that CI is a supcase of SCI and we thus begin with SCI.

6.1. General Properties of SCI

There are three properties of SCI that need to be accounted for:

- (i) the position of the SCL
- (ii) the root character of the construction:

¹³We differ here from Rizzi's understanding, who takes the SCL to be the realization of subject agreement.

(iii) the triggered character of the construction

Property (i) and (ii) are illustrated below:

- (\$N23)
- a. mange-t-il
 eats-t-he (does he eat)
 - b.* Je me demande si mange-t-il
 I wonder if does he eat

Property (iii) encodes the fact that either there is a particular overt trigger for SCL or SCL triggers a particular interpretation, which we may also describe as involving a covert trigger with particular interpretive properties. The first example below illustrates the trigger case with *peut-etre/possibly*, a class of adverbials that allow SCI. The other examples illustrate the second kind of interpretive trigger (respectively hortative, conditional and Yes-No questions):

- (\$N24)
- a. Peut etre mange-t-il de la soupe
 may be he eats soup
 - b. Puisse-t-il resoudre le probleme a temps
 may he solve the problem on time
 - c. Aurait-il resolu le probleme a temps, nous aurions...
 would he have solved the problem on time, we would...
 - d. A-t-il resolu le problem a temps
 has he solved the problem on time

6.2. The standard account

If we adopt the standard account of the second property, as have Kayne (1984) or Rizzi and Roberts (1989) which elaborates on Den Besten's proposal for the treatment of V2 in Germanic, a root phenomenon par excellence, in terms of movement of I to C, we derive the correlation between the impossibility of SCI and V2 and a filled C, i.e. the root character of the phenomenon.

- (\$N25)
- a. Peut etre qu' il mange (/ *que mange-t-il) de la soupe
 - b. Qu' il puisse (/ *que puisse-t-il) resoudre le probleme a temps
 - c. Si il avait (/ *si aurait-il) resolu le probleme a temps, nous aurions...

- d. Je me demande si il a (/si a-t-il) resolu le problem a temps

Accordingly, the highest verb of the clause, say V, will have to raise to C. In order to do so and given our structural analysis, V will have to raise to I (or T or AGRs) and then to Nom in order to reach C without violating the Head movement constraint. The step through Nom will cause the head of NomP, the SCL, and the V to form an incorporated structure.

6.3. Clitic-host proximity problems and the syntax morphology interaction

6.3.1. The proximity problem

This analysis, although quite appealing is not fully satisfactory. Consider the following differences (cf (\$5c)):¹⁴

- (\$N26)
- | | | |
|----|-----|---|
| a. | | Il ou elle connait bien le probleme
he or she knows well the problem |
| b. | (?) | Jean le ou les connait bien
Jean knows him or them well |
| c. | * | Mange-t-il ou (t-)elle
eats he or she |

We can readily handle the difference between (\$26a) and (\$26c): a preverbal SCL like *il* is not a syntactic clitic according to us: we can describe this fact by having V not raise to Nom. By contrast, the postverbal SCL in (\$26c) is syntactically cliticized due to the intermediate movement of the Verb through Nom. However, the contrast between (\$26b) and (\$26c) is unexplained:

- (\$N27)(i) if both object clitics and postverbal clitics in SCI are cliticized,
why are some preverbal and other postverbal, i.e. what accounts for

¹⁴These judgments are I believe duplicated although all shifted towards the worse with *et (and)* instead of *ou (or)*.

the difference in positions?

- (ii) Why is it that postverbal SCL appear more strongly connected to the verb than preverbal object clitics (an observation with substantial cross Romance validity)

Kayne (1991) offers a proposal potentially bearing on the first problem. He suggests that sequences clitic-verb are to be analyzed essentially as $[_F\text{CL } [_F \text{ V}]]$, while sequences verb-clitic involve the movement of the verb (adjunction to F') around a functional projection F to which the clitic is adjoined: $[_F' \text{ V } [_F' [_F\text{CL } [_F \text{ e}]]]$. Taking the position of the clitic as fixed in the clausal structure, Kayne (1991) proposes that a verb to the right of a clitic is actually higher in the tree than when it is to its left, *ceteris paribus*, a valid observation he shows, in some of the cases he discusses. Ignoring the theoretical problem of allowing adjunction of a head to a non head (which could be fixed by assuming that the verb actually raises to a higher head position) it is hard to see how this mechanism (adjunction to F') accounts for the closer proximity we are observing. If anything, this mechanism would lead us to expect the reverse given the greater "distance" between the morphemes involved. Postulating a further incorporation of the clitic to the right of the preposed V does not answer the question either, since nothing would account for why incorporation of a clitic to the left of its host would be of a looser kind than incorporation to the right of its host?

6.3.2. Syntax Morphology Interaction

How then should this closer proximity be handled. Recall Chomsky's (1992) proposal concerning affix hopping in English. In English, it seems clear that the morphological material licensed in T or $AGRs$ may appear on the verb even though the verb does not overtly raise out of the VP to T or AGR (unlike what happens in say, French). Consequently, the traditional analysis (in fact Chomsky, 1957) postulates a process of affix lowering to V . The problem is that this lowering type of head movement creates an illicit configuration (the unbound trace of the lowered affix) which now must be rectified by LF by raising the verbal complex back to T (and $AGRs$). Chomsky (1992) proposes a simpler and more principled approach to this problem by treating morphological concatenation independently of the process of checking the form and ordering of affixes (I simplify his proposal here). He suggests that the verb is drawn from the lexicon fully inflected, say $[[V+T]+AGRs]$, and that the verbal complex must raise by LF to T and $AGRs$ in order to check (or cancel out) the properties of the inflectional affixes. English can then be seen as a language which delays raising of V to LF (i.e. raises covertly: it is a procrastinating language) while French raises the verb overtly. Let us adopt for purposes of exposition the more precise machinery

postulated by Chomsky (nothing here turns on precisely what the mechanism is): a morphologically complex form $[[A + \text{aff1}] + \text{aff2}]...$ is a pair $([A + \text{aff1} + \text{aff2}]..., (\text{aff1}, \text{aff2}, ...))$. The string of affixes aff_n must be cancelled or checked in a left to right order (aff1 first, then $\text{aff2}...$) under head movement up the tree of this complex form.

One immediate advantage of this approach is the treatment of suppletion, i.e. of forms such $\text{eat} + \text{past} = \text{ate}$. In a system in which concatenation of morphemes is syntactic, the syntax must be allowed to check back into the lexicon after having performed the concatenation. This is a dubious property of the system since there does not seem to be any syntactic property dependent on whether or not checking of suppletive forms in the lexicon has indeed taken place: suppletive forms have exactly the same syntax as non suppletive forms. This intermediate recourse to lexical information must therefore be eliminated, as Chomsky's proposal implies. Note as a consequence of this proposal that we can now hold that there are no lowering rules at all in syntax, surely a desirable result.

This is not to say that morpheme concatenation is always morphological rather than syntactic. We in fact expect to find both, but with different properties:

Syntactic incorporation (SI): the concatenation of morphemes is the result of the application of head movement.

Because it takes place in the syntactic component as a case of a (head-)movement rule, we expect this kind of concatenation to (i) always involve upward movement, never lowering and (ii) the resulting morphology to be strictly compositional (since input from the lexicon is unavailable).

Morphological incorporation (MI): the concatenation of morphemes is a morphological (or lexical) operation. In this case, we expect to find (i) apparent cases of lowering (since a word may be generated with an affix whose licensing position is higher in the tree) and (ii) non compositionality of the concatenation (lexical exception, i.e. suppletion, etc...).

6.3.3. Typology of cliticization

The proposal I would like to entertain capitalizes on the difference between MI and SI in order to explain the properties in (§27). I would like to suggest that Cliticization (i.e. the concatenation itself, not the licensing of particular morphemes which, if required, as e.g. for inflectional morphemes, always involves syntactic movement upward to some licensing position) is either morphological or syntactic.

Syntactic cliticization instantiates the way cliticization is usually thought of. It involves head movement of the clitic or the host upward, is morphologically strictly compositional and, in French and some other

Romance languages derives configuration in which the clitic is to the left of its host: in particular, this is the case of preverbal object clitics.

Morphological cliticization is a morphological operation (subject of course to syntactic checking under head movement). The clitic in this case is affixed prior to lexical insertion. As discussed above, it may involve apparent cases of lowering, and we should observe morphological compositionality violations. This is the case, I would like to suggest, of postverbal SCLs.

Return now to properties (§27): in French, because inflectional affixation is suffixal, we expect morphologically affixed clitics to follow their host and to be as closely integrated to their host as inflectional affixes, since we are in effect dealing with one word. On the other hand, with syntactic concatenation, there is a priori neither ordering expectation (it turns out to be mostly - perhaps exclusively - prefixal in French) nor one word formed: we are dealing with two words, one adjoined to the other e.g. [V CL [V V]], much the same way compounds are formed.¹⁵

Furthermore, as expected we find compositionality violations with postverbal SCLs, not with preverbal clitics. In French such a violation is illustrated by the epenthetic /t/:¹⁶

- (§N28)
- a. il a telephone / a-**t**-il telephone
he has called/ has he called
 - b. Elle aura fini / Aura-**t**-elle fini
She will have finished / will-have she finished

¹⁵This distinction has sometimes been implemented differently by distinguishing two types of head movement: substitution (into a subcategorized slot) and adjunction, which would correspond to the MI/SI distinction. In effect, we are claiming that head movement as substitution is morphological incorporation subject to syntactic checking under head movement. The converse seems false however. There are if we are right, cases of MI not involving subcategorized slots as locus of substitution in any reasonable sense: postverbal SCL for example.

¹⁶Its appearance is morphophonologically conditioned (between a verb with appropriate phonological ending and an SCL cliticized to it beginning with a vowel). It cannot be analysed as third person agreement being sometimes deleted, as it never shows up in any other context where it should, e.g. in liaison contexts.

The same conclusion extends to the Northern Italian dialects such as Trentino or Fiorentino discussed earlier. Recall that in these languages, preverbal SCL unlike French SCL are indeed clitics syntactically. They also allow SCI constructions (examples from Brandi and Cordin, 1989):

- (\$N29)
- a. Quand es-tu arrive
 - b. Quando se'-tu arrivato (Fiorentino)
 - c. Quando set riva (Trentino)
- When did you arrive

Not only do postverbal clitics exhibit allomorphy (or morphologically conditioned epenthesis):

(\$N30)	Preverbal SCL		postverbal SCL	
IIIs	tu		tu	Fiorentino
	te		t	Trentino
IIIsm	e/gli		egli	Fiorentino
	el/l		lo	Trentino
IIIsf	la		ella	Fiorentino
	la		la	Trentino

But Fiorentino exhibit cases in which the postverbal SCL actually occurs between the verbal root and AGRs:

- (\$N31)
- a. Icche **gl'** hanno fatto
 - b. Icche ha(e)-**gli-no** fatto
- What have they done

As Brandi and Cordin note, examples such as (\$31b) "are not expected if the ordering of the morphemes resulting from the morphological merger is entirely determined by the linear order of syntactic categories in a tree". In effect, we even find cases of violation of the mirror principle if what was involved was concatenation under head movement. Under an MI analysis, there may be (although it certainly appears to be exceptional) cases of mismatch between linear ordering of morphemes and ordering of the syntactic projection in which they are checked because the two are dissociated: there may be exceptional complex

forms ([A+aff2+aff1]..(aff1,aff2,...)). We would treat this a case of complex allomorphy (hence exceptional, but allowed in principle) swapping the order of affixes in MI.¹⁷

6.3.4. SCI and V movement

Because of the existence of the phenomenon called affix lowering, we know that the presence of a particular morpheme on some head says nothing of the syntactic position of that head in the overt syntax. Applied to the case of SCI, the fact that Nom - the SCL - appears adjoined to the right of the verb says nothing about whether verb raising has applied or not. The fact that SCI only occurs in possible V2 contexts makes overt raising to C a plausible analysis. We now turn to CI. As we will see, the properties of CI challenge this conclusion and I will propose an analysis of the root character of SCI or CI not involving overt V to C.

7. Postverbal Nominative clitics: CI.

Recall the basic examples and the basic problems raised by CI

- (\$1) a. Jean est-il malade
 b. Depuis quand Jean est-il malade

Just like SCI, complex inversion is a root phenomenon; It is consequently reasonable to suppose that it involves raising of I to C, the classic V2 effect. Given that Wh-movement is to [spec,CP] and the the subject DP intervenes between the wh-phrase and the highest verb (as in (1b)), where is this DP subject? This is what Rizzi and Roberts call the "landing site problem. Finally, why may a pronominal copy of the subject cooccur with a full DP subject, making complex inversion a construction with two subjects. In the

¹⁷I will not discuss other cases of postverbal clitics, i.e. object postverbal clitics found in positive imperatives: *Mange le, Donne le lui* (eat it, give it to him). Extending the present proposal to these cases is suggested by the relative lack of parallelism between what is found in preverbal position and what is found in postverbal position: *Jean m'en donne, Donne m'en*; **Jean moi (z-)en donne, donne moi z-en* (Note the epenthetic -z- intervening in the clitic string); **Jean en moi donne, donne z'en moi*; (*John to me of it gives, give (some) of it to me*), or *Pierre l'y déposera*, ?* *depose l'y* (*John will drop him there, drop him there*).

words of Rizzi and Roberts, the existence of two apparent subjects in CI pose the Case problem - how is each subject assigned Case - and the source problem - where do these subjects originate.

7.1. The landing site problem: I to C and root phenomena.

7.1.1. Some remarks on the availability of I to C

The landing site problem arises primarily because of the assumption that CI involves I to C in the overt syntax. It is tempting to drop this assumption, as is suggested in Morin (1979) or Noonan (1989, 1992), provided that a plausible account of the root property can be constructed. If there was no overt I to C, there would not be such problem: the tensed verb could either be in AGRs with the subject in [spec,AGRs] or [spec,NomP] or have raised to Nom with the subject in [spec,NomP]. The only obstacle to assuming that there is no I to C in CI, it seems, is the account of the root character of CI. Let us examine it in more detail.

Initial accounts of CI (and V2 and related phenomena) built on the observed correlation between CI and the presence of overt complementizer. Postulating I to C accounts for the correlation because an overt complementizer fills the C slot, making it unavailable for a raised I. Surely however, as Rizzi and Roberts discuss, this account is insufficient, and at the very least needs a condition along the lines of (i) below to supplement (ii).¹⁸

- (§N32) a. The CP is not lexically selected (restricting I to C to main clauses, adjuncts..)
 b. The C position is not filled

The necessity of some additional condition with the effect of (§32a) is supported by the instances Rizzi and Roberts point out of selected "complementizer-less" clauses which do not allow I to C even if the language has I to C: infinitives clauses on a widespread scale, that-less tensed complement clauses in English... Even if the cases of silent C's could somehow be dealt with, there are also cases of overt clitic complementizer in Hebrew or Irish in which a clitic C lowers to I. (See Schlonsky, 1988, Mc Closkey, 1992), or very possibly French "interrogative" *que* (as in e.g. *que fais-tu?* / *What do you do* in which *que* and *fais* are cliticized to each other) that do not show the complex of properties associated with I to C.

¹⁸They also suggest to derive the first condition from the Projection Principle. See Sportiche, 1993 for further discussion.

The necessity of (§32b) is supported, according to Rizzi and Roberts by cases of unselected clauses with filled Cs disallowing CI:

- (§N33) a. Peut-etre Jean est-il parti/ Peut-etre que Jean est(*-il) parti
 may be John is gone / may be that...
- b. Aurait-il mange/ Si il avait mange (*aurait-il..)
 Would he have eaten/ If he had eaten (*had he eaten)

Some questions arise however. The first clause appear somewhat too strong: certain varieties of English, for example, allow I to C in embedded interrogatives (as e.g. *John wonders should he go to the store*. The second clause, if it is indeed a primitive, is suspicious; it seems to condition the availability of a syntactic process (I to C) on a phonological one ("filled" or not); it introduces a degree of arbitrariness (if it is a primitive, the distribution of unfilled Cs is arbitrary); most important however is the following difficulty: French CI or English I to C is impossible in statements in main clauses lacking an overt complementizer. This strongly suggest that I to C is a triggered rule. It applies only if some specific property (question, doubt..) triggers it. This point in the following general direction that I will not elaborate on in detail here (but see Sportiche, 1993): I to C (or more broadly head movement) is fundamentally a triggered process. C sometimes contains a property, say, [+Q], that must be realized. In selected environment, this licensing does not require the raising of a lower I to C because insertion of a subordinator - e.g. the complementizer - typically (but not always, cf. the varieties of English alluded to above) is available¹⁹ Although in principle, this licensing could arise from raising of a lower I to this C, this is prohibited by Chomsky's (1992) Principle of Greed: movement is motivated only to license a property of the moved item. Here I has to no property of itself to license.

If the [+Q] property appears on an unselected C, the insertion of a subordinator may be excluded (in main clauses, by definition). The only way to licitly license this property is to raise I to C. This means that we must interpret the Principle of Greed as an Economy Principle and not as an absolute prohibition.²⁰

¹⁹Selection also must be licensed: Sportiche, 1993, expanding on Koopman, 1993a, suggests that this is done by incorporating this C into its selector.

²⁰This approach naturally extends to other cases. I would interpret Negative Inversion as in (*Mary said that) under no circumstances would he agree to that* exactly as a case of licensing by I to Neg of the head Neg of NegP, whose specifier position is occupied by the negative adverbial phrase, i.e. exactly as cases of unselected C discussed below.

This type of account is probably rendered necessary as soon as we adopt Chomsky's view of the morphology/syntax interaction described earlier. It would indeed be extremely surprising not to find cases of covert V2 - with the same distribution of properties as overt V2 - analogous to cases of covert V to T raising analogous to French overt V to T raising. But more generally, the fundamentally identical properties (in terms of locality, etc..) of cases of head raising (V to T) and head lowering (affix lowering) demands treatments of head movement that are neutral between raising and lowering - i.e. between overt and covert raising. This naturally applies to V2 effects.

Consequently, and most importantly for our purposes, there is no variation in the configurations allowing and thus requiring I to C. As usual, this raising may take place either in the overt syntax or in the covert syntax, depending on the language and the particular construction. But this is the only type of variation allowed.

7.1.2. Covert I to C in French

Nothing then really turns on whether I to C movement is overt movement or covert movement. We have to make sure that a complementizer that counts as filled at S-structure also counts as filled at LF. If this is insured, in principle the cases of permissible overt I to C and covert I to C are going to be identical. This can be achieved by the null assumption: if a complementizer position counts as "filled" at S-structure, it means that its licensing does not require I to C, hence does not require I to C at LF. Consequently, we are free to assume that CI involves in fact covert I to C without affecting the account of the overall distribution of CI. This is what I am going to assume now.

We should expect never to find really free alternations between I to C and lack thereof. Let us now return to the cases in (§33) which look like such cases:²¹

- (§33) a. Peut-etre Jean est-il parti/ Peut-etre que Jean est(*-il) parti
 may be John is gone / may be that...
- b. Aurait-il mange?/ Si il avait mange (*aurait-il..)

²¹Rizzi and Roberts also cite other type of examples which raise the same kind of questions or are less convincing for a variety of reasons: for example the popular French pairs: (i) *qui que tu as vu/qui qu'as-tu vu* (*who (that) did you see*). Besides the questions of the text, an additional problem here is that the register allowing doubly filled comp simply lacks the constructions SCI nor CI -even, of course, in contexts lacking overt complementizers.

Would he have eaten/ If he had eaten (*had he eaten)

Rizzi and Roberts assume that the *que* headed clause in (§33a) is unselected.²² It seems at least as plausible, extrapolating from Morin's (1985) work on *voilà* clauses, that the *que* clause in *peut-etre que..* is actually lexically selected as a complement by a the higher adverbial predicate *peut-etre..*, a reasonable assumption given the semantics of these adverbials reminiscent of that corresponding adjectives *possible*, *probable*, *certain*, *difficile*, *rare..* which do take a clausal argument. The independance of the two structures is supported by the existence of adverbs which allow I to C but not a *que* clause as e.g. *a peine* (as soon as), *encore* (untranslatable discourse particle) viz. *A peine est-il arrive/*A peine qu'il est arrive; Encore aurait-il fallu../*encore qu'il aurait fallu* and which, correlatively, are not predicates at all. Furthermore, the following lack of alternation is unexpected if indeed, all that is at stake is the filled/unfilled alternation in otherwise identical structures or the selected/non selected distinction:

- (§N34) a. Je crois que peut etre qu'il est parti
 I believe that maybe that he left
 b. *Je crois que peut etre est-il parti

In our terms, the impossibility of SCL Inversion (which incidentally is always optional in standard French, i.e. freely overt or covert if we are right) in (§33a), (§34a,b) must be attributed to the Principle of Greed - i.e. to the existence of an alternative to I to C (roughly, insertion of *que*, a subordinator, which is not available in main clauses).

The cases of (§33b) are different since we are dealing throughout with non main clauses. Here too, the structures differ: in inverted structures, the verbal mood inflection is conditional; in non inverted structures the inflection on the verb is indicative. Thus, no real optionality is found here either.²³

7.1.3. The distribution of *-il* and the Principle of Greed

²²They also assume that the small class of items (*peut-etre*, *probablement*, *sans doute*, *difficilement*, *rarement..*) allowing these alternations appear in [spec,CP]. This seems incompatible with the acceptability of Adjunct extraction like: *Pourquoi as-tu dit que peut etre que Jean a demissionne t* (why did you say that may be John resigned). If they did, this should be on a par with adjunct extraction out of wh-islands.

²³*Si* clauses and their inverted counterpart differ in interpretation as well, I believe. The former may be interpreted either as (past) hypothetical or (present) counterfactual, the latter only as counterfactual.

I propose that there is no overt verb movement to C in Complex Inversion constructions nor of course in SCI constructions. I also propose that SCLs are licensed in the position head of NomP. In the case of postverbal SCLs, which I assume are morphologically incorporated to the verbal complex, licensing of the SCL requires movement of the verbal complex to Nom. However, as we saw, postverbal SCL are licensed only in questions (or other triggered environments), i.e. only in cases in which I to C is otherwise required. How then is the licensing of postverbal SCL prevented in other contexts. To put differently, what excludes the raising of the verbal complex to Nom in environments lacking an appropriate trigger in C.

We need a three way distinction:

1. Type 1 heads such as Tense or AGR, which may be generated on V must be able to force V-raising to T or AGR (see below) to get themselves licensed in a way consistent with the principle of Greed. Thus, V+T raises to T to license T.

2. Type 2 heads such as [+Q] Cs must be able to trigger raising of the verb to C (more precisely of I to C, as V to I is independently motivated), in violation of the (economical interpretation of) the principle of Greed, if no more economical option is available, to get themselves licensed. Thus, I raises to [+Q] C only in unselected contexts.²⁴

3. Type 3 heads such as *il* which cannot trigger raising at all in order to get themselves licensed and are therefore (i) either generated where they are licensed (preverbal SCLs), or (ii) are generated on some other head H and can only be licensed if H has to raise to or through their licensing position for independent reasons (postverbal SCLs licensed though the independent raising of I to C).

The distinction type 1/type 2 is necessary as a consequence of Chomsky's proposal concerning morphology and lowering. The distinction between type 3 and the others, the innovation we introduce, appears necessary as well. Recall that complex forms are assumed to be generated fully inflected and that the affixes are licensed through head movement either overtly or covertly. This proposal raises the following question: how complex can complex forms get? Thus, we would in principle expect to find cases of (\$35a) with (\$35b) reading:

- (\$N35) a. I [e] [e [John left-that-believe]]
 b. I believe [that John left]

²⁴It is clear that type 1 type 2 distinction is for expository purposes only here. It is an accidental fact where a particular head is generated. What matters is that it transits through or ends up in its licensing position by LF.

in which the complex embedded form would be properly licensed by successive movements from its V position to I to C to V to I - all possible instances of head movement. Such cases appear rare. In order to account for this restriction we in effect need a notion of "natural complex word". The distinction between type 3 heads and the two others would be of this nature: in effect a type 3 head, when attached to another head does not form a natural complex word with it; its licensing requires some exceptional rescuing device (here raising to C) which will allow the parasitic licensing of this type 3 head.

Leaving type 2 heads aside, I suggest relating the distinction between type 1 heads (AGR, ASP..) - call them Xstrong heads - on the one hand, and type 3 heads (Nom)- call them Xweak heads - on the other to whether or not the property expressed by the head is lexically related to X: AGR is a Case related property, and T(enses) can lexically differ as to their Case assigning properties. AGR is hence T-strong head forcing raising of T+AGR to AGR (hence of V+T+AGR to AGR).²⁵

Nom however is not an Xstrong head for any head in the verbal system. Nom cannot trigger raising on its own of some other verb-related head to Nom.²⁶.} Consequently, a postverbal SCL is never licensed unless the verb raises to a position higher than Nom for independent reasons, licensing the postverbal SCL on the way. In other words, it may licitly be affixed to a verb only in V2 triggering contexts.

7.1.4. Excursus on other varieties of French

Yes/no questions in two varieties of French can be quite naturally analysed very much along the same lines. In each, postverbal SCL have been replaced by an invariable suffix, namely *-tu* in varieties of Quebec French and *-ti* in varieties of popular French documented in Morin (1979):

(\$N36) Jean/Je peux-ti ajouter quelque chose
 Can Jean/I add something

Here, the post verbal particle may cooccur with a preverbal SCL, something impossible in the standard variety. Otherwise this construction has similar distribution and allows the same subject DPs as the

²⁵This might be extended to type 2 heads as well with an extended notion of lexical property: [+Q] would be an Istrong head because of the kind of selectional restrictions between Cs and T or T+AGRs.

²⁶If anything, the function of Nom is to license specificity of the associated XP*, hence could only license the raising of the head of XP* to Nom., see section 9.

standard CI or SCI. The analysis is straightforward: the postverbal affix is a morphologically concatenated question morpheme (as Noonan, 1989, suggests) that must eventually be licensed by the verbal complex raising to C at LF. Raising to C however does not take place overtly for the same reasons as in the standard variety.

7.2. The Double subject problems

For Rizzi and Roberts or Kayne (1984), the postverbal pronominal form is essentially a DP subject cliticized. Hence the Case problem, the source problem and, as additional question, the difference between pronominal and non pronominal DPs in regard their potential ability to appear postverbally. Since we do not treat these postverbal elements as DPs at any level, it is clear that none of these problems arise.

7.2.1. The Case problem

Rizzi and Roberts or Kayne suppose that SCI or CI involve I to C. Postverbal subjects are then expected to be possible (just like in English yes no questions or German V2 structures). The impossibility of (§37a):

- (§N37) a. A Jean parle (Has John spoken)
 b. A-t-il parle (has he spoken)

need to be accounted for and in a way that allows (§37b). Rizzi and Roberts propose, following Szabolcsi's (1983) suggestion, that I to C in French, contrary to English, destroys the context for Nominative Case assignment. Rizzi and Roberts postulate that Nominative Case assignment in French is only right to left: raising of I to C yields a Case Filter violation in (§37a): *Jean* has no Case. In (§37b), the pronominal DP subject can satisfy its Case requirement by incorporating into its Case assigner, as Baker, Johnson and Roberts (1988) have suggested. The first part of this proposal is difficult to reconcile with the current conception of (structural) Case assignment. Structural Case assignment is the reflex of a specifier head relationship. This raises two problems: first we expect English and French to be treated exactly alike from the point of view of Case theory - which is incompatible with Rizzi and Roberts's proposal; secondly nominative and accusative Case assignment should function exactly alike. Nominative arises from a spec/head relationship between T in AGRs and the latter's specifier position. Accusative arises from a spec/head relationship between V in AGRo and the specifier of AGRo. If T to C destroys the configuration for nominative Case assignment, why does not V to T, which occurs systematically and is parallel to I to C destroy the configuration for Accusative Case assignment?

(\\$N38) C DP AGRs T T DP AGRo V

If pre or postverbal SCL are not analysed as DPs, this problem does not arise at all. (§37a) is excluded simply because French lacks overt I to C.

Kayne (1984) conjectured that CI was possible in French only because postverbal SCL were clitics (and more generally that a language may have CI-like constructions only if the equivalent of postverbal SCL were clitics, thus partially explaining its rarity). Rizzi and Roberts's account has the property of theoretically substantiating this conjecture: for them, incorporation in (§37b) must take place motivated by Case theoretic considerations: the postverbal SCL is a DP, hence needs Case. It is not in a Case receiving configurations, hence incorporates.²⁷

Kayne's conjecture is also derived within the present account. CI involves inversion of some sort by definition but not Verb/Subject. Instead, it is inversion of two normally adjacent heads H₁ and H₂ normally occurring in this order. If the inverse order cum adjacency is found, because of the Head movement constraint, this can only occur if one incorporates to the other in one way or another. Hence, in a sense each of them must be clitic on the other.

7.2.2. The source problem

Clearly, the source problem, a problem of potential undergeneration, does not arise under the present proposal. In CI constructions, there is only one subject. However, converse problems arises, i.e. problems of overgeneration: so far we have assumed that nothing in particular about the availability of the NomP projection (except that it may only occur in clauses having nominative, i.e. tensed clauses in French).

Consider first the case of preverbal SCL, e.g. *il a mange/ he ate*. Here, we have the following relevant substructure:

(\\$N39) Nom AGRs T V

²⁷Although the link between Case and Incorporation seems to me theoretically highly desirable, the motivation that has been given for it seems to me unconvincing. For example, English passive *-en*, which motivates Baker, Johnson and Roberts's (1989) analysis leading to the view of the relation Case/Incorporation can, I believe, be reanalyzed as heading a projection, the passive Voice, in a way very similar to my current analysis of clitics heading Clitic Projections, and not as nominal at all (see Sportiche, 1993, for further discussion).

the SCL *il* is not (necessarily) a syntactic clitic. The verb does not (have to) raise all the way to Nom but must raise at least to AGRs (the standard analysis, cf. Pollock (1990)). Let us now look at the DP subject. Sportiche (1992) shows that, in French and when it is possible to tell, a silent DP, i.e. *pro*, doubling a clitic head of CIP must raise to [spec,CIP], at least. It is difficult to show directly that this is the case in the present situation, but it is not unreasonable to extend this conclusion here.

With a preverbal SCL, this DP cannot be overt in standard French. Provided that this DP is required to raise to [spec,NomP] overtly,²⁸ surely the null hypothesis given the behaviour of silent DPs, we may, as mentioned earlier, encode this impossibility in a version of the "doubly filled COMP filter" extended to the Nom system: Nom and [spec,NomP] cannot be simultaneously filled (in the relevant sense) at S-structure.²⁹

Turn now to postverbal SCLs.

(\$N40) Nom AGRs T V

The difference here is that both overt and silent DP subject are allowed. The latter case raises no particular question: it raises just as in the previous case to [spec,NomP]. But the former does: why are overt DPs suddenly allowed? By uniformity, an overt DP should be considered to have raised to [spec,NomP] as well. Furthermore, we have good independent evidence that tensed verbs always raise to AGRs overtly (Pollock, 1990). The only conclusion compatible with the doubly filled projection approach is that the combination V-SCL raises no further than AGRs. It does not raise to Nom, hence does not create a doubly filled projection. This means that the affixation of the postverbal SCL could not have resulted from the V raising to (or past) Nom. Rather, concatenation V+SCL must have occurred independently of head movement of V to Nom. This is what we had concluded earlier: it is precisely the fact that post verbal SCLs are subject to MI that allows CI to exist in French.

It is worth pointing out the logical relations between the various proposals we make at this point. The fundamental proposal we make, i.e. that SCLs are the head of Nom, and that there is no head movement

²⁸In Chomsky's (1992) terms, the property licensed on this DP by the raising, to a discussion of which we return below, is strong, and must thus be licensed prior to spell out

²⁹Not all varieties of French exhibit this prohibition. Thus Quebec French has been argued to allow an overt - non dislocated- subject DP doubling a SCL (see Bouchard, 1982, for example). Interestingly, Quebec French also appears to lack the doubly filled filter.

to C in SCI and CI constructions is independent from the analysis of postverbal clitics as involving MI. This proposal could be maintained even if the surface position of the postverbal SCL was due to movement (of the verb or of the SCL). It would probably indicate that tensed verbs in French routinely raise to Nom (or that there is syntactic lowering of the SCL).

7.3. Some direct evidence for lack of overt I to C

7.3.1. Distributional Evidence

If I to C does not take place overtly in French, nothing special need be said about the position of the DP subject in CI: it occurs in [spec,NomP]. The V+SCL combination is in AGRs. This is illustrated in (§41a).

In Kayne's or Rizzi and Roberts's analysis, I to C does take place overtly: V+SCL is in C and the DP subject in some intermediate position between C and [spec,CP], where wh-phrases occur. This is illustrated in (§41b).

(\$N41)	a.	[CP	C	[IP	Nom	AGRs T V
		XP _{wh}			DP	V+SCL
	b.	[CP			C	[IP ...
		XP _{wh}	DP	V+SCL		

The two analyses make quite different predictions concerning "IP" initial material: in CI or SCI, this material is predicted to occur to the right of a wh-phrase and

- (i) to the left of the V+SCL complex or to the left of an overt subject if any, according to the first analysis
- (ii) to the right of the V+SCL complex, according to the second analysis

The following examples illustrate a possible case. Consider the temporal clausal adjunct (\$42a). Elements of its distribution are illustrated in (\$42b) (the symbol *^ indicate that the adjunct clause in (\$42a) cannot appear in the position of ^ in (\$42b), a bare ^ indicates that it may):

- (\$N42)
- a. Quand le vote a eu lieu
when the vote took place
 - b. ^ les electeurs sont ??^ alles a la peche
the voters went fishing
 - c. Dans quelle ville ^1 (les electeurs) sont-ils ??^2 alles a la peche
In which city (the voters) went fishing

The judgments seem preserved in (\$42c): although position 1 is perceived as a natural position for the intervening temporal clause, position 2, although not impossible is perceived as less natural, stylistically more marked. This observation is explained if the subject DP and the verbal complex occupy respectively the same positions as in (\$42b), and mysterious otherwise. The post verbal position 2 in (\$42c) is particularly significant. Both Kayne (1984) and Rizzi and Roberts (1989) consider that because of I to C, the pre-C position hosting the preposed subject counts as a [spec,IP] so that there are in effect two IPs: the original IP and a derived IP. Position #1 is thus a pre-IP position.

7.3.2. Binding Evidence

The position of the overt subject in CI must be construed the way a (possibly derived) A-position usually is (however this should be defined). This is shown by the possibility of sentences like *De qui_j [le pere t_j] est-il venu?* (*Of whom did the father come*): extraction from elements preposed in A-bar position is not possible (cf. **De qui te demandes-tu quel frere est venu / De qui_j [le pere t_j] Jean l_j'a vu* (*Of whom do you wonder which brother came, Of whom the father John saw him.*)). This is as expected under both Rizzi and Roberts's and the present analyses (but is the opposite conclusion of Kayne 's (1984)). In the present analysis, the subject is in the normal subject position. In Rizzi and Roberts's, it is the specifier of as derived IP (so that raising to C is in effect a structure building rule).

SCI, *est-il venu*, is treated differently by each analysis:

- (\$N43)
- a. C [NomP pro [e [ARGsP [est-il....
 - b. [IP e [est-[il]_j [IP t_j [...

Consider now the following sentences:

- (\\$N44)
- a. Si Jean_j était venu, il_j aurait décidé...
If John had come, he would have decided..
 - b. *Il_j aurait, si Jean était venu, décidé...
He would have, if John had come, decided...
 - c. *Aurait-il_j, si Jean_j était venu
Would he, if John had come, decided....

(\\$44b) illustrates a Principle C effect: the pronoun *il*, or the *pro* c-commands the name *Jean*. Why is this effect also found in (\\$44c)? According to structure (\\$43a), it is for an identical reason: the *if* clause is lower than AGRs and thus c-commanded by *pro*. According to structure (\\$43b), the reason is less clear. The *if* clause can appear, say adjoined, IP initially (an observation corroborated, within Rizzi and Roberts's proposal, by the possibility of *Quand, si Marie est malade, Jean pourra-t-il lui rendre visite* (*When, if Mary is sick, will John be able to visit her*). Adjoined to the lower IP in (\\$43b), it should not trigger any principle C effect as it is not within the c-command domain of any coindexed DP. There is also no reason to count the incorporated head *il* of the subject DP as relevant for the binding theory.³⁰

8. Subject Extraction and the role of NomP

There are two interrelated questions that we have not addressed yet. The first is the function of the NomP projection. The second concerns the deviance of simultaneous subject extraction and SCI illustrated in (\\$45):

- (\\$N45)
- Qui_i t_i a-t-il_i mange de la soupe
who has-he eaten soup

The deviance of (\\$45) is actually not fully representative of the data. Thus, as noted in Grevisse (1980), subject extraction and SCI, i.e. wh-movement of the subject in CI constructions, are compatible for example in questions and in exclamatives:³¹

³⁰See Sportiche, 1992, for discussion of comparable cases with object clitics.

³¹It should be remembered that CI belongs to a fairly formal register. Intuitions in complex cases are not as secure as in more spoken varieties of French. This caveat given, I may add that, although the wh-questions examples given below are acceptable, such cases are most natural with exclamatives.

- (N46)
- a. [Combien d'entre nous]_i t_i auraient-ils_i droit ...
How many among us would-have-they the right
 - b. [quel feroce magicien]_i t_i a-t-il_i enferme ton secret...
which fierce magician has-he locked up your secret

Specificity of the subject seems to be a determining factor allowing cooccurrence of SCI and subject extraction. The correct notion, say specificity, however it should be characterized (see Enc, 1991, and references therein), is strongly reminiscent of that relevant for accusative clitic doubling (in River Plate Spanish, see Jaeggli, 1982, Porten~o Spanish, see Suner's work, e.g. Suner, 1991, Rumanian, etc..) or "accusative case marking" in Turkish (see, Enc (1991)). Sportiche (1992) suggests that the function of AccP, the Accusative counterpart of NomP whose head hosts accusative clitics, is precisely that of a "specificity" licenser. Extending this idea to NomP not only provides an answer to the first question, but explains the difference between (N45) and (N46). The examples in (N46) are acceptable precisely because it is natural to interpret the variable bound by the wh-quantifier as ranging over a set previously introduced in the discourse. After all, this conclusion is not surprising as the cases under discussion are cases of Clitic Doubling involving Nominative instead of Accusative.

If this approach is correct, the specificity requirement imposed by the presence of the SCL, i.e. of NomP, should be observed in non wh-structures as well. Non wh DPs incompatible with a specific interpretation should not be able to occur as subjects in CI constructions. This prediction is difficult to test if specificity is correctly characterized in terms of prior introduction of some (restricted) set of possible referents for it might rely not so much on the internal structure of DPs as on the discourse conditions of use of DPs (e.g. why couldn't *qui* in (N45) be interpreted as specific in particular discourse conditions). Fortunately, there is a class of DPs which cannot receive a specific interpretation, namely indefinite DPs modified by a relative clause in the subjunctive mood (they cannot appear with a definite determiner). These DPs cannot appear on the CI construction. Indefinite DPs modified by a relative clause in the indicative mood are ambiguous between a specific and a non specific interpretation. They may appear in CI constructions. When they do, however, they can only be interpreted as specific:

- (N47)
- a. Je cherche un homme qui sache/sait cuisiner
I am looking for a man who could-subj / can-ind how to cook
specific reading only / ambiguous
 - b. Un homme qui *sache/sait cuisiner chercherait-il un tel poste
a man who could-subj/can-ind cook would-look-for-he such a position

Would a man who can cook seek such a position? (specific reading only).

Given the similar treatment we propose for French and Northern Italian SCL, we expect that similar conclusions should hold of the Northern Italian dialects. Suner (1992) suggests that they do despite *prima facie* evidence to the contrary, such as the possibility of doubling quantifiers such as *nobody* with SCLs. She points out that in Porten~o Spanish, doubling of a direct object *ninguno* (*nobody*) is possible and suggests that this negative quantifier in all these cases is interpreted as partitive.³² Whether this is correct is unclear. As I mentioned earlier, specificity as I have been using it may not be the right notion. It seems that the right set of DPs should at least include specific DPs. The crucial factor here is that we find parallel behaviour in subject doubling and object doubling.

9. Concluding Remarks

The analysis of SCL clitics we advocate for French and, more generally, Romance, is in line with that suggested in Sportiche (1992) for object clitics. It also marks a return to one of the earliest analysis of SCLs, namely that of Kayne's (1972). Kayne suggested that NPs be generated in the form [NP -SCL] (e.g. [Jean -il], or [lui -il]), where either the strong pronoun *lui* or the SCL *il* be deleted, except in special contexts such as CI. The idea that the SCL and the DP are distinct entities is the fundamental idea we have pursued. Essentially, we have departed from Kayne's proposal only in requiring that the configuration DP-SCL is not base generated as such but has to hold at LF.

³²My judgments on French are not straightforward. Thus, while *personne* in simple CI is impossible (**Personne n'a-t-il mange* (*Nobody has-he eaten* = *Has anybody eaten*)), it improves in *why* questions (*Why personne n'a-t-il mange* (*why hasn't anybody eaten*)).

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