

Toward an Analysis of French Hyper-Complex Inversion

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September, 2008

1. HCI

Standard French has a root interrogative construction that involves what looks a bit like English subject-aux inversion:¹

- (1) Is he there?
- (2) Est-il là? ('is he there')

In a way related to Pollock's (1989) discussion, the fronted verb in French, as opposed to English, need not be an auxiliary:

- (3) Voit-elle quelqu'un? ('sees she someone')

A second difference between the two languages is that in French yes-no questions the postverbal subject must be a pronominal clitic, as it is in (2) and (3); it cannot be a lexical DP:²

- (4) *Est Jean là? ('is J there')
- (5) *Voit Marie quelqu'un? ('sees M someone')

A third difference is that French allows what Kayne (1972) called 'Complex Inversion' (henceforth CI), in which a non-dislocated preverbal subject can co-occur with the postverbal pronominal subject:

- (6) Cela est-il vrai? ('that is it true')

In the appropriate register, CI is highly productive. Relevant to this paper is the fact that CI is compatible with an object clitic (henceforth OCL):

- (7) Cela la gêne-t-il? ('that her bothers it' = 'does that bother her?')

Central to this paper is an important observation due to Morin (1985), namely that alongside (7) a large number of speakers also accept, with the same interpretation:

- (8) Cela la gêne-t-elle? ('that her bothers she' = 'does that bother her?')

in which the postverbal (nominative) subject clitic (here *elle*) agrees in gender and number with the preverbal (accusative) OCL (here *la*). This contrasts with ordinary CI, as in (7), in which the postverbal subject clitic *il* agrees with the preverbal subject *cela*. We shall use for (8) the term Hyper-Complex Inversion (henceforth HCI), and in this paper shall provide a first attempt at a theoretically grounded analysis of some of HCI's properties.

2. HCI as clitic doubling.

¹ Colloquial French has lost the inversions discussed in this paper. In what follows, we abbreviate 'standard French' to 'French'.

² French has another, distinct inversion construction informally called 'stylistic inversion' that sometimes (but not in yes-no questions) overlaps with subject clitic inversion - see Kayne and Pollock (2001) and references cited there.

In many ways HCI and CI are very similar,³ so that one can think of HCI as a subcase of CI characterized by the agreement, in HCI, between subject clitic (henceforth SCL) and OCL (and by the non-agreement, in HCI, between SCL and preverbal subject). There are sentences that appear ambiguous between HCI and CI, such as:

(9) *Cela le gêne-t-il?*

in which masculine *il* might be agreeing (in gender and number) either with the lexical subject *cela* or with the masculine OCL *le*. To bring out the specific properties of HCI, then, one needs to study sentences in which, as in (8), the lexical subject and the OCL do not match in phi-features.

It should be noted that although the postverbal SCL in HCI/CI can agree with either the OCL (HCI) or with the preverbal subject (CI), it does not have the option of not agreeing at all:⁴

(10) **Cette table la gêne-t-il?* ('that table her bothers it/him')

Here, both *cette table* and *la* are feminine, while *il* is masculine. In this respect, HCI/CI differs sharply from the closest French counterpart of English *There has arrived a letter*.

(11) *Il est arrivé une lettre.* ('it is arrived a letter')

In (11) there is an expletive-like SCL *il* that is masculine in gender, despite the fact that *une lettre* is feminine. Agreement between the SCL and its 'associate' (i.e. having feminine *elle* in place of masculine *il*) is impossible:⁵

(12) **Elle est arrivée une lettre.*

Thinking of Chomsky (1995, %), we can attribute this lack of agreement to the fact that the expletive-like *il* of (11) has intrinsic masculine gender. In which case we conclude that the postverbal SCL of CI/HCI seen in (7)/(8) is not expletive-like. The alternative that we will adopt is to see CI/HCI as an instance of clitic doubling, i.e. to relate it to the well-known dative clitic doubling found in languages like Spanish. A key difference is that CI/HCI centrally involves not dative clitics but rather nominative ones.

We will adopt the 'complex constituent' approach to clitic doubling proposed in Kayne (1972, sect. 3) for CI and in Uriagereka (1995, 81) for the Spanish type.⁶ This amounts to saying that in a CI example like (7) *cela* and *il* start out within a phrase (a complex DP) that excludes the verb (and the object):

(13) ...[*cela il*] *gêne la*

In HCI examples like (8), the SCL starts out paired with the OCL, rather than with the lexical subject:

³ For example, both are restricted to root contexts lacking any complementizer, both are limited to interrogatives and some affective contexts, both have the property that the postverbal pronoun must be a clitic. For additional details on CI, see Kayne (1972) and Pollock (2006).

⁴ As opposed to the non-standard *-ti* mentioned by Morin (1985, 794) and Pollock (2006, section 7.3).

⁵ As opposed to right-dislocation:

i) *Elle est arrivée hier, cette lettre.* ('she/it is arrived yesterday, this letter')

⁶ Cf. also Bianchini, Borgato and Galassi (1982), Belletti (1999), and, for extensions to wh-doubling, Poletto & Pollock (2004).

(14) ...cela gêne [la elle]

The agreement effect seen in CI/HCI is in this way reduced to agreement (in gender and number) within the complex DP. (In both (7) and (8) the complex DP is split apart in the course of the derivation.)

The impossibility of (10), in which the postverbal SCL agrees with nothing, is now excluded as follows. If that SCL is merged within a complex DP containing either *cette table* or *la*, there is a violation of the obligatoriness of DP-internal gender/number agreement. But if that SCL is not thus merged, it has no viable source at all (on the reasonable assumption that it cannot be an expletive of the sort licensed in (11)).

Of interest now is that fact that simple SCL inversion (henceforth SCLI) of the sort seen earlier in (2) and (3) has no HCI-like counterpart. SCLI is compatible with an OCL:

(15) La gêne-t-il? ('her bothers it/he' = 'does he/it bother her?')

Here *la* and *il* correspond to distinct arguments. If there existed an HCI-like counterpart of (15), then agreement between SCL and OCL would be possible in (15), while keeping the interpretation constant. Such agreement is not, however, possible in sentences like (15). Although the following is well-formed, it does not have the interpretation of (15):

(16) La gêne-t-elle? ('her bothers she/it' = 'does she/it bother her?')

(The (postverbal) subject argument in (15) must be masculine (whether animate or not), while the corresponding argument in (16) must be feminine.)

The reason that (16) cannot be related to (15) in the way that (8) is related to (7) is the following. In (8), *elle* can be taken to be a double of *la* (both then being part of the object argument), since there is still *cela* to fill the role of subject argument. Whereas in (16), if we were to take *elle* to be a double of *la*, there would be nothing left to fill the role of subject argument.⁷

The impossibility of (16) in the relevant reading is brought out by a contrast between HCI and right dislocation:

(17) Ce scandale la gênera-t-elle? ('this scandal her will-bother she' = 'will this scandal bother her?')

(18) *La gênera-t-elle, ce scandale?⁸

(17) is an example of HCI parallel to (8). (18) is an ill-formed instance of right dislocation corresponding to the well-formed right dislocation in:

⁷ Since French is not a null subject language of the Italian sort. French may allow (cf. Kayne (1972) and Kayne and Pollock (2001)):

i) pro il/elle...

but such a pro would have to be linked to the SCL and therefore could not correspond to a separate argument, as would be needed in (16).

The text proposal is in the spirit of Morin (1985, 796).

⁸ Counterparts of both this example and (16) appear to be possible in the North Italian dialect (close to Paduan) discussed by Penello (2007, (11b)). The contrast with French may be related to that dialect's being a partial pro-drop language. See also Roberts (1993) and Pollock (2006) on Valdôtain dialects, and Poletto (2000) on multiple SCLs.

(19) *La gênera-t-il, ce scandale?* ('her will-bother it, this scandal' = 'will it bother her, this scandal?')
 in which the SCL *il* is paired with the dislocated *ce scandale*. (18) is ill-formed for essentially the same reason as (the relevant interpretation of) (16) - having *elle* instead of *il* amounts to having *elle* merged in the same complex DP as object argument *la*. That causes no problem in (17), where non-dislocated *ce scandale* is available as subject argument, but in (18) there is no available subject argument once *elle* is paired with *la*. The reason is that a right-dislocated constituent cannot directly correspond to any argument and there is no available pronoun in (18) that can (help it to) fill that role, either (just as there wasn't in (16)).

3. Person and -/-.

In taking the relation between OCL *la* and SCL *elle* in the HCI example (17) to be one of clitic doubling, we are taking it not to be exactly the same kind of agreement relation as that found between OCLs and past participles in French or Italian, as illustrated in:

(20) *Jean l'a repeinte.* (French: 'J it(fem.) has repainted(fem.)')

(21) *Gianni la avrebbe vista.* (Italian: 'G it/her would-have seen(fem.)')

A clear difference between HCI and past participle agreement involves person. In French and in some Italian a past participle can agree in gender (and number⁹) with a first or second person pronoun accusative OCL:¹⁰

(22) *Jean t'a prise par le bras.* (French: 'J you(fem.) has taken(fem.) by the arm')

(23) *Gianni mi ha vista ieri.* (Italian: 'G me(fem.) has seen(fem.) yesterday')

In contrast, while CI in French can readily have such an OCL:

(24) *Cela te/me gêne-t-il?* ('that you/me bothers it' = 'does that bother you/me?')

HCI cannot.¹¹ Even if the OCL in (24) is understood to be feminine, the SCL must remain *il* (pairing with *cela*); this *il* cannot be replaced by feminine *elle* (pairing with *te* or *me*):

(25) **Cela te/me gêne-t-elle?*

This property of HCI is not surprising, insofar as other instances of clitic doubling also strictly prohibit a person clash:

(26) *Je te vois toi/*elle.* (French: 'I you see you/her')

(27) *Yo te veo a ti/*ella.*¹² (Spanish: 'I you saw to you/her')

⁹ In ordinary French the plural -s on agreeing past participles is only orthographic; in Italian plural agreement is readily audible.

¹⁰ The fact that for some Italian speakers (23) is impossible may be due to their obligatorily taking first and second person OCLs to be dative, with this in turn related to their Italian having a stronger presence of Spanish-like accusative *a* than the Italian of those who accept (23).

¹¹ As noted by Morin (1985, 795).

¹² On Spanish *Nos vió a los lingüistas* ('us (s)he-saw to the linguists' = '(s)he saw us linguists'), with a silent first plural (non-clitic) pronoun, see Torrego (1996) and Ordóñez and Treviño (1999); also Kayne (to appear - a).

This contrast between clitic doubling and past participle agreement can be understood more specifically as follows. In all of (25)-(27) there is a clash between *te/me* and *elle/ella*. This clash is due to the morpheme *-l-* present as part of *elle/ella*. A doubling relation cannot hold of two elements one of which is (non-first/non-second person) *-l-* and the other of which is first or second person. On the other hand, the past participle agreement morphemes *-e/-a* in (22)-(23) contain no *-l-*; consequently there is no person clash.¹³

4. *Voilà*.

Our account of the impossibility of HCI in (18) rested, in essence, on the idea that (18) lacked an appropriate non-dislocated subject argument. At first glance this might seem to be in conflict with a point made by Morin (1985, 795) concerning French *voilà*,¹⁴ which occurs in sentences like:

(28) *Voilà Jean*. ('see there J' = 'there's J')
and which is similar to (the less usual) *voici*:

(29) *Voici Jean*. ('see here J' = 'here's J')

Morin notes that *voilà* (but not *voici*) is compatible with HCI. One of his examples is:

(30) *Ne les voilà-t-elles pas qui courent maintenant?* ('neg. them(fem.) *voilà t* they(fem.) who run now' = 'isn't that them (who are) running now')

In (30), OCL *les* and SCL *elles* are merged in a complex DP (and are separated in the course of the derivation). Taken together as one argument, they correspond to *Jean* in (28). The reason that (30) is well-formed and (18) is not is that the verb *gêner* in (18) is a two-argument verb (so a problem arises, as discussed), whereas *voilà* in (30) requires only one true argument (so that problem does not arise for (30)).¹⁵

¹³ We leave aside for reasons of space the general question of finite verb agreement, which differs from both past participle agreement and clitic doubling in various ways, while sharing with the former the absence of *-l-*; for some discussion, see Kayne (2003).

We also note in passing that, if the presence vs. absence of *-l-* is at the heart of (22)-(23) vs. (25)-(27), the possibility arises that past participle agreement should receive a complex DP analysis of the sort proposed for clitic doubling, i.e. that (22)-(23), for example, should be taken to contain the complex DPs [te -e] and [mi -a], respectively (cf. Kayne (1994a)).

¹⁴ Cf. also Kayne (1983).

¹⁵ Morin (1985) argues that *voilà* and *voici* are truly subjectless. Alternatively, (29) has a subject *-ci* ('here') past which verbal *voi-* has moved, and similarly for a subject *là* ('there') in (28). However, the fact that *voici* and *voilà* contrast with respect to HCI might indicate that the subject in at least (30) (and perhaps (28), too) is just *l-*, with *-à* (despite the spelling) being a form of the verb 'have' (in which case we could take the presence of the postverbal SCL with *voilà*, which never allows a preverbal SCL, to be indirectly licensed by verbal *à*). That *voilà* can contain 'have' (cf. Morin's (1985, 810ff.) dialect observations) might then be related to French existentials containing 'have'.

Morin (1985, 797) notes that almost all speakers reject HCI with *falloir* in:

i) **La (lui) faut-elle absolument?* ('it/her to-him/her is-necessary it/she really' = 'does

5. A SCL restriction.

In lacking an ordinary subject argument, *voilà* has something in common with a verb like *falloir* ('to be-necessary'):

(31) Il nous faut une nouvelle voiture. ('it us is-necessary a new car' = 'we need a new car')

They differ in that *falloir* takes an expletive-like preverbal subject clitic *il*,¹⁶ as seen in (31), while *voilà* does not. The compatibility of *voilà* with HCI seen in (30) has no parallel with *falloir*, despite their partial similarity. SCLI is possible in:

(32) Nous la faut-il? ('us it is-necessary it' = 'do we need it?')
where *la* is an OCL counterpart of *une nouvelle voiture*, as in the simple declarative:

(33) Il nous la faut.

Yet (33) cannot give rise to HCI:

(34) *Il nous la faut-elle?

nor can it to CI:

(35) *Il nous la faut-il?

As it happens, this is not specific to *falloir*, or even to impersonal verbs more generally, but is rather a property of all preverbal SCLs, which are never compatible with CI/HCI.¹⁷ Thus alongside:

he/she really need it/her?')

This recalls (18), as he in effect notes, and suggests that the impersonal subject of *falloir* might be a quasi-argument rather than an expletive - cf. Kayne (to appear - b). Alternatively, or in addition, see section 5.

Possible to some extent is:

ii) (?)? La surprendrait-elle que tout soit en ordre? ('her would-surprise she that all is in order' = 'would it surprise her that...?')

in which *que tout soit en ordre* must be counting as subject argument.

¹⁶ This *il* can sometimes fail to appear with *falloir* (cf. Morin (1985, 807)), but probably only in varieties/registers of French that exclude HCI.

¹⁷ In contrast, the distinct popular French *-ti* mentioned by Morin (1985, 794) and Pollock (2006, section 7.3) is compatible with preverbal subject clitics.

There is also a contrast here between French and the dialect studied by Penello (2007) - cf. note 8.

Demonstrative *ça* is not a SCL insofar as it is compatible with HCI and CI:

i) Ça la gêne-t-elle? ('that her bothers she' = 'does that bother her?')

ii) Ça la gêne-t-il?

Ça (as opposed to demonstrative *ce*) also differs from SCLs in never undergoing simple SCL-inversion of the (37)/(2)/(3)-type:

iii) Est-ce vrai? ('is that true?')

iv) *Est-ça vrai?

and in sometimes being able to be the subject of a gerund:

v) (?)Ça étant dit, je pense que... ('that being said, I think that...')

vi) *Il étant heureux,... ('he being happy,...')

Morin (1985, note 26) takes *ça* to be a clitic; it may instead be that *ça* (or at least some instances of it) is something like a weak pronoun in the sense of (a more refined

(36) Ils la voient. ('they her see')
with SCL *is*, French allows SCLI:

(37) La voient-ils?

but neither CI:

(38) *Ils la voient-ils?

nor HCI:

(39) *Ils la voient-elle?

6. The *-t* morpheme.

Informally speaking, the sharp deviance of (38) and (39) can be thought of as reflecting the fact that French cannot license two SCLs in one simple sentence, as opposed to French being able, in CI/HCI, to license one (postverbal) SCL and one (preverbal) lexical subject DP at the same time. If we set aside left- and right-dislocation, however, we can see that such doubling licensing is possible only if the SCL is postverbal. This is shown using CI in:

(40) Cela est-il vrai? ('that is it true')

(41) *Cela il est vrai.

and with HCI in:

(42) Cela la gêne-t-elle? ('that her bothers *t* she' = 'does that bother her?')

(43) *Cela elle la gêne.

We can take (41) and (43) to be excluded by virtue of the fact that preverbal SCLs and preverbal lexical subject DPs are, in French,¹⁸ Case-licensed in the same way by a functional head that can license only one of them in a given simple sentence.

If so, then postverbal SCLs must have access to an extra licenser, one that is not available to preverbal subjects of any type. In the spirit (though not the letter) of Pollock (2006), we shall claim that it is the *-t* morpheme of CI and HCI (seen clearly in (42)) that plays a key role in licensing the postverbal subject clitic in those constructions.

This 'extra' *-t* is not clearly represented in the orthography in cases like (40) that contain a verb whose third person form otherwise ends in *-t*. But it is in (42) and in cases such as:

(44) Marie a-t-elle une voiture? ('M has *t* she a car')

as compared with the corresponding non-inversion examples:

(45) Marie a (*-t) une voiture.

(46) Elle a (*-t) une voiture.

In (44) (and (42) and (40)), the *t* must be pronounced; in (45)/(46) there cannot be a pronounced *t*.

When the verb has an orthographic *-t* as does *est* in (40), then that *-t* can (sometimes) be pronounced if followed by a word beginning with a vowel. Thus the following, in which the verb-final *-t* can be pronounced, contrast minimally with (45)/(46):

version of) Cardinaletti and Starke's (1999) proposal.

¹⁸ As opposed to various dialects in northern France and in northern Italy; on the latter, see Poletto (2000).

- (47) Ceci est une voiture. ('this is a car')
- (48) Elle parlait à sa soeur. ('she spoke to her sister')
- (49) Elles entendent une symphonie. ('they hear a symphony')

French is thus 'irregular' in the following way. Some finite verb forms, such as those in (47)-(49), end in a third-person agreement *-t* morpheme.¹⁹ Others, as in (45)/(46), normally do not, but are nonetheless followed by that *-t* morpheme in root interrogative contexts in which the finite verb is itself followed by a SCL, as in (44).²⁰

The absence of any *-t* in (45)/(46) means that ordinary subject Case-licensing, whether of a preverbal lexical DP, as in (45), or of a preverbal SCL, as in (46), cannot in general depend on the presence of (overt) *-t*. On the other hand, there is invariably a pronounced *-t* immediately preceding a postverbal third person SCL, as in (44). As stated above, this makes it plausible to take the licensing of a third person postverbal SCL to depend crucially on the presence of this *-t*.²¹

7. Remnant movement and *-t*.

Thinking of the limitation of this *-t* to root contexts, of a partial similarity to Germanic complementizer agreement²², and of Shlonsky (1994), we take *-t* to be a morpheme located above IP, somewhere in the Comp area, in Rizzi's (1997) sense. It may be an independent Agr head in the spirit of Pollock (1989), in which case it must require the

¹⁹ In at least one dialect in France, this third person *-t* has been generalized - see Morin (1985, note 30).

²⁰ The limitation to root contexts is sharp, but (to an extent as in English) there are some non-interrogative root contexts that allow *-t* + SCL, e.g. with CI and HCI:

- i) Peut-être cela la gêne-t-il. ('maybe that her bothers it')
- ii) Peut-être cela la gêne-t-elle.

The fact that the *-t* in question cannot precede a lexical DP:

- iii) Où va-t-il? ('where goes *t* he')
- iv) Où va (*-t-) Anne?

(with (iv) an instance of stylistic inversion - see note 2) can be thought of in terms of a requirement that *-t* have something to license the nominative Case of; alternatively (or in addition), there might be a link to languages like Irish, in which agreement with a postverbal lexical subject is excluded.

The fact that (v) contrasts with (iv) in allowing *-t* to be pronounced:

- v) Que fait Anne? ('what does A')

reinforces the idea that there are two related but non-identical third person *t* morphemes.

²¹ A more syntax-friendly French orthography would arguably write (40) as:

- (i) Cela est-t-il vrai?

(in which only one *t* would be pronounced, in a way consistent with general properties of French phonology). In other words, we take this 'extra' *-t* to be present in CI/HCI whether the verb has a *-t* of its own or not.

²² For recent discussion, see Gruber (2008). Why Germanic 'complementizer agreement' is (apparently) limited to the 'OV' Germanic languages needs to be accounted for.

nearby presence of a root interrogative head, or it may reflect the spelling out of (phi-features on) a root interrogative head.²³ Of importance to the present paper are two properties of *-t-*. The first, already discussed to some extent, is that it participates in the Case-licensing of a (third person) SCL found in the projection just below it. In the CI example (44) *-t-* participates in the Case-licensing of *elle*, and similarly in the HCI example (42).

The second important property of this interrogative *-t-* is that it attracts to its Spec a phrase containing the lexical subject plus the finite verb (along with any intervening OCLs). In (42), for example, *-t-* attracts the phrase '[*cela la gêne*]', as indicated in the following sketchy derivation (traces/copies not included):²⁴

- (50) *cela gêne* [*la elle*] --> OCL movement
cela la_i *gêne* [t_i *elle*] --> raising of remnant containing SCL
 $[t_i$ *elle*] $_j$ *cela la gêne* t_j --> merger of *-t-*
 t [t_i *elle*] $_j$ *cela la gêne* t_j --> remnant IP movement
 $[$ *cela la gêne* t_j $]$ $_k$ t [t_i *elle*] $_j$ t_k

with the last step involving remnant IP movement, essentially as in Pollock (2006). (In (42)/(50),

-t- licences the morphologically nominative *elle* while the finite tense Case-marks *cela* (but without being able to license a morphologically nominative subject) - see section 10 below.)

8. Missing persons.

Of interest is a restriction on HCI not yet mentioned, namely that HCI is limited to third-person SCLs. Alongside the well-formed (42)/(50), repeated here:

- (51) *Cela la gêne-t-elle?* ('that her bothers t she' = 'does that bother her?')

there is no second person:

- (52) **Cela te gêne-(t-)tu?* ('that you bothers t you')

Similarly, alongside the well-formed HCI example:

- (53) *Cela l'aurait-elle gênée?* ('that her would-have she bothered' = 'would that have bothered her?')

there is no:²⁵

²³ For discussion, see Pollock (2006).

²⁴ Well-formed sentences with *-t-* have no counterpart with zero in place of *-t-*:

(i) *Cela a*(-t-)il été important?* ('that has t it been important' = 'has that been important?')

²⁵ We have switched to a conditional tense because of restrictions on postverbal *je* discussed by Pollock (2006, note 43).

In the first and second plural, the facts are the same:

- i) **Cela nous gêne-nous?*
 ii) **Cela vous gêne-vous?*

These HCI examples must be distinguished from right-dislocation (with its distinctive intonation):

- iii) *Cela nous gêne, nous?*
 iv) *Cela vous gêne, vous?*

With a (silent) third person *-t-*, (52) and (54) might be excluded via a person

(54) *Cela m'aurait-je gêné? ('that me would-have I bothered')

A further question is whether HCI is possible when both the SCL and the preverbal subject are first or second person. At first glance, there do seem to be well-formed CI sentences that fit this description, e.g.:

(55) Jean et moi avons-nous vu ce film? ('J and me have we seen that film')

On the other hand, Morin (1979) noted the contrast:

(56) Pourquoi lui seul a-t-il été prévenu? ('why him alone has *t* he been told')

(57) *Pourquoi toi seul as-tu été prévenu? ('why you alone have *t* you been told')

and Pollock (2006):

(58) Quel livre lui a-t-il apporté? ('which book him has *t* he brought' = 'which book did HE bring?')

(59) *Quel livre moi ai-je apporté? ('which book me have *t* I brought')

We tentatively interpret this to mean that both CI (as in (57) and (59)) and HCI (as in (52) and (54)) are impossible with a first or second person SCL.²⁶

If CI and HCI are truly not possible in the first or second person, they contrast with first and second person examples of SCLI (in which the SCL is not doubling anything overt) as in:

(60) Aurais-je été prévenu? ('would-have I been told')

(61) As-tu été prévenu? ('have you been told')

(62) Avons-nous été prévenus? ('have we...')

(63) Avez-vous été prévenu(s)? ('have you...')

This suggests that CI and HCI are excluded in the first and second person precisely because the type of overt doubling that plays a central role in CI/HCI is incompatible with first and second person. The reason for that may lie in the complex DP analysis that we have taken to underlie such doubling, insofar as third person SCLs resemble definite articles (they share the *-l-* morpheme), while first and second person SCLs do not. If, more specifically, first and second person SCLs (as opposed to third person SCLs) are not Ds,²⁷ then they arguably may not appear at all in the complex DP structure that underlies CI/HCI doubling.²⁸

clash, with third person *-t-* clashing in person features with the SCLs *tu* and *je*. On the other hand, with a first or second person (silent) counterpart of *-t-*, (52) and (54) would involve no clash with the SCL.

²⁶ In which case (55) must be an instance of (a certain form of) left dislocation, as in:

i) Je me demande ce que Marie et toi vous lui avez dit pour qu'il se fache à ce point-là. ('I me ask that which M and you you him have told for...' = 'I wonder what M and you told him for...')

²⁷ Cf. Jones (1993, sects. 2.2.6, 5.1) and Bartos (2001).

²⁸ First and second person object clitic doubling, as in:

i) Jean m'a vu moi. (French: 'J me has seen me')

ii) Juan me vió a mi. (Spanish: 'J me saw to me')

must then have a different origin, perhaps a bisentential one:

iii) J m'a vu [AND] A VU moi.

thinking in part of:

iv) He's real smart, John is.

on which, cf. Kayne (1994b, %), and similarly for the kind of doubling (cf. Ronat (1979))

French has a subject clitic *on* that takes third person singular verb agreement and that has a range of interpretations that in English would (approximately) match *one*, impersonal *they* and *we*. In the *we* interpretation, *on* can cooccur with *nous*:

(64) *Nous, on va à Paris.* ('us *on* go to P' = 'we're going to P')

(65) *On va à Paris, nous.*

Yet alongside the CI example:

(66) *Cela nous gêne-t-il?* ('that us bothers it' = 'does that bother us?')

there is no HCI-like:

(67) **Cela nous gêne-t-on?*

despite the fact that *on* is compatible with SCLI:

(68) *A-t-on tous fait la même erreur?* ('has *on* all made the same mistake' = 'have we all...?')

A plausible hypothesis is that (67) is excluded for the same reason as (52) and (54), i.e. that *on* is not a D. Put another way, *on* is more closely related to the first and second person SCLs than to the third person SCLs (despite sharing verb agreement with the latter). More precisely, *on* is the nominative counterpart of object clitic *se* (cf. Togeby (1982, 428)), as suggested also by the parallelism between the range of interpretations of *on* and those of the Italian *si* discussed by Cinque (1988), as well as by the strong similarity internal to French between the following 'middle' example:

(69) *Cela se lit facilement.* ('this book *se* reads easily')

and:

(70) *On lit cela facilement.*

Of note is the fact that middles are compatible with CI:

(71) *Cela se lit-il facilement?*

but not with HCI:

(72) **Cela se lit-on facilement?*

i.e. doubling of *se* by *on* is prohibited, despite *on* being the nominative counterpart of *se*. The reason is, as with (52), (54) and (67), that HCI is possible only with D-type SCLs and that class excludes first person *je*, second person *tu* and what we might call zero person *on*.²⁹

9. The demonstrative SCL *ce*.

The notion of D-type SCL here covers those SCLs (*il, elle, ils, elles*) that in French share the morpheme *-l-* with definite articles. In all likelihood, the SCL *ce* seen in SCLI in:

(73) *Est-ce vrai?* ('is that true')

does not belong to the D-type class, to judge by its incompatibility, for most speakers, with CI:³⁰

found in:

v) *Je le ferai moi.* ('I it will-do me')

The exclusion of first and second person doubling as in the text must not extend to the wh-doubling studied by Poletto and Pollock (2004).

²⁹ Cf. Kayne (2003). The fact that *on* requires the same agreement on verbs as ordinary third person singular subjects needs to be elucidated.

³⁰ Those who accept this example may be doing so as an instance of dislocation.

(74) Depuis quand cela est-il/*ce connu? ('since when that is it/that known' = 'since when has that been known?')

and by its sharp exclusion from HCI, as we can illustrate starting with:

(75) Cet article est court. ('this article is short')

for which French has a VP-deletion-like use of object clitic *le*:³¹

(76) Cet article l'est.

that has something in common with (dialectal) English:

(77) This article is that.

where *that* is close to French *le*. Now (76) has a CI counterpart:

(78) Cet article l'est-il?

but no HCI counterpart (in which SCL *ce*, which is often a good translation of *that*) would double *le*:

(79) *Cet article l'est-ce?

That *ce* is not a D-type SCL is in all likelihood due to its not being a definite article, but rather a demonstrative, combined with Leu's (2007; 2008) argument that demonstratives are phrasal (as opposed to definite articles, which are not).

10. A link to gerunds and to 'stylistic inversion'.

Returning to the question of (38) and (39), i.e. to the question why neither CI nor HCI allows the preverbal subject to be a SCL, we see two possibilities. The first is to say that the merger of *-t* in (50) is not external merge, but internal merge, i.e. to say that *-t* reaches its above-IP position via movement from the usual Agr-S position within IP. If so, then it might be that *-t* is limited to Case-licensing just one element. If it licenses the postverbal SCL, then it cannot license a preverbal one, so (38) and (39) are not possible. This approach would require saying that lexical DP subjects, as in (44), have another licensing option that is not open to SCLs, and would lead to a link with gerunds:

(80) Jean ayant téléphoné,... ('J having telephoned,...')

(81) *Il ayant téléphoné,... ('he...')

which disallow SCLs as subjects, arguably because SCLs invariably require agreement, which is lacking in gerunds. We could then say that the preverbal lexical subject in CI/HCI is licensed in the same way (via Tense, as in Pollock (2006)) as the preverbal lexical subject in gerunds.

A second way of thinking about the incompatibility of preverbal SCLs with CI and HCI would be to establish a link to the following stylistic inversion contrast discussed by Kayne and Pollock (2001):

(82) un livre que lit Jean ('a book that reads J' = 'a book that J is reading')

(83) *un livre que lit-il ('...he')

³¹ Cf. Sportiche (1995).

in terms of the idea that the lexical subject that ends up postverbal in such cases must have been topicalized at an intermediate stage of the derivation,³² with topicalization not being available to SCLs. From that perspective, one could say that in both CI and HCI (and perhaps in French gerunds, too) topicalization of the preverbal subject must likewise take place (within the remnant-moved constituent in (50)),³³ in which case the non-topicalizable SCLs would be unable to appear preverbally either in CI or in HCI (or in gerunds).

11. Conclusion.

French hyper-complex inversion (HCI), like its better-known counterpart complex inversion (CI), is an instance of clitic doubling that lends itself to a complex DP analysis. Such an analysis, combined with an analysis of French interrogative *-t-*, yields an account of a number of salient properties of both HCI and CI.³⁴ Whether an equally satisfactory account of HCI/CI could be achieved via Chomsky's (2001) Agree needs to be looked into, as does the converse question whether a complex DP analysis of 'ordinary' verbal agreement could replace one based on Agree.

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³² The topicalization in question must be compatible with:

i) un enfant à qui a dû faire peur quelque chose ('a child to whom has must make fear some thing' = 'a child that something must have frightened') despite the counter-indefiniteness effect examples discussed by Kayne and Pollock (2001). Cf. also Pollock (2006, note 26) on sentences with parentheticals following indefinite subjects.

³³ Possibly there is a link here to the fact that North Italian dialects (apart from the Val d'Aosta ones discussed in Roberts (1993) and Pollock (2006)) generally lack CI and HCI with a lexical subject (and may lack 'stylistic inversion').

On the fact that HCI allows:

i) *Quelque chose la gêne-t-elle?* ('some thing her bothers *t* she') with a subject that is otherwise not readily topicalizable, see the previous note; in both HCI/CI and stylistic inversion, the heart of the matter is not the term 'topicalization', but the idea that SCLs cannot move as high as lexical DPs.

³⁴ Additional salient properties, set aside here for reasons of space, will be addressed in a second paper on HCI/CI that we hope to complete soon.

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