On the Left Periphery of Some Romance Wh-Questions

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I. Introduction.

This article will sketch out the fine structure of the left periphery of questions as it emerges from our ongoing research on French, Bellunese and Italian wh-questions (cf. Pollock, Munaro & Poletto (1999), Poletto & Pollock (1999), (2000)), Pollock (2000).

The two basic principles that have guided our enquiry are simply stated; the first is standard in comparative work in generative grammar; it claims that the considerable variation in spell-out sequences exhibited by the wh-configurations across (those three) languages is not random; rather it can be profitably (re)analyzed as reflecting the interplay of the invariant structure of the complementizer domain (in Romance) and a small number of morphologically-based differences that are part of the primary linguistic data to which the language learners are necessarily exposed.


When that radical tack is taken Remnant Movement operations are put to crucial use and replace not only much covert movement but also (many) head movement analyses in the Government and Binding tradition; postulating such Remnant Movement operations leads, we shall see, to illuminating comparative analyses of the syntax of wh-questions in three languages under study; furthermore the remnant phrases that move to the left periphery of questions will be shown to be attracted to
semantically motivated layers in the fixed hierarchy of categories that make up the ‘split’ complementizer area —cf. Rizzi (1997)— of questions in the Romance languages.

2. Bellunese vs French (first pass).

As is well-known, French has a variety of —apparent (see Pollock, Munaro & Poletto (1999)),¹— wh-in situ questions like (1a, b, c); bare *que, on the other hand, cannot occur in such contexts as the sharp ungrammaticality of (1d) shows:

(1) a. Tu vas où?
   You’re going where
   Where are you going?

b. Tu as parlé à qui?
   You’ve spoken to whom
   To whom did you speak?

c. Tu pars quand
   you leave when
   When are you leaving?

d. *Jean a acheté que?
   Jean has bought what
   What did Jean buy?

In that respect Bellunese behaves quite unexpectedly: *che, the counterpart of *que, and the other bare wh-words andé ‘where’, chi ‘who’ and come ‘how’ MUST occur in sentence final position (cf. Munaro (1999)):

(2) a. Ha-tu magnà che?
   have you eaten what
   What did you eat?

¹. But see Cheng & Rooryck (2000) for an analysis of such configurations relying on covert movement of a Q-feature. See also Poletto & Pollock (in prep).
b. *Che ha-tu magná?
   what have you eaten

c. Se-tu 'ndat andé?
   are you gone where
   Where did you go?

d. *Andé se-tu 'ndat?
   where are you gone

Sentences like (2) in Bellunese must be carefully distinguished from (1) since they show obligatory subject verb inversion, which (apparent) wh- in situ in French bans totally:

(3)   *Vas-tu où?
   go you where
   Where are you going?

Modulo that important difference --to which we return at length in sections 7 and 8 below-- the distribution of che and que with respect to ‘sentence internal/final’ positions is extremely puzzling; if one took Bellunese che to be in a position within IP one would be hard put to explain why its French counterpart que, which does not appear to be any more or less “defective” morphologically or semantically than che,\(^2\) has to move to the left periphery; in short, the morphological similarity of que and che should lead one to expect similar syntactic behavior; that reasonable expectation pairs like (1d) vs (2a) seem to falsify, unexpectedly. As Pollock, Munaro & Poletto (1999) showed, appearances are (fortunately) deceptive; one can begin to reconcile Bellunese and French wh- syntax by positing that che in (2a) and andé in (2c) HAVE indeed moved to the left periphery of the clause, just as French que visibly has in sentences like (4):

(4)   a. Qu’a acheté Jean?
   what has bought Jean
   What did Jean buy?

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\(^2\) On “defective” wh-words see Munaro & Obenauer (2000), Poletto & Pollock (in prep).
b. Qu’a-t-il acheté?
   what has-t-he bought?
   What did he buy?

In a theory that does not countenance covert (feature) movement this conclusion is independently required by the fact noted and analyzed in Munaro (1999) that (apparent) wh- in situ configurations like (2a, c) and (5) in Bellunese are sensitive to strong and weak island effects, as (6) from Munaro (1999, chapter 1, 50-56, 74) show:

(5) a. Ha-tu parecia che?
   have you prepared what?
   What did you prepare?

   b. Va-lo ‘ndé?
      goes he where?
      Where is he going?

   c. Se ciame-lo comé?
      himself call-he how
      What’s his name?

(6) Strong island effects:

   a. *Te ha-li dit che i clienti de chi no i-ha pagá?
      to you have they told that the customers of whom not they have paid
      Who have they told you the customers of haven’t paid?

   b. *Ho-e da telefonarte prima de ‘ndar andé?
      have I to phone you before of going where
      Where have I to phone you before going?

Weak island effects:

   c. ??Te despiáse-lo de aver desmentegá ché?
      to you displeases-it to have forgotten what
      What are you sorry you have forgotten?

That Bellunese che in (5a) is not in its IP internal argument position is also suggested by the following data:
(7) a. Al ghe ha dat al libro a so fradel  
    he to him has given the book to his brother  
    He gave the book to his brother  

b. *Ghe halo dat che a so fradel?  
    to him has he given what to his brother  
    What did he give to his brother?  

c. Ghe halo dat che, a so fradel?  
    to him has he given what, to this brother

(7) shows that the dative complement a so fradel is necessarily 'emarginated' in Bellunese che --also ande, come, chi-- questions like (7b, c), though not in statements like (7a); if che was in the ordinary sentence internal object position in which el libro in (7a) is presumably standing, such facts would be difficult to understand; (7) thus gives added support to an overt movement analysis of all wh-questions in Bellunese.

Accepting the (desirable) conclusion that che, ande, chi and come in (5) have indeed moved to the CP field, we are evidently forced to adopt the idea that the rest of the clause has itself moved past the 'low' Comp position in which the bare wh-words are standing to a higher layer of the left periphery; such sentences therefore involve wh-mvt of the expected variety and Remnant Movement of (some layer(s) of) IP; this conclusion goes in the direction of much recent work in Generative Grammar, e.g. Koopman & Szabolczi (in press), Kayne & Pollock (1999), Pollock, Munaro & Poletto (1999), Pollock (2000); the much simplified derivation of a sentence like (5) in Bellunese must thus look something like (8):

(8) Input : [IP tu ha parecia che]  
(a) Wh-movement ⇒ [XP che; X° [IP tu ha parecia t_j]]  
(b) Remnant IP Movement ⇒ [YP [IP ha-tu parecia t_j] Y [XP che; X° t_j]]

Step (8b) is clearly lumping together computations that must be teased apart and analyzed. That we proceed to do now.
3. **SCLI in French and Bellunese.**

If the previous section is correct, Bellunese seems to allow one type of Remnant movement to the left periphery that French does not; compare (9) vs (10) again:

(9) Se-tu 'ndat andé?
    are you gone where
    Where did you go?

(10) *Es-tu allé où?
    are you gone where

We believe that appearances are again deceptive; putting aside for the moment the 'low' position of andé in (9) vs the 'high' position of où in (10) to which we return in section 8, (9) displays the subject verb inversion pattern known as “subject clitic inversion” (SCLI) common to many Romance languages; the null hypothesis is, then, that such sequences should be analyzed like their French counterparts in (11).³

³. The inversion pattern of (9) and (11) is also present in another type of inversion construction specific to French (and Valdôtain), the so-called ‘Complex Inversion’ (CI) of (i):

(i) a. Où Jean est-il allé?
    where Jean is-he gone
    Where has Jean gone?

   b. Quand tout est-il tombé?
    when all is-it fallen
    When has everything fallen?

   c. Martin mindze-të de seuppa?
    Martin eats he the soup
    Does Martin eat the soup?

   (Valdôtain, Aosta)

   d. Pequè lo méinô medze-t-i la pomma?
    why the child eats-t-he the apple
    Why does the child eat the apple?

   (Valdôtain, St. Nicholas)
(11) Où est-il allé?
where is he gone?
Where did he go?

This is strongly suggested by the fact that both SCLI in French and (apparent) wh-in situ sentences like (9) in Bellunese are restricted to root contexts:

(12) a. *Je ne sais pas (ce) qu’a-t-il acheté?
I don’t know what has he bought\(^4\)
I do not know what he bought
b. *Je ne sais pas où est-il allé
I don’t know where went-he
I do not know where he went

(13) a. *No so (che) ha-lo comprà che
neg I know that has-he bought what
I do not know what he bought
b. *No so (che) se-tu 'ndat andé?
neg I know that are you gone where
I do not know where he went

(14) a. No so che l'ha comprà
neg I know what that he has bought
I do not know what he bought

(i) only differs from (9) and (11) in having an additional preverbal DP subject; in particular CI is also restricted to root clauses. On the analysis to be developed below this must mean that CI too involves Remnant IP movement to ForceP as Pollock (2000) argues in detail. See note 21 below; on CI (and SCLI) in French and Valdôtain see also Kayne (1972), (1975), Roberts (1993), Laenzlinger (1998).

\(^4\) On the orthogonal question of why *que* surfaces as *ce que* in French embedded questions see Poletto & Pollock (2000), (in prep).
b. No so andé che te se ndat
    neg I know where that you are gone
    I do not know where he went

It thus seems highly desirable, perhaps mandatory, to suppose that the same
computations to the left periphery, all restricted to root contexts, are at work in (9)
and (11) in the two languages.

We adopt this view and now show, firstly, that SCLI in Bellunese and French is
the reflex of overt (pre spell-out) computations, and, secondly, that SCLI cannot be
analyzed in terms of head movement, as the surface form it has in Bellunese would
in itself suggest.

4. SCLI is Overt Movement.

SCLI is a wide-spread phenomenon in the Northern Italian Dialects (henceforth
‘NIDs’) as discussed extensively by Poletto (2000, chapter 1, section 3.2); (15) gives
examples from two varieties:

(15) a. Cossa fa-lo Paduan
    what does-he?
    What does he do?

b. Ce fas-tu Friulian
    what do-you?
    What are you doing?

In Monnese SCLI obligatorily triggers “fa-support” (cf. Beninca & Poletto
(1997)), in contexts in which English triggers “do-support”:

(16) a. Ngo fa-l ndâ
    where does-he go
    Where is he going?

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b. Ngo fè-t ndà
   where do you-singular go
   Where aer you going?

c. Ngo fè-f ndà
   where do you-plural go
   Where are you going?

English do-support and Monnese fa-support are strikingly similar in that they occur only in root contexts when no auxiliary or modal verbs are present and both are banned when the subject is questioned (cf. Beninca & Poletto (1997)); fa-support, unlike do-support does not occur in negative clauses, but that difference can be shown to be a consequence of an orthogonal difference between English and Romance: in Monnese in particular and Romance in general main verbs cross over the negation position —(which is in fact defined by Zanuttini (1997) as postverbal)— while Modern English main verbs don’t (cf. Pollock (1989)).

As should be clear even from this cursory summary, fa-support and do-support cry out for a uniform analysis. Beninca & Poletto (1997) provides one and shows that fa-support is indeed to be analyzed in the same terms as English do-support; now, despite the fact that there have been many different views on do-support in the literature over the last 50 years or so none to our knowledge has ever suggested that it be analyzed as an instance of covert LF movement; if so Monnese fa-support, the shape SCLI takes in that language, is also an instance of overt movement to the Comp domain; it is therefore highly desirable to also view SCLI in the more usual varieties of Romance as a case of pre spellout movement to the left periphery.

The NIDs provide at least two other arguments in favor of overt movement in SCLI; in the dialect of Rodoretto di Prali it is possible to coordinate SCLI constructions and wh-structures with an overt complementizer, as in (17) (cf. Poletto (2000, Chapter 3, (21)):

(17)  L’achat-tu ou qu’ tu l’achatte pa?
       it buy-you or that ut buy not
       Are you going to buy it or not?

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

In Fassano --the dialects spoken in the Fassa valley-- SCLI is only possible when the verb has crossed the position of a ‘new information’ particle that has been shown to be a CP particle (cf. Poletto & Zanuttini (2000), Poletto (2000, 46-49)):

(18) a. Olà vas-t pa?
   where go you particle
   Where are you going?
   b. Olà pa tu vas
   where particle you go
   c. *Olà pa vas-t?
   where particle go you
   d. *Olà tu vas pa?
   where you go particle

In (18a) SCLI has taken place and both the verb vas and the subject clitic -t precede the Comp particle pa; in (18b) SCLI inversion has not taken place --as is possible in many varieties, including colloquial French (cf. Où tu vas? = where you go?)-- and pa precedes the subject clitic and the verb; (18c) shows that pa cannot precede the verb and the clitic when SCLI has taken place and (18d) that the particle cannot follow them when it has not. Evidently, (18) can be explained neatly if SCLI is a computation that overtly displaces the verb and the subject clitic to the Comp field, more precisely to a position higher than pa.6

6. That pa is a Comp particle --more precisely the specifier of a (low) Focus layer in the Comp field (cf. Poletto and Zanuttini (2000))-- is shown by the following facts: pa occurs after the inflected verb, which is expected given the fact that Central Rhaetoromance is a V2 language but a) higher than all adverbials located in the IP field (according to Cinque’s (1999) hierarchy) as shown in (i), b) higher than an inverted subject (cf. (ii)) and c) is incompatible with lower complementizers as the interrogative s in embedded questions a shown by the ungrammaticality of (iii):

(i) a. Al a pa d sigy mangé. (S. Leonardo)
   SCL have pa of sure eaten
5. **SCLI is not head Movement.**

Since French SCLI constructions share crucial properties with their counterparts in the NIDs we conclude, fairly reasonably, that they too involve overt computations to the CP field. At the same time SCLI can be shown NOT to be amenable to a \(^1\)\(^v\) head movement analysis; this somewhat paradoxical conclusion follows from Kayne’s (1994) and Sportiche’s (1993) analyses of the various types of non nominative clitics as heading a number of functional projections distinct from the verb’s; under such analyses SCLI questions like e.g. *te l’as-t-il donné?* (‘to you it has he given?’), cannot arise as a consequence of \(^1\)\(^v\) movement, clearly; the same extends to the equivalent clitic-verb sequences in the NIDs.

As Kayne (1991) argues, the view that non nominative clitics need not be analyzed as adjoined to V is almost certainly imposed on one by examples like (19a) in literary French, (19b, c, d) --from Madame de Sévigné’s *Lettres*-- in classical French, and (19e, f) in Modern Triestino and Calabrian in which the clitics are separated from the verb by various (maximal) adverbial phrases:

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b  *Al a \(d\) sigy \(pa\) mangé.

SCL has of sure \(pa\) eaten

c  *Al a \(pa\) magari bel mangé.

SCL has \(pa\) perhaps already eaten

Maybe he has already eaten

d  *Al a magari \(pa\) bel mangé

(iii)  *A i m a domané \(s\) al \(n\) fus \(pa\) bel.

SCL SCL me asked if SCL neg was \(pa\) nice

He asked me whether it was nice
(19) a. Il a dû en fort bien parler
   he must have of it very well spoken
   He must have spoken very well of it
b. [...] elle dit qu'elle lui doit tout son bonheur, par le soin qu'elle a eu de la
   bien élever
   she says she owes her her happiness because of the care she has had to
   her well bring up
   She says she own her her happiness because she brought her up so well
c. [...] ils ont été affligés de ne vous point voir
   they were sorry to ne you not see
   They were sorry because they could not see you
d. Nous faisons une vie si réglée qu'il n'est quasi pas possible de se mal
   porter
   we lead one life so orderly that it is almost impossible to 'se' ill bear'
   We lead such an orderly life that it is almost impossible to be in poor
   health
e. Nol se gnanca vedi
   not-it refl not-even see
   You cannot even see it
f. El me sempre disi...
   he to-me always says
   He always says to me...
g. Un ti manco canusciu
   Not you at all know
   I do not know you at all

h. Ci propiu volia
   Loc-cl really want
   It was really necessary

Such examples show beyond any doubt that French, Triestino and Calabrian
clitics need not/have not always adjoin(ed) to the verb. Now, if the clitics in (20),

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

also head a projection different from that of the verb —the null hypothesis— we clearly cannot analyze the OVERT —recall section 4— computation(s) to the left periphery at work in (21) as instances I°/V° movement:

(21) a. Pierre me l’a-t-il donné?
      P to me it has-he given
      Did P. give it to me?
b. Pierre ne lui a-t-il pas parlé?
      P ne to him hashe not spoken
      Didn’t P. speak to him?
c. Ne m’en donnera-t-il pas?
      ne to me of it will-he give not
      Won’t he give it to me?
d. M’y conduira-t-elle?
      me there will-she take
      Will she take me there?

Additional arguments against the traditional I°/V° head movement analysis of (21) have been given in the literature; Kayne (1994) notes that claiming that clitics adjoin to the verb leaves us without an account for the fact that referential expressions are typically banned from appearing within words: compare OK a self hater vs *a(n) {it, her, you} hater. Hulk (1993, 3.3), Kayne (1994, 45), Terzi (1999, section 2) note that on the standard assumption that in Romance imperatives the
verb *does* move to some ‘high’—see Terzi (1999)—head position in the CP field, the fact that in (22a) the clitics are obligatorily stranded by the verb is in itself an argument that no verb movement has applied in SCLI sentences like (22c):

(22)  
  a. Donne le lui! 
       give it to him 
       Give it to him! 
  b. *Le lui donne! 
       it to him give 
  c. Le lui donnera-t-il? 
       it to him will-give you? 
       Will he give it to her?

Hulk (1993) --also Terzi (1999) and her references-- observes further that the negative head ‘ne’ blocks head movement in imperatives, as (23) show:

(23)  
  a. *Ne donne le lui pas 
       ne give it to him not 
  b. Ne le lui donne pas 
       ne it to him give not 
       Don’t give it to him

and she points out that if head movement was involved in (22b, c) one would expect, everything else being equal, perfectly fine SCLI sentences like (24) to be ungrammatical:

(24)  
       Ne le lui donnera-t-il pas? 
       ne it to him will-give you not 
       Won’t he give it to him?

We conclude, then, like Hulk (1993), Kayne (1994) and Sportiche (1993) that SCLI does *NOT* involve Infl°/Verb° movement to some head position in the CP field. But our section 4 arguments prevent us from concluding that SCLI results from *covert*, post spell-out computations, as these scholars claimed.
6. **SCLI is Remnant Phrasal Movement.**

In order to solve this apparent paradox we need only conclude that SCLI is derived via overt phrasal movement to the Comp domain; *Le lui donnera-t-il?* can now be derived, as it must, if the string 'le+lui+donnera' is a constituent and moves as one to the left periphery; however, XP in (25),

\[(25) \quad [XP \text{ le } [YP \text{ lui } [ZP \text{ donnera } ... ]]]\]

and object clitic + finite verb strings in general are typically *NOT* constituents; they are not in (26) for example:

\[(26) \quad \begin{align*}
a. & \quad \text{Il ne le lui donnera pas} \\
& \quad \text{he neg it to-him will-give not} \\
& \quad \text{He will not give it to him} \\
b. & \quad \text{Il ne m'a pas parlé} \\
& \quad \text{he neg to-me has not spoken} \\
& \quad \text{He did not speak to me} \\
c. & \quad \text{Je n'y suis pas allé} \\
& \quad \text{I neg there am not gone} \\
& \quad \text{I did not go there}
\end{align*}\]

It appears, then, that a phrasal movement analysis of SCLI --forced on us by the facts and arguments in section 5-- entails that XP in (25) and the like can only move as a constituent because the elements included in the '...' have vacated their input position at some earlier stage in the derivation; in short, any overt phrasal movement analysis of SCLI in French has to be a Remnant Movement analysis, as the spell-out string of Bellunese wh-questions like (9) --*Se-tu 'ndat andé?* ('are you gone where?')-- would in itself suggest. The derivations that have to be posited to yield the French sentences in (27),

\[(27) \quad \begin{align*}
a. & \quad \text{Ne le lui donnera-t-il pas?} \\
& \quad \text{neg it to-him will-give him not} \\
& \quad \text{Won't he give it to him?}
\end{align*}\]
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b. Va-t-elle lui prêter un livre?
   will she to-him lend a book
   Will she lend him the book?
c. Avez-vous envoyé un livre à Paul?
   have you sent a book to Paul
   Did you send a book to P.?

must thus involve previous displacement of the negative phrase pas in (27a), of the
infinital clause lui prêter un livre in (27b) and of the participial phrase envoyé un
livre à Paul in (27c) followed by Remnant Movement, as sketched in the much
simplified derivations of (28):

(28)  a. Il ne le lui donnera; [pas [t₃]i] ⇒ Il [pas [t₃]i] [ne le lui donnera t₃] ⇒ [ne
   le lui donnera t₃]k il [pas [t₃]j t₃k ]
   b. Elle [va [lui prêter un livre]] ⇒ Elle [lui prêter un livre]i [va t₃] ⇒ [va t₃j
   elle [lui prêter un livre] t₃ ]
   c. Vous [avez [envoyé un livre à Paul]] ⇒ Vous [envoyé un livre à Paul]i
      [avez t₃] ⇒ [avez t₃j vous [envoyé un livre à Paul]i t₃ ]

7. Characterizing SCLI: French and Bellunese (second pass).

Let us try to be more precise about derivations like (28) and the various layers of
the left periphery that we need if we are to give formal status to the conclusions we
have just reached.

The first point to make is that our "split" Comp domain will have to contain (at
least) two different positions for the (various types of) wh-phrases; this follows from
our discussion of Bellunese vs French pairs like (29):

(29)  a. Se-tu 'ndat andé?
   are you gone where
   Where have you gone?
b. Où est-il allé?
where is he gone?

If, as we have concluded above, both sentences involve Remnant Movement of ‘Se-tu ‘ndat’ and ‘est-il allé’ to some (ideally) identical layer(s) of the left periphery, then the chief difference between Bellunese and French will have to lie in the fact that andé in (29a) is standing ‘low’ in the structure while où has crossed over the position(s) to which ‘est-il allé’ has been attracted on its way to a higher layer of the Comp area.

That there should be (at least) two such positions is overtly manifested in various NIDs; in Bellunese in particular, in addition to (30) and the like one can also have ‘doubling structures’ like (31), under semantic conditions described precisely in Munaro & Obenauer (2000):

\[(30)\] Ha-lo fat che?
what has he done what
What did he do?

\[(31)\] Cossa ha-lo fat che?
what has he done what

Similarly Monnese ‘doubling’ wh-questions like (32) alternate with non doubling ones like (33):\(^7\)

\[(32)\] Ch’et fat qué?
what have you done what
What have you done?

\[(33)\] Ch’et fat?
what have-you done?

Bellunese (31) and Monnese (33) thus display at spell-out the two wh-positions that we shall posit are part of the left periphery of the wh-questions of all the

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\(^7\) In questions without an auxiliary Monnese shows ‘fà-support’, for independent reasons; see section 4 above and the references given there.
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Romance languages under study; more precisely we say that (30) is an invisible instance of doubling with a null version of cossa, which we call "Rest(ictor)" , standing in the uppermost layer of the Comp field:

(34)  Rest ha-lo fat che?  
what has he done what
What has he done?

We say furthermore that in Bellunese null "Rest" is a non lexical NP in a complex wh- phrase which has the structure in (35), parallel to that of Standard Italian che cosa

(35)  [ che {cossa, Rest.}]

The two wh- positions in the Comp area overtly manifested in (30), (32) and (34) we shall call Op1 and Op2, respectively.

In addition to those two positions, it can be argued that SCLI crucially involves (the more traditional) "ForceP"; this is because, as stressed above, SCLI is restricted to root contexts; on the usual view that in embedded contexts the feature checking done via (Remnant IP) movement to ForceP in root sentences is unnecessary, hence impossible by economy -- because the matrix verb or predicate suffices to identify the sentence type, its "force" --, the non existence of SCLI in embedded contexts follows if it targets Spec Force°; we thus conclude that in Où est-il allé?, A qui parles-tu? etc. the remnant phrase including the finite verb is indeed attracted by the [+question] feature of (root) Force°.

French SCLI questions like Où est-il allé? wear on their sleeves the fact that the Remnant phrase checking the [+question] feature has had all its lower portion removed, as indicated in (28). As for that lower portion itself, we claim that it moves to yet another layer of the Comp domain and that the nominative subject clitic does too, to yet another one; in order to make things slightly more perspicuous, we give those two extra layers the somewhat arbitrary, though fairly transparent, labels "TopP" and "GroundP", respectively.

Adding up and ordering the five layers we have now introduced we obtain the full(er) structure in (36):

We shall come back to the independent syntactic justification for TopP and GroundP in the next section; the semantics associated with each of the five layers in (36) we will discuss as we proceed and come back to in the concluding section of the paper.

To illustrate how the system works in French consider the derivation of *Où est-il allé?* (‘Where is he gone?’); it would go as follows:

(37) Input: [il est allé où]

(a) Merge Op1° and IP and attract ‘ou’ to spec Op1P ⇒
\[ \text{[Op1P où₁ Op1° [il est allé t₁]]} \]

(b) Merge TopP and Op1P and attract the participial phrase\(^8\) [allé t₁] to spec Top ⇒
\[ \text{[TopP [allé t₁] j Top° [Op1P où₁ Op1° [il est t₁]]]} \]

(c) Merge G° and TopP and attract ‘il’\(^9\) to spec G ⇒
\[ \text{[GP il₁ G° [TopP [allé t₁] j Top° [Op1P où₁ Op1° [t₁ est t₁]]]} \]

(d) Merge Force and GP and attract IP to spec Force° ⇒
\[ \text{[ForceP [t₁ est t₁]₁ F° [GP il₁ G° [TopP [allé t₁] j Top° [Op1P où₁ Op1° t₁]]]]} \]

(e) Merge Op2P and ForceP and attract ‘ou’ to Spec Op2° ⇒
\[ \text{[Op2P où₁ Op2° [ForceP [t₁ est t₁]₁ F° [GP il₁ G° [TopP [allé t₁] j Top° [Op1P t₁ Op1° t₁]]]]]} \]

\(^8\) It is not just participial phrases that are attracted to TopP in SCLI constructions but all the elements following the main finite verb; taking our clue from the hierarchy of functional projections in Cinque (1999) we arrive at the idea that what is moving to TopP in SCLI is an habitual aspectual phrase (see Cinque (1999, 130)).

\(^9\) Note that *il* is moving as a phrase here; if nominative clitics are heads in the sense of Cardinaletti & Starke (1999) --contrary to what they say concerning nominative clitics-- this may mean that what is attracted to GP is a Kaynian or Sporticheian clitic phrase (cf. Kayne (1972), Sportiche (1993)) whose head is *il* and whose specifier is phrasal pro; if nominative clitics are phrases, then *il* moves as one, evidently.
A major property of (37) is that it has no head movement at all; as we noted above the root vs non root asymmetry of SCLI which in much current work is taken to be a reflex of (I° to C°) head movement we analyze as a consequence of the fact that the [+question] feature of Force° is checked ‘lexically’ by the main predicate in embedded contexts: the main sentence predicate «types» the subordinate interrogative clause.

Going back to Bellunese, we can advantageously say that the derivation of apparent wh- in situ SCLI sentences like (29) -- Se-tu 'ndat andè?-- is identical to that shown in (37) with one essential difference and one minor one; the essential difference lies in the fact that Bellunese, unlike French, has “doubling wh-phrases” like [andè Rest] [che Rest] etc. parallel to [che cos(s)a];¹⁰ we say that in Bellunese Spec Op2P attracts the null Rest., just as cosa is so attracted in Standard Italian or as Bellunese cosa is in doubling structures like (38)

(38)  Cossa ha-lo fat che?
       what has he done what
       What has he done?

In that perspective, then, (29) is derived as shown in (39), which is identical in all relevant respects to the derivation of (38) or of its null Rest. variant ‘ha-lo fat che?’¹¹

¹⁰. By analyzing ‘where’, ‘how(many)’ as taking a null restrictor complement, we are following Munaro (1999 note 14, 227-229),

¹¹. The conditions ruling the cosa vs null Rest. alternation have still to be fully worked out. Munaro and Obenauer (1999) show that cosa must be used when the question is not ‘neutral’, in some relevant dimension, e.g. when some form of ‘surprise’ is intended or when the wh-item has the special interpretation which they call “‘why-like’”, which is restricted to cosa. If the ‘special’ interpretations found when cosa is used are a reflex of a higher position of the wh-item, as Munaro and Obenauer (1999) claim, the distinction between cosa and our null Rest. could be tied to the different movement path of the two elements, and ultimately to the fact that cosa, though not Rest., can check ‘higher’ features in the Comp domain.
(39) Input: [tu sê 'ndat [andé Rest.]]

(a) Merge Op1° and IP and attract [andé Rest.] to spec Op1P ⇒
[Op1P [andé Rest.]; Op1° [tu sê 'ndat t₁]]

(b) Merge TopP and Op1P and attract the participial phrase [ndat t₁] to
spec Top ⇒
[TopP [ndat t₁]; Top° [Op1P [andé Rest.]; Op1° [tu sê t₁]]]

(c) Merge G° and TopP and attract 'tu' to spec G ⇒
[G° tuk G° [TopP [ndat t₁] Top° [Op1P [andé Rest.]; Op1° [t₁ sê t₁]]]

(d) Merge Force and GP and attract IP to spec F° ⇒
Rest.]; Op1° t₁]]]

(e) Merge Op2P and ForceP and attract Rest. to Spec Op2° ⇒
[Op1P [andé tₘ]; Op1° t₁]]]]

The 'minor' difference has to do with the fact that Bellunese, unlike French, has a
special class of non assertive clitics which differ morphologically and distributionally
from assertive clitics across the verbal paradigm. Table 1 gives the
morphology of the two classes of clitics:

<table>
<thead>
<tr>
<th>Ass.cl.</th>
<th>1 pers</th>
<th>2 pers.</th>
<th>3 pers.</th>
<th>1 plur.</th>
<th>2 plur.</th>
<th>3 plur.</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu</td>
<td>/</td>
<td>te</td>
<td>al/la</td>
<td>/</td>
<td>/</td>
<td>i/le</td>
</tr>
<tr>
<td>Non ass.cl.</td>
<td>/</td>
<td>tu</td>
<td>lo/la</td>
<td>e</td>
<td>o</td>
<td>li/le</td>
</tr>
</tbody>
</table>

Let us capitalize on the fact that the non assertive paradigm is morphologically
somewhat ""heavier"" than the assertive one and let us claim that the former are
merged in the specifier of Agrs, while the latter are the spellouts of Agrs°, i.e.
""real"" clitic heads, as in many other NIDs; we say further that non assertive clitics
are necessarily [+ground] in the lexicon. When the GroundP layer is merged in the
left periphery, it will have to attract a [+ground] element; if it fails to, the derivation
crashes; this will ultimately require that the numerations yielding (SCLI) questions
in Bellunese merge the non assertive clitics; even if assertive clitics were also
optionally [+ground] in the numeration they would still fail to be attracted to
GroundP on the view that heads *NEVER* move to the Comp field; conversely, if non assertive weak pronouns are part of a numeration and the GroundP is not merged in the left periphery, as it presumably isn’t in (many) non interrogative sentences, the [+ground] feature of non assertive clitics will fail to be checked, also causing the derivation to crash; this will thus ban them in assertive contexts, as Bellunese requires; (Standard) French, on the other hand, has a single set of (weak) nominative pronouns that may optionally bear [+ground]; when GP is merged some [+ground] element must be attracted to Spec Ground to delete an uninterpretable feature; French nominative pronouns will then have to be [+ground] in precisely those cases.\(^{12}\)

---

\(^{12}\) What we are saying here is that nominative clitic heads, like clitics in general, never move out of their head positions: they are ‘frozen in place’ once they have reached them; as a consequence they can only be displaced further up in the structure as part of a bigger phrase, as object clitics are in Remnant IP movement; put slightly differently, clitic movement to the CP domain is never possible because clitic movement can only be the syntactic analogue of morphological processes which only concern IP internal functional projections like AGR, Tense, neg, (clitic) voice etc.

French and Valdôtain SCLI and CI differ from Bellunese SCLI in having an obligatory ‘-t-’ morpheme precede third person clitics, as in (i):

(i) a Où (Marie) va *(t-)* elle aller?
   where (Marie) will-\(t\)- she go?
   Where will she/Marie go?

b Où va *(t-)* il aller?
   where will-\(t\)- he go
   Where will he go?

As Poletto (2000) and Pollock (2000) show, the standard analysis of ‘-t’ as an epenthetic consonant is falsified by the data in (i),

(i) a Ven-lo-li? (Morgeux, Provençal)
   come-interr marker-they
   Are they coming?

b Ven-lo-lou? (Morgeux, Provençal)
Let us now consider SCLI sentences with 'D-linked' wh-phrases in Bellunese; (40) gives the relevant paradigm:

(40) a. Quanti libri à-tu ledest?
  how many books have-you read
  How many books did you read?
b. Che vestito à-la comprà?
  what dress has she bought
  Which dress did she buy?
c. Con che tozàt à-tu parlà?
  with what boy have you spoken
  Which boy did you talk to?
d. *Ha-tu ledest quanti libri ?
  have-you read how many books
  *How many books has she read?
e. *Ha-la comprà che vestito ?
  has she bought what dress

(40) does not differ from (41) in French,

(41) a. Combien de livres as-tu lus?
  how many books have-you read

  come-interr marker-she
  Is she coming?

from Morgeux, a Provençal dialect; in that dialect, Standard French 't-' surfaces as 'lo' but its insertion cannot be a purely PF phenomenon since neither -lt (they) nor -lou (she) are in need of an epenthetic consonant.

Like Pollock (2000) we shall hypothesize that 't-' in French and 'lo' in Morgeux have syntactic import and are interrogative morphemes in main clause questions. More precisely we follow much traditional work in claiming that French 't-' and Morgeux 'lo' are ''conjugaison interrogative'' markers, [+interrogative] morphemes merged as heads in Force®; on our derivations, 't-' will thus end up to the immediate left of the subject clitics and the immediate right of the finite verb; since those ''conjugaison interrogative'" morphemes play no part in the rest of this paper we shall ignore that important aspect of the SCLI phenomenon here.
How many books did you read?
b. Quelle robe a-t-elle achetée?
   what dress has she bought
   Which dress did she buy?
c. Avec quel garçon as-tu parlé?
   with what boy have you spoken
   Which boy did you talk to?
d. *As-tu lu combien de livres?
   have-you read how many books
   has she bought what dress

and the null hypothesis should be that all such sentences are derived in the same way; granted the invariant left periphery in (36) and the computations it triggers, one can arrive at that desirable conclusion fairly easily; the derivation of the sentences in (40) is identical to (37), modulo the lexical choices; that of (40a), for example, goes as follows:

(42) Input: [tu à ledest [quanti libri]]

(a) Merge Op1° and IP and attract [quanti libri] to spec Op1P ⇒
    [Op1P [quanti libri]i Op1° [tu à ledest t_i]]

(b) Merge TopP and Op1P and attract the participial phrase [ledest t_i] to
    spec Top ⇒
    [TopP [ledest t_i]j Top° [Op1P [quanti libri]i Op1° [tu à t_j]]]

(c) Merge G° and TopP and attract ‘tu’ to spec G ⇒
   [GP tu_k G° [TopP [ledest t_i]j Top° [Op1P [quanti libri]i Op1° [tu à t_j]]]]

(d) Merge Force and GP and attract IP to spec F° ⇒
   [ForceP [t_k à t_j]1 F° [GP tu_k G° [TopP [ledest t_i]j Top° [Op1P [quanti libri]i Op1° t_i]]]]

(e) Merge Op2P and ForceP and attract Wh-phrase to Spec Op2° ⇒
    [ledest t_i]j Top° [Op1P t_i Op1° t_i]]]]

At step (e) no (null) ‘Rest(rictor)’ attraction to Spec Op2P is possible since wh-
phrase *quanti* has a lexical complement *libri*, one might still ask why *libri* or *vestito* in (39) couldn’t move to Op2P the way the null Rest. or its lexical counterpart *cossa* in (31) do, yielding totally ungrammatical sentences like (43):

(43) a. *Libri à-tu ledest quanti?*  
books have you read how many  
How many books did you read?

b. *Vestito à-la comprar che?*  
dress have you bought what?  
Which dress did she buy?

(43) would be excluded if Op2P only attracted “abstract” domain restrictors. Let us say, as a first approximation, that the non lexical “Rest.” and its “deficient” -- see Munaro & Obenauer (2000) -- opposite number *cossa* qualify unlike fully specified lexical items like *libri*; we claim, a little more precisely, that what counts as the appropriate restrictor in the displaced *quanti libri* in (40a) is a (non lexical) ‘quantity phrase’; in short quanti libri = « Wh-quantity (book) »; similarly in *che vestito* in (40b) we say that the restrictor is a non lexical ‘token phrase’; *che vestito* = « wh-(token)vestito » etc.  

Following this guideline, let us now raise the further question of why such syntactic functional positions couldn’t host a non lexical “Restrictor” of the required type the way the null counterpart of *cos(s)a* does; if furthermore such null restrictors were attracted to Op2P the way they are in (39) the ungrammatical (40d, e) -*à-tu ledest quanti libri?* *à-la comprar che vestito?* -- would be incorrectly derived.

Derivations of this type would obtain if the null Q or D restrictors were extractable from within a structure in which they have a lexical complement; but pied piping is obligatory in all such cases: only the “tail” of a syntactic constituent can under certain conditions be extracted from that constituent without pied-piping.

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13. This is tantamount to saying, as Katz and Postal (1964) did thirty six years ago, that ‘what book’ is really ‘Wh-some book’, ‘which book’, ‘Wh-the book’ etc., on the assumption that what we informally call ‘quantity’ and ‘token’ in the text are syntactically encoded in functional projections in the DP, as a (specifier of) Q(P), Det(P) or other functional layers in the DP.
the rest; this will suffice to account for the ungrammaticality of (40d, e) under the hypothetical derivation entertained here; put another way, although constituents can be discontinuous they cannot be "scattered".

One might still ask why the complex "null restritor+{libri, vestito}" couldn't itself be extracted from within the wh-phrase, yielding once again ungrammatical strings like *libri à-tu ledest quanti? *vestito à-la comprà che?. It is worth stressing at this point that Bellunese does have sentences that it is very tempting to analyze along such lines; in that dialect bare wh-phrases like qual (which) and quanti (how many) can appear in sentence initial position or in (apparent) sentence internal position (cf. Pollock, Munaro & Poletto (1999, (47)), Munaro (1999)). This is illustrated in (44):

(44)  a. Qual avé-o ciot?
    which have you taken
    Which one did you take?
  b. Avé-o ciot qual?
    have you taken which
  c. Quant avé-o laorà?
    how much have you worked
    How long did you work?
  d. Avé-o laorà quant?
    have you worked how much

In our terms this means that qual and quant can behave like full DPs of the quanti libri type or like the bare wh-words che, ande, chi, come; if so (44b) and (44d) must have two non lexical "Restrictors" in the highest layer of their left periphery, as the spell-out parses in (45) sketch:

(45)  a. [Op2P Rest_m Op2° [ForceP [t_k avé \ t_j]; F° [GroundP o_k G° [TopP [ciot t_i];
      Top° [Op1P [qual t_m]; Op1° t_i ]]]]
  b. [Op2P Rest_m Op2° [ForceP [t_k avé \ t_j]; F° [GroundP o_k G° [TopP [laora t_i];
      Top° [Op1P [quant t_m]; Op1° t_i ]]]]

"Rest_m" in (44a, b) must be a "token" phrase, and a "quantity" phrase, respectively, rather than the invisible cossa restrictor of strings like ha-lo fat che?.

We believe that this may optionally obtain in (45a) because the final consonant in 
*qual* is an (optionally) incorporated definite determiner; when this takes place *qual* is comparable to French *(le)quel* and functions like a pronominal binding a null [NP pro] variable which provides the ‘token’ restrictor that *qual* needs, our (informal) 
‘Rest.’ in (45a). When no such definite determiner incorporation takes place *qual* is really to be analyzed as [QP Qu(a)- [DP l [NP Rest.]]] and pied piping of the null restrictor to Op2P is then required, yielding (44a); we claim that this is because (some minimalist version of) subjacency makes it impossible to extract Rest. across DP and QP; we note in passing that what this says of -l agrees fairly well with Vanelli (1992) which shows that the definite article in standard Italian is (our optionally incorporated) -l whose vocalic nucleus in other contexts is 
epenthetic.

As for (44d), we posit that in such cases *quant* can optionally take a null (measure) PP complement --as it does quasi overtly in de *stti libri, ghen ‘avé-o ledest quanti? (of these books of them have you hrown many? ’); it is that null PP that counts as the null quantity Restrictor in ‘*quant in situ*’ derivations like (45b); when that reanalysis fails to obtain, the whole [QP[quant [NumP o [NP Rest.]]] must be pied piped to SpecOp2P, as in (44a, c); again this is because extracting Rest. alone would violate (some minimalist version of) subjacency.

Before we can conclude our analysis of (44), we still have to say why a derivation in which the constituent [NumP o [NP Rest.]], headed by a (null) head --sometimes overtly manifested, as in quanti-- would be extracted from within the wh- phrase is excluded; what we have said so far isn’t enough since an appeal to (some form of) subjacency could not be made. Our view is that such a derivation would yield an incorrect input to the PF component just as the corresponding displacement of [DP l [NP Rest.]] in (44b) would; the string *lava’-o ciot qua? is ungrammatical.

If this is on the right track we can say that PF convergence and (some minimalist version of) subjacency converge to require pied piping of the whole wh-phrase to Op2P in (40a, b, c) in Bellunese. Wh- ‘stranding’ as in (44b, d) seems restricted to cases in which the complement of *qual* and *quant(i)* are phonetically null.

We can now conclude that Bellunese speakers analyze wh-questions like (40) exactly as French speakers analyze (41), surely the best analysis. In neither language can attraction of a restrictor to Op2P yield a well-formed output unless pied piping of the rest of the wh phrase takes place; it appears, then, that the massive spellout differences between French and Bellunese with which we started follow as a
consequence of our invariant (36) and the existence of "doubling" wh-phrases like (38) in Bellunese and their non existence in French.\(^{14}\)

\(^{14}\). Next to that of Bellunese, Monnese examples like (i) (=32)-(33) in text above) show that another doubling pattern exists

\begin{enumerate}
\item a Ch'et fat qué? (what have you done what?)
\item b Ch'et fat?
\end{enumerate}

In (1b), as in standard Italian Cosa questions like (iiiia), the element that has no phonetic shape at spellout is the qu- element in Op1 rather than the restrictor in Op2. It thus seems clear that some Romance varieties may fail to lexically express one of the two elements in (iiia):

\begin{enumerate}
\item [Ch- NP]
\end{enumerate}

Bellunese lexically realizes ch- and may fail to realize NP, Italian, Friulian and Paduan in sentences like (iii)

\begin{enumerate}
\item a Cosa ha fatto?
  what has done
  What did he do?
\item b Cossa fa-lo? Paduan
  what does-he
  What does he do?
\item c Ce mangia-l? Friulian
  what eats-he
  What does he eat?
\end{enumerate}

fail to lexicalize ch- but always lexicalize the NP restrictor, just as Monnese does; Written Italian differs from Monnese and Bellunese in that when both ch- and NP are lexically expressed they obligatorily move as a unit to Op2P: *che cosa ha fatto? vs Cosa ha fatto che. In Monnese sentences like (ia) and Bellunese (38) on the other hand no such pied piping is obligatory (see text above); one could in fact posit that Standard Italian, Friulian and Paduan "strang" their non lexical ch-, i.e. that (iiiia) should be analyzed as in (iv):
(iv) \([\text{NP Costa}]_1 \text{ ha pro fatto } [\text{QP } \sigma t_1]\)

where \(\sigma = \text{null } ch\); if this were correct one would of course want to explain why the "truncated" DPs discussed in connection with Bellunese (44b, d) are only available in Standard Italian, Friulian and Paduan when the QP layer of ch- phrases is phonetically null. Alternatively, of course, one might want to stick to a more conventional analysis in which no stranding of the null ch- phrase is involved in such sentences and where the restrictor movement to Op2P pied-pipes the whole ch- phrase in all cases; the spellout parse of (iiiia), for example, would then be (v):

(v) \([\text{QP } \sigma [\text{NP Costa}]]_1 [\text{ ha pro fatto } t_1]]\)

The question of the status of ce que questions like (vi) in French,

(vi) Je ne sais pas ce qu'il fera
   I know not ce that he will do
   I do not know what he will do

might be reconsidered in this light. One might claim for example that ce que consists of ce, the French counterpart to ch\(^{+}\) in Mornese and cos/sa in Italian/Bellunese followed by que, the lexicalization of Force\(^{6}\). If so exclamative like (vii) and (viii) might then be analyzed as containing a lexical or non lexical ch'/cosa/ce

(vii) Ce qu'il est bête!
     ce that he is silly
     How silly he is!

(viii) Qu'il est bête!
     that he is silly
     How silly he is!

Alternatively, ce que in (vi) and (vii) could be the viewed as the counterpart of che cosa plus additional movement of ce to some slot in the left periphery of the DP followed by pied piping of the whole constituent to Comp, again because of (some version of) subadjacency. Under the first alternative
8. **Another Instance of Remnant Movement: French Stylistic Inversion.**

Before we can deal with Italian wh-questions, we need to introduce and briefly discuss another type of construction, 'Stylistic Inversion' (SI) sentences like (46) in French:

(46) a. Où est allé Jean?
    where has gone Jean
    Where has Jean gone?

b. À qui a téléphoné Jean?
    to whom has phoned Jean
    Who did Jean phone?

SI sentences share with SCLI the fundamental property that their subjects occur in a non canonical, displaced position; in SI, though not in SCLI, that non canonical position is made licit by (certain types of (local)) wh-phrases (cf. Kayne & Pollock (1979), (1999)); thus, for instance (46) contrasts sharply with (47):

(47) a. *A Paris est allé Jean?
    to Paris is gone Jean
    Did Jean go to Paris?

b. *A téléphoné Jean?
    has telephoned Jean
    Has Jean phoned?

c. Y est-il allé?
    there-is-he gone
    Did he go there?

---

French, like Bellunese, Monnese and Italian would also have the option not to lexicalize ch-/qu-; under the second, it would always lexicalize qu-; in any case French only allows fleeting manifestations of a lexical restrictor of the cos(s)ja variety, as in (vi) and (vii); on how best to analyze que in Que fait-il? and the ungrammaticality of *qu’il fait? see Poletto & Pollock (in prep).
d. A-t-il téléphoné?
   has he telephoned
   Has he phoned?

SCLI and SI contrast in many other respects (cf. Kayne (1972)); to mention just two other well-known differences, SI is not restricted to root contexts, unlike SCLI, as the pair in (48) shows:

(48) a. Je ne sais pas quand partira Jean
   I know not when will-leave Jean
   I do not know when Jean will leave
b. *Je ne sais pas quand partira-t-il
   I know not when will-leave-t-he
   I do not know when he will leave

and the postverbal subject of SI sentences must occur in post participial or post infinitival position, which the postverbal subject clitic in SCLI cannot do:

(49) a. Où croit-il être?
   where thinks-he (to) be
   Where does he think he is?
b. *Où croit Jean être?
   where thinks Jean (to) be
   Where does Jean think he is?
c. Où a-t-il été?
   where has he been
   Where has he been?
d. *Où a Jean été?
   where has Jean been
   Where has John been?

(50) a. *Où croit être il?
   where thinks (to) be he
b. Où croit être Jean?
   where thinks (to) be Jean
   Where does Jean think he is?
c. *Où a Jean été?
   where has Jean been
d. Où a été Jean?
   where has been Jean
   Where has Jean been?

Despite these major differences SI and SCLI share one important property: they are both instances of Remnant phrasal movement to the IP field. That is how SI should be analyzed has been argued for at length in Kayne & Pollock (1999) -- henceforth K&P -- in ways that we cannot go into in any detail here; we shall be content to mention two important properties of SI and its spell-out structure; on K&P’s analysis, the postverbal subject of SI has been attracted to the left periphery and is thus structurally ‘high’, rather than ‘low’, as hypothesized in many past analyses, e.g Kayne & Pollock’s (1979); furthermore that ‘high’ position is a topic-like position; these two claims are supported by a number of facts, among which the following four:

Firstly, like preverbal subjects but unlike direct objects ‘de NP’ (‘of NP’) postverbal subjects are excluded in SI --cf. e.g. Peu de linguistes nous ont critiqué (few linguists have criticized us) vs *de linguistes nous ont peu critiqué (‘of linguists us have few criticized’), *le jour où nous ont peu critiqués de linguistes (‘the day when us have few criticized of linguists’) vs J’ai peu critiqué de linguistes (‘I have few criticized of linguists’).

Secondly, postverbal subjects in SI, like preverbal subjects and unlike objects, cannot give rise to subnominal ‘en’ extraction (on which see Pollock (1998); compare: J’en ai critiqué trois (‘I have critized three’) vs *Le linguiste qu’en ont critiqué trois (‘the linguist that of them have criticized three’), *trois en ont critiqué ce linguiste (‘three of them-have criticized this linguist’).

Thirdly, postverbal subjects in SI resist long distance ‘pas’ (neg) quantification, unlike objects and like preverbal subjects; compare: *Quel livre n’ont pas lu de linguistes? (‘what book neg. have not read of linguists’), *De linguistes n’ont pas lu ce livre (‘Of linguists have not read this book’) vs Je n’ai pas vu de linguiste (‘I neg have not seen of linguist’).
Finally, the 'high' subject position of the postverbal subjects is shown to be a Topic-like position by the 'anti-indefiniteness' effect at work in SI, first noted by Cornulier (1974); compare: *Quel gâteau a mangé quelqu'un? ('what cake has eaten someone?') *Quel article critiquera quelqu'un? ('what article will criticize someone?'); since the postverbal subject in SI is by hypothesis in (a topic position in) the left periphery, this anti-indefiniteness effect can be seen in same light as the unfelicitousness of, say, *Quelqu'un il a critiqué mon article ('someone he has criticized my article'), *Quelqu'un il a mangé le gâteau ('someone he has eaten the cake'), although the CLLD position of such sentences cannot be equated with that of SI subjects; SI subjects, unlike CLLD subjects, can be quantified subjects like personne compare: La personne à qui n'a parlé personne c'est Jean ('the person to whom has spoken no one') vs *Personne, il n'a parlé à Jean (Noone, he neg has spoken to Jean)

Summarizing, the DP subject in SI is attracted by a topic feature to the left periphery; the (remnant) IP crosses over TopP on its way to a higher position in the CP field; it is NOT targetting ForceP, however, unlike SCLI; this is shown, as already stressed, by the fact that SI is optional in subordinate clauses; furthermore IP in SI does not 'strand' its infinitival or participial phrases, as pairs like (48) and (49) show.

In part taking advantage of the homophony between the 'GroundP' introduced in the previous sections and K&P's (more abstract) 'GP', we now attempt to tie some of the respective properties of Remnant IP movement in SCLI and SI to a difference in the positions that IP and their subjects target in the two constructions; on our section 7 analysis of French and Bellunese SCLI the nominative weak pronouns target the GroundP layer of the left periphery and the participial, infinitival complements of the finite verb (see note 8), target a Topic layer; in SI, on the other hand, we say with K&P that the DP subject targets a topic layer while the IP itself targets the Ground layer.

If this is so, 'ForceP' plays no part in SI Remnant IP movement; assuming it is obligatorily present in main root questions, as the invariant structure of the left periphery in (51) (= (36) above) would lead one to assume,

\[
(51) \quad [\text{Op}_2 \text{P Op}_2^0 [\text{ForceP Force}^5] [\text{GroundP} G^0 [\text{TopP Top}^0 [\text{Op}_1 \text{P Op}_1^0 \text{IP} ]]]]]
\]

we conclude that in French the wh-phrases themselves can --and therefore must--
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check the interrogative force feature in root SI questions.
On this analysis, then, the derivation of sentences like (46a) is (52):

(52) Input : [IP Jean est allé où]

(a) Merge Op1° and IP and où movement to Op1P ⇒
[Op1P où IP Jean est allé t1]

(b) Merge Top° and Op1° and attract Jean to TopP ⇒
[TopP Jean] Top° [Op1P où IP Jean est allé t1]

(c) Merge Ground and TopP and attract (Remnant) IP movement to
GroundP ⇒

(d) Merge Force° and GroundP and attract où to Spec Force ⇒

(e) Merge Op2 and Force and attract où to Spec Op2P ⇒

We cannot even begin to do justice to the extremely complex empirical properties
of SI sentences here; three remarks are nevertheless in order. Firstly, if the fully
acceptable wh-less cases of subjunctive triggered SI and the (far) more marginal
indicative ones dealt with in part II and III of K&P can be integrated in this general
perspective, this analysis would give us an immediate and principled account,
different from K&P's, of why SI, but not SCLI, is typically "triggered" by (local)
wh-phrases: only when a Force checking phrase is present can the requirements of
checking theory be met in the CP field of questions; wh-phrases have that ability,
unlike topicalized elements; this immediately accounts for (53) vs (54) (= (46)-(47)
above):

(53) a. Où est allé Jean?
where has gone Jean
Where has John gone?
b. À qui a téléphoné Jean?
   to whom has phoned Jean
   Whom did John phone?

(54) a. *À Paris est allé Jean?
   To Paris is gone Jean
   Has John gone to Paris?

b. *A téléphoné Jean?
   has telephoned Jean
   Has Jean phoned?

Since, on the other hand, Remnant IP movement accomplishes that task in SCLI
no such additional checking of the force feature need take place, whence the
acceptability of (55).\footnote{This analysis of pairs like (54) vs (55) presupposes that no (subpart of the remnant) IP in Spec,
Ground in SI can be attracted further up to check the Force feature in SI; we hold that remnant
phrases are ‘frozen in place’ once they have reached their target.}

(55) a. Est-il allé à Paris?
   is he gone to Paris
   Has he gone to Paris?

b. A-t-il téléphoné?
   has he phoned

Secondly, derivations like (52) claim that (Remnant) IP is checking a Ground
feature; suppose, reasonably enough, that for an IP to have that ability all its
constituents must also be \(+\text{ground}\). Assuming only clitic pronouns,\footnote{Only \textit{non assertive} clitics in Bellunese, see discussion of table 1 above.} variables,
quantifiers, quantified DPs and idioms can be so characterized, we could begin to
give some intuitive content to the notion ‘lexical argument’ of K&P’s principle
(169) --from Koopman and Szabolcsi (in press)-- repeated in (56),
(56) IP preposing results in a violation if IP contains a lexical argument.

and account for the following facts and contrasts --all from K&P:

(57) a. Depuis quelle heure ont faim les enfants? since what time have hunger the kids
    Since when are the kids hungry?
    b. À quelle pièce donne accès cette clé? to what room gives access this key
    Which room does this key give acces to?
    c. Quand ont pris langue Paul et Marie? when have taken tongue P & M'
    When did P & M discuss the issue?

(58) À qui l'a montré Jean-Jacques? to whom it has shown J-J
    To whom did J-J show it?

(59) Qu'a dit Jean? what has said J
    What did Jean say?

(60) a. La fille à qui a tout dit Jean-Jacques the girl to whom has everthing told J-J
    the girl to whom J-J said everything
    b. La fille à qui n'a rien laissé sa grand'mère the girl to whom neg. has nothing left her grandmother
    The girl to whom her grandmother left nothing
    c. La fille à qui laissera sûrement quelque chose sa grand'mère the girl to whom will-leave surely something her grandmother
    The girl to whom her grandmother will surely leave something

(61) *À qui a donné ce livre Jean? to whom has given that book J
    To whom did Jean give this book?
In (61) the R-expression *ce livre* is by hypothesis *NOT* [+ground], so IP cannot be either and it fails to check the ground feature of the left periphery, causing the derivation to crash. In (57) through (60), on the contrary IP does contain only (lexical) [+ground] elements, so the derivations converge.\textsuperscript{17} \textsuperscript{18}

Thirdly, wh-phrases like *où* on our analysis are 'wild cards' in that they not only check Op1 and Op2 features, but also a [+question] Force feature; granted this, a

\textsuperscript{17} In acceptable cases of SI like (i) [-ground] constituents like *à Paul* or *à Marie* are extracted -- either pied piped by wh-movement to Op1P, or topicalized (cf. K&P) -- previous to IP movement to GP:

(i) a Quel livre a donné Jean à Paul?
    which book has given Jean to Paul
    Which book did Jean give to Paul?

b Qu’a donné à Marie cet homme?
    what has given to Marie this man?
    What did this man give to Marie?

As K&P show, direct objects like *ce livre* cannot undergo either wh-pied piping or topicalization, whence (61). Note that our reinterpretation of (56) also provides an account of why the [-ground] DP subject *must* topicalize out of IP in SI.

\textsuperscript{18} On Pollock's (2000) analysis of French Complex Inversion sentences like (i)

(i) Quand Pierre a-t-il téléphoné à Marie?
    when Pierre has he phoned to Marie
    When did Pierre phone Marie?

Remnant mvt has taken place, carrying along the [-ground] subject *Pierre* and the finite verb *a* to the left periphery. Since in such cases, just as in SCLI, IP is moving to Spec Force, *NOT* to Spec Ground, no violation of our reinterpretation of (56) is incurred, although its literal phrasing would be violated, incorrectly.
natural expectation is that not all wh-phrases have that ability; the unacceptability of (62), first noted by Cornulier (1974),

(62) a. *Pourquoi parle Pierre?
    why speaks P
    Why does P speaks?

b. *Pourquoi travaillent les linguistes?
    why work the linguists
    Why do linguists work?

c. *En quel sens parlent les fleurs?
    in what sense speak the flowers
    In which sense do flowers speak?

and discussed at length in a different perspective in K&P’s section 13, could now be seen as stemming from the inability of *pourquoi and *en quel sens to check an interrogative Force feature.

More generally, depending on the partly idiosyncratic syntactic and morphological make up of their wh-phrases, one would expect closely related languages to differ with respect to this ‘extra’ ability, which should yield interesting minimal differences; we shall see in the next section that French and Italian meet that expectation.

9. Italian

In our general perspective, the structure of interrogative clauses is invariant across the Romance languages; each of them has to check the same set of features in the left periphery, hence the computations at work in French should be present

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19. K&P point out in their footnote 59 that when argumental, *en quel sens is compatible with SI, as in (i):

(i) En quel sens a tourné la voiture?
    in what direction has turned the car
    Which direction did the car turn?
elsewhere as well, although orthogonal differences between them might make them ‘opaque’ at spellout. If this is on the right track standard Italian might be expected to have two different types of interrogative constructions; one should correspond to SCLI, be restricted to main contexts and occur in both wh- and yes/no questions; the other should be the counterpart of French SI and should thus be licit in both main and embedded contexts although it should be banned in yes/no questions and can be expected to be restricted to certain types of wh-items, just as it is in French.

In this section we shall try to show that Italian indeed has both SCLI and SI, a property that has remained undetected up to now because standard Italian is a null subject language. In addition, we shall suggest that the SI phenomenology in the two languages has a partly different distribution because Italian non d-linked wh-phrases are unable to check the Force feature, unlike (most of —see (62)—) their French analogues.

9.1. SCLI and the Main vs Embedded Asymmetry

Standard Italian does not have lexical subject clitics, although it has a corresponding null pronoun, pro\textsuperscript{20}. As a consequence, the only way to distinguish Italian SCLI configurations corresponding to French sentences like Qu’a-t-il fait, Jean (‘What has he done, Jean?’) and Italian SI of the type Qu’a fait Jean (‘What has done Jean?’), if such exist, should be intonation.

French sentences like Qu’a-t-il fait, Jean (‘What has he done, Jean?’) are derived via SCLI and display an obligatory intonation break before the sentence-final ‘subject’ since such ‘subjects’ are moved to, or merged in, a (‘very high’) CLLD position. If SCLI of this type exists in Italian as well, the same should hold true.\textsuperscript{21}

\textsuperscript{20} See all the literature on the null subject parameter and Cardinaletti and Starke (1999). On Alexiadou & Anagnostopoulou’s (1998) reanalysis of the null subject parameter, no null pronoun needs to be posited in the Romance type null subject languages; such a view would make our very direct assimilation of Italian pro inversion and French SCLI more difficult to express.

\textsuperscript{21} For the sake of execution we say that cases of Clitic Right dislocations like (63) are derived from the corresponding Clitic Left dislocations configurations via (further) CP movement to the left
In SI like *Qu’a fait Jean? (‘What has done Jean?’), on the other hand, the postverbal subject has moved (leftwards) to a position in the left periphery previous to Remnant IP movement; it is thus standing much ‘lower’ in the clause structure periphery. Recall that the ‘very high’ CLLD position in which Jean is standing in Qu’a-t-il fait, Jean should be carefully distinguished from the ‘lower’ Comp position of in which Jean is standing in SI sentences like Qu’a fait Jean; although the DPs standing in both positions show an ‘anti-indefiniteness effect (see section 8), the lower position, unlike the higher one, can host quantifiers; compare À qui n’a parlé personne? (‘To whom has spoken noone?’) vs *À qui n’a-t-il parlé, personne (‘To whom has he spoken, noone?) is sharply ungrammatical.

As is well-known --see Kayne (1972) -- sentences like (i) should also be carefully distinguished from complex inversion cases like (ii):

(i) À qui a-t-il parlé, Jean?
    to whom has he spoken, Jean
    Who did Jean talk to?

(ii) À qui Jean a-t-il parlé?
    to whom Jean has he spoken

In the latter, though not in the former, the subject Jean has been merged in Spec IP and has moved to Spec Force along with the remainder of IP. For reasons discussed in Pollock (2000), CI is not available in Italian or in the NIDs, even though the NIDs often show SCLI; this is because full DPs in Italian move further up than they do in French and can thus never be dragged along by Remnant IP movement, which suffices to exclude derivations like (iii):

(iii) * [OpP Cosa Op° [ForceP [IP [Gianni t_i] ha t_j ]k Force° [AgrS° [pro; AgrS°] [fatto ... δ t_k ]]

This should arguably be tied to Italian and the NIDs being null subject languages, unlike French; in Pollock’s (2000) this link is expressed as follows: Romance SCLI and CI inversion are really instances of Remnant TP movement; in non pro drop languages full DPs —and, more exceptionally, nominative clitics in the ‘-ti’ dialects of French and Valdètain-- can stand in Spec TP; in the null subject languages, on the other hand, they can’t and must at least move to Spec AgrS; it follows that (i) can never obtain in Italian.
and is not—in fact cannot be—separated from the rest of the clause by any pause. If Italian has configurations to be analyzed in terms of SI, non ‘emarginated’ subjects should surface, just as they do in French, for exactly the same reasons.

Bearing those remarks in mind, we note that, everything else being equal, the intonational pattern of Italian main questions like (63b) does correspond to that of French SCLI cases like (63a):

(63) a. Qu’a-t-il fait, Jean?
   what has-he done, J.
   What has Jean done?

b. Cosa ha fatto, Gianni?
   what has-he done, J.

We take our lead from this and now claim that (63b) should indeed be analyzed as in (64):

(64) Cosa ha-pro fatto, Gianni?
   What has pro done, Gianni

This says that (63b) has a pro subject, the null counterpart of French il and that pro, like il, occurs immediately to the right of the auxiliary; the derivation of (63b) is thus exactly the same as that proposed for its French analogues in section 7; the ‘pro inversion’ version of SCLI at work in Italian is also a consequence of remnant IP movement to the Spec Force, as sketched in (65):

(65) Input: [pro è andato dove]
   (a) Merge Op1° and IP and attract dove to spec Op1P ⇒
   [Op1P dove; Op1° [pro è andato tj]]
   (b) Merge TopP and Op1P and attract the participial phrase [andato tj] to
   spec Top ⇒
   [TopP [andato tj]j Top° [Op1P dove; Op1° [pro è tj]]]
   (c) Merge G° and TopP and attract ‘pro’ to spec G ⇒
   [Gprok G° [TopP [andato tj]; Top° [Op1P dove; Op1° [tk è tj]]]]
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(d) Merge Force° and GP and attract IP to spec Force° \[ \text{ForceP} \left[ t_k \varepsilon t_j \right]_{1} \text{F}^° \left[ \text{GP pro}_k \text{ G}^° \left[ \text{TopP} \left[ \text{andato t}_j \right] \right] \text{Top}^° \left[ \text{Op1P dove} ; \text{ Op1}^° \text{ t}_j \right] \right] \]

(e) Merge Op2P° and ForceP and attract dove to Spec Op2° \[ \text{Op2P dove} ; \text{ Op2}^° \left[ \text{ForceP} \left[ t_k \varepsilon t_j \right]_{1} \text{F}^° \left[ \text{GP pro}_k \text{ G}^° \left[ \text{TopP} \left[ \text{andato t}_j \right] \right] \text{Top}^° \left[ \text{Op1P t}_i \text{ Op1}^° \text{ t}_j \right] \right] \right] \]

In that derivation ‘pro’ moves to the Spec Ground position just as il does in French SCLI and Remnant IP movement shifts the (IP constituent containing the) finite auxiliary to pro’s left; nominative weak pronouns move because they have a [+ground] feature in the numeration and are attracted to the relevant layer of the Comp domain to check an uninterpretable feature; if Italian ‘pro’ is a weak pronoun the extension is automatic.

Of course, Standard Italian is similar to French and different from Bellunese in not having the wh-doubling structure which results in (apparent) wh-in situ and SCLI in that language; having no doubling mechanism, no null or lexical Restrictor can move alone to the higher OpP layer and the full wh- phrase must therefore move to SpecOp2.

If French SCLI (63a) and Italian ‘pro inversion’ in (63b) are derived by one and the same computation, they should obey the same restrictions; in particular they should be banned in embedded questions; we believe that this is true and that the well-formed (66a) is the counterpart of the non inverted French configuration in (66b):

(66) a. Mi hanno chiesto cosa pro ha fatto, Gianni
to me have asked what pro has done, Gianni
They asked me what Gianni has done

b. Ils m’ont demandé ce qu’il a fait, Jean
they to me have asked what he has done, Jean
They’ve asked me what Jean has done

c. *Ils m’ont demandé (ce) qu’a-t-il fait, Jean
they to me have asek done what-he done, Jean

Because pro is phonetically null, (66a) and (66b) are deceptively identical; but in (66a) there can’t have been any more Remnant IP movement than in (66c) in French,
for reasons stated above; so only wh-movement has applied and pro is in its usual preverbal IP position.\textsuperscript{22}

This sketch ties together a number of facts and makes interesting predictions; firstly it explains the ungrammaticality of (67) in the same terms as it does its French analogues in (68):

(67) a. *Cosa pro (non) ha letto, nessuno?
    what pro (not) has read, noone
b. *Nessuno, cosa pro (non) ha letto?
    noone, what pro not has read?
    What did noone read?

(68) a. *Que n’a-t-il pas lu, personne? (same as (67a))
b. *Personne, que n’a-t-il pas lu? (same as (67b))

This simply follows from the fact that no (negative) quantifier can be merged in or attracted to a (Clitic) left dislocated position, or, put slightly differently, that no lexical or non lexical subject clitic can be used as a resumptive pronoun for a quantifier.

Secondly, if our SCLI analysis of non D-linked wh-questions in main contexts can be shown to be the only available option in Italian we will have a simple account of the necessary ‘emargination’ of subjects in such contexts, a well-known though, to our knowledge, still unexplained fact; compare:

(68') a. Cosa ha fatto, Gianni?
     what has done, Gianni
b. *Cosa ha fatto Gianni?
     what has done Gianni
     What did Gianni do?

The next sections will show that this is the correct tack; (68'b) will thus follow from our analysis of ‘pro inversion’ and the unavailability of SI in Italian main

\textsuperscript{22} IP here stands for AgrsP, if the non existence of CI in Italian is analyzed as sketched in note 21.
questions with non D-linked wh-phrases.

Thirdly, if (63b) is really a case of ‘invisible’ SCLI unavailable in embedded questions, we expect Italian questions to be able to surface with a preverbal subject only in subordinate clauses; (69) vs (70) shows the expected contrast:

(69)  
(a) Mi hanno chiesto dove Gianni fosse andato  
      to me have asked where Gianni were gone  
      They asked me where Gianni went  
(b) Mi hanno chiesto dove Gianni è andato ieri  
      to me have asked where Gianni is gone yesterday  
      They asked me where Gianni went yesterday

(70)  
*Dove Gianni è andato (ieri)?  
      where Gianni is gone (yesterday)  
      Where did Gianni go (yesterday)?

As is well known, preverbal subjects are fine when the verb is in the subjunctive, as in (69a); when it is in the indicative, the sentence is fine provided the VP contains an object or an adverb, as in (69b); on the other hand, their counterparts in main clauses like (70) are unacceptable, as expected.23

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23. We come back in 9.3 to the fact that (i) and the like are often judged to be degraded

(i)  ??Mi hanno chiesto dove Gianni è andato  
      to me have asked where Gianni is gone  
      They asked me where Gianni has gone

and to the fact that bare wh-phrases like dove or cosa when contrastively stressed under D-linking permit to a varying degree non inverted questions like (ii):

(ii)  ? DOVE Gianni è andato?  
      where Gianni is gone?  
      Where has Gianni gone?
9.2. **Italian non-D-linked wh- phrases and Stylistic Inversion**

We know from section 7 that SI is a case of remnant movement to the Ground layer of the invariant left periphery in (71):

\[(Op_{2P} Op_{2}^{\circ}[ForceP Force^{\circ}] [GroundP G^{\circ} [TopP Top^{\circ}[Op_{1P} Op_{1}^{\circ} IP ]]])]\]

Granted this, SI requires that the Force and Op2 features be checked by some other means. The only acceptable candidates seem to be the wh-phrases themselves, which thus have to have the ability to check three different features in the left periphery, Op1 and Op2 --as discussed in section 8-- but also [+Question] in Force; this does not hold of SCLI, in which Force is checked by remnant IP movement itself; as already noted, this may well suffice to account for minimal pairs like e.g. *Est-il parti?* ("is he gone?") vs *Est parti Jean?* ("Is gone Jean?") in French; in SCLI on the other hand, only the Op2 feature is checked by the wh-item.\(^{24}\) We now capitalize on this difference to account for the distribution of SI in standard Italian.

We interpret the contrast in (72) as showing that SI is fine in embedded contexts but excluded in main ones:

\[(72) \quad \begin{align*}
\text{a.} & \quad *\text{Cosa ha fatto Gianni?} \\
& \quad \text{what has done Gianni} \\
& \quad \text{What did Gianni do?} \\
\text{b.} & \quad \text{Mi hanno chiesto cosa ha fatto Gianni} \\
& \quad \text{to me have asked what has done Gianni} \\
& \quad \text{They asked me what Gianni did}
\end{align*}\]

If so, Italian contrasts with French, where SI is *not* limited to embedded questions:

\(^{24}\) Our analysis of yes/no question has no need for null wh-phrases; in our perspective Op2P and Op1P are only required to be merged in (72) when the numeration contains wh-phrases, i.e. items whose Op1 and Op2 features must be checked; when none are present the Op1 and Op2 layers need not --in fact cannot-- be merged since there won't be any element in the structure to erase their non interpretable features.
(73) a. Qu’a fait Jean?
   what has done Gianni
   What did Gianni do?
b. Ils m’ont demandé ce qu’a fait Jean
   they to me have asked what has done Gianni
   They asked me what Gianni did

The SI derivation of (73) would be as in (74):

Input: [Ip Gianni è andato dove]

(74) (a) Merge Op1\textdegree\textsuperscript{o} and IP and dove movement to Op1P ⇒
   [Op1P dove; Op1\textdegree\textsuperscript{o} [Ip Gianni è andato t\textsubscript{j}]]

(b) Merge Top\textdegree\textsuperscript{o} and Op1\textdegree\textsuperscript{o} and attract Gianni to TopP ⇒
   [TopP [Gianni\textsubscript{j}] Top\textdegree\textsuperscript{o} [Op1P dove; Op1\textdegree\textsuperscript{o} [Ip t\textsubscript{j} è andato t\textsubscript{j}]]]

(c) Merge Ground and TopP and attract (Remnant) IP movement to
   GroundP ⇒
   [GroundP [Ip t\textsubscript{j} è andato t\textsubscript{j}]\textsubscript{k} G\textdegree\textsuperscript{o} [TopP [Gianni\textsubscript{j}] Top\textdegree\textsuperscript{o} [Op1P dove; Op1\textdegree\textsuperscript{o} [Ip t\textsubscript{k}]]]]

(d) Merge Force\textdegree\textsuperscript{o} and GroundP and attract dove to Spec Force ⇒
   [ForceP Dove; Force\textdegree\textsuperscript{o} [GroundP [Ip t\textsubscript{j} è andato t\textsubscript{j}]\textsubscript{k} Ground\textdegree\textsuperscript{o} [TopP [Gianni\textsubscript{j}] Top\textdegree\textsuperscript{o} [Op1PP t\textsubscript{j} Op1\textdegree\textsuperscript{o} [Ip t\textsubscript{k}]]]]]

(e) Merge Op2 and Force and attract dove to Spec Op2P ⇒
   [Op2P Dove; Op2\textdegree\textsuperscript{o} [ForceP t\textsubscript{i} Force\textdegree\textsuperscript{o} [GroundP [Ip t\textsubscript{j} è andato t\textsubscript{j}]\textsubscript{k} Ground\textdegree\textsuperscript{o} [TopP [Gianni\textsubscript{j}] Top\textdegree\textsuperscript{o} [Op1PP t\textsubscript{i} Op1\textdegree\textsuperscript{o} [Ip t\textsubscript{k}]]]]]]

(74) yields a converging derivation only in embedded questions in Italian; there
is a consensus that the main vs embedded contrast is a consequence of some form of
lexical checking by the matrix verb of the Force feature in embedded clauses, which
is unavailable in root sentences and requires XP movement to Force; we conclude
that Italian wh-words like cosa, dove, a chi etc. can only check their ‘ordinary’ OP1
and Op2 features: (non d-linked) bare wh-words cannot bear a [+Question] force
feature.

That [+Question] feature must therefore be checked some other way; it can only
be via remnant IP movement in main contexts, which requires (obligatory) SCLI in
its 'pro-inversion' version, or by lexical checking by a selecting verb in embedded contexts; this gives us an account of the mysterious contrasts in (75),

(75)  
a. Cosa ha fatto, Gianni?  
what has pro done, Gianni  
What did Gianni do?  
b. *Cosa ha fatto Gianni?  
what has pro done Gianni  
c. Mi hanno chiesto cosa ha fatto Gianni  
to me have asked me what has done Gianni  
They asked me what Gianni did

which we see as parallel to those in (76) in French.25

(76)  
a. Pourquoi avait-il téléphoné, (Jean)?  
why has he phoned, Jean  
Why has Jean phoned?  
b. *Pourquoi avait téléphoné Jean?  
Why had phoned Jean  
c. Ils m’ont demandé pourquoi avait téléphoné Jean  
they to me have asked me why had phoned Jean  
They asked me why Jean had phoned

In (75b) and (76b) a [+question] force feature has remained unchecked, giving rise to an uninterpretable LF; in (75a) and (76a), Remnant IP mvt to Force checks the [+question] force feature, thus relieving cosa and pourquoi of an impossible task; lexical checking of [+question] by chiesto and demandé in (75c) and (76c) does the same, with the same (fortunate) consequences.

25. Pairs like (76b) vs (76c) were pointed out to Jean-Yves Pollock and Richard Kayne by Paul Hirschbüllher almost 25 years ago but had so far remained without any explanation. For unclear reasons in the text perspective, there is no main vs embedded contrast with en quel sens, and the embedded version of (62) above remains unacceptable.
9.3. *D-linked wh- words and SI*

Our analysis so far has crucially relied on the idea that Italian wh- phrases are deficient in a way their French analogues are not. If this is correct one might expect Italian to have other types of wh-items behaving differently; with this in mind, let us turn to D-linked wh-phrases; they show strikingly different behavior in root SI contexts, as (77) shows,

(77) a. Quale libro ha letto Gianni?
    which book has read Gianni
    Which book did Gianni read?

b. *Cosa ha letto Gianni
    what has read Gianni
    What did Gianni read?

c. Mi hanno chiesto quale libro ha letto Gianni
    to me have asked me which book has read John
    They asked me which book Gianni read

and they thus provide strong support for our view that the explanation for why SI is excluded in matrix contexts like (75b) crucially hinges on the properties of the wh-element.

In our terms, examples like (77) establish that D-linked wh-items make SI structures licit in questions, both in root and embedded contexts; if so (77) should be seen in the same light as (78) in French:

(78) a. Dans quel but a téléphoné Jean?
    in what goal has phoned Jean
    What has Jean phoned for?

b. *Pourquoi a téléphoné Jean?
    why has phoned Jean
    Why has Jean phoned?

c. Ils m’ont demandé dans quel but avait téléphoné Jean
    they to me have asked me in what goal had phoned Jean
    They asked me why Jean had phoned
Both will follow from our invariant structure of the left periphery if D-linked
wh-phrases like quale libro, dans quel but CAN check the [+question] feature of the
Force layer, unlike non d-linked wh-items like cosa in Italian or pourquoi in French.

In brief, in both French and Italian those wh-phrases that cannot check the
[+question] feature can only occur in embedded cases of SI, where [+question] is
checked by means of the selecting verb; chosing such wh-phrases in the numeration
of a main question will thus force SCLI; on the other hand, those wh-phrases that
can type their clause as a question --i.e. check [+question] in ForceP-- make it
possible for SI to occur in main contexts as well.

That the checking of the [+question] feature is achieved by two different means
in main and embedded clauses is also shown by contrasts like the following:

(79)  a. Quale libro non ha letto nessuno?
   which book not has read noone
   Which book did noone read?
   
   b. *Cosa non ha letto nessuno?
   what not has read noone 26
   What did noone read?
   
   c. Mi hanno chiesto quale libro non ha letto nessuno
   to me have asked which book has read noone
   They asked me which book noone read
   
   d. Mi hanno chiesto cosa non ha letto nessuno
   to me have asked what has read noone
   They asked me what noone read

Such examples show that there is a main vs. embedded asymmetry with SI as
well, but it reverses that at work in V2 structures and SCLI. SI is 
unrestricted in
embedded clauses because Force is checked by something other than the wh-phrase
itself, which erases all surface differences concerning the checking capabilities of
the various types of wh-items.

One additional argument in favour of a parallel between French SI and its Italian

26. (79b) is ungrammatical only when the wh-word is interpreted as non d-linked. See (82) below.
counterpart is given by the ungrammaticality of sentences like the following:

\[(80) \quad \begin{align*}
    &a. \ast \text{Quale libro ha letto qualcuno?} \\
    &\quad \text{which book has read someone} \\
    &\quad \text{Which book has someone read?} \\
    &b. \ast \text{Quale politico vota qualcuno?} \\
    &\quad \text{which politician votes someone} \\
    &\quad \text{Which politician does somebody vote for?}
\end{align*}\]

which in our perspective should be seen as the exact counterparts of \[(81)\] in French:

\[(81) \quad \begin{align*}
    &a. \ast \text{Quel gateau a mang\`e quelqu\'un?} \\
    &\quad \text{what cake has eaten someone} \\
    &\quad \text{Which cake did someone eat?} \\
    &b. \ast \text{Quel article critiquer\`a quelqu\'un?} \\
    &\quad \text{what article will-criticize someone} \\
    &\quad \text{Which article will someone criticize?}
\end{align*}\]

Both violate the ‘anti-indefiniteness’ effect described in section 8 above and Kayne & Pollock’s (1999, section 6).

The picture we have just drawn is somewhat simplified in that the judgements concerning \textit{quale} wh-phrases in (79a) can be reproduced even with bare wh-words provided a suitable intonation is adopted, as in (82):

\[(82) \quad \begin{align*}
    &a. \text{COSA non ha fatto nessuno?} \\
    &\quad \text{what non has done anyone} \\
    &\quad \text{What has noone done?} \\
    &b. \text{A CHI non ha parlato nessuno?} \\
    &\quad \text{to whom not has spoken anyone} \\
    &\quad \text{Whom did noone talk to?}
\end{align*}\]

In (82) there is high pitch on \textit{COSa} or \textit{A CHI} and then a low level tone on the rest of the sentence. In such cases, \textit{cosa} and \textit{a chi} are interpreted as D-linked and as a consequence a SI configuration can be licitly produced.
9.4. **D-linked wh-items and non inverted structures**

D-linked wh-items can of course also be found in SCLI contexts like (83):

(83) Quale libro ha letto, Gianni?
   which book has read, G
   Which book has Gianni read?

which then show that D-linked wh-items are only optional [+question] checkers.

That more is involved in the syntax of Italian d-linked wh-phrase questions however, is shown by minimal pairs like (84a) vs (84b);

(84) a. ?(?)Quale ragazzo Gianni ha visto ieri?
   which boy Gianni has seen yesterday
   Which boy did Gianni see yesterday?

b. *Cosa Gianni ha visto ieri?
   what Gianni has seen yesterday
   What did Gianni see yesterday?

Keeping to our strategy so far, we shall try to make sense of such (somewhat marginal but clear) pairs by aligning them with French non inverted interrogatives like (84) and viewing (84a) vs (84b) in the same light as (85) vs (86).

(85) a. Quel livre Marie n’a pas lu?
   which book Marie ne has not read
   Which book didn’t Marie read?

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27 (86a) is sharply ungrammatical (86b, c) are less so, probably because they can be rescued on a marked intonation which would stress oui, qui etc. and give a low level tone to the rest of the sentence, not unlike that of Italian in examples like (82) above. Because que cannot be stressed in this way that strategy remains unavailable to (82a). Without that marked intonation (86b, c) strike the native speaker of French among us as rather sharply deviant.
b. Quel livre seul Jean a lu?
   which book only Jean has read
   Which book did only Jean read?
c. Quel linguiste seul Jean supporte?
   which linguist only Jean (can) stand
   Which linguist can only Jean stand?

(86) a. *Que Marie n’a pas lu ?
   what Marie ne has not read
   What didn’t Marie read?
b. ?*Où seul Jean part?
   where only Jean goes
   Where did only Jean go?
c. ?*Qui seul Jean supporte?
   who only Jean (can) stand
   Who can only Jean stand?

Since no inversion at all is seen in (85) we claim, as in Pollock, Munaro & Poletto (1999), that French complex wh-phrases like quel livre can in and of themselves check all the features of the invariant left periphery of interrogative sentences. When that option is chosen the complex wh-phrases in the numeration bear [+Ground] and [+question] features in addition to their usual Op1 and Op2 features; if so nothing need--hence can--happen in the IP field, which is what we see in (85a) and (86). Assuming bare wh-phrases like que, où and qui fail to have the ability to bear a [+ground] feature, another phrase must; we know from K&P and section 8 that IP itself can be [+Ground]; we also know, however, that in Remnant IP mvt to Spec GP subject topicalization must apply in the derivation of sentences like (84a) and (85); since neither have in (84b) and (86) such sentences are excluded because the ('strong') features of the French CP field of interrogatives have failed to be checked by a licit checker in overt syntax.\(^{28}\) The (84a) vs (84b) pair will follow likewise if in Italian too complex wh-phrases like quale libro can move from their IP internal argument position to the Op2 position in the CP field checking all four Op1,

\(^{28}\) An IP with a [-ground] subject cannot check a [+ground] feature in the left periphery; see section 8 and references cited there.
G, Force and Op2 features on their way. If so, there is no remnant IP movement at all in (84a), the preverbal subjects in those sentences are standing in their usual preverbal position. That explains why QPs like nessuno and solo qualcuno occur where they do in (87):

(87) a. A quale politico nessuno ha dato il proprio voto?
    to which politician noone has given his vote
    Which politician did noone vote for?

b. A quale politico solo qualcuno ha dato il proprio voto?
    to which politician only someone has given his vote
    Which politician did only somone vote for?

c. A quale politico solo Gianni ha dato il proprio voto?
    to which politician only John has given his vote
    Which politician did only John vote for?

In (88), however,

(88) a. ??A chi nessuno ha dato il proprio voto?
    to whom noone has given his vote
    Whom did noone vote for?

b. ??A chi solo qualcuno ha dato il proprio voto?
    to whom only someone has given his vote
    Whom did only someone vote for?

c. ?? A chi solo Gianni ha dato il proprio voto?
    to whom only John has given his vote
    Whom did only Gianni vote for?

since bare a chi cannot check the [+Ground] feature — or for the matter of that the [+Question] force feature, see above—, Remnant IP mvt should take place, which suffices to exclude all such examples; if Remnant IP movement to [+ground] did apply nessuno would have to first move out of IP; but there would still be a [+question] feature to check, which no element in the structure could do.

The facts concerning the acceptability of preverbal subjects in Italian wh-questions with complex wh-phrases are somewhat more fuzzy than this sketch indicates. Many speakers find (89) (much) worse than (87a).
(89) ??Quale libro nessuno legge?
which book noone reads
Which book does noone read?

Descriptively it seems that the perfect acceptability of preverbal DP or QP subjects in wh-questions with (complex) D-linked wh-phrases is contingent on the presence of an object in VP or an adverbal in postverbal position. When there is one, as in (87), a postverbal position for the subject is degraded and the preverbal position is correspondingly perfect. When no such object or adverb is present, Italian speakers seem to prefer a Remnant IP mvt strategy. 29

Contrasts of that type are not restricted to wh-questions, as the following examples show:

(90) A. Gianni ha dato il libro a Maria
Gianni has given the book to Maria

B. (a) No, NESSUNO ha dato il libro a Maria
No, noone has given the book to M
(b) *No, non ha dato il libro a Maria NESSUNO
no, not has given the book to M. noone

29. On our analysis Italian postverbal subjects in wh-questions are always derived via remnant IP movement to the left periphery. Pace Belletti (1999), it would seem natural to extend the same type of approach to all postverbal subjects in declarative clauses, as this formulation implies; we will not develop this any further here, as the task is clearly beyond the scope and topic of this paper; we simply note that any such analysis will have to account for the well-known fact --see Belletti (1988) and Belletti (1999) and much previous work-- that Italian and French have at least two different types of postverbal subjects: those of inaccusatives tolerate ne/en-extraction, while those of (in)transitives (typically) don't. See Poletto & Pollock (in prep). Rather than relying on the idea that in the former case the subjects are generated low --thus allowing for acceptable ne cliticization to some c-commanding Clitic Phrase head-- while in the latter they are generated too high for that to take place, a uniform Remnant IP mvt to the left periphery will have to claim that ne/en cliticization can apply before Remnant mvt takes place when IP contains an inaccusative though typically not when it contains intransitives (see Kayne & Pollock (1999, note 9)).
(c) No, a Maria, il libro non l’ha dato NESSUNO
no, to M., the book not it-has given noone

(91) A. Gianni vuole dare il proprio voto a Berlusconi
G. wants to give his vote to B.
B. (a) No, NNESSUNO vuole dare il proprio voto a Berlusconi
*No, non vuole dare il proprio voto a Berlusconi NNESSUNO
no, noone wants to give his vote to Berlusconi noone
(c) No, il proprio voto a Berlusconi non lo vuole dare NNESSUNO
no, his vote to Berlusconi, non it-wants to give noone

(92) A. Gianni e arrivato ieri (G. is arrived yesterday)
B. (a) ??No, NNESSUNO e arrivato ieri (No, noone is arrived yesterday)
(b) No non e arrivato NNESSUNO ieri (No, non is arrived noone
yesterday)

Such examples show that the optimal position for contrastively stressed subject QPs in Italian depends on what there is in the VP; if, as in (89) and (91), an argument fills the object position the contrastively stressed preverbal QP subject is fine; if an object is not present in the VP, on the other hand, the subject seems to require a postverbal position, as in (92).

On this basis, it seems fair to say that a finer-grained study of (89) would have to carry over to (90), (91) and (92); if so it is at least in part orthogonal to the syntax of wh- questions and beyond the scope of the present work. 30

In sum, the general picture concerning the difference between D-linked and non D-linked wh-items emerging from the above is the following: D-linked wh-phrases are in general “more liberal” than non D-linked ones in allowing for a greater variety of interrogative constructions. In our account this observation translates in terms of different checking abilities. French and Italian D-linked wh-phrases can check all

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30 (90B(a)) and (91B(a)) are not the most natural sentences in the dialogue. Most speakers would probably prefer to left-dislocate the constituent inside the VP and have a postverbal contrastively stressed QP, as in (90B(c)) or (91B(c)).
the ("strong") features activated in the different layers of invariant interrogative left periphery repeated in (91) --i.e. Op1, Ground, Force and Op2--:

(93) \[ \text{Op2P Op2} ^o \left[ \text{ForceP Force} ^o \right] \left[ \text{GroundP G} ^o \left[ \text{TopP Top} ^o \left[ \text{Op1P Op1} ^o \text{ IP } \right] \right] \right] \]

When this obtains non inverted structures are derived where no displacement other than "pure" wh-movement can take place. In Italian or French, D-linked wh-phrases need not check the [+ground] feature; when that obtains Remnant IP movement to GroundP must take place, resulting in main clause SI configurations; as for non D-linked wh-items like cosa, a chi etc. they only check Op2 and Op1 in Italian which excludes them from acceptable root SI structures; in that respect they are like French pourquoi, which shows the same distribution; as a consequence Italian cosa, a chi etc. and French pourquoi are only compatible with SI in embedded contexts --where some form of lexical checking of the [+question] feature of ForceP takes place-- ; in root contexts they thus force the 'pro-inversion' and SCLI strategies. 31

This analysis of the various wh- configurations in French and Italian thus relies

31. Contrasts like (i) and (ii)

(i) ??Je crois qu'est parti Jean
   I think that is left Jean
   I think Joh has left

(ii) Je doute que soit parti Jean
    I doubt that be left Jean
    I doubt that John has left

might conceivably be viewed in the same terms, with the subjunctive making a groundP layer fully available in non interrogative subordinates which indicatives would typically ban. On the non availability of SI in yes/no questions and si subordinates see below. See Kayne & Pollock (1999, part 2) for an analysis of such contrasts relying on subject extraction from the subordinate and Remnant movement to the Comp domain of the matrix clause rather than on Remnant Movement to the left periphery of the embedded sentence.
on two differences between the two languages: the (non controversial) fact that Italian is a pro drop language and the deficient character of non D-linked, bare wh-phrases in Italian which prevents them from checking [+question] in Root clauses, thereby obligatorily triggering (non lexical though overt) SCLI configurations at spellout.

10. Conclusion: on Characterizing the Left Periphery of Questions.

The five functional projections ForceP, GP, Op1P, Op2P and TopP that the present work, capitalizing on previous research by Kayne & Pollock (1999), Pollock, Munaro & Poletto (1999), Poletto & Pollock (1999), has added to the standard interrogative ForceP of (wh-)questions (in Romance) have so far been motivated only syntactically; consequently the labels that we have given them have remained essentially mnemonic; it is worth pointing out that this is a perfectly legitimate move, which we share with most work on the fine structure of the IP and CP fields conducted over the last 15 years or so (see e.g. Pollock (1989), Cinque (1999)); the logic that leads to the identification of five different positions in the left periphery, as expressed in the hierarchy of functional projections in (93), should be familiar, although we have kept it implicit so far; we have been claiming in effect that without (93) it would be very difficult to account in a unitary and principled fashion for the syntax of (subject positions in) wh-questions in French, Italian and Bellunese; more precisely we have been arguing that (93) allows for a natural account of the apparently idiosyncratic behavior and location of the (bare) wh-words in the three languages and the various properties of postverbal subjects in different types of wh-questions; without (93) no such explanatorily satisfying account would be possible. This is because (93) has five different sites in the left periphery of questions to which various phrases can be attracted, in accordance with the usual requirements of checking theory, which gives just the leeway that the word order phenomena studied here\textsuperscript{32} seem to require if they are to be integrated in the explanatory framework for comparative syntax developed in generative grammar.

\textsuperscript{32} See Poletto (2000) and Obenauer & Poletto (1999) for arguments that other higher positions must be added to (94) when rhetorical questions are taken into account.
over the last twenty five years or so.\textsuperscript{33}

Let us summarize and highlight the chief properties of, and motivations for, the different positions of (93) as they emerge from the preceding discussion.

Starting with the lowest and highest layers, Op1 and Op2, Bellunese wears on its sleeves the fact that they attract different types of wh- elements or, in case of pied piping, different features in the same wh-phrase. ‘OpP1’ is the spell-out position in which all bare wh- words in Bellunese obligatorily stand in sentences like (94),

\begin{enumerate}
\item a. Ha-tu magnà chè?
   
   have you eaten what
   
   What did you eat?

\item b. Se-tu ‘ndat andè
   
   are you gone where
   
   Where did you go?
\end{enumerate}

and through which all wh-words move on their way to (ForceP and) Op2P in French and Italian. Op2 is the position that attracts phonetically overt elements like $cos(s)a$ or their null counterparts Rest., as discussed in section 7. Postulating those two positions is virtually forced on one by the “doubling” configurations in Bellunese and various other NIDs (see examples (30)-(32), section 7). On this basis, we have made what we take to be the null hypothesis and claimed that the two positions exist as well in the other Romance languages examined here; if so the ‘high’ position in which all the French and Italian wh-phrases surface at spellout is the Restrictor position, not the wh- (operator) position; wh- items reach it for the same reason complex wh-phrases in Bellunese do in sentences like e.g. \textit{Che vestito à-la comprà?} (what dress has she bought?), namely because UG makes it impossible in such cases

\textsuperscript{33} The assumption is that anything does NOT go in the variation among languages, more precisely, that surface differences in the syntax of languages as closely related as French, Bellunese, the Northern Italian dialects and Italian, however bizarre in appearance, like the respective surface distribution of \textit{que} and \textit{che} in French and Bellunese (see 2 above), should follow from the interplay of general UG principles and a limited set of parameters, often tied to the morphology of each language. The analysis developed above fits into that general picture fairly well although, of course, the fact that it does doesn’t suffice to make it right.
to only attract the restrictor of the variable bound by che (see also discussion of (40), (43) and (44) above).

What this is saying, then, is that the familiar distinction between binding and strong binding (see e.g. Chomsky (1986, 85)) is syntactically encoded in the left periphery of questions in (some of) the Romance languages; that that distinction should be expressed syntactically is not particularly surprising; what is a little more surprising, perhaps, is the ordering and hierarchy of the two functional layers that express it; the domain restrictor is specified (checked) later in the derivation, hence is structurally higher, than the variable binding by the wh- operator. But then our surprise may well only be due to our incorrectly expecting languages to mimic the formulas of familiar logic in too direct a way.

Our TopicP and Force P are more familiar; TopP is the position to which the subject of SI and the various participial and infinitival complements of the finite

34. What this formulation implies is that (wh-) quantification is read --i.e. fed to the Conceptual/intensional systems-- ‘on line’; the question of whether non wh- operators can also stand in or move through Op1/2P cannot be discussed here; in the likely event that they don’t --despite French sentences like Il faut tous qu’ils partent (‘They must all that they go’ = they must all go)--, our ‘OpP’ label will remain apt if UG regulates the choice of the different operator positions to which different types of operators are attracted and from which they (weakly) bind their variables; this is the tacit assumption concerning the position to which QPs like beaucoup move in French QAD (‘quantification at a distance’) constructions like (i) --on which see Obenauer (1984), (1994):

(i) Il a beaucoup lu de livres
    he has many read of books
    He read a lot of books

Beaucoup in (i) is presumably standing in an IP internal operator position, but that position cannot host wh-phrases --cf. (ii):

(ii) *Il a combien lu de livres?
     he has how many read of books
     Did he read lot of books?
verb in SCLI are attracted; that the postverbal subject of French—and Italian—SI constructions stands in such a (high) position in the left periphery is argued for at length in Kayne & Pollock (1999, part 1) and we have repeated some of their basic arguments in section 8 above; in addition, the label ‘TopP’ plays an important role in explaining the anti-indefiniteness effect of postverbal subjects in SI; as for our ‘ForceP’, it is the layer made familiar by recent litterature on the left periphery and the use we have made of it is fairly standard; our only (major) innovation is our claim that Remnant IP Movement to Spec Force, rather than head movement to Force, is at work in French SCLI and its (covert) variants in Bellunese and Italian (see 2, 3, 4, 5).

It is worth stressing that if this is on the right track, ALL question related verb movements in Romance are cases of Remnant Movement; in particular Remnant IP movement in SI only differs from Remnant IP movement in SCLI—and CI (see Pollock (2000))—in targeting a different layer of the Comp domain, Kayne & Pollock’s (1999) ‘GP’ rather than ForceP. We believe that this unitary approach to the verb related displacements to Comp should be regarded as a step forward, especially if we are correct in our tentative account of why Remnant IP movement to GP crucially forces the subject to vacate it SpecIP position while in SCLI—and more obviously so in CI—no such requirement holds (see section 8); our analysis of this major difference has hankled on the fortunate homophony between K&P’s (abstract) ‘GP’ and our own ‘GroundP’; it states, fairly naturally, that all elements in a [+ground] IP must also be [+ground]; on the assumption that non pronominal DPs in Romance can never be [+ground] we expect them to move out of IP, which is what we see in SI;36 In SCLI and CI on the other hand, Remnant IP Movement is

35. If English in particular and the Germanic languages in general didn’t share that restriction we might consider that sentences like Who has John rung up? are derived via exactly the same Remnant IP movement to Force as its French counterpart Qui a-t-il appelé? On this see Poletto & Polock (in prep).

36. This formulation implies that there should be cases of (concealed) stylistic inversion with a [+ground] pronominal subject; Poletto & Polock (1999), (in prep) do in fact claim that pairs like (i) vs (2) in French follow from the fact that in (i) (string vacuous remnant) IP movement to GP is possible though it is not in (ii), for the reason just stated in the text:
triggered by a [+question] feature and a sentence can be so characterized regardless of its having a [+ground] subject or not; it must be stressed that in viewing K&P’s “GP” and our “GroundP” as one element we have been exploiting a general view of the left periphery also developed in Poletto (1999) and Benincà & Poletto (1999) in which the left periphery (of questions) divides fundamentally into two subparts, a lower half in which ‘new’ information is located and a higher half in which the ‘known’ information stands, a hierarchy which our (93) respects.

The present work has made very crucial use of GroundP since it has claimed it is obligatorily present in the left periphery of Romance (wh-) questions; it must therefore attract a constituent appropriately marked to its specifier; when that is impossible a non converging derivation obtains; in our analysis a variety of constituents can be so displaced.

Firstly, D-linked (complex) wh-phrases, as in French Combien de linguistes Marie a rencontrés? (how many linguists Mary has met?) and Italian Quanti linguisti Maria ha incontrato (same).

Secondly, (Remnant) IP, yielding French and Italian SI (cf. sections 9.1 and 9.2) like A qui a téléphoné Marie? (to whom has telephoned Marie?), A quale ragazzo ha telefonato Maria? (to which boy has telephoned Maria?)

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(i) a Où il va?
    where he goes
    Where is he going?

b Qui t’as vu
    who you’ve seen
    Whom did you see?

(ii) a ??Où Yves va
    where Yves goes
    Where is Yves going?

b ?? Qui Paul a vu
    who Paul has seen
    Whom has Paul seen?

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37. And possibly apparent non inverted sentences like Où il va? (Where he goes?) Quand elle a téléphoné? (when she has phoned?) etc. (see previous footnote) as well as subject extraction
Thirdly, (overt or covert) subject clitics in French, Bellunese and Italian SCLI configurations like *A qui a-t-elle parlé? (‘To whom has she spoken?’)

Consider Remnant IP movement to GroundP first, the idea that the non wh-part of IP somehow denotes presupposed knowledge has been taken for granted by most work on the syntax and semantics of wh-questions in generative grammar since at least Katz & Postal (1964); put in very informal terms, this is saying that ‘who did you see’ should be analyzed as ‘presupposition (you saw someone) & wh (someone)’, ‘who saw you?’ as ‘presupposition (someone saw you) & wh (someone)’, ‘when did you leave?’ as ‘presupposition (you left at some time, & wh (some time)’ etc.; on that view a [+ground] IP is attracted to the syntactic layer of the left periphery that is cross-linguistically devoted to the expression of shared or presupposed information. We may note in passing that this (re)interpretation of Remnant IP movement in SI may well offer an account of the well-known fact that the interrogative *si complementizer of French, unlike pourquoi, does not allow for SI in embedded interrogatives and for the fact that root yes/no questions ban SI altogether:

(95)  

a. *Je ne sais pas si a téléphone Marie  
I know not if has phoned Marie  
I do not know if Maire has phoned  
b. *A téléphone Marie?  
has telephoned Marie  
Has Marie phoned?

If *si lexicalizes Force°, as commonly assumed --see e.e. Kayne (2000, chapter 4)-- and checks the [+question] feature of the embedded sentence, we can --probably must-- impute the ungrammaticality of (95) to the fact that IP is not ‘presupposed’ in yes/no questions in general and in *si subordinates in particular. If so the attracting IP to the GroundP layer in yes/no questions like (95) cannot yield a converging derivation.

Going back to the other two ways of checking [+ground], the fact that D-linked (complex) wh-phrases should be able to do so is natural; D-linked wh-phrases do not

sentences like Qui est venu? (Who came?) in which it is very tempting to say that string vacuous Remnant IP movement has (obligatorily) applied. See Polletto & Pollock (in prep)
contain information shared by the speaker and hearer since the domain over which the variable bound by *lequel, quale, combien* can range in sentences like *Lequel de tes amis Marie va épouser?* or *Quale libro ha letto Gianni?* is known to both hearer and speaker at the relevant stage in discourse; if so, nothing precludes taking the relevant part of the wh-phrase as [+Ground], allowing it to move to Spec GroundP; that *non* D-linked wh-phrases should on the contrary be incapable of so moving also follows from the same consideration since the range of the variable bound by bare wh-phrases like *qui, que, où, comment* etc. is (typically) unknown to the speaker. That other [+ground] elements like (non assertive) nominative clitic pronouns should be similarly attracted in SCLI also seems fairly natural.

The left periphery of SCLI --and French CI-- and SI share a ground layer but they

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38. But see (discussion of) (82) on D-linked COza etc. The fact that Remnant IP mvt and SCLI are still possible options in sentences like (i) containing D-linked wh-phrases,

(i) a Lequel de tes amis ont rencontré Marie et Jean
    which of your friends have met Marie and Jean
    Which of your friend did Marie and Jean meet?

b Quale libro ha letto, Gianni?
    which book has read, Gianni
    Which book did Gianni read?

we take to follow from a possible option in the assignment of the ground feature either to IP or to the D-linked (complex) wh-phrase. The numerations of (i) and (ii) are thus crucially different:

(ii) a Lequel de tes amis Marie et Jean ont rencontré?
    which of your friends Marie and Jean have met
    Which of your friends did Marie and Jean meet?

b Quale libro ha letto Gianni?
    which book has read Gianni
    Which book did Gianni read?

since in (ii) '(*lequel de*) tes amis' and 'Quale libro' are [+Ground] while I(P) is in (i); this should most probably be tied to the 'salience' of what counts as Ground in the discourse.
differ crucially in their sensitivity to the root vs embedded asymmetry. French and Italian SCLI only obtain in root contexts; Italian has a less well-known though equally interesting pattern of facts which reverses the root vs embedded asymmetry: its SI is unrestricted in embedded contexts and restricted --in fact impossible with non D-linked wh-phrases-- in main wh-questions, as pairs like (96) show:

(96) a. *Dove va Maria?
   Where goes Maria
   Where is Maria going?

   b. Dimmi dove va Maria
      tell me where goes Maria
      Tell me where Maria is going

The root vs embedded contrast exhibited by SCLI structures will follow, as standardly assumed, if the Comp domain targeted by Remnant IP movement in root SCLI has its feature checked by the matrix verb in embedded contexts.\(^{39}\)

Italian pairs like (96) we have interpreted as showing that the [+question] Force feature cannot be checked by remnant IP movement; if so (96a) shows that Italian bare wh-phrases cannot check the [+question] feature; (96b) now follows since embedded questions have their force feature checked by the matrix verb.

In sum, the five basic projections of the left periphery of (some of) the Romance wh-questions trigger the following computations:

a) OP1 and OP2 features are checked by the wh-item, or by their ‘restrictor’ in doubling constructions;

b) The topic feature can be checked either by a DP subject in SI sentences or by the lower portion of IP corresponding to AspP (see footnote 8) in SCLI contexts;

c) [+ground] can be checked either by remnant IP movement, by the wh-item if its internal structure contains a [+ground] feature (as in D-linked wh-phrases) or by lexical or non lexical subject clitics;

d) [+question] Force can be checked by the wh-items themselves in SI sentences,

\(^{39}\) Although we have remained vague as to the precise mechanism that allows this (lexical) checking. See Poletto & Pollock (in prep).
unless they are "defective" like French *pourquoi* and Italian non D-linked wh-items; remnant IP movement can also check that feature, as in SCLI contexts; lexical checking by a selecting verb plays the same part in embedded contexts.

Although our semantic characterisation of the various layers of (93) has remained very informal we feel it has some good first approximation plausibility; the unified treatment of SCLI, SI, Bellunese wh-in situ, wh-doubling in French, Bellunese and Italian that (93), our highly "split" complementizer area, makes possible is an indirect but cogent argument that at least that level of complexity is required if a truly explanatory account of the syntax of questions in Romance is to be ultimately developed.
On the Left Periphery of Some Romance Wh-Questions

References


