#### ANOTHER LOOK AT WH-QUESTIONS IN ROMANCE

## THE CASE OF MENDRISIOTTO AND ITS CONSEQUENCES FOR THE ANALYSIS OF FRENCH WH- $IN\,SITU$ AND EMBEDDED INTERROGATIVES $^1$

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This article will attempt to show that there are at least two types of wh-doubling in Romance. In some languages, such wh-doubling involves a complex DP of the form [clitic wh-, wh-phrase], as in Illasi, Monno and the other North Eastern dialects of Italy studied in Poletto & Pollock (2004), Munaro & Pollock (2005). In others, such doubling configurations will be argued to result from merging a complex DP of the form ['weak' wh-element, wh-phrase] in argument position. The latter we shall show to be at the root of (some) doubling wh-structures in Mendrisiotto, the language spoken in Mendrisio and its surroundings. Correspondingly Mendrisiotto displays a tripartite distinction among wh-items: not only does it have clitic and strong ('tonic') wh-items but also weak wh-words, in the sense of Cardinaletti & Starke (1999).

As in our previous work on the Northern Italian dialects we shall show that the structures and derivations at work in Mendrisiotto shed light on the syntax of French questions. Just as Illasi suggested very strongly that clitic que ('what') in French was paired with a null (strong) associate, Mendrisiotto suggests equally strongly that French quoi ('what') is the lexical counterpart of the null associate of the weak form cusa ('what') in Mendrisiotto.

This hypothesis will be shown to play a major part in a satisfactory explanation of many apparently specific properties of French quoi. The rest of paper will provide a new analysis of French embedded ce+que questions, (Qu-) est-ce que questions, 'diable' questions and so-called wh-in situ constructions.

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This article wouldn't have come into existence without the patient help of three Mendrisiotto informants whom we pestered for long hours: Piermario Croci and his wife and Franco Lura. It was presented in preliminary form at the UMR 7023 round table organised in Paris by Hans Obenauer in December 2006, at the twentieth 'Going Romance' conference that took place in Amsterdam on December7<sup>th</sup> and 8<sup>th</sup>, 2006, and at the Whorkshop on French interrogatives organised by Ur Shlonsky in Geneva in February 2008. Many thanks to the audiences of these conferences for fruitful comments and discussion and to an anonymous reviewer for many pertinent remarks. Each of us has contributed to each and every part of this article but for administrative reasons in Italy Cecilia Poletto takes responsibility for sections 1, 2, 3 and Jean-Yves Pollock for sections 4, 5, 6.

#### Introduction

This article has three main descriptive goals:

- A. We shall show that there are (at least) two types of wh-doubling in Romance, one involving a [clitic wh-, wh-phrase] pair, the other a ['weak' wh-element, wh-phrase] pair. Correspondingly, we shall show that in addition to the well known syntactic split between wh-words and wh-phrases in many Romance and Germanic languages, Mendrisiotto displays a hitherto undocumented tripartite distinction among wh-items: not only does it have clitic and strong ('tonic') wh-items (see Poletto & Pollock (2004b)) but also weak wh-words, in the sense of Cardinaletti & Starke (1999).
- B. In order to begin to account for this tripartite distinction we shall argue that the internal structure of wh-items contains several distinct functional features that can be spelled out as the various elements involved in the various wh-doubling configurations of Mendrisiotto.
- C. As in our previous work on Illasi and Monno (cf. Poletto & Pollock 2004b²) we shall show that the structures and derivations at work in Mendrisiotto shed light on better-known Romance languages, French among them. Just as Illasi suggested very strongly that clitic *que* ('what') in French was paired with a null (strong) associate, Mendrisiotto suggests equally strongly that *quoi* ('what') is the lexical counterpart of the null associate of the weak form *cusa* ('what') in Mendrisiotto. Various advantageous consequences will be seen to follow from this hypothesis which will derive all the 'odd' properties of French *quoi* and *ce+que* questions and suggest a new revealing analysis of the syntax of French wh-*in situ* constructions<sup>3</sup>.

Beyond its attempt to describe and explain previously undocumented facts —a worthy enterprise in its own right without which the second goal could never be reached—, this article can thus be read as an exercise in micro-comparative syntax attempting to show how the uniquely preserved dialects of Northern Italy (and south west Switzerland) can shed light on longstanding problems and puzzles in the syntax of better known Romance languages. The article is constructed as follows: section 1 sums up previous results and analyses on overt and covert whdoubling. Section 2 introduces the Mendrisiotto data we shall be concerned with and section 3 offers our analysis of these data. Section 4 and 5 extends our findings to French interrogative syntax: French *in situ* questions in section 4, embedded questions, (spurious) cleft and 'diable' ('the hell') interrogatives in section 5. Section 6 concludes the paper.

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<sup>&</sup>lt;sup>2</sup> See also Beninca & Poletto (2004).

<sup>&</sup>lt;sup>3</sup> We always use the term '*in situ*' pre-theoretically to refer to surface strings where the wh-words and phrases stand in some right edge position in the clause. This, we shall argue, is syntactically misleading: all such cases in French and Mendrisiotto involve pre-spell-out wh-movement to the left periphery, followed by Remnant IP movement.

## 1. A Reminder: Wh-Configurations of the Illasi Type (Poletto & Pollock 2004b)

Unlike national Romance languages like Italian, Spanish, Portuguese, Romanian or French, many Northern Italian dialects exhibit wh-doubling configurations, as in (1) and (2a, b):

(1) a. S'a-lo fat che? Illasi (Verona) Wh-clitic doubling

What has-he done what?

'What has he done?'

b. Ndo e-lo ndat endoe?

Where is-he gone where?

'Where has he gone?

c. Ci alo visto  $ci^{94}$ 

Whom has he seen whom?

'Who has he seen?'

(2) a. Ch'et fat què? Monno (Brescia) Wh-clitic doubling

What have-you done what?

'What have you done?'

b. Ngo fet majà ngont?

Where do you eat where?

'Where do you eat?'

c. Ch'et fat? Wh in first position

Wh in situ

What have-you done?

'What have you done?'

d. Ngo fet majà?

Where do-you eat?

'Where do you eat?'

e. Fet fà què?

Do-you do what? 'What have you done?'

f. Fet majà ngont?

Do-you eat where?

'Where do you eat?'

In such doubling configurations the two wh-words that make up the doubling pair do not have the same shape or status. We have claimed in Poletto & Polock (2004b) that the phenomenon illustrated in (1) and (2) is analogous to DP doubling, where both a clitic and a phrase appear in the same sentence and share case and thematic role. Furthermore, the analysis of DP doubling originally put forth by Kayne (1972)

<sup>&</sup>lt;sup>4</sup> Where the two forms are identical as they are here we assume that the clitic and the full form are homophonous, This often happens in the pronominal system of various Romance languages, For instance Rhaetoromance *al* is both the clitic and the tonic form of the third person singular masculine subject pronoun, just as nominative and accusative first and second person plural *vous/nous* are in French.

and developed in Uriagereka can and should carry over to wh-doubling: the whclitic and the wh-phrase, start out as a single complex item and then split and move to different projections, due to the distinct features they have to check.

In Monno and Illasi the wh-word sitting at the left edge of the sentence do have all the properties that are traditionally associated with clitics (see Poletto & Pollock 2004b). French que shares these clitic properties with ngo, ch', s', ci in the dialects. Given this state of affairs, the null hypothesis seems to be that clitic wh-words do what all pronominal, negative and adverbial clitics have to do, namely find a cliticisation site within the IP internal clitic field. Let us then say that ngo, ch', s', ci in (1)-(2), as well as French que, do cliticise to a (set of) designated wh-clitic slot(s) within IP. Once that step is taken, one expects (some minimalist version of) the Head to Head constraint to prevent those wh-clitics from reaching their (high) left periphery target, unless they are 'smuggled' to a position adjacent to it by some other computation. Poletto & Pollock (2004b) argued that Subject Clitic Inversion is the computation that gives wh-clitics the 'free ride' they need and further that SCLI must be reanalyzed as (yet another instance of) Remnant IP movement (to ForceP) (See Pollock (2003), (2006)). It now follows that if, for independent reasons, that computation is not available the relevant clitic wh-words will be 'stuck' in IP hence failing to reach their target in the CP field and causing the derivations in which they are involved to crash. This is what accounts for the (surprising) ungrammaticality of French sentences like \*Que tombe? ('What falls?'), \*Que tu veux? ('What (do) you want?') \*Tu veux que? ('You want what') etc. and for the corresponding cases in the dialects.

Concerning wh-doubling now, the null hypothesis is clearly that one should deal with it as a sub-case of pronominal doubling. Assuming so, Poletto & Pollock (2004b) argued that the doubling pairs in (1) and (2) were merged in argument position as a wh-pair whose head is the wh-clitic and the specifier a (null or lexical) phrasal wh-word, as sketched in (3a):

It was argued further in that work that each member of such complex wh-pairs have a different target in the 'highly split' CP field of questions in (3b), argued for at length in Kayne & Pollock (2001), Munaro, Poletto & Pollock (2002), Poletto & Pollock (2004a, b), Munaro & Pollock (2005), Pollock (2003), (2006). The (lexical or null) clitic wh-word's target is the 'high' WhP1- layer while the 'strong' (lexical or null) wh-word's target is the 'low' WhP2 layer of (3b) where, in addition, the GroundP and ForceP layers are targeted by various instances of Remnant IP movement. In sum, Poletto & Pollock (2004b) attempted to offer an integrated comparative analysis of (wh-)clitic doubling, clitic wh-words and the various syntactic configurations in which they occur in the dialects and in French.

<sup>&</sup>lt;sup>5</sup> On this notion see Poletto & Pollock (2004b) and Collins (2004).

#### 2. Mendrisiotto<sup>6</sup>

Mendrisiotto shares with French, Illasi and Monno clitic wh-words. It has two: sa/se 'what' (not to be confused with s'è see section 3.4. below) and ma/me 'how' (where sa/ma are mere phonetic variants of se/me). As clitics, sa/se and ma/me cannot occur at the right edge of the sentence, cannot be isolated utterances, cannot be objects of a preposition etc. as illustrated in (4). Like the wh-clitics of Illasi and Monno they can either occur alone in the left periphery or in doubling configurations (see (5)). When they do, they always sit at the left edge of the sentence. Mendrisiotto also has full wh-forms, quand, cuse, indue, and cume which can occur alone at the right edge of the sentence, almost always under a 'Surprise-Disapproval' or 'can't find the value' interpretation (henceforth S/D).

(4) a. \*Sa? Se?

What?

b. \*Da se? \*Da sa?

From what?

c. \*Ta mangiat sa?

You eat what?

#### Wh-clitic doubling

(5) a. Sa/se ta fet (cumè)?<sup>8</sup>

What you do how?

'How do you do it?'

b. Sa ta mangiat (cusè)?

What you eat what?

'What are you eating?'

c. Me ta l è cüsinaa (cumè)?

How you it have cooked how?

'How do you cook it?'

#### Wh-in-situ

(6) a. T'è metüü i ciaf induè? (S/D or 'can't find the value' question)

You have put the keys where?

'Where the hell did you put the keys?'

b. T'è fai cusè? (S/D or 'can't find the value' question)

You have done what?

'What on earth have you done?'

<sup>&</sup>lt;sup>6</sup> Mendrisiotto is the dialect spoken in Mendrisio and its surroundings. Mendrisio is a small town on the Swiss side of the border between the Ticino district of Switzerland and Italy.

<sup>&</sup>lt;sup>7</sup> On these notions see, among other work by him, Obenauer (2006).

<sup>&</sup>lt;sup>8</sup> Note that *Sa/se* can double both *cusè* and *comè* in Mendrisiotto, suggesting a closer link between the two interrogative pronouns than meets the eye.

Unlike their Bellunese, Illasi and Monnese opposite numbers, however, *cusè*, *induè*, *quand* and *cumè* can also surface alone at the left edge of the sentence:

(7) a. Quand ta vet a Milan

Wh- in first position

When you go to Milan?

'When are you going to Milan?'

b. Cusè ta mangiat?

What you eat?

'What are you eating?'

c. Da cusè ii parlàa?

Of what have-you talked?

'What are you talking about?'

d. Cume el va a scöla?

How he goes at school?

'Is he a good student?'

e. Induè tal metat?

Where you-it put?

'Where are you going to put it?'

chi <sup>9</sup>and complex wh-phrases like con quanti omen (how many men), che libru (what book) etc. can never be doubled,

(8) a. \*{sa, se, cosa, cosè} (che) t è cataa fö che libru?

What (that) you have taken out which book?

'Which book have you found?'

b. \*Sa ta parlat de sta roba con quanti omen?

What you talk of this thing with how-many men?

'With how many people do you talk about this?'

c. \*Chi ta incuntrat sempru chi?

Who you meet always who?

'Who do you always meet?'

but *da cusè* counts as a 'simple' wh-word for doubling purposes, hence *can* be doubled: 10

(9) Se/sa ta parlat da cusè?

What you talk about what?

'What are you talking about?'

<sup>&</sup>lt;sup>9</sup> Mendrisiotto *chi* thus differs markedly from its Illasi, Monno or Bellunese opposite numbers; compare (8c) and (1c) above for example.

<sup>&</sup>lt;sup>10</sup> In that respect Mendrisiotto  $da\ cus\grave{e}$  is like Bellunese  $di\ che$ , which can also be doubled – by a null clitic cf. Polletto & Pollock (2004b), Munaro (1999, 50). In the NIDs doubling with PPs is restricted to functional prepositions like (some cases of)  $\grave{a}$  and de in French and is impossible with lexical prepositions like against, for, with etc. The set of functional prepositions may vary slightly from one language or dialect to the next; so in and with in Italian may count as functional at least when suppletion takes place  $(col, nella\ etc.)$ ,  $\grave{a}$  and de in French cases like  $de+le \Rightarrow du$ ,  $\grave{a}+le \Rightarrow au$  may also count as functional.

Mendrisiotto strikingly differs from Monno, Illasi and Bellunese in not having subject clitic inversion. In that respect it is like (one variety of spoken) French. Yet, differently from French, its clitic wh-words can occur in such non inverted interrogatives. Therefore minimal pairs like (10) arise:

(10) a. Sa ta mangiat? Mendrisiotto

What you eat

'What are you eating?'

b.\*Oue tu manges? French

What you eat

'What are you eating?'

Mendrisiotto further shares with French (and many other NIDs) a very extensive use of what Munaro & Pollock (2005) dubbed 'Qu-est-ce que' structures, i.e. different varieties of cleft questions like (11) to (14):

(11) Da chi l'è che ta parlat?
About whom it is that you talk?
'What are you talking about?'

Clef wh-questions

- (12) Chi l'eva che t'è parlaa de sta roba
  Who it was that to you has talked of this thing?
  'Who told you about this?'
- (13) \*Chi eva che t'è parlaa de sta roba
  Who was that to you has talked of this thing?
  'Who told you about this?'
- (14) Chi è che t'è parlaa de sta roba
  Who is that to-you has talked of this thing?
  Who told you about this?'

The two types of 'Qu-est-ce que' constructions in (11)-(12) and (13)-(14) have different properties. (11)-(12) have a nominative expletive subject l' and their copula can be inflected for tense. (13)-(14) lack the expletive clitic subject and their copula is only inflected for present tense.

We assume here Munaro & Pollock's (2005) analysis of French and Northern Italian clefts. It is shown in that work that there are two types of cleft constructions. One is a 'real' biclausal cleft, in which the copular clause has a clitic subject (*ce* in French and *l'* in Mendrisiotto) and the copula can inflect for all tenses. The other is a 'spurious' cleft, in affect a monoclausal construction, where the copular clause originates in the CP layer of what is only apparently its embedded clause. In such cases the predicate of the copular clause is null in Mendrisiotto and *ce* in French. In such structures the copular clause is "frozen" as tense distinctions are not found

and subject clitics are banned.<sup>11</sup> It can be shown that the two types of cleft constructions have a different distribution, occurring as they do with different types of wh-items. We refer to Munaro & Pollock (2005) for detailed arguments in favour of the idea that (some) cleft clauses can be monoclausal.

As is also the case in some (mainly rural sounding) varieties of French, Mendrisiotto in addition to those two types of clefts has 'simple' wh-*che* interrogatives, in which no copula shows up between the wh word and the complementiser:

(15) a. Cun chi (che) ta mangiat, stassira?

With whom that you eat tonight?

'With whom are you going to eat tonight?'

b. Chi (che) vegn stassira?

Who that comes tonight?

'Who is coming tonight?'

c. Cusè (che) ta mangiat?

What that you eat?

'What are you eating?'

d. Cumè (che) al sa cumpurta a scöla

How that he him behaves at school?

'How does he behave at school?'

In addition to clitic and strong wh-words, Mendrisiotto has two wh-forms *Cusa* and *Cuma* which we shall analyse as 'weak' wh-forms in the sense of Cardinaletti & Starke (1999). Adopting Cardinaletti & Starke's tests for weak pronouns, *Cusa* and *Cuma* do indeed behave as weak elements: they can neither occur sentence internally nor to the immediate left of a complementiser in *wh-che* questions: they must be adjacent to (the pronominal clitics adjacent to) a finite verb, They thus have a fixed position in the clause, just as weak pronouns. Moreover, they cannot bear focus and do not occur in isolation. <sup>12</sup>

(16) a. Cusa ta mangiat par solit?

What you eat for usual?

'What do you usually eat?'

SCL is nero

<sup>&</sup>lt;sup>11</sup> An anonymous reviewer correctly points out that it could simply be assumed that a subject clitic is only necessary in the past tense. However, this assumption would be hard to reconcile with the fact that a subject clitic *is* obligatory in those copular constructions which are *not* part of a cleft interrogative, as shown in (i):

<sup>(</sup>i) l'è nero

<sup>(</sup>ii) \*è nero

<sup>&</sup>lt;sup>12</sup> One cannot test *Cusa* and *Cuma* for coordination and modification since coordination would yield semantically ill-formed sentences and modification would yield complex wh-phrases, not wh-words.

b. Cusa l'è che ta mangiat?

What it is that you eat?

'What is it that you eat?'

c. \*Ta mangiat cusa?

You eat what?

d. Cuma ta l'è cüsinaa?

How you it have cooked

'How did you cook it?

Like clitic wh-words 'weak' wh-pronouns can double full forms, provided they are in the environment they require:

(17) a. Cusa t'è fai cusè?

What you have done what?

'What have you done?'

b. Cuma ta l'è cüsinaa cumè?

How you it have cooked how

'How did you cook it'

The table in (18) sums up the Mendrisiotto facts described in this section. The next one will attempt to analyse them:

(18)							
	Clitic do	ubl	Wh-che	Wh in first position	Wh in situ	Cleft	Weak doubl
What		+	+	+	+	+	+
Sa/cusa/cusè							
de+wh		+	+	+	+	+	+
de cusè							
How		+	+	+	+	+	+
Cuma/cumè							
Where		_	+	+	+	+	+
Indua/i	ndué		. /				
When		_	+/-	+	+	+	_
Quand Who			1./	1	1		
w no Chi		_	+/-	+	+	+	_
Wh-phi	nasa	_	+	+	+	+	_
Quanti			'	ı.	1	'	
Why	11011	_	_	+	+	_	_
Parch	è			·	•		

#### 3. Analysing the Various Wh-Paradigms of Mendrisiotto

3.1 (Simple) Wh-Clitic (doubling) Configurations

The first thing our comparative analysis must explain is the pair in (10), repeated in (19) vs (20) below:

(19) Sa ta fet (cusè)? (Mendrisiotto)
What you eat (what)?
'What are you eating?'

(20) \*Que tu manges? (French)
What you eat
'What are you eating?'

Our guiding intuition here is that such pairs stem from a difference between the two languages that is orthogonal to their wh-syntax: subject clitics in Mendrisiotto in particular and (most of) the NID's in general stand lower in the IP field than their French opposite numbers. As a consequence, the wh-clitic position to which the clitic wh's move as phrases stands *above* subject clitic *ta* in Mendrisiotto but *below* French *tu*. As a consequence, clitic *que* will not reach its high Wh1 position in French – because of various intervening heads (see Poletto & Pollock (2004a) – but *sa/se* will.

Granted this, the (simplified) derivation we suggest for (19) can be sketched as shown in (21):

- (21) Input [IP ta fet [sa,  $\{cus\grave{e}, \emptyset]$ ]
  - (a) Attract *sa* to interrogative Clitic Phrase within IP  $\Rightarrow$  [IP sa; ta fet [t;, cusè]]
  - (b) Merge Op1 and IP and attract {cusè,  $\emptyset$ } to Op1P  $\Rightarrow$  [Op1P {cusè<sub>i</sub>,  $\emptyset$ <sub>i</sub>} Op1° [IP [sa<sub>i</sub> [ ta fet [ t<sub>i</sub>, t<sub>i</sub>]]
  - (c) Merge ForceP and OP1 and attract remnant IP to Spec Force  $\Rightarrow$  [ForceP [IP [sai ta fet [  $t_i$ ,  $t_j$ ]]<sub>m</sub> F° [Op1P {cusèj ,  $\emptyset_j$  }Op1°  $t_m$ ]]]
  - (f) Merge Op2P and ForceP and attract sa to Op2°  $\Rightarrow$  [Op2P sai Op2° [ForceP [IP ti [ti [ta fet [ ti, tj]]]\_m F° [Op1P {cusej , øj } Op1° t \_m ]]]

(21) will thus yield both sa ta fet? and sa ta fet cusè? as required, and it does so in a way that is strongly reminiscent of the way SCLI sentences like (1) in Illasi and e.g. Que manges-tu? in French are derived, the only difference lying in the fact that the subject clitic does not move to any GroundP prior to Remnant IP movement to Force (see Poletto & Pollock (2004b)). This is made possible by the 'low' position in which subject clitics in Mendrisiotto stand. This 'low position' cannot accommodate full DP subjects which stand higher in the structure, probably in the low Topic position in the CP field, and, as expected, these full DP

subjects do exclude both clitic wh-words and 'weak' wh-words, just as they exclude *que* questions in French:

(22) a. \*Sa Mario al mangia? (Mendrisiotto)

What Mario he eats?

'What is Mario eating?'

b. \*Cusa Mario al mangia? What Mario he eats?

c. \*Cusa nisun (al) mangia? What nobody (he) eats?

(23) \* Que Marie mange?

What Marie eats?

'What is Mary eating?'

#### 3.2 Weak Wh-word (doubling) Configurations

In this section we examine cases of doubling including weak wh-pronouns and strong forms, with the weak form at the beginning and the strong form at the end of the sentence. The relevant configurations are given in (24):

(French)

(24) a. Cusa ta fet (cusè)?

What you do (what)?

'What are you doing?'

b. Cuma ta l'è cüsinaa (cumè)?

How you it-have cooked (how)?

'How do you cook it?'

c. Indua ta vet (induè)?

Where you go (where)?

'Where are you going?'

Concerning *indua*, *cusa* and *cuma*, we adopt Cardinaletti & Starke's (1999) idea that there exists within IP on the right of the inflected verb a specific 'weak' position for 'weak' elements, to which they have to move. We propose that this set of positions includes a position for weak wh-pronouns just like the clitic set includes a position for clitic wh-pronouns. Granted this, (24) and the like will be derived as follows:

## (25) Input: [Ip ta fet [cusa, {cusè, ø}]]

- (a) Attract *cusa* to interrogative Weak Phrase within IP  $\Rightarrow$  [IP ta fet cusa; [ti, cusè]]
- (b) Merge Op1 and IP and attract {cusè,  $\emptyset$ } to Op1P<sup>13</sup>  $\Rightarrow$  [Op1P {cusè,  $\emptyset$ }<sub>i</sub> Op1 [IP ta fet cusa<sub>i</sub> [ t<sub>i</sub>, t<sub>i</sub>]]
- (c) Merge Force and OP1 and attract remnant IP to Spec Force  $\Rightarrow$  [ForceP [IP ta fet cusa; [ti, ti]]m Force [Op1P {cuse, ø}i Op1tm]
- (f) Merge Op2P and ForceP and attract  $\mathit{cusa}$  to Op2  $\Rightarrow$  [Op2P  $\mathit{cusa}_i$  Op2° [ForceP [IP ta fet  $t_i$  [  $t_i$ ,  $t_j$ ]]<sub>m</sub> Force° [Op1P { $\mathit{cuse}$ ,  $\mathit{ø}$ }<sub>j</sub> Op1t<sub>m</sub>]
- (26) Input [IP ta l'è cüsinaa [cuma, {cumè, ø}]]
  - (a) Attract *cuma* to interrogative Weak Phrase within IP  $\Rightarrow$  [IP ta l'è cüsinaa cuma<sub>i</sub> [t<sub>i</sub>, cumè]]
  - (b) Merge Op1 and IP and attract {cumè,  $\emptyset$ } to Op1P  $\Rightarrow$  [Op1P {cumè,  $\emptyset$ }<sub>j</sub> Op1 [IP ta l'è cüsinaa cuma<sub>i</sub> [ t<sub>i</sub>, t<sub>j</sub>]]
  - (c) Merge Force and OP1 and attract remnant IP to Spec Force  $\Rightarrow$  [ForceP [IP ta l'è cüsinaa cuma\_i [ t\_i, t\_j]]\_m Force° [Op1P {cumè, ø}\_j Op1t\_m]
  - (f) Merge Op2P and ForceP and attract cusa to Op2  $\Rightarrow$  [Op2P cuma; Op2° [ForceP [IP ta l'è cüsinaa  $t_i$  [  $t_i$ ,  $t_j$ ]]<sub>m</sub> Force° [Op1P {cumè,  $\emptyset$ }; Op1 $t_m$ ]

Why then are (27) impossible?

(27) a. \*Cusa che ta mangiat (cusè)
What that you eat (what)?
'What are you eating?'

b. \*Al so mia cusa che al mangia
I-it know not what that he eats
'I don't know what he is eating?'

<sup>&</sup>lt;sup>13</sup> Note that at step (b) in (25) and (26) *cusa* and *cuma* or *sa/se/me* in (21) do not block 'shortest move' to the low OpP2 position. This is because their own target is the 'high' OpP1 position. In brief, 'shortest move' should be made relative to the possible targets of the wh-words and phrases involved.

The answer to that question is fairly transparent: the presence of *che* in root or embedded questions blocks remnant IP movement to Force; <sup>14</sup> as a consequence *cusa*, *cuma* are prevented from reaching their Wh1P position for essentially the same reason as the clitic forms sa/se would be: as weak forms they cannot reach it because of various intervening heads in their path. Why couldn't *cusè*, *cumè* then move to Wh1P instead, leaving *cusa* and *cuma* behind, yielding \**Cusè che ta mangiat cusa*? Clearly *cusa* and *cuma* have an operator feature to check but fail to do so if they remain inside IP, causing the derivation to crash once again. This, notice, must mean that in the perfectly acceptable (28),

(28) a. Cusè che ta mangiat?

What that you eat?

'What are you eating?'

b. Cusè ta mangiat?

What you eat?

'What are you eating?'

c. Cumè (che) al sa cumpurta a scöla How that he him behaves at school?

'How does he do at school?'

Cusè, cumè must have been merged in object position as a single wh-word; we thus reach the conclusion that while weak *cusa*, *cuma* always require a double – i.e. are always merged as one of the two elements of a complex wh-phrase, just like clitics sa, se and me – strong forms like cusè do not. In this cusè, induè and cumè differ from their Bellunese, Monno or Illasi counterparts which must be merged in a complex wh-phrase whose head is a (null) clitic wh- (see Munaro, Poletto & Pollock (2001), Poletto & Pollock (2004a)). Because of that, Bellunese and Illasi che, chi, andé etc. always surface at the right edge of (root) questions, unlike Mendrisiotto cusè, induè and cumè which can also appear in sentence initial position or in pre-complementiser position, as in (28a, c). We cannot say yet whether the difference between Mendrisiotto-type dialects and Bellunese-type dialects in this respect is related to other independent properties. It should however be pointed out that the form of the element corresponding to 'what' in Monno, Bellunese and Illasi is weak 'che' while it is strong 'cusè' in Mendrisiotto. The syntactic difference we observe here thus seems to be tied to the morphology of these items. More generally, the difference between the two types of dialects should be seen in the same light as that between languages with clitics or weak forms and languages that only display tonic forms. This might in turn be tied to different verb movement properties 'activating' (higher) projections for clitic or weak forms, or to

<sup>14</sup> Various explanations for this state of affairs have been suggested in the literature. Concerning embedded questions, there seems to be a consensus, going back at least to den Besten (1983), that the embedded clause is typed as a question by the matrix predicate, hence cannot attract anything from

embedded clause is typed as a question by the matrix predicate, hence cannot attract anything from the embedded IP for 'typing' purposes. In the spirit of work by Ross in late sixties and early seventies, root *wh-che* questions could be analysed in a similar fashion with an invisible interrogative predicate typing the interrogative ForceP. Alternatively some suitably general 'that-trace' filter could

be at work in such root wh-che questions again blocking Remnant IP movement to ForceP.

some yet unknown factor. Further research will be needed to shed light on this general problem.

We account for the following data in the same terms as (28):

(29) a. Cun chi (che) ta mangiat, stassira?

With whom that you eat tonight?

'With whom are you going to eat tonight?'

b. Chi (che) vegn stassira?

Who that comes tonight?

'Who is coming tonight?'

c. Cusè (che) ta mangiat?

What that you eat?

'What are you eating?'

d. Cumè (che) al sa cumpurta a scöla

How that he him behaves at school?

'How does he behave at school?'

(30) a. Che libru (che) t'è catà fö?

Which book (that) you have taken out?

'Which book did you find?'

b. Che tuza (che) t'e visct

Which girl (that) you have seen?

'Which girl did you see?'

c. A che ura (che) ta rivat?

At what time (that) you arrive?

'At what time will you arrive?'

All the wh phrases in these examples either *can* be merged as a single wh-item *(cumé)* or *must* be *(chi, cun chi, che libru, che tuza, a che ura)* and they then must be checking both the Wh1° and Wh2° features. Because *cusa* and *cuma* on the other hand are always merged in a complex wh-phrase, they can never be found in sentence internal position, so examples like (31a, b) are banned and contrast minimally with (31c, d):

(31) a. \*Sa ta fet cusa?

What you do what?

'What are you doing?'

b. \*Tal fe cuma?

You-it do how?

'How do you do it?'

c. Sa ta fet cusè?

What you do what?

'What are you doing?'

d. Tal fe comè?

You-it do how?

'How do you do it?'

This is because their (null or lexical) associate move to WhP2; therefore *cusa*, *cuma* should check the feature in the high WhP1. They could only do that if they could be 'smuggled' to the CP field by IP remnant movement to ForceP, which would require them show up in the left periphery. *Cusè* and *comè*, on the other hand, check both Wh1 and Wh2 features, a property which shall be shown to pave the way to an understanding of pairs like (31b vs d) (see below). As for (31a) it is banned for another partly independent reason: *cusa* cannot be doubled by a clitic form because it and *sa/se* would then be competing for the WhP1 position and the 'low' Wh2° feature would remain unchecked.

The same analysis will also account for triples like (32), on the assumption that pairs like *induè* vs *indua* should be analysed as parallel to *cusè* vs *cusa*.

(32) a. Indua t'è metüü i ciaf?

Where you have put the keys?

'Where did you put the keys?'

b. Induè che t'è metüü i ciaf?

Where that you have put the keys?

'Where did you put the keys?'

c. \*Indua che t è metüü i ciaf?

Where that you have put the keys?

'Where did you put the keys?'

It is worth pointing out that the preceding account crucially rests on the idea that when a complex (wh) phrase is merged, each element in the complex phrase must check a different position (in the IP or CP fields), as already claimed in Poletto (2006). In the DP system, the clitic element moves to a Case position located high in the structure of the IP (the traditional AgrP) inside the set of projections hosting clitic elements, while its phrasal companion moves to a (much) lower position where it checks other features (like number, gender, specificity etc.). Similarly, the two elements of the original complex Wh-item will be said to be associated to specific features which need to be checked in the CP layer. Hence, each will move to the specific CP layer where its feature is checked.

#### 3.3 On Wh-Pairs

What are wh-pairs and why are they merged as a unit in argument position? As just stated, we surmise that each element in such pairs instantiates a (set of) feature(s) in the complex functional structure of wh-items which parallels the different layers of the CP projections. This means that there are at least two functional projections above the lexical restrictor of the wh-item, maybe the existential and the disjunction operator layers informally suggested in Munaro & Pollock (2005).

If so, the internal structure of the pairs we have been discussing can now be represented as follows using Munaro & Pollock's (2005) informal decomposition of wh-items (See Poletto 2006):

- (33) a.  $[DisjP sa [ExistP cuse] [RestrictorP t_j]]] \Rightarrow \{[[+Disj] sa], [[+exist], [+Rest] cuse]\}$ 
  - b. [DisjP cusaj [ExistP tj [RestrictorP cusè]]]  $\Rightarrow$  {[[+Disj], [exist] cusa], [[+Rest] cusè]}
  - c.  $[DisjP cuse] [ExistP tj [RestrictorP tj]]] \Rightarrow [[+Disj], [+exist], [+Rest] cuse]$

clitic *sa/se* thus only lexicalises the Disjunction feature of WhP1. Weak *cusa* lexicalises both the existential feature and the disjunction feature. As for *cusè* it can lexicalise all three features, as in (29c), or be both a restrictor and an existential operator, as in (33a) or a mere restrictor, as in (33b).

#### 3.4 Cleft Questions in Mendrisiotto and French

Let us now consider cleft clauses keeping in mind that they are of two types, one with a subject clitic and an inflected copula and one without subject clitic and with uninflected copula. Some of the relevant sentence types are repeated in (34) and (35):

- (34) a. Da cusè l'è che ta parlat?
  - Of what it is that you talk?
  - 'What are you talking about?'
  - b. Chi l'eva che t'è parlaa de sta roba?

Who it was that to-you has spoken of this thing?

- 'Who talked to you about this?'
- (35) a. \*Chi eva che t'è parlaa de sta roba?

Who it was that to-you has spoken of this thing?

- 'Who was it that spoke to you about this?'
- b. Chi è che t'è parlaa de sta roba?

Who is that to-you has spoken of this thing?

'Who is it that spoke to you about this?'

We shall analyze such sentences as their French analogues in (36) and (37),

(36) a. De quoi c'est que tu parles?<sup>15</sup>

Of what that is that you talk?

'What is it that you talk about?'

b. Qui c'était qui te parlait de ça?

Who that was that to you talked of this?

'Who was it that was talking to you about this?'

<sup>&</sup>lt;sup>15</sup> Example (36) is not really part of Jean-Yves' French though the literature on questions shows it to be really part of the internal language of some speakers.

(37) a. De quoi est-ce que tu parlais?

Of what is that that you talked?

'What is it that you were talking about?'

b. ?\*De quoi était-ce que tu parlais?

Of what is that that you talked?

'What was it that you were talking about?'

c. Qui est-ce qui te parlait de ça?

Who is that that to you talked of this?

'Who is it that was talking to you about this?'

and say that (34) are instances of 'Genuine' bi-clausal clefts; in Mendrisiotto these have a nominative expletive clitic subject *l*' and a copula that can surface in the present and past tense forms *è* and *eva*. Their French opposite numbers in (36) have nominative clitic *ce* in subject position and the copula *être* can be in its present and past third person forms, *est* and *était*. The Mendrisiotto and French clefts in (34b)-(35b) would then have the much simplified structures in (38)

$$(38)a. \ [Wh1P\ chi_j\ Wh1°...[\ Wh2P\ t_j\ Wh2°[\ [IP\ l'\ \{\grave{e},\ eva\}\ t_j]\ [CP\ t_j\ che\ [IP\ t_j\ ...\ ]]]] \\ b. \ [Wh1P\ qui_j\ Wh1°...[\ Wh2P\ t_j\ Wh2°[\ [IP\ c'\ \{est,\ \acute{e}tait\}\ t_j]\ [CP\ t_j\ qui\ [IP\ t_j\ ...\ ]]]]$$

in which *chi* and *qui* check all features in the left periphery of the matrix clause, including possibly the Force feature (see Poletto & Pollock (2003).

In (35) and (37), on the other hand, the copula can only be in the present  $-\dot{e}$  and *est* respectively. In the case of French Munaro & Pollock (2005) argue that *de quoi*, *qui* etc. start off in the subject position of the SC embedded under the copula. In such structures the predicate of the SC surfaces as *ce* in French (on the reason for this distinction between the two types of clefts and its many syntactic consequences for French see Munaro & Pollock (2005).

Going back to Mendrisiotto (39) now, there's a sharp contrast with the unacceptable (40) in French:

- (39) S'è che ta mangiat?
  What is that you eat?
  'What are you eating?'
- (40) \*Que c'est que tu as mangé?
  What that is that you eat?
  'What is it that you are eating?'

As we already did in the case of the 'simple' questions in 3.1. above, we claim that such pairs stem from the fact that subject clitics in Mendrisiotto in general and expletive l' in particular stand lower in the IP field than their French opposite numbers, including ce. As a consequence, the wh-clitic position to which the clitic wh's must move as phrases in the root copulative clause in (39) stands *above* the expletive clitic l' in Mendrisiotto but *below* French ce. As a consequence, clitic

que cannot reach its Wh1P position in (40) but sa/se in (39b, c) can. The acceptable (41),

(41) Qu'est-ce que tu as mangé? What is that that you've eaten? 'What is it that you've eaten?

will be analysed as in Munaro & Pollock (2005, section 5.1), i.e. as derived from spurious cleft structures on the derivation sketched in (42):

- $(42) Input: [ForceP [CopP est [SC que ce]]]] [ForceO que [Wh2P O_i [IP tu as mangé t_i]]]$ 
  - (a) Cliticize se to  $ClP \Rightarrow$

[ForceP [CLP quei [CopP est [SC ti ce]]]] [Force que [Wh2P Oi [IP tu as mangé ti]]]

(b) Merge Op2P and attract clitic *que* to structurally adjacent Wh1P  $\Rightarrow$  [Wh1P que; Wh1°[ ForceP [CLP ti [CopP est [SC ti ce]]]] [Force° que [Wh2P Oi [IP tu as mangé ti]]]

In derivations such as these the null phrasal associate of clitic *que* checks the low WhP2 feature and clitic *que*, generated in the subject position of the Copulative Phrase merged in ForceP checks the high WhP1 feature after it has cliticised. The question is now whether a derivation of that sort is appropriate for (39) in Mendrisiotto? If it is we would have (43):

(43) Input:

 $[ForceP\ [CopP\ \grave{e}\ [SC\ se\ pred]]]]\ [Force^{\circ}\ che\ [Wh2P\ O_{i}\ [IP\ ta\ mangiat\ t_{i}]]]$ 

(a) Cliticize se to  $ClP \Rightarrow$ 

 $[ForceP\ [CLP\ se_i\ [CopP\ \grave{e}\ [SC\ t_i\ pred]]]]\ [Force^\circ\ che\ [Wh2P\ O_i\ [IP\ ta\ mangiat\ t_i]]]$ 

(b) Merge Wh1° and attract clitic  $se \Rightarrow$ 

 $[Wh1P se_i Wh1^\circ[ForceP \ [CLP \ t_i \ [CopP \ \dot{e} \ [SC \ t_i \ pred]]]] \ [Force^\circ \ che \ [Wh2P \ O_i \ [IP \ ta \ mangiat \ t_i]]]$ 

 $\Rightarrow$  S'è che ta mangiat?

Here, just as in French, the low null associate of clitic *sa/se* moves to WhP2 in the left periphery of the whole clause and se checks the high WhP1 feature. This makes clear predictions, since in Mendrisiotto unlike French, *sa/se*'s associate can surface as lexical *cusè*. (43) should therefore yield well-formed sentences like (44):

(44) a. S'è cusè che ta vedat?

What is what that you see?

- 'What are you seeing?'
- b. Cusa è cusè che ta vedat?
  - What is what that you see 'What are you seeing?'

Whatever the status of (44) is, <sup>16</sup> derivations like (43) will never yield (45),

(45) a. S'è che ta vedat cusè
What is that you see what
b. Cusa l'è che ta vedat cusè

What it is that you see what

which we know are well-formed. We conclude that the input structure of (44) either does not exist – as in Bellunese (see Munaro & Pollock (2005) – if (45) are excluded or, if they ultimately turn out to be fine, that (44) is at any rate insufficiently general to yield (45).

In order to generate them we have to assume the following derivation and input structure:

```
(46) Input: [p è [Cp che [p ta vedat {se, cusè}...]]]
```

- (a) Merge Wh2 and attract cusè to spec, Wh2P  $\Rightarrow$  [Wh2P cusè; [IP è [CP t; che [IP ta vedat {se, t;}..]]]]
- (b) Merge Force and Remnant move IP to Spec Force  $\Rightarrow$  [ForceP [IP è [CP ti che [IP ta vedat {se, ti}...]]; Force [Wh2P cusè; [ti]]
  - (c) Cliticise se to Main clause  $^{17} \Rightarrow$

 $[ForceP\ [IP\ [CIP\ se_i\ \grave{e}\ \ [CP\ t_i\ che\ [IP\ \ ta\ vedat\ \ \{t_i,t_i\}..\ ]]_i\ Force^\circ\ [Wh2P\ cus\grave{e}_i\ [t_i]$ 

(d) Merge Wh1P and attract clitic  $se \Rightarrow [Wh1P \ s_j]^* [ForceP [IP \ CIP \ t_i \ endownorm \ t_i \ t_j, t_i]]_j Force^* [Wh2P \ cuse_i \ [t_j]]$ 

The question of why the copula is invariable and why the predicate of the Copulative SC embedded under  $\dot{e}$  is (necessarily) null unfortunately remains unsolved at this stage.

#### 3.5 Non Doubling in situ Wh-Constructions in Mendrisiotto

Let us now tackle wh-in-situ in Mendrisiotto. Given our analysis of doubling above, we expect that in such cases the wh-form occurring in the (apparent) *in situ* position is the 'strong' or tonic form. The relevant sentence types are exemplified in (47), which sharply contrast with (48)-(49):

'what it is what that you were saying?'

What is it that you are saying?

At this stage we cannot make any sense of these data.

<sup>&</sup>lt;sup>16</sup> One of our informants rejected it although she accepted (i):

<sup>(</sup>i) Sa l'è cusè che ta disat?

<sup>&</sup>lt;sup>17</sup> Wh clitics like *se/sa/me/ma* in Mendrisioto and *que* in French can move long distance cyclically as wh-phrases and only have to find a cliticisation site in the IP field of the sentence into whose CP field they are ultimately attracted. On this see Poletto & Pollock (2004b).

(47) a. T'è metüü i ciaf induè?

You have put the keys where?

'Where did you put the keys?'

b. Ta l vedat quand è, ul Giani?

You him see when, the Giani?

'When will you see John?'

c. Ta parlat da cusè?

You talk of what?

'What are you talking about?'

d. La mia turta, la mangia chii è?

The my cake, it east who? 'Who is eating my cake?'

e. Tal fet cumé?

You-it do how?

'How do you do it?'

f. Ta vet via parché

You go away why?

'Why are you going away?'

g. Ta l'è metuu induè?

You it have put where?

'Where did you put it?'

(48) \*Ta è metuu se/sa?

You have put what?

'What did you put on?'

(49) \*Tal fet cuma?

You-it do how?

'How do you do it?'

Such examples show that the wh-phrase sitting at the right edge of the sentence is indeed the 'strong' form (cf. (48) and (49)) and cannot be a clitic or a weak form. All the acceptable sentences in (47) have a strong 'Surprise/Disapproval' (S/D) or 'Can't find the value' (CFV) flavour. In that they sharply contrast with French cases like (50) which don't:

(50) a. T'as mis la clef où?

You've put the key where?

'Where have you put the key?'

b. Tu rencontres toujours qui?

You meet always whom?

'Who do you keep meeting?'

On the other hand (51) and the like do have the same S/D or CFV undertones if the wh-item is followed by ca:

(51) a. T'as mis la clef où ca?

You've put the key where that?

'Where on earth have you put the key?'

b. Tu rencontres toujours qui ça?

You meet always whom that?

'Who did you say you keep meeting?'

The derivation we suggest for (47) we take to involve a very high S/D or CFV position of the sort argued for in Obenauer (2006), in which  $\dot{e}$  and c can be merged and to which only strong wh-forms can move. Such movement is followed by another case of Remnant IP movement to a still higher topic-like position. This sort of derivation obviously raises the question of why (52) are not acceptable:

(52) a. \*Che t'è metüü i ciaf induè?

That you have put the keys where-is?

b. \*Che ta l vedat quand è, ul Giani? That you him see when is, the Giani?

c. \*Che ta parlat da cusè?

That you talk of what-is?

d. \*Che tal fet cumé?

That you-it do how-is?

e. \*Che ta l'è metuu induè?

That you it have put where-is?

We have no real answer at this stage, our best bet would be that (52) are excluded for the same reason *il fait beau* in (53a) cannot be preceded by a complementiser, as shown in (53b, c):

(53) a. Il fait pas beau, qu'il me dit

It makes not pretty, that he told me

'The weather isn't nice, he told me'

b. \*Qu'il fait pas beau, il me dit

That it makes not pretty, he told me

'The weather isn't nice, he told me'

c. \*Qu'il fait pas beau qu'il me dit

That it makes not pretty, that he told me

'The weather isn't nice, he told me'

#### 4. In situ Wh-Questions in French

4. 1 An Aside on Multiple Questions in French

We start with the examples in (54), (55) and (56) already partly discussed in Obenauer (1994, 288):

(54) a. \*?(Dis moi) quand qui est arrivé?

'(Tell me) when who has arrived?'

b. \*?(Dis moi) où qui doit se rendre? '(Tell me) where who must go?'

c. \*?(Dis moi) de quoi qui a été chargé?

'(Tell me) with what who has been entrusted?'

d. \*?(Dis moi) où quoi doit être installé? '(Tell me) where what must go?'

(55) a. (Dis moi) quand est arrivé qui?

'(Tell me) when has arrived who?'

b. (Dis moi) où doit se rendre qui?

'(Tell me) where must go who?'
c. (Dis moi) de quoi a été chargé qui?

'(Tell me) with what has been entrusted who?'

d. (Dis moi) où doit être installé quoi? '(Tell me) where must go what?'

(56) a. (Dis moi) qui est arrivé quand?

'(Tell me) who has arrived when?' b. (Dis moi) qui doit se rendre où?

'(Tell me) who must go when?'

c. (Dis moi) qui a été chargé de quoi?

'(Tell me) who has been entrusted with what?'

d. \*(Dis moi) quoi doit être installé où? '(Tell me) what must go where?

(55) are perfectly fine root and embedded multiple questions and they sharply contrast with (54), which obviously need to be analysed as violating superiority (i.e. minimality, 'shortest move' etc.) Clearly no such violation is involved in either (55) or (56); there's an additional twist concerning (55d): its expected counterpart (56d) is sharply out although it does *not* violate superiority. If *quoi* is to be used at all in multiple questions, the only well-formed output is (55d), a rather unexpected fact. <sup>18</sup> Our attempt at accounting for such intriguing data will rest on our highly split left periphery for questions repeated in (57):

On the syntax of these see section 5.

<sup>&</sup>lt;sup>18</sup> Two viable alternatives would involve using the two other equivalents of English 'what', 'qu'est-ce que' or 'ce que' as in (i) and (ii)

<sup>(</sup>i) (Dis moi) qu'est-ce qui doit être installé où (Tell me) what is-ce that+i must be go where '(Tell me) what must go where'

<sup>(</sup>ii) Dis moi ce qui doit être installé où Tell me ce that+i must be go where 'Tell me what must go where'

### (57) [WhP1 Wh°1 [ForceP F°[GroundP G° [WhP2 Wh°2 [IP ...]]]]]

The first thing we need to explain is why the examples in (55) do not violate superiority (i.e. minimality, 'shortest move' etc.). These examples are of course to be seen in the same light as so-called 'Stylistic Inversion' sentences like (Dis moi) quand est arrivé Jean? ('(Tell me) when Jean has arrived') (Dis moi) où doit se rendre Marie? ('(Tell me) where Marie must go') etc. whose correct analysis we believe has been provided in Kayne & Pollock (2001). Such sentences involve remnant IP movement to GroundP and movement of the subject to a Topic position in the CP field below WhP2. This derivation is, however, not very plausible for multiple questions like (55): clearly wh-phrases are not topics. So let us instead claim that in the acceptable (55) both wh-phrases stand in a wh-position, more precisely in our WhP1 and WhP2 positions. If so (55) are derived via the computations listed in (58):

- (58) (a) *qui*, *quoi* to WhP2;
  - (b) Remnant IP Movement to Ground;
  - (c) Ouand, où, de quoi etc. to WhP1.

Obviously, superiority does not prevent movement of subject *qui* or *quoi* at step (a). Remnant IP movement to GroundP at step (b) will then "smuggle" the object wh-word to the left periphery, just as similar computations in Illasi, Monno or Mendrisiotto "smuggle" clitic or weak wh-pronouns to the left periphery, avoiding violations of minimality or the Head to head constraint. Once in GroundP *quand*, *où*, *de quoi* etc. will be attracted to the high WhP1 without violating superiority. No such derivation being available to the examples in (54), they remain excluded, as they must be. <sup>19</sup>

Let us now raise the question of why (56d) is ungrammatical. We note that a natural answer would be provided if we could justify the conjecture in (59):

(59) *Quoi* cannot move to the high Wh1P.

# 4.2 A Remnant IP Movement Account of French Wh-in situ: Reinterpreting Obenauer's (1994, chapter 3) LF Account

Before we can attempt to find reasons for why (59) should hold, we need to go back to French *in situ* questions. Let us start with pairs like the following, already described and explained at length in Obenauer (1994) (see Obenauer (1994, 295, (25)-(26)):

<sup>&</sup>lt;sup>19</sup> The trace of the wh-phrase in the low Wh2P layer must of course be invisible for superiority. Minimal pairs like (54) vs (55) thus provide yet another argument in favour of the existence of Remnant IP movement in Romance in addition to those already developed in Kayne & Pollock (2001), Pollock (2003), (2006), Munaro, Poletto & Pollock (2001), Munaro & Pollock (2005), Poletto & Pollock (2004a, b).

- (60) a. Il pense que passer par Arvieux et le col d'Izoard serait plus prudent 'He thinks that to go via Arvieux and the Izoard pass would be surer'
  - b. Il pense qu'il serait plus prudent de passer par Arvieux et le col d'Izoard 'He thinks that it would be surer to go via Arvieux and the Izoard pass'
  - c. Il pense qu'inviter le professeur Choron et Monsieur Dugommer serait bien vu
    - 'He thinks that to invite professor Choron and Mr Dugommier would be a good idea'
  - d. Il pense qu'il serait bien vu d'inviter le professeur Choron et Monsieur Dugommer
    - 'He thinks that it would be a good idea to invite professor Choron and Mr Dugommier'
- (61) a. \*Tu penses que passer par où serait plus prudent You think that to go via where would be surer
  - b. Tu penses qu'il serait plus prudent de passer par où ? You think that it would be surer to go via where?
  - c. \*Il pense qu'inviter qui serait bien vu He thinks that to invite whom would be a good idea
  - d. Il pense qu'il serait bien vu d'inviter qui ? He thinks that it would be a good idea to invite whom

Pursuing the Remnant movement approach we have adopted for Mendrisiotto and the other Northern Italian dialects mentioned above, we note that no possible Remnant IP movement derivation could yield (61a), (61c) and that the (previous overt) wh-extraction from the subject clause will inevitably violate (some minimalist version of) the ECP. On the other hand no such problem arises for (60b, d), which in this perspective suffices to account for their acceptability. Obenauer (1994) adopted a similar approach and interpreted facts like (61) as a relevant diagnostic for LF movement. Both his LF movement account and our reinterpretation of it in terms of remnant IP movement predict that (62) and the like will not be interpretable as real questions:

(62) \*{On se demande, dis moi} si tu vas acheter quel livre? {one wonders, tell me} if you are going to buy what book?

This is true, and follows from the fact that all such sentences could only be derived by extracting the wh-phrase (here *quel livre*) from an interrogative island. Concerning sentences like (63),

(63) Il s'est défendu en accusant qui ? 'He defended himself by attacking whom?' it is again easy to adopt Obenauer's (1994) idea that all such involve pied piping of the whole clause *en accusant qui*, a structure which, for many native speakers, can indeed surface, as in (64):

(64) En accusant qui il s'est défendu?

By attacking whom he defended himself?

'By attacking whom did he defend himself?'

In short, we contend that Obenauer's (1994) LF analysis was fundamentally correct. Our only innovation –already sketched in Munaro, Poletto & Pollock (2001), consists in reanalyzing his *covert* LF wh-movement as an instance of *overt* wh-movement followed by Remnant IP movement.

In this respect Obenauer (1994), Munaro, Poletto & Pollock (2001) – as well as Ambar & Veloso, (1999), Etxepare & Uribe-Etxebaria (2000), and the present article rather markedly differ from much recent work on French wh-in situ, which, in one way or another, has interpreted sentences like (61b, d), (63) or (65),

(65) a. Pierre a fait quoi?

Pierre has done what?

'What has Pierre done?'

b. Marie a embrassé qui? Marie has kissed whom?

'Who has Mary kissed?'

c. Marie a engagé quel linguiste?Marie has hired what linguist?'What linguist has Mary hired?'

as 'real' *in situ* questions, i.e. as sentences in which the right edge wh-words and phrases stand in their ordinary object or indirect object (A-)positions at spell-out (see e.g. Chang 1997, Cheng & Rooryck 2000, Mathieu 2001<sup>20</sup>).

These works make factual claims concerning the availability of questions like (65) with which the French native speaker among us disagrees. Such questions are often said to be restricted to root contexts and accordingly (66) is described as ungrammatical on a non echo interpretation:

(66) Marie s'imagine que Paul va épouser qui? Marie thinks that Paul will marry whom?

In much the same way sentences like (67)

(67) Tu ne veux pas rencontrer qui? You ne want not to meet whom? 'Who don't you want to meet?'

<sup>20</sup> This common idea has of course been executed differently in the various works mentioned in the text, but the idea of an unmoved wh-word or phrase at spell-out is shared by them all.

in which *qui* is the c-command domain of the (complex) negation *ne...pas* and of a modal verb (*vouloir*) are often described as echo questions only. The same claim is regularly made for (68) in which the wh-word is in the scope of a quantified subject:

(68) Personne n'a voulu engager quel linguiste? 'No one wanted to hire what linguist?'

However for (Paris) speakers like Jean-Yves or (Geneva speakers like) Michal Starke (p.c.) such restrictions do not hold and for both of them (61b, d), (65), (66), (67) and (68) are all fine genuine questions and so are all of (69) and (70):<sup>21</sup>

- (69) a. Tu penses que Marie va épouser qui finalement? You think that Marie will marry whom finally? 'Who do you think that Mary will end up marrying?'
  - b. La presse a déclaré qu'elle soutiendrait quel candidat en fin de compte? The press has declared that it would support what candidate in the end? 'What candidate has the press finally declared it would support in the end?'
  - c. Selon toi, il faudrait qu'elle épouse qui pour plaire à son père? According to you, it would be required that she marry whom to please her father?
    - 'According to you who would she have to marry to please her father?'
  - d. En somme, tu voudrais que ton fils fasse quoi pendant les vacances? You would want that your son do what during the holiday? 'What would you like your son to do during the holidays?'
- (70) a. Et à cette fête, à ton avis, {tout le monde, chacun} a embrassé {combien de filles, quelle top modèle, qui}?

And at this party, in your opinion, {everybody, each one} has kissed {how many girls, which top model, whom}?'

- 'And at this party, in your opinion, {how many girls, which top model, whom} has {everybody, each one} kissed'
- b. Et à cette fête, à ton avis, Jean n'a pas voulu embrassé combien de filles? And at this party, in your opinion, Jean has refused to kiss how many girls?
  - 'And at this party, in your opinion, how many girls has Jean refused to kiss?'

<sup>&</sup>lt;sup>21</sup> These examples all contain adverbs or adverbial expressions like *finalement*, *en fin de compte*, *selon toi*, *en somme* etc. which make it pragmatically impossible to interpret the sentence in which they occur as echo questions. If (69) and (70) were really only interpretable as echo questions this should create a contradiction and (69)-(70) should therefore be sharply unacceptable, which they clearly are not.

- c. Et dans ces situations, à ton avis, {les gens, tout le monde, chacun] refuse(nt) d'embrasser combien de top modèles?
  - And in this kind of situation, in your opinion, {people, everybody, each one] refuse(s) to kiss how many top models?
  - 'And in this kind of situation, in your opinion, how many top models do(es) {people, everybody, each one} refuse to kiss?
- d. Et dans ces situations, à ton avis, personne ne veut épouser quel type de filles?
  - And in these situations, in your opinion, noone wants to marry what type of girls?
  - 'And in these situations, in your opinion, what type of girls does noone want to marry?
- e. Et dans ces situations là, à ton avis, {les gens, chacun} suspecte(nt) qui? And in these situations, in your opinion, {people, each one} suspect(s) whom?
  - 'And in these situations, in your opinion, whom do(es) {people, each one} suspect?
- f. Et dans ces situations là, à ton avis, les gens ne veulent pas avoir recours à qui?
  - And in these situations, in you opinion, people do no want to have recourse to whom?
  - 'And in these situations, in you opinion, to whom do people do not want to have recourse?

Every one of these would be – incorrectly – excluded by the analyses of Chang (1997), Cheng & Rooryck (2000), Mathieu (2001). Mathieu (2001) views all such examples as cases of 'non canonical' quantification, analogous to (71), discussed and analysed at great length in Obenauer (1994):

- (71) a. \*Combien a-t-il beaucoup lu de livres
  - How many has he much read of books?
  - 'How many books has he read a lot?'
  - b. \*Combien n'a-t-il pas lu de livres

How many not has he not read of books?

'How many books hasn't he read?'

In order to tie (71) and questions like (67) and (68) Mathieu claims that all whwords and phrases in French can be paired with a null operator 'Op'; when they are, complex phrases like (72) are merged in argument position:

### (72) <Op, wh- phrase>

The claim is then that what overtly moves to the CP field in *in situ* questions is the null operator, stranding its lexical wh-phrase associate, as sketched in (73):

```
(73) a. [CP Op<sub>i</sub> ... [IP II a fait < t<sub>i</sub> quoi>]] b. [CP Op<sub>i</sub> ... [IP II a embrassé < t<sub>i</sub> qui>]] c. [CP Op<sub>i</sub> ... [IP II a embrassé < t<sub>i</sub> quelle fille>]]
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Mathieu views (73) as analogous to the derivations producing Obenauer's 'non-canonical' *combien* questions like (74):

```
(74) [Combien; ... (n') a-t-il {*beaucoup, *pas} lu < t_i de livres> ]]
```

In both, according to him, the null wh-operator and *combien* move across a negative or adverbial intervener, thus triggering a minimality violation, in sharp contradistinction with canonical cases of wh-movement like (75):

(75) Combien de livres a-t-il beaucoup lus? 'How many books has he often read?'

Putting aside the question of what the facts concerning wh-in situ really are, it should be noted that no NID known to us ever exhibits overt doubling with the whole set of wh-words and phrases, which Mathieu's (73) would lead one to expect. In particular no NID ever shows overt doubling with wh-phrases like quel linguiste, quelle femme etc. So, for example, Illasi sharply excludes \*S'alo magnà che torta? ('What has-he eaten what cake?' What cake has he eaten?), and only allows che torta alo magnà? (see Poletto & Pollock 2004b). Similarly Mendrisiotto prohibits \*{sa, se, cosa, cosè} (che) t è cataa fö che libru? ('What (that) you have taken out which book?' (See section 2 above). Secondly, the (un)acceptability of Obenauer's non canonical combien questions is NOT open to variations among speakers and, of course, adding disambiguating expressions like "à ton avis", "selon toi" etc. does not make (74) any more acceptable. Thirdly, the alleged sensitivity of in situ questions to the presence of modal verbs or embedded contexts does not exist for non canonical combien questions, as the perfect acceptability of (76) shows:

(76) a. Combien {faut-il, veux-tu} que j'apporte de livres?

How many {must I, do you want me to} bring books?

'How many books {should I, do you want me to} bring along?'

b. Combien as-tu dit que Marie avait embrassé de garçons? How many have you said that Mary has kissed of boys? 'How many books did you say that Mary had kissed?'

In short Mathieu's (2001) elegant proposal<sup>22</sup> unfortunately has a number of theoretical and factual problems;<sup>23</sup> if only for that reason it would seem that an

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<sup>&</sup>lt;sup>22</sup> It is in the spirit of Watanabe (1991), an equally elegant piece of work.

<sup>&</sup>lt;sup>23</sup> It could be argued that French speakers fall into two categories. Speakers like Pollock and Starke would be deemed 'liberal' and Mathieu and Rooryck would then be seen as more 'conservative'. See note 27 below.

alternative is well worth looking for.<sup>24</sup> Our Remnant IP movement approach is a plausible one and it has a number of empirical advantages over its predecessors, as we shall show in the rest of this article.

#### 4.3 Quoi vs P+quoi

We can now go back to our (59) repeated below in (77),

(77) *Quoi* cannot move to the high Wh1P.

and to the question of its 'raison d'être'. In order to shed light on it, it is profitable to look at French *quoi* and Mendrisiotto *cusa* in the same light. More precisely, we believe that *quoi* should be analyzed as the lexical counterpart of the null or lexical associate of *cusa* in Mendrisiotto questions like (78):

(78) a. Cusa ta mangiat par solit?

What you eat for usual

'What do you usually eat'

b. Cusa l'è che ta mangiat

What it is that you eat

'What is it that you eat?'

c. Cusa t'è fai cusè?

What you have done what?

'What have you done?'

Like *cusa*'s associate, *quoi* can only move to the low WhP2 position. We now take the next obvious step and say that *quoi* can be paired with the null counterpart of weak *cusa* as (79) informally indicates:

(79) [ø, quoi]

Granted this, the derivation of a sentence like (80),

(80) Tu as fait quoi?
You've done what?

'What did you do?'

must involve merging of the pair [ø, quoi] as a complex object of *fait*, movement of *quoi* to WhP2 followed by obligatory remnant IP movement to Spec, Force and final movement of the weak null companion ø to WhP1. This is because for speakers like Jean-Yves<sup>25</sup> the left periphery of root *in situ* questions like (80) may

<sup>&</sup>lt;sup>24</sup> The three remarks above are not meant to do justice to all aspects of Mathieu's dissertation, evidently. Also, the above does not comment on the other articles mentioned above. For relevant remarks and critiques of other aspects of that literature see e.g. Adli (2004).

<sup>&</sup>lt;sup>25</sup> On this restriction, see below.

have two wh- positions, our high WhP1 and low WhP2, each of which requires checking, a task that neither *quoi* nor *cusa*'s null associate could perform alone.

This account also explains why (81) is unacceptable, as it should:

(81) \*Je ne sais pas quoi tu as fait
I ne know not what you have done
'I don't know what you have done'

Here *quoi*'s non lexical weak companion cannot reach its target above ForceP since there cannot be any Remnant IP movement to ForceP in embedded clauses, for reasons already mentioned in section 3.1. (See footnote 11). Consequently the head to head constraint applies to the non lexical 'weak' wh-pronoun with which *quoi* is associated and blocks its movement to the high WhP1 position just at it blocks the same displacement of weak cusa in Mendrisiotto sentences like \**Al so mia cusa che al mangia* (see (27b) above). The features in the high Wh1° position will thus remain unchecked, causing the derivation to crash.

In short, our analysis deals with (80) and pairs like (82a, b) vs (82, c, d),

(82) a. \*Ouoi tu fais?

What you have done?

'What have you done?'

b. \*Je ne sais pas quoi tu fais?

I ne know not what you do

'I don't know what you're doing'

c. Qui t'as embrassé?

Who you have kissed?

'Who have you kissed?'

d. Je ne sais pas qui t'as embrassé

I ne know not who you have kissed

'I don't know who you have kissed'

as a consequence of *quoi*'s defining property: it can only check the low Wh2° feature and must therefore enter a derivation with a (weak) null associate whenever the left periphery of the clause in which it is merged contains the two wh-positions of the highly split left periphery in (57)-(83):

### (83) [WhP1 Wh°1 [ForceP F° [GroundP G° [WhP2 Wh°2 [JP ...]]]]]

On the other hand, all the other (non clitic) French wh-pronouns like qui, quand, où etc. can check both Wh1° and Wh2° features, just like chi, quant, indue in Mendrisiotto, whence the acceptability of (82c, d). In order to answer the question of why only quoi has that property – rather than qui, quand or où – we capitalise on an empirical generalisation concerning wh-doubling or wh-in situ of the Illasi, Monno and Bellunese type: such structures always first arise diachronically with the counterpart of quoi ('what') then may generalise to other (bare) wh-pronouns,

although they need not (see Munaro 1999a). Seen in this perspective, the uniqueness of French *quoi* – and *que* (see Poletto & Pollock 2004b) – falls in line, and so does one of the most puzzling features of French wh-syntax, namely the contrast between the ungrammaticality of (82a, b) and the perfect acceptability of (84) and (85):

(84) a. A quoi tu penses?

To what you think?

'What are you thinking of?'

b. De quoi tu vas parler?

Of what you are going to talk?

'What are you going to talk about?'

c. Sur quoi il se fonde?

On what he himself is basing?

'What is he relying on?'

(85) a. Je ne sais pas à quoi il pense

I ne know not to what he thinks

'I don't know what he is thinking of'

b. Je ne sais pas de quoi il va parler

I ne know not of what he is going to talk

'I don't know what he is going to talk about

c. Je ne sais pas sur quoi il se fonde

I ne know not on what he himself is basing

'I don't know what he is relying on'

Again, a comparison with Mendrisiotto and the other NID's gives us a handle on such pairs: (real)<sup>26</sup> PP's and complex wh -phrases are typically never merged as part of a complex wh-phrase. We therefore do not expect à quoi, de quoi, sur quoi to be either. Consequently one expects such PP's to check all formal features in the CP domain, which they indeed do in (85).

Our micro-comparative perspective and our analysis of French apparent *in situ* questions as cases of Remnant IP movement thus provides us with the first step in a true explanation of the syntax of *quoi* –and *que*–: it correlates *quoi*'s (apparently) odd properties with quite general facts in closely related languages. As always in the natural sciences, an 'explanation' for any given isolated fact minimally consists in showing that it is not isolated but rather part of a (more) general pattern.

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<sup>&</sup>lt;sup>26</sup> See note 9 above.

- 4.4 Remnant IP Movement and French in situ Wh-Questions again Granted the above, what accounts for the acceptability of embedded infinitival questions like (86)?
- (86) Je ne sais pas quoi faire
  I ne know not what do+inf
  'I do not know what to do'

The analysis in the preceding section leaves us only one option: the left periphery of (86) must be defective and missing (at least) our high WhP1 layer altogether. We shall adopt this conclusion and claim that the null associate *quoi* is necessarily paired with when merged in an embedded non finite question may fail to be merged. Since the left periphery of (86) has no WhP1 layer, this option will cause no harm, whence the acceptability of (86) and the like.

For (very) mature French speakers like Jean-Yves, (86) alternates with (87) fairly freely:

(87) Je ne sais pas que faire
I ne know not what do+inf
'I do not know what to do'

In (87) *que* is a clitic wh-word which needs to check the 'high' WhP1 feature in structure (83). This obviously implies that infinitival embedded questions can also have a non truncated left periphery. When that option is taken we claim, as in Poletto & Pollock (2004a), that (87) must be derived by (string vacuous) Aux to Comp – a restricted version of SCLI – 'smuggling' *que* to a position structurally adjacent to its high WhP1 target. If this is true, the existence of (86) *and* (87) means that the syntax of French embedded infinitival questions is in a state of flux: speakers of Jean-Yves's generation have two competing grammars, yielding slightly different outputs. One relies on a truncated left periphery like (89)<sup>27</sup> and cannot generate strings like (87), the other has the fully fledged left periphery in (88) – our (3b), (57) and (83) above – which, given the clitic properties of *que*, must involve crucial use of the wh pair in (90b):

- $[\text{WhP1 Wh}^{\circ}\text{1 }[\text{ForceP F}^{\circ}\text{ }[\text{GroundP G}^{\circ}\text{ }[\text{WhP2 Wh}^{\circ}\text{2 }[\text{IP ...}]]]]]$
- (89) ([ForceP F°) [GroundP G° [WhP Wh° [IP ...]]](])
- (90) a. [ø, quoi] b. [que, ø]

Obenauer (1994) has shown very conclusively that there are a number of lexical restrictions on sentences like (87) which are perceived as residual by many

<sup>&</sup>lt;sup>27</sup> On the presence or absence of ForceP in such truncated structures see below.

young(er) speakers. One may thus conjecture that younger generations are losing the full CP field of (88) in embedded infinitival questions. This means that young(er) speakers will no longer have two competing grammars for infinitives, i.e. will no longer be 'bilingual' the way Jean-Yves is: their internal grammar will only associate a truncated CP field to infinitival questions.

Why should this be? It is tempting to tie this to the fact that in the Internal Grammar of those monolingual speakers the lexical entry of all French wh-words in infinitival questions will be uniform: they will only have the (low) WhP2 feature to check, and the 'exotic' lexical entries of *que* and *quoi* in (90) will be dispensable in all of (91):

(91) Je ne sais pas {qui voir, quoi faire, de quoi parler, où aller, ...}
I don't know {who to see, what to do, about what to talk, where to go...}

In sum, the truncated structure of French infinitival questions will eventually do away with the feature splitting sketched in (33) which French speakers once developed like so many other speakers of North Eastern Romance languages. Another consequence will be that clitic *que* will disappear from infinitival questions. In fact it may well disappear from French altogether. To see why, let us return to root wh-*in situ* questions like (92):

(92) a. Il a fait quoi?

He has done what?

'What has he done?'

b. Il a embrassé qui?

He has kissed whom?

'Whom has he kissed?'

c. Il est parti où?

He has gone where?

'Where has he gone?'

d. Il a rencontré quel linguiste?

He has met what linguist?

'What linguist has he met?'

e. Il a fait ca pour qui?

He has done that for whom?

'Who did he do that for?'

For native speakers of Jean-Yves' generation, (92b, c, d) alternate freely with (93),

(93) a. Qui il a embrassé?

Whom he has kissed?

'Whom has he kissed?'

b. Où il est parti?

Where he has gone?

'Where has he gone?

c. Quel linguiste il a rencontré? What linguist he has met?

'What linguist has he met?'

d. Pour qui il a fait ça?For whom he has done that?'Who did he do that for?'

which we take to involve wh-movement to both the high and low wh-layers of (88). As in Poletto & Pollock (2004a) we shall say further that the various whitems in (93) also check the interrogative Force feature of (88). If so the left periphery of (93) has all the functional layers of the (more) 'standard' Complex Inversion or Subject Clitic Inversion sentences in (94):

(94) a. Qui (Pierre) a-t-il embrassé?

Whom (Pierre) has he kissed?

'Whom has {Pierre, he} kissed?'

b. Où (Pierre) est-il parti?

Where (Pierre) is he gone?

'Where has {Pierre, he} gone?

c. Quel linguiste (Pierre) a-t-il rencontré?

What linguist (Pierre) has he met?

'What linguist has {Pierre, he} met?'

d. Pour qui (Pierre) a-t-il fait ça?

For whom Pierre he has done that?

'Who did {Pierre, he} do that for?

What about (92b, c, d, e)? Relying on our micro-comparative approach and taking our clue from overt wh-doubling in the NIDs, we are forced to the conclusion that neither (92d) nor (92e) could involve covert wh-doubling since as we have already pointed out, they never overtly do in the NIDs. As for (92b, c), we know that Illasi, Monno and Bellunese, though not Mendrisiotto, allow for overt doubling of the counterparts of who and where, so French qui and où could conceivably also do. However, we note that doubling seems subject to some east/west impoverishment: Mendrisiotto only has doubling with what and how while Bellunese has (null) doubling with all (true) bare wh-words, even (optionally) including how many (see Munaro 1999a), which Illasi doesn't have. Everything else being equal, one might then expect French to have only (covert) doubling with (a sub-set of) Mendrisiotto's (overt) doubles, as argued above.

We shall adopt this conclusion. Since the various wh-words are standing in the low WhP2 position in (92b, c, d, e) and since no covert double could check the 'high' WhP1 feature of the fully fledged CP field of questions in (95),

(95) [WhP1 Wh°1 [ForceP F° [GroundP G° [WhP2 Wh°2 [JP ...]]]]]

we are compelled to (re)analyse the left periphery of such root finite questions as truncated structures: like the embedded infinitival questions in (86) and (91) they must be lacking at least the 'high' WhP1 layer. This, again, will allow all the lexical entries of all French bare wh-words in root wh-questions to be uniform, thus integrating *quoi* into the 'standard' paradigm of *qui*, *où*, *quand*, *quel homme*, etc. and getting rid of clitic *que*.

These results shouldn't of course make us lose our analysis of the ungrammaticality of embedded finite questions like (96) (= (81) above),

(96) \*Je ne sais pas quoi tu as faitI ne know not what you have done'I don't know what you have done'

which in turns must mean that the left periphery of embedded *finite* questions is the fully-fledged (95). Why should there be such a difference between the two types of questions? Let us take a rather traditional stand on this and say that the contrast stems from the fact that embedded finite questions are *selected* by the matrix predicate, unlike root questions. Predicates like *ne pas savoir, ignorer* etc. do not select wh-words and phrases *per se* but only subordinate (wh- or yes/no) questions. This means that the selection of an interrogative ForceP in (96) is what licenses WhP1. Let us conjecture further that the converse is also true: if no WhP1 layer is present, then no ForceP layer is selected either. This, then, means that the truncated left periphery of (92b, c, d, e) is really as shown in (97),

### (97) [GroundP G° [WhP2 Wh1° [IP ...]]]

If so, the question of the form of the left periphery of embedded infinitival questions like (98),

(98) Je ne sais pas quoi faire
I ne know not what doinf
'I don't know what to do'

arises again, since we were led above to assume that it too was 'truncated', despite the fact that it evidently is just as selected by the matrix predicate as its finite opposite number. In order to solve that paradox, we shall appeal to Rizzi's (1997) work on the left periphery and to his distinction between what he called Force and Fin(iteness). In his system the two positions are distinct, as shown in (99):

### (99) Force (Top\*) Focus (Top\*) fin IP

Rizzi shows further that di stands lower than force, a conclusion we take up. Freely reinterpreting his work now, we say that, at least in French, the matrix predicate can either select the Force feature – hence also indirectly the 'high' WhP1 layer licensed by interrogative force – or else only the low Finite layer in

non finite embedded questions.<sup>28</sup> When this happens, the low WhP2 is itself licensed by Fin in the (much) simplified structure shown in (100):

#### (100) WhP1 Force WhP2 Fin IP

In this perspective, we must further assume that if the high ForceP layer is selected by the matrix predicate, all the lower layers of the left periphery are also licensed, among them the low WhP2. On the other hand, if only the Fin layer is selected the higher Force and WhP1 layers cannot be. This, then, will yield the 'truncated' left periphery that we need for embedded infinitival questions and root wh-*in situ* questions.

4.5 *More on Root Wh-* in situ *Questions*Let us go back to root in situ questions like the following:

(101) a. Il a fait quoi?

He has done what?

'What has he done?'

b. Il a embrassé qui?

He has kissed whom?

'Whom has he kissed?'

(102) Il est parti où? He has gone where? 'Where has he gone?'

(103) a. Il a rencontré quel linguiste?

He has met what linguist?

'What linguist has he met?'

b. Il a fait ca pour qui?

He has done that for whom?

'Who did he do that for?'

As we have already seen, there are two ways of deriving (101a) for speakers of Jean-Yves' generation; sentences of that sort may be analysed as having a fully fledged left-periphery and they then involve merging of the wh-pair [ø, quoi] as object of *fait*, movement of *quoi* to WhP2 followed by obligatory remnant IP movement to Spec, Force and final movement of the weak null companion ø to WhP1. The 'truncated' left periphery of root questions may also be chosen in (101) however. But that option is *required* by (103a, b) since the wh-phrases like *quel linguiste* or PPs like *pour qui* cannot be doubled in the NIDs. If so, we still have to explain why Remnant IP movement MUST take place in that case: here neither minimality nor any version of the Head to Head constraint could require it to take place for 'smuggling' purposes. To explain why it must nevertheless apply we shall

<sup>&</sup>lt;sup>28</sup> This 'defective' property of embedded infinitival questions should in all likelihood be tied to the fact that many languages do seem to ban such interrogative sentences altogether.

rely on the very close tie that many languages establish between wh-positions and Focus positions<sup>29</sup> and conjecture that for Root truncated structures like (104),

to be bona fide questions, the low WhP2 must be interpreted as [+Focus]. We shall say that in French the only way of achieving this unambiguously is to mark the rest of the sentence as Ground, conceivably because unlike English, Italian and many other languages contrastive stress in French is never interpreted as (non contrastive) [+focus] Assuming so, obligatory Remnant IP movement to GroundP will be triggered, as required by (at least) (103b, c, d, e).<sup>30</sup>

#### 4.6 More on Ouoi and Oue

Since all speakers of Jean-Yves' generation have the two lexical entries in (105) for que and quoi in their internal language.

one might wonder why no known dialect of French has ever, to the best of our knowledge, developed doubling of the Mendrisiotto or Illasi type where both members are lexical, as in (106):

(106) a. S'a-lo fat che? Illasi (Verona)

'What has-he done what?'

What has he done?

b. Cusa ta fet cusè?

Mendrisiotto

What you do (what)?

'What are you doing?'

c. Sa ta fet cusè

(same)

Personne n'a voulu engager quel linguiste? (iii) 'Noone wanted to hire what linguist?'

might be seen as a consequence of the fact that for them a remnant IP can only be interpreted as [+Ground] if it is relatively 'simple' -no embedding- and/or fails to include sentential negation or quantified expressions. Speakers like Starke and Pollock woud then be more liberal in their interpretation of what may count as [+Ground].

<sup>&</sup>lt;sup>29</sup> In many languages, wh-words move to a (relatively low) Focus position and compete for that position with other focussed constituents. Hungarian is one such language. See for example Brody (1990), Den Dikken (2001). That is why in Rizzi's (1997) system the wh-phrases are said to move

<sup>&</sup>lt;sup>30</sup> In this perspective the fact that speakers like Mathieu and Rooryck (tend to) reject sentences like (i), (ii) or (iii):

<sup>(</sup>i) Marie s'imagine que Paul va épouser qui? Marie thinks that Paul will marry whom?

Tu ne veux pas rencontrer qui? (ii) You ne want not to meet whom? 'Who don't you want to meet?'

In particular one might well wonder what makes the pair in (107a) unavailable, i.e. why sentences like (107b) are totally unthinkable:

(107) a. \*[que, quoi] b. \*Qu'a-t-il fait quoi? What has he done what?

Our analysis in fact says why that is so: if we are right *quoi*'s non lexical weak associate has both Disjunctive and Existential features (see section 3.3); on the other hand, clitic *que*'s associate has both existential and restrictor features. The pair in (107a) would thus only have a [+disjunctive] feature and a [+restrictor] feature and would be missing the existential feature. As a consequence it would always fail to check (one of) the features of the low WhP2 layer in the nontruncated left periphery of questions, which it should do. This, then, accounts for why (107a) was never a viable pair and why *que* and *quoi* have remained two separate lexical items for as far back as one can go.<sup>31</sup> If our analysis in the previous section is on the right track, however, that 'odd' property of French may well be on the verge of disappearing if, as was just suggested, the rise of the truncated left-periphery in the constructions studied in this article finally does away with clitic *que*.<sup>32</sup>

# 5. On 'Ce que' questions, 'Can't Find the Value' Questions, Expanded Interrogative Pronouns and Related Topics in French Interrogative Syntax

### 5.1 'Ce que' *questions*

Because no remnant IP movement can take place in embedded finite questions and because the left periphery of such questions cannot be truncated – see section 4.5 – neither clitic *que* nor the null associate of the strong form *quoi* can reach their high WhP1 target, whence the ungrammaticality of (108):

(108) a. \*Sais-tu quoi il a fait

Know you what he has done

'Do you know what he has done'

b. \*Sais-tu que il a fait?

Know you what he has done

'Do you know what he has done'

In such cases the only viable sentence types are (109) or (110):

<sup>31</sup> On the history of *que* and *quoi* see for instance Kunstmann (1990, 29-52).

<sup>&</sup>lt;sup>32</sup> *Que* must check the high WhP° feature, necessarily missing in truncated CP fields. It will therefore cease to be used in infinitives and root finite questions when all such are reanalysed as truncated structures. As a clitic, *que* cannot be used in finite embedded questions either, because in these cases it cannot be 'smuggled' to the left periphery (see above and Poletto & Pollock 2004b).

- (109) Sais-tu ce qu'il a fait?

  Know you ce that he has done
  'Do you know what he has done?'
- (110) Sais-tu qu'est-ce qu'il a fait? Know you what is that that he has done 'Do you know what he has done?'

(109) is standard written French, (110) standard spoken French often deemed (slightly) more colloquial than (109). (110) should, we believe, be analysed as in section 3.3. It is derived from the spurious cleft structure described there on the derivation sketched in (111) (see Munaro & Pollock (2005), sections 3 and 4 above, and sections 5.2, 5.3 below):

### (111) Input:

[Sais-tu [ForceP [CopP est [SC que ce]]] [Force que] [Wh2P Oi [[IP tu as fait ti]]]]

(a) Cliticize que to  $ClP \Rightarrow$ 

[Sais-tu [ForceP [CLP quei [CopP est [SC ti ce]]] [Force que] [Wh2P Oi [IP tu as fait ti]]]]

(b) Merge Op2P and attract clitic *que* to structurally adjacent WhP1  $\Rightarrow$  [Sais-tu [Wh1P que<sub>i</sub> Wh1°[ForceP [CLP t<sub>i</sub> [CopP est [SC t<sub>i</sub> ce]]] [Force° que][Wh2P O<sub>i</sub> [IP tu as fait t<sub>i</sub>]]]]

In (111)  $O_i$ , *que*'s null phrasal associate, checks the low WhP2 feature and clitic *que*, merged in the subject position of the Small Clause selected by *être* in the Copulative Phrase merged in ForceP, checks the high WhP1 feature after it has cliticised to the (wh-)clitic position made available by the Copulative phrase. In all such interrogative sentences, *ce* is thus the (originally deictic) predicate of a small clause selected by the (invariable) copula *est*.

What about *ce* in (109) now? Traditional grammarians and generative linguists alike have analysed it very differently and looked at it as a variant of *ce* in (112):

(112) a. Je tiens à ce que tu partes

I insist on ce that you go

'I insist on your going'

b. Il mangera ce qu'on lui donnera

He'll eat ce that we shall give him

'He'll eat what we give him'

In (112a) ce is typically viewed as a clausal determiner made possible/necessary by preposition  $a^{33}$  and so is ce in (112b), except that it would be required/licensed here by the presence of a null relative wh-word. In line with this approach, (109) is often analysed as a concealed question, i.e. as a DP interpreted as a question for the same reason the DP *l'heure qu'il est* is so interpreted in (113):

(113) Sais-tu l'heure qu'il est? 'Do you know the time it is?'

In view of the fact that *dont* ('of which') has been a relative pronoun – and only a relative pronoun – for at least five hundred years, this line of thought is strengthened by pairs like (114):

(114) a. \*Sais-tu dont il est capable?

Do you know of what he is capable?

'Do you know what he is capable of?'

b. Sais-tu ce dont il est capable?

Do you know ce of what he is capable?

'Do you know what he is capable of?'

Likewise, the fact that both (115) and (116) are acceptable for speakers of Jean-Yves's generation,

- (115) Sais-tu pourquoi il est parti? 'Do you know why he has gone?'
- (116) Sais-tu ce pourquoi il est parti?
  'Do you know ce why he has gone?'

should clearly be seen as a consequence of the fact that *savoir* can either take an embedded question as a complement, as in (117a) or a DP complement, as in (117b):

- (117) a. Sais-tu avec qui il est parti?
  - 'Do you know with whom he left?'
  - b. Sais-tu la raison pour laquelle il est parti?
    - 'Do you know the reason why he left?'

(i) a. \*J'insiste sur ce que tu partes

'I insist on ce that you go'

b. \*J'insiste sur que tu partes

'I insist on that you go'

- (i)'s only acceptable variant would be something like (ii):
- (ii) J'insiste sur {l'obligation que tu partes, le fait que tu dois partir}I insist on {the obligation that you go, the fact that you must go}

<sup>&</sup>lt;sup>33</sup> Compare (112a) and (i):

We would like to argue that this analysis in indeed correct for sentences like (114b) and (116), but incorrect for (109). That the two types should be treated differently is shown by the fact that they sharply contrast in one salient property: (109) accepts modification by 'diable' but (114b) and (116) exclude it:

- (118) a. Veux-tu me dire ce que diable il va faire
  Will you tell me ce that devil he is going to do
  'I'd really like to know what the hell he's going to do'
  - b. Veux-tu me dire ce qu'il va faire
     Will you tell me ce that he is going to do
     'I'd really like to know what he's going to do'
- (119) a. \*Veux-tu me dire ce dont diable il va parler
  Will you tell me ce about what devil he is going to talk
  'I'd really like to know what the hell he's going to talk about'
  - b. Veux-tu me dire ce dont il va parlerWill you tell me ce about what he is going to talk'I'd really like to know what he's going to talk about'
- (120) a. \*Veux-tu me dire ce pourquoi diable il est parti?
  Will you tell me ce why devil he is left
  'I'd really like to know why the hell he has left'
  - 'I'd really like to know why the hell he has left b. Veux-tu me dire pourquoi (diable) il est parti?
    - Will you tell me why (devil) he is left 'I'd really like to know why the hell he has left'
  - c. Veux-tu me dire ce pourquoi il est parti?Will you tell me ce why he is left'I'd really like to know the reason why he has left'

These sharp contrasts follow from the fact that 'diable', the 'can't find the value' marker described at length in Obenauer (1994, 2006) – see also Poletto & Pollock (2004b) –, must be in the syntactic domain of an interrogative wh-word or phrase. There's none in (119a)-(120a), whence their unacceptability, but there is one, albeit non lexical, in (118a) whence its well-formedness..

In addition to this argument, Friedeman (1989) and Pollock (1992) point out that *ce que* questions and *ce que* free relatives do not show the same sensitivity to island effects. Extraction from *ce que* relatives yields (much) sharper unacceptability than extraction from *ce que* questions. Compare (121a) vs (121b), from Pollock (1992):

- (121) a. Je cacherai ce que Marie a rapporté pour Jean 'I'll hide what Mary brought back for John'
  - b. Je ne sais pas ce que Marie a rapporté pour Jean 'I don't know what Mary brought back for John'

(122) a. \*\*C'est pour Jean que je cacherai ce que Marie a rapporté 'It's for Jean that I'll hide what Mary brought back

b. ?C'est pour Jean que je ne sais pas ce que Marie a rapporté 'It's for John that I don't know what Mary brought back'

Aligning the analysis of (121a) on (121b) would make the difference in acceptability of (122a) and (122b) unexpected.<sup>34</sup> As expected on our analysis, the status of (123) is comparable to that of (122b):

(123) ? C'est pour Jean que je ne sais pas qu'est-ce que Marie a rapporté 'It's for John that I don't know what is ce that Mary brought back' 'It's for John that I don't know what Mary brought back'

Similarly the unacceptability of (124) is much worse than that of (123), again an unexpected contrast under the analysis of *ce que* interrogatives as free relatives.

(124) \*\*C'est à Jean que je ne sais pas ce dont Pierre parlera 'It's to John that I don't know what Pierre will speak'

Going back to *diable* and its syntax now, our analysis of (119), (120) and the like implies that wh+diable phrases do not enter the derivation as a constituent: 'diable' in well-formed (aggressively non D-linked)<sup>35</sup> questions like (125),

(125) a. Oui diable a-t-il rencontré?

Who devil has he met?'

What the hell has he met?

b. Où diable Jean voulait-il aller?

'Where devil Jean wanted-he to go?'

Where the hell did John want to go?

must be merged as an independent item in a separate relatively 'high' left periphery layer. French *diable* constructions thus share significant properties with Chinese 'daodi' questions as analysed in Huang & Ochi (2004).<sup>36</sup> More precisely,

<sup>36</sup> In Chinese 'daodi' – litt: 'to the bottom' – plays the role of 'diable' or 'hell' in French and English; 'daodi' must be in the scope of an interrogative CP and must have a wh-phrase in its domain although it does not form a constituent with it, as (i) – Huang & Ochi's (9a) and (9d) – suffices to show:

What the hell did he buy?

Huang & Ochi (2004) suggest that 'daodi' is merged as the specifier of an 'Attitude phrase' whose head contains a logophoric feature of attitude. In recent work, H. Obenauer (2006) convincingly

<sup>&</sup>lt;sup>34</sup> The converse judgements are never found. On question vs relative islands see Rizzi (1982, chapter 3).

<sup>&</sup>lt;sup>35</sup> See Pesetsky (1987)

<sup>(</sup>i) a ta daodi mai-le shenme?

<sup>&#</sup>x27;he daodi bougth what'

b wo jiushi bu xiaode daodi ta weishenme me lai

<sup>&#</sup>x27;I just not know daodi he why not come'

I simply don't know why the hell he did not show up

we view the lexical item diable as the head or specifier<sup>37</sup> of a 'diable' projection' - maybe Huang & Ochi's (2004) 'attitude Phrase' - merged high in the CP field. As a preliminary step, let us state minimally that that diable projection is merged in the CP field and must be in the c-command domain of a wh-word. In questions like (125) it could be considered to have been merged immediately below WhP1 and the various wh-words move through it on their way to their final target. In ce+que indirect questions, it seems to surface below ForceP -for why this should be so see next section—and the wh-word licensing it is the non lexical version of clitic que in (126):

(126) Veux-tu me dire qu'est-ce que diable il va faire Will you tell me what is ce that the hell he is going to do 'I'd really like to know what the hell he's going to do'

In short we claim that genuine ce+que questions are elliptical versions of the spurious cleft constructions, derived from them by the processes that also yield reduced relatives like (127a) from (127b) by deletion of the copula and (relative) wh-word:

- (127) a. L'étudiant entré le dernier dans la pièce fermera la porte The student entered the last in the room will close the door 'The student last entering the room will close the door'
  - b. L'étudiant qui sera entré le dernier dans la pièce fermera la porte The student who will be entered the last in the room will close the door 'The student who will last be entering the room will close the door'

In both (127) and (109)-(118) the only remaining part of the elided sentence is the predicate, the past participle entré in (127a), ce in (109) and (118), although the elided clitic wh-word que is still active and successfully licenses the diable projection in (118a).<sup>38</sup> On the other hand, there is no such interrogative wh-word in the concealed questions of (119a) and (120a), which explains why they are unacceptable. This, then, shows that ce in ce+que embedded questions like (109)-(118) should not to be confused with the homophonous sentential determiner ce of concealed questions like (114b), (119b) and (120b), despite the fact that the two have almost always been erroneously lumped together.<sup>39</sup>

argued that the layer of the left periphery responsible for the 'Can't find the Value' interpretation at work in diable questions is merged above our high Wh1P layer. This is compatible with our analysis and would only require additional Movement of the wh words and phrases involved (phrasal movement for qui, où etc. but head movement for que).

<sup>38</sup> This would follow neatly if the elliptical process at work here took place on the PF side of the

See section 5.3 on this alternative.

grammar only.

<sup>39</sup> Munaro (1999b) has made the important discovery that in many NIDs demonstratives have come to play the part of real interrogative wh-words. He illustrates this empirical generalisation very convincingly with data from Piedmontese, Valdotain and Ligurian dialects. For example in (i) and

#### 5.2 Where the hell is 'diable'?

The preceding section has made advantageous use of island facts and the idea that the 'diable projection' in the left periphery needs to be c-commanded by an interrogative wh-word to tease apart the two question types in (118) and (119). Yet it has also arrived at a paradox: in 'can't find the value' (CFV) questions like (128),

(128) a. Oue diable a-t-il fait?

'What the hell has he done?'

b. Où diable est-il allé?

'Where the hell has he gone?'

c. Oui diable embrasse-t-elle?

Who devil kisses she?

'Who the hell is she kissing?'

d. A qui diable parlais-tu?

To whom devil spoke you?

'Who the hell were you speaking to?

(ii), from the Southern and Northern Valdotain varieties of Chatillon and Courmayeur, the form *senche* (= 'ce que') is used as 'what', both in root and embedded questions:

(i) a. sen-che fi-yen?

Chatillon Valdotain

ce-that do we ='what shall we do?'

b. sen-che t' a t feit?

ce-that scl-have-scl done? = 'what have you done?'

(ii) a. sen-che fièn-nò?

Courmayeur Valdotain

ce-that do-scl?

'what shall we do?'

b. dì-me *sen-che* meudgie Marie

tell-me ce-that eats Mary

'tell me what Mary eats'

Similar facts hold in Rodoretto di Prali, a dialect spoken west of Turin in the Germanasca valley, where the *wh*-phrase *what* is expressed by the form *soc*:

(iii) a. e mi, soc minjou-lò?

Rodoretto di Prali

and I, ce+that eat-scl?

'And me, what shall I eat?'

b. soc al aourè-lò dit Giorgio?

Ce+that scl would-have-scl said George?

'what would George have said?'

c. Sabbou pa soc (a) fase Jan

Know not ce+that (scl) does Jan

'I don't know what John does'

As Munaro notes  $s\grave{e}n$  is a demonstrative and the form sen-che is straightforwardly analysable as resulting from the agglutination of the demonstrative  $s\grave{e}n$  to the complementizer che. The same is true of the form soc in Rodoretto di Prali. The text analysis of 'real' embedded ce que interrogatives in French could or could not extend to these and similar forms, depending on what the facts concerning spurious clefts and the 'diable' projection are in those dialects. Assuming they are indeed amenable to the analysis suggested above for French ce que embedded questions, the deletion of wh-words and est at work in French embedded questions would then have generalised to root contexts, for reasons that would need to be spelled out. Conceivably European Portuguese 'O que' ('the what') questions – which are licit both in root and embedded questions – might be similarly analysed.

diable is sitting immediately below the high WhP1 position and above the ForceP layer to which remnant IP movement – i.e. Subject Clitic Inversion, see Pollock (2003), (2006) and 5.3 below – has moved the (remnant IP containing the) finite verb (see Poletto & Pollock 2004a, b); however in spurious cleft constructions like (129) for speakers like Jean-Yves it must surface below the forceP layer where the spurious cleft was merged:<sup>40</sup>

- (129) a. \*Que diable est-ce que tu cherches dans ce placard?
  What devil is ce that you look in that cupboard
  'What the hell it is that you are looking for in that cupboard?'
  - b. Qu'est-ce que diable tu cherches dans ce placard?What is ce that devil you look in that cupboard 'What the hell it is that you are looking for in that cupboard?'

As expected on the analysis suggested above, the ordering in (129b) is replicated in embedded *ce que* questions:

- (130) a. Dis-moi ce que diable tu cherches dans ce placard
  Tell me ce that devil you look in that cupboard
  'Tell me what the hell you're looking for in that cupboard'
  - b. \*Dis-moi ce diable que tu cherches dans ce placard
    Tell me ce devil that you look in that cupboard
    'Tell me what the hell you're looking for in that cupboard'
  - c. \*Dis-moi diable ce que tu cherches dans ce placard
     Tell me devil ce that you look in that cupboard
     'Tell me what the hell you're looking for in that cupboard'

Still, in comparison to (125), the ordering in (129) and (130) is unexpected. To draw a more complete picture of *diable* and spurious clefts in French it must be noted that the examples in (131) behave as one would expect:

Further work will be needed to cover the full range of intuitions among speakers of 'French'

regardless of their age and/or regional origin (see also note 49 below).

40 There seems to be considerable variation among French speakers here. All of them agree, as far

as we know, that (129a) is sharply out and thus contrasts quite unexpectedly with the perfect (131). We've never found the reverse judgement. Not all speakers accept (129b) or (132) however. There seems to be an age dimension here. Younger generations of French speakers like Michal Starke or Eric Mathieu (p.c.) seem not to use 'diable' as a 'can't find the value' marker productively anymore and consider it as an obsolete form whose use is restricted to literary Fench. Correspondingly sentences like (129b) or (132) feel very odd to them, although in general not clashingly bad. Older speakers like Jean-Yves on the other hand seem to have preserved an active 'diable' syntax and for them the judgements reported in the text are in general fairly sharp. The analysis in the rest of this paper is an attempt to make sense of those older speakers's intuitions.

(131) a. Qui diable est-ce que tu as vu dans ce placard?

Who devil is ce that you saw in that cupboard

'Who the hell was it that you saw in that cupboard?'41

b. Où diable est-ce que j'ai mis mes clefs?

Where devil is ce that I put my keys

'Where the hell did I put my keys?'

c. Pourquoi diable est-ce que tu me poses cette question? Why devil is ce that you to me ask that question?

'Why the hell did you ask me that question?'

d. Dis moi qui diable est-ce que tu as vu dans ce placard? Tell me who devil is ce that you saw in that cupboard 'Tell me who the hell you saw in that cupboard?'

e. Dis moi où diable est-ce que j'ai mis mes clefs? Tell me where devil is ce that I put my keys

'Tell me where the hell I put my keys?'

f. Dis moi pourquoi diable est-ce que tu me poses cette question? Tell me why devil is ce that you to me ask that question

'Tell me why the hell you ask me that question'

In short the unexpected order of the 'diable projection' and the ForceP layer only seems to arise (obligatorily) when interrogative clitic que surfaces, either overtly, as in (129) or covertly, as in (130). One might therefore be tempted to view this as yet another reflex of the clitic vs non clitic dimension. This, however, would be insufficiently general since it would not take into account the fact that in addition to (128) and (129) the examples in (132) are also fine for French speakers like Jean-Yves:

(132) a. Qui est-ce que diable tu as vu dans ce placard?

Who is ce that devil you saw in that cupboard

'Who the hell did you see in that cupboard?

b. Où est-ce que diable j'ai mis mes clefs?

Where is ce that devil I put my keys 'Where the hell did I put my keys?'

c. Pourquoi est-ce que diable tu me poses cette question? Why is ce that devil you to me ask that question

'Why the hell do you ask me that question?'

d. Dis moi qui est-ce que diable tu as vu dans ce placard?

Tell me who is ce that devil you saw in that cupboard

'Tell me who the hell you saw in that cupboard?'

e. Dis moi où est-ce que diable j'ai mis mes clefs?

Tell me where is ce that devil I put my keys

'Tell me where the hell I put my keys?'

<sup>&</sup>lt;sup>41</sup> As pointed out in Munaro & Pollock (2005), the English translation of (128a) is rather misleading: *wh-est-ce que/qui* questions are not genuine clefts the way *wh-is it that* questions are in English. A better translation for (128a) would thus be the simpler *Who the hell did you see in that cupboard?* We shall adopt a mono-clausal translation for all the relevant cases below.

f. Dis moi pourquoi est-ce que diable tu me poses cette question? Tell me why is ce that devil you to me ask that question 'Tell me why the hell you are asking me that question?

Neither qui nor où nor evidently pourquoi share the clitic properties of que, so making the ordering in (129b) (131) and (132) dependent on cliticness in too direct a fashion would not be optimal. Instead of taking that tack, we shall posit that the unexpected ordering is tied to a property of 'wh-est-ce que' constructions which neither Obenauer (1982) nor Munaro & Pollock (2005) -the only in-depth generative studies of (spurious) cleft questions known to us- properly identified. More specifically we shall follow here an extremely long and influential French grammatical tradition according to which the sequence 'wh-est-ce que/qui' may be reanalyzed in Modern French as a single complex wh-phrase. That tradition was so prevalent in (early) 20<sup>th</sup> century grammatical studies that its correctness was just taken for granted and authors didn't even bother to argue in favour of it. So for example, Foulet (1919, section 267), discussing 'les formes allongées des pronoms interrogatifs' ('expanded interrogative pronouns') in Old French writes: "Ces constructions ont une apparence toute moderne. Mais c'est une illusion. Il ne faut pas faire de 'qui est-ce qui', 'qu'est-ce que' des locutions indécomposables en ancien français [our stress C. Poletto & J-Y Pollock] : le verbe être y retient toute sa force et le tour exprime toujours indignation, surprise, admiration, curiosité vive, etc. » ('these constructions do look like their modern counterparts. Yet this is misleading. One should not view 'qui est-ce qui', 'qu'est-ce que' as unanalysable phrases in Old French: such constructions always expressed indignation, surprise, admiration, keen interest etc.)

Obenauer (1982), Munaro & Pollock (2005) have implicitly or explicitly argued against this tradition if it is interpreted as meaning that '{que, qui, où, quand, pourquoi} est-ce que' are first merged in an A-position as a single complex wh-word. This execution of the traditional intuition could not account, for example, for the well-known que/qui alternation in (133a, b) and (133c, d) in a unitary fashion, as it evidently should:

- (133) a. Dis moi qui est-ce qui est arrivé en retard Tell me who is ce that+i is arrived late 'Tell me who arrived late'
  - b. Dis moi qui est-ce que tu as vu à Paris Tell me who is ce that you saw in Paris 'Tell me who you saw in Paris
  - c. Qui dis-tu qui est arrivé en retard ? Who say you that+i arrived late 'Who did you say arrived late?'
  - d. Qui dis-tu que tu as vu à Paris?Who did you say that you saw in Paris?'Who did you say you saw in Paris?

So *que* in *wh-est-ce que* must be minimally analysed as a complementiser, <sup>42</sup> which it obviously couldn't be if it was merged as a mere suffix in what we shall call pre-theoretically an 'Expanded Interrogative Pronoun', adopting Foulet's (1919) terminology. Similarly, the Expanded Interrogative Pronoun idea if it is interpreted in that way would have a hard time explaining why '{que, qui, où, quand, pourquoi} est-ce que' can never occur in *in situ* position.

We consequently have to rephrase the basic intuition of that tradition rather drastically, although we do wish to retain its main feature, the idea that sequences like '{que, qui, où, quand, pourquoi} est-ce que' may be reanalysed as a single syntactic phrase, an 'Expanded Interrogative Pronoun' (henceforth EIP), which can therefore move as a unit. We shall do so by claiming that such constituents arise cyclically. Let us say informally that this results from a 'reanalysis' of the spurious cleft structure described above. If this is right, the derivation of CFV questions like (134) is as indicated in the very rough sketch in (135):

(134) Qu'est-ce que diable tu as fait?
What is ce that the devil you have done?
'What the hell have you done?'

(135) Input:

 $[ForceP\ [CopP\ est\ [SC\ que\ ce]]]\ [Force^\circ\ que]\ [Wh2P\ O_i\ [[IP\ tu\ as\ fait\ t_i]]]]$ 

(a) Cliticize que to  $ClP \Rightarrow$ 

[ForceP [CLP quei [CopP est [SC ti ce]]] [Force que] [Wh2P Oi [IP tu as fait ti]]]]

(b) wh-est-ce que/qui Reanalysis ⇒

 $[ForceP\ [CLP\ \{que_i\ [CopP\ est\ [SC\ t_i\ ce]]]\ [Force^\circ\ que]\}[Wh2P\ O_i\ [IP\ tu\ as\ fait\ t_i]]]]$ 

- (c) Merge DiableP and move 'Expanded Interrogative Pronoun' {que} [CopP est [SC ti ce]]] [Force° que]} to Spec, diableP  $\Rightarrow$  [DiableP {que} [CopP est [SC ti ce]]] [Force° que]} j diable[ForceP tj [CLP [Wh2P Oi [TP tu as fait ti]]]]
- (d) Merge high WhP1 and attract 'EIPronoun' to WhP1  $\Rightarrow$  [Wh1P {que<sub>i</sub> [CopP est [SC t<sub>i</sub> ce]]] [Force° que]}<sub>j</sub> Wh1° [DiableP t<sub>j</sub> diable[ForceP t<sub>j</sub> [CLP [Wh2P O<sub>i</sub> [IP tu as fait t<sub>i</sub>]]]]
  - $\Rightarrow$  Qu'est-ce que diable tu as fait <sup>43</sup>

<sup>42</sup> In the derivations sketched above it is the lexical head of ForceP, in line with Rizzi's (1997) ideas concerning his split CP. On the need to modify that structure see section 5.3.

<sup>&</sup>lt;sup>43</sup> Note that (135), sketchy though it is, explains why 'qui est-ce qui', 'qu'est-ce que' etc. can never occur in situ: these 'Expanded Interrogative Pronouns' start off as copulative phrases merged in ForceP, a layer of the left periphery that is typically missing in the truncated left periphery of in situ questions. When it is not missing – in the internal grammar of speakers of Jean-Yves' generation (see above) –, it is empty and has its Force feature checked by the wh-word and phrases. So the left periphery of in situ questions, truncated or not, is incompatible with 'qui est-ce qui', 'qu'est-ce que'.

As (135) suffices to show, our 'wh-est-ce que/qui' reanalysis makes sense of the unexpected ordering of diable in spurious clefts: if some such process exists there will be no need for the inelegant assumption that the diable projection is merged in two distinct layers of the CP field of questions, a requirement for any analysis of French wh-questions in particular and for our cartographic approach in general.<sup>44</sup>

- 5.3 On Deriving 'Reanalysis' and 'Expanded Interrogative Pronouns' from UG Despite the interesting simplifications and generalisations our 'reanalysis' thus permits, it also raises serious problems, among which the following two are probably the most obvious:
- (136) A. Why is 'wh-est-ce que/qui' reanalysis only obligatory with clitic que? <sup>45</sup> B. What sort of a process is 'wh-est-ce que/qui' reanalysis?

Although we shall not be able to provide a fully worked-out answer to each of them, we shall try to go some way towards that goal, in the hope that future research can take our hints and sketches further. We start with A, probably the easier problem of the two, and attempt to solve it by combining the status of *diable* in the *diable* projection and the properties of (clitic) *que*-movement.

While it is possible to have a speaker-oriented parenthetical like 'à ton avis' ('in your opinion') in between qui est-ce and complementiser qui, this is impossible whenever clitic wh- que is involved. This judgement seems to be shared by all speakers of French unlike the judgements concerning diable discussed in the text The pair in (i) would follow if reanalysis made the resulting string, Foulet's EIPs, unavailable for parenthetical merge. 'Reanalysis' as sketched in (135) also correctly predicts pairs like (iia) vs (iib), which sharply contrast with the acceptable (iii) in Jean-Yves's French:

- (ii) a. Où diable est-ce, à ton avis, que Paul a rencontré Marie? Where devil is-ce, in your opinion, that Paul has met Marie? 'Where the hell, in your opinion, did Paul meet Mary?'
  - b. \*Où est-ce, à ton avis, que diable Paul a rencontré Marie? Where is-ce, in your opinion, that devil Paul has met Marie? 'Where the hell, in your opinion, did Paul meet Mary?'
- (iii) a. Où est-ce que diable Paul a rencontré Marie?

Where the hell did Paul most Mary?

'Where the hell did Paul meet Mary?'

b. Où diable est-ce que Paul a rencontré M

b. Où diable est-ce que Paul a rencontré Marie? Where devil is-ce that Paul has met Marie? 'Where the hell did Paul meet Mary?'

<sup>&</sup>lt;sup>44</sup> In addition to the text facts, the reanalysis suggested above and the 'expanded interrogative pronouns' it creates may also give us a handle on pairs like (i):

a. Oui est-ce. à ton avis, qui a dit cela?

<sup>&#</sup>x27;Who is it, in your opinion, that has said that?

b. \*Qu'est-ce, à ton avis, qui est tombé

<sup>&#</sup>x27;What is it, in your opinion, that has fallen down?

<sup>&</sup>lt;sup>45</sup> Compare (129a) vs (129b), and (131) vs (132).

In sharp contrast with its English opposite numbers the {hell, dickens, devil}, diable as an 'aggressively non D-linked' or 'Can't Find the Value' marker cannot take a definite article. When it does, as in (137a),

(137) a. Où le diable est-il allé?

Where the {hell, dickens, devil} is he gone?

'Where did the devil go?'

b. Où diable est-il allé

Where the {hell, dickens} is he gone?

'Where the hell, dickens} did he go?'

'le diable' can only be interpreted as an R-expression, the (demonic) subject of a Complex Inversion question – on which see Poletto & Pollock (2004a), Pollock (2006) –, and it thus sharply contrasts with its article-less counterpart in (137b). Non argumental, article-less count singular diable we shall claim is preferably analysed as a bare noun and, therefore, will typically be the head of the diable projection. Consider what the effect of this is for the syntax of wh-movement; in particular, go back to step (c) and (d) of (135). Suppose reanalysis does not take place. Then clitic que must reach WhP1 and cross over DiableP. But que is a clitic, thus moves as a head and obeys (some minimalist version of) the Head to Head constraint. Suppose further that clitic que cannot adjoin to 'diable'. It follows that clitic que cannot reach its high target position if diable is a head. If this is true, diable cannot be a head in perfectly acceptable SCLI questions like (138):

(138) Que diable as-tu fait à Marie? What devil have you done to Marie?

'What the hell have you done to Mary?'

(i) a. Qui as-tu vu d'autre?

Who have you seen of other?

'Who else have you seen?'

b. Qui d'autre as-tu vu?

Who of other have you seen? 'Who else have you seen?'

But clitic *que* cannot, as shown in (ii)

(ii) a. Ou'as-tu vu d'autre?

What have you seen of other?

'What else have you seen?'

b. \*Que d'autre as-tu vu?

What of other have you seen?

'What else have you seen?'

for reasons stated at the beginning of this footnote.

<sup>&</sup>lt;sup>46</sup> If it did, it would either drag along *diable* on its way to WhP1, which we claim would make proper head-adjunction of clitic *que* to Wh1° impossible, thus causing the Wh1° feature to remain unchecked or else it would 'excorporate' from a head. Excorporation has long been considered an illegal computation in GB theorising, see Baker (1995), despite occasional claims to the contrary, e.g. Roberts (1991). That clitic *que* cannot drag anything along to its cliticisation site is demonstrated by the following facts: *Qui*, a non clitic wh-word, can optionally drag along *d'autre* (lit. 'of other' = 'else') to the high WhP1 position in (ib),

It must rather be the NP specifier of the *diable* projection, whose head is null. We shall assume that unlike lexical *diable*, that non lexical head will not block legitimate *que* adjunction to Wh1°, whence the well-formedness of (138).

Suppose however, as was just stated, that this is a marked option, a last resort solution: (Modern) French article-less singular count nouns are typically *not* analysed as phrases but as bare nouns. We now note that the cyclic reanalysis sketched out (135b) creates a phrasal object, Foulet's (1919) 'Expanded Interrogative Pronoun', and it can therefore move to Spec, *diable* as a phrase, as shown in (135c), just as non clitic *qui* or *pourquoi* do in the derivations of (139a, b):

(139) a. Qui diable est-ce que tu as rencontré?
Who diable is-ce that you have met?
'Who the hell have you met?'

b. Pourquoi diable est-ce que tu es parti?
Why devil is-ce that you are gone?
'Why the hell did you leave?'

Put in another way, the 'reanalysis' that creates the 'Expanded Interrogative Pronouns' {qu'est-ce que/qui} has the effect of allowing a clitic wh-word to move as a phrase and still be a clitic: That EIP is phrasal and provides the clitic within it with the cliticisation site it requires. <sup>47</sup> Because of that property any EIP containing que makes it possible for diable to be analyzed as the head of the diable projection, which we have just argued is the null, unmarked way article-less diable is analysed, like other article-less count singular nouns in (Modern) French. We now interpret the unacceptability of (126a), repeated in (140),

(140) \*Que diable est-ce que tu cherches dans ce placard?
What devil is ce that you look in that cupboard
'What the hell are you looking for in that cupboard?'

as stemming from the fact that (140) has not availed itself of that possibility. Consequently a marked analysis of *diable* was chosen while an unmarked one would have been possible if 'reanalysis' had created a *que*-based EIP. A corollary of this is, of course, that no legitimate reanalysis creating an EIP could have taken place in (138). Assuming so, no alternative was possible; hence the marked analysis of *diable* as the NP specifier of the *diable* projection was a legitimate option and (138) is fine.<sup>48</sup>

<sup>47</sup> In that respect EIPs differ crucially from *d'autre*, which clitic *que* cannot pied-pipe, for reasons described above in footnote 43.

<sup>48</sup> On why no 'reanalysis' could have taken place in (138), see below. By now the reader will evidently have realised that the present analysis is conceptually strongly reminiscent of Chomsky's (1995, chapter 2) 'economy' account of *do*-support in English. Like Chomsky's, our analysis crucially rests on the idea that two derivations are competing and that the 'less costly' one wins out. This is a non local view of economy and because of that our account, like Chomsky's, will ultimately need to be (re)formulated in less computationally costly terms, although at this stage we don't know how this could be done.

It should be stressed again that the reanalysis creating EIPs is *not* dependant on the presence of a clitic wh-word like *que*: for example it has applied in all of (130), repeated in (141),

- (141) a. Qui est-ce que diable tu as vu dans ce placard?
  Who is ce that devil you saw in that cupboard
  'Who the hell did you see in that cupboard?
  - b. Où est-ce que diable j'ai mis mes clefs? Where is ce that devil I put my keys 'Where the hell did I put my keys?'
  - c. Pourquoi est-ce que diable tu me poses cette question? Why is ce that devil you to me ask that question 'Why the hell are you asking me that question?'

where neither *qui* nor *où* nor *pourquoi* are clitic wh-words. Because they are not, *qui*, *où* or *pourquoi* move as phrases to Spec, *diable* on the unmarked analysis thereof, where *diable* is a bare noun and hence a head. Reanalysis creating EIPs is also possible and obviously does not alter the status of *diable* where non clitic wh-words are concerned. The consequence is that (130)-(141) and (128)-(142) are both fine and are close to perfect free-variants for speakers of Jean-Yves' generation:<sup>49</sup>

- (142) a. Qui diable est-ce que tu as vu dans ce placard? Who devil is ce that you saw in that cupboard 'Who the hell did you see in that cupboard?'
  - b. Où diable est-ce que j'ai mis mes clefs? Where devil is ce that I put my keys 'Where the hell did I put my keys?'
  - c. Pourquoi diable est-ce que tu me poses cette question? Why devil is ce that you to me ask that question? 'Why the hell are you asking me that question?'

Let us now try to tackle questions (136B), repeated below as (143):

(143) B. What sort of a process is 'wh-est-ce que/qui' reanalysis?

<sup>49</sup> This as seen above does not seem true true for youg(er) speakers who, to the extent that they use

is in the process of being replaced in many sentence types by a truncated one, then *que* will end up becoming obsolete. If, furthermore, *que* was the basic 'raison d'être' of the continuing need in the Internal Language of French speakers for spurious clefts and Expanded Interrogative Pronouns, then one might expect the latter two ultimately to become obsolete as well.

the *diable* construction at all, only fully accept sentences like (142) where no EIP creating 'reanalysis' has taken place. One might view this evolution as resulting from the ongoing loss of clitic *que* described in section 4 above. The two phenomena might be linked as follows: the spurious cleft constructions and the 'reanalysis' made possible by it have been kept alive and kicking for six or seven hundred years by the simultaneous existence of clitic *que* and the (often conflicting) need for such clitic wh-words to reach the high WhP1 of the fully fledged left periphery of 'standard' French. If it is true, as claimed in 4 above, that that fully fledged CP field is in the process of being replaced in many sentence types by a truncated one, then *que* will end up

The best possible answer would evidently be that the 'reanalysis' in question, although it has real enough empirical effects, as shown in the previous two sections, does not exist as an independent process: clearly one wouldn't want speakers of natural languages to freely 'reanalyse' any arbitrary string as a syntactic constituent, as our sketch in (135), repeated in (144), seems to be doing:

```
(144) Input:
```

[ForceP [CopP est [SC que ce]]] [Force que] [Wh2P Oi [[IP tu as fait ti]]]]

(a) Cliticize que to  $ClP \Rightarrow$ 

[ForceP [CLP que; [CopP est [SC ti ce]]] [Force que] [Wh2P Oi [IP tu as fait ti]]]]

(b) wh-est-ce que/qui Reanalysis ⇒

 $[ForceP\ [CLP\ \{que_i\ [CopP\ est\ [SC\ t_i\ ce]]]\ [Force^\circ\ que]\}[Wh2P\ O_i\ [IP\ tu\ as\ fait\ t_i]]]]$ 

Assuming so, it must be the case what we have been informally calling 'reanalysis' is a language particular instance of a general syntactic process however specific its output – Foulet's (1919) 'Expanded Interrogative Pronouns' – may seem to be in French. We shall make what we take to be the null hypothesis: Qu-movement can 'drag along' est-ce que for the same reason wh-movement can drag along additional lexical material in pied-piping contexts; the existence of EIPs in French must therefore be the consequence of the UG defined possibility of pied-piping material along with wh-words in wh-movement. Taking this tack has two major consequences. Firstly, the parse of the input structure of 'Qu'est-ce que diable tu as fait?' shown in (143) cannot be right. If it were there would be no way pied-piping could drag along the string qu+est-ce + que, since it is not a constituent in (143). Secondly, as already pointed out above, the fact that SCLI questions like (144a) are perfect and that (144b) is sharply out,

(144) a. Que diable as-tu fait?

What devil have you done?

'What the hell have you done?'

b.\*Qu'as diable tu fait?

What have devil you done?

'What have the hell you done?'

must mean that pied-piping of  $[IP \ t \ l \ [CIP \ que \ [as \ t_k \ ]]$  by *que* at step (f) of derivation (145) cannot take place.

```
(145) Input : [IP tu as fait [que, \emptyset]]
```

(a) Cliticise *que* to IP internal clitic field  $\Rightarrow$  [IP tu [CIP que; [as fait [t<sub>i</sub>,  $\emptyset$ ]]]

(b) Merge WhP1 and IP and attract 'ø' to spec WhP1  $\Rightarrow$  [WhP ø<sub>i</sub> Wh1° [IP tu [CIP que<sub>i</sub> [as fait [t<sub>i</sub>, t<sub>i</sub>]]]]

(c) Merge TopP and WhP1 and attract the participial phrase [fait [ $t_i$ ,  $t_j$ ]] to spec Top  $\Rightarrow$ 

[TopP [fait [t<sub>i</sub>, t<sub>j</sub>]]<sub>k</sub> Top° [WhP ø<sub>j</sub> Wh1° [IP tu [CIP que<sub>i</sub> [as t<sub>k</sub>]]]]

- (d) Merge GroundP and TopP and attract 'tu'<sup>50</sup> to Spec Ground  $\Rightarrow$  [GP tu] G° [TopP [fait [t<sub>i</sub>, t<sub>j</sub>]]<sub>k</sub> Top° [WhP Ø<sub>j</sub> Wh1° [IP t<sub>l</sub> [CIP que<sub>i</sub> [as t<sub>k</sub>]]]]]
- (e) Merge Force and GP and attract remnant IP to spec Force°  $\Rightarrow$  [ForceP [IP tl [CIP quei [as tk ]]m F° [GP tul G° [TopP [fait [ti, t j]] k Top° [WhP øj Wh1° tm]]]]]]
  - (f) Merge DiableP and ForceP and attract que to its null head (marked option) ⇒

[DiableP diable que<sub>i</sub> + $\emptyset$  [ForceP [IP t<sub>1</sub> [CIP t<sub>i</sub> [as t<sub>k</sub>]<sub>m</sub> F° [GP tul G° [TopP [fait [t<sub>i</sub>, t<sub>j</sub>]] k Top° [WhP  $\emptyset$ <sub>i</sub> Wh1° t<sub>m</sub>]]]]]]

(e) Merge WhP2 and diableP and attract *que* to Wh2°  $\Rightarrow$  [WhP2 que<sub>i</sub>+ø [DiableP diable t<sub>i</sub> [ForceP [IP t<sub>i</sub> [CIP t<sub>i</sub> [as t<sub>k</sub> ]]<sub>m</sub> F° [GP tul G° [TopP [fait [t<sub>i</sub>, t<sub>i</sub>]]<sub>k</sub> Top° [WhP ø<sub>i</sub> Wh1° t<sub>m</sub>]]]]]]

# $\Rightarrow$ *Que diable as-tu fait?*

Everything else being equal, this shows that there must be a major structural difference between the Copulative Phrase merged in ForceP and the (remnant) IP moved there in SCLI: while in spurious clefts pied-piping of 'est-ce (que)' by *qui*, *où*, *pourquoi* etc. is licit – indeed obligatory with clitic *que* for speakers like Jean-Yves –, in all Subject Clitic Inversion sentences pied-piping of IP by *que*, *qui*, *où*, *pourquoi* etc. is sharply excluded.

We shall claim that this striking contrast follows as an automatic consequence from the status of the phrases in ForceP in 'qu'-est-ce que questions and SCLI, on the one hand, and the properties of pied-piping on the other. Concerning the latter, we shall follow a line of thought that goes back to Webelhuth (1992) and Koopman (1996) and claim that a phrase XP can only be pied-piped by XP's head or its specifier YP. <sup>51</sup> Clearly at step (e) in (145) que is not the specifier of IP. Assuming the Clitic Phrase of which que is the head cannot be extracted from IP, no derivation could ever yield the unacceptable (144b), as desired. On the other hand, ignoring for another moment the question of complementiser que, non clitic qui, où, quand etc. or clitic que are the specifiers of the phrases merged in ForceP at the point of the derivation where they could be moved to the specifier of the diable phrase, as shown in (146):

<sup>&</sup>lt;sup>50</sup> *tu* 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 must mean that what is attracted to GP is a Clitic Phrase (cf. Kayne 1972, Sportiche 1993, Poletto & Pollock 2004b) whose head is *tu* and whose specifier is pro.

<sup>&</sup>lt;sup>51</sup> On pied piping in PPs see Horvath (2006).

(146) a. 
$$[C_{opP} \{qui_i, où_i, quand_i, ...\} [C_{op}^{\circ} est] [SC t_i ce]]$$
  
b.  $[C_{LP} que_i [C_{opP} t_i est [SC t_i ce]]]$ 

This is because the 'spurious clefts' discussed here are 'defective' in the sense of Munaro & Pollock (2005): the copula of 'qu'-est-ce que questions cannot be inflected for tense, person or number. The copulative phrase is therefore merged alone in ForceP and is *not* embedded in any TP and/or AGRP. Because of that, the constituents in (146a) can indeed be pied-piped to Spec, Diable and must be in the case of (146b).

French also has 'real', ordinary cleft questions of the English (and Bellunese, see Munaro & Pollock (2005)) variety. These are inflected for tense:

- (147) a. A qui était-ce que tu parlais dans la rue tout à l'heure?

  To whom was it that you spoke in the street a moment ago?

  'Who was it that you were speaking to in the street a moment ago?'

  b. Le type qui te parlait tout à l'heure dans la rue, qui c'était?
  - b. Le type qui te parlait tout à l'heure dans la rue, qui c'était?

    'The bloke who was speaking to you in the street a moment ago, who was he?'

The preceding analysis thus correctly predicts that (148) will be unacceptable,

- (148) a. \*A qui était-ce que diable tu parlais dans la rue tout à l'heure?

  To whom was it that devil you spoke in the street a moment ago?

  'Who the hell was it that you were speaking to in the street a moment ago?'
  - b. \*Le type qui te parlait tout à l'heure dans la rue, qui c'était diable?

    The bloke who was speaking to you in the street a moment ago, who was he devil?
    - 'The bloke who was speaking to you in the street a moment ago, who the hell was he?'

and that a *Diable* projection, if present, will necessarily be contiguous to the wh-word:

- (149) a. A qui diable était-ce que tu parlais dans la rue tout à l'heure?

  To whom devil was it that you spoke in the street a moment ago?

  'Who the hell was it that you were speaking to in the street a moment ago?'
  - b. Le type qui te parlait tout à l'heure dans la rue, qui diable c'était?

    The bloke who was speaking to you in the street a moment ago, who devil was he?
    - 'The bloke who was speaking to you in the street a moment ago, who the hell was he?'

Let us now turn to our last problem, the fact that Foulet's "Expanded Interrogative Pronouns", resulting form pied-piping as just characterised, necessarily include complementiser que. As stated above, this must mean that what we have up to now analysed as the head of ForceP forms a constituent with the Copulative phrase that precedes it. The traditional interpretation of the relation between a complementiser C<sup>52</sup> and its subordinate IP cannot express this since the IP is merged directly with C. Under that theory there is no way pied-piping could attract que only, unless one appealed to yet another instance of remnant IP movement removing the complement of C prior to pied-piping. In the case at hand we cannot think of any empirical facts that might justify such a move. Therefore, rather than taking that tack, we shall adopt Kayne's (2000) theory of (prepositional) complementisers, according to which C is an attractor of IP and cannot be merged directly with it. More precisely, we shall adopt Kayne's idea that C is merged above VP, i.e. above where V and IP have been combined. In Kayne (2000) a typical derivation involving an infinitival subordinate clause and a matrix predicate like I tried to sing runs as follows (our (150) = (37) in Kayne (2000))

```
(150) (a) ...tried sing \Rightarrow merger of to

(b) ...to tried sing \Rightarrow attraction of infinitival IP by to

(c) ...singi to tried ti \Rightarrow merger of W and attraction of to by W

(d) ...toj+W singi tj tried ti \Rightarrow attraction of VP to Spec,W

(e) ...[tried ti]k toj+W singi tj tk
```

The important point for our present purposes is that (150c) is of the form 'IP C V'. In the (very) special case of spurious clefts we are discussing, adopting a theory of this kind has the effect of merging a *que* complementiser *above* the copulative phrase (or the CIP it allows) and to its left. Granting the idea that the copulative phrase in *ce que* questions is highly difective, the counterparts of (150d, e) will not take place, though that of (150c) will, as shown in (151):

```
(150) \  \, \text{Inputs:} \quad a.[CopP \ \{\text{qui}_i, \, \text{où}_i, \, \text{quand}_i, \, \dots\} \ [Cop^\circ \, \text{est}] \ [SC \ t_i \, \text{ce}]]] \\ b. \ [CLP \ \text{que}_i \ [CopP \ t_i \, \text{est} \ [SC \ t_i \, \text{ce}]]] \\ (a) \  \, \text{Merger of} \  \, que \  \, \Rightarrow \\ a'. \ [CP \ \text{que} \ [CopP \ \{\text{qui}_i, \, \text{où}_i, \, \text{quand}_i, \, \dots\} \ [Cop^\circ \, \text{est}] \ [SC \ t_i \, \text{ce}]]] \\ b'. \ [CP \ \text{que} \ [CLP \ \text{que}_i \ [CopP \ t_i \, \text{est} \ [SC \ t_i \, \text{ce}]]] \\ a''. \ [CP \ [CopP \ \{\text{qui}_i, \, \text{où}_i, \, \text{quand}_i, \, \dots\} \ [Cop^\circ \, \text{est}] \ [SC \ t_i \, \text{ce}]]]_j \ \text{que} \ t_j] \\ b''. \ [CP \ [CLP \ \text{que}_i \ [CopP \ t_i \, \text{est} \ [SC \ t_i \, \text{ce}]]]_j \ \text{que} \ t_j] \\
```

<sup>&</sup>lt;sup>52</sup> In our cartographic approach, the traditional notion 'complementiser' has no real status. Informally, one may say that a complementiser is one of the heads, lexical or null, of the various functional projections of the highly split left periphery of sentences.

The resulting strings in (150a'', b'') are constituents. We now posit, as above, that those constituents are merged in Spec Force, resulting in (151),

```
(151) a. [Force [CP [CopP \{qui_i, où_i, quand_i, ...\} [Cop^o est] [SC t_i ce]]]_j que t_j]
F^o]...
b. [Force [CP [CLP que_i [CopP t_i est [SC t_i ce]]]_i que t_j] F^o]...
```

Pied piping can now 'drag along' the whole sequence to Spec Diable, optionally so in (152) and obligatorily so in (153):

- (152) {Qui, où, quand} est-ce que diable tu as {vu, embrassé Marie}?
- (153) Qu'est-ce que diable tu as vu? 53

## 6. Concluding remarks

As in much of our previous work on the Northern Italian dialects, Italian and French this article has attempted to show that micro-comparative work on the Northern Italian dialects invariably digs up unheard of gems: if we are right Mendrisiotto has 'weak' wh-pronouns, yet another variety of wh-beasts, not previously identified. We have attempted to show here that such weak pronouns, like clitic wh- words, are merged in their argument positions in a complex wh-pair and move to specific positions in the IP field (different from that where clitic pronouns move), related to the position to which weak personal pronouns move, before moving up to their target position in the highly split left periphery of questions we have already argued for in much previous work.

We have also tried to show that the mysterious properties of French interrogative *quoi* can be made sense of when seen in the light of such 'weak' whpronouns, except that *quoi* we have claimed is the *lexical* counterpart of the *null* 

What he hell has just fallen?

On the other hand, he also accepts (ii), although he excludes (iii), which contrasts with (iv):

(ii) Qu'est-ce diable qui vient de tomber?
What is-ce devil that+i comes to fall?
What the hell has just fallen down?

(iii) \*Qu'est-ce diable que tu as fait?
What is-ce devil that you do?
What the hell are you doing?

(iv) Qu'est-ce que diable tu as fait?
What is-ce that devil you have done?
What the hell have you been doing?

For speakers of his type (ii) must mean that the *qui* resulting from the *que* to *qui* rule may optionally fail to be analyzed as a Kaynian complementiser, contrary to 'simple' *que* which must be so analysed, given the (iii) vs (iv) contrast.

<sup>&</sup>lt;sup>53</sup> In Jean-Yves's French, the so called 'que to qui' rule yields a *qui* complementiser that can be 'dragged along' under reanalysis (pied piping), since he accepts (i):

<sup>(</sup>i) Qu'est-ce qui diable vient de tomber ? What is-ce that+i devil comes to fall?

companion of Mendrisiotto's weak *cusa*. In short Mendrisiotto has provided the same sort of insight that Illasi, Monno and Bellunese provided concerning French interrogative clitic *que*.

Various extensions of these ideas have also been tentatively suggested concerning embedded questions, can't find the value questions and *in situ* questions. Much work remains to be done, and many questions are still unsolved, some of them empirical (see notes 40 and 49). We do hope, however, that the sort of work that we have suggested here will be pushed further in the near future by us or others and will ultimately solve what we hope are only problems and not mysteries.

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