# Some Questions (and Answers) about Cleft Sentences

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#### Abstract

The goal of this study is to correlate two independent accounts about *est-ce que/qui* questions in French (*est-ce que/qui* as a question marker, or as a decomposed element) with two independent accounts about cleft sentences (focused element *in situ* or displaced). Instead of trying to tease these two respective accounts apart, we argue that the two syntactic strategies do exist and compete for cleft constructions, and hence for *est-ce que/qui* questions: the first strategy relates to a (partial) movement strategy, whereas the second one refers to the 'relative' strategy. We give several empirical arguments in favor of that claim, based notably on the nature of complementizers (subordination *versus* relativization) and the distribution of specific adverbs (such as *donc* "then"). Interestingly, such an assumption for two competing strategies makes nice predictions with respect to the relation between focus and accentuation, typological differences, or connectivity/reconstruction effects.

**Keywords:** cleft sentences, questions, focus, intonation, reconstruction, partial movement

#### 1. How it all started...

Our study of the interaction between questions and clefts started with empirical data from child induced production. In her study of the acquisition of embedded questions by French native children, Oiry (2011a/b) notices a quite high production of data such as (1):

(1) Tu crois quoi qui est caché dans le sac? (Child French) you think what that is hidden in the bag "What do you think is hidden in the bag?"

On the basis of such examples, one could argue for several potential analyses. We are particularly interested in two of them:

- a partial movement strategy, traditionally related to interrogative full wh- movement
- a 'cleft-relative' construction, traditionally related to the presence of a relative clause.

A partial movement strategy would more or less state that examples such as (1) from French native children would be similar to what adult speakers of German or Bahasa Indonesia tend to produce, i.e. a question in which the displaced/wh- constituent is neither pronounced in situ nor in its final position, but in an intermediate position. More precisely, (1) would rather relate to what Fanselow (2006) calls Simple Partial Movement (SPM), i.e. a partial movement where no question marker arises in the matrix to indicate the scope of the interrogation. Notice that analyzing (1) in such a way would fulfill Fanselow (2006)'s claim that a language that allows for SPM also allows for wh- in situ and full wh- movement. French would just be an example of such a language.

A second potential analysis of example (1) would be to consider it as a case involving an embedded clefting strategy, i.e. as being parallel to (2):

(2) Tu crois que c'est quoi qui est caché dans le sac? (French) you think that it is what that is hidden in the bag "What do you think is hidden in the bag?"

In (2), the *wh*- item is not displaced anymore, but rather inserted in a cleft construction. Under this analysis, examples such as (1) and (2) can now be considered as cases of *in situ* questions, with a potential relative clause modifying the clefted constituent. One advantage of this analysis is the fact that (1) would now be related to a highly productive strategy for French adults too, by which a *wh*- item is inserted in a cleft construction, and left *in situ*. Here is

another example of the strategy, showing that cleft constructions are very present in adult French, be they in matrix or embedded sentences:

(3) (Tu crois que) c'est qui que Jean a vu? (French) you think that it is who that John has seen (Lit.) "(You think that) it's who that John saw?"

Considering those two potential analyses, what linguists intuitively tend to think is pretty clear: most of them argue for the *in situ* strategy to account for the data. The reason for that is certainly related to the fact that similar examples can be constructed even in the absence of any question. Notice indeed that, from the two potential analyses, only one seems clearly related to interrogative movement, i.e. the simple partial movement (SPM from now on) analysis. The fact that examples such as (4) (without interrogation) are perfectly grammatical seems to argue in favor of the 'cleft-relative' strategy:

Example (4) from adult French then seems to indicate that an SPM analysis would be inadequate, as the same data occurs even if no *wh*- item occurs in the sentence.

However, contrary to what intuitions would lead us to think, we argue that the two independent strategies sketched above do co-exist in French, and that they just correlate with the syntactic ambiguity of both cleft constructions and *est-ce que/qui* questions (see Munaro & Pollock (2005)). The ambiguity of cleft constructions refers to the fact that, depending on the analyses proposed in the literature, the clefted position (where the clefted constituent appears on the surface) may be considered either as an *in situ* or displaced position (i.e. as an A or A' position in GB terms). The ambiguity of *est-ce que/qui* is also related to two different analyses of such element: either as an interrogative scope marker (C°) or as a decomposed element with subject-auxiliary inversion (*est*<sub>AUX</sub>.-*ce*<sub>SUBJ</sub>.).

The following section introduces fundamental arguments in favor of our claim, the coexistence of two syntactic strategies for questions with clefts. Section 3 gives a more finegrained analysis of the two strategies based mainly on their syntactic and prosodic properties, and Section 4 discusses further arguments not only for the general claim, but also for the specific syntactic analysis proposed for each strategy.

#### 2. Two morphosyntactic strategies: arguments for the claim

In our study of the interaction between clefts and questions, we argue for the co-existence of two independent syntactic and cognitive strategies in French: one closely related to partial movement (and hence interrogation), the other much more related to clefts and relative clauses. Notice here that much of the discussion on that topic in the literature tries to give arguments in favor of one analysis over the other. And there might be a reason for that: the fact that in most cases, both strategies cannot be distinguished morphologically. Take the following examples in French which, we argue, can be equally analyzed as an SPM strategy or a relative strategy:

(5) a. (Tu crois que) c'est qui que Jean a vu?
(you think that) it is who that John has seen
(Lit.) "(You think that) it's who that John saw?"
b. (Tu crois que) c'est qui qui a vu Jean?
(you think that) it is who who has seen John
(Lit.) "(You think that) it's who who saw John?"

From (5), it is difficult to see whether the focused/wh- constituent qui is displaced or not, and whether the elements que/qui introducing the embedded proposition should be analyzed as a traditional case of que/qui alternation on the complementizer (see Kayne (1976)) or rather as two relative pronouns. However in this section, we introduce two contexts that do distinguish the two morphosyntactic strategies, hence providing strong support in favor of our claim.

#### These two contexts relate to:

- 1. the form of the complementizer, and the presence *versus* absence of pied-piping;
- 2. (un)grammatical constructions with the adverb *donc* 'then' in full *wh*-movement.

# 2.1. Pied-piping versus relative pronoun

One argument for the co-existence of both strategies in French arises if you consider cases which might disambiguate between a 'question' strategy (related to SPM) *versus* a 'cleft' strategy with a relative clause. Extraction of or out of Prepositional Phrases (PPs) in French provides such a case, as displacement of *wh*- constituents requires some form of pied-piping (the whole PP) whereas relative clauses make use of specific relative pronouns such as *dont* ("of whom"), or *avec lequel* ("with which"). And surprisingly both options lead to grammaticality in standard French, as can be seen from the following examples:

- (6) a. C'est de quoi que tu as parlé?

  it is of what that you have talked
  b. C'est quoi dont tu as parlé?

  it is what REL you have talked
  "What is it that you talked about?"
- (7) a. C'est avec quel couteau que tu as coupé le gâteau?

  it is with which knife that you have cut the cake

  b. C'est quel couteau avec lequel tu as coupé le gâteau?

  it is which knife with which you have cut the cake

  "Which knife is it that you cut the cake with?

In both examples (6)a and (7)a, some form of pied-piping occurs, with the whole PPs *de quoi* 'of what' and *avec quel couteau* 'with which knife' being displaced from their thematic position, and followed by the traditional *que/qui* alternation in the complementizer position. The occurrence of such pied-piping on the focused constituent followed by the *que/qui* alternation gives strong support for an SPM account of the relevant examples, hence suggesting a direct relation between those examples and their full interrogative movement counterparts.

But very interestingly, French clearly has another strategy to derive these questions with clefts, as shown in (6)b and (7)b. If the semantic contribution seems very similar to the previous ones, the morphosyntactic strategy is clearly different. In those examples indeed, the focused constituents *quoi* 'what' and *quel couteau* 'which knife' do not exhibit any form of pied-

piping anymore, and they are now followed by unambiguous forms of relative pronouns or locutions such as *dont* in (6)b and *avec lequel* 'with which' in (7)b.

The fact that both examples in (6) and (7) are perfectly grammatical in French clearly argues for the existence of the two independent strategies sketched above. iv

### 2.2. Structures with donc ("then")

A second strong argument in favor of the existence of two morphosyntactic strategies for questions with clefts comes from the fact that the same duality can be seen with full interrogative movement structures. More precisely, the occurrence of an adverb like *donc* ('then') in full *wh*- movement structures seems to clearly favor the use of the cleft-relative strategy, with no pied-piping, and the use of relative pronouns such as *dont* in French. Consider indeed the following two examples, which again correspond to two different syntactic options for a similar semantic contribution:

- (8) De quoi/qui est-ce qu' il a parlé? of what/whom is it that he has talked
- (9) Qu' / Qui est-ce donc dont il a parlé? what/who is it then REL he has talked

The first option in (8) is clearly related to the first strategy (the SPM strategy), as some form of pied-piping is required. But crucially, the second strategy with presence of a relative clause is also available. In example (9) indeed, presence of the element *dont* ('of which') unambiguously indicates that a relative clause is used in that case. And notice that the use of such relative pronoun seems to be triggered by the presence of the adverb *donc* 'then'. We thus have two options when full interrogative movement is at stake, one related to the SPM strategy and the other making use of both relative clauses and the adverb *donc* 'then' simultaneously.

# 3. Two morphosyntactic strategies: analyses

Having introduced two fundamental arguments for the co-existence of two morphosyntactic processes to derive questions with clefts, we now develop a more precise analysis of these two constructions, taking into account not only their morphosyntactic properties, but also some prosodic and discursive properties.

### 3.1. The (simple partial) movement strategy

On the basis of the examples introduced in the previous section, several properties can be argued for with respect to the SPM strategy. The structure in (10) summarizes the most important ones:

(10) Tu crois que [
$$[f_{oc}]$$
 c'est **de quoi** qu' il a parlé ~~de quoi~~]] ]<sub>INTP</sub> you think that FOC of what TOP he has talked

The first property of that structure is the fact that the wh- constituent is (partially) moved from an  $in\ situ$  position further embedded within the sentence. Related to that is our assumption about the item  $c'est\ (que)$  in this strategy, which we analyze as a Focus particle introducing a Foc" projection, and triggering a contrastive focus on the displaced constituent.

Another main property of the SPM strategy is the fact that only one intonation phrase (INTP) is associated to the whole cleft sentence. Notice here that focus in French is traditionally assumed to occur at the right-edge of the intonation phrase (see Hamlaoui (2007)), except when contrastive, and in which case no such constraint occurs (see Erteschik-Shir (1997)). We argue that the FOC particle crucially introduces contrastive focus on the displaced constituent, so that focus does not have to coincide with the right-edge of an intonation phrase. Finally notice that the structure proposed here is clearly related to expletive analyses of clefts, as proposed in Chomsky (1977) among others.

A natural question that arises at this stage is what triggers movement of the cleft interrogative constituent. If we believe that such movement can clearly be considered as a kind of simple partial movement of the *wh*- constituent in the sense of Fanselow (2006), we also argue that this partial movement is not related to interrogation, but crucially to focus. Our main argument for that claim is the fact that pied-piping, our main diagnostics for the SPM strategy,

does not only occur in questions like in (10), but also in answers, as shown by the following example in (11):

The fact that (11) is a perfectly grammatical answer to (10) seems to indicate that what triggers movement and pied-piping in (10) has nothing to do with the interrogative feature, but is rather triggered by a focus feature.

There is a further argument for the view that focus is at stake in such examples and that focus is related to interrogation and partial movement in some way. That argument is typological: as noticed by Fanselow (2006), when you consider partial movement structures in other languages than French, it seems to be the case that Simple Partial Movement (i.e. with no interrogative scope marker at the root clause) is often associated with the presence of a focus particle (see Fanselow 2006: 440). One example of such language is Bahasa Indonesia studied in Saddy (1991). Consider indeed the following examples:

```
(12) a. Bill tahu Tom men-cintai siapa?

Bill knows Tom TRANS-loves who
b. Bill tahu siapa yang Tom cintai?

Bill knows who FOC Tom loves

"Who does Bill know that Tom loves?"
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(12) shows two options for asking a question in Bahasa Indonesia, the first one being the in situ construction, the second one being the SPM strategy. In that respect, Bahasa Indonesia and French behave on a par in fulfilling Fanselow (2006)'s generalization that that a language that allows for SPM also allows for *wh- in situ* (and full *wh-* movement). But another common property of these two languages is the presence of a focus particle to introduce the partially moved constituent. And on a par with the examples in French, the same particle also occurs in answers in Bahasa Indonesia, as shown in (13):

(13) Buku-buku yang saya cium.

books FOC I love

"I love BOOKS."

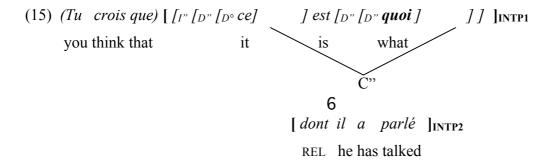
Summarizing the discussion, both generalizations given in Fanselow (2006) apply to French and directly follow from the analysis proposed here: *c'est (que)* is the focus particle associated with SPM movement, and the correlation with the *in situ* construction is straightforward as the former is directly derived from the latter, the only difference being that contrastive focus is introduced in the former.

One last property of the SPM strategy concerns its correlation with full *wh*- movement: with respect to that issue, we basically argue for a complementary distribution of the focus particle (FOC) *c'est (que)* and the question particle (Q) *est-ce que*: there is no focus position, hence no contrastive focus. vi

(14) 
$$[C'']$$
 De quoi  $[C']$  est-ce que  $[C']$  (tu crois qu') il a parlé de quoi  $[C']$  of what  $[C']$  you think that he has talked

#### 3.2. The 'relative' strategy

As for the second morphosyntactic strategy, we propose the following structure in (15), which again summarizes our main assumptions about it:



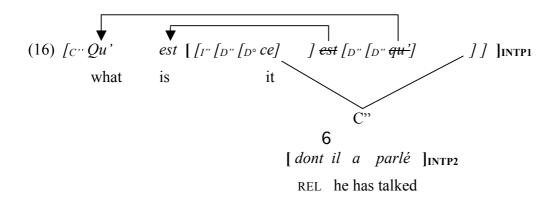
As compared to the first strategy, the structure proposed here is quite different in several aspects. First, this second morphosyntactic strategy is characterized by the presence of a relative clause, introduced by a relative pronoun (here *dont*). Notice that this strategy now relates to extraposition analyses of clefts, as proposed in Den Dikken (2006) among others: the relative clause is clearly analyzed as an extraposition structure in (15), more precisely

through a multidominance approach. We thus follow Bachrach & Katzir (2008) among others in arguing for a multidominance formalization of extraposition structures in general. vii

Another crucial aspect of the relative strategy is related to the fact that the c'est expression is now decomposed and analyzed as copular/identificational construction, with the demonstrative ce' it' being the subject, and  $\hat{e}tre'$  be' being the copula in I°. And notice that the cleft/wh- constituent now appears  $in \ situ$ , i.e. is not displaced from within the relative clause.

Finally, the last major difference with the SPM construction is that, in the case of the relative strategy, two intonation phrases (INTP) are associated to the cleft, instead of one for the SPM strategy. And notice that the focused constituent position now coincides with the right-edge of the first INTP, thereby fulfilling the general constraint on *potentially non-contrastive* focus in French.<sup>viii</sup>

What about the correlation between this relative strategy and full interrogative movement? As the former just corresponds to an *in situ* construction (the focused constituent being merged as an argument of the copula), we argue that movement of the focused constituent gives rise to regular subject (*ce*)-auxiliary (*est*) inversion, as schematized in (16):



First notice that contrary to the SPM strategy where the (contrastive) focus position disappears together with the focus particle, the (potentially non-contrastive) focus position in the relative strategy is still present, as it corresponds to the *in situ* position at the right-edge of the first INTP.

One major potential problem with the structure proposed in (16) is the fact that the output does not always seems to be grammatical in French. Consider indeed the output of (16) repeated in (17), which is always rejected by French speakers:

But there is a natural explanation for the status of that output, which nicely follows from one of the assumptions that we posit for the relative strategy: the ungrammaticality of (17) is expected under the constraint on (non-contrastive) focus at the right-edge of INTP. Such constraint forces the presence of an item to bear focus. Reconsider now the occurrence of the adverb *donc* 'then' in examples involving relative pronouns such as *dont* (see (9) in the previous section). Crucially indeed, the same sentence becomes grammatical when adding the adverb *donc* 'then' (see (18) below), which, we argue, fills the right-edge of the first INTP.

(18) [ 
$$Qu'$$
 est-ce donc ]<sub>INTP</sub> dont il a parlé? (French) what is-it then REL he has talked

Notice however that the presence of the adverb *donc* is not always necessary to get a grammatical output. Consider the contrast between (17) and (19) below:

In (19), to account for the fact that the adverb donc is not necessary, we suggest that it might be related to focus again, and more precisely the well-established fact that the wh- pronoun Qui [animate] (in (19)) is a strong/tonic form (and thus can be stressed) whereas Qu(e) [inanimate] (in (17)) is clearly a weak/clitic form (and then cannot be stressed). So whatever the precise process to account for the contrast, it seems to be the case that qui in (19) can indeed bear the focus of the first INTP, whereas no such item can be found in (17).

# 4. Further arguments for the analyses

To summarize our analysis so far, three major distinctions can be made between the two morphosyntactic strategies developed in the previous section. The first one concerns the prosodic pattern associated to each of the two constructions, as the SPM strategy is characterized by one INTP whereas two INTPs occur with the relative strategy. Moreover, a clear relative clause appears in the relative strategy, whereas the status of the embedded sentence in the SPM strategy is more traditionally associated to a complement clause. Finally, the two strategies differ as to what corresponds to the in situ position: it is found in the embedded clause for the SPM strategy, but in the argument position of the copula for the relative strategy. Building on these distinctions, the goal of this section is to provide further arguments both for the general claim (for to co-existence of two distinct morphosyntactic constructions) and for the specific analysis proposed for each of the constructions.

#### 4.1. On Focus 'holders'...

Our first argument is related to what we call focus 'holders'. Recall that the second strategy (the 'relative' strategy) for deriving questions with clefts is associated to two intonation phrases, one for the copular construction, and the other for the relative clause, as schematized in (20) below:

### (20) [copular construction]<sub>INTP1</sub> - [relative clause]<sub>INTP2</sub>

Crucially, such prosodic structure in French allows for a *potentially non-contrastive* focus at the right-edge of the first INTP, as defended in Hamlaoui (2007). The first natural prediction of such account is that there should be an item to fill the right-edge of the first INTP. As already shown in the previous section, we argue that this is precisely the role of the adverb *donc* 'then': it rescues full *wh*- movement sentences derived through the relative strategy such as (21) below by providing the missing item to bear focus at the right-edge of the first INTP.

(21) Quel étudiant est-ce <sup>??</sup>(donc) dont tu parles ? which student is-it then REL you talk

In absence of the adverb, the SPM strategy is clearly favored, correlated with pied-piping of the whole PP, as shown in (22). And notice that the presence of the same adverb with this strategy is now pretty odd. This is expected within our account, as the SPM strategy does not rely on the same prosodic structure (with only one INTP for the whole sentence).

(22) De quel étudiant est-ce (??donc) que tu parles ? of which student is-it then that you talk

Another prediction of our account is the fact that several items, and not only the adverb *donc* 'then', could in principle fill the right-edge of INTP and bear non-contrastive focus. As shown from data in (23), that predication is also fulfilled, as several adverbs seem to be able to play a similar role:

(23) Quel étudiant est-ce donc / alors / diantre / exactement dont tu parles? which student is-it then / so / good heavens / precisely REL you talk

To summarize, the distribution of adverbs such as *donc* 'then', *diantre* 'good heavens' or *exactement* 'precisely', gives more credit to the analysis proposed for each of the two prosodic/syntactic strategies: these items behave as focus holders, and are thus highly preferred (if not compulsory) under the relative strategy composed of two distinct INTPs.

# 4.2. Clefts and Relative clauses...

Aside from the prosodic structure, another main distinction that clearly emerges from the two structures proposed in the previous section is related to the status of the embedded clause (CP): a complement clause correlated with *que/qui* alternation for the SPM strategy <sup>x</sup>, versus a clear relative clause for the second strategy. A natural prediction of this concerns the occurrence of a further relative clause (RC) in these structures. We argue that it should be more naturally available with the SPM strategy, building on the assumption that two consecutive relative clauses tend to be related through coordination. First take the following contrast in (24) to illustrate the argument:

(24) a. ??le livre dont Paul a parlé que Marie aime
the book REL Paul has talked REL Mary loves
b. le livre dont Paul a parlé et que Marie aime
the book REL Paul has talked and REL Mary loves
"the book that Paul has talked about ??(and) that Mary loves"

Coming back to our data, adding a (further) relative should give rise to a similar contrast with the second strategy only, i.e. the one where a clear relative clause is already present in the structure. The example in (25) first illustrate an ambiguous case, i.e. a case where both strategies are in principle available:

(25) *C'est qui que Paul a invité* [RC que Marie aime]? FOC who TOP Paul has invited REL Mary loves

Unsurprisingly, the output is perfectly grammatical in (25): a relative clause can be added to the question-cleft construction. We argue that this grammatical output crucially relies on the SPM strategy where no relative clause is at stake. In other words, we argue that (25) is grammatical in the same way that the following full *wh*-movement and *in situ* constructions are grammatical in (26):

```
(26) a. Qui est-ce que Paul a invité [RC que Marie aime]? (full wh- movement)
who Q Paul has invited REL Mary loves
"Who did Paul invite that Mary loves?"
b. Paul a invité qui [RC que Marie aime]? (in situ)
Paul has invited who REL Mary loves
```

A first confirmation of such claim comes from the following example in (27)a, where piedpiping of the whole PP and the form of the complementizer indicate that the SPM strategy is used. Crucially indeed, such example, and their two correlates (see the full *wh*- movement and *in situ* questions in (27)b and c), are perfectly grammatical with the following relative clause:

(27) a. C'est de qui que Paul a parlé [RC que Marie aime ]? (focus movement)

FOC of who TOP Paul has talked REL Mary loves

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b. De qui est-ce que Paul a parlé [RC que Marie aime]? (full wh- movement)
of who Q Paul has talked REL Mary loves
"Who did Paul talked about that Mary loves?"
c. Paul a parlé de qui [RC que Marie aime]? (in situ)
Paul has talked of who REL Mary loves
```

A second and even stronger confirmation comes from (28)a, where presence of the relative pronoun *dont* and the adverb *donc* 'then' now force the use of the second strategy. The output, which now corresponds to an *in situ* question, is pretty odd, in the same way that (24)a with two consecutive relative clauses is odd. And notice the same judgment holds for the corresponding full wh- movement construction under the relative strategy, as shown in (28)b:

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(28) a. ??C'est qui donc dont Paul a parlé [RC que Marie aime]? (in situ)
it is who then REL Paul has talked REL Mary loves
??"Who is it then that Paul talked about that Mary loves?"
b. ??Qui est-ce donc dont Paul a parlé [RC que Marie aime]? (full wh- movement)
who is-it then REL Paul has talked REL Mary loves
```

In both cases, the occurrence of two consecutive relative clauses leads to the oddness of the sentence. And notice that both examples improve significantly when coordination is added between the two relative clauses, as illustrated in (29):

```
(29) a. C'est qui donc [dont Paul a parlé] et [que Marie aime]?

it is who then REL Paul has talked and REL Mary loves

b. Qui est-ce donc [dont Paul a parlé] et [que Marie aime]?

who is-it then REL Paul has talked and REL Mary loves
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#### 4.3. Reconstruction

One final argument for the coexistence of two morphosyntactic strategies to derive questions with clefts is related to reconstruction and connectivity data. Reconstruction/Connectivity

traditionally refers to the interaction between displacement and constraints on interpretation such as Binding Conditions. More precisely, the main idea is that fronted items may (have to) be 'reconstructed' within the movement chain for interpretation matters. Recall that under the two morphosyntactic strategies developed in this study, the movement chain differs, as the *in situ* position lies within the 'embedded' clause for the first strategy, whereas it corresponds to the argument of the copula for the relative strategy. Our account of questions with clefts thus predicts that reconstruction data should differ with respect to the strategy available. And very interestingly, it seems that the presence *versus* absence of the adverb *donc* 'then' clearly plays a role with respect to reconstruction data with questions. Consider indeed the following contrast in (30), related to condition C in full *wh*- movement questions:

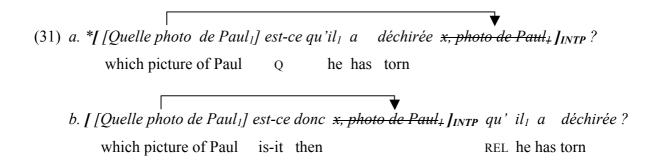
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(30) a. *Quelle photo de Paul<sub>1</sub> est-ce qu'il<sub>1</sub> a déchirée ?
which picture of Paul Q he has torn
b. Quelle photo de Paul<sub>1</sub> est-ce donc qu' il<sub>1</sub> a déchirée ?
which picture of Paul is-it then REL he has torn
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In the absence of the adverb *donc* 'then' in (30)a, a condition C effect clearly emerges: the coreference between *Paul* and the subject pronoun *il* 'he' is not available, as if the displaced constituent had to be reconstructed in the thematic position where a condition C violation occurs, the R-expression *Paul* being bound by the subject pronoun. However, adding the adverb *donc* 'then' in (30)b makes that coreference available again: no condition C effect arises, suggesting lack of reconstruction, or rather intermediate reconstruction which would not create a condition C effect.

This contrast is clearly expected if we follow our account and Erteschik-Shir (1997)'s constraints on reconstruction. Erteschik-Shir (1997: 106) gives two main constraints on the reconstruction process:

- 1. Fronted wh- items have to be reconstructed to 'locate' the variable associated with them
- 2. Reconstructed positions are limited to the ones that allow for non-contrastive focus, at the right-edge of INTP

The fact that the two examples in (30) correspond to two distinct morphosyntactic derivations now paves the way for a straightforward explanation of the contrast. The two structures in (31) below summarize the argument.



In the absence of the adverb *donc* in (31)a, the only position available for reconstruction is the *in situ* position of the fronted constituent, i.e. the internal argument position of *déchirer* 'tear'. And no doubt that reconstruction into that position leads to a condition C violation. However, adding the adverb *donc* in (31)b forces the use of the relative strategy with two distinct INTPs, and reconstruction is thus possible at the right-edge of the first INTP, i.e. in the *in situ* position corresponding to the argument of the copula. Reconstruction in that position crucially does not violate condition C, as the R-expression *Paul* is still not within the syntactic scope of the subject pronoun *il* 'he'.

Finally notice that what is relevant in this contrast is the presence versus the absence of an intermediate site for reconstruction at the right-edge of INTPs, and not really the in situ position of the fronted constituent. Confirmation of this comes from reconstruction data with embedded contexts. Consider the example (32) to illustrate the argument:

- (32) *Quelle photo de Paul*<sub>1</sub> *est-ce que tu crois qu' il*<sub>1</sub> *a déchirée*? which picture of Paul Q you think that he has torn
- (32) is perfectly grammatical under the intended reading, that is to say the coreference between *Paul* and the embedded subject pronoun *il* 'he'. In other words, the role of embedding under the verb *croire* 'think' is pretty similar to the one observed with the adverb *donc*: as shown in the structure below, it also creates another INTP, hence another potential site for reconstruction of the fronted constituent in example (33):
  - (33) [ [Quelle photo de Paul<sub>1</sub>] est-ce que tu crois x, photo de Paul<sub>4</sub>]<sub>INTP</sub> qu'il<sub>1</sub> a déchirée ?

    which picture of Paul Q you think that he has torn

Notice that the reconstruction site is not an in situ position in that case, but still the right-edge of an INTP.

To conclude, reconstruction data provides further credit to our claim for the coexistence of two morphosyntactic strategies, and more precisely to the structure proposed for the second strategy, which correlates the occurrence of the adverb *donc* to the presence of two distinct INTPS.

# 5. Conclusion & further issues

Our main conclusion of the study on the interaction between questions and clefts in French (mostly) is that two morphosyntactic strategies do co-exist, and that they just correlate with a syntactic ambiguity of both cleft constructions and *est-ce que/qui* questions. On the one hand, the SPM strategy correlates with a 'cleft' strategy in which the cleft constituent is fronted and introduced by the focus particle (FOC) *c'est que*, and with a 'question' strategy in which *est-ce que* is analyzed as question particle (Q). On the other hand, the 'relative' strategy correlates with a 'cleft' strategy in which the cleft constituent appears *in situ* as an argument of the copula *être*, and with a 'question' strategy in which *est-ce que* is decomposed as a regular subject (*ce*) – auxiliary (*est*) inversion.

The main arguments for both our general claim and the specific structure proposed for each of the strategies are based on the following empirical properties:

- the pied-piping of PPs for the SPM strategy *versus* presence of relative clauses (with unambiguous relative pronouns) for the 'relative' strategy;
- the need for focus holders with full wh- movement correlates of the 'relative' strategy;
- the availability of a distinct relative clause only with the SPM strategy;
- the absence of reconstruction with condition C for the 'relative' strategy only.

This study paves the way for further research on certain related aspects of these constructions. Among others, the question of the precise semantics of the two constructions still needs to be tackled. It is still unclear whether the two strategies differ in terms of context of use or presuppositions. Another question that arises is related to the precise status of the embedded

clause in the SPM strategy, and how the *que/qui* alternation in French should be analyzed (see Koopman & Sportiche (2009) for more details). Finally, the study of the interaction with prolepsis and resumption might also be relevant to get a more precise view on this type of constructions. For example, Koopman & Sportiche (2009) make an indirect link between their analysis of *que/qui* alternation and the existence of prolepsis constructions. The study of Kizu (2005) who tries to account for the (un)availability of resumption with clefts in Japanese might also be relevant, as embedding seems to play a crucial role in her analysis.

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a. Was glaubst du wen Irina liebt? (German) what believe you who-acc Irina loves "Who do you think Irina loves?"

a. C'est qui que Marie a vu?

It-is who that M. has seen

"It's who that John saw?"

<sup>&</sup>lt;sup>i</sup> Two potential analyses are discussed here. A third one could be posited, namely coordination of two questions, but whose effect is pretty similar to the second strategy introduced here. See Dayal (2000) for discussion.

ii Bahasa Indonesia and Malay languages differ from German in that only the latter exhibits an interrogative scope marker in the matrix:

French grammar. Oiry (in prep) is currently running an experimental study with French Speakers in order to assess how widespread this construction is. For now, we assume that the embedded cleft is part of the Non-Standard French grammar whereas the Standard French commonly accepts the matrix cleft such as (a) below, see Chang (1997), Boeckx (1999: 70), Mathieu (2002):

iv Notice here that the story is even more complex, as a third strategy could be argued for, which seems less natural but still tolerable according to speakers, and which would be a kind of mixture between the other two, i.e. a strategy where what looks like pied-piping would cooccur with a relative pronoun (see (a) below). There would then be three potential cognitive strategies for the speaker: priming the 'interrogative' feature, priming the 'focus' feature, or treating both on a par.

a. ?C'est de quoi dont il a parlé?

it is of what REL he has talked

<sup>v</sup> One question may arise at this point with respect to the relation between the adverb *donc* and the use of relative clauses. That question is whether the relative strategy always requires the presence of the adverb *donc* in such examples. See section 3.2 for a discussion of that issue.

vi This analysis makes no distinction between cases with ou without embedding, although there might be one. If the complementary distribution between the two particles seems reasonable when no embedding occurs, it might not be the case when there is one, as it opens the way for several foci, i.e. the main/root focus and secondary focus as developed in Erteschik-Shir (1997). In other words, it raises the question as to when co-occurrence of both particles is available, and we leave that issue for future research.

vii Actually, the precise account of extraposition structures is not so relevant here, but we just follow the most prominent literature on the topic in arguing for the multidominance approach.

viii Recall that, according to Hamlaoui (2007), an element at the right-edge of the INTP in French can be assigned non-contrastive focus.

ix One such process could be reconstruction of the wh- pronoun in the in situ position, i.e. at the right edge of INTP, which wouldn't be possible in the case of qu(e) [inanimate], as the position would be related to focus and stress.

<sup>x</sup> We follow traditional literature on *que/qui* alternation in claiming here that the CP is a subordinate complement clause (see Kayne (1976), but the status of that clause is not so clear, and some other or more recent analyses of the *que/qui* alternation argue for a small clause approach, or a free relative among others (see Koopman & Sportiche (2009) for example).