

The *que/qui* Alternation: New Analytical Directions*

Hilda Koopman¹

Dominique Sportiche²

Abstract : Since Kayne, 1976, much work has tried to formulate the conditions under which the *que/qui* alternation obtains, and why it exists – suggesting it is an instance of a “Complementizer trace” effect. Sportiche (2008) proposes a new formulation and a different rationale for the existence of this alternation in short subject extraction cases; it further documents new properties of long subject extraction in French.

The present article proposes an analysis of long subject extraction cases taking into account these properties. It suggests that they are not long extraction cases but rather rely on alternative structures known as pseudo or predicative relatives, and further suggest that subject extraction is never possible in French.

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¹ Department of Linguistics, University of California Los Angeles, contact: koopman@ucla.edu

² Department of Linguistics, University of California Los Angeles ; département d’études cognitives, école normale supérieure Paris, Institut Jean Nicod, contact: sportich@ucla.edu

1 Introduction

In this paper, we are interested in trying to understand what conditions the appearance of what we call special *qui* in the well known French *que/qui* alternation most strikingly illustrated in (1) where in each sentence there is no choice as which of *que* or *qui* must be used.

- (1) a. Tu crois **que** qui est venu
You think that WHO came (echo)
- b. Qui tu crois **qui** est venu
Who do you think came
- c. La chaise que je pense **qui** est tombée, ...
The chair that I think fell
- d. Le type que tu dis **qui** va gagner
The guy that you say will win

We will call the contexts that allow for special *qui* Special contexts.

All current accounts, from Kayne 1976, to Rizzi, 1990, Taraldsen 2001, Rizzi and Shlonsky 2006 among others, link the appearance of special *qui* directly to extraction of the subject from the tensed complement clause. Because of special restrictions on subject extraction, variously known as that-trace effects, NIC (Nominative Island Condition) effects, ECP (Empty Category Principle) effects, or, more recently, Criterial Effects, a special process – the *que/qui* rule - altering the morphology of the complementizer (normally *que*) is triggered, just in case the subject of the embedded clause is extracted, but not otherwise.

We present a different view. While we agree with the existence of such subject extraction effects, our view is that in French, subjects cannot be extracted from tensed complements at all, in a way very reminiscent of what Rizzi 1982 (chapter 4) argued for Italian. Because of this, French resorts to an altogether alternative structure to get a similar, but not an identical, effect. More concretely, we will suggest that structures with an apparently long extracted subject are not parallel to the conventional structures assigned to long extracted objects or other elements, that is (1) is not parallel to the contexts in (2a,b), contexts to which we refer as Bridge Contexts.

- (2) a. Qui_i tu crois [t_i que [Jean a vu t_i]
Who you believe that John has seen
- b. Où_i tu crois [t_i que [Jean est allé t_i]]
Where you believe that John has gone

Rather (1) is derived from a different source, namely a pseudo relative small clause illustrated within brackets below, where, as we will see, wh-movement displaces the subject of a pseudo relative small clause (here, *Jean*):

- (3) a. C'est [Jean qui part] It's John leaving
b. Voila [Jean qui part] There is John leaving
c. On voit [Jean qui part] We see John leaving

The following reasons, which we will lay out in section 2, motivate this analysis:³

- Special contexts display properties different from bridge contexts but share properties with pseudo relative small clauses;
- Long extracted wh-subjects display interpretive properties which are unlike other long wh-moved elements but which are similar to subjects of pseudo relative small clauses
- The analogue of special *qui* and special contexts is found in other languages (e.g. Flemish and certain Dutch dialects, and perhaps Norwegian) with special properties consistent with our proposal but not with others.

2 Properties of Special Contexts

Let us first illustrate some of the properties of Special contexts that are not shared with Bridge contexts.

In (4), we present the general format of a structure involving an embedded special *qui*, where MC stands for the content of the main clause or the embedding predicate of the construction and EC the content of the embedded clause in (4a):

³ There are two additional reasons, which we do not discuss here. One derives from the fact that the specific motivation for Kayne's linking the *que/qui* rule to subject extraction disappears under the reanalysis of the relative C system developed in Sportiche, 2008. The second is the reasons given in Sportiche (2008a) to the effect that *qui* is not a complementizer but a DP relative pronoun.

- (4) a. Wh-j [TP-1 ...MC... [X qui [TP-2 t-j ...EC...]]]
 b. Qui tu crois qui est parti
 Who you think (who) left

There are constraints on what can intervene in the MC between *wh-j* and *qui*, and on properties of EC. Some of these properties are well known, (cf. Kayne (1984), Godard (1986) Rizzi (1990)), others have not previously been noted, to the best of our knowledge. We list these in (5) and illustrate in them turn:

(5) Properties of Special contexts:

- (i) X must be in a complement structure of a predicate P in MC, where P=V or A.
- (ii) Intervention effects: the following material intervening between the *wh*-operator and the special *qui*– that is material scoping over X - causes a degradation in acceptability judgments:
 - Quantifiers
 - Negative quantifiers
 - Sentential Negation⁴
- (iii) Mood restrictions: If the predicate P in MC normally allows an alternation between subjunctive mood and indicative mood in its complement clause, subjunctive in the EC is excluded.
- (iv) Predicate restrictions: P must belong to a particular subset of predicates (certain propositional attitude predicates)⁵
- (v) Godard's 1986 near Generalization: There is an almost perfect overlap between members P and what we will call French **EECM** verbs (Exceptional ECM verbs)

Property (i) captures the fact that special *qui* is sharply excluded from any environment where X is not a complement a verb or certain adjectives. As compared to object (or non subject) extraction, this is unexpected. (6) illustrates this for clausal complements to P, (7) for complements of N.

⁴ The distribution of special *qui* is also sensitive to the presence of *wh*-islands, one of Pesetsky's 1984 surprising subject/object asymmetries, i.e. in English ?**who do you wonder whether he believes can help us* vs. *who do you wonder whether he believes we can help*.

⁵ Properties i, ii, and iv strongly recall the behavior of partial *wh*-movement questions in languages like German, Hindi, (cf. Van Riemsdijk, 1983, McDaniel, 1989, Dayal 1994, Horvath 1997, Mahajan 2000, Lahiri 2002, and the papers in Lütz et al. 2000), a parallelism which seems too strong to be coincidental, but which we will not discuss here.

- (6) a. Qui_i tu tiens à ce que [Jean voie t_i]
 Who you insist on that John see
 ‘Who do you insist on John seeing?’
- b. * Qui_i tu tiens à ce [_X qui t_i voie ce film]
 Who you insist on qui see this film
 ‘Who do you insist on seeing this film’
- (7) a. Où il a donné l’impression qu’il allait
 Where he has given the impression that he went
 ‘Where did he give the impression he went’
- b. *Qui il a donné l’impression qui allait à Paris
 Who he has given the impression qui went to Paris
 ‘Who did he give the impression went to Paris?’

This is sufficient to show that whatever is responsible for the appearance of *qui* cannot be solely due to the fact that *qui* licenses subject extraction in one way or another. The context in which the clause X appears matters. A purely local process restricted to the internal structure of the embedded clause and C system is insufficient. Thus any account of the distribution of special *qui* in special contexts that is limited to dealing with what happens to the subject trace and its relation to the Comp system in the subordinate clause, as many accounts have done over the years, is going to be unsatisfactory.

Property (ii) illustrates the intervention effect caused by quantifiers, most strikingly by “downward entailers” for subject extraction but not for object extraction, that is we find such effects in Special contexts but not in Bridge contexts. We summarize the observed pattern in the following subschema of (4a), and use object extraction as our benchmark:

- (8) WH_j [...Q/NEG ...[* QUI_j/ ok QUE ... t_j ..
- (9) OBJECT (benchmark)
- a. Quel homme **tous les** (/plusieurs/ **deux ou trois**) témoins croient que tu as rencontré **t**
 Which man all the (/several /two or three) witnesses believe that you’ve met
- b. Quel homme **personne/ aucun témoin** ne croit que tu as rencontré **t**
 Who (does) nobody / no witness believe that you met
- c. Quel homme il **n’a pas** dit (/ tu **ne crois pas**) que tu as vu **t**
 Who (didn’t) he say /(do) you not believe that you saw

Taking the object cases above as benchmarks, we use the symbol ↓ to indicate degraded status relative to these benchmarks (with ↓↓ indicating more degradation than ↓):

(10) SUBJECT

- a. ↓ Quel homme **tous les (/plusieurs/ deux ou trois) témoins** croient **qui** a sauté
 Who (do) all the (/several/ two or three) witnesses believe qui jumped
- b. ↓↓ Quel homme **personne/ aucun témoin** ne croit **qui** a sauté
 Who (does) nobody / no witness believes jumped
- c. ↓↓ Quel homme il **n’a pas dit (tu ne crois pas) qui** doit partir
 Who (does) he not say (do you not believe) must leave

What we observe is that a quantified expression (upward entailing such as *tous/all* or *plusieurs/several* or non monotonic *deux ou trois/two or three*) somewhat degrades subject extraction (10a) but not object extraction (9a), and that downward entailers such as *aucun/no* or negation substantially degrades subject extraction (10b, c) but not object extraction (9b, c).

Property (iii) is found in contexts like (11), where the main clause predicate PRED either allows subjunctive or indicative mood in its clausal complement (both qualifying as Bridge contexts). In a special context with special *qui*, the subjunctive option becomes unavailable:

- (11) a. WH_j [...PRED ...[QUE [INDICATIVE/SUBJUNCTIVE ... t_j ...]]
 b. WH_j [...PRED ...[QUI_j [INDICATIVE /*SUBJUNCTIVE ... t_j ...]]

This is illustrated in (12) with a verb like *croire* ‘believe’, which allows either indicative or subjunctive mood in its complement clause under certain conditions (e.g. when the truth of the complement proposition is not presupposed as in cases when the main clause is negated or questioned).

- (12) a. Qui croit-il que Jean veut/**veuille** voir **t**
 who does he believe that John wants/want-SUBJ to see
- b. Qui croit-il **qui** veut / ***veuille** voir Jean?
 who does he believe wants/want-SUBJ to see John

This prohibition remains even with the introduction of modal verbs which facilitates the use of the optional subjunctive in such embedded contexts:⁶

- (13) a. Qui croyait-il que Jean pouvait/**puisse** voir **t**
 who does he believe that John wants /want-SUBJ to see
- b. Où croyait-il que Jean pouvait/**puisse** aller **t**
 who does he believe that John wants/want-SUBJ to see
- c. Qui croyait-il **qui** pouvait/ ***puisse** voir Jean?
 who does he believe *qui* could / can-SUBJ see John

Properties (iv) and (v) concern the choice of the predicate which is allowed to appear as main predicate (MC) in the Special context:

- (14) WH_j [... PRED...[↓QUI_j / ok QUE ... t_j .. unless PRED well chosen
- (15) a. L'homme qu'il PRED qui t est malade
 The man that he PRED *qui* is sick
- b. Qui il PRED qui t est malade
 Who S PRED is sick

A list of allowed and disallowed PREDs is presented below⁷.

- (16) Special *qui* ok: verba dicendi, epistemic verbs, desiderative verbs..
dire 'say', *affirmer* 'assert', *déclarer* 'declare', ?*annoncer* 'announce', ?*remarquer* 'notice', *croire* 'believe', *penser* 'think', ?*savoir* 'know', *considérer* 'consider', *juger* 'judge', *estimer*, ? *être sûr* 'be sure', ? *être certain* 'be certain', *prétendre* 'pretend', *supposer* 'suppose', *imaginer* 'imagine'.
- (17) Special *qui* harder or excluded: Manner of speaking verbs, Non attitude predicates, ...
Murmurer 'murmur', *souffler* 'whisper', *grommeler* 'grumble', *ignorer* 'ignore', *douter* 'doubt', *contester* 'contest', *parier* 'bet', *mériter* 'deserve', *écrire* 'write', *falloir* 'be necessary', *promettre* 'promise', *ordonner* 'order', *être important* 'be important', *être évident* 'be obvious', *être clair* 'be clear', *convaincre* 'convince', *persuader* 'persuade', *avoir l'impression* 'have the impression', ..

⁶ For the subjunctive to be allowed, a more formal register than the colloquial register we have used throughout is more natural, hence the inversion subject verb.

⁷ This is not an exhaustive list and there seems to be a certain amount of speaker variation around a common core. The judgments reported here are from a small sample of speakers including Dominique Sportiche.

The nature of the embedding predicate thus must be taken into account. Descriptively, the “rule” allowing the appearance of special *qui* can be formulated so as to make reference to the choice of the embedding predicate. This is for example what Rizzi (1990:56) does (by positing that the selecting predicates select AGR in C⁸). An account limited to stating this falls short as it is also necessary to explain why this sensitivity exists and why it is found with these particular type of predicates.

There are two remarkable observations about the class of allowed PREDs. First, not all bridge predicates qualify.⁹ For example, *falloir* ‘be necessary’, or *mériter* ‘deserve’ are both bridge verbs for direct objects or locatives, but are excluded in Special contexts:

- (18) a. On se demande *qui_i* il faut que Jean rencontre *t_i*
 We wonder who it be-necessary that John meets
 ‘We wonder who John has to meet’
- b. L’homme *qu’* il faut que Jean rencontre *t*
 The man that John has to meet
- c. (l’endroit/) où il faut que Jean aille
 (the place) where it be-necessary that John goes
- (19) a. * On se demande *qui* il faut *qui* rencontre Jean
 We wonder who it is- necessary *qui* meets John
- b. * L’homme *qu’*il faut *qui* rencontre Jean
 The man that it is-necessary that meets John

The second observation, which we call Godard’s generalization, is due to Godard (1986:53ff): Godard claims that verbs allowed in Special contexts are identical to what we will call Exceptional Exceptional Case marking verbs or EECM verbs. These are ECM verbs in the ordinary sense but where the Exceptional Case Marking option is limited to situations in which the ECM marked DP is wh-moved (see Kayne, 1984, for substantial discussion). This is illustrated below:

⁸ Rizzi’s agreeing complementizers (a C which agrees with an element in its Spec, CP) should not be confused with West Germanic complementizer agreement, which is a different phenomenon. West Germanic complementizer agreement refers to the occurrence of a subject agreement marker between C and the left edge of a TP ([C -AGR_i[TP DP_i...]], regardless of patterns of extraction.

⁹ It is not even clear that being a bridge predicate is required to allow a Special context. It looks correct but it may be for accidental reasons.

- (20)
- a. * On croit cet homme être malade
We believe this man to be sick
 - b. L'homme qu'on croit **t** être malade → Case becomes available under wh-mvt
The man that we believe to be sick
 - c. Qui croyait-on **t** être malade → Case becomes available under wh-mvt
Who did we believe to be sick

We very substantially agree with Godard's generalization, and build it into our proposal below. As her generalization predicts, some CP complements of non EECM bridge predicates sharply exclude special *qui*:

- (21)
- Object extraction
 - a. la fille qu'il est important que tu voies
The girl that it is important that you see
 - Special *qui*
 - b. * la fille qu'il est important qui vienne
The girl that it is important *qui* come
 - EECM
 - c. *la fille qu'il est important de t voir Pierre
The girl that it is important to t see Peter

However, we are (together with some other speakers, e.g. Jean Yves Pollock) a bit more liberal in our judgments than is reported in Godard (1986) (or by other speakers, e.g. Anne Abeillé p.c.¹⁰). We differ in allowing *que/qui* with desiderative verbs like '*vouloir* 'want, *désire* 'desire'. These are cases in which extraction from the infinitival is sharply excluded:¹¹

- (22)
- a. Qui tu veux/ désires qui réussisse
Who you want/desire *qui* succeeds
 - b. La fille que je veux/ ?désire qui gagne la course
The girl that I want/ desire *qui* wins the race
 - c. * La fille que je veux/désire t être la gagnante
The girl that I want/ desire to be the winner

¹⁰ Some speakers agree with Abeillé and Godard but nevertheless allow *vouloir* in rhetorical questions (e.g. *Mais qui veux tu qui vienne!*)

¹¹ It may be significant that these verbs: (i) are a subspecies of ECM verbs in English (those that take infinitival complements with *for*), (ii) were EECM verbs in 17th century French (cf. e.g. Vaugelas, 1690).

Similarly (in agreement with what is reported in Kayne, 1976, p.294 fn19) we allow certain cases with adjectives. Again, extraction from the infinitival subject is sharply excluded:

- (23) a. ? L'homme que je suis sûr qui gagnera
 The man that I am sure *qui* will win
- b. * L'homme que je suis sûr (d') être le gagnant
 The man that I am sure to be the winner

We thus take it that the overlap between Special Contexts PREDs and EECM verbs is significant but not complete (at least for certain speakers). This leads to the question why exactly it holds where it holds.

3 Proposal

The following properties must be explained:

- (24) a. Without intervention effects, Special contexts are more restricted than Bridge contexts.
 b. Special contexts are sensitive to intervention effects unlike Bridge contexts
 c. Special contexts, unlike Bridge contexts, induce mood selection effects
 d. Godard's (near) generalization holds and why it fails in the few cases it fails

We propose two generalizations:

First French subject wh-phrases can never escape from their CPs by wh-movement¹². If they could, we would have to postulate a mechanism requiring the appearance of Special *qui* (e.g. a *que* to *qui* rule) and link its application to the aforementioned effects. But such a rule is fundamentally subject to strict syntactic locality¹³, while the observed effects found in Special contexts are, at least in some cases, fundamentally non local. This raises the question how we ever get what appears to be long subject extraction.

Our second generalization is that French subject wh-phrases that appear to escape their base CPs by wh-movement are in fact wh-moved subjects of pseudo relative CP small clauses headed by relative *qui* ([*qui*_{wh} [_{PRSC} *qui* ..].

¹² Note that this raises the question of what happens in short wh-movement of subjects, cf. Koopman (1996, 2000) Sportiche (2008) for discussion.

3.1 Pseudo relatives

French pseudorelatives, also known as attributive relatives, are exemplified below. The pseudo relative is underlined, and what we call its subject is italicized. We label the bracketed string PRSC standing for Pseudo Relative Small Clause:

- (25) a. Il y a [_{PRSC} des gens qui surveillent]
 There are people watching
- b. Voilà [_{PRSC} Marie qui arrive]
 Here is Mary arriving
- c. J'ai entendu [_{PRSC} Jean qui se faisait chahuter]
 I heard John getting teased
- d. Julie a rencontré [_{PRSC} Hélène qui se promenait]
 July met Helen who was taking a walk
- e. Avec [_{PRSC} Pierre qui est malade]
 With Peter sick

The literature on pseudorelatives (e.g. Guasti 1993, Cinque 1995, Koenig and Lambrecht, 1997, Côté, 1999 among others¹⁴), agrees on the following conclusions, which we will accept and which will be sufficient for our purposes:

- (26) (i) the pseudo relative is a constituent
- (ii) the relativized element must be the subject of the pseudo relative (at least in cases in French which concern us here – cf. fn 16)
- (iii) the pseudo relative is a predicate, predicated of the DP in italics, its subject
- (iv) the bracketed structure is distinct from a regular (restrictive or appositive) relative
- (v) the subject + pseudo relative can receive a “propositional” reading, e.g. in cases (25 a, b, c, f and perhaps e).

These conclusions are firmly established. (26)(i) and (ii)) are uncontroversial. Points (iii) and (iv) are related. These relatives can modify bare proper names, so they can't be restrictive relative

¹³ In addition, Sportiche 2008 demonstrates that the appearance of special *qui* is guided by syntactically local requirements, accepting Kayne's 1976 generalization that special *qui* also appears in short subject relative clauses.

(27) a.	Voilà [Marie [qui arrive]] Here-is Mary arriving	a'. la voilà qui arrive her.ACC here.is arriving
b.	J'ai vu [Jean [qui embrassait Marie]] I saw [John kissing Marie]	b'. Je l'ai vu qui embrassait Marie I him.ACC saw kissing Marie
c.	Julie a rencontré [Hélène [qui se promenait]] Julie met [Helen walking]	c' Julie l'a rencontrée qui se promenait Julie her.ACC met qui was walking
(28)	J'ai acheté [la table sur laquelle tu manges] I bought the table on which you eat	* Je l' ai acheté [sur laquelle tu manges] I it.acc bought on which you eat

(29) a. Voilà [qui arrive] [Marie avec ses amis] (based on (=27a))
here is arriving Mary with her friends

b. J'ai vu qui embrassait Marie le jeune garçon qu'elle a rencontré hier. (based on (=27b))
I saw kissing Mary the young boy that she met yesterday

c. Julie a rencontrés qui se promenaient Hélène et Alexandre (based on (=27c))
Julie met walking Helen and Alexander

(30) a. * J'ai acheté [sur laquelle tu manges] la grande table du salon (based on (=28))
I bought on which you eat the big table in the living room

b. * J'ai réveillé [qui dormaient d'ailleurs] Jean et Marie
I woke up [who by the way was sleeping] Jean and Mary

(31) a. J'ai réveillé Jean [lequel dormait d'ailleurs] based on (30b)
 I woke up John, the.which by the way was sleeping
 b. *Voilà Jean lequel dort (based on (=27a))

¹⁴ See also Mc Cawley (1998, p. 460-467) for English who like Belletti (2008) makes an explicit link to

animate DP modified by a clause, as we would expect a DP (human) individual denoting pronoun as *le* or *la* to be able to replace the PRSC with the same meaning, contrary to fact. Instead, only an inanimate pronoun such as *ça/this* can, under appropriate circumstances, be used:¹⁵

- (32)
- | | |
|------|---|
| | J'ai entendu [PRSC Jean <u>qui se faisait chahuter</u>] |
| → * | [PRSC Jean <u>qui se faisait chahuter</u>], je l'ai entendu |
| → ok | [PRSC Jean <u>qui se faisait chahuter</u>], j' ai entendu ça |

Let us note here that, given that pseudo relative is a kind of (subject) relative, hence an open one-place predicate, we minimally expect to find it in every environment in which it can get saturated; we thus expect to find it occurring as a predicate taking a subject to form a (small) clause, which can then be a complement small clause or an adjunct (secondary predicate) clause if so licensed in the relevant structures. This is essentially Cinque's 1995 overall conclusion, which strikes us as the null hypothesis.¹⁶ We will follow those of his conclusions relevant for our purposes, more specifically the following:

certain cleft constructions .

¹⁵ In addition, Koenig and Lambrecht (1997) cite David Pesetsky (p.c.) as pointing out that (32) does not entail that I heard Jean, thus suggesting that *Jean* is not an argument (but rather and only the thematic subject of a PRSC). Koenig and Lambrecht (1997) express skepticism because "a verb like *entendre* can be used in contexts where the experiencer does not literally hear the object's referent. For example [(i)] could be uttered in a situation where the only noise heard by the speaker was the neighbor's TV: (i) *J'ai entendu le voisin jusqu'à 5 heures du matin*/I heard my neighbor until 5 O'clock in the morning. It might be that the extent to which (i) is accepted depends on how willing native speakers are to extend literal uses of *entendre*." We think that they are right that literal uses can be extended but only so much: (i) can only be uttered felicitously under the assumption that the neighbor is responsible for the noise. If we know that the neighbor's TV comes on by itself while she is asleep, (i) is not felicitous. The fact that (32) can be uttered felicitously without attributing any responsibility for the teasing suggests that *Jean* is indeed not an argument of *entendre*.

¹⁶ Controversies about pseudo relatives bear on:

- i. whether the pseudo relatives ever form a constituent with its subject: that it is at least in cases (29a,b,c,d) is accepted by most authors and convincingly argued for by Cinque (although it is rejected for the d case by Koenig and Lambrecht, 1997, but on unconvincing grounds we believe). Ultimately, it will not matter for our purposes.
- ii. The categorial nature of PSR (CP, DP, etc..), and in particular whether it is uniform across the mentioned contexts or not.
- iii. whether pseudo relatives only involve subject relativization and how precisely to analyze this restriction if and when it holds.
- iv. whether the subject has been or can be raised from inside the pseudo relative to its surface position and what is found in the subject position of the pseudo relative (PRO, pro, trace, etc...).
- v. How to handle the complex (and variable depending on the context) selectional restrictions on tense/ aspect and aktionsart of the pseudo relative predicate.

- If a context allows small clauses, it allows propositional type complements and should in principle allow pseudo relatives small clauses (which receive a propositional reading).
- In such contexts (25a, b, c, f and perhaps e), as well as the Special contexts we will focus on below, we will take this constituent to be a CP small clause¹⁷, that is a CP with an external subject as illustrated below:

- (33)
- a. Voilà [_{PRSC} [_{DP} Marie] [_{CP} qui arrive]]
Here is Mary arriving
 - b. Il y a [_{PRSC} [_{DP} Jean] [_{CP} qui dort]
There is John sleeping
 - c. J'ai vu [_{PRSC} [_{DP} [Jean] [_{CP} qui embrassait Marie]
I saw John kissing Marie
 - d. C'est [_{PRSC} [_{DP} Pierre] [_{CP} qui chante]
It is Peter singing

3.2 Towards an Analysis of Special Contexts

We now return to the properties of special contexts and discuss how to derive them from our analytical premises, which are the following: subject extraction out of CP is excluded independently, but French makes another structure available, CP small clauses where the predicate is a (subject) relative clause, i.e. PRSC:

- (34) PRED [_{PRSC} SUB CP_{rel}]

What seems to be a long extracted subject is in fact the extracted subject of the PRSC small clause complement of a predicate belonging to an allowable class we have called PRED.

3.2.1 Identifying the PRED class

First, the relevant property of PREDs cannot be that they take ordinary CP complements. Verbs like *écrire* 'write' for example fall in the latter category but are not allowed in Special contexts (**qui tu as écrit qui est parti*, 'who did you write left'. In light of our proposal, and since PRSC are a kind of small clause, we expect the ability to take a complement small clauses to be a better predictor for membership in the allowed special context PREDs. An examination of the list of allowed and disallowed PRED in (16) and (17) suggests that this is largely correct. However, two

¹⁷ This is good enough for our present purpose (and is Cinque's 1995 and others's assumption). However, we think it may well be a TP small clause, an idea we do not discuss here.

types of exceptions are found. Among disallowed predicates, *mériter* ‘deserve’ is found, even though it allows small clauses (perhaps somewhat marginally) ((?)*Tu mérites ton pain bien cuit* ‘you deserve your bread well cooked’. Conversely, among allowed predicates, the adjective *sûr/sure* is found even though it does not allow small clauses (**Il est sûr Jean malade*/He is sure John sick). This shows that the property of “taking a complement small clause” must be modulated in the right way.

One idea is provided by Godard’s proposed generalization that the class of verbs allowed as PRED in special contexts are EECM infinitival selecting verbs. EECM verbs turn out to be a subclass of small clause taking verbs, excluding verbs like *mériter/deserve* (cf. **L homme que tu mérites être le gagnant*/ **the man that you deserve to be the winner*). But this leaves *être sûr* as an exceptional predicate (which occurs with infinitivals but is not EECM) and creates new exceptions, e.g. desiderative verbs *vouloir* which are not EECM either.

We would like to suggest instead (following remarks made also in Godard, 1986) that the relevant difference among small clause taking predicates is whether or not they can enter into the following **prolepsis** construction (with the a sentence as benchmark):

- (35) a. L’homme dont Marie croit qu’il est honnête
The man *dont* Mary believes he is honest
b. ↓ De Jean, Marie croit qu’il est honnête
About John, Mary believes he is honest
c. ↓ Marie croit de Jean qu’il est honnête
Marie believes about/of John that he is honest

Without going into much detail (but see Salzmann 2006 for a recent extended discussion and references), the preposed or relativized XP, preceded by the P *de*, or specified for genitive (*dont*) is understood as the topic of the embedded clause, that is the entity about which Marie’s belief holds. Prolepsis is found most naturally in the (35c) example with relative clauses, with a resumptive pronoun in the complement clause.¹⁸ Simple preposing as in (35b) or in-situ topic as in (35c) example is possible but perhaps somewhat degraded depending on intonational (clausal extraposition) or lexical factors.¹⁹

¹⁸ Note that such contexts do not, to the extent that it is testable, display the intervention effects Special Contexts do.

¹⁹ Cliticization with genitive *en* is sharply disallowed: (i) *De cet immeuble, * Marie en croit qu’il doit être détruit.*

It is significant that such constructions are excluded with bridge verbs like *mériter* ‘deserve’ and *falloir* ‘be-necessary’:

- (36) a. * L’homme dont tu mérites qu’il vienne te voir
The man dont you deserve that he come you see
- b. * L’homme dont il faut qu’il vienne
The man dont it be-necessary that he come

But allowed with verbs like *vouloir* or adjectives like *sûr*:

- (37) a. L’homme dont je voulais qu’il réussisse
The man of whom I wanted that he succeed
‘The man that I wanted to succeed’
- b. La femme dont je suis sûr qu’elle réussira
The woman of whom I am sure that she will succeed

We return in section 4.4 to a discussion of the interpretive implications of prolepsis, related to the fact that these verbs all are saying verbs or attitude verbs, as Godard noted. For now it suffices to point out that all allowed PREDs permit prolepsis. Furthermore, no member of the set of disallowed PREDs allows such a topic argument or are attitude verbs, except for verbs like *ignorer* ‘ignore’, adjectives like *evident* ‘obvious’ and expressions like *avoir l’impression* ‘have the impression’. But such predicates disallow small clauses (and the former is downward entailing).

We thus propose the following characterization:

- (38) Allowable PREDs are predicates of saying, and attitude predicates which take small clause complements and which allow prolepsis (that is, an extra “topic” argument most naturally wh-moved (or, marginally, preposed))

From a technical standpoint, how can we characterize these verbs, and how do we account for the differences between Prolepsis contexts and Special contexts? These verbs have the ability to license an extra “topic argument” which they can Case mark in different ways, genitive in prolepsis, and accusative in cases in which this argument is wh-moved from inside a PRSC (see section 5.1 for discussion)

Consider an EECM verb like *croire* ‘believe’. It satisfies the conditions in (38): it is an attitude verb, it allows a small clause complement (39a), and prolepsis (39b). In addition, it also allows a control infinitival complement (39c), is not an ECM verb (39d), but is EECM (39 e): .

- (39) a. Pierre croit Jean fou
Peter believes John crazy
b. L’homme dont Pierre croit qu’il est fou
The man of whom Peter believes that he is crazy
c. Pierre croit être fou
lit: Peter believes to be crazy (‘Peter believes himself to be crazy’)
d. * Pierre croit Jean être fou
Peter believes John to be crazy
e. L’homme que Pierre croit t être fou
The man Peter believes to be crazy

Clearly, because of the small clause case, *croire* is an accusative Case assigner. *Croire* also allows an infinitival complement clause (with control) but not ECM. This shows that the presence of a full clause – by which we mean a [+/-finite] clausal complement - prevents access to the accusative Case for the subject of the infinitive.

We would like to suggest the following reasoning. Taking into account that these structures involve a version of “raising to object”, assume that accusative Case is assigned/sanctioned by the main verb in a position inside the main clause call it K:

- (40) Pierre croit K ... [_{XP} DP*]

Small clauses are deficient: they are the analog for clauses of bare or incorporated Ns complement of Vs (this is what regulates their distribution): they need no Case, and remain low in the structure. If XP is a small clause, DP* can raise to K (or, alternatively AGREE with K.) Finite or infinitival CPs on the other hand do need Case, as argued in Stowell (1981).²⁰ If XP is a full clause K is used up to case mark it and thus becomes unavailable for DP*. But verbs like *croire* are allowed to case mark one additional DP provided this DP is wh-moved: this is what we see in prolepsis constructions. We propose that this option is taken advantage of in infinitival EECM structures.

²⁰ (see e.g. Kayne, 2000, ch.14, and references therein). Although this assumption has been questioned, the basic fact remains that the single position where overt DPs cannot occur – subject of complementizerless non ECM infinitival clauses simply do not allow subject clauses, a mystery if clauses do not need Case.

We thus analyze (39e) (*l'homme que Jean croit être fou*) as meeting the schema in (40) as follows:

- (i) XP is a PRSC
- (ii) DP* is SUB
- (iii) SUB must be wh-moved

This proposal thus assigns the following source to the EECM structure (40):

(41) Pierre croit K ... [_{PRSC} DP*-i [_{CP} PRO-i ...]]

In which the CP pseudo relative is an infinitival pseudo relative (say with a PRO subject like an infinitival relative) predicated of DP*. K case marks the infinitival PRSC. DP* picks up the “proleptic” Case *croire* makes available under wh-movement.²¹

There are two advantages to claiming that EECM structures arise from complement PRSC rather than regular infinitival complement clauses. First, it directly relates the property of taking a small clause and the property of being an EECM verbs (or ECM for that matter) thus partially explaining this correlation. Secondly, it meets an objection leveled by M. Brody against some earlier proposals (e.g. Kayne's 1984). For French EECM verbs, Kayne (1984) is representative in proposing that Case could be assigned by the EECM verb to DP* in XP where XP would be a complement CP, and DP* would have moved to Comp from subject position (as in (42a). Brody remarked that this would make an incorrect prediction for such sentences as (42 b):

- (42) a. L'homme que je crois [t1 [t2 être parti]]
 The man who I believe [t1 [t2 to have left]]
 'The man that I believe left'
- b. *L'homme que je crois [t1 [être sûr [d' t2 être parti]]]
 The man who I believe [t1 [to be sure [t2 to have left]]]
 'The man that I believe I am sure left'

Successive cyclic movement from t2 to t1 should allow Case marking in t1 predicting (42b) should be well formed. The generalization that (42) illustrates is that movement for Case can

²¹ In the case of perception verbs we have both a tenseless PRSC complement and a non wh DP as SUB.
 (i) J'ai vu [_{PRSC} [_{DP*} Jean-i] [_{CP} PRO-i embrasser Marie]] / I saw John kissing Marie
 From the point of view of the proposal in the text, this means that such verbs assign two Cases: one for the full tenseless clausal complement and one for the subject of the infinitival clause. See also section 5.1

only be “local”, which follows from the standard generalization that movement to Comp is the required way to move long distance and requires a Case marked moving element. Under our proposal this locality condition is met, as the first step is movement to a case position, and movement to the C region is launched from the case position.²²

3.2.2 An analysis for Special Contexts

We are now in a position to propose an analysis for Special Contexts, which has two antecedents we are aware of, namely Van der Auwera (1986) (in our terminology only for Special Contexts), Léard (1990) and Le Flem (1992) (in our terminology both for Special contexts and EECM verbs)²³: PREDs allowed in Special contexts are similar to EECM verbs in that they allow prolepsis and thus provide an extra Case for a wh-moving element.²⁴ They differ from EECM verbs in that this option is exercised with tensed PRSC:

- (43) Qui_k tu crois t_k [qui dort]]
 WH_k PRED K [PRSC SUB_k [CPrel qui]]

From an intuitive point of view, the source of special *qui* as in the sentence above can be thought of as being: *tu crois (que c'est) [qui qui dort]/ you believe that it is who who is asleep*, where the parenthesized material is absent, the first *qui* is caseless, and the bracketed material is a pseudo relative (which it can be in French).

²² It is a by product of the fact that the predicate of PRSC is restricted to subject relatives (for reasons that remain to be elucidated).

²³ These analyses, based on different reasons than ours, are criticized in Hirschbühler and Labelle (1996). We address the central reason they offer to reject such analyses (namely that SUB must be wh-moved). They provide two other reasons which are, we believe, unconvincing: one is based on the fact that coordination of a *qui* clause is claimed to be possible with a regular embedded clause, something that our analysis allows (although they give as good: *Le garçon que tu veux qui vienne et qu'on attende avec des fleurs/ the boy you wanted [t to come] and [us to wait for t]*, the judgments do not seem sharp— to us at best such examples are sub par). The other is based on expletive negation. The claim is that expletive negation is allowed inside the *qui* clause, suggesting it is not a relative (cf. e.g. (i) *Plus de gens sont venus que tu voulais qu'il ne vienne/ More people came than you wanted there NEG to be coming* vs (ii) *Plus de gens sont venus que tu voulais qui ne viennent/ More people came than you wanted NEG to come*). Not only have not been able to duplicate the reported judgments (namely that (i) and (ii) equally possible), but we have found that (ii) is sharply excluded – something expected under some theories of the presence of expletive negation. There may be dialectal variation involved with factors we are not in a position to control and thus calling for more study.

²⁴ See section 5.1 for further discussion.

From this point of view, the fact that predicates like *vouloir* or *être sûr* occur in special contexts but are not EECM must come from the properties related to their infinitival complementation. We can only speculate as to what these are at this point. In the case of *être sûr*, one striking property of EECM verbs, taken advantage of in Kayne's 1981 analysis, is that such verbs never allow infinitival complements introduced by the overt complementizer *de*. This may explain why *être sûr* provides a special context for special *qui* with tensed PRSC (the case of prolepsis is available) but is not an EECM predicate as the infinitive uses the proleptic case *de*.²⁵ We return to this question in section 5.1.

Less clear is what happens with verbs of desire. They display the kind of properties that should lead them to being EECM verbs, e.g. taking propositional complements and allowing small clause complements. We have no explanation as to why they behave as EECM verbs with tensed pseudo relatives but not with their tenseless counterparts.²⁶

4 Basic Predictions

Optimally, the analysis we provide should be able to derive the properties we listed of special contexts.

In a certain number of instances it is. In others, we can show that it behaves as expected, without deriving these properties: the behavior of special contexts correlates with that of constructions which overtly display, or which we argued display, the structure we attribute to special contexts. Properties falling in the first set are properties (5i, iv, v) the latter two by design so we will not discuss them. Properties falling in the second set include properties (5ii, and iii).

In addition, this analysis makes a number of predictions, some internal to French and regarding the behavior of PRSC and similar constructions and also about similar constructions in other languages. Putting these considerations together and given that we analyze special contexts as basically introduced by EECM verbs taking tensed PRSC:

²⁵ Italian is informative in this respect as the corresponding PREDs taking control complements introduced by *di* (the counterpart of French *de*) - can be EECM verbs without *di* (see Rizzi, 1982, chapter 3). No French verb allows this.

(44) WH_k PRED K [PRSC SUB_k [CPrel qui]]

We predict the following:

(45)

1. Since the pattern of intervention by Quantifiers and Downward entailers observed in special contexts (but not in bridge contexts and thus) is in part due to the presence of a PRSC, this pattern should also be found in EECM constructions and other cases of overt Pseudo Relatives
2. If other languages display instances of special *qui*, we expect similar behavior across the board (pattern of intervention, interpretative effects etc..)
3. Since Case on WH_k comes from the prolepsis-allowing PRED, it should not be nominative.²⁷
4. Since SUB is the subject of a small clause, it should semantically behave like a subject of small clause from the point of view of scope

We discuss all these aspects in the next section.

4.1 Distribution of Special Qui

Starting with property (5i): we do not expect special *qui* to occur in any context either disallowing small clauses or allowing small clauses but disallowing a silent subject for the small clause (whatever this silent subject is, pro, PRO or trace). In particular, special *qui* should never occur as object of a preposition as in (6b). Such examples as (6b) are excluded on a par with examples such as (46), which may be a small clause structure complement of a P (*avec*) yet, disallowed special *qui*:

- (46) a. Il faut compter avec Jean qui est malade
 we must take-into-account (with) Jean being sick
 b. * Qui_j il faut compter avec t_j qui est malade
 who we must take-into-account being sick

4.2 Pattern of Intervention effects

²⁶ As noted earlier, verbs of desire were EECM verbs in (standard) French. It is thus tempting to try to coorelate this change to other changes in the language, perhaps to the fact that such verbs stopped allowing the kind of restructuring necessary for clitic climbing.

²⁷ Kayne (1984, chapter 2) argues for a similar conclusion but in a bridge context (and for different reasons having to do exclusively with the embedded clause). This leads to problems discussed in Godard 1986.

Prediction (45.1) seems fulfilled. Special contexts, EECM constructions and overt Pseudo Relatives all behave similarly. Below we compare a special *qui* construction (a), an EECM construction (b), an overt PRSC with a perception verb (c) (see fn 21), and long extraction of an object in a bridge context (d) (trying to construct as parallel sentences as possible).

- (47)a. Qui tu crois qui est en train d'appeler Pierre
 who you believe *qui* is calling Pierre
 b. Qui tu crois être en train d'appeler Pierre
 Who you believe to be calling Pierre
 b. Qui tu as vu qui était en train d'appeler Pierre
 Who did you see *qui* was calling Peter
 d. Qui tu crois que Jean est en train d'appeler
 Who you believe that John is calling

Taking the previous sentences as benchmarks, and matching all (a) sentences against each other, all (b) sentences against each other etc., we get the following judgments:

Intervention by quantifiers. (*tous les* 'all' *plusieurs* 'several', *deux ou trois* 'two or three')

- (48) a. ↓ Qui **tous les (/plusieurs/ deux ou trois) témoins** croient qui est en train de l'appeler
 Who (do)all the (/several/ two or three) witnesses believe *qui* is calling him
 b. ↓ Qui **tous les (/plusieurs/ deux ou trois) témoins** croient être en train de l'appeler
 Who (do)all the (/several/ two or three) witnesses believe to be calling him
 c. ↓ Qui **tous les (/plusieurs/ deux ou trois) témoins** ont vu qui était en train de l'appeler
 Who (do)all the (/several/ two or three) witnesses saw who was calling him
 d. Qui **tous les (/plusieurs/ deux ou trois) témoins** croient qu'il est en train d'appeler
 Who (do)all the (/several/ two or three) witnesses saw that he was calling

Intervention by negative quantifiers (*personne* 'noone', *aucun témoin* 'no witness') :

- (49) a. ↓↓ Qui **personne/ aucun témoin** ne croit qui est en train de l'appeler
 b. ↓↓ Qui **personne/ aucun témoin** ne croit être en train de l'appeler
 c. ↓↓ Qui **personne/ aucun témoin** n'a vu qui était en train de l'appeler
 d. Qui **personne/ aucun témoin** ne croit qu'il est en train d'appeler

Intervention by sentential negation (*ne..pas*):

- (50) a. ↓↓ Qui tu **ne crois pas** qui est en train d'appeler Pierre
 b. ↓↓ Qui tu **ne crois pas** être en train d'appeler Pierre
 b. ↓↓ Qui tu **n'as pas** vu qui était en train d'appeler Pierre
 d. Qui tu **ne crois pas** que Jean est en train d'appeler

Similarly for relative clauses :

- (51) a. L'homme que tu crois qui est en train d'appeler Pierre
 b. L'homme que tu crois être en train d'appeler Pierre

- b. L'homme que tu as vu qui était en train d'appeler Pierre
 d. L'homme que tu crois que Jean est en train d'appeler
- (52) a. ↓ L'homme que tous les (/plusieurs/ deux ou trois) témoins croient qui est en train de l'appeler
 b. ↓ L'homme que tous les (/plusieurs/ deux ou trois) témoins croient être en train de l'appeler
 c. ↓ L'homme que tous les (/plusieurs/ deux ou trois) témoins ont vu qui était en train de l'appeler
 d. L'homme que tous les (/plusieurs/ deux ou trois) témoins croient qu'il est en train d'appeler
- (53) a. ↓↓ L'homme que personne/ aucun témoin ne croit qui est en train de l'appeler
 b. ↓↓ L'homme que personne/ aucun témoin ne croit être en train de l'appeler
 c. ↓↓ L'homme que personne/ aucun témoin n'a vu qui était en train de l'appeler
 d. L'homme que personne/ aucun témoin ne croit qu'il est en train d'appeler
- (54) a. ↓↓ L'homme que tu ne crois pas qui est en train d'appeler Pierre
 b. ↓↓ L'homme que tu ne crois pas être en train d'appeler Pierre
 c. ↓↓ L'homme que tu n'as pas vu qui était en train d'appeler Pierre
 d. L'homme que tu ne crois pas que Jean est en train d'appeler

We should of course make sure that quantifiers are not excluded in cases of overt PRSC. The following sentences are fine :

- (55) a. Exactement trois/ Plusieurs/ Tous les témoins ont vu Marie qui embrassait Jean
 Exactly three/ Several/ All the witnesses saw Mary kissing John
 b. Personne/ Aucun témoin n'a vu Marie qui embrassait Jean
 No one/ No witness saw Mary kissing John
 c. Suzanne n'a pas vu Marie qui embrassait Jean
 Suzanne didn't see Mary kissing John.

As for negation, we should note that we disagree with Koenig and Lambrecht, (1997) regarding the status of negated pseudorelatives without wh-movement. Thus, although some cases are degraded (e.g. the existential (56a), the perception verb cases are fine:²⁸

- (56) a. ?? Il n'y a pas [Jean qui dort]
 there is n't John sleeping
 b. Je n'ai pas vu [Jean qui embrassait Marie]
 I did not see John sleeping
 c. Personne n'a vu Jean qui embrassait Marie

²⁸ We disagree here with Koenig and Lambrecht, 1997 p.5-6 who state that negation, modals and yes/no questions are disallowed on the basis of the following (their judgments): (i) **Je ne le voyais pas qui fumait*, (I was not seeing him smoking) (ii) **Je pouvais le voir qui fumait* (I could see him smoking) , (iii) *??est-ce que tu l'as vu qui fumait* (did you see him smoking). While we agree that these particular sentences may be odd, (especially the first one), it seems to us to be a fact about these particular sentences, rather than about pseudo relatives in these contexts in general. Thus (i) is fine with a different subject and a different aspect: (iv) *Dans la demi obscurité, Pierre n'a pas vu / ne pouvait pas voir Marie qui fumait* (in the semi darkness, Peter did not/ could see Marie smoking)...

Nobody saw John sleeping

4.3 Flemish and Dutch dialects; case on the high wh-phrase and intervention effects

In the next two section, we examine predictions (45.2) and (45.3) for West Flemish of the rural area of Knokke Heist (Haegeman and Bennis 1984, Haegeman 1984, 1992, and personal communication), and the “standard” Dutch of co-author Hilda Koopman (HK), who grew up in Nijmegen. The two varieties display an equivalent of the French special *qui* phenomenon: special *die*. Haegeman’s West Flemish (henceforth LH-WF) can use the equivalent of a special *qui*, special ‘*die*’ in case of long subject relativization, HK’s Dutch can resort to special ‘*die*’ for long subject *and* object relatives and wh-questions, yielding double *die* patterns²⁹.

We start with prediction (45.3). If long distance subject extraction was possible, on par with long object extraction in bridge context, we would expect the bold wh-phrase elements in the following sentences to be nominative:

- (57) a. **QUI** tu crois *qui* **t** a vu Jean
 Who do you think saw John
 b. L’homme **QUE** tu crois *qui* **t** a vu Jean
 The man that you think saw John

At the outset, it should be noted that it is not impossible to devise a way to have a single movement chain as in the standard successive cyclic analysis of subject extraction with two cases in it (as have done Kayne, 1984, or Godard, 1986). The problem is the ad hoc character of such a proposal and its lack of relation to the other properties of the special *qui*/special *die* construction. It is however expected under the analysis we propose since the extracted element relates to higher verb the same the subject of a small clause complement to this verb does. This prediction is hard to check in French. Interrogative pronouns do not show differences between nominative and accusative case. As for relative pronouns, it is hard to tell whether *que* in (57b) is an accusative relative pronoun or the complementizer (as it is in Kayne’s 1976 analysis).³⁰

²⁹ These patterns are well attested in the data from the SAND project (Barbiers et al 2005 and Schippers (2006)). The analysis presented in the text differs from Barbiers, Koenenman, and Lekaku (2007) and takes the d-forms to be weak forms as in Sportiche 2008. For further discussion, see Koopman (2008).

³⁰ This is discussed at length in Sportiche, 2008.

The Dutch dialects under discussion however show the higher relative pronoun must be and can only be accusative. We first provide an analysis of the case forms in the two varieties, lay out the predictions for the distributions of these forms in our analysis, and show these are borne out. This then sets the stage for testing if the expected intervention effects occur (only) in the derivations that involve special *die*. Again, this predictions seems to be borne out.

We should say at the outset that Dutch/Flemish differs from French in a couple of ways. First, the PRSC used in Dutch is unlikely to be of exactly the same type as those found in French, as pseudo relatives are not clearly attested. Rather, we believe, although we will not develop this here, that it is based on embedding the type of structures exemplified below fitting the structural description in a with obligatory movement of SUB:

(58) a. [SUB [die ...clause...]]

b. Jan die is gekomen
John die is come
'John came'

c. Jan die kenn ik niet
John I do not know

Because of this we also believe that although special *die* and special *qui* have properties in common, they also differ with the consequence that special *die* can be observed for both subjects and objects, whereas it seems to only be observed for subjects in French.

4.3.1 The distribution of Case forms.

The relative clauses in the Dutch dialects under discussion use d-forms in contexts where French uses (what Sportiche, 2008 calls) weak forms *que/qui*, namely as bare nominative and accusatives, and strong wh-forms where French uses strong forms (*lequel, quoi*, etc..). While d-forms do not inflect for case, different forms surface in short relatives depending on the case of the relativized item. We restrict our attention to antecedents that require *die* in standard Dutch (neuter singular antecedents require *dat* which is (homophonous with) the complementizer), and present simple relatives.

- (59) a. den vent da/die 'm getrokken heeft (LH-WF)
b. de vent *dat/die him gefotografeerd heeft ((HK)-Dutch)
'the guy that took a picture of him'

- (60) a. den vent da/*die Pol getrokken heeft (LH-WF)
 b. de vent *dat/die Paul gefotografeerd heeft ((HK)-Dutch)
 ‘the guy that Paul took a picture of’

The inventory of d-forms is different in the two varieties: whereas West Flemish has *die* only as a nominative form, HK’s Dutch, importantly from our perspective, has *die* as both as an accusative and nominative.³¹

(61) Table: Inventory of D-forms used (with antecedents other than neuter singular)

	NOM		ACC		<i>finite C</i>
“Standard” Dutch (HK’s Dutch)	die		die		<i>dat</i>
West Flemish/ LH	die	da		da	<i>da</i>

Both West Flemish and HKs Dutch allow special *die* in long extraction, which we analyze like special *qui*, i.e. as a kind of pseudo relative structure, forced because of impossibility to extract a nominative DP from a regular embedded declarative tenses CP. The pseudo-relative analysis of *que/qui* makes predictions different from what the standard successive cyclic movement makes for the patterns of d-forms in long relatives in West-Flemish and HK’s Dutch. According to the standard analysis, normal successive cyclic movement should be possible for long nominative and accusative extraction alike, just as it is possible for pied-piped PPs. As a result, the highest d-word should carry the case of the extraction site, *regardless* of what happens to the C that contains the extraction site.

In the tables below, we compare the expected distribution of case patterns under long extraction of a subject and an object out of (apparently) an embedded tensed clause, limiting ourselves to relatives with non neuter singular antecedents:

³¹ The analysis of *da* as nominative d-form or C is difficult, as these forms are homophonous. The question whether d-forms are agreeing forms of the complementizer or not is not important for our discussion.

predictions under a standard successive cyclic movement in bridge contexts					
(62)		Highest Comp	Bridge Context	Embedded CP	
a.	De NP	[<i>d_{nom}</i> [	... V	[_{CP} < <i>d_{nom}</i> > da(t)_C [	<<i>d_{nom}</i> >
b.	de NP	[<i>d_{acc}</i> [	... V	[_{CP} < <i>d_{acc}</i> > da(t)_C [	... <<i>d_{acc}</i> >
c.	de NP	[PP [	... V	[_{CP} <PP> da(t)_C [	... <PP>

And under the analysis we propose:

prediction under a PRSC type analysis						
(63)		Highest Comp	Special Context	SUB	Predicate	
a.	De NP	[<i>d_{acc}</i> [	... V	[< <i>d_{acc}</i>>[	[<<i>d_{nom}</i> >	< <i>d_{nom}</i> >
b.	de NP	[<i>d_{acc}</i> [	... V	[< <i>d_{acc}</i> >	[< <i>d_{acc}</i> >	... < <i>d_{acc}</i> >

Putting together the predicted forms in the highest Comp under either analysis next to what is observed:

Case of Extracted Element	form ³² predicted by				Observed in	
	Standard analysis		PSRC analysis		highest Comp	
	WF(LH)	D(HK)	WF(LH)	D(HK)	WF(LH)	D(HK)
NOM	die	die	da(t)	die	da(t)/*die	die
ACC	da(t)	die	da(t)	die	da	die

The crucial prediction is in the highlighted cell: as we see, nominative d-forms are **not** able to appear in the highest C as predicted by the PRSC analysis and contradicting the standard analysis.³³

We conclude that the higher d-word is always accusative, in support of (45.3).

An additional, more general, prediction is made by our proposal: only in varieties that both have an accusative *die* and a nominative *die* should allow for the double *die* pattern, that is for special *die* in the embedded clause and another *die* in the Comp system of the higher clause. Dialects with just a nominative *die* (and which allow *that*-relative/accusative *da(t)*) should only allow only the *da(t)/die* surface pattern, that is with special *die* in the embedded clause and *da(t)* in the

³² The WF C can be *da* or *dat* (perhaps just because of spelling vs pronunciation).

³³ Note in particular that an “economy type” requiring *die* deletion when not needed for LH-WF (or French in comparable circumstances for that matter) as Milner (1982, chapter “la redondance fonctionnelle”) propose seems untenable in view of HK’s Dutch.

Comp system of the higher clause. This prediction seems correct given the data on Dutch varieties reported in Schippers (2006).

4.3.2 Intervention effects

On the basis of our analysis of French, we expect to find intervention effects in the special *die* cases, which must involve the pseudo-relative strategy in West Flemish and HK's Dutch, but not in the usual successive cyclic derivations. The next sections present the data that support this prediction: as expected special *die* in West Flemish (thanks to Liliane Haegeman) or HK's Dutch is sensitive to the context of the main clause in several ways: the choice of embedding predicate or the presence of negative interveners.³⁴ No intervention effects however are found with PP prolepsis. In HK's Dutch intervention effects are found with special *die*, both with long subject and long object relatives.

We illustrate West Flemish intervention cases first with negative intervention with subject special *die* extraction (we omit prolepsis and resumptive pronoun alternatives):

- (64) a. ??* de studenten dat er niemand zeid die.n do geweest oan (WF)
 the students that there nobody said die.PL there been were
 the students noone said had been there
- b. ??? de studenten dat er niemand zeid da.n do geweest oan (WF)
 the students that there nobody said that.PL there been were

Long object extraction over an intervening negation is possible:

- (65) de studenten dat er niemand zeid da-j moet contacteren (WF)
 the student that there nobody said tha-2nd must contact
 'the students that nobody said you must contact'

Complements of adjectival predicates cannot support subject relativization:

- (66) a. * de studenten dat het nuodig is dien de secretaresse ipbellen
 the students that it necessary is die.pl the secretary upcall.pl
 b.??? de studenten dat het nuodig is dan de secretaresse ipbellen
 the students that it necessary is da.pl the secretary upcall.pl

But object relativization is non-problematic:

- (67) de studenten dat het nuodig is da de secretaresse ipbelt
 the students that it necessary is that the secretary upcalls

Thus, the special *die* derivation shows the expected behavior.

³⁴ Note that plural complementizer agreement cannot overcome the extraction violation, even though West Flemish has otherwise been argued to be a pro-drop language.

In HK's Dutch, negative intervention effects are found with the special *die* strategy, regardless of whether it is subject or object extraction:

- (68) a. * de studenten die niemand geloofde *die* het verhaal verteld hadden
 the students die noone believed *die* the story told had
 'the students who noone believes had told the story'
- b. * de studenten die niemand geloofde die ik gezien heb
 the students die nobody believed *die* I seen have

Long object extraction over negation is much improved for an accusative without the special *die* strategy and perfect for an oblique/PP.

- (69) a. (?) de studenten die niemand gelooft dat ik in mijn buro gezien heb
 the students die noone believed that I in my office seen have
- b. de man met wie niemand gelooft dat ik gesproken heb
 the man with whom noone believes that I spoken have

As expected complements of adjectival predicates do not license special *die*³⁵:

- (70) a. *de studenten dat het nodig is die haar/ de secretaresse opbellen
 the students that it necessary is *die* her/the secretary upcall.pl
- b. *de studenten die het nodig is die ik opbel
 the students *die* it necessary is *die* I upcall.pl
- c. ?? de studenten *die* het nodig is dat ik opbel
 the students *die* it necessary is that I go call pl
- d. the studenten met wie het nodig is dat ik een afspraak maak
 the students with who it necessary is that I a meeting do

Interestingly, sensitivity to the choice of intervening predicate is illustrated by desiderative verbs in both LH-WF and HK's Dutch thus patterning like Godard's French), which exclude subject special *die* in WF:

- (71) a. ??* de studenten daj zou willen dien de secretaresse ipbellen
 the students that.you would want *die*.pl the secretary upcall.pl
 'the students that you would want to call the secretary

³⁵ While *être sur* 'be certain' supports special *qui*, the Dutch equivalent (*er zeker van zijn dat*) "lit.be certain of it that' does not'. Interestingly this form seems to obligatorily include the proleptic case marker *van*. 'zeker weten'/know for sure' seems to marginally support special *die* (and supports prolepsis as well).

- b. ??? de studenten daj zou willen dan de secretaresse opbellen
 the students that.you would want da.pl the secretary upcall.pl
- c. de studenten daj zou willen da de secretaresse ipbelt
 the students da.you would want that the secretary ip-calls

And exclude subject and object special *die* in HK's Dutch:

- (72) a. * de studenten *die* je wou *die* d'r gingen opbellen
 the students die you wanted die her go.pl up.call.inf
 'the students that you would want to call the secretary
- b. * de studenten *die* je wou *die* ik ging opbellen
 the students *die*.you wanted die I go upcall.inf
- c. ? de studenten *die* je wou dat ik ging opbellen
 the students that.you wanted that I went upcall
- d. de studenten met *wie* je wou dat ik ging praten
 the students with whom you wanted that I went talk
 'the students with who you wanted me to talk'

We see thus that the predictions (45.2) and (45.3) are verified.

4.4 Small clause subjects: interpretation

We now turn to predictions made in (45.4).

We propose that the type of structures we are discussing – special contexts - obey the following format, in which (73a) is an underlying structure and (73b) is derived by wh-movement of SUBJ:

- (73) a. PRED [PRSC SUBJ [CP *qui* ...]]
 b. wh-SUBJ_j PRED [PRSC t_j [CP *qui* ...]]

By hypothesis, predicates of the PRED class allow both CP complements and small clause complements and they are all saying or attitude verbs.

Because they introduce a proposition describing someone's utterance, belief or desire etc., saying or attitude verbs (as modal verbs in the wide sense of the term), can induce *de re/de dicto* ambiguities on DPs contained in this proposition. In the simple cases we are considering, a main clause with an attitude verb and a single complement clause, let us refer to *de re* descriptions as speaker's descriptions and to *de dicto* descriptions as attitude holder descriptions. Descriptions

can always be read *de re*, but to be read *de dicto*, they need to be in the scope of a modal verb, for example within a complement clause to an attitude verb.^{36,37}

For our purposes, it is enough to note that if a sentence like (74a) expresses a *de re* belief of John's regarding the denotation of the DP subject of the embedded clause, here *the president*.

This sentence is synonymous with (74b), in which this DP is proleptically expressed: *de re* is, for our purposes equivalent to prolepsis:

- (74) a. Jean croit [que le président est absent]
 John believes that the president is absent
 b. Du président, Jean croit qu'il est absent
 [Of the president]_i, John believes that he_i is absent

In a nutshell, our proposal is the following: in PRSC structures (as in small clauses in fact) SUBJ is outside of the complement CP of PRED: as a result SUBJ must (under normal circumstances) be interpreted *de re*, very much the way a proleptic argument is interpreted in structures involving prolepsis.

Our approach predicts that whenever SUBJ does not lend itself to a *de re* interpretation, deviance should ensue.

It is known since at least the work of Williams (1983) that subjects of small clauses behave differently from subjects of clauses: while the latter do not have to escape the scope domain of the immediately superordinate verb - they can be interpreted *de re* or *de dicto* - the former must be interpreted *de re* only.³⁸ Thus none of the subsequent sentences are ambiguous the way the first one is:

³⁶ Although, unfortunately, modalities can also be implicit. Descriptions intended by a speaker to be *de dicto* can be found in main clauses not containing any overt intensional material. Such readings are typically transcribed with quotes around the descriptive material to indicate they are not the speaker's (Referring back to John's crazy belief that the neighbor's cow grazing in his backyard is a unicorn, I can state to John: the "unicorn" is leaving). This makes it difficult to correlate (some types of) *de dicto* readings with syntactic distribution.

³⁷ *De re* readings can require more than simply taking a description as the speaker's. It also requires that there be in Lewis (1979)'s terms an "acquaintance relation" between the attitude holder and the referent of the description. We have described but not explained why verbs allowed in special contexts (or prolepsis) are limited such verbs. It is tempting to think that this extra case that such verbs allow actually permits the overt syntactic realization of this acquaintance relation. See Percus and Sauerland (2002) for recent discussion.

³⁸ We assume that intensional predicates such as *chercher/look for* who induce *de re/de dicto* distinctions on their direct objects of the subject of small clause complement should be represented with a double VP (a VP-shell) with the higher verb an intensional verb. The small clause subject of the complement of such predicates need only escape the scope of the lower verb of this shell.

- (75) a. John believes that someone is sick
 b. John believes someone sick
 c. John saw someone sick

In the first one, *someone* can be read as a narrow scope existential or a wide scope existential relative to the verb *believe*:

- (76) a. John believes that there is someone who is sick
 b. There is someone who John believes is sick

In the others, the first reading is unavailable. Sentence (75a) for example can be read as synonymous with (76b) and not as (76a): the quantifier must outscope the verb *believe*.

The same facts hold, *mutatis mutandis*, in French.

This provides us with a test to determine whether a given DP is the subject of a clause or the subject of a small clause and our analysis makes a prediction: it predicts that in all cases we claim there to be PRSC, that is special contexts, EECM contexts and PRSC complement of perception verbs, the DP claimed to be the subject of the small clause should have to outscope the superordinate verb. If on the other hand, these are bridge contexts, this should not be true. We now discuss evidence suggesting that this prediction is correct, namely that such subjects must be interpreted *de re*.

4.4.1 Idioms Chunks

The first type of evidence comes from idioms chunks. SUBJ we claim must be interpreted *de re*. We predict that if SUBJ is an idiom chunk that cannot be interpreted “referentially”, deviance should ensue. Care is needed in the selection of the relevant idiom chunks as they both need to be wh-movable (to induce the presence of special *qui* in a special context) and they must not be metaphorically interpretable as object denoting. We believe that one such case is found with the non “referential” idiom chunk *part* in *prendre part* (meaning participate), where the idiom chunk, when wh-moved, can only be interpreted as an amount:

- (77) Talleyrand a pris part aux négociations
 Talleyrand took part in the negotiations

This idiom can be passivized, triggering obligatory participle agreement:

- (78) Une part importante a été prise aux négociations par Talleyrand
An important part was taken in the negotiations by Talleyrand

It is wh-movable from the subject position, yielding an amount reading:

- (79) Quelle part a été prise aux négociations par Talleyrand
what part was taken to the negotiations by Talleyrand
'How much did T participate in the negotiations'

Or from object position, short distance (80) or long distance (81), in which case participle agreement is excluded:

- (80) Quelle part Talleyrand a (-t-il) pris(*e) aux négociations
What part did Talleyrand take in the negotiations
'How much did Talleyrand participate in the negotiations'
- (81) Quelle part tu crois (crois-tu) que Talleyrand a pris(*e) aux négociations
What part do you think Talleyrand took in the negotiations
'How much do you think Talleyrand participated in the negotiations'

Strikingly, such sentences degrade substantially if the moved idiom chunk stands for SUB in a special contexts:

- (82) ↓↓ Quelle part tu crois qui a été prise aux négociations par Talleyrand
What part do you think was taken to the negotiations by Talleyrand
'How much do you think Talleyrand participated in the negotiations'
- (83) ↓↓ Quelle part tu crois avoir été prise aux négociations par Talleyrand
What part do you think to have been taken to the negotiations by Talleyrand
'How much do you think Talleyrand participated in the negotiations'

This suggests that the extractee indeed is not treated as moved from inside the embedded clause and behaves as predicted by our analysis. The degraded character of such idioms and the idea that it is linked to the difficulty of reading the idiom chunk *de re* is corroborated by the (much more) strongly degraded character of prolepsis with such idioms:

- (84) a. * De quelle part tu crois que Talleyrand l'a pris(e) aux négociations
Of which part you think that T took it in the negotiations

- b. * La part dont tu crois que Talleyrand l'a pris(e) aux négociations
the part *dont* you think that Talleyrand took it in the negotiations

4.4.2 Unexpected Restrictions on Quantity Questions in Special Contexts

Also relevant and quite striking is an observation made in Obenauer (1994). Obenauer (1994) reports that some versions of quantity questions are unacceptable. Obenauer reports the following contrasts (his sentences, slightly modified):

- (85) a. ? Combien d'hommes tu crois qui seraient capables d'escalader le Mont-Blanc?
'How many people do you believe *qui* would be able to climb the Mont-Blanc?'
 - b. ? Combien de députés tu crois qui voteront la motion?
'How many representatives do you believe *qui* will vote the proposal?'
 - c. ? Combien de chefs d'état tu crois qui viendront à la réception?
'How many heads of state do you believe *qui* will come to the party?'
- (86) a. * Combien de personnes tu crois qui tiennent dans une Twingo?
'How many people do you believe *qui* fit into a Twingo?'
 - b. * Combien d'effractions tu crois qui ont lieu chaque jour?
'How many break-ins do you believe *qui* take place every day?'
 - c. * Combien d'essence tu crois qui a fuit?
'How much gasoline do you believe *qui* leaked?'

The crucial factor seems to be one that is describes as follows in Rizzi (2001): “it is quite natural to have in mind a group of heads of states, or of representatives, or of brilliant climbers”, when such questions as (85) are asked. Questions like (86), however, naturally ask about a purely quantitative information and as Rizzi (op. cit.) notes: “it doesn't matter which particular individuals will fit into the car, or which particular break-ins take place, and the amount of gas won't be, in the normal case, one of a set of amounts that were mentioned before in discourse.” Rizzi (2001) offers a alternative account of this behavior in terms of agreement which we discuss in section 5.2. It suffices here to put these remarks in our terms, and realize that this deviance is predicted by our account if it is not possible to assign a *de re* interpretation to the preposed DP, i.e. if these questions cannot be interpreted as asking about the property of particular objects. And as a matter of fact, it is the norm that in such questions, there are no individualized quantities that one is asking about. Obenauer's reported judgments follow.

We should note that while we agree with Obenauer's reported judgments, it still seems to us possible to us to rescue the sentences in (86) to the level of the sentences in (85) by

individualizing quantities. For example, if the situation provides for discrete set of alternative quantities as possible answers to the question before asking it (e.g. for (86c), of one, two or three gallons, how much do you think...).

5 Speculations and Remarks

5.1 Case assignment

The idea that the Case of the extracted wh-element in a special qui construction is somehow provided by the main predicate is not new. It is explored by many authors notably Kayne, 1984 and Godard 1986.

Here we briefly speculate about how Case assignment works technically.

Here are the parameters and assumptions of the problem where we use the notation given for PRSC:

1. Normal DPs need Case
2. Small clauses do not need Case
3. [+/- finite clauses] need Case
4. SUB in PRSC gets accusative Case
5. SUB cannot be a clitic (e.g. *le*)
6. The proleptic argument gets a different Case (say genitive)
7. The proleptic argument cannot be a clitic (*en*)

As a result point 1 and 3, we need to conclude what we did in fn 21 which we repeat here: In the case of perception verbs we have both a tenseless PRSC complement³⁹ and a non wh DP as SUB.

- (87) J'ai vu [_{PRSC} [_{DP*}Jean-i] [_{CP} PRO-i embrasser Marie]]
I saw John kissing Marie

Given points 1 and 3 above, this means that such verbs assign two Cases: one for the non finite clause and one for the subject of the infinitival clause.

The same must be said in the case of SUB and a tensed or tenseless PRSC: both the PRSC and SUB need Case. The difference is that the subject of the tenseless clause under a perception verb can cliticize (viz. *Je l'ai vu embrasser Marie/I saw him kissing Mary*) unlike SUB. We would like to suggest that the Case gotten by SUB is licensed much higher in the structure – call it high accusative - than normal - low - accusative Case. This would mean in general that the ability to

³⁹ This would also apply to the option Cinque 1995 argues is available in Italian (and probably in French too), with SUB a direct object, and the relative an adjunct CP PRSC (with a PRO subject).

end up as a clitic (or as a silent DP linked to a clitic) is licensed low. This assumption seems necessary anyway as in the original theory of *ne*-placement in Italian (Belletti and Rizzi, 1981) or en-placement in French in terms of unaccusativity had it (although it is not clear how to formulate the relevant requirement in today's theoretical context).

By the same reasoning, the proleptic Genitive must be licensed high, since cliticization is also excluded (cf. fn 19).

Technically then, we take predicates of the allowed PRED class to be those with the ability of assigning a high Case, be it Accusative as in the PRSC constructions under consideration, or Genitive as in Prolepsis.

That SUB must get a high Case can follow from the fact that tensed clauses and bare infinitives receive low accusative Case. If the high accusative is lower than the proleptic high genitive, SUB will (by minimality) get the next one available, namely high Accusative.

By the same reasoning, we can describe in more technical details why *être sûr* is not an EECM verb but allows special *qui*: this is due to the independent fact that the infinitive complement of this predicate must be introduced by the *de* complementizer.

Under Kayne's 2000, chapter 14 "Prepositions as Probes" idea or Sportiche's 2005b "Strict Locality of Selection" proposal, it is desirable to suppose that "complementizers" and weak prepositions in general are VP external and attract complement clauses ("TP's") to them. This has the effect of requiring raising of the container of SUB higher than the normal low accusative position, thus preventing low accusative assignment to SUB. If we take the presence of *de* on the infinitive to mean that this infinitive must raise as high as the "proleptic" genitive Case and, as concluded above, this genitive is higher than the high Accusative, the impossibility of Casemarking SUB in such cases follows.

5.2 Is an Agreement Based Proposal Viable

In the text, we discussed the restriction on quantity questions in special contexts. We only know of a couple of previous attempts to try and explain this restriction Obenauer (1994) and Rizzi (2001) both based on Rizzi's (1990). Rizzi (2001) offers perhaps the most complete analysis to date. It takes *qui* to be an agreeing form of *que*, and takes the above *combien* facts to support this agreement analysis. Here, we discuss why we think an agreement based approach is insufficient.

5.2.1 Questions about an agreement based proposal

Rizzi's 2001 reasoning goes as follows:

1. Agreement on past participles in *combien* questions is only compatible with D-linked readings:

- (88) Dis-moi combien de fautes tu as faites
'Tell me how many mistakes you have made+Agr'

Such examples and this correlation are due to Obenauer (1994) who writes : "...l'accord n'est naturel que dans un contexte où on parle de fautes spécifiques - probables, faciles à faire-, énumérées dans une liste..." (op.cit.:173). 'agreement is natural only in a context where likely, easy to make, specific mistakes are made' Forcing non D-linked questions with the help of a well chosen modifier illustrates this point:

- (89) a. Jusqu'à combien de fautes ont-ils fait(*es), vos élèves?
'Up to how many mistakes have they made(+Agr), your students?'
b. Combien de fautes en moins ont-t-ils fait(*es) cette fois?
'How many mistakes less (than last time) have they made(+Agr) this time?'

2. The overt morphological manifestation of agreement in C (on *qui*) suggests that this case can be naturally unified with the previous one: participle agreement and *que/qui* agreement are incompatible with a non D-linked interpretation.

3. For a sentence with a non D-linked interpretation, the surface structure in (90a) results in the LF in (90b) as follows:

- (90) a. [Combien_j d'essence]_k tu crois [t_k **qui** [t_k a fuit]] ?
'how much gas you think *qui* leaked'
b. Combien_j tu crois [t_k **qui** [[t_j *d'essence*]_k a fuit]] ?

And this LF is excluded according to Rizzi (2001) "because Agr in C in the embedded clause is not supported by a DP at LF".

This account of the ungrammaticality of *qui* in non D-linked questions seems to us unpromising for the following reasons:

a. As indicated in the representation in (90b), the agreement of *que* is triggered by the presence of the trace t_k of the overtly moved subject. It is unclear why an agreement configuration, fundamentally a surface phenomenon, would need to be sanctioned again at LF. For example, this is not the case in raising to subject constructions, in which, say, indefinite subjects can routinely reconstruct into an embedded clause (see Sportiche, 2005a, 2005b, for discussion and references), regardless of whether there is agreement with the main verbs. Thus we have the following sentences in (91a) and (92a), with their (rough) respective associated LFs in (91a,c) and (92b,c) – the relevant LFs being (91a) and (92c) in which no DP appears in the putatively agreement triggering position:

- (91) a. Un russe semblera avoir gagné la course
 a Russian will-seem-3rdsg to have won the race
 b. un russe_k semblera [t_k avoir gagné la course]
 there is a Russian who seems to have won the race
 c. semblera [un russe_k avoir gagné la course]
 it seems that there is a Russian who won the race
- (92) a. Des russes sembleront avoir gagné la course
 Russians will-seem-3rdpl to have won the race
 b. Des russes_k sembleront [t_k avoir gagné la course]
 there are Russians who seem to have won the race
 c. sembleront [russes_k avoir gagné la course]
 it seems that there are Russians who won the race

This suggest that there is no independent motivation for the agreement/interpretive correlation (which could of course be stipulated by endowing the head H (here *que*) expressing agreement with a relevant semantic property).

b. Furthermore, as Rizzi himself (and others) notes, participle agreement *per se* does not preclude non D-linked readings. Rather, this reading is unavailable “when the Wh phrase moves directly from Spec AgrP to the C system,..., but it is not when the phrase passes through AgrS as well, in a passive or unaccusative sentence” (example attributed to Michal Starke):

- (93) Je me demande combien de femmes (en plus) ont été admises cette fois
 I wonder how many (more) women were admitted+Agr this time

This shows that participle agreement itself says nothing about interpretation. What is significant about participle agreement is that it is tied to an interpretive property (D-linking) only in

configurations where such agreement is optional. In passive (or unaccusative) constructions, lack of agreement is not an option, while it is in cases of quantity questions.

Overall then, this suggests that agreement imposes no interpretive constraint unless it alternates with the possibility of non agreement. Postulating one in the case of the *que/qui* alternation amounts to a stipulation, since there is no optionality in such cases.

We interpret this array of facts as indicated that, in non passive or unaccusative structures, participle agreement is a diagnostic that the object has raised high enough to some position P which precludes certain interpretations.

5.2.2 Quantity Questions, D-linking and the agreement based proposal

In what precedes, we have followed Rizzi (2001) in taking the relevant property evidenced by participle agreement in certain contexts as being D-linking. Here we modify this somewhat. *How many/much* questions introduce two quantifications: a question about quantities and an existential quantification on the set of objects (denoted by the nominal restriction) being counted or measured. This can lead to ambiguous sentences, depending on the scope of existential quantifier binding the nominal restriction of *how many/much*. Questions such as (94a) can be paraphrased either as (94b) - the existential wide scope reading - or as (94c) - the pure quantity reading:

- (94)a. How many books does he want to read
- b. What is the number n, such that there are n books, such that he wants to read them
- c. What is the number n, such that he wants there to be n books for him to read

And while a French word by word translation in (94a) of (95a) is as ambiguous as its English counterpart, the version in (95b) with the nominal restriction left in situ – a well formed option in French- gives rise only to the quantity reading:

- (95)a. Combien de livres il veut lire
What is the number n, such that there are n books, such that he wants to read them
- b. Combien il veut lire de livres
What is the number n, such that he wants to read n books
- or What is the number n, such that he wants there to be n books for him to read

This distinction can lead to different truth values. Consider for example the following context:

“Susan, Anna and Mary want John to buy some pictures. They all want him to buy six pictures. They agree on three of them but disagree on the three other pictures.”

In such a context, the question:

(96)[How many pictures] do they all want him to buy t

can have two possible answers depending on the scope of the existential quantifier.

If the quantifier is interpreted with wide scope:

(97)How many pictures are there that they all want him to buy?

The answer is: THREE. Because there are exactly three pictures that they all want him to buy

If on the other hand it is interpreted with narrow scope

(98)What’s the number such that they all want him to buy this number of pictures?

The answer is : SIX. Because they all agree that he should buy six pictures.

As expected, in French, the word by word translation of the English question is ambiguous as in English:

(99) Combien de photos veulent-elles toutes qu’il achète
How many pictures do they all want him to buy

The answer is SIX or THREE. However, with a split question, leaving the restriction in situ:

(100) Combien veulent-elles toutes qu’il achète *de photos*
How many do they all want him to buy pictures

The only possible answer is SIX.

This pattern falls out if, as is standardly assumed, the Logical Form position of the nominal restriction (here *de photos*) determines the scope of the existential quantifier. If unmoved, it can only be interpreted in situ (in the scope of *want* and *all*). If moved, it may be interpreted in its moved position (wide scope) or reconstructed (narrow scope).

The point of this discussion is to show that moving a full DP and leaving it moved at LF or reconstructing it is orthogonal to the D-linked /non D-linked distinction. Nothing in what precedes requires the introduction of any specific set of pictures. In either case, it is possible to get a D-linked interpretation either by introducing at the beginning of the question a context like as:

(101) Ok, of all the pictures we have talked about....

Similarly, it is possible (although not very natural) to D-link a set of numbers (or a set of quantities), as in:

(102) Ok. There may be a disagreement among us here. Of these three numbers: three, six and nine, which one is the answer to the question: how many pictures do they all want him to buy.

Given that D-linking is the crucial ingredient in (active) participle agreement, an account trying to capitalize on the idea that in the LF of (90), repeated below:

- (103) a. [Combien_j d'essence]_k tu crois [t_k **qui** [t_k a fuit]] ?
 'how much gas you think *qui* leaked"
 b. Combien_j tu crois [t_k **qui** [[t_j *d'essence*]_k a fuit]] ?

the Agr in C in the embedded clause not being supported by a DP at LF cause deviance seems insufficient.

6 Final remarks

We have left a number of questions raised by our proposal open. We list them here with final remarks about each.

Mood Restrictions:⁴⁰ We have not addressed the question of why we find restrictions on mood possibilities in the embedded clause of Special contexts. Recall that what is prevented is not the obligatory subjunctive (sometimes called the intensional subjunctive) but rather subjunctive

⁴⁰ We have not addressed the restriction on the presence of expletive negation mentioned in footnote 23 pace Hirschbühler and Labelle (1996), which seem related to the properties of this embedded clause.

mood when indicative is an option (sometimes called the polar subjunctive). We have no explanation to offer. It may be that pseudo relatives are not syntactically structured enough to allow the presence of elements that can give rise to mood alternations. Or it may be that the indicative/subjunctive alternations in French, as discussed most recently in Homer (2007) are linked with semantic properties (e.g. presupposition) in a way that is incompatible with other interpretive requirements of such pseudo relatives. We are thinking of what Koenig and Lambrecht (1997) suggest, namely that in neutral contexts, the content of pseudo relatives is always asserted: it “*marks an entity as new in the perceptual world of a perceiver (=center of perspective) and as appearing in this perceived world through his/her involvement in a particular event. Both the perception event and the perceived event are pragmatically asserted*”.

Intervention effects: while we have shown that intervention effects seemed shared across PRSCs, we have offered no reasons why they arise in the first place. As noted, both the choice of predicates in Special Contexts and the intervention of downward entailers suggest a strong link with the properties of partial wh-movement. In addition, the limitations on the interpretation of the subject of the PRSC (as being *de re*) recalls Herburger’s 1994 and Lahiri’s 2002 interpretive properties of partial movement wh-questions in German and Hindi respectively. If this link withstand further scrutiny, it would suggest at least that such intervention effects are not limited to cases involving covert movement as Beck (1996) had it, but rather to the type of movement involved, which all seem to be giving rise to “split constructions”, and may ultimately provide a path to an explanation.

Properties and typology of pseudo relatives. One striking property of French pseudo relatives is that they are limited to subjects relatives, a property we have not attempted to derive. We have discussed the fact that Dutch special *die* makes use of a different kind of PSRC, one not subject to this subject restriction. We have left open the nature of the parametric variation involved. In addition, we have not attempted to discuss what happens in English. As mentioned, McCawley (1998) does discuss English pseudo relatives and mentions one intriguing fact: he reports that cases in which deletion of the complementizer *that* is found in subject relatives in some English varieties (as in *the man (that) left*) are all cases of pseudo relatives. The involvement of *that* deletion in English *that-t* effects and the parallel involvement of special *qui* in parallel French cases, is intriguing.

Subject Extraction: finally, we have not attempted to discuss in any detail why long distance extraction of subjects is disallowed in French, nor how to analyze cases of apparent short subject extraction.

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