

What's 'what' in French questions¹

BERNADETTE PLUNKETT

University of York

(Received 24 May 1999; revised 25 June 2000)

The analysis of French 'what' questions poses a number of difficulties. These questions exhibit numerous peculiarities, especially when they involve a subject *wh*-phrase. It is argued that the anomalous paradigm derives from three independent factors. The first is linked to the general status of matrix subject *wh*-phrases and the position they occupy at the interface levels. The second relates to the status of *que* 'what' as a phonological clitic. The third is argued to derive from the difference between strong *quoi* 'what' and weak *que* with respect to specificity. Once the interaction of these factors is taken into account, the unusual paradigm is completely explained.

1. FRENCH QUESTIONS: SOME RESTRICTIONS ON 'WHAT'

French 'what' questions are special in several respects. This paper examines them and proposes an approach which provides an explanation for the anomalies. I will begin by reviewing these, individually.

1.1 *Strong versus weak 'what'?*

Generally speaking, overt Wh Movement is optional in direct questions in French. *Wh*-words may either move to the front of the sentence or stay in situ. A straightforward contrast can be seen in (1).

- (1) (a) Qui aimes-tu?
 who love you
 'Who do you love?'
 (b) T(u) aimes qui?

The same variability can be seen in the long-distance questions in (2).²

[1] This paper owes much to comments and suggestions by David Adger and Anthony Warner as well as by *JL* referees. Particular thanks to Paul Hirschbühler for discussion and critical examples. Thanks also to the numerous other French speakers who provided judgements.

[2] Boeckx et al. (2000) correctly point out that the general ban on long-distance in situ questions proposed by Bošković (1998) cannot be correct. They argue that if and only if the matrix predicate is non-intensional, a *wh*-phrase can stay in situ in the lower clause. Their characterisation is insufficient, as shown by the unobjectionable (2b) and (i), in which the matrix verb is prototypically intensional.

(i) Tu veux que Catherine le mette où, le tatoo?
you want that C it put where the tatoo
'Where do you want Catherine to put the transfer?'

- (2) (a) Où veux-tu l' accrocher?
 where want you it to attach
 'Where to you want to hang it?'
 (b) Tu veux l' accrocher où?
 you want it to attach where

In both (1) and (2), the *wh*-word usually takes the same form in moved and in situ questions.

The first oddity regarding 'what' in French, is that it has two forms; as (3) shows, the forms are in complementary distribution.

- (3) (a) Que cherchez-vous?
 what seek you
 'What are you looking for?'
 (b) Vous cherchez quoi?
 (c) *Vous cherchez que?
 (d) *Quoi cherchez-vous?

This fact leads several researchers to suggest that *que* and *quoi* are respectively weak and strong variants of a single pronoun. Obenauer (1977) proposes an alternative view, in which the weak form is treated as the finite complementiser *que*. Both Goldsmith (1978) and Hirschbühler (1978) review and argue in convincing detail against Obenauer's view of interrogative *que*. They take the former view, which I also adopt.

On this view, the two forms of the word for 'what' may be seen as a weak unstressed form *que* and a tonic form *quoi*. This view is supported by the existence of identical variation in other weak-strong pronominal pairs: *te* ~ *toi* 'you', *me* ~ *moi* 'me', *se* ~ *soi* 'one'. Just as with those pairs, the weak member cannot be used alone in a sentence fragment and only the strong form appears inside PPs. In addition, for most speakers *que* cannot be coordinated with another *wh*-word. Thus, (4a) is parallel to (4c), where the coordination of weak subject pronouns is ruled out; (4b) with coordinated strong pronouns is fine.

Furthermore, they fail to notice that (ii), their example (5b), contains non-intensional *dire* 'to say'.

- (ii) *Pierre a dit que Jean a acheté quoi?
 P has said that J has bought what
 'What did Pierre say that Jean has bought?'

The counterexamples here, along with many examples in the text are from a French corpus collected by the author (hereafter the York corpus). This comprises adult interactions with children collected for an acquisition project (ESRC R000221972); it contains over 4,000 non-echo *wh*-questions from adults speaking French, Canadian and Belgian varieties of French. Use of the corpus enables us to show that (2b) was not an echo; it followed the instruction 'You decide!'.

- (4) (a) ??Qui ou que/*Que ou qui préfères-tu?
 who or what/what or who prefer you
 'Who or what do you prefer?'
 (b) ? Qui ou quoi préfères tu?
 who or what prefer you
 (c) * Tu et il préfèrent qui?
 you and he prefer who

Further, *que* questions require obligatory inversion. As would be expected if *que* were a syntactic clitic, Obenauer (1977) argues that it may not be separated from the verb by anything other than a clitic. He thus predicts that *que* will allow only the Simple Inversion (of a pronominal subject and a finite verb), as in (3a), and Stylistic Inversion, as in (5).³

- (5) Qu' t_i aurait voulu Jean_i?
 what would have wanted Jean
 'What does Jean want?'

However, contra his claim that it is at best marginal, my informants almost without exception accept (6) with Complex Inversion, where a strong subject pronoun intervenes between *que* and the verb.

- (6) Que cela veut- il dire?
 what that wants it to say
 'What does that mean?'

Despite differences, all three types of inversion are triggered by overt extraction of a *wh*-phrase and I assume that it is this overt extraction that *que* demands.

The treatment of *que* as a weak form of *quoi* is thus generally well supported. Whether this weak pronoun is a type of clitic is less clear. Given the grammaticality of (6), we conclude that *que* is compatible with any type of inversion, and is thus not a syntactic clitic. It is, however, a form which occurs only when overt *wh*-extraction has taken place.

I move on now to the constraints which apply to 'what' only when it is interpreted as a subject.

1.2 Subject 'what' questions

A problematic constraint on 'what' arises in simple direct questions whenever it functions as the subject; it appears neither to be possible to extract such a subject, nor to leave it in situ in [Spec,TP].

[3] Stylistic Inversion involves post-posing of a lexical subject. Since it is found in embedded contexts it is not generally treated as involving I-to-C movement.

- (7) (a) *Que flotte dans l'eau?
 what floats in the water
 ‘What floats/is floating in (the) water?’
 (b) *Quoi flotte dans l'eau?

This is not true for other subject *wh*-phrases: replacing *que* by *qui* ‘who’ results in perfect grammaticality.

The restriction on the extraction of subject *que* does not apparently carry over to more complex ‘periphrastic’ questions like (8), which I take to involve biclausal structure, given the standard *que* ~ *qui* alternation which shows up after extraction of an embedded subject.⁴

- (8) Qu’est ce qui flotte dans l’eau?
 what is this that floats in the water
 ‘What (is it that) floats/is floating in (the) water?’

These cases most likely involve long-distance extraction and as such may parallel (9).

- (9) Que crains-tu qui soit advenu?
 what fear you that be taken place
 ‘What do you fear has happened?’

Whether the restriction on non-echo *quoi* in [Spec,TP] extends to embedded contexts is harder to determine. The impossibility of cases like (10) suggests that it does (though the constraints mentioned in fn. 2 may be involved).

- (10) *Tu pensais que quoi traînait dans le couloir?
 you thought that what lay around in the corridor
 ‘What did you think was lying around in the corridor?’

At least where movement is independently blocked, ‘what’ appears to be marginally possible in [Spec,TP].

- (11) (?)Qui a dit que quoi traînait où?
 who has said that what lay around where
 ‘Who said that what was lying around where?’

Such data present difficulties for Goldsmith’s (1978) view that the ban on *quoi* in canonical subject position is due to its incompatibility with nominative Case. Similarly, in cases like (12), the expletive subject would normally be assumed to transmit nominative Case to *quoi*.

- (12) Il est arrivé quoi?
 it is happened what
 ‘What happened?’

[4] In ‘that’-t contexts in French a *que* complementiser becomes *qui*.

Such expletive-*quoi* chains arise both in unaccusative 'There'-Insertion constructions and in passives like (13).

- (13) Il a été décidé quoi pour demain?
 it has been decided what for tomorrow
 'What has been decided for tomorrow?'

It may be more crucial in (11)–(13) that *quoi* is interpreted as a subject but originates in a post-verbal position.⁵

When [Spec,TP] is filled with an expletive, the post-verbal nominative *que* can be extracted, as in (14).

- (14) Qu' a-t-il été décidé t pour demain?
 what has it been decided for tomorrow
 'What has been decided for tomorrow?'

Thus far, the only licit cases of *que* extraction we have seen are (8) and (9). They both putatively involve long-distance movement of derived subjects.

We have now seen all the constraints on 'what' questions in French. We review briefly before proceeding.⁶

1.3 Review

Que/quoi questions are special in several ways. First, 'what' has two forms in French, one a weak pronoun (*que*) triggering inversion and the second a strong pronoun (*quoi*) appearing inside complex *wh*-phrases and in the in situ strategy. Second, 'what' questions involving the weak form necessarily involve overt movement. Finally, the appearance of *que* is severely restricted when extracted from the canonical subject position; the overt extraction of 'what' subjects from the matrix subject position is impossible. Coincidentally, *quoi* may not normally appear as an in situ subject either, suggesting that any covert extraction of such phrases may be similarly constrained.

In the next section, I will discuss an approach to Wh Movement which, I believe, sheds some light on these peculiarities.

[5] *Traîner* 'lie around' in (11) takes *avoir* 'have' as its auxiliary, but choice of auxiliary is not a clear diagnostic for unaccusativity in French (see Jones 1996 for discussion).

[6] Indirect 'what' questions provide no further data, since both subject and object cases are anomalous. When the embedded clause is tensed, they are always introduced by the pronoun *ce* 'it', resulting in a free-relative type structure not required in indirect questions involving other *wh*-words.

- (i) (a) Je me demande *(ce) que tu aimes.
 I myself ask what you like
 'I wonder what you like.'
 (b) *Je me demande *(ce) qui lui fait peur.
 I myself ask it that him makes fear
 'I wonder what makes him frightened.'

Where an embedded *wh*-clause is non-finite there can never be an overt subject so we cannot tell if 'what' cases are different from others.

2. ACCOUNTING FOR WH MOVEMENT

Rizzi (1991) proposed that Wh Movement could be accounted for by the Wh Criterion as given in (15).

(15) *Wh Criterion*

- (a) A *wh*-operator must be in a Spec-head configuration with an X^0 .
+WH
- (b) An X^0 must be in a Spec-head configuration with a *wh*-operator.
+WH

(Rizzi 1991: 2)

Some updated version of this is generally assumed. However, in positing two clauses of the Wh Criterion, Rizzi is postulating that *wh*-heads and *wh*-phrases have independent checking requirements. Under Minimalism (Chomsky 1995), one would expect only one of these to be necessary, so that movement is either solely motivated by Attract or by Greed. Plunkett (2000) presents arguments that the single clause approach in Plunkett (1993) can be updated using only Attract, whereby phrases are attracted by a head to check its features. This is what I will assume here; and I will attempt to account for French *wh*-questions using only Attract together with the revised Wh Criterion in (16); which equates to the retention of only clause (b) of Rizzi's Criterion.

(16) *Wh Criterion* (revised)

Heads marked [+WH] bear a \pm strong X feature.

Here, an X feature is intended as a categorial feature similar to a D-feature as used in Chomsky (1995) except that the particular category of the element is unimportant. The strength of the feature is parameterised.

We turn now to French questions.

2.1 *Factors to be accounted for in French questions*

An adequate approach to Wh Movement must be able to account for when any *wh*-phrase must, may or may not move. In addition, it should correctly predict in which cases of Wh Movement a concomitant inversion must or may take place. In particular, with respect to French it must explain:

- why overt Wh Movement is optional in matrix questions and obligatory in embedded questions,
- why inversion is possible though not obligatory with most matrix (overtly moved) questions but (Stylistic Inversion aside) impossible in embedded questions,
- why, in contexts requiring obligatory overt movement, only one *wh*-phrase must or indeed may move, and
- why inversion never happens when a *wh*-phrase stays in situ.

In addition, with respect to 'what' questions, our theory must explain:

- why inversion is obligatory in matrix *que* questions, and
- why subject *que/quoi* questions are generally ruled out.

Rizzi (1991) deals with the first four of these requirements, but in order to cover the French data as presented here, he requires the additional assumptions in (17).

- (17) (a) Only selected interrogative clauses obligatorily bear *wh*-features on a clausal head.
 (b) *Wh*-phrases do not become 'operators' until LF.
 (c) Both clauses of the Wh Criterion must apply at the same level of representation.
 (d) French (but not English) has a process of Dynamic Agreement.

We will see that it is possible to dispense completely with the second and third of these; neither is compatible with a minimalist approach within which there is no 'level of representation' corresponding to the overt syntax. The first supposition we wish to retain but the last is replaced by the extension in French of an independent interpretative mechanism. Having seen the overall requirements we turn to them individually now.

I will develop my analysis first by looking in turn at the factors to be accounted for and defending some modifications to Rizzi's (1991) treatment. Subsequently, I will turn to the analysis of 'what' questions specifically and, finally, I will discuss subject questions in general and argue for further modifications, which make the overall approach more 'minimal'.

2.1.1 Overt movement

Rizzi (1991) argued that the Wh Criterion applied at S-structure, in French. Reformulating in the terms of Chomsky (1995), this means that *wh*-features must be considered strong there. Strong features must be eliminated within their own projection; the presence of *wh*-features on a clausal head will attract a *wh*-marked phrase to check them within the projection of that head. All other things being equal, this should induce obligatory overt Wh Movement in French, much as it does in English. Assumption (17a) is invoked to explain why, in matrix contexts, it does not.

If all interrogative clauses contain a head which bears strong *wh*-features then Wh Movement is correctly predicted to be obligatory in indirect questions in French. To explain the optionality of overt Wh Movement in matrix clauses, Rizzi proposes that matrix T may bear *wh*-features, but such features are not NECESSARILY generated. Thus the proposal that *wh*-features are generated freely, largely accounts for the optionality of overt movement.

Implementing free generation of *wh*-features within a minimalist approach entails that matrix moved and in situ *wh*-questions in French have different

numerations. That they should do so makes sense if they have different interpretations, as has been claimed.⁷ Although work remains to be done on explicating the precise differences and a different approach to the optionality was taken in Plunkett (2000), I will assume here that these claims are in essence correct. Under Minimalism (Chomsky 1995), movement of an element in the syntax is licit only if a failure of such movement would result in a derivation which could not converge. Adopting different numerations for the two question types provides a simple way around this ban on pure optionality.

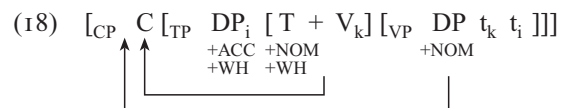
I will assume in what follows that in a direct question where no *wh*-phrase moves, the head of the matrix clause is [-WH] (i.e. unmarked for *wh*). Initially I will also assume with Rizzi (1991) that where *wh*-features do appear in matrix clauses, they appear on T, rather than on C. This will explain the complementarity of inversion between matrix and embedded clauses in languages where this is found; it is to inversion that we now turn.

2.1.2 *Triggering inversion*

In French, as in Italian, T hosts the finite verb in matrix clauses. Assume, as is standard, that T checks nominative Case in these languages, as well as bearing a strong D-feature and strong *wh*-features. In a system with unique specifier positions, like the one Rizzi was assuming, a non-nominative *wh*-phrase would be unable to check the *wh*-feature on T in [Spec,TP]; if it did, the derivation would ultimately crash, due to the unchecked nominative features. However, if the subject checks the D-features on T and incidentally the nominative features, then [+WH] remains unchecked.

Rizzi proposed that T could raise to C, taking with it the unchecked *wh*-feature; the *wh*-phrase could then be attracted into [Spec,CP] to check the *wh*-feature. The raising of T to C constitutes the inversion and this is not triggered in the embedded clause since there the *wh*-phrase is attracted directly into the C-projection.

In Rizzi's system, a question arises as to why an object *wh*-phrase could not target [Spec,TP] as in (18), with T to C movement then being triggered to allow the checking of nominative features.



Although the Minimal Link Condition may not guarantee that the subject target [Spec,TP] in a language where the verb is in T, the derivation can only

[7] Until recently, it has been suggested anecdotally (see for example Plunkett 1994) that these questions might be used in different types of contexts but little systematic work had been done in this area. Both Boeckx et al. (2000) and Cheng & Rooryck (2000), building on work by Chang (1997), provide suggestions relating the precise differences to presuppositionality.

survive if it does. The scenario in (18) can be ruled out under Minimalism because if the object were to raise and check the *wh*- and D-features on T; even assuming that T can raise, as in Rizzi (1991), if it were to raise here, I assume (following Chomsky (1995: chapter 4)) that Case features cannot be strong and therefore T could no longer attract the subject. Having no role at LF Case features may not survive beyond Spell Out but in this scenario they will not have been checked and the derivation will crash.

A different problem arises under Minimalism. If *wh*-features are strong, then it is imperative that they be eliminated within the projection in which they are merged; raising T to C and achieving the checking there will not suffice. Further, the claimed availability of multiple specifier positions leads to the expectation that even with a subject in the inner [Spec,TP] a *wh*-phrase could check the *wh*-features in the outer Spec. We thus expect uninverted questions like (19) as the norm.

- (19) Qui tu veux mettre à la place?⁸
 who you want to put at the place
 'Who do you want to put (there) instead?'

Without a new problem of optionality arising, the assumption that uninverted questions involve multiple specifiers leaves no way to explain the (more frequent) examples involving inversion. Leaving cases like (19) aside for the moment, how might we make Rizzi's explanation for inversion compatible with Minimalism? Plunkett (2000) suggests that the option of multiple specifiers may be parametric. Suppose that a language has the negative value for the Multiple Spec Parameter. How can it allow an unchecked strong *wh*-feature to be eliminated within the T projection? Plunkett (2000) proposes, contra Chomsky (1995: 321), that a head may raise and adjoin to its own projection, giving for the case in point (20).

- (20) [_{TP} T_m [_{TP} DP t_m [_{VP} ...]]]
 +WH +NOM

A *wh*-phrase can now be attracted by T_[+WH]. As in Rizzi (1991), the application of inversion thus implicates the presence of *wh*-features on T rather than on C.

Assume now that both English (which bars uninverted questions) and French reject multiple specifiers. Since we wish to avoid pure optionality, an alternative explanation for the cases in (19) must be found.

[8] Only around 5% of referential questions in the York corpus follow this uninverted pattern; all ask the addressee to pick one from a set. Most are clefted cases like (i); of the other uninverted direct object questions all but three involve 'which' phrases.

(i) Qui c'est qui l'a déchirée?
 who it is that it has torn
 'Who was it that tore it?'

Most uninverted questions are *comment* 'how' and *pourquoi* 'why' questions.

Rizzi's solution is Dynamic Agreement, which he claims is available in French but not English. It is invoked to account for both the optionality of overt Wh Movement in unselected questions and for the optionality of inversion. We turn to this now.

2.1.3 *Dispensing with Dynamic Agreement*

By positing two clauses of the Wh Criterion, Rizzi ensures that whenever a sentence contains a *wh*-phrase, even in the absence of *wh*-features on a clausal head, Wh Movement will still be required at some level. He assumes that since a *wh*-phrase can move to [Spec,CP] to satisfy its own requirements, by a process of agreement which is 'dynamic', the empty C position can come to agree with the *wh*-phrase, satisfying (15a). Dynamic Agreement is claimed to be available both at LF and in the overt syntax.

Now, Rizzi (1991) assumes that both clauses of the Wh Criterion (15) apply at S-structure in French; clause (a) is claimed not to force overt movement because in situ *wh*-phrases do not have the status of 'operators' until LF. We can capture the 'operator' status of *wh*-phrases by the designation of *wh*-features as 'interpretable'; this entails that they are present throughout the derivation, remaining even once checked in the overt syntax.

If languages choose uniformly strong or weak *wh*-features, there is no minimalist way to implement the claim that in the absence of clausal *wh*-features, in situ *wh*-phrases can nevertheless raise to a scope position at LF. The conceptual dictates of Minimalism require that we dispense with such a claim. The claim is in any case problematic; Rizzi assumes that (19) contains no clausal *wh*-features. To explain such cases he must assume that non-operator *wh*-phrases may *OPTIONALLY* move to [Spec,CP] in the overt syntax.

I propose, contra Rizzi, that there is a one-to-one correspondence between overt Wh Movement and the presence of clausal *wh*-features in the numeration. I will return to the issue of where these might be situated in cases like (19).

If we dispense with Dynamic Agreement to explain uninverted questions, should some version of it be invoked for in situ questions? With no independent means of provoking LF movement, such a process would be useless. I propose that there is no Dynamic Agreement and that where Rizzi claims that it is allowed, we assume a process whereby, even though not in a checking relation with a clausal head, a phrase bearing interpretable *wh*-features can be assigned scope. A basic mechanism will already allow in situ *wh*-phrases in multiple questions to receive scope.

On this view, the presence of interpretable *wh*-features alone must be taken to be sufficient to classify a sentence containing them as a question.⁹ If this

[9] I differ here from Cheng & Rooryck (2000). As here, in Cheng & Rooryck, in situ and moved questions in French are featurally distinct. While I am sympathetic to the idea that

view is correct, as in Reinhart (1994), LF Wh Movement will be superfluous in such cases.

An alternative explanation for uninverted structures like (19) must now be sought. Consider in this regard another form of uninverted question, which is particularly associated with dialects like Québécois; in these dialects the Doubly Filled Comp Filter (DFCF) (Chomsky & Lasnik 1977) is apparently not in effect.

- (21) Où qu' on apprend à raconter des histoires?
 where that one learns to tell some stories
 'Where do we learn to tell stories?'

An updated version of this filter bars the redundant overt realisation of certain features on both a head and the phrase occupying its specifier. This Spec-Head Redundancy Filter (SHRF) as we can now rename it (following Rowlett 1996) does not provide an absolute ban; cases like (22a) exist in the dialect which bans (22b).

- (22) (a) Peut-être qu' il est parti
 perhaps that he is left
 'Perhaps he left.'
 (b) *Je me demande qui qui est parti?
 I myself ask who that is left
 'I wonder who left.'

Tellier (1993) has argued that cases like (21) contain a *wh*-phrase in

the featural distinction between them relates to the presence of an additional feature rather than the presence/absence of *wh*-features, their claim that in situ *wh*-phrases in French must move into the C domain at LF, may not be right. They cite cases like (i) (their (4b)) as proof that unlike in situ *wh*-phrases in Japanese, French *wh*-phrases cannot occupy an island.

- (i) *Jean aime le livre que qui a écrit?
 J likes the book that who has written
 '**Who does Jean like the book that wrote?'

Given that they erroneously follow Bošković (1998) in rejecting all long-distance *wh*-in situ in French, Cheng & Rooryck cannot rule out (i) exclusively as an island violation. Small changes reduce the status of their example to marginality, and the status of (ii) is far superior to that of (iii), its moved equivalent.

- (ii) ?Tu aimes les livres que qui a écrit?
 you like the books that who has written
 '***Who do you like the book that wrote?'
 (iii) **Qui_k est-ce que tu aimes les livres qui t_k a écrit?

In situ *wh*-phrases DO occur inside islands in the York corpus; in such cases as (iv), not an echo since it was followed by a set of choices, a version with overt movement would be at the very least severely degraded.

- (iv) Je me régale en mangeant quoi?
 I myself feast in eating what
 '?*What do I feast myself when eating?'

[Spec,CP] with an overtly realised C.¹⁰ It seems that speakers employing such questions can project C in matrix clauses; for them, *wh*-features thus appear on C in these unselected contexts.

In Québécois, finite complementisers are variably realised in both interrogatives and embedded declaratives, suggesting that each overt complementiser has a non-overt counterpart. In English, the absence of an overt complementiser in embedded contexts is usually taken not to indicate the absence of a C projection but to signal the existence of a non-overt counterpart to the overt complementiser. With respect to matrix contexts, however, there is less agreement as to whether a C projection is required.

In the majority French dialect in which declarative complementisers are obligatory in the embedded clause, they can be realised in the matrix only in exceptional contexts like (22a). Further, matrix declarative complementisers are no less unusual in dialects like Québécois. Assuming a type of Economy of Projection Principle (Grimshaw 1991, Speas 1993) we may expect that at least in the declarative case, matrix clauses in French may be TPs rather than CPs (compare Plunkett 1993 with respect to English).

Suppose now that clausal *wh*-features are always associated with the topmost head of a clause. This entails that if C appears, it will bear the *wh*-features, otherwise these will appear on T. If all finite embedded clauses are CPs, any clausal *wh*-features in them will be on C, whether the clause is selected by a higher predicate or not. We need no longer resort to a stipulation about which head *wh*-features are realised on, in which contexts.

If this approach is correct, then the presence of inversion in a given *wh*-context indicates the absence of a C projection.¹¹ With no Dynamic Agreement, lack of inversion – all other things being equal – indicates the

[10] Rizzi does not mention such questions and Lefebvre (1982) prefers to treat them as clefts, with the introductory *c'est* 'it is' elided. This could account for why a *wh+ça* phrase normally appearing only in situ occurs in initial position in (i).

- (i) Où ça qu' ils ne sont pas bien, Madame?
 where that that they neg are not well Madam
 'Where exactly aren't they fine, Madam?'

While the most obvious account of these questions as *wh*-clefts would posit an in situ *wh*-phrase in the matrix, cases like (iii) will then present a problem since *pourquoi* 'why' cannot otherwise appear in situ.

- (iii) Pourquoi que tu balayes?
 why that you sweep
 'Why are you sweeping?'

Furthermore, (22b) is fine for speakers who regularly produce 'doubly filled' questions; such cases would then require a separate account.

[11] Periphrastic questions involve inversion in the European dialects of French. However, in Canadian dialects allowing (i) *qu'est-ce* is in situ and thus clearly unanalysed; periphrastic questions are 'doubly filled' for such speakers.

- (i) C'est qu'est-ce qui va noir?
 it is qu'est-ce that goes black
 'What (one) is it that will go in black?'

presence of a C head bearing *wh*-features. If Tellier's analysis of (21) is correct, then we accurately predict that Québécois speakers produce a version of it in which the complementiser *que* is non-overt (19), just as they can omit the complementiser in *qu'est-ce (que)* questions. Such speakers seem to always project C in matrix questions.

What analysis should (19) receive for speakers who normally obey SHRF? There is usually little independent evidence that they ever project C in matrix interrogatives. If we assume that they only project T in such questions, we will need to posit a special checking mechanism, available in just these cases. To assume instead that C is involved requires that these speakers have the 'option' of projecting C in some matrix interrogatives. This is the view I will pursue.

Suppose that the variable projection of C in matrix clauses is a reflection of grammatical change in progress; two grammars may be in competition for such speakers (Kroch 1989), one in which matrix clauses are TP, another in which they are CP. This does not entail optionality in the grammar itself. Some factor specific to the interpretation of uninverted questions may force the projection of C in them (see fn. 8). Assume that speakers attempt to reconcile all data with a single grammar. Québécois speakers can do this, since *wh + est-ce* can be reanalysed in their dialect and inversion is otherwise shunned by them in *wh*-questions. Speakers of dialects where inversion in *wh*-questions is productive can resolve more of the data on a TP analysis. I assume, then, that Economy of Projection will lead these speakers to prefer the grammar in which only T is projected. They will be required to resort to the CP grammar just for cases like (19).

Since we know from (22a) that other factors can force the projection of CP in a matrix clause, it seems more reasonable to posit the variable realisation of C than to resort to Dynamic Agreement.

Before proceeding to the consideration of the factors specific to 'what' questions, let us summarise the assumptions of the proposed approach to Wh Movement, ensuring that all the factors in (17) have been covered.

2.1.4 Summary

In unselected contexts, clausal *wh*-features are freely generated; where present, they always appear on the topmost head of the clause. Inversion is triggered only in the presence of *wh*-features on T. However, the in situ *wh*-strategy is licensed only in the absence of clausal *wh*-features; it is thus never possible to derive inversion without overt Wh Movement. There is an isomorphic relation between the presence of a clausal head (T or C) marked [+WH] and overt Wh Movement. In some languages assignment of scope to a *wh*-phrase at LF is limited to contexts in which a *wh*-phrase has already moved in the syntax. In these languages, derivations of questions in which no clausal heads are marked [+WH] will crash; English is such a language while

French is not. It is with respect to the presence of this mechanism that English and French are postulated to differ, rather than with respect to any ‘dynamic’ process of agreement.

The treatment proposed is necessary to a complete explanation for the behaviour of ‘what’ questions in French, to which we now return.

2.2 *Que questions*

We begin our re-examination of *que* questions by looking at the reasons for the obligatory inversion which it induces. We then move on to look at the clitic-like nature of *que*, with which we link this.

2.2.1 *Obligatory inversion in que questions*

Why should moved ‘what’ questions always induce inversion in French? In the proposed treatment, inversion occurs only where T bears *wh*-features; we can thus construe *que* as being incompatible with derivations in which *wh*-features are generated on C.

Suppose we construed SHRF as blocking the spell-out of certain heads, rather than entailing the selection of a non-overt head in the numeration. We could then posit a superficial reason why *que* is illicit in the Spec of a *que* Complementiser, the adjacent appearance of two identical phonetic forms being starred. However, a similar situation in which a *qui* occupies both the head and specifier of CP results in no ungrammaticality in the dialects in which SHRF is not in operation; for these speakers (22b) is grammatical. Any contrast between **que que* and acceptable *qui qui* must thus presumably be attributed to the clitic-like nature of *que* ‘what’, since *qui* ‘who’ does not appear to have clitic-like properties. If *que* is treated as a clitic, however, such filters become redundant. Let us explore a little further the clitic-like nature of the *wh*-word *que*.

2.2.2 *Que as a phonological clitic*

We saw in section 1 that there are sound morphological and syntactic reasons for regarding *que* as a weak form of the pronoun *quoi*. Suppose pronouns are Ds whose nominal complement is null; the weak form of a pronoun might implicate the use of the head and the strong form the use of the phrasal projection. We could thus take the occurrence of *que* to indicate head movement. The view that *que* is a syntactic clitic undergoing head movement is espoused in Plunkett (1994); it clearly accounts for the fact that, cases like (5) aside, *que* cliticises only to verbs and not whatever it happens to be adjacent to. However, adopting this view is not straightforward.

Weak object pronouns in French are standardly treated as syntactic clitics and since Kayne (1975) clitic placement has often been regarded as involving

movement of a head. Hirschbühler (1978) invokes various phonological rules to account for the dependence of *que* on a verb.¹² While the distribution of *que* clearly shows that it is a phonological clitic, its status as a syntactic clitic, and hence as a head which has undergone head movement, is less certain.

As noted by Friedemann (1991), the fact that *que* exhibits long-distance extraction from tensed clauses disfavors a treatment in which it undergoes only Head Movement.¹³ However, movement of a clitic may involve two steps; the first might involve the movement of a maximal projection to some specifier (say of the projection in which its Case is checked), the second could be seen as movement of a head to the clitic position in T.

Sportiche (1996) develops a two step view, with clitic heads generated in a dedicated voice phrase and A-bar movement of a *pro* from the argument position into the Spec of this clitic projection. If we were to adapt such a treatment to *que*, we would need to block the head movement of the clitic to the T of its own clause in the case where it gets scope in a higher clause. In fact, more generally we would need to block the clitic movement until the verb had moved past the subject position. If we did not, we could neither explain the obligatory subject-verb inversion triggered by *que* nor explain why *que* consistently appears outside all other clitics, including *ne*. A further problem with adapting Sportiche’s approach would arise from his otherwise reasonable association of the clitic voice projections with specificity; *wh*-phrases are by their nature indefinite, and, I will shortly argue, *que* is not only indefinite but non-specific.

Instead of assuming that *que* implicates head movement, suppose that it is only a phonological clitic. In this case, we can assume that Wh Movement of *que* is phrasal as usual. Once *wh*-features have been checked, the head can pro-cliticise to the adjacent verb plus or minus clitics. This will enable us to account for the fact that, unlike the syntactic clitics, *que* need not attach to the verb of its own clause.

It is not entirely clear why a phonological clitic should invariably cliticise to a verb group and never to a complementiser or to a weak subject pronoun; it seems reasonable to relate this to the issue of phonological weight. I propose that what is at stake in the **que que* subject pronoun sequences is that the complementisers and pronouns do not themselves have sufficient phonological weight to act as a host for a phonological clitic. Complement clitics form a phonological unit with the following verb, which does have

[12] The only cases where *que* does not occur alone before the verb are those involving *que diable* ‘what the devil’. *Que diable* may not occur adjacent to a weak pronoun but Hirschbühler (1978) noted that all *wh-diable* phrases induce Simple Inversion.

[13] As a referee points out, if A and A-bar heads are distinguished this need not be a problem. Note, however, that the only known cases of long head movement in French are cases of clitic climbing, which only happens in contexts where there is independent evidence of clausal reanalysis. There is no such evidence in the relevant cases of putative long *que* movement.

sufficient weight to act as a host. This view is supported by the perceived grammaticality of the complex inversion in (5); *cela* ‘that’, a non-clitic demonstrative pronoun, is heavy enough to act as a host to the clitic.

I conclude that the obligatory inversion in *que* questions can be attributed to the status of *que* as a phonological clitic. Let us return finally to the remaining problematic cases, in which *que* functions as a subject.

2.2.3 *Que/quoi in subject questions*

Let us first review what the problematic cases were. Echoes aside, simple matrix questions are ungrammatical when the subject is a form of ‘what’, whether the subject is left in situ or moved. However, when *quoi* – though interpreted as a subject – is linked to an expletive in [Spec,TP] no problems arise. Complex direct questions, in which a *que* subject has been extracted long-distance also generally pose no problem; periphrastic ‘what’ questions pattern with these long-distance cases.

The contrasts show that (a) ‘what’ may transit through [Spec,TP] but may not occupy it at Spell Out and (b) ‘what’ can be extracted from a subject position, but not from the subject position of its own clause.

Let us dispense with the latter case first. Since subject *que* cannot be completely barred from the initial position of direct questions, why should it be blocked from moving a short distance? Actually, assuming Tellier’s analysis of ‘doubly filled’ questions, the following examples show that where C and not T bears the *wh*-features, short movement of ‘what’ to [Spec,CP] is not blocked.

- (23) (a) **Quoi** qui glisse?
 what that slides
 ‘What’s slippery?’
 (b) **Quoi** qui tombe tout le temps?
 what that falls all the time
 ‘What keeps falling down?’

Bold here indicates that the speaker used heavy stress. In both examples the speaker asks for the precise reference of a pronoun used by the previous speaker. Note that the strong form moves, since the presence of an adjacent complementiser blocks *que*.

Movement per se is not blocked; what is ruled out is a derivation resulting in a representation like (24).

- (24) ***[_{TP} que_i [_T + V_k]_j [_{TP} t_i t_j [_{VP} t_i t_k ...]]]]**

In fact, (24) is ruled out simply because nothing triggers the movements out of TP posited in the structure in bold. Assume, as proposed, that by default only TP is projected in matrix contexts in the majority dialect. When a subject *wh*-phrase moves to [Spec,TP] it can check not only the strong D-feature and nominative Case features on T, but the strong categorial *wh*-

feature too. The *wh*-feature having thus been eliminated immediately, readjunction of T with the consequent provision of a new specifier position cannot be motivated. As argued in Plunkett (1993), an approach to the derivation of matrix subject questions in which subject *wh*-phrases satisfy the Wh Criterion in the canonical subject position is the minimal approach to Wh Movement. Rizzi (1991) rejected this admittedly 'minimal' view of subject questions on the grounds that previous work (Koopman 1982, Friedemann 1991) had shown that subject *wh*-phrases were in [Spec,CP] in French. In fact, what this work had shown was that SOME 'what' subject phrases could not remain in situ; we will see shortly why this should be.

In the current implementation of the minimal approach a *wh*-phrase in [Spec,TP] satisfies the Wh Criterion; further movement is completely unmotivated and thus blocked since under Minimalism, movement without the satisfaction of morphological requirements cannot occur to salvage ungrammaticality. Wh Movement of a matrix subject beyond [Spec,TP] is blocked in all cases where *wh*-features are associated with T. Note, however, that (25) presents a different scenario.

- (25) Qu' est-il arrivé?
 what is it happened
 'What happened?'

Assuming that the expletive occupies [Spec,TP], without inversion the Wh Criterion will remain unsatisfied. Inversion and overt Wh Movement will thus be triggered in such cases; they will be similarly induced in non-subject questions and in long-distance subject questions.

By adopting the minimal approach we explain why matrix subject *que* cannot be extracted; we thus reduce the problem cases to one type and incidentally explain the contrast between long-distance and short-distance subject questions.

Let us concentrate then on explaining the remaining problem, the ban on (non-echo) 'what' in [Spec,TP]. I will argue that we can attribute this to the status of *que* as a non-specific indefinite.¹⁴

In all cases where in situ 'what' is acceptable on a subject interpretation, 'what' means something like 'what particular thing'. This is true in the rare cases where 'what' is in [Spec,TP] as in (11), as well as in the cases like (12) and (13), where it is linked to an expletive. In all these cases, 'what' is in its strong form and in common with the cases of moved *quoi* in (23), it is being interpreted as a specific indefinite.

It is known that languages may bar indefinites from [Spec,TP] or at least require that they receive a specific or a generic interpretation whenever they occur in that position. Suppose now that *que* cannot be given a specific

[14] The link with specificity was first suggested to me by David Adger.

interpretation. If this is accurate and French is amongst the languages which resist non-specific indefinites in [Spec,TP] then we correctly predict that *que* can never appear in that position. We also correctly predict that wherever *que* does appear it is interpreted non-specifically and it occupies a position distinct from the canonical subject position. In all the cases where *que* questions are licit, we have seen independent motivation for supposing that *que* occupies the additional ‘surrogate’ specifier position created by the readjunction of T to its own projection.

In spoken French – though not in written – non-specific indefinites are at best marginal in matrix canonical subject position. For some speakers (26) is impossible and an expletive construction is clearly preferred in (27).

- (26) *Un médecin est entré.
 a doctor is come in
- (27) (a) ?*Un médecin se libère.
 a doctor REFL liberate
- (b) Il y a un médecin qui se libère.
 it there has a doctor that REFL liberate
 ‘A doctor is just becoming available.’

Speakers will often accept *quoi* as a subject in an echo. The nature of an echo question is such that the echoed *wh*-phrase automatically receives a specific interpretation just as *que* does in the multiple interrogation in (11) where the answers to ‘what’ must be selected from a previously delimited set. Most speakers reject (28) or find it much worse than (11); one informant accepted it but, although not a linguist, pointed out that it could only be used where the context provided multiple pairs as an answer and never simply something like ‘a priceless book, on the floor’.

- (28) (?*)Quoi traînait où?
 what lay around where?
 ‘What was lying around where?’

Much like ‘which’ phrases then, the acceptable *quoi* subjects seem to require a specific interpretation.

Note now that (29) presupposes that someone either is floating in the water or that people of a certain type could float in it. It can only be answered felicitously then by replying with the identity of an individual or a generic type; it cannot be answered by *personne* ‘no-one’.

- (29) Qui flotte dans l’eau?
 who floats in the water
 ‘Who floats/is floating in the water?’

Qui ‘who’ can be either a weak or a strong pronoun and it does not trigger obligatory inversion; presumably then it is compatible with either a specific interpretation, comparable to that of *quoi*, or with a non-specific in-

terpretation comparable to that of *que*. Crucially, as expected, when occurring in [Spec,TP] it gets only the specific interpretation.

Having adopted the minimal approach to Wh Movement, we have reduced the anomaly in the 'what' paradigm to the usual impossibility of 'what' in subject position. Since [Spec,TP] is adjacent to a verb and since clitic forms – wherever they are possible – are standardly preferred over strong forms, the expected form for unstressed 'what' in [Spec,TP] is *que*. If this is incompatible with that position for independent interpretative reasons, we now explain the 'what' paradigm completely. The exceptional cases where *quoi* occurs in [Spec,TP] are explained by the fact that clitic forms may not be stressed. Where focal stress is required, as in an echo, only the strong form appears, and it always has a specific interpretation.

3. CONCLUSION

In this paper we have seen that French questions possess a number of peculiarities which have major implications for our understanding of Wh Movement and how it is to be analysed within current syntactic theory. I have proposed a number of revisions to Rizzi's original approach to questions; these bring it into line with the minimalist view in Chomsky (1995) that checking is a one-way mechanism.

I have argued that the approach proposed, in particular its analysis of matrix subject questions, goes part-way to explaining the restrictions on 'what' questions which have been so widely discussed in the literature on French syntax. These revisions alone do not suffice, however – there is a further constraint on the positioning of *que*, which I have proposed is a strongly non-specific indefinite barred from terminating in [Spec,TP]. Contra Rizzi (1991), we thus conclude that that position is in principle compatible with *wh*-phrases. More generally then, vacuous Wh Movement is unmotivated.

REFERENCES

- Boeckx, C., Stateva, P. & Stepanov, A. (2000). Optionality, presupposition and *wh*-in situ in French. Ms., University of Connecticut.
- Bošković, Ž. (1998). LF movement and the Minimalist Program. In Tmanji, P. N. & Kusumoto, K. (eds.), *Proceedings of the North Eastern Linguistics Society* 28. Amherst, MA: Graduate Linguistics Student Association. 43–57.
- Chang, L. (1977). *Wh-in-situ phenomena in French*. MA thesis, University of British Columbia.
- Cheng, L & Rooryck, J. (2000). Licensing *wh*-in-situ. *Syntax* 3:1. 1–19.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, N. & Lasnik, H. (1977). Filters and control. *Linguistic Inquiry* 8.3. 425–504.
- Friedemann, M.-A. (1991). *Propos sur la montée du verb en C⁰ dans certaines interrogatives françaises*. Mémoire de licence, Université de Genève.
- Goldsmith, J. (1978). *Que, c'est quoi? que, c'est QUOI*. *Recherches linguistiques à Montreal* 11. 1–13.
- Grimshaw, J. (1991). Extended projection. Ms. Rutgers University.
- Hirschbühler, P. (1978). *The syntax and semantics of wh constructions*. Ph.D. dissertation, University of Massachusetts at Amherst. [Published (1979), Bloomington, IN: Indiana University Linguistics Club.]

- Jones, M. (1996). *Foundations of French syntax*. Cambridge, MA: Cambridge University Press.
- Kayne, R. (1975). *French syntax: the transformational cycle*. Cambridge, MA: MIT Press.
- Koopman, H. (1982). Theoretical implications of the distribution of *quoi*. In Pustejovsky, P. & Sells, P. (eds.), *Proceedings of the North Eastern Linguistics Society*. Amherst, MA: Graduate Linguistics Student Association. 153–162.
- Kroch, A. (1989). Reflexes of grammar in patterns of language change. *Language variation and change* 1:3. 199–244.
- Lefebvre, C. (1982). *Qui qui vient? ou Qui vient: voilà la question*. In Lefebvre (ed.), *La syntaxe comparée du français standard et populaire*. (2 vols.) Québec: Office de la Langue Française. 47–101.
- Obenauer, H.-G. (1977). Syntaxe et interprétation: *que* interrogatif. *Le Français Moderne* 45. 305–341.
- Plunkett, B. (1993). *Subjects and specifier positions*. Ph.D. dissertation, University of Massachusetts at Amherst. [Michigan: University Microfilms.]
- Plunkett, B. (1994). The minimal approach to Wh Movement. Ms., University of York.
- Plunkett, B. (2000). Attract and covert merge. In Alexandrova, G. & Arnaudova, O. (eds.), *The Minimalist parameter*. Amsterdam & Philadelphia: John Benjamins. 159–172.
- Rizzi, L. (1991). *Residual verb second and the Wh Criterion*. *Technical Reports in Formal and Computational Linguistics* 2, Faculté des Lettres, Université de Genève. [Republished in Belletti, A. & Rizzi, L. (eds.) (1995). *Parameters and functional heads: essays in comparative syntax*. Oxford: Oxford University Press. 63–90.]
- Reinhart, T. (1994). *Wh-in-situ in the framework of the Minimalist program*, *Utrecht Institute of Linguistics OTS Working Papers in Theoretical Linguistics*. 94–103.
- Rowlett, P. (1996). *Negative configurations in French*. D.Phil. dissertation, University of York. [Revised version published as Rowlett, P. (1988). *Sentential negation in French*, Oxford: Oxford University Press.]
- Speas, M. (1993). Null arguments in a theory of economy of projection. In Benedicto, E. & Runner, J. (eds.), *Functional projections*. University of Massachusetts Occasional Papers 17. Amherst, MA: Graduate Linguistics Student Association. 179–208.
- Sportiche, D. (1996). Clitic constructions. In Rooryck, J. & Zaring, L. (eds.), *Phrase structure and the lexicon*. Dordrecht: Kluwer. 213–276.
- Tellier, C. (1993). *Que en français populaire: distributions et contraintes*, in Crochetière, A. et al. (eds.), *Actes du XVe Congrès International des Linguistes*, vol 2. Sainte-Foy: Presses Universitaires de Laval. 377–380.
- Author's address: Department of Language and Linguistic Science,
University of York,
Heslington,
York YO10 5DD,
U.K.
E-mail: bp4@york.ac.uk*