Syntacticizing blends: the case of English *wh*-raising

1. Introduction

The focus of this paper is the data in (1), in which a long relativised subject triggers agreement in both the embedded and the matrix clause. In (1a), the singular antecedent *the standard of hygiene* triggers agreement both in the higher clause (*is felt*) and in the lower clause (*is attributable*); in (1b), plural *any quotes* triggers agreement on both *were (felt)* and *were (relevant)*.

(1) a. McDonald's has also seen an increase in the standard of hygiene across restaurants which$_i$ is felt t_i is attributable to the fact that the programme is now specifically about McDonald's restaurants. (http://www.cedma-europe.org/newsletter%20articles/Kineo/McDonald's%20UK%20-%20Rapid%20E-Learning%20in%20Action%20(Oct%2011).pdf)

b. A recording was also made of each School and was then used to transcribe the minutes and any quotes which$_i$ were felt t_i were relevant to the process. (http://orgprints.org/22387/1/JasonHornerMastersthesis.pdf)

At first sight, the examples seem to be derived by illicit subject raising from within a finite clause (2), which - at least in English - is standardly unacceptable, regardless of the presence of the complementizer *that*. The ungrammatical example in (2) can be said to violate a constraint according to which A-movement cannot cross a CP boundary. Quoting Sigurðsson (2012: 207): "CPs are A-islands; that is, A-relations, including T-licensing, are blocked from being established across C-boundaries" (see also Rizzi & Shlonsky 2007: 146).

(2) *John$_i$ seems (that) t_i reads a book.

Native speaking informants unanimously reject (2), but some accept data as (1) and such data are also attested. Speakers who reject the examples in (1) replace them by the alternatives in (3), with a matrix expletive subject, which triggers agreement. Speakers who accept (1) also accept (3).

(3) a. … the standard of hygiene across restaurants which$_i$ **it** is felt t_i is attributable to …

b. … any quotes which$_i$ **it** was felt t_i were relevant to the process.

Because the pattern in (1) is tied to *wh*-movement and is unavailable with a regular DP subject (2), we will call the pattern in (1) *wh*-raising. Using a cartographic framework, we will develop an analysis for the derivation of the data in (1) framed against the background of Rizzi's (2006) approach to subject extraction.

The paper is organized as follows: the remainder of section 1 provides some additional illustrations of the relevant data. Section 2 is an inventory of the core

properties of *wh*-raising. Section 3 lays out our theoretical assumptions and section 4 presents our analysis. Section 5 is a brief summary.

(1) shows *wh*-raising with relativization, (4) and (5) are interrogative and comparative variants of the *wh*-raising pattern. For reasons of space we will focus only on the relativization pattern.

(4) [the church leaders] disagreed as to which books$_i$ were thought t_i were "Godly inspired". (GloWbE; ABC News, Was Jesus Married? Ancient Papyrus Mentions His 'Wife'; http://abcnews.go.com/blogs/headlines/2012/09/was-jesus-married-ancient-papyrus-mentions-his-wife/)

(5) Keep more balloons available than$_i$ is thought t_i will be necessary. (http://www.ehow.com/how_10049417_make-balloon-princess-wand.html)

The examples in (1), (4) and (5) seem to be 'hybrids' between subject raising and long *wh*-movement. (1b) could be seen as a combination of a raising pattern (1b') and a *wh*-movement pattern (1b"):

(1) b'. any quotes which were felt to be relevant to the process
b". any quotes which it was felt were relevant to the process

One might consider such examples as extragrammatical 'blends' or 'amalgams' (Bolinger 1961, Coppock 2010 etc.). We will take a different route: we see them as the product of the grammar of a subset of speakers and we examine how a grammar that generates *wh*-raising would differ from the grammar which does not. We will argue that in the grammar of speakers who accept such examples the predicate selecting the finite CP from which the subject is *wh*-moved incorporates the Fin head of its complement.

Our account is based on (i) the intuitions of five native speaking informants who accept the pattern, (ii) anecdotally encountered attested data like those above and (iii) material from searches in online corpora.

2. The empirical data

2.1. The core properties

2.1.1 Double agreement

The hallmark of *wh*-raising in (1), (4) and (5) is the fact that, in addition to triggering agreement in the clause from which it is extracted, a *wh*-subject triggers agreement in the immediately superordinate clause. In (1)b), repeated here in a simplified form in (6), plural *which* agrees with the lower copula and with the higher auxiliary.

(6) any quotes which$_i$ were felt t_i were relevant to the process

Observe that the double agreement makes an analysis postulating a null variant of the subject expletive *it* in the higher clause unlikely since this should trigger singular

agreement. Similarly, the double agreement is incompatible with analysing the matrix domain as some kind of 'parenthetical'.

2.1.2 The selecting predicate

The higher clause in which the *wh*-subject triggers agreement contains a raising predicate including verbs such as *seem, appear,* passive predicates such as *said, felt, hoped*, and adjectives such as *likely*.

2.1.3 Only *wh*-movement

For our informants, non-*wh*-subjects cannot give rise to double agreement (cf. (2)) and although there are occasional attestations of the pattern with non-*wh*-subjects, like for instance (7), we will consider them ungrammatical.

(7) However, IT spending rates are expected will bottom out in 2013 and will be resilient over the long run [...]. (Google search 18.01.2014; http://www.gartner.com/newsroom/id/2238915)

The asymmetry between *wh*-subjects and DP subjects makes an analysis in terms of copyraising (Asudeh 2002) or hyperraising (Carstens & Dierckx 2013, among many others) unlikely because these patterns are not restricted to *wh*-subjects.

2.1.4 Subject restriction

Wh-moved objects cannot trigger agreement in a superordinate clause: examples such as (8) are not attested, and rejected by our informants.

(8) *they will transcribe any quotes which$_i$ were felt **[**they can use t_i in the court case].

2.1.5 *That*-trace effect

The extraction of the subject in the *wh*-raising configuration gives rise to the familiar *that*-trace effect. Our informants reject the variant of (9) with an overt *that*-complementizer in the extraction domain:

(9) Organizations that provide counseling and legal assistance to various tenant populations will now have the opportunity to bid for the new city funds, which$_i$ are hoped (***that**) t_i will help up to 150 families facing eviction

2.1.6 Locality: only biclausal configurations

The *wh*-raising pattern involves two and only two adjacent clauses. For ease of discussion, numerals will be used to identify the clausal domains involved: the clause from which the *wh*-subject is extracted is assigned the index 1, and is labelled CP1, the immediately dominating clause is CP2 etc. Similarly, the lower TP is labelled TP1, the immediately dominating one TP2.

Having triggered agreement in CP2, the moved *wh*-subject halts in the left periphery of CP2. There are no attestations of data such as (10), with further *wh*-movement of the *wh*-subject to CP3, and such examples are not accepted by our informants:

(10) ? the new city funds, [$_{CP3}$ which$_i$ they say/it is said [$_{CP2}$ t_i are hoped [$_{CP1}$ t_i will help up to 150 families facing eviction]]].

The alternatives in the examples in (11), in which a *wh*-subject moves out of CP1, skips CP2 and triggers agreement in CP3, are also unattested and rejected by our informants, regardless of whether the intermediate clause has a lexical (11)a) or an expletive subject (11)b). The regular raising variants of these examples are accepted by our informants.

(11) a. * the new city funds, [$_{CP3}$ which$_i$ are hoped [$_{CP2}$ the government will confirm [$_{CP1}$ t_i will help 150 families facing eviction]]].
b. * the new city funds, [$_{CP3}$ which$_i$ are said [$_{CP2}$ it is hoped [$_{CP1}$ t_i will help up to 150 families facing eviction]]].

Finally, informants who accept double agreement (12)a) reject triple agreement (12)b):

(12) a. This is a mutation of the virus [$_{CP2}$ which$_i$ **was** suspected [$_{CP1}$ t_i **had** initially caused the infection]]].
b. */??This is a mutation of the virus [$_{CP3}$ which$_i$ **was** reported [$_{CP2}$ t_i **was** suspected [$_{CP1}$ t_i **had** initially caused the infection]]].

2.2 Some similar patterns in English

In *wh*-raising, a *wh*-subject interacts with syntactic processes typical for A-movement in a clause dominating that from which it is extracted. There are similar patterns elsewhere in the grammar of English, some of which are also only available to a subset of speakers.

2.2.1 Accusative case on long *wh*-moved subjects

Wh-raising is reminiscent of examples such as (13), in which the *wh*-subject of a finite clause is realized by the accusative *whom*, whose source is taken to be the selecting verb (Quirk et al. 1985: 368, 1299). These configurations are often considered ungrammatical (cf. Quirk et al. 1985: 1299), and they could also be analysed as blends, with (13) a blend of (14)a) and (14)b).

(13) This is the candidate [whom$_i$ [we expect [t_i will win the competition]]].

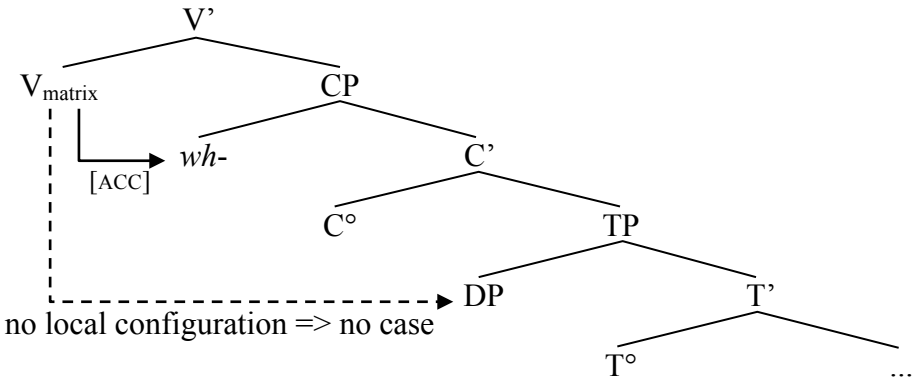
(14) a. This is the candidate <u>whom we expect</u> to win the competition.
b. This is the candidate who we <u>expect will win the competition</u>.

As is the case for *wh*-raising, the pattern in (13) displays an asymmetry between *wh*- and DP subjects, in that only the former can be assigned case from a higher verb.

(15) *We expect him/her/them will win the competition.

Formal accounts for the accusative form of the *wh*-subject propose that by virtue of transiting through the embedded left periphery, the subject attains a local relation with the higher verb - here *expect* - and is assigned accusative case (cf. Kayne (1995) and Haegeman (2008), but see Lasnik & Sobin (2000) for a different view). The local relation between a case assigning matrix predicate and *wh*-subjects becomes available thanks to the intermediate landing site of the *wh*-subject in the embedded CP:

(16)



The ungrammaticality of (15) is expected: a DP in the embedded SpecTP cannot attain a local configuration with the selecting verb.

2.2.2 *Wh*-agreement with long moved subjects in American English

The *wh*-raising data in (1) are also reminiscent of the American English pattern discussed in Kimball & Aissen (1971) and Kayne (1995). In (17) the *wh*-subject *who* triggers plural agreement with the matrix predicate *think* (which is clearly not a raising predicate), in spite of the presence of the singular subject *Clark*. Only a subset of speakers accept this pattern.

(17) % Mark knows the people who_{PL} $Clark_{SG}$ $think_{PL}$ are in the garden. (from Kimball & Aissen (1971: 241, their (1b); cf. Kayne 1995)).

2.2.3 DP/*wh*-asymmetries and ECM

The asymmetry between *wh*-subjects and DP subjects detected in (1) is also found with some ECM complements, as shown in (18). Assuming that the infinitival complement clauses in (18) have a left-peripheral space, i.e. they are CPs rather than bare TPs, a DP in the specifier of the infinitival TP is not close enough to the selecting verb for case marking. By transiting through the left periphery of the complement clause, a *wh*-moved subject becomes accessible to the higher case marker (cf. (16)). For Romance analogies see Kayne (1981), Rizzi (1982) and Ura (1993).

(18) a. *I assure you John to be the best student.
b. John, who_i I assure you t_i to be the best student... (Kayne (1980: 79-80), his (34) and (33); Ura (1993: 251), his (26a,b))

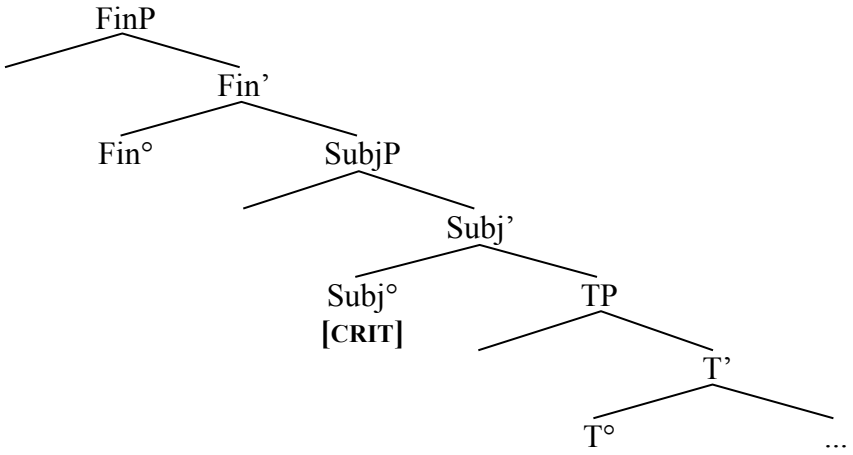
3. Cartography and the Subject Criterion

We will adopt the framework for subject extraction developed by Rizzi (2006) and Rizzi & Shlonsky (2006, 2007), which recasts the EPP in terms of the Subject Criterion, and accounts for restrictions on subject extraction in terms of Criterial Freezing (cf. Shlonsky 2014).

3.1 SubjP, the Subject Criterion and subject extraction

Following Cardinaletti (1997, 2004), Rizzi (2006) postulates that the finite TP domain is dominated by SubjP, which hosts the subject of predication, whereas T is the locus where subject-verb agreement is established. SubjP is dominated by FinP, which encodes the finiteness properties of the clause (Rizzi 1997) and is the lowest left-peripheral projection.

(19)



SubjP is a criterial projection. A criterial requirement is defined as in (20)a) (R&S 2006: 138, their (53)):

(20) a. For [+F] a criterial feature, X+F is in a Spec-head configuration with A+F.

Criterial configurations associated with features such as [*wh*], [Top], [Foc], [Rel] and [Subj] induce Criterial Freezing of the constituent in the specifier position of the criterial head. Once the subject has satisfied the Subject Criterion (henceforth SCrit) by moving to SpecSubjP, it is frozen in place, as illustrated by the subject-object asymmetry in the French interrogatives in (21)a,b). For those cases such as French (21)c) where subject extraction is in fact possible, Rizzi & Shlonsky (2006, 2007) assume that such cases never involve movement to SpecSubjP. Instead, specialized mechanisms are needed to make subject extraction possible. In (21)c) this is manifested by the replacement of the regular complementizer *que* by *qui*:

(21) a. *Qui$_i$ crois-tu que [$_{SubjP}$ t$_i$ va partir]?
who think-you that will leave

b. Que$_i$ crois-tu que [$_{SubjP}$ Jean a fait t$_i$]?
what think-you that Jean has done
'What do you think (that) John did?'

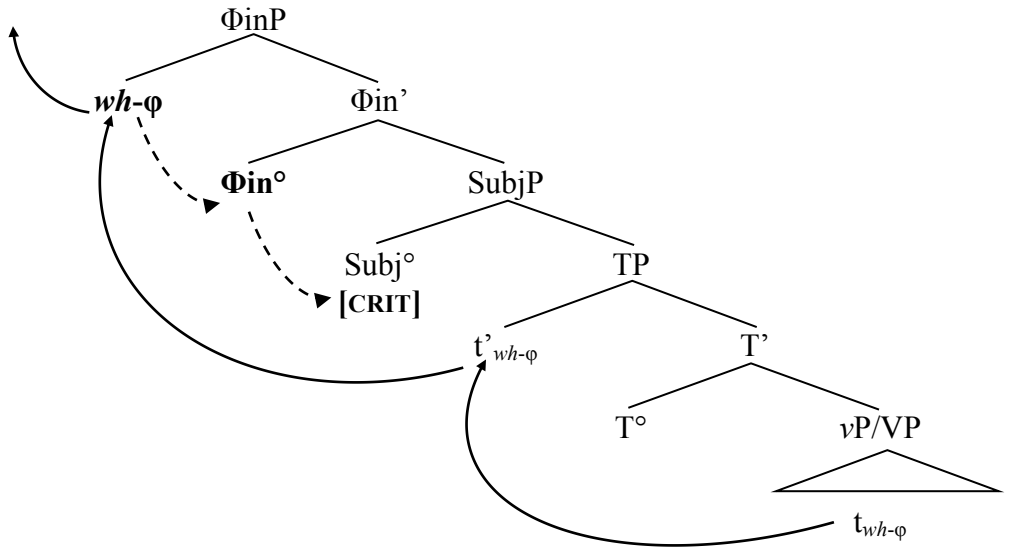
c. Qui crois-tu qui va partir?
who think-you *qui* will leave
'Who do you think will leave?'

For Rizzi & Shlonsky (2007) *qui* is the reflex of an occurrence of Fin enriched with φ-features (Taraldsen 2001), which we will represent as 'Φin'. The authors assume that through the local c-command relation with the Subj head, the φ-features on Φin satisfy the SCrit. Rizzi & Shlonsky (2007: 138-139) therefore restate the criterial condition as follows:

(20) b. For [+F] a criterial feature, X+*F* is locally c-commanded by A+*F*.

In addition, the φ-features on Φin have to be licensed independently: on its way to its ultimate left-peripheral landing site, the *wh*-subject moves through SpecΦin and licenses the φ-features of Φin. SpecΦin itself is not a criterial position, meaning that it is not a halting place. (22) summarizes the derivation. As the constituent in SpecΦinP φ-agrees with the head, SpecΦin qualifies as an A-position (cf. Cardinaletti 1992, Haegeman 1996).

(22)

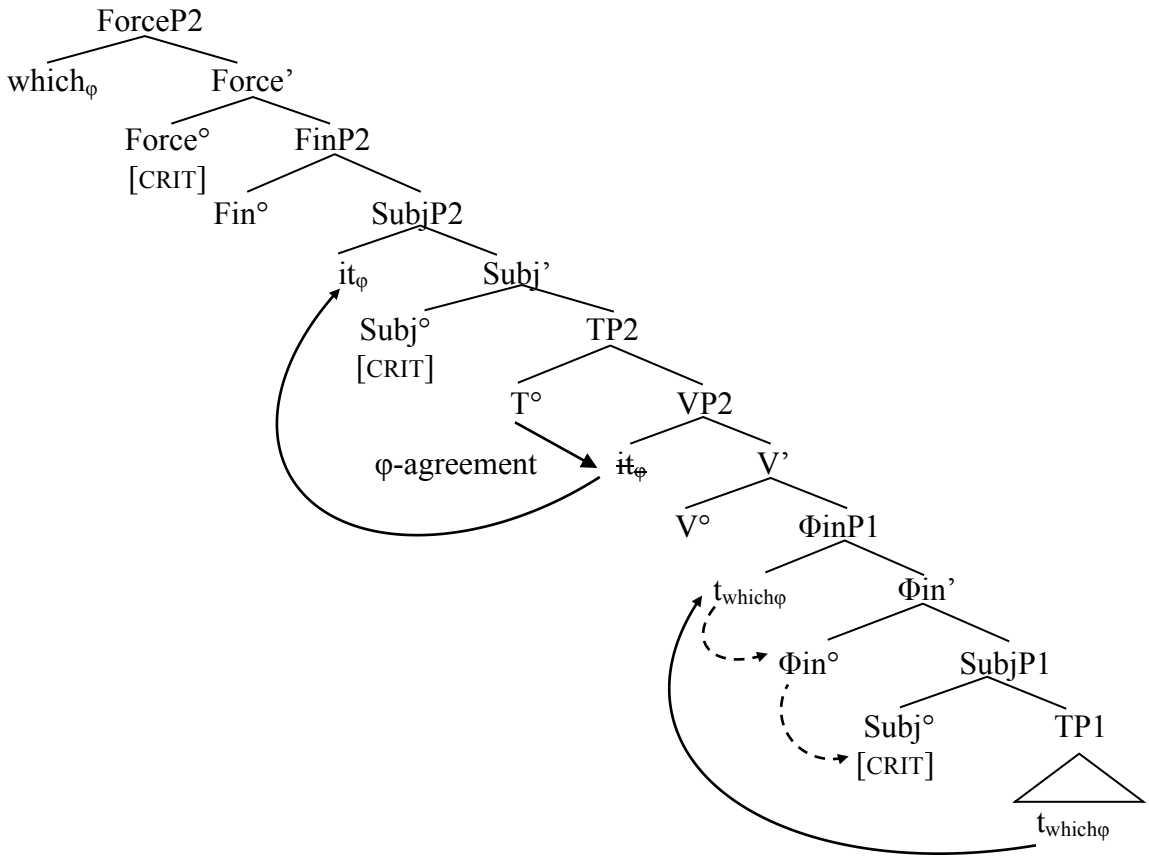


3.2 Subject extraction in English

In the case of subject extraction in English, the SCrit can also be satisfied by φ-features on Φin, which are licensed by the *wh*-moved subject in SpecΦin. With Rizzi & Shlonsky (2006: section 9), we will assume that the left periphery of the complement clause in (23)a) is reduced to ΦinP1. (23)b) shows the main ingredients of the analysis: in the complement clause agreement on T1 is triggered by the plural

subject *which* <*quotes*>; matrix agreement on T2 is triggered by the expletive subject *it.*

(23) a. quotes which it was felt were relevant to the process
b.



4. *Wh*-raising

In (3) and (23)a), 'regular' cases of long subject extraction with the expletive subject *it* in the superordinate clause, agreement between T2 and the *wh*-subject is impossible because T2 and the *wh*-subject do not attain a local relation. In the *wh*-raising pattern (1), in contrast, the extracted subject triggers T-agreement in both the embedded clause - as expected - as well as in the immediately dominating raising domain. A grammar that derives *wh*-raising must therefore have a marked property to allow the features of an embedded *wh*-subject to become accessible to the higher T and concomitantly preventing the insertion of an expletive subject. In what follows, we will propose that the grammar that allows *wh*-raising has an additional, 'defective' instantiation of Φin which incorporates to its (c- or s-)selecting head.

4.1 Φin-to-V incorporation

As discussed, for most speakers, T2 agreement with the *wh*-subject in (24)a) is unavailable for reasons of locality: T2 cannot attain a sufficiently local relation with the *wh*-subject. The question arises why *wh*-raising is available for some speakers, i.e. how for those speakers the *wh*-subject can attain the local relation with T2 required for T2 agreement.

(24) a. % to transcribe any quotes which were felt were relevant to the process.

The structural configuration for the agreement between matrix T2 and the long-moved *wh*-subject evidenced by the agreement between <*any quotes*> *which* and *were (felt*) in (24)a) is schematized in (25), to be amended below.

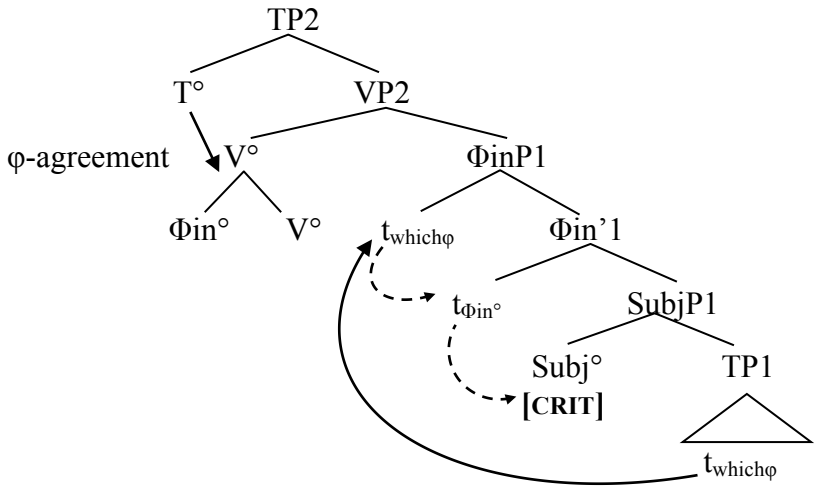
(25) … T2 [$_{vP}$ … [$_{ΦinP1}$ *wh*-phrase Φin° [$_{SubjP1}$ CRIT [$_{TP1}$ ~~*wh*-phrase~~…

Agreement between T2 and the *wh*-subject blocks insertion of an *it*-expletive as the superordinate subject (24)b), which makes the regular mode of satisfying the SCrit, insertion of an XP in SpecSubjP2, unavailable:

(24) b. * to transcribe any quotes which [$_{SubjP2}$ it were felt were relevant to the process].

Recall that in the case of subject extraction, Φin heads the highest projection in the embedded clause (23)b). As a result, Φin1 - whose φ-features are licensed by the moving *wh*-subject - is in a local relation with the selecting V2. To account for *wh*-raising, we propose that Φin1 incorporates into the selecting head (V2). Crucially, this operation makes the φ-features of the moved *wh*-subject accessible to T2 by moving them into the domain of the matrix clause: the resulting head 'V2+Φin1' has a local relation with T2, allowing T2 to agree with the φ-features on V2+Φin1. Strictly speaking, T2 does not agree with the *wh*-subject in SpecΦin1, as suggested in (25), but rather, T2 agrees with the φ-features on V2/Φin1, themselves licensed by the *wh*-subject:

(26)



4.2 The superordinate clause

Thanks to Φin1-to-V incorporation, T2 can agree with the φ-features of Φin1, i.e. with the *wh*-subject. As a result, expletive insertion in the canonical subject position of the matrix clause to satisfy the SCrit becomes unavailable (24)b).

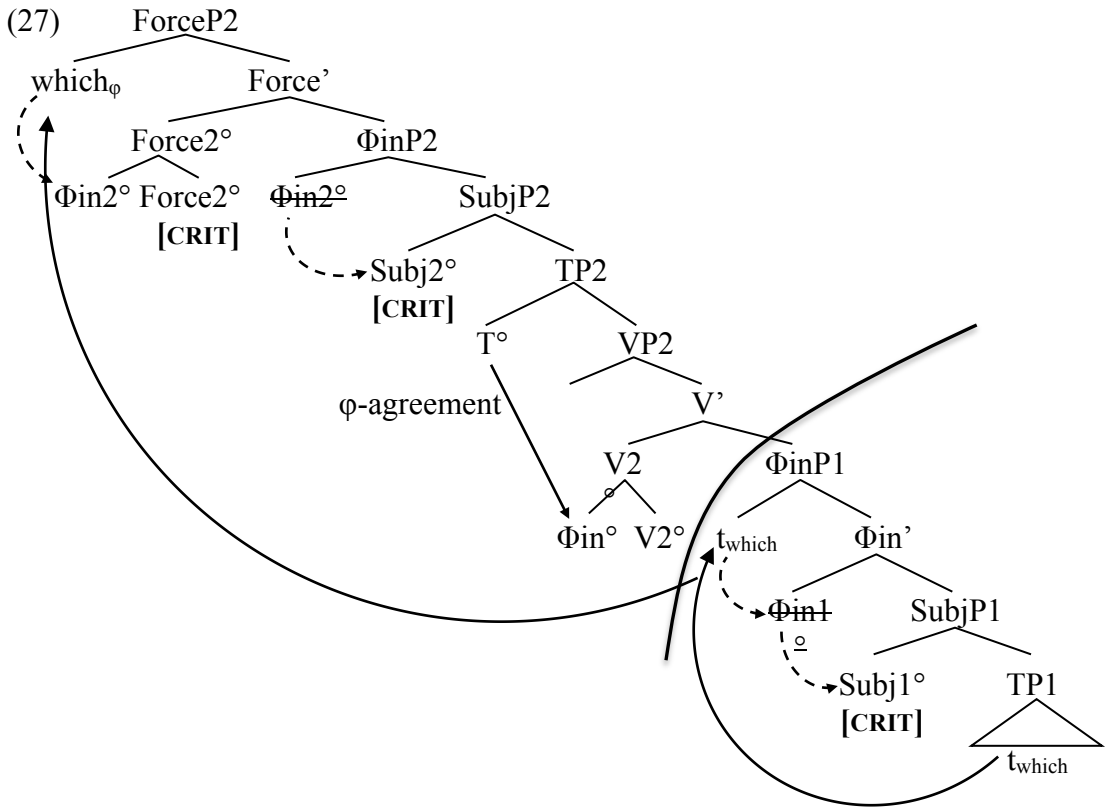
SpecSubjP being a criterial position, a constituent moving there is frozen. Because the relative operator *which (quotes)* ultimately has to end up in a left-peripheral position, it cannot itself move to the SpecSubj2 to satisfy the SCrit because this would induce freezing. In addition, if SpecSubjP2 is an A-position, movement to SpecSubjP2 would illicitly extend the A-chain beyond the finite CP1 (cf. Sigurðsson (2012: 207).

It follows that the superordinate SCrit has to be satisfied via an enriched Φin2, whose φ-features in turn have to be licensed by a constituent on its way to a left-peripheral criterial position, say SpecForceP2 (Rizzi 1997).[1] However, on its way to its criterial landing site, the *wh*-subject cannot move from SpecΦin1 to SpecΦin2: SpecΦin being an A-position, movement from SpecΦin1 to SpecΦin2 again illicitly extends an A-chain beyond a finite clause boundary. We propose an alternative scenario to license the φ-features of Φin2. Recall that the *wh*-subject moves to a criterial position, labelled Force2. We propose that Φin2 incorporates into the Force2 head. Through the creation of the complex head Φin2-Force2[2], the φ-features of Φin2 attain the required local relation with the *wh*-subject in SpecForce2. Thus in the specifier position of Force2-Φin2, the *wh*-subject simultaneously satisfies both the criterial condition of Force2 and licenses the φ-features on Φin2. (27) summarizes the derivation:

[1] The relevant position might also be labelled SpecRelP as in Shlonsky (2014).

[2] In work on Hebrew relativization Shlonsky (2014) proposes that Φin and the criterial head in whose specifier relative operators are hosted (Rel) can form one syncretic head. His proposal can be reinterpreted along the lines set out here.

(27)



4.3 Deriving *wh*-raising

The 'exceptional' nature of *wh*-raising is captured by assuming two applications of Φin-incorporation: in the lower domain, Φin1 incorporates to the selecting V2, in the higher domain, Φin2 incorporates to the selecting Force2.

One way of unifying these two proposals would be to say that what differentiates a grammar with *wh*-raising from a grammar without *wh*-raising is the availability of a 'defective' Φin-head which obligatorily incorporates to a higher head. In the clause from which the subject is extracted and which, following Rizzi & Shlonsky (2006), we assume to be truncated up to Φin1, Φin1-to-X incorporation targets the lowest head of the immediately higher clause (say 'V2'). At the next CP level, at which a left periphery is fully articulated, Φin2 incorporates to a left-peripheral head. This unification reduces the 'exceptional' properties of the *wh*-raising grammar to the availability of a specific lexical item, namely 'deficient Φin'. Observe that since the relevant speakers also have the 'canonical' pattern of subject extraction, we assume they also have the 'regular' non-incorporating variant of Φin.

The next section shows how our analysis captures the locality restrictions on *wh*-raising discussed in section 2.1.6.

4.4 Restrictions on *wh*-raising: the 'halting effect'

Recall that the *wh*-raising pattern is a biclausal configuration in which the *wh*-subject that triggers double agreement halts in CP2. We identified a number of subcases of an unacceptable continuation of *wh*-movement into CP3. In the first, (28) (= (12)b), *wh*-agreement illicitly applies in both CP2 and CP3. In the second, in (29) (= (10)), the moved *wh*-subject is extracted to the left periphery of CP3, without agreeing with T3, which has its own (lexical or expletive) subject.[3]

(28) */??This is a mutation of the virus [$_{CP3}$ which$_i$ **was** reported [$_{CP2}$ t_i **was** suspected [$_{CP1}$ t_i **had** initially caused the infection]]].

(29) ? the new city funds, [$_{CP3}$ which$_i$ **they say/it is said** [$_{CP2}$ t_i are hoped [$_{CP1}$ t_i will help up to 150 families facing eviction]]].

In our account, *wh*-raising depends on Φin-incorporation. In CP1, Φin1-to-V2 incorporation makes the φ-features of Φin1 accessible to T2. In CP2, Φin2 incorporates to Force2. Assuming that in relative clauses the *wh*-subject targets SpecForceP, as a result of Criterial Freezing it would be frozen in that position, whence the ban on reiterated *wh*-agreement. For other cases of A'-movement than relativization (4,5), criterial freezing will also arise by virtue of Φin2 incorporating in a criterial head below ForceP2 (e.g. Top2 or Foc2).

However, to exclude (28) and (29), we also need to rule out that a non-terminal step of cyclic *wh*-movement to a criterial position, say SpecForceP3, targets an intermediate, non-criterial 'edge' position in the left periphery of CP2 and that Φin2 incorporates into this non-criterial head in CP2, with the *wh*-subject in transit locally licensing the features of Φin2. This derivation can be avoided if we stipulate that Φin-incorporation to a non-criterial head is ruled out.

An independent motivation for the ban on Φin-incorporation to a non-criterial head depends on how successive cyclic movement is handled in the cartographic and criterial framework and on the identification of criterial vs. non-criterial left-peripheral positions. We sketch two avenues for deriving the observed restriction.

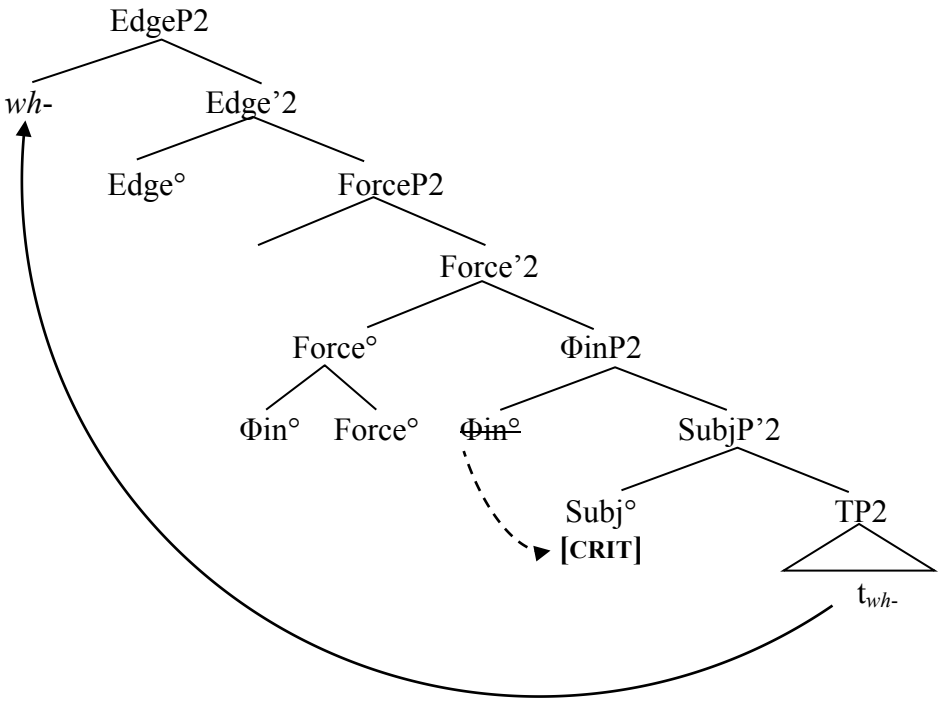
By assumption, Fin and its enriched counterpart Φin are not criterial. Criterial heads are endowed with contentful features like [Top], [Foc], [Int]. To derive successive cyclicity of movement, Rizzi (2006: 110-111) postulates that there is a non-criterial version of the criterial heads, which contains the formal counterpart of the criterial features. These formal features trigger movement without giving rise to any interpretive (scope/discourse) effect. To restrict *wh*-raising, we would have to stipulate that Φin cannot incorporate into a head with a purely formal feature. As a result, in the case of an A'-chain continuation beyond CP2, the features of Φin2 would never be licensed.

Alternatively, differentiating the terminal and intermediate steps of A'-movement categorically, we could propose that terminal steps target criterial positions and that non-terminal steps can bypass an intermediate CP domain via an 'indiscriminate' edge position (say 'EdgeP') dominating a non-criterial version of

[3] We ascribe the fact that (29) was judged as better than (28) to the availability of an alternative reading where the string *it is said* functions as a parenthetical inside CP2.

ForceP (which can be held responsible for clause-typing its host clause), by hypothesis the highest projection of the CP-domain (see Danckaert (2012) for motivation). The relevant structure is diagrammed in (30):

(30)



En route to a higher criterial position in CP3, the *wh*-subject must move via EdgeP2. The unavailability of reiterated *wh*-raising could then be related to the non-local relation between Φin2 and EdgeP2. Because of the intervening heads of the CP2 periphery, the *wh*-subject cannot attain a sufficiently local configuration with Φin2 to license Φin2's φ-features.

Finally, as shown in (31) (= (11)a), non-local *wh*-raising targeting CP3 across a clause with a subject of its own is also unacceptable.

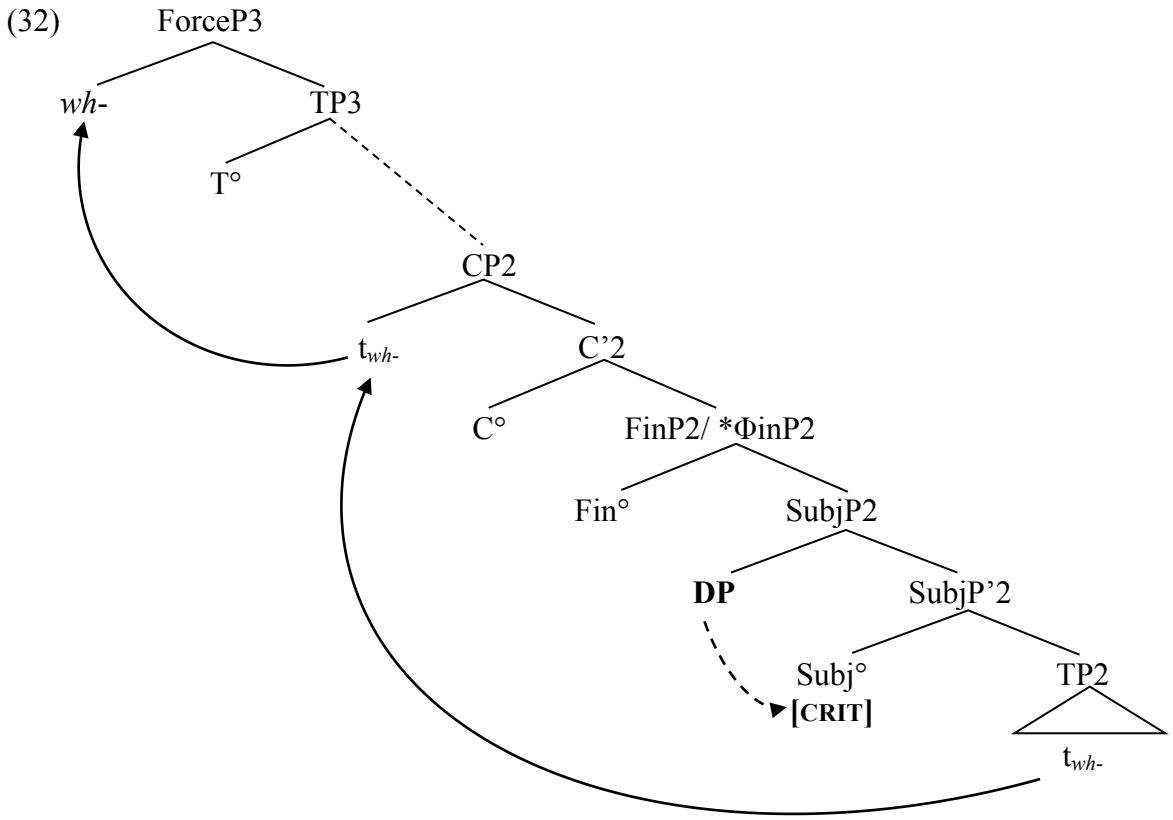
(31) * the new city funds, [$_{CP3}$ which$_i$ are hoped [$_{CP2}$ the government will confirm [$_{CP1}$ t_i will help 150 families facing eviction]]].

In the intended derivation of (31), the relative *wh*-subject *which* triggers agreement in CP1 (*will*), then moves on to CP3, where it agrees with *are*; in the intermediate CP2 the agreement on *will* is triggered by the subject DP *the government*.

Our analysis excludes this pattern as follows. Thanks to Φin1-to-V2 incorporation T2 agrees with the embedded Φin1, whose φ-features are licensed by the *wh*-subject. This automatically entails *wh*-agreement of T2. In the offending (31), *wh*-agreement has to be triggered by T3. In the intermediate CP2, however, T2 agrees in the regular fashion with *the government*, a DP which will also satisfy the SCrit in Subj2. Thus, a featurally enriched Φin2 is not required and by economy is unavailable. Φin2 being unavailable, the φ-features of the moving *wh*-subject never become accessible to T3 and *wh*-agreement cannot arise. As shown in (32) at no point in the derivation can T3 agree with the φ-features of the moving *wh*-subject. The

intermediate landing site of the *wh*-item labelled '(Spec)CP2' is either EdgeP or a non-criterial ForceP.

(32)



5. Summary

This paper considers *wh*-raising in English, a particular pattern of *wh*-movement which is attested and which is accepted by some speakers, in which a *wh*-subject triggers raising in a clausal domain immediately dominating its merge site. In the standard grammar this pattern is ungrammatical. Adopting Rizzi's (2006) approach to subject extraction, we relate the availability of *wh*-raising in some grammars to the nature of the left-peripheral φ-enriched head Φin, which plays a crucial role in subject extraction. We propose that in a grammar with *wh*-raising, Φin can be deficient and that a deficient Φin incorporates into the next higher head, thus allowing for agreement with a higher T head in a restricted set of circumstances.

References

Asudeh, Ash. 2002. Richard III, *Chicago Linguistic Society* 38, 31-46.
Bolinger, Dwight. 1961. Syntactic blends and other matters, *Language* 37, 366-381.
Cardinaletti, Anna. 1992. SpecCP in verb-second languages: expletives, null subjects, and nominative case-assignment, *Geneva Generative Papers* 0, 1-9.

Cardinaletti, Anna. 1997. Subjects and clause structure. In: Haegeman, L. (ed.), *The new comparative syntax*, London: Longman, 33-63.
Cardinaletti, Anna. 2004. Towards a cartography of subject positions. In: Rizzi, L. (ed.), *The structure of CP and IP*, Oxford: O.U.P., 115-165
Carstens, Vicki & Michael Diercks. 2013. Parameterizing Case and Activity: hyper-raising in Bantu, *NELS* 40, 99-118.
Coppock, Elizabeth. 2010. Parallel grammatical encoding in sentence production: evidence from syntactic blends, *Language and Cognitive Processes* 25, 38-49.
Danckaert, Lieven. 2012. *Latin embedded clauses: the left periphery*. Amsterdam: Benjamins.
Haegeman, Liliane. 1996. Verb second, the split CP and null subjects in early Dutch finite clauses. *GenGenP*. Available on: http://ling.auf.net/lingBuzz/001059.
Haegeman, Liliane. 2008. Extraction du sujet, réallocation de cas et localité, *Cycnos* 17, available at http://revel.unice.fr/cycnos/index.html?id=1694.
Kayne, Richard. 1980. Extensions of Binding and Case-marking, *Linguistic Inquiry* 11, 75-96 (reprinted in Kayne, R. (1984), 1-21).
Kayne, Richard. 1981. On certain differences between French and English, *Linguistic Inquiry* 12, 349-371 (reprinted in Kayne, R. (1984), 103-123).
Kayne, Richard. 1984. *Connectedness and binary branching*. Dordrecht: Foris.
Kayne, Richard. 1995. Agreement and verb morphology in three varieties of English. In: Haider, H., S. Olsen & S. Vikner (eds.), *Studies in comparative Germanic Syntax*, Dordrecht: Kluwer, 159-165.
Kimball, John & Judith Aissen. 1971. I think, you think, he think, *Linguistic Inquiry* 2, 241-246.
Lasnik, Howard & Nicholas Sobin. 2000. The *who/whom* puzzle: on the preservation of an archaic feature, *Natural Language and Linguistic Theory* 18, 343-371.
Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech & Jan Svartvik. 1985. *A comprehensive grammar of the English Language*. London: Longman.
Rizzi, Luigi. 1982. *Issues in Italian syntax*. Foris: Dordrecht.
Rizzi, Luigi. 1997. The fine structure of the left periphery. In: Haegeman, L. (ed.), *Elements of grammar: handbook in generative syntax*, Dordrecht: Kluwer, 281-337.
Rizzi, Luigi. 2006. On the form of chains: criterial positions and ECP effects. In: Cheng, L. & N. Corver (eds.), *Wh-movement: moving on*, Cambridge (Mass.): MIT Press, 97-133.
Rizzi, Luigi & Ur Shlonsky. 2006. Satisfying the Subject Criterion by a non subject: English Locative Inversion and Heavy NP Shift. In: Frascarelli, M. (ed.), *Phases of interpretation*, Berlin: Mouton de Gruyter, 341-361.
Rizzi, Luigi & Ur Shlonsky. 2007. Strategies of subject extraction. In: Sauerland, U. & H.-M. Gärtner (eds.), *Interfaces + Recursion = Language? Chomsky's Minimalism and the view from syntax-semantics*, Berlin: Mouton de Gruyter, 115-160.
Sigurðsson, Halldór. 2012. Minimalist C/case, *Linguistic Inquiry* 43, 191-227.
Shlonsky, Ur. 2014. Subject positions, subject extraction, EPP, and the Subject Criterion. In: Aboh, E., M. T. Guasti & I. Roberts (eds.), *Locality*, Oxford: O.U.P., 58-85.
Taraldsen, Tarald. 2001. Subject extraction, the distribution of expletives, and

stylistic inversion. In: Hulk, A. & J.-Y. Pollock (eds.), *Subject inversion in Romance and the theory of Universal Grammar*, Oxford: O.U.P., 163-182.
Ura, Hiroyuki. 1993. On feature checking for wh-traces, *MIT Working Papers in Linguistics* 18, 243-280.