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## 6 Finite verb movement in Scandinavian embedded clauses

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### 1 Introduction

In this paper, I want to discuss movements of the finite verb in the Scandinavian languages, and especially in embedded clauses.<sup>1</sup>

Assuming a basic structure where IP is the complement of C and VP is the complement of I, two movements are possible: V-to-I movement (1) and V-to-I-to-C movement (2):

(1)  $[_{CP} \text{Spec } [_{C'} C [_{IP} \text{Spec } [_{I'} I [_{VP} \text{Spec } [_{V'} V \dots]$

(2)  $[_{CP} \text{Spec } [_{C'} C [_{IP} \text{Spec } [_{I'} I [_{VP} \text{Spec } [_{V'} V \dots]$

Before discussing the two movements in detail, I would like to mention some problems connected with telling them apart. There are thus, at least in theory, three different positions in (1) and (2) that the finite verb may occupy: C, I, or V. Whether the finite verb is in V or not can be determined from its position relative to a sentence-medial adverbial (i.e. an adverbial which follows the subject but precedes the complement of the verb), as demonstrated for verb movement in French and English by Emonds (1978) and Pollock (1989). The medial adverbial is adjoined to the VP, which means that if the verb precedes the adverbial, it has left the VP, whereas if the verb follows the adverbial, it must still be in V. One can thus tell that main verbs stay in V in English, whereas they leave VP in French:

- (3) a. Marie often goes to Paris  
b. \*Marie goes often to Paris

- (4) a. \*Marie souvent va à Paris  
b. Marie va souvent à Paris

When the finite verb leaves VP, it moves to I, from where it may move on to C. Whereas it can be determined whether the movement from V to I takes place, this is not always the case for the movement from I to C, depending on the position of the subject. If the subject occurs in the normal subject position, Spec of IP, the finite verb must be in C if it precedes the subject, and in I if it follows the subject (as long as it still precedes a medial adverbial). It is however also possible that the subject itself moves, from Spec of IP to Spec of CP, and so we cannot tell for any "subject-verb-..." sequence, whether the subject is in Spec of IP and the verb in I or the subject has moved to Spec of CP and the verb to C:

- (5) a. Marie va souvent à Paris  
 b. Marie tager ofte til Paris (Danish)  
 'Marie goes often to Paris'

If on the other hand the verb precedes the subject, there is no doubt that the verb has moved to C. We can take the possibility of such a sequence as an indication of whether the verb has moved from I to C in a subject-verb sequence:

- (6) a. Heureusement Marie va souvent à Paris  
 b. \*Heureusement va Marie souvent à Paris  
 c. \*Heldigvis Marie tager ofte til Paris  
 d. Heldigvis tager Marie ofte til Paris  
 'Luckily (goes) Marie (goes) often to Paris'

(6) thus supports the analysis that the French finite verb only moves to I and cannot move to C (it has undergone "independent" V-to-I movement in (5a)) and that the Danish finite verb moves all the way to C (it has undergone V2 in (5b)).

In section 2, I will discuss V-to-I movement, before I turn to V2 in section 3. I will argue that independent V-to-I movement (1), as opposed to V-to-I movement as part of V2 (2), does not occur in the Scandinavian languages, except in Icelandic embedded questions.

## 2 V-to-I movement

### 2.1 Verbal inflection

Kosmeijer (1986), Holmberg & Platzack (1991, in press), Platzack (1988), and others observe that a correlation seems to hold between the

inflection of the finite verb and the apparent occurrence of V-to-I movement. They propose to analyze V-to-I movement as a movement motivated by the presence of inflectional morphology in I. In this section I will argue that the predictions yielded by this view are essentially correct, provided it is interpreted in the following fashion: rather than say that V-to-I movement only takes place if inflectional morphology is present in I, I would like to interpret the above suggestions to say that the verb may only stay in V if there is no inflectional morphology in I. The reason for this is that V2 also takes place in languages with no inflectional verbal morphology (i.e. Danish, Norwegian, and Swedish), and taking V2 to be V-to-I-to-C movement means that the verb may move to (and through) I even in languages without inflectional morphology in I. As an indication of whether a language has inflectional morphology generated in I (which should then make V-to-I movement of finite verbs obligatory), one may consider standard verb paradigms like the following:

- (7) *throw*, infinitive and present indicative:

		Icelandic	Faroese	Danish
	Inf.	kasta	kasta	kaste
Sg.	1	ég kasta	eg kasti	jeg kaster
	2	þú kastar	tú kastar	du kaster
	3	hann kastar	hann kastar	han kaster
Pl.	1	við köstum	vit kasta	vi kaster
	2	þið kastið	tit kasta	I kaster
	3	þeir kasta	tey kasta	de kaster
Total		4	3	1

One might expect I to have content if the language distinguishes between the various persons and numbers. This, which essentially is what is suggested in Holmberg & Platzack (1991:98), would however predict the only languages to allow the finite verb to stay in V to be Danish, Norwegian, and Swedish, a prediction which does not hold, as this is also possible in Faroese (and in English). V-to-I movement would be expected to have to take place if I had any content at all, and I would be expected to have content if any distinctions were made between different combinations of person and number, as is the case in Faroese (and in English).

A solution could be to say that a *substantial* number of distinctions are needed for V-to-I movement to have to take place. This raises the question of how finite verbs in English and Faroese are united with

their inflectional endings (-s in English 3sg, -i in Faroese 1sg, -r in Faroese 2sg & 3sg). I will assume that these inflectional elements are actually base-generated in I, but subsequently moved downward to merge with the verb in V. This idea can be found in Emonds (1976, 1978), Pollock (1989), Chomsky (1991), Rizzi (1990b:22-24), among others, and it is ultimately derived from the affix hopping analysis of Chomsky (1957).

One particular version of the idea of "substantial number of distinctions" is given by Platzack & Holmberg (1989:70), who suggest that (obligatory) V-to-I movement is triggered by the existence of distinctions between different persons. This is done in order to account for the difference between two Scandinavian dialects: in the Swedish dialect Älvdalsmålet (spoken in Dalecarlia, eastern central Sweden) there are both number and person distinctions, whereas in the Norwegian dialect of Hallingdalen (central southern Norway) the verb is only inflected for number, not for person:

(8) *throw*, infinitive and present indicative:

		Älvdalsmålet	Hallingdalen	
	Inf.	kasta	kastæ	
Sg.	1	kastar	kasta	
	2	kastar	kasta	
	3	kastar	kasta	
Pl.	1	kastum	kastæ	(Älvdalsmålet from Levander
	2	kaster	kastæ	(1909), Trosterud (1989:97-98),
	3	kasta	kastæ	Hallingdalen from Trosterud
	Total	4	2	(1989:88-89)

Only Älvdalsmålet may have V-to-I movement:<sup>2,3</sup>

(9) *ba fo dye at uir uildum int fy om* (Älvdalsmålet)  
just because that we would (1pl) not follow him

(from Levander (1909), cited in Platzack & Holmberg (1989:70))

(10) a. ... at me ikkje kjøpæ bokje (Hallingdalen)

b. \*... at me kjøpæ ikkje bokje

... that we (buy(pl)) not (buy(pl)) book-the

(from Trosterud (1989:91, (4g,h)))

This account would, however, predict incorrectly that Faroese should have (obligatory) V-to-I movement: whereas Hallingdalen makes no distinctions between different persons, Faroese distinguishes between first person singular and second/third person singular.

A refinement of Platzack & Holmberg's suggestion is made by Roberts (1993), who suggests that (obligatory) V-to-I movement is triggered by the existence of inflectional endings both in the singular and in the plural ("if there is overt, equipollent marking for number," Roberts (1993:267). In Älvdalsmålet, there are endings which are marked plural, -um, -er, and also one which is marked singular, -ar, which is sufficient to show the language learner that lexical material is generated in I which requires the verb to move there. In Hallingdalen, on the other hand, there is an ending marked singular, -a, but no plural ending at all (the plural form is identical to the infinitive and (presumably) also to the imperative singular).<sup>4</sup>

Applying this analysis to various Germanic languages (and French), we obtain the correct predictions that German, Icelandic, Yiddish, and French (like Älvdalsmålet) all have obligatory V-to-I movement and that English, Danish, and Faroese (like Hallingdalen), on the other hand, do not have it.

English and Faroese are very much like Hallingdalen, in that they have endings which are marked singular, English -s (3sg), Faroese -i (1sg) and -ar (2sg, 3sg), but no endings in the plural at all; the plural form is identical to the infinitive and to the imperative (in Faroese to the imperative singular).

In Danish (along with Norwegian and Swedish), the situation is slightly different, as there are endings present and the present tense form, Da. *kaster*, is distinct from both the infinitive, *kaste*, and the imperative, *kast*. But although there are endings, they can be analyzed as endings of tense, and not of number, as they are the same in both singular and plural. Historically, what happened was that Middle Danish had a system like Hallingdalen, an ending in the singular, -r, but no ending in the plural. When the singular ending generalized to the plural (a process starting in the west of Denmark around or before 1400, though the plural forms only disappeared completely in print around 1900), it lost its meaning as a marker of number and became a marker of tense only.

The conclusion is then that what is necessary to lose obligatory V-to-I movement is the absence of endings in either singular or plural. The actual transition between two stages is influenced by the number of "forward compatible" constructions, i.e. acceptable word orders from before the change (i.e. with V-to-I movement) that are compatible with the new analysis (i.e. without V-to-I movement). For the Scandinavian languages such word orders not only include all V2 structures, where the finite verb is in C and therefore cannot be seen

in I or in V, but also non-V2 structures without medial adverbials or negations and also the so-called stylistic fronting structures, cf. Vikner (1991).

Having discussed the status of verbal inflection and its possible connection with V-to-I movement, I will now go on to consider the evidence concerning V-to-I movement in the different Scandinavian languages.

## 2.2 Languages without V-to-I movement

The data provide direct evidence whether or not V-to-I movement has taken place. It has taken place if the finite verb precedes a medial adverbial (taken to be adjoined to VP) or a negation, and it has not taken place if the finite verb occurs right of such elements. The languages without obligatory V-to-I movement are English and Danish (and Norwegian, Swedish, and also the Norwegian dialect from Hallingdalen, as discussed in section 2.1). In the following subsection, 2.3, I will argue that Faroese also belongs in this group. None of these languages has inflectional morphology both in the singular and in the plural (cf. the discussion in 2.1 above): English, Hallingdalen, and Faroese have endings marked singular, but no endings in the plural at all. Danish, Norwegian, and Swedish have endings both in the singular and in the plural, but as they are the same in singular and plural, they can be taken to be tense morphology rather than inflectional morphology.

Consider first the data from English. Here we see the absence of V-to-I movement both in main clauses (11a,b), in embedded complement clauses (11c,d) and in relative clauses (11e,f).

- (11) a. \*Marie *smokes* often these cigars  
 b. Marie often *smokes* these cigars  
 c. \*Peter doubts that Marie *smokes* often these cigars  
 d. Peter doubts that Marie often *smokes* these cigars  
 e. \*The cigars that Marie *smokes* often are expensive  
 f. The cigars that Marie often *smokes* are expensive

Let us then turn to Danish. Here V-to-I movement takes place in the main clause (12a,b) but not in the embedded complement clause (12c,d), nor in the relative clause (12e,f):

- (12) a. Marie *ryger* ofte disse cigarer  
 b. \*Marie ofte *ryger* disse cigarer

- Marie (smokes) often (smokes) these cigars  
 c. \*Peter tvivler på at Marie *ryger* ofte disse cigarer  
 d. Peter tvivler på at Marie ofte *ryger* disse cigarer  
 Peter doubts on that Marie (smokes) often (smokes) these cigars  
 e. \*De cigarer som Marie *ryger* ofte er dyre  
 f. De cigarer som Marie ofte *ryger* er dyre  
 The cigars which Marie (smokes) often (smokes) are expensive

The question is whether what we see in (12a,b) is independent V-to-I movement or only V-to-I movement as part of V-to-I-to-C movement (i.e. as part of V2). If we consider topicalization, i.e. non-subject initial clauses (6c,d), it is clear that the verb in main clauses moves to C in Danish, and so I take it that V2 also takes place in subject-initial main clauses. Consequently, (12a,b) is not independent V-to-I movement and then Danish and English are alike, in that neither has independent V-to-I movement.<sup>5</sup>

## 2.3 Faroese

I will argue in this section that modern spoken Faroese is like Danish, Norwegian, and Swedish, and also English and Hallingdalen in that it does not have independent V-to-I movement. As this is not an uncontroversial statement, I will discuss a number of examples in detail. First a main clause:

- (13) a. Dreingirnir *vóru* als ikki ósamdir  
 b. \*Dreingirnir als ikki *vóru* ósamdir  
 Boys-the (were) at-all not (were) disagreed  
 c. I gjàr *vóru* dreingirnir als ikki ósamdir  
 d. I gjàr dreingirnir *vóru* als ikki ósamdir  
 e. \*I gjàr dreingirnir als ikki *vóru* ósamdir  
 Yesterday (were) boys-the (were) at-all not (were) disagreed

(13a,b) shows that the verb cannot be left in V in a main clause. The verb in (13a) could then be either in C or in I. When we look at a topicalization (13c,d,e), it is clear that here the finite verb is in C and not in I nor in V. This amounts to saying that Faroese has V2 in main clauses, so I will take it that (13a) is also a V2 clause, and that the verb is in C.

Consider now a situation where embedded V2 is possible.

- (14) Tróndur segði, at ...  
 Tróndur said that ...

- a. ... dreingirnir vóru als ikki ósamdir  
 b. ... dreingirnir als ikki vóru ósamdir  
 ... (boys-the) (were) (boys-the) at-all not (w.) disagreed  
 c. ... í gjár vóru dreingirnir als ikki ósamdir  
 d. \*... í gjár dreingirnir vóru als ikki ósamdir  
 \*... í gjár dreingirnir als ikki vóru ósamdir  
 ... yesterday (were) boys-the (were) at-all not (w.) disagreed

(14a,b) shows that the verb can either be left in V in a subject-initial clause or moved out of V. The verb in (14a) could then be either in C or in I. From the fact that an embedded topicalization is possible here (14c), and only with V2 (14d,e), I conclude that both V2 with the verb in C (14a,c) and non-V2 with the verb in V (14b), are possible in this context. The fact that embedded V2 is possible in spite of the presence of an overt complementizer, *at*, in (14a,c) might be a problem for the analysis of V2 as movement of the finite verb to C. As discussed below in section 3.2.1, I suggest that sentences like (14a,c) contain two CPs inside each other. Consider now a situation where embedded V2 is not possible:

- (15) Tað var óvæntað, at ...  
 It was unexpected that ...

- a. \*... dreingirnir vóru als ikki ósamdir  
 b. ... dreingirnir als ikki vóru ósamdir  
 ... (boys-the) (were) (boys-the) at-all not (w.) disagreed  
 c. \*... í gjár vóru dreingirnir als ikki ósamdir  
 d. \*... í gjár dreingirnir vóru als ikki ósamdir  
 e. \*... í gjár dreingirnir als ikki vóru ósamdir  
 ... yesterday (were) boys-the (were) at-all not (w.) disagreed

According to my informants, the only possibility here is a subject-initial embedded sentence with the verb after the sentence adverb (15b), i.e. with the verb in V. (15a) shows that the verb can neither be in C nor in I.

For the sake of comparison with Icelandic in section 2.4 below, the following should be noticed about (14) and (15): the only difference between them is the matrix predicate, *to say X* vs. *for X to be unexpected*, and only with the former, but not with the latter, is embedded V2 possible. Furthermore, even in the context where embedded V2 is possible (14), it is also possible for the verb to stay in V (14b). Notice also that the corresponding situation in Danish, Norwegian, and Swedish is exactly parallel. The following pair of examples supports the above

analysis:

- (16) a. Maria vil gjarna í biograf  
 b. \*Maria gjarna vil í biograf  
 Maria (will) gladly (will) in cinema  
 (17) a. \*Eg vil vedda uppá, at Maria vil gjarna í biograf  
 b. Eg vil vedda uppá, at Maria gjarna vil í biograf  
 I will bet on that Maria (will) gladly (will) in cinema

In main clauses, V2 is obligatory, and therefore the finite verb precedes the sentence adverb in (16a) (if the subject had not been moved to Spec of CP here, then the finite verb would also have preceded the subject). In some embedded clauses like (17), V2 is impossible, and then we can clearly see that V-to-I movement is also impossible, leaving the verb in V (17b). The same analysis will also account for the situation with respect to relative clauses. V2 is not possible, making it possible to see that V-to-I movement also is impossible:

- (18) a. \*Har vóru nógv fólk, Fríðrikur kendi ikki  
 b. Har vóru nógv fólk, Fríðrikur ikki kendi  
 There were many people Fríðrikur (knew) not (knew)

(adapted from Lockwood (1955:156) and Barnes (1987:15, (30)))

The judgments in examples of the type (15a) and (17a) are somewhat controversial. According to my informants, they deserve a \*, but according to (the informants of) Michael Barnes (p.c.), examples of the same type are not all that unacceptable, or in some cases even acceptable.

To account for this relatively blurred picture, it would seem reasonable to assume that a change is taking place at the moment, as suggested by Barnes (1986:44, 1987:17, 1989): Faroese is in the process of losing or has just lost V-to-I movement. This would also explain why examples like (15a) and (17a) (with the verb before the adverbial) seem to be as common in Faroese newspapers as examples like (15b) and (17b). Written language frequently shows a certain lag behind spoken language.<sup>6</sup> Hence my formulation that *modern spoken* Faroese seems to have lost V-to-I movement.

## 2.4 Languages with V-to-I movement

V-to-I movement must have taken place if the finite verb precedes a medial adverbial or a negation (i.e. an element which occurs left of

VP), and it could not have taken place if the finite verb occurs right of such an element. The languages with V-to-I movement include French, Icelandic, and Yiddish (and also the dialects of Swedish spoken in Älvdalen and in Kronoby, as discussed in section 2.1). With the exception of the Kronoby dialect, these languages all have inflectional endings both in the singular and in the plural. Let us examine Icelandic more closely:

- (19) a. Helgi hefur oft lesið þessa bók  
 b. \*Helgi oft hefur lesið þessa bók  
 Helgi (has) often (has) read this book  
 c. þessa bók hefur Helgi oft lesið  
 d. \*þessa bók Helgi hefur oft lesið  
 e. \*þessa bók Helgi oft hefur lesið  
 This book (has) Helgi (has) often (has) read

As for main clauses, Icelandic is completely parallel to Danish and Faroese. (19a,b) shows that the verb cannot be left in V in a main clause. The verb in (19a) could then be either in C or in I. It is clear from the topicalization data (19c,d,e) that here the finite verb is in C and neither in I nor in V. This means that Icelandic has V2 in main clauses, and so I will take it that (19a) is also a V2 clause and that the verb is in C. Consider now embedded V2 in Icelandic:

- (20) það var óvænt, að ...  
 It was unexpected that ...  
 a. ...Helgi skyldi oft hafa lesið þessa bók  
 b. \*... Helgi oft skyldi hafa lesið þessa bók  
 ...(Helgi)(should) (Helgi) often (should) have read this book  
 c. ... þessa bók skyldi Helgi oft hafa lesið  
 d. \*... þessa bók Helgi skyldi oft hafa lesið  
 e. \*... þessa bók Helgi oft skyldi hafa lesið  
 ... this book (should) Helgi (should) often (should) have read

This example points to two important peculiarities of Icelandic: unlike the other Scandinavian languages, where it depends on the lexical items of the matrix clause, embedded V2 is possible in all embedded declarative clauses in Icelandic (the same lexical items do not allow embedded V2 in Faroese (15)). Second, the finite verb can never stay in V, not even in embedded clauses. The former suggests that CP-recursion (one C contains *að*, the other the finite verb, cf. section 3.2.1 below) is general in Icelandic and lexically restricted in the other Scandinavian languages. The latter shows that Icelandic has obligatory

V-to-I movement. The following examples will show that Icelandic also has independent V-to-I movement:

- (21) Ég spurði  
 I asked ...  
 a. \*... af hverju hefði Helgi oft lesið þessa bók  
 b. ... af hverju Helgi hefði oft lesið þessa bók  
 c. \*... af hverju Helgi oft hefði lesið þessa bók  
 ... why (had) Helgi (had) often (had) read this book  
 d. ??... af hverju þessa bók hefði Helgi oft lesið  
 e. \*... af hverju þessa bók Helgi hefði oft lesið  
 f. \*... af hverju þessa bók Helgi oft hefði lesið  
 ... why this book (had) Helgi (had) often (had) read

(21b) on its own might be an example of either V2 or independent V-to-I movement. The impossibility of (21d) shows the latter to be the case. Although embedded V2 is much more general in Icelandic than in the other Scandinavian languages, (21) is an example of a construction where embedded V2 is not possible, and it thus shows that Icelandic has both independent (21b) and obligatory (21c) V-to-I movement.

We have seen that of the five Scandinavian languages, only Icelandic (and the Älvdalen dialect in Sweden) has (independent and/or obligatory) V-to-I movement. In the other four, the verb only moves to I on its way to C, and it may stay in V when no movement to C takes place.

### 3 Verb second

#### 3.1 Verb second is movement of the finite verb into C

I will follow most of the generative literature on V2 (starting with den Besten (1983) and Thiersch (1978) and going up to e.g. Holmberg (1986), Platzack (1986), Taraldsen (1986), Tomaselli (1990)) in assuming that the finite verb (in sentences with no complementizer) occurs in the position C, in which the complementizer would otherwise have occurred.

If one assumes Chomsky's (1986b) extension of the X' system to include the heads C and I and their maximal projections CP and IP, it is possible to account for some of the properties of V2. These include that there are only two positions (a maximal projection and the finite



verb) in front of the subject, that these two elements differ in projection level, and that their order is XP before X rather than the other way around. All this follows from the structure of CP, which again follows the X' schema: [<sub>CP</sub> Specifier [<sub>C'</sub> C Complement]]. The very straightforward explanation that these properties receive thus turns into one kind of a supporting argument for this analysis of V2.

The basic assumption that V2 is movement of the finite verb into the position otherwise occupied by the complementizer, i.e. C, is based on various kinds of evidence. One kind consists of examples which simply show that both the verb (in verb second position) and the complementizer (in (most) embedded clauses) occupy the position immediately left of the subject:

- (22) a. Er sagt, *daß* die Kinder diesen Film gesehen haben (German)  
He says that the children this film seen have  
b. Diesen Film *haben* die Kinder gesehen  
This film have the children seen
- (23) a. Han siger *at* børnene har set denne film (Danish)  
He says that children-the have seen this film  
b. Denne film *har* børnene set  
This film have children-the seen

Another kind of supporting evidence (this time also valid for English) comes from conditional clauses, where the two versions are in free variation, one with a complementizer (24) and one with a verb in front of the subject (25):

- (24) a. *Wenn* ich mehr Zeit gehabt hätte, ... (German)  
b. *Hvis* jeg havde haft mere tid, ... (Danish)  
c. *If* I had had more time, ...
- (25) a. *Hätte* ich mehr Zeit gehabt, ...  
b. *Havde* jeg haft mere tid, ...  
c. *Had* I had more time, ...

Clauses of the *as if*-type also support this point. The complementizer has the same position (26a) and (27a) as the finite verb does when the complementizer is absent (26b) and (27b):

- (26) Sie schaute ihn an, ... (German)  
She looked him at ...  
a. ... *als ob* er ein großes Verbrechen begangen *hätte*  
b. ... *hätte* er ein großes Verbrechen begangen

- ... as if/had he a big crime committed (had)
- (27) Hun så på ham, (Danish)  
... She looked at him ...  
a. ... *som om* han *havde* begået en stor forbrydelse  
b. ... *som havde* han begået en stor forbrydelse  
... as if/had he (had) committed a big crime

More support has been claimed to exist with respect to certain phenomena which concern the finite verb in main clauses and the complementizer in embedded clauses, e.g. the adjacency requirement between C and pronominal subjects in Swedish and other languages. In V2 structures (28) only non-pronominal subjects may be separated from the verb to their left. Similarly, in embedded clauses (29) only non-pronominal subjects may be separated from the complementizer to their left:

- (28) a. Har han verkligen gjort det här? (Swedish)  
b. \*Har *verkligen* han gjort det här?  
Has (really) he (really) done this?  
c. Har Kalle verkligen gjort det här?  
d. Har *verkligen* Kalle gjort det här?  
Has (really) Kalle (really) done this?  
(adapted from Platzack (1986:45, (44a)))
- (29) a. ... att han verkligen har gjort det här  
b. \*... att *verkligen* han har gjort det här  
... that (really) he (really) has done this  
c. ... att Kalle verkligen har gjort det här  
d. ... att *verkligen* Kalle har gjort det här  
... that (really) Kalle (really) has done this

## 3.2 Verb second in embedded clauses

### 3.2.1 Introduction

The analysis that V2 is the movement of the finite verb into C would seem to predict that V2 should only occur in main clauses, as C in embedded clauses already is filled, viz. by a complementizer. Although this makes exactly the right predictions for German, where embedded V2 only occurs without any complementizer, embedded V2 in some of the other Germanic languages is much more problematic. Two groups of languages are relevant here, Danish, Faroese,

Norwegian, and Swedish on one hand, and Icelandic and Yiddish on the other. In both of these two groups, embedded V2 only occurs with a complementizer present (cf. (30) below). The difference between the two groups is that in Icelandic and Yiddish V2 occurs in all embedded clauses (as discussed in section 2.4), whereas in Danish, Faroese, Norwegian, and Swedish embedded clauses may only be V2 if they are embedded under certain matrix verbs (as is also the case in German). Embedded V2 with a complementizer (30a,b) contrasts with an embedded non-V2 clause (30c) in the following way:

(30) Vi ved ... (Danish)

We know ...

- a. ... [<sub>CP</sub> at [<sub>CP</sub> denne bog<sub>i</sub> har<sub>j</sub> [<sub>IP</sub> Bo ikke t<sub>j</sub> læst t<sub>i</sub>]]]  
... that this book has Bo not read
- b. ... [<sub>CP</sub> at [<sub>CP</sub> Bo<sub>i</sub> har<sub>j</sub> [<sub>IP</sub> t<sub>i</sub> ikke t<sub>j</sub> læst denne bog]]]
- c. ... [<sub>CP</sub> at [<sub>IP</sub> Bo ikke har læst denne bog]]

In embedded V2, there are two CPs, and thus two Cs: the higher C contains the complementizer, the lower one contains the finite verb.

Below I will discuss general embedded V2 in Icelandic in order to see whether it should lead to a revision of the above analysis of V2, as has been claimed by Rögnvaldsson & Thráinsson (1990). I will conclude that this is not the case and that the analysis that V2 is movement of the finite verb to C should be retained, even if it means that embedded V2 clauses may often consist of two CPs.

### 3.2.2 Embedded clauses in Icelandic

Icelandic embedded clauses can be divided into two groups: in one group the finite verb precedes the subject and these are clearly V2, e.g. (31a) and (32a) below.

In the other group, it is impossible to tell whether V2 has applied or not: the subject precedes the finite verb, which again precedes a sentence adverbial, as in (31b) and (32b) below. This order could be derived in two different ways. It could be a result of V2 (i.e. the subject is in Spec of CP, the finite verb is in C), but it could also occur inside IP (i.e. the subject is in Spec of IP, the finite verb is in I), if Icelandic has V-to-I movement and if I precedes the VP.

Recall that it is precisely because one or the other of these two conditions (V-to-I movement and I-VP order) does not hold that we can tell whether a subject-initial embedded clause in the other Germanic

languages is or is not V2. In Danish, Faroese, Norwegian, or Swedish, non-V2 subject-initial embedded clauses would have the form of (31c) and (32c) below: the sentence adverbial would precede the finite verb because of the lack of V-to-I movement. In German, non-V2 subject-initial embedded clauses would have the form of (31d) and (32d) below: the VP would precede the finite verb due to the VP-I order.

(31) a. ... *that* topic *verb*<sub>fin</sub> subject adverbial VP

b. ... *that* subject *verb*<sub>fin</sub> adverbial VP

c. ... *that* subject adverbial *verb*<sub>fin</sub> VP

d. ... *that* subject adverbial VP *verb*<sub>fin</sub>

(32) a. ... að Maríu hefur Helgi aldrei kysst (Icelandic)

... that Maria has Helgi never kissed

b. ... að Helgi hefur aldrei kysst Maríu

c. \*... að Helgi aldrei hefur kysst Maríu

d. \*... að Helgi aldrei kysst Maríu hefur

... that Helgi (has) never (has) kissed Maria (has)

In other words, the word order of any given subject-initial embedded clause in Icelandic is compatible both with general embedded V2 or with Icelandic having both V-to-I movement and I-VP order. I assume that the main problem that the child acquiring Icelandic faces is that there are no differences between embedded and main clauses. Consequently the child will analyze subject-initial embedded clauses as V2 (subject in Spec of CP, finite verb in C), as this is what she does for the main clauses, given that main clause topicalizations give sufficient evidence that the V2 mechanism is warranted, and that V-to-I movement and I-VP order will not suffice (as an account of (31a) and (32a)).

That embedded V2 clauses are indeed possible in more contexts in (Yiddish and) Icelandic than in other Germanic languages can of course only be shown with respect to embedded clauses which necessarily are V2: embedded non-subject-initial clauses, i.e. embedded topicalizations, as I shall refer to them below. General embedded V2 will be illustrated and discussed in connection with two phenomena in the following two subsections on expletive subjects and on topicalizations under non-bridge verbs, which will give examples of V2 being possible in (Yiddish and) Icelandic but not in the other Germanic languages.



## 3.2.2.1 Expletive subjects in embedded clauses

The Icelandic expletive subject *það* behaves much like the German expletive subject *es*. It may occur in the topic position (Spec of CP) (33a) and (34a) but it may not occur in the subject position (Spec of IP) (33c,e) and (34c,e).<sup>7</sup>

- (33) a. Es ist ein Junge gekommen (German)  
 b. \**pro* ist ein Junge gekommen  
 (There) is a boy come  
 c. \*Gestern ist es ein Junge gekommen  
 d. Gestern ist *pro* ein Junge gekommen  
 Yesterday is (there) a boy come  
 e. \*Warum ist es ein Junge gekommen?  
 f. Warum ist *pro* ein Junge gekommen?  
 Why is (there) a boy come ?
- (34) a. það hefur komið strákur (Icelandic)  
 b. \**pro* hefur komið strákur  
 (There) has come (a) boy  
 c. \*I gær hefur það komið strákur  
 d. I gær hefur *pro* komið strákur  
 Yesterday has (there) come (a) boy  
 e. \*Af hverju hefur það komið strákur?  
 f. Af hverju hefur *pro* komið strákur?  
 Why has (there) come (a) boy ?

The situation in Icelandic may thus be taken to be completely parallel to the one in German: *es/það* is impossible in Spec of IP, but possible in Spec of CP.

However, Icelandic differs from German when we look at embedded clauses. Here *það* is not only possible after the complementizer, it is obligatory:

- (35) a. \*Ich weiß, daß es ein Junge gekommen ist (German)  
 b. Ich weiß, daß *pro* ein Junge gekommen ist  
 I know that (there) a boy come is
- (36) a. Ég veit að *það* hefur komið strákur (Icelandic)  
 b. \*Ég veit að *pro* hefur komið strákur  
 I know that (there) has come (a) boy

This is a clear indication that there is a fundamental difference between German embedded clauses with *daß* and Icelandic ones with *að*: the latter behave as if they were V2 (i.e. they are like main clauses);

the former do not.

## 3.2.2.2 Topicalizations embedded under "non-bridge verbs"

As will be discussed further below, in German and Danish embedded V2 only occurs when the embedded clause is the complement of a certain kind of verb. These verbs are often referred to as bridge verbs. (41) and (42) show two brief and non-exhaustive lists of German and Danish verbs which allow V2 in their sentential complements and of verbs which do not.

Here are first two examples of what the lists are supposed to illustrate. The verbs on the list in (41) allow embedded clauses both without V2, as in (37), and with V2, as in (38):

- (37) a. Watson påstod at Moriarty kun havde stjålet pengene (Danish)  
 Watson claimed that Moriarty only had stolen money-the  
 b. Watson behauptete, daß Moriarty nur das Geld gestohlen hatte (German)  
 Watson claimed that Moriarty only the money stolen had
- (38) a. Watson påstod at disse penge havde Moriarty stjålet (Danish)  
 b. Watson behauptete, dieses Geld hatte Moriarty gestohlen (German)  
 Watson claimed (that) this money had Moriarty stolen

The verbs on the list in (42) only allow embedded clauses without V2 (39) and not embedded clauses with V2 (40):

- (39) a. Holmes beviste at Moriarty kun havde stjålet pen gene  
 Holmes proved that Moriarty only had stolen money-the  
 b. Holmes bewies, daß Moriarty nur das Geld gestohlen hatte  
 Holmes proved that Moriarty only the money stolen had
- (40) a. ??Holmes beviste at disse penge havde Moriarty stjålet  
 b. \*Holmes bewies, dieses Geld hatte Moriarty gestohlen  
 Holmes proved (that) this money had Moriarty stolen

## (41) Verbs which allow sentential complements with and without V2

Ge. andeuten, angeben, antworten, behaupten, berichten, betonen,  
 Da. antyde, angive, svare, påstå, berette, betone,  
 hint, indicate, answer, claim, report, emphasize,  
 entscheiden, erfahren, sich erinnern, feststellen, finden, glauben,

beslutte, erfare, huske, slå fast, synes, tro,  
 decide, learn, remember, ascertain think, think,

hoffen, meinen, sagen, sehen, spüren, vermuten, wissen.  
 håbe, mene, sige, se, føle, formode, vide.  
 hope, mean, say, see, feel, assume, know.

(42) *Verbs which allow sentential complements, but only without V2*

Ge. bedauern, bestätigen, bereuen, beweisen, bezweifeln,

Da. beklage, bekræfte, fortryde, bevise, tvivle på,  
 be sorry, confirm, regret, prove, doubt,

darum bitten, daran denken, erklären, erlauben, geheim halten,  
 bede om, tænke på, forklare, tillade, holde hemmeligt,  
 ask for, think of, explain, permit, keep secret,

gern haben, hassen, übersehen, überzeugen, vergeben,  
 være glad for, hade, overse, overbevise om, tilgive,  
 be happy, hate, overlook, convince, forgive,

verlangen, verschweigen, zeigen, zugeben.  
 forlange, fortie, vise, indrømme.  
 demand, conceal, show, admit.

The point of this subsection is that in Icelandic, topicalization takes place in clauses embedded under any verb which allows a sentential complement, including the verbs in (42) above. Consider as examples *doubt* and *regret*, as given for Icelandic by Rögnvaldsson & Thráinsson (1990:23, (32)):

(43) a. Jón efast um að á morgun fari María snemma á fætur  
 (Icelandic)

b. \*Jón ivast í um í morgin fer Maria tíðliga á fætur (Faroese)

c. \*Johan tvivler på at i morgen står Maria tidligt op (Danish)

d. John tsveyfelt az morgen vet Miriam fri oyfshteyn (Yiddish)

e. \*Johann bezweifelt, morgen wird Maria früh aufstehen  
 (German)

John doubts (that) tomorrow will Mary get up early

(44) a. Jón harmar að þessa bók skuli ég hafa lesið

b. \*Jón er keddur av at hesa bók havi eg lisið

c. \*Johan beklager at denne bog har jeg læst

d. John bedoyert az das bukh hob ikh geleyent

e. \*Johann bedauert, dieses Buch habe ich gelesen

John regrets (that) this book have I read

Summing up, embedded V2 exists in Danish, Faroese and German as well as in Icelandic and Yiddish. There are nevertheless considerable differences. In Danish, Faroese, and German, embedded V2 only occurs with certain main clause verbs, i.e. only a subset of those taking sentential complements. In Icelandic and Yiddish, embedded V2 does not appear to be selected by the main clause verb, as it may occur with all verbs that take sentential complements.

### 3.2.3 Three alternative analyses of general embedded V2

So far, I have been assuming that V2 always arises through the finite verb moving to C, and that embedded V2 in Icelandic and Danish therefore needs two CPs: the complementizer is in the higher C, and the finite verb is in the lower C. I shall continue to defend this analysis, through comparing it with alternative ones.

It has been suggested that V2 may arise in embedded clauses through movement of non-subjects to Spec of IP rather than to Spec of CP, by Diesing (1988, 1990) and Santorini (1988a,b, 1989, 1992b) for Yiddish, by Rögnvaldsson & Thráinsson (1990) for Icelandic, and by Reinholtz (1989) for Danish. In other words, what I have been assuming to take place at the CP-level (V2: the finite verb in C, the preverbal XP in Spec of CP) is analyzed as taking place at the IP-level (V2: the finite verb in I, the preverbal XP in Spec of IP).

A third possible analysis is that there is a projection level, ZP, between CP and IP (V2: the finite verb in Z, the preverbal XP in Spec of ZP). The advantage of this approach, (46), is that recursion of CP is avoided and Spec of IP is retained as reserved for the subject (i.e. as an A-position).

These three alternative analyses can be illustrated as follows:

(45) The CP-recursion analysis

	C°	CP-spec	C°	IP-spec
a. ... -that -	subject -	finite verb -		-adverbial
b. ... -that -	topic -	finite verb -	subject	-adverbial

(e.g. Holmberg (1986:110) and Vikner (1991))

## (46) The ZP analysis

- |                                  |               |         |            |
|----------------------------------|---------------|---------|------------|
| C°                               | ZP-spec       | Z°      | IP-spec    |
| a. ... - <i>that</i> - subject - | finite verb - |         | -adverbial |
| b. ... - <i>that</i> - topic -   | finite verb - | subject | -adverbial |
- (Roberts (1991)/Cardinaletti & Roberts (1991): Z° = Agr1°; Tsimplici (1990): Z° = F°)

## (47) The topicalization to Spec of IP analysis

- |                                  |               |         |                 |
|----------------------------------|---------------|---------|-----------------|
| C°                               | IP-spec       | I°      | TP-spec/VP-spec |
| a. ... - <i>that</i> - subject - | finite verb - |         | -adverbial      |
| b. ... - <i>that</i> - topic -   | finite verb - | subject | -adverbial      |
- Diesing (1988, 1990), Santorini (1988a,b, 1989, 1991), Reinholtz (1989), and Rögnvaldsson & Thráinsson (1990))

The various versions of the topicalization to Spec of IP analysis differ with respect to the status of Spec of IP. Whereas Santorini (1988a,b, 1989) and Reinholtz (1989) assume that Spec of IP always is the topic position, i.e. always is an A' position, Diesing (1988, 1990) takes Spec of IP to be an A-position when filled by the subject and an A'-position when filled by a non-subject. Rögnvaldsson & Thráinsson (1990) do not actually commit themselves as to the A- or A'-status of Spec of IP. Below I will very often treat these different approaches as one, as they all crucially differ from the approach I am defending in allowing Spec of IP to be the landing site for topicalization, and in taking I to be the position of the finite verb in a V2 structure. However, the general arguments against this approach may not always apply to Santorini (1988a,b, 1989) and Reinholtz (1989), as in some respects their analysis may be considered a notational variant of the CP-recursion one: it could be argued that what I call the lower CP has merely been re-labelled IP, and my IP is re-labelled TP.

At least in theory, all three analyses in (45)-(47) are compatible with a CP-analysis of V2 in main clauses, though the advocates of (47) all assume that main clause V2 in Yiddish and Icelandic have the same analysis as embedded V2, i.e. that in both main and embedded clauses topicalization is a movement to Spec of IP (Diesing (1988:127), Santorini (1988b:167), Rögnvaldsson & Thráinsson (1990:10, (10))).

At this point one could either reject the topicalization to Spec of CP analysis for all the V2 languages (and keep the parallelism between all the languages intact) or say that there is a difference with respect to main clauses between Icelandic (and Yiddish) and the other V2 languages similar to the one seen above for embedded clauses.

As for the former, it would mean rejecting the argumentation in section 3.1 above, and also losing the explanation for the main/em-

bedded asymmetry in the V2 languages (apart from Icelandic (and Yiddish)). Presumably for these reasons, none of the analyses of Icelandic (and Yiddish) cited above entertain this possibility.

If, on the other hand, main clause V2 is topicalization to Spec of IP in Icelandic (and Yiddish) but to Spec of CP in the other V2 languages, the question is whether such a difference is motivated, given that there would seem to be no structural differences between the two groups at all with respect to main clauses (as opposed to embedded clauses in the two groups; cf. 3.2.2 above). In other words, although it is true that the topicalization to Spec of IP analysis avoids postulating a difference which is not motivated by the evidence (i.e. between main and embedded clauses in Icelandic (and Yiddish)), as claimed e.g. by Rögnvaldsson & Thráinsson (1990:4), this analysis necessitates postulating another difference which is not motivated by the evidence either, namely one between main clauses in Icelandic (and Yiddish) and main clauses in the other V2 languages.

Although Rögnvaldsson & Thráinsson (1990:9) actually do assume the existence of Spec of CP in main clauses in Icelandic, they claim that it is only filled by left-dislocated elements.

In the following two sections, I will argue that the evidence concerning the relative positions of the subject and the sentential adverbial (3.2.4) and concerning subject-verb agreement (3.2.5) may be used as arguments against the topicalization to Spec of IP analysis.

### 3.2.4 The relative positions of the subject and the sentential adverbial

In this section I will show how the data concerning adverbials which occur to the right of the subject in embedded V2 clauses in Icelandic provide an argument against the claim of the topicalization to Spec of IP analysis that in non-subject-initial V2 clauses the subject is in Spec of VP. The data only argue directly against the subject being in Spec of VP in such clauses and only indirectly against the initial element (i.e. the topic) being in Spec of IP, as this presupposes that there is only one functional head between C and V, namely I.

In Icelandic embedded non-subject-initial V2 clauses, the subject always precedes the sentential adverbial:<sup>8</sup>

- (48) a. Hann veit að kannski las Jón *aldrei* bókina  
 b. \*Hann veit að kannski las *aldrei* Jón bókina  
 He knows that maybe read (Jón) never (Jón) book-the

- c. Hann veit að kannski hefur Jón ekki lesið bókina  
 d. \*Hann veit að kannski hefur ekki Jón lesið bókina  
 He knows that maybe has (Jón) never (Jón) read book-the

Following the logic of the topicalization to Spec of IP analysis (which I am trying to argue against), if the finite verb is in I (and there is no IP-recursion), then the subject must either be in Spec of VP or in the specifier of some intermediate projection, e.g. Spec of TP. As Rögnvaldsson & Thráinsson (1990) (and also Diesing (1988, 1990)) explicitly take the subject to be in Spec of VP in topicalizations, I will mainly argue against this, and only by extension also against the Spec of TP possibility.

The first argument is an argument against either of the two possibilities in that the adverbial between the subject and the participle, the negative sentence adverb *aldrei* 'never' in (48a) or the negation *ekki* 'not' in (48c), like other sentential adverbials, should only occur adjoined to, or in the specifier position of, an XP relatively high in the tree for reasons of scope. Furthermore, the fact that both induce negative islands points towards their position in Spec of TP.

- (49) a. *Hversu margar bækur* hefur Jón lesið t?  
 How many books has Jón read?  
 b. *Hversu margar bækur* hefur Jón ekki lesið t?  
 How many books has Jón not read?  
 (50) a. *Hvað* hefur Jón lesið [t margar bækur]?  
 What has Jón read many books ?  
 (=How many books has Jón read?)  
 b. \**Hvað* hefur Jón ekki lesið [t margar bækur]?  
 What has Jón not read many books ?

Asking for the number of books that Jón has read can take two forms, either *How many books* .... (49a) or *What .... many books* ... (50a).<sup>9</sup> If, however, you want to know the number of books that he has not read, only the former strategy works (49b), the latter does not (50b). Following Rizzi (1990b:15-22), this may be accounted for by assuming the negation to be in Spec of TP, blocking the A' movement of non-arguments across it (i.e. of elements which do not have a referential index): the whole object can be moved to Spec of CP (49b) but just a part of the object cannot (50b), as it does not have a referential index and the negation blocks antecedent government of the trace, leaving the trace without any link to its antecedent.

If the negation in (48a,c) is in Spec of TP, then the subject, which is to

the left of the negation, can neither be in Spec of VP nor in Spec of TP.

The second argument only goes against the subject occurring in Spec of VP. The adverbial *örugglega* 'surely,' like its English counterpart, has two different interpretations, which depend on its position in the sentence:

- (51) a. Vilhjálmur mun *örugglega* hitta eplið  
 b. Vilhjálmur mun hitta eplið *örugglega*  
 Vilhjálmur will (surely) hit apple-the (surely)

In (51a) *örugglega* is a sentence-adverbial, with the meaning 'definitely/certainly/absolutely.' In (51b) *örugglega* is a VP-adverbial, with the meaning 'in a sure manner.' Let us now consider what happens in embedded clauses:

- (52) Ég held að í gær hafi ...  
 I believe that yesterday has ...  
 a. ??... *örugglega* Vilhjálmur hitt eplið  
 b. ... Vilhjálmur *örugglega* hitt eplið  
 c. ... Vilhjálmur hitt eplið *örugglega*  
 ... (surely) Vilhjálmur (surely) hit apple-the (surely)

The subject cannot occur to the right of the adverbial (52a) parallel to (48b) and (48d) (insofar as (52a) is interpretable, the adverbial would not be a sentence adverbial, but only modify *Vilhjálmur*, 'at least Vilhjálmur' or 'certainly Vilhjálmur,' as opposed to anybody else). If the subject is in Spec of VP, as claimed by Rögnvaldsson & Thráinsson (1990), the adverbial in (52b), which only has the sentence-adverbial interpretation, is adjoined to V'. The adverbial in (52c), which only has the VP-adverbial interpretation, can either be adjoined to V' or to some larger constituent, e.g. VP or TP. If the adverbial in (52c) is adjoined to V', then the adverbials in (52b) and (52c) are adjoined to the same constituent, i.e. have the same scope, and we would expect them to have the identical interpretations or scope properties. If the adverbial in (52c) is adjoined to VP or higher, we would expect it to have wider scope than the one in (52b), contrary to fact.

If, on the other hand, the subject is in Spec of IP, then the adverbial in (52b) can be adjoined to TP, and the one in (52c) to VP. If we assume that the negation is in Spec of TP, following the argumentation concerning (49)-(50), then the following data support the analysis that when *örugglega* occurs right of the subject and left of the participle, it is adjoined to TP:

- (53) Ég held að á morgun muni Vilhjálmur ...  
 I believe that tomorrow will Vilhjálmur ...  
 a. ... örugglega ekki hitta eplið  
 b. \*... ekki örugglega hitta eplið  
 ... (surely) not (surely) hit apple-the

Another argument of a closely related nature concerns the scope interactions between adverbials and quantified objects:

- (54) Helgi sagði ...  
 Helgi said ...  
 a. ... að þess vegna hafði Jón oft lesið margar bækur  
 b. ... að þess vegna hafði Jón lesið margar bækur oft  
 ... that therefore has Jón (often) read many books (often)

The interpretations of (54a,b) differ in exactly the same way as those of their English counterparts: (54a) means that Jón often reads many books (for some particular reason), whereas (54b) means that there are many books which (for some particular reason) Jón often reads. This again clearly shows that when the adverbial occurs between the subject and the participle it has higher scope than when it occurs sentence-finally. As the sentence-final adverbial in (54b) cannot possibly have a position in the tree lower than adjoined to V' (as it is preceded by the object), the adverbial in (54a) must occur in a higher position, which means that it in turn cannot be lower than in Spec of VP or adjoined to VP. Both of these in turn exclude the subject being in Spec of VP in (54a).

The fourth argument is a conceptual argument against the subject being in Spec of VP, based on X' theory. If the subject is in Spec of VP in (48a,c), then the fact that the adverbial would have to occur between Spec of VP and the complement of V implies a particular D-structure representation. This structure (before the verb leaves VP) would have to be the following, as is in fact explicitly assumed by Rögnvaldsson & Thráinsson (1990:10, (10), (11)):

- (55) [<sub>VP</sub> Subject [<sub>V'</sub> Adverbial [<sub>V'</sub> V Complement]]]

I take a structure like (55) to be explicitly ruled out in the X'-system of Chomsky (1986b), as adjunction to an X' is impossible. This point is also made for Danish in Reinholtz (1989:107).

A closely related argument may be made on the basis of data concerning object shift in Icelandic (cf. Holmberg (1986:218) and Vikner (1989)):

- (56) Hann veit ...  
 He knows ...  
 a. ... að þess vegna las<sub>v</sub> Jón bókina<sub>i</sub> ekki t<sub>v</sub> t<sub>i</sub>  
 b. \*... að þess vegna las<sub>v</sub> bókina<sub>i</sub> Jón ekki t<sub>v</sub> t<sub>i</sub>  
 ... that therefore read (book-the) Jón (book-the) not

We know from the fact that *bókina* precedes the negation that it has left its base position (which is to the right of the verb trace which again is to the right of the negation). The question is now what position the object has moved to in (56a). If the subject, *Jón*, were in Spec of VP, then *bókina* must have adjoined to V', something I also take to be excluded by X'-theory. If on the other hand *Jón* is in Spec of IP, then it is possible that *bókina* has adjoined to VP, which is perfectly compatible with X'-theory.

So far we have seen five reasons why the subject in (48a,c) cannot be in Spec of VP, only one of which also argues against it being in Spec of TP. There is another argument to be made against the subject being in Spec of TP, and that is that Spec of TP is an A' position. This assumption is made by Roberts (1993:22), and it is supported by the relativized minimality analysis of negative islands (cf. (49)-(50) above) and of the so-called "pseudo-opacity" phenomena (cf. Rizzi (1990b: 12-15), which is based on Obenauer (1976, 1984)).

Summing up, if the subject in (48a,c) can neither occur in Spec of TP nor in Spec of VP, as has been argued above, then it is not possible to analyze these well-formed examples as having the finite verb in I.

If, however, the finite verb is in C, then a third possibility for the position of the subject in (48a,c) may be taken into consideration: the subject could be in Spec of IP. This analysis suffers from none of the defaults discussed above, and as the subject being in Spec of IP excludes Spec of IP as the landing site of topicalization, I shall take this to be an argument against the topicalization to Spec of IP analysis.

### 3.2.5 Subject-verb agreement

In Icelandic, the finite verb agrees in number and person with the subject. This is a realization of Spec-X agreement inside IP (or inside AGRP, if IP is split into AGRP and TP). If topicalization was to Spec of IP (or to Spec of AGRP), the finite verb should agree with the topic.

Below are two paradigms showing that the finite verb in Icelandic always agrees with the subject, and never with the topicalized element.

In (57) the topicalized element is the object, which is singular in all cases. It is clear from the grammaticality of (57a) and the ungrammaticality of (57b) that agreement is with the subject, not with the topic:

- (57) a. ... að bókina hafa börnin lesið í gær  
           ... that book-the have children-the read yesterday  
       b. \*... að bókina hefur bömin lesið í gær  
           ... that book-the has children-the read yesterday  
       c. \*... að bókina hafa strákurinn lesið í gær  
           ... that book-the have boy-the read yesterday  
       d. ... að bókina hefur strákurinn lesið í gær  
           ... that book-the has boy-the read yesterday

In (58) the topicalized element is the time adverbial *yesterday*. It is clear from the way the number of the verb must vary with the number of the subject that agreement is with the subject:

- (58) a. ... að í gær hafa börnin lesið bókina  
           ... that yesterday have children-the read book-the  
       b. \*... að í gær hefur bömin lesið bókina  
           ... that yesterday has children-the read book-the  
       c. \*...að í gær hafa strákurinn lesið bókina  
           ... that yesterday have boy-the read book-the  
       d. ... að í gær hefur strákurinn lesið bókina  
           ... that yesterday has boy-the read book-the

In the following diagram, I have pointed out which position the elements in (57a,b) are claimed to occupy, both according to the CP-recursion analysis and according to the topicalization to Spec of IP analysis:

- |                    |          |       |              |                |
|--------------------|----------|-------|--------------|----------------|
| (59) CP-recursion: | CP-Spec  | C°    | IP-Spec      | ...            |
| Top. to IP-spec:   | IP-Spec  | I°    | VP-Spec      | ...            |
| a. ... að          | bókina   | hafa  | börnin       | lesið í gær    |
| ... that           | the book | have  | the children | read yesterday |
| b. *... að         | bókina   | hefur | bömin        | lesið í gær    |
| ... that           | the book | has   | the children | read yesterday |

In the CP-recursion analysis, the subject-verb agreement is a realization of Spec-X agreement inside IP: the subject in Spec of IP agrees with the verbal inflection generated in I. That the verbal inflection then has to move to C along with the verb stem does not alter this.

In the topicalization to Spec of IP analysis, the subject-verb agreement seems to be more difficult to account for. If the subject is in Spec

of VP, we would expect that the only head which could show agreement with the subject would be the verb stem, which is generated in V. This may not be a problem, as the verb stem does not show any agreement at all, and so the idea of agreement between subject and verb stem cannot be empirically rejected. However, if the object is in Spec of IP, we would expect the verbal inflection, which (I assume) is generated in I, to show agreement with the object and not the subject. This is clearly not the case, as it would predict that (59a) was ungrammatical and that (59b) was grammatical, which is exactly the wrong prediction. The only way for the topicalization to Spec of IP analysis to avoid this problem would seem to be to give up the idea that morphological agreement is a manifestation of a head-specifier relationship, something which can be retained in the CP-recursion analysis.<sup>10</sup>

Summing up, if we want to retain the idea that agreement between the subject and the finite verb is a manifestation of Spec-X agreement, and if we want to keep either the structure [<sub>IP</sub> VP] or the structure [AGRP TP], the subject will have to be in Spec of IP (or AGRP) or at least to have passed through it.

A potential problem for this analysis is that Icelandic has agreement between finite verbs and nominative objects, which might be taken to show that trying to analyze agreement with the finite verb as Spec-X agreement inside IP is a lost cause. This, however, presupposes that the two kinds of agreement, finite verb and nominative subject and finite verb and nominative object, are the same kind of process. I will argue that this is not the case, as agreement with nominative objects never takes place outside the third person, and also, at least in many cases, seems to be optional, two properties neither of which ever hold for agreement with nominative subjects:

- (60) a. Mér þykir their skemmtilegir  
       b. Mér þykja their skemmtilegir  
           Me(D) think(3sg/3pl) they(N) amusing (N.pl.M.)
- (61) a. þér þykir við skemmtilegir  
       b. \*þér þykjum við skemmtilegir  
       c. ??þér þykja við skemmtilegir  
           You(D.sg) think(3sg/1pl/3pl) we(N) amusing (N.pl.M.)
- (62) a. Mér þykir þið skemmtilegir  
       b. \*Mér þykio þið skemmtilegir  
       c. ??Mér þykja þið skemmtilegir  
           Me(D) think(3sg/2pl/3pl) you(N.pl) amusing (N.pl.M.)





5. Lightfoot (1993, fn5) argues that negation in Swedish (and by extension also in Danish and Norwegian) must be adjoined to I, because he assumes that the verb in embedded clauses in Swedish has to be in I, as Swedish is a V2 language. His underlying assumption is thus that only languages which have independent or obligatory V-to-I movement can have V2 (V-to-I-to-C movement).

- (i) Sw. ... om Jan *inte* köpte boken  
... if Jan not bought book-the

(from Holmberg & Platzack (1991, (7c)))

However, if *inte* in (i) is adjoined to I, it (and other negations or adverbials that may appear in the same position) must be an X category. That this is not so can be seen from the fact that *inte* can be exchanged with full adverbial XPs such as *without doubt*, *in spite of everything*, *in no way*, *in this way*, *off and on*, *honestly spoken*, etc. Furthermore, if *inte* and other adverbials could adjoin to I, we would not be able to account for why the negation or adverbial could not move along to C when the finite verb moves there, i.e. in any main clause. I therefore maintain the view that the negation or adverbial is adjoined to VP and I consequently find Danish, Norwegian, and Swedish to be counterexamples to Lightfoot's assumption that only languages which have independent V-to-I movement can have V2.

6. A similarity between 16th-17th century Danish and 20th century Faroese is that examples with V-to-I movement are found alongside examples without V-to-I movement. Parallel to the fact that V-to-I movement structures may be found in most Faroese newspapers every day is the fact that Danish structures like the following were attested as late as the 19th century, albeit in the written down version of a folk tale:

- (i) Prindsessen havde faaet Vulle saa kjær,  
Princess-the had got Vulle so fond  
(=The princess had fallen so much in love with Vulle ...)  
at hun *vilde ikke* have Kongen  
that she would not have king-the

(19th century, from Skautrup (1953:233))

7. (33b) and (34b) are both possible as questions. (34b) is furthermore also possible as a "V1 declarative," a construction particularly frequent in narrative contexts (cf. e.g. Sigurðsson (1990a)).
8. It should be emphasized that what I say below does not hold for indefinite subjects in constructions with *það*. As indefinite subjects in *það*-constructions (as opposed to all other subjects) may indeed follow the adverbial, they must be able to occur in Spec of VP:
- (i) *það* mundu *kannski einhver* jir bátar hafa verið keyptir  
There would (3pl) perhaps some boats(nom) have been bought  
(from Sigurðsson (1991:350, (47a)))
9. This is thus a parallel to the so-called *was...* *für*-split in other Germanic languages, cf. e.g. den Besten (1984:34-39), Corver (1990), Vikner (1991:36-37).
10. Raffaella Zanuttini (p.c.) points out that if this argument is translated into a

framework with AGRP and TP, it becomes crucial that AGR selects TP, as is the case in the analyses suggested by Belletti (1990) or by Chomsky (1991). If T would select AGRP (as is suggested by Pollock (1989)), the subject could be in Spec of AGRP, and topicalization could be to Spec of TP, and recursion of CP would not be called for.

## 7 Comments on the paper by Vikner

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Höskuldur Thráinsson

### 1 Introduction

In these comments I will suggest different ways of looking at some of the phenomena Vikner discusses, defending certain proposals of Rögnvaldsson & Thráinsson (1990, henceforth R&T) in the process.<sup>1</sup> In section 2 I list the most important assumptions and claims made in Vikner's paper. In section 3 I describe a different set of theoretical assumptions that I take to be more compatible with the spirit of the analysis advocated in R&T and explain why I think they make at least as good or better sense than those made by Vikner. Finally, section 4 contains the concluding remarks.

### 2 Vikner's basic assumptions, claims and arguments

The list in (1) summarizes the most important assumptions and claims made by Vikner in the present paper (see also Vikner 1991):

- (1) a. There is a relationship between rich agreement morphology of verbs and overt (or "independent") V-to-I movement.
- b. There is some feature in C that the finite verb can pick up by moving there.
- c. Spec of IP is the position where subjects are assigned (nominative) case. It is an A-position reserved for subjects.
- d. The finite verb always moves overtly to C in main clauses in Germanic V2 languages.<sup>2</sup>
- e. The finite verb always moves overtly to C in embedded V2 clauses in Germanic languages.
- f. Topicalization is always movement to Spec of CP (in the Germanic V2 languages), also when it is found in embedded clauses.

- g. The subject always moves to Spec of CP in main clauses in Germanic V2 languages unless an XP is topicalized. The same is true for those embedded clauses where the verb moves to C but no XP is topicalized (embedded V2 clauses).
- h. Overt expletives (expletive subjects) in Icelandic (German and Yiddish) occur in Spec of CP.
- i. While Spec of VP may be the (universal) D-position of subject, there is empirical evidence suggesting that the subject is never found in Spec of VP.
- j. Adjunction of (sentential) adverbs to V' would be suspicious for X'-theoretical reasons.
- k. There are empirical problems with the assumption that (sentential) adverbs adjoin to V'.

I have no particular problems with assumption (1a), as discussed in 3.1. Vikner does not directly discuss (1b) in the present paper but he does so in his dissertation (1991, section 2.2). We will discuss it in connection with topicalization in section 3.3. As regards assumptions in (1c-h), I do not think that they are correct for Icelandic (nor Yiddish). Most of the comments that follow concentrate on these assumptions (see sections 3.2-4). The claims in (1i-k) pertain to arguments by Vikner against the analysis in R&T. While I do not accept all these arguments, I believe that some of them are well founded (cf. section 3.5).

### 3 Assumptions and claims

#### 3.1 Verbal morphology and V-to-I

Vikner argues (following e.g. Holmberg & Platzack 1991; Roberts 1993; cf. also Barnes 1987, 1989) that whether a language has overt V-to-I movement in the syntax depends on the "richness" of its verbal morphology (or verbal agreement morphology). This is a popular claim but it is rarely defined what is meant by "rich morphology" in this connection. Counting surface morphophonemic distinctions is a tricky business and in the case of Icelandic and Faroese the number of finite forms different from the infinitive will to some extent depend on the inflectional class selected (cf. Einarsson 1945:90 ff.; Lockwood 1955:76ff.). It is clear, however, that Icelandic has subject-verb agreement, Danish does not and there are some signs that modern spoken Faroese may be losing it. This is the reason, Vikner claims, that Icelandic has overt V-to-I, Danish does not, and (spoken) Faroese has (recently) lost it. This seems supported by the facts Vikner presents.

Vikner then makes the standard assumption that the inflectional affixes of the verb are "present" under the relevant functional heads in the syntactic structure and will be "lowered" onto a finite verb that does not move. But one could also assume (with Chomsky 1992, Chomsky & Lasnik 1991, and others) that verbs (and other inflectable words) emerge from the lexicon in a fully inflected form. Thus lowering of I-to-V in the syntax (in languages without the V-to-I raising) is eliminable. The inflected items are marked for the relevant inflectional features which must then be checked in the appropriate place in the structure. The features of a (subject) NP will be checked in a specifier relationship with a functional head. Whether a given feature must be checked in the syntax, as opposed to at LF, will depend on the "strength" of the feature. The strength will vary from language to language, and one hopes that it will be reflected in the overt morphology of the language rather than being a totally abstract parametric phenomenon (cf. the discussion of Scandinavian verbal agreement above). If the agreement features in the verbal inflection are "strong" they will have to be checked overtly in the syntax, otherwise they will only be checked at LF, following the economy principle of procrastination ("move as late as possible"; cf. Chomsky 1992: section 4). It is in the spirit of this approach to take morphology seriously and ask questions about possible syntactic consequences.

Further, if one assumes the "split INFL" analysis (cf. Pollock 1989), the possibility is open that some languages will have overt movement of the verb to T (V-to-T) but non-overt movement of the verb to the higher inflectional head (V-to-AGR, Vikner's V-to-I), depending on the strength of the relevant features.<sup>3</sup> Thus Næss (1991) suggests that Mainland Scandinavian (MSc) has only overt V-to-T movement and not V-to-AGR. This would correlate with the morphological fact that the MSc languages do indeed have clear tense distinctions although they do not have verb agreement.

#### 3.2 Subject position and the A/A' distinction

Before going further, it is necessary to discuss the concept of "normal subject position" and the A/A' distinction.

Vikner (section 3.2.3) observes that Santorini (1989) and Reinholtz (1989) assume that Spec of IP is always an A'-position, and hence freely available for topicalized constituents in languages like Yiddish and Danish, whereas Diesing (1988, 1990) suggests that it is an A-position (in Yiddish) when occupied by the subject but an A'-position

when non-subjects have been moved there. R&T also assumed that this position could either be occupied by subjects or non-subjects in Icelandic but were non-committal about its A/A'-bar status. Vikner then argues that it is surely "more elegant to assume Spec of IP to have one and the same status universally (i.e. to be an A-position)." This is not so obvious.

First, recall that while the meaning of the concept A- and A'-position seemed reasonably clear in the original framework of Chomsky's *Lectures on Government and Binding* (LGB, Chomsky 1981), the generally accepted idea of VP-internal subjects has changed the whole issue. This is so because in LGB the basic idea was that positions which could be assigned thematic roles were A-positions (cf. Chomsky 1981: section 2.2, *passim*) and other positions were A'-positions. More specifically, it was assumed that Spec of IP was an A-position (the position where subjects were assigned their thematic role) and the complement position of V was one too (the position where objects received their thematic role).<sup>4</sup> The assumption that subjects are generated VP-internally makes it possible to say that verbs only assign thematic roles inside their maximal projection. This radically changes the status of Spec of IP.

The facts that used to be accounted for in terms of the difference in A/A'-status of, say, Spec of IP and Spec of CP will still need to be accounted for, however. Hence linguists have searched for a different definition of the A/A'-concept (cf. e.g. Frampton 1991; O'Neil 1992). Rizzi (1991b) has suggested, for instance, that the A/A'-status of specifier positions may depend on their content and their relationship with the head, thus adopting a somewhat similar line of reasoning to Diesing (1988, 1990).

It also seems a real possibility within Chomsky's minimalist framework (1992) that the A/A'-status of Spec of AGRP may vary from language to language, depending on the content of the specifier position. Recall that in the minimalist framework it is assumed that verbs move to have their inflectional features checked and subjects move to have their case features checked. Chomsky suggests the term L-features for morphological features that have to be checked this way (1992:40). He suggests further that specifier positions of heads with L-features may have special properties, or "the basic properties of A-positions." The morphological features of the inflectional heads, T (Tense) and AGR, are checked by the verb that raises to them and the inflectional heads check inflectional features of the NP (the subject in the case under discussion) "that raises to their specifier position."

Now consider the following scenario: suppose the case of the subject NP can be checked in Spec of TP in the syntax in some languages but not others (depending on the strength of the N-features in T). If the subject has its case checked in Spec of TP, then the verb (raised to T) and the subject would be in a checking relationship in TP and Spec of TP would then be an L-related position, i.e. an A-position in the sense described above. We could then argue that Spec of TP was "the normal subject position" in such a language. This has recently been proposed for Icelandic in Jonas (1992) and for Irish in Bobaljik & Carnie (1992).

Now if checking of the inflectional features of the subject occurs in Spec of TP, then it means that no such checking will take place in Spec of AGRP.<sup>5</sup> This follows from the idea of "Movement as a Last Resort": X can move only if it has to (e.g., is an NP that must have its case checked (or assigned) or a V that must have its Tense checked—cf. Chomsky 1992).<sup>6</sup> That would leave Spec of AGRP "free" for non-subjects (but see section 3.3), which is basically the claim made by R&T and by Kosmeijer (1991) for Icelandic, and for Yiddish most recently by Heycock & Santorini (1992).<sup>7</sup>

### 3.3 V-to-I, V-to-C and topicalization

Recall that Vikner assumes that V-to-I (or V-to-T and V-to-AGR in a Pollockian structure) is in some sense motivated by morphology.<sup>8</sup> But he also wants to explain the fact that in Germanic V2 languages (as opposed to English) no more than one constituent can precede the finite verb. He argues for the "standard" assumption that in all V2 sentences the finite verb has moved to C. Under the X'-system, that means that only one constituent can precede the verb, i.e. Spec of CP (assuming that no adjunction is allowed to CP).<sup>9</sup>

Now it is obviously not enough to simply stipulate that the verb is in C in all V2 sentences. We need some sort of a motivation for why it should move there in the V2 languages. Vikner does not here say much about why V moves to C. However, in Vikner (1991: section 2.2), he gives an excellent overview of proposed explanations for this movement. He concludes that no single explanation offered in the literature is particularly convincing. Some of the explanations relate the verb movement to case assignment requirements, others to the claim that the verb must pick up some features in C if there is no complementizer present. As already discussed, Vikner assumes that subjects are assigned (nominative) case in Spec of IP and in his dissertation

(1992, section 2.2.6) he accepts the common claim that case is assigned to this position under government from C in V2 languages. He suggests, however, that this may be more of a "side effect" of the V-to-C movement than its real reason and accepts the idea that the finite verb probably moves to C to pick up some feature in C. The question is what kind of feature.

While this idea of "picking up a feature" is more in the spirit of the checking framework, it is not entirely simple to formulate (cf. Zwart 1992). We need to account for the alleged complementary distribution of lexical complementizers and fronted finite verbs. What must be said, then, is that there is some feature present in C that needs to be checked in overt syntax and the presence of a complementizer or a (finite) verb suffices to check this feature (and eliminate it). One could then assume that the difference between V2 languages and, say, English lies in the strength of this feature: a strong feature requires some action in overt syntax (the V2 phenomenon), a weak feature will only be checked at LF.<sup>10</sup>

As pointed out in Zwart (1992) and Chomsky (1992:45), wh-movement has to be feature driven in this framework, i.e. there must be special features associated with wh-operators that need to be checked in the proper Spec-Head relationship. Under the standard analysis, the wh-element moves to Spec of CP and the relevant feature is then checked with a head in C. In main clause questions this could be the finite verb:

- (2) a. What have you eaten? /\*What you have eaten?  
 b. Hvad har du spist? /\*Hvad du har spist? (Danish)  
 c. Hvað hefur þú borðað? /\*Hvað þú hefur borðað? (Icelandic)

But in indirect questions one has to assume that an empty complementizer suffices for these checking purposes since the finite verb cannot precede the subject in such sentences (i.e. cannot occur in C), neither in English nor in Germanic V2 languages:

- (3) a. She asked what you had eaten. /\*...what had you eaten  
 b. Hun spurgte hvad du havde spist. /\*...hvad havde du spist. (Danish)  
 c. Hún spurði hvað þú hefðir borðað. / \*...hvað hefðir þú borðað. (Icelandic)

These facts would seem to indicate that there is no difference between English and Germanic V2 languages in terms of the strength of the wh-feature; the checking requirements are the same.<sup>11</sup>

Chomsky (1992:45) suggests in passing that "[T]opicalization and focus could be treated the same way" as wh-movement, by assuming that they are driven by a special feature. This idea is discussed in some detail in Zwart (1992), mainly in the context of Dutch main clause topicalization. He discusses the well-known fact that English has V2 in main clause questions (cf. (2) above) but not in main clause topicalizations (cf. also Rizzi 1990a and others). In this respect English is obviously different from the V2 languages:

- (4) a. \*Mary have I not seen / Mary I have not seen  
 b. Marie har jeg ikke set / \*Marie jeg har ikke set (Danish)  
 c. Mariu hef ég ekki séð / \*Mariu hef ekki séð (Icelandic)

This means that there is obviously some difference between wh-movement and topicalization. Assuming that the verb moves to C to provide the proper head for the topicalization feature to be checked, one must say that it does so covertly in English (= weak topic feature in C) but overtly in Danish and Icelandic (= strong topic feature).

Recall that Vikner (cf. (1g)) assumes that the subject moves to Spec of CP in main clauses when no topicalization takes place. Zwart (1992) argues that this is unmotivated unless the subject is a topic (i.e. has a [+operator] feature). He thus maintains (like Travis (1991:350, passim) for German and Swedish) that non-subject-initial main clauses in Dutch are CPs (with a topicalized constituent in Spec of CP and the finite verb in C) where subject-initial main clauses are IPs (with the subject in Spec of IP and the finite verb in I—or rather Spec of AGRPs with the subject in Spec of AGRP and the verb in AGR).

A similar argument has been made for Icelandic by Ottósson (1989; see also Travis (1991:351, passim)). He discusses contrasts like the following (my examples):<sup>12</sup>

- (5) a. þá höfðu einhverjir stúdentar oft stolið smjörinu  
 then had some students frequently stolen the-butter  
 b. þá höfðu oft einhverjir stúdentar stolið smjörinu  
 then had frequently some students stolen the-butter  
 (6) a. þá höfðu stúdentarnir oft stolið smjörinu  
 then had the-students frequently stolen the-butter  
 b. \*þá höfðu oft stúdentarnir stolið smjörinu  
 then had frequently the-students stolen the-butter

Ottósson is assuming that the preposed adverbial in these sentences is in Spec of CP, as are topicalized XPs in general, and the verb is in C. The fact that (5a,b) are both good indicates, he argues, that indefinite



subjects can either be in Spec of IP (as in (5a)) or stay in Spec of VP (as in (5b)). Which of the two positions they occupy can be seen from their position relative to (VP-adjoined) sentential adverbs like *oft* 'frequently' (but see Jonas & Bobaljik 1993 for a different analysis). But definite subjects for some reason cannot stay in Spec of VP. Hence (6b) is bad.

Now consider a simple declarative sentence like (7):

- (7) Stúdentarnir höfðu oft stolið smjörinu  
the-students had frequently stolen the-butter  
'The students had frequently stolen the butter'

Ottósson argues that in sentences of this sort there is no reason to assume movement of the verb to C nor the subject to Spec of CP. Such movement would be string-vacuous and the language learner would have no evidence for it, he claims.<sup>13</sup> But since he argues that topicalization generally involves movement to Spec of CP, he adopts the CP-recursion analysis of embedded topicalization (1989:95). But if Spec of TP is a checking position for subjects, as assumed here, then Spec of IP (Spec of AGRP) is "free" for non-subjects (unless agreement features must be checked there).

In a checking framework, however, it is not sufficient to say that a particular position is "free" and hence various kinds of constituents can move into it. If all movement is driven by feature checking, we need to make a case for a feature that needs to be checked in an A'-position like Spec of AGRP in Icelandic (and Yiddish). And we need to account for the fact that embedded topicalization applies more freely in Icelandic and Yiddish than in the other Germanic languages. One possibility is to say, like Vikner, that all embedded topicalization requires CP-recursion. Icelandic and Yiddish then differ from the other Germanic languages in that they have generalized CP-recursion while it is restricted to complements of "bridge" verbs in the other Germanic languages.<sup>14</sup> Another possibility is to say that Icelandic and Yiddish differ from the other Germanic languages in allowing the case (and agreement?) of the subject to be checked in Spec of TP (as opposed to Spec of AGRP). Hence Spec of AGRP is not the "normal subject position" in Icelandic and Yiddish but has a somewhat similar function to Spec of CP in the other Germanic languages. In particular, it can be the site of the feature checking involved in topicalization.

Now it might be argued that these analyses come close to being notational variants of each other. One problem they both face is the fact that although topicalization is more general in embedded clauses

in Icelandic than in Danish (but see note 14), it is not completely general, as Magnússon (1990) has shown:

- (8) a. ?Ég spurði Grím hvort í þessum bíl hefðu þeir fundið hass  
I asked Grímur whether in this car had they found pot  
b. Ég spurði Grím hvort í þessum bíl hefði fundist hass  
I asked Grímur whether in this car had been-found pot  
(9) a. ?Ég spurði Grím hvað í þessum kassa hefði verið  
I asked Grímur what in this box had been  
b. Enginn veit hvað um þá hefur orðið  
nobody knows what about them has become  
'Nobody knows what has become of them'  
(10) a. \*Ég spurði Grím hvað í þessum kassa hefði hann geymt  
I asked Grímur what in this box had he stored  
b. \*Ég spurði Maríu hverjum þessa bók hefði hún gefið  
I asked Mary whom this book had she given

In (8) we have indirect questions introduced by the wh-complementizer 'whether', which arguably does not involve any movement. (8a) is less than perfect, (8b) is fine. Now (8b) contains a "subject gap" (it has a sentence-final subject) and it is sometimes argued that fronting in all such clauses is a case of stylistic fronting rather than topicalization (cf. Maling 1990). But if stylistic fronting involves head movement as argued by Jónsson (1991a) and Poole (1992), then (8b) cannot be stylistic fronting since it clearly involves fronting of a whole PP.

Similarly, while (9a) is not perfect, (9b) is. Since both involve wh-movement of the subject they also contain a "subject gap." But the fronted constituent is again a PP rather than a head, so the fronting processes would be analyzed as topicalizations under some analyses at least. In contrast, when an object is fronted by wh-movement, all attempts to topicalize another constituent seem to result in bad sentences (cf. (10)). Thus we see that something more needs to be said about embedded topicalization under any analysis (see also Hoekstra & Mulder 1990).

### 3.4 Expletive subjects

As pointed out in (1h) in section 2, Vikner assumes that the expletive *það* in Icelandic occurs in Spec of CP. The basic generalization about the Icelandic expletive element is that it can never follow the finite verb (cf. also (34) in Vikner's paper):

- (11) a. það höfðu einhverjir stúdentar stolið smjöri  
there had some students stolen butter  
b. Höfðu (\*það) einhverjir stúdentar stolið smjöri?  
had (\*there) some students stolen butter  
c. Smjörinu höfðu (\*það) einhverjir stúdentar stolið  
the-butter had (\*there) some students stolen  
d. Af hverju höfðu (\*það) einhverjir stúdentar stolið smjörinu?  
for what had (\*there) some students stolen the-butter  
'Why had some students stolen the butter?'

Vikner suggests that the generalization here is that *það* (as well as its German and Yiddish counterpart *es*) can only occur in Spec of CP. In (11b-d) the verb is arguably in C, with Spec of CP perhaps filled by an empty *wh*-operator in (11b), by the topicalized element in (11c) and by the fronted *wh*-phrase in (11d). While this is certainly suggestive, it is argued by R&T, Ottósson (1989) and Kosmeijer (1991) that *það* generally occupies the Spec of IP position. R&T base their argument on the fact that *það* occurs quite generally in embedded clauses, more generally in fact than topicalized elements, as shown by Magnússon (1990). Similar arguments are presented by Ottósson. Kosmeijer (1991), on the other hand, argues that *það* never occurs in Spec of CP and can only occur in Spec of IP when it is not a case position. When the finite verb moves to C, as it does when an operator is in Spec of CP, Spec of IP becomes a case position and *það* is ruled out.

While Kosmeijer's analysis is not directly translatable into the checking framework assumed here, its basic insight can easily be expressed in such a framework along the following lines: *það* is an invariant dummy and does not have any case features of its own. It can occur in Spec of IP (Spec of AGRP) in Icelandic, which is not a case checking position, but it cannot occur in Spec of TP, which is the case checking position for subjects. Since *það* does not have any case features to check, it does not have to move to (or be inserted into) a case checking position and hence it cannot. In addition, the expletive *það* in Spec of TP would prevent the "real" subject from moving there to have its case checked.<sup>15</sup>

### 3.5 Some claims I agree with

In this subsection I will consider some claims that I agree with, although I do not accept all of Vikner's arguments for them:

- (1) i. While Spec of VP may be the (universal) D-position of subjects, there is empirical evidence suggesting that the subject is never found in Spec of VP.  
j. Adjunction of (sentential) adverbs to V' would be suspicious for X'-theoretical reasons.  
k. There are empirical problems with the assumption that (sentential) adverbs adjoin to V'.

First, the argument in section 3.2.4 concerning negative islands (his examples (49)-(50)) aims to show that negative adverbs are located in Spec of TP, which would then be an A' position (cf. Rizzi 1990b). But there are other possibilities. Thus Frampton (1991:20) points out that one could also get the desired effect by assuming that negation heads a NegP and that Spec of NegP is an A'-position containing an empty operator. In any case, one must reject Vikner's analysis of these phenomena in the checking framework.

In contrast, the discussion of adverbial scope seems well founded. It argues against the proposal made by R&T that subjects that follow the finite verb are in Spec of VP. But here we have not been assuming that subjects following the finite verb necessarily stay in Spec of VP. Rather, subjects typically move to Spec of TP in the syntax to get their case checked (but see note 12).

The agreement argument in 3.2.5 against the claim of R&T that topicalization could be movement to Spec of IP (or Spec of AGRP) has no force, as far as I can see. Since Vikner would have to assume that quirky subjects in Icelandic occur in "normal subject position" like nominative subjects, i.e. in Spec of IP in his analysis, it is clear that an NP in Spec of IP (or Spec of AGRP) cannot automatically trigger verb agreement in anybody's theory. Agreement is only with nominative NPs and they do not have to show up in Spec of IP (Spec of AGRP) nor even in Spec of TP:

- (12) a. Strákana hafði/\*höfðu vantað peninga  
the-boys (A) had (3sg/\*pl) needed money (A)  
b. Í gær höfðu/\*hafði nokkrir stúdentar komið í tímann  
yesterday had (3pl/\*sg) some students come in class  
c. Í gær höfðu/\*hafði komið nokkrir stúdentar í tímann  
yesterday had (3pl/\*sg) come some students (N) in class

(12a) is an example of a non-nominative subject and Vikner would have to assume that it occurs in Spec of IP (or at least passes through that position). Yet it does not trigger agreement. Conversely, the nomi-

native subject in (12b,c) triggers agreement whether or not it immediately follows the finite verb (is in Spec of IP in Vikner's analysis) or follows the main (unaccusative) verb. Whatever the proper analysis of unaccusative verbs like *koma* 'come' may be, the examples in (12) show that we cannot simply say that the finite verb agrees with any NP that shows up in (or passes through) Spec of IP (or Spec of AGRP) in the syntax (cf. also note 12). It can only agree with nominative NPs. Hence there is no reason to expect the finite verb to agree with non-nominative topics, even if they ended up in Spec of IP (or Spec of AGRP).

#### 4 Concluding remarks

I hope the different approaches illustrated in Vikner's paper and my comments complement each other and shed some new light on the issues. The differences between the two approaches can easily be seen below where I have repeated those of Vikner's basic assumptions that I do not agree with and changed them accordingly:

- (1) c. Spec of IP is NOT the position where subjects are assigned (nominative) case. It is not an A-position reserved for subjects.
- d. The finite verb does NOT always move overtly to C in main clauses in Germanic V2 languages.
- e. The finite verb does NOT always move overtly to C in embedded V2 clauses in Germanic languages.
- f. Topicalization is NOT always movement to Spec of CP (in the Germanic V2 languages). It may be movement to Spec of IP (or AGRP).<sup>16</sup>
- g. The subject does NOT always move to Spec of CP in main clauses and embedded V2 clauses in Germanic V2 languages when no XP is topicalized. It may move to Spec of IP (Spec of AGRP).
- h. Overt expletives (expletive subjects) in Icelandic (and Yiddish) do not occur in Spec of CP. They occur in Spec of IP (Spec of AGRP).

#### Notes

1. Some of this material was presented at the University of Oslo and I would like to thank the audience there for helpful comments. I am also indebted to Halldór Ármann Sigurðsson, Jóhannes Gísli Jónsson, Kjartan G. Ottósson, Anders Holmberg, Christer Platzack, Alma Næss, Beatrice Santorini, Anthony Kroch, Sabine Iatridou, and Jan Wouter Zwart for sending me relevant unpublished work. Special thanks to Sam Epstein, Dianne Jonas, and David Light-

foot for very helpful comments on earlier versions of this paper, and to Sten Vikner for corrections, suggestions and cooperation. It is difficult to imagine someone who would have been more pleasant to work with on a task like this.

2. I should point out that in these comments the abbreviation V2 is purely descriptive and means "finite verb in second position in the clause." It does not imply any particular analysis of this phenomenon and I must admit that I find it confusing when Vikner and others use it to mean "finite verb has moved to C." As we shall see, movement of the finite verb to C is only one possible analysis of the phenomenon.
3. Since I will usually not be discussing a lower agreement phrase at all, i.e. an Agr<sub>o</sub>P (in the sense of Chomsky 1991:434), I will use AGRP to refer to the higher agreement phrase ("subject agreement phrase").
4. Actually, the notion was not as simple as usually assumed since it involved a transderivational notion. Thus the position of *he* in *He seems to have left* would be an A-position although it is not assigned a thematic role by *seem*. This is because in another derivation, this position (i.e., presumably Spec of IP in Vikner's framework) could have been assigned a thematic role. I owe this point to Sam Epstein.
5. Actually, I am sidestepping a rather important issue here: What is the relationship between agreement and case in Icelandic? As pointed out in section 3.5, two facts must be kept in mind: first, the so-called quirky subjects in Icelandic have the same distribution as nominative subjects although the finite verb only agrees with the latter; second, the finite verb may agree with nominative NPs in (apparent) object position. This indicates that movement of the subject NP to a particular structural position in the syntax is neither a necessary nor a sufficient condition for subject-verb agreement in Icelandic. See also n. 11, and Sigurðsson (1991) and references cited there for discussion. But the analysis suggested here may have to be revised in the light of more articulated theories of case and agreement checking and available subject positions (see Jonas & Bobaljik 1993).
6. See also Epstein (1992a:243-244) for an explanation of constraints on wh-movement in terms of economy: unnecessary movements are blocked.
7. Note that neither R&T, Kosmeijer (1991), nor Heycock & Santorini (1992) assume the Pollockian "split IP" analysis with AGRP and TP. Hence they assume that subjects following the INFL-position must be in Spec of VP. As Vikner shows in the present paper, that assumption is problematic for Icelandic but the problems do not arise if the non-initial subjects are considered to be in Spec of TP instead, as suggested here. We will return to these issues in sections 3.4 and 3.5 below.
8. I am ignoring here, as does Vikner in the paper under discussion, the fact that there is evidence for verb movement in infinitival complements of control verbs in Icelandic (cf. Thráinsson (1984, 1993); Sigurðsson (1989); Hornstein (1990); Johnson & Vikner (1992)).
9. As Sam Epstein points out to me, this account of the V2 phenomenon must also assume, of course, that no adjunction is allowed to C', C or to V-in-C either.
10. For a detailed demonstration of how the difference between overt verb movement vs. verb movement at LF can account for certain puzzling empirical facts see Epstein (1992b: section 8).
11. Actually, Chomsky has suggested that the wh-feature may be "universally

strong" (1992:45). But as Sam Epstein points out to me, only one wh-operator moves in the syntax in sentences like:

(i) Who bought what?

This indicates that once the relevant feature in C has been checked (i.e., by a wh-element that has moved to Spec of CP), no further wh-movement occurs in the syntax.

12. Obviously, everybody needs to say something about the case and licensing of indefinite NPs. If one assumes, for instance, that subject case is checked in Spec of TP in the syntax, then the indefinite subjects have to move there too at some point. In sentences like (5b), this could mean that the sentential adverb in (5b) was adjoined to TP rather than to VP. The observed differences between definite and indefinite NPs would then not have anything to do with case checking (or marking) differences but something else, such as interaction with scope properties of the sentential adverbs (cf. Jonas 1992:182, fn. 12). Another possibility would be to say that indefinite subjects can have their case checked in Spec of TP at LF; cf. the discussion around (12) in 3.5.
13. But this argument is flawed since it may very well be that UG forces string-vacuous movement in certain cases. The claim that the verb does not move to C nor the subject to Spec of CP in simple declarative sentences in Icelandic must therefore be evaluated with respect to the account presented of the V-to-C movement in general. What is the verb doing in C when it moves there? Why does it not have to move there in certain instances? I owe this point to Sam Epstein.
14. Actually, there may be some dialectal or idiolectal differences here which I am ignoring at the moment. Thus it seems that some speakers of Icelandic are not too happy with "embedded topicalization outside bridge verb contexts" (fn. 12 in Vikner's paper). Jónsson (1991b) also reports that he finds embedded topicalization better in complements of verbs like *vita* 'know' than *harma* 'regret'. Reinholtz (1989:104) on the other hand claims that V2 order in Danish embedded clauses is not restricted to complements of bridge verbs, although she admits that a "limited number of items, often denoting negation, cannot introduce a subordinate clause with V-2 word order" (1989:104, fn. 7).
15. I do not want to imply, however, that I have a complete account of *það*-sentences in Icelandic. The overt expletive *það* is notoriously difficult to deal with. For a rather different analysis see Hornstein (1991).
16. An alternative not discussed here nor by Vikner is that there is a special Focus Phrase (FP) between CP and AGRP and focussed (topicalized) elements move to Spec of FP. See Branigan (1992) for some discussion and references.

## 8 The Brythonic Celtic copula and head raising<sup>1</sup>

Randall Hendrick

### 1 Introduction

This study explores the syntactic consequences of the rather subtle variation in the copula that appears in the Brythonic Celtic languages. I begin by arguing in section 2 that there are in fact at least two Celtic copulas, a grammatical copula that simply spells out tense and agreement, and a substantive copula formed on a lexically listed verbal stem. This difference is reflected in the surface word order. The grammatical copula requires the predicate adjective (or nominal) to raise to tense and agreement so that it is positioned in initial position to the left of the subject. The substantive copula co-occurs with a predicative particle; the predicate adjective (or nominal) raises to that particle and appears to the right of the subject. The explanation I offer for these facts requires subjects of predicate adjectives and nominals to originate within VP-internal small clauses in contrast to subjects of unergative verbs that are VP-external in D-structure. In section 3 I examine the interaction of the copula with agreement in order to argue that the Breton copula forms an aspectual verb composed of the copula and a raised agreement prefix. The composition of this aspectual verb explains a number of its otherwise idiosyncratic characteristics. In addition, the construction suggests that external arguments of verbs are projected within an aspect phrase rather than VP-internally, confirming the tack taken to predicate adjectives and nominals. In section 4 I turn to consider the interaction of the copula with tense. On the basis of the Breton periphrastic aspectual construction I argue that finite verbs fail to raise to C because tense is an operator but C is an argument position. Instead finite verbs adjoin to AGRP. Non-finite verbs remain free to raise to C because no tense operator is involved in such constructions. The behavior of copula-initial infinitives (or