#### **Swedish Wh-Root-Infinitives**

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## **Abstract**

The purpose of this short paper is to present a minimalist account of the syntax of the Swedish Wh-Root-Infinitives, trying to characterize the syntax of this generally neglected main clause equivalent while comparing its syntax to the syntax of finite root clauses. See (i) and (ii):

(i) Swedish

Varför sälj-a huset? why sell-inf house-the 'Why sell the house?'

(ii) Swedish

Varför sälj-er ni huset? why sell-pres you house-the 'Why do you sell the house?'

My account is based on the hypothesis that C minimally probes the sentence type features finite, imperative or infinitive, present in the inflection of the verb. More precisely, I will show that the Swedish facts, like corresponding facts in English, German and Icelandic, follow from a grammar driven by an asymmetry with respect to feature values, see Chomsky (2007: 6) and subsequent papers, and that all unvalued features must be eliminated before syntax can zip together form and meaning.

Keywords: root infinitives, varför 'why', Swedish, syntax

#### 1 Root infinitives

In the Germanic languages, the overwhelming majority of independent sentences are finite, with a verb inflected at least for tense. Occasionally, however, we find independent sentences with an infinitival verb, as in the English examples in (1). These are usually introduced by *why* or *how*:

- (1) English (Huddleston & Pullum 2001: 874)
  - a. Why be so soft with them?
  - b. Why not accept his offer?

# c. How to persuade her to forgive him?

In this paper I will discuss the syntax of Swedish independent infinitive sentences or Root-infinitives, introduced by a wh-word (Wh.-RIs). This is a minor and mainly neglected sentence type, classified by *The Swedish Academy Grammar* (Teleman, Hellberg & Andersson 1999, IV: 826-827) as a kind of main clause equivalent. Some Swedish examples are presented in (2); as in English, Swedish mainly prefers root infinitives introduced by a wh-adverb *varför* 'why' or *hur* 'how':

- (2) Swedish (# indicates that the example is not fully productive)
  - a. #Vad göra?

what do-inf

'What to do?'

b. #Vart vända sig?

where turn-inf REFL

'Where to turn?'

c. Varför inte gå på bio?

why not go-inf to movie

'Why don't you go to the movie?'

d. Varför sälja huset?

why sell-inf house-the

'Why sell the house?'

e. Hur få personalen att förstå? (Teleman, Hellberg & Andersson 1999, IV:

826-82

how get-inf staff-the to understand

'How to get the staff to understand?'

German accepts both wh arguments and wh adverbs (including warum 'why'), as shown by the examples in (3), mainly from Reis (2003).

(3) German

a. Was tun?

Reis (2003), example (37a)

what do-inf

'What to do?'

b. Wohin sich wenden?

Reis (2003), example (37b)

where-to REFL turn

<sup>&</sup>lt;sup>1</sup> An exception is Reis' (2003) paper about German root infinitives.

- 'Where to turn?'
- c. Warum nicht ins Kino gehen? Reis (2003), example (38b) why not to-the movies go-inf
  - 'Why don't go to the movies?'
- d. Warum das Haus verkaufen?

why the house sell-inf

'Why did you sell your house'

Icelandic, finally, according to Halldór Sigurðsson p.c., seems to accept only Wh-RIs with *hvers vegna* 'why', preferably together with the infinitival marker *að*, see (4c,d).

# (4) Icelandic

a. \*Hvað (að) gera?

Halldór Sigurðsson p.c.

what to do-inf

'What to do?'

b. \*Hvert (að) snúa sér?

Halldór Sigurðsson p.c.

where to turn-inf REFL

'Where to turn?'

c. Hvers vegna ekki (að) fara í bíó? Halldór Sigurðsson p.c.

why not to go-inf tomovie

'Why don't go to the movie?'

d. ?Hvers vegna (að) selja húsið? Halldór Sigurðsson p.c.

why to sell-inf house-the 'Why sell the house?

Not any of the other languages investigated seem to accept an infinitive complementizer (English *to*, German *zu*, Swedish *att*) in Wh.-RTs. Swedish and German (see Reis 2003, p. 156 for German) never use the infinitival marker in Wh-RIs. English, according to Huddleston & Pullum (2002, p. 875), has two types of Wh.-RIs, one without infinitival *to* (5c,d), and one with infinitival *to* that accepts more options, as shown in (5a,b):

# (5) English

- a. \*Where go? Where to go?
- b. \*What do next? What to do next?
- c. Why be so soft with them?
- d. Why not accept his offer?

In short, of the four Germanic languages discussed above, German seems to be less restricted with respect to which Wh-RIs that are possible (both argumental and adverbial wh-words, e.g.). Swedish, Icelandic and English mainly allow Wh-RIs introduced by *why* (English) and

its Swedish and Icelandic counterparts *varför* and *hvers vegna*. English Wh-RIs with *to* also accepts other adverbial wh-words.

In this paper I will take a closer look at Swedish Wh-RIs, claming that Wh-RIs belong to an independent infinitival sentence type and arguing for an analysis that expands Reis' account of German Wh-RIs (2003). Reis' analysis is in its turn inspired by Rosengren & Platzack's (1997/98) account of the imperative sentence type, launched within the Minimalist program (Chomsky 1995 and subsequent work).

The paper is organized in the following way. Section 2 gives a brief introduction to those parts of the Minimalist program that are vital for understanding my account, and section 3 outlines the analysis of the ordinary finite sentence type. Section 4 presents the non-finite sentence type Wh-RIs and copmpares its syntax with the syntax of finite sentences. A short conclusion and discussion follows in section 5.

# 2. A short presentation of the theoretical framework

# 2.1. Introduction

In this section I will present some central assumptions of the feature-driven version of the minimalist program that I use for my analysis of Wh-RIs in Swedish. In general, I will be close to Chomsky (2007, 2008) and Pesetsky & Torrego (2001, 2004, 2007).<sup>2</sup> The assumption that there are three types of independent sentence types, finite, infinite and imperative, corresponding to the same three types of basic verbal inflection, is outlined in more detail in Platzack & Rosengren (in prep.).

## 2.2 Morphology Lexicon and Features

Following a recent discussion in, Cecchetto & Donati (2015) I have chosen a version of the minimalist program where words are created in an autonomous morphological module. Hence a word can be seen as atomic elements from the point of view of syntax. Each word is, according to Chomsky (2007, 6), "a structured array of properties (*features*) to which Merge and other operations apply to form expressions."

Features enter the syntactic computation either as valued or unvalued; the purpose of the computation is to build structure so that all unvalued features become valued.

## 2.3 Merge, EPP and the operation Agree

The central player of the Minimalist syntactic derivation is the operation Merge that builds structure. Merge operates on (bundles of) features (valued or unvalued) that provide the

<sup>&</sup>lt;sup>2</sup> In Pesetsky & Torrego (2007), the authors have made their feature driven approach more fine graded, complicating the derivation but reaching a level of detail that does not seem to be needed for our purposes here.

building material for syntactic structure. Merge takes a feature bundle and adds it to another feature bundle, creating a minimal structure, see (6):

(6) Pick the feature bundle A and merge it to an available feature bundle B:

$$A B \xrightarrow{A/B} A B$$

The result of merging A and B is labeled either A or B. Merge can now take a new feature bundle X from the lexicon and merge it to the root of the structure, illustrated in (7), or it may take the feature bundle B, already present in the derivation, and remerge it to the root of the structure, yielding (8); this operation is also called "Move":



The operation Agree, see Chomsky (2001:3ff.) and below, establishes a connection between an unvalued and a valued instance of a feature, valuing the unvalued one, see (9). The derivation will crash if there is any unvalued feature left at the semantic interface.

# (9) The operation Agree

**Step 1:** Select a **probe** i.e. a head with at least one unvalued feature [¬F], where [F] is a variable over features.

**Step 2:** Search the c-command domain of the probe for the closest **goal** with a valued instance of the same feature, [F].

**Step 3:** Value the unvalued feature of the probe in accordance with the value of the goal. Agree may be accompanied by movement of the bearer of the valued feature to the bearer of the unvalued feature. This operation presupposes the presence of what I here call "EPP" whitch is associated with an unvalued feature,  $[\neg F^{EPP}]$ , saying that the agree-relation must be visible.

## 2.4. The Morpho-Syntactic interface

Following Cecchetto & Donati (2015, 14), I assume that "[a] word which is delivered by morphology to syntax, is intrinsically endowned with a category feature". For verbs, I assume the verbal feature [v], for nouns the nominal feature [n] and for adjectives the adjectival feature [a]. In addition to the categorial feature, morphology also provides inflectional features. With Platzack & Rosengren (in prep.), I assume three kinds of inflectional features

<sup>3</sup> EPP was originally introduced (Chomsky 1982) to capture the fact that a sentence must have a subject. Even if EPP is more widely used here, inspired by Pesetsky & Torrego (2001), the original use is partly retained, since EPP, as used here, determines that there is a visible subject in languages like English and the Scandinavian ones.

in Germanic verbs, listed in (10) and exemplified in (11) with Swedish independent main clauses:

- (10) a. **The finite inflection**, introducing the feature [fin] and expressed by the tense suffix in Swedish.
  - b. **The imperative inflection**, introducing the feature [imp] and expressed by the verbal stem in Swedish.
  - c. **The infinitival inflection**, introducing the feature [inf] and expressed by the infinitive suffix -*a* in Swedish.
  - (11) Swedish
    - a. Johan läs-te en roman.
       Johan read-tns a novel'
       'Johan read a novel'
    - b. *Läs en roman*! read a novel

'Read a novel!

c. Varför läs-a en roman!?

why read-inf a novel

'Why read a novel!?'

Simplifying, the first step in the derivation of a sentence like Swedish (11a) or its German counterpart, *Johann las ein Roman*, is to pick the verb *läste / las* 'read-past' from the lexicon and merge it with a DP *en roman / ein Roman* 'a novel' bearing an internal theta-role in relation to the verb. The Swedish case is outlined in (12) and the German one in (13), the main difference being that the Swedish vP structure is VO, the German one OV.

(12) Swedish  $[_{vP} \ Johan \quad [l\"{a}ste \ en \ roman]]$ 

(13) German

[vP Johan [ein Roman] las]

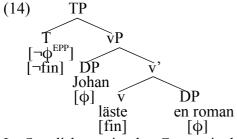
Like all DPs, both the external argument *Johan* in Spec.vP and the object *en roman / ein Roman* in the complement of v carry a valued φ-feature. In addition, v carries a valued [fin] feature. The different order between v and DP in Swedish and German is mandatory to capture the syntactic differences between VO languages and OV languages, see Haider (2010, 5-43) for a detailed presentation. Among other things, this difference plays a role in accounting for the fact that Swedish but not German displays subject – object asymmetries,

see Haider (2010, 79 ff.) Since the VO/OV distinction is not in focus here, I will mainly give structures where the head governs to the right, as in English, Icelandic and Swedish.

# 3. The derivation of the Swedish finite sentence type

In this section, I will illustrate the functional parts TP (called Finite Phrase in Rizzi (1997)) and CP (called Force Phrase in Rizzi (a.a.)).

In the absence of sentence adverbs and auxiliaries, that are supposed to be adjoined to vP, the next step after vP is assembled is to pick T from the lexicon and merge it to vP. The result is depicted in (14), assuming T to carry both unvalued phi-features and an unvalued finfeature:



In Swedish, as in the Germanic languages in general, the subject is visible in Spec.TP, indicating the presence of an EPP feature. The presence of a visible subject is accounted for by postulating that EPP is attached to the unvalued  $[\phi]$ -features in T, hence the proper formulation of this feature will be  $[\neg \phi]$  This forces the closest c-commanded DP, i.e. *Johan*, to move to Spec.TP.<sup>4</sup>

The derivation of TP as illustrated in (14) is not complete. T contains an unvalued finiteness feature that must be valued. Acting as a probe, T with feature [¬fin] will establish an Agree relation with [fin] in little v and thereby the finite feature in T is valued. There is no reason to assume that the verb moves from v to T in Swedish;<sup>5</sup> if so, we would, contrary to facts, have expected the finite verb to appear in front of the negation in an embedded clause, taking for granted that the negation is adjoined to vP and thus to the right of a verb that has moved to T.

The highest phase in the derivation of a sentence is the C-projection with an unvalued finiteness feature in C, which is valued by merging C to TP. In most Germanic languages the tensed verb is moved to C, due to EPP associated with  $[\neg fin]$  in C. Among other things, this gives rise to verb second. Spec.CP may be filled by the subject or object, by an adverb phrase,

<sup>&</sup>lt;sup>4</sup> Since DP is a phrase, it cannot move to T, which is a head. Notice that the result of subject moving to Spec.TP in many languages is visually expressed on the verb in T as subject-verb agreement.

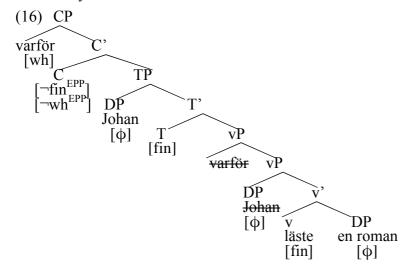
<sup>&</sup>lt;sup>5</sup> As we will see immediately, the verb moves visibly to C (verb second).

prepositional phrase and various other elements. Since the main part of this paper discusses the adverb *varför* 'why' I will here show how a finite clause introduced by *varför* is derived. Being a wh-adverb, *varför* must move to Spec.CP. See Shlonsky & Soare (2011) for a partly different account.

I will assume that a TP containing *varför*' why 'merges with C that carries the features [¬fin] and [¬wh], both with EPP. This will force the closest wh-phrase to move to Spec. CP This is illustrated with the Swedish sentence in (15) where both the unvalued features in C are marked EPP. The structure when C has merged is given in (16):

# (15) Swedish

Varför läs-te Johan en roman? why read-past Johan a novel 'why does Johan read a novel?'



Let us start with the unvalued finiteness feature in C. When Agree is applied, C will probe its c-command domain for a goal with valued finiteness feature, which it finds in T. Due to EPP, the finiteness feature [fin] will be pronounced in C, a prerequisite for verb second.

As seen in (16), C hosts a second unvalued feature with EPP, viz. [¬wh<sup>EPP</sup>]. This feature probes Wh-words, *varför* 'why', in our example. In line with Slonsky & Soare (2011, p. 667), *why* (and, I assume, Swedish *varför*) is first merged in Spec.Reason P, here simplified as a high adjunction to vP. In particular, ReasonP is assumed to be to the left of the negation, which is adjoined to (a low) vP.

Starting from the structure in (16), I will in the next section compare the syntactic properties of the independent Swedish Wh.-RIs with the properties of the independent Swedish finite sentence.

# 4 The syntax of the independent Swedish Wh-Root-Infinitive

## 4.1 Structural analysis

In this section I will present an analysis of the independent Swedish root infinitive introduced by a wh-phrase, arguing for a structure that differs from the finite structure (cf. (16)) mainly in lacking a T-projection between C and v. This idea, which is taken over from Reis (2003), is compatible with the fact that the infinitive verb is not inflected for tense and lacks a (visible) subject. See also Platzack & Rosengren (in prep.)

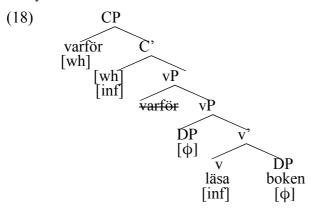
In short, I will assume that there is no TP in root infinitives. The Wh-RI in (17) will thus get the structure in (18) when all unvalued features are valued.

# (17) Swedish

Varför läs-a bok-en?

why read-inf book-the

'Why read the book?'



As will be shown below, the analysis proposed accounts for the main syntactic differences between Wh.-RIs and the finite sentence type. Section 4.2 compares the finite and infinitival sentences with respect to word order, section 4.3 points out similarities and differences with respect to the external argument in Spec.vP, and section 4.4 briefly discusses A-bar movement of *varför* 'why' in the two sentence types. I will argue that the syntactic similarities and differences between Wh.-RIs and Wh.-finite clauses follow from the structural differences and similarities of (16) and (18).

#### 4.2 Word Order

As seen above, both the finite sentence and the root infinitive may be introduced by a whphrase with an adverbial function:

# (19) Swedish

a. Varför stäng-er Lisa dörr-en?

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why shut-pres Lisa door-the 'Why does Lisa shut the door?'
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b. Varför stäng-a dörren? why shut-inf door-the 'Why shut the door?

Only finite sentences may be productively introduced by an argumental wh-phrase:

# (20) Swedish

- a. Vem välj-er vi denna gång?
  who vote-pres we this time
  'Who do we vote for this time?'
- b. #Vem välj-a denna gång? (Teleman, Hellberg & Andersson, 1999, IV, p. 827) who vote-inf this time

'Who vote for this time?'

The finite verb precedes sentence adverbs and the negation,<sup>6</sup> the infinitival verb follows sentence adverbs and the negation:

# (21) Swedish

- a. Varför stäng-er Lisa inte dörr-en? why shut-pres Lisa not door-the 'Why doesn't Lisa shut the door?'
- b. \*Varför stäng-a inte dörr-en?

  why shut-inf not door-the

  'Why not shut the door?'
- c. Varför inte stänga dörr-en?<sup>7</sup>
  why not shut-inf door-the
  'Why not shut the door?'

The differences and similarities listed in (19)-(21) are all related to the C-domain. Comparing with the analysis of the finite main clause in section 3, the presence of a wh-phrase in first position, more precisely in Spec.CP, is accounted for by the presence of an unvalued wh-feature in C, [¬wh<sup>EPP</sup>], which forces a wh-phrase to take first position. Since also the wh-infinitive begins with a wh-phrase, the feature [¬wh<sup>EPP</sup>] is supposed to be present in the

(i) Han fråga-de varför Lisa inte stänger dörr-en

he ask-ed why Lisa not

<sup>&</sup>lt;sup>6</sup> In an embedded clause, the finite verb behaves like the infinitive:

Lisa not close-pres door-the

<sup>&</sup>lt;sup>7</sup> Note that the negated *varför*-infinitive often, as here, has the meaning of an advise. The negated finite *varför* sentence, on the other hand, asks for the reason not to do something.

infinitival C as well as in the finite C. The specific mechanism that in the absence of a whword allows almost any phrase to be fronted in Swedish finite main clauses (verb second) is not present in Swedish root infinitives, however.

In Wh.-RIs, as we see in (20b), the choice of initial wh-phrase is restricted in wh-infinitives but not in finite main clauses. Descriptively, we can account for this restriction if we limit the range of the feature wh in C in wh-infinitives to be only sentence adverbials, roughly adverbials being first merged as a high adjunct to vP. This is more or less the area that Cinque (1999) claims consists of functional projections hierarchically ordered in the same way in all of the world's languages. I will use the notation wh<sub>vP</sub> to remind the reader of this limitation, claiming that C in wh-infinitives is merged with the feature bundle [¬wh<sub>vP</sub> EPP] and that the agree-relation that is established, see (9), will probe the closest goal in vP, supposed to be *varför* 'why'.

Whereas the wh-feature in C has an EPP feature both in finite main clauses and in whinfinitives, there is a difference with respect to the other features in C. In section 3. we concluded that the C of the tensed main clause in Swedish hosts an unvalued finiteness feature with EPP, [¬fin<sup>EPP</sup>], forcing V2. There is no finiteness feature associated with whinfinitives, but an infinitival feature associated with the infinitive inflection in little v, see (12c).

As (21b,c) indicate, the infinitival verb does not seem to move away from little v, as the finite verb does, hence there is no indication of an EPP feature associated with the infinitival feature. In other respects the two inflectional features [fin] and [inf] are syntactically used in the same way: they are, e.g. both merged in v as valued, and in C as unvalued. The unvalued versions of the feature for the two cases are summarized in (22):

- (22) a. C in the finite sentence type contains the unvalued feature [¬fin<sup>EPP</sup>]
  - b. C in the infinitive sentence type contains the unvalued feature [¬inf]]

Both finite and infinite C will probe its c-command domain, valuing the feature in C. Like the finite sentence type, we conclude that the Wh.-RIs contain both CP and vP, like the finite sentence type. The main difference is the absence of a T-projection between C and v.

## 4.3. The external argument

The external argument, less precisely the subject argument, is visible in Swedish finite sentences, but not in infinitive sentences.

<sup>&</sup>lt;sup>8</sup> Cinque's hypothesis has been corroborated for many languages, including English and Swedish, see e.g. Beijer (2005).

# (23) Swedish

- a. Varför stäng-er han fönstr-et?
  why shut-pres he window-the
  'Why does he shut the window?'
- b. Varför stäng-a (\*han) fönstr-et?

  why shut-inf he window-the

  'Why shut the window?'

In the finite sentence type introduced by *varför* 'why', the subject appears in Spec.TP, after the finite verb in C. See the analysis in (16). The subject is visible in this position, due to EPP associated with the Agree relation between the unvalued  $[\phi]$ -feature in T and the valued  $[\phi]$ -feature in Spec.vP. The absence of a visible DP in the infinitive case indicates that there is no TP present to establish an agree relation between T and the external argument in this sentence type, as I argued above.

An alternative possibility would be to assume that no DP is merged to vP, but there are indirect evidence against such an analysis and in favour of the analysis which assumes the presence of an invisible DP in Spec.vP of the infinitive sentence, with the same theta-role as the visible subject in the finite sentence. As the examples in (24) and (25) show, the invisible DP in (24), like the visible counterpart in (25), may bind an anaphoric pronoun, or the possessive reflexive *sin*, and it agrees with a predicative adjective:

#### (24) Swedish infinitive clauses

- a. Varför gömm-a sig under säng-en?why hide-inf refl under bed-the'Why hide under the bed?'
- b. Varför gömm-a sin bok under säng-en?
  why hide-inf refl book under bed-the
  'Why hide his book under the bed
- c. Varför komm-a full-ø / full-a till fest-en?
  why come -inf drunk-sg / drunk-pl to party-the
  'Why come drunk to the party?'

## (25) Swedish finite clauses

- a. Varför gömm-er han sig under säng-en?
  why hide-pres he refl under bed-the
  'Why does he hide under the bed?'
- b. Varför gömm-er han sin bok under säng-en?

why hide-pres he poss refl book under bed-the 'Why hide his book under the bed

c. Varför komm-er han full-ø / de full-a till fest-en?
why come -pres he drunk-sg / they drunk-pl to party-the
'Why does he / they come drunk to the party?'

Hence the binding and predicative agreement facts support the analysis that there is an invisible DP in Spec.vP.

From a syntactic point of view there seems to be no reason to expect anything else than a symmetrical distribution of *varför* in both finite and infinitival clauses. Thus, if we find a well-formed infinitive sentence introduced by *varför* 'why', we predict the existence of a corresponding finite sentence introduced by *varför* 'why', and vice versa. So far, none of the Swedish examples given seems to violate this prediction; here I give another two examples of the same kind.

## (26) Swedish

- a. Varför frukta-r hon hundar?why fears-pres she dogs'Why does she fear dogs.'
- b. Varför frukt-a hundar?why fear-inf dogs'Why fear dogs?'

# (27) Swedish

- a. Varför sprang Erik till affären? why ran-past Erik to shop-the 'Why did Erik run to the shop?'
- b. Varför spring-a till affären?! why run-inf to shop-the 'Why run to the shop?'

So far, the prediction seems to hold. However, notice that the invisible subject cannot be some arbitrary  $3^{rd}$  person feminine in (26) or invisible Erik in (27), but must represent the person spoken to (an invisible you). Thus, there is an interpretative difference between the finite and the infinitival sentence types. As can be seen, this interpretative difference also

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<sup>&</sup>lt;sup>9</sup> Reis (2003, 168) concludes that Wh.-RIs and Wh.-V2-clauses have the same left peripheral structure.

shows up in cases like (28) and (29), where the "spoken-to" interpretation of the invisible DP in Spec.vP is not available, and hence there is no infinitival correspondence:

## (28) Swedish

- a. Varför dog han efter operationen?why die-past he after operation-the'Why did he die after the operation?'
- b. \*Varför dö efter operationen!? why die-inf after operation-the
- (29) a. Varför sjönk fartyget snabbt?

  why sink-past ship-the fast

  'Why did the ship sink fast?'
  - b. \*Varför sjunk-a snabbt?!
    why sink-inf fast

To understand why there is no well-formed infinitival correspondent to the well formed finite sentences in the a-examples in (28) and (29), and why there is an interpretation restriction in (26) and (27), I will turn to an observation by Reis (2003, 186). Reis notices with respect to the subject of Wh.-RIs, that "[n]o matter how we represent the silent subject argument in RIs in syntax, whether by PRO or nothing (that is, by just suppressing the respective argument variable), one thing is clear: In order for RIs to receive a sensible utterance interpretation, the subject reference must be specified." As Reis (2003,186) notices "[t]he possible candidates [---] are limited to the participants in the utterance situation: speaker(s) and addressees." A closer look at the ungrammatical b-examples in (28)-(29), reveals that in these cases, the subject reference cannot be a participant in the utterance situation, whereas in all the well formed cases it can.

# 4.5 A-bar movement of varför 'why'

As we saw in the last section, Wh.-RIs do not seem to allow A-movement, whereas finite sentences do. A-bar movement, on the other hand, is found in both sentence types, in the infinitive one only in form of Wh-movement. Consider the finite sentence in (30).

## (30) Swedish

Varför sa du att Johan skrev brevet? why said-past you that Johan wrote-past letter-the 'Why did you say that Johan wrote the letter?'

This sentence is ambiguous: the speaker is either asking why the subject of the main clause said something (the matrix reading), or why the subject of the embedded clause wrote the letter (the embedded reading). See Shlonsky & Soare (2011) and Simik (2006). Since the whword is in the same position in both cases, we must assume that *varför* has moved from its position in the embedded clause to the edge of the matrix clause (Spec.CP), supporting the analysis in section 3 above. Notice that *varför* in this case is first merged in a finite domain and has moved to a position within a finite domain (Spec.CP of the matrix).

The corresponding Wh.-RI is (31):

(31) Varför säga att Johan skrev brevet?!

why say-inf that Johan wrote letter-the

'Why say that Johan wrote the letter'

Contrary to the finite clause in (30), example (31) only displays the matrix reading; hence in both the finite sentence matrix and the infinitival one, one option is that *varför* is merged to matrix vP and moved to matrix Spec.CP of the infinitive sentence. With regard to the embedded reading, *varför* is first merged to a high Spec.vP inside a finite domain, i.e. the embedded *att*-clause. Obviously, movement out of this domain to a position in the matrix infinitive domain is not allowed. In the sentence with an infinitive matrix, *varför* when extracted, must move out of a finite domain and into an infinitive domain, which presumably is not allowed. There is no corresponding switch of domains in finite sentences like (30), hence extraction of *varför* from an embedded clause to the matrix one is only possible in finite sentences.

# 5. Summary and conclusion

As mentioned in the introduction, the purpose of my paper has been to present a narrow syntactic account of the Swedish Wh.-Root-Infinitives, trying to characterize this often neglected main clause equivalent while comparing it with finite root clauses. My account is based on the hypotheses that C minimally hosts the sentence type features finite, imperative and infinitive, in addition to an edge feature (Chomsky (2007, 11 f.)). More precisely, I have tried to show that the Swedish facts follow nicely from a grammar driven by an asymmetry with respect to features, which come in two guises, valued and unvalued, and that all unvalued features must be eliminated before the semantic and pragmatic interfaces are reached.

Working mainly with one language might be seen as a drawback: after all, our understanding of syntax has improved tremendously over the last 30 years, much as a result of us having a theory that may take variation (especially on a macro-level) into account. 10 However, it may also be a problem for our field of research that we always are ready to take other languages into consideration before we are confident that the machinery we have at our disposal can handle at least one human language. Thirty years of studying macro-variation have teached us that the beautiful generalizations we found initially (the parameters), see e.g. Holmberg & Platzack (1995), usually fade away under a closer study. And we should not forget that each natural language is a possible outcome of Universal Grammar. Therefore, what I have presented in this paper can be seen as the basis for comparative syntactic studies. The outcome of a detailed study of a certain part of a single language will result in lists of properties, which, when used in the computation, predicts particular properties of the language studied. Any change that we are forced to make with respect to the theoretical apparatus that is motivated by a careful description of a single language when we are describing another language from the same perspective must be evaluated both with respect to the basic account of the data and possible accounts we have of other languages.

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<sup>&</sup>lt;sup>10</sup> Micro-variation, on the other hand, may be easily visible when we work with a single language, encountering different intuitions, idiosyncratisms, different sociolects or different dialects.

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