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# Embedded V2 does not exist in Swedish

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## Abstract

“Embedded” V2-clauses are often analyzed as subordinate clauses which contain a recursive CP. In this paper, I point at three problems associated with a recursive CP-analysis: Topicalization of and extraction out of an “embedded” V2-clause yields an ungrammatical result in Swedish and an “embedded” V2-clause does not have to be deictically adjusted to its “matrix”. I present an alternative analysis, according to which both the “matrix” clause and the “embedded” clause are main clauses. I argue that the “complementizer” *att* ('that') is not a complementizer but a pronominal element which functions as an argument in relation to the verb of the “matrix” clause.

## 1. Introduction

Main clauses and subordinate clauses are core concepts within grammatical theory. They constitute two basic categories which form a dichotomy that often serves as a point of departure for further generalizations. However, a closer look at the two categories of clauses will show that this dichotomy is not necessarily as strict and unproblematic as one initially might assume. There is a number of clause types that, for different reasons, seem quite difficult to fit into the typical division into main clauses and subordinate clauses. One of these problematic clause types are the so called embedded V2-clauses, which are also the subject of

this paper.

The purpose of this paper is twofold. Firstly, I point at some problems associated with analyzing so called embedded V2-clauses as syntactic structures containing a recursive CP (that is, assuming that there are two CPs: a lower one to which the finite verb moves and a higher one which hosts the complementizer). Secondly, I suggest an alternative analysis, which in my opinion accounts for “embedded” V2 in a more straightforward way. I argue that there are good reasons for analyzing sentences containing so called embedded V2-clauses as paratactic constructions (however not coordinated), rather than instances of hypotax.

The paper has the following outline: Section 2 deals with main clauses and subordinate clauses in Swedish. To begin with, I give a brief description of the syntax and semantics of prototypical main clauses and subordinate clauses respectively. Then I describe the so called embedded V2-clauses and point out how they deviate from typical subordinate clauses in Swedish. In section 3, I point at three problems with analyzing “embedded” V2-clauses as subordinate clauses containing a recursive CP: extraction out of the “embedded” clause is not possible, the “embedded” clause cannot be topicalized and deictic adjustment is not necessary. I argue that these facts are incompatible with a subordination analysis, if the notion subordination is to be taken seriously. In section 4, I present a proposal for an analysis in which the two parts of “embedded” V2-constructions are considered to be two syntactically independent main clauses. I show that the problems associated with a recursive CP analysis are solved within a paratactic analysis.

## 2. Background

### 2.1 The syntax and semantics of prototypical main clauses and subordinate clauses in Swedish

The Mainland Scandinavian languages, Norwegian, Danish and Swedish, belong to the Germanic family of languages, and like all other Germanic languages, with the exception for English, they display V2 word order. That means that, in these languages, the finite verb of a declarative main clause holds the second position of the clause and can be preceded by no more than one constituent. This word order property, however, normally only applies to main clauses. In subordinate clauses, the finite verb is typically preceded by the negation and other sentence adverbials, which means that the finite verb normally occupies a lower structural position in a subordinate clause than it does in a main clause.

Let us begin by taking a look at the typical word order of declarative main clauses in Swedish. It is illustrated by the examples in (1) and (2) below.

- (1) **Glen** äter aldrig köttfärs nu för tiden.  
*Glen eats never minced.meat now for time.the*  
 'Glen never eats minced meat now a days'
- (2) Nu för tiden äter **Glen** aldrig köttfärs.  
*Now for time.the eats Glen never minced.meat*  
 'Now a days, Glen never eats minced meat.'

The sentences in (1) and (2) above are examples of well formed declarative main clauses in Swedish. They illustrate three important structural properties of V2 word order. Firstly, they show that the finite verb (which is underlined) holds

the second position in a Swedish declarative main clause. Secondly they illustrate the fact that almost any kind of clause constituent may be topicalized. The fronting of an adverbial as in (2) is just as grammatical as having the subject in the first position, as in (1). The third V2-related structural property of a Swedish declarative main clause that is illustrated by (1) and (2), is that the subject (in bold type) can occupy one of two possible positions. The canonical (but not necessarily most frequently used) subject position is immediately to the right of the finite verb. This is the position that the subject will hold unless it is topicalized<sup>1</sup>.

The most central property of the V2 word order, however, is of course that the verb holds the second position of the clause and that only one position is available to the left of it. This means that the word order of a sentence like that in (3) is ungrammatical in Swedish.

- (3) \*Nu för tiden    Gusten äter aldrig köttfärs.  
*Now for time.the Gusten eats never minced.meat*  
 'Now a days, Gusten never eats minced meat.'

As mentioned above, the V2 word order is a phenomenon which normally applies only to main clauses. The typical word order of a subordinate clause in Swedish is the following: complementizer > subject > sentence adverbials and negation > finite verb (Platzack, 1998, 92). This is illustrated in (4). Once again the finite verb is underlined and the subject is in bold.

- (4) att **Glen** aldrig äter köttfärs    nu för tiden.  
*that Glen never eats minced.meat now for time.the*  
 'that Glen never eats minced meat now a days.'

<sup>1</sup> The subject may be preceded by a negation or other sentence adverbials: (i) Nu för tiden äter aldrig Gusten köttfärs. ('Now a days Gusten never eats minced meat.')

The fact that V2 typically only applies to main clauses leads to a structural asymmetry between main clauses and subordinate clauses in the Germanic V2-languages. With the exception for Yiddish and Icelandic<sup>2</sup>, this asymmetry can easily be observed directly in the surface structure of all Germanic V2-languages. In the case of a prototypical main clause, the second position of the clause is occupied by the finite verb, whereas the same position is held by a complementizer in a prototypical subordinate clause, meaning that the finite verb is further to the right.

In accordance with a widely spread view, the syntactic asymmetry between Germanic main clauses and subordinate clauses can be explained and described in terms of verb movement. The common assumption is that the finite verb of a main clause in the Germanic V2-languages undergoes V-to-C movement (cf. den Besten, 1983; Holmberg and Platzack, 1995; Vikner, 1995). This movement is said to be motivated by the presence of a strong finiteness feature in C°, which, in main clauses, is checked by the finite verb (cf. Platzack, 1998). In subordinate clauses on the other hand, the finiteness feature in C° is lexicalized by a complementizer. That means that the second position, C°, which is otherwise held by the finite verb, in subordinate clauses is occupied by a complementizer and this prevents the finite verb from moving from V to C (for a further discussion

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2 Unlike subordinate clauses in other Germanic V2-languages, Icelandic and Yiddish subordinate clauses display a word order where the finite verb precedes the negation. This means that the surface structure of subordinate clauses in these languages resemble the structure of main clauses. However, following a common assumption, I take the word order in Yiddish and Icelandic subject-initial subordinate clauses to be the result of obligatory V-to-I movement, and not necessarily V-to-C movement as in main clauses. That would mean that the finite verb of an Icelandic or Yiddish subordinate clause would normally hold the position I° and the subject would occupy spec-IP (cf. Thráinsson, 2007, p.43). That means that a case of "embedded" V2 (understood as V-to-C movement) in Icelandic or Yiddish can only be established if an other constituent than the subject has been topicalized. This analysis is also given some support from Vikner (1995, p. 139) who assumes that Icelandic and Yiddish has obligatory V-to-I movement and that subordinate clauses in these languages can be either V2 or non V2. However, V2 is never obligatory in Icelandic or Yiddish subordinate clauses. According to Vikner, "There are no environments [for Icelandic or Yiddish subordinate clauses] that only allow embedded V2" (1995, 139).

about V-to-C movement, see, among others, Holmberg and Platzack, 1995; Vikner 1995 and Julien, 2007).

Above, I have given a short description of the syntactic differences between prototypical Swedish main clauses and subordinate clauses. But the differences between the two categories of clauses are not limited to their syntactic structures. There are also semantic/pragmatic differences, which can be related to verb movement (or the lack of verb movement).

Typically, main clauses and subordinate clauses differ with regards to speech acts. Normally, there is a clear correlation between main clause status and speech act value: The prototypical main clause expresses a speech act, whereas the prototypical subordinate clause does not. That is, main clauses are used for asking questions, giving commands or making assertions. These acts can normally not be performed by subordinate clauses, which typically represent propositions but do not express speech acts (cf Teleman et al., 1999, volume 4, 475). The difference in the semantic/pragmatic interpretation between the prototypical cases of main clauses and subordinate clauses is illustrated by the examples in (5) - (6).

- (5) Jag vill inte köpa sill.  
*I want not buy herring*  
 'I don't want to buy herring'

- (6) att jag inte vill köpa sill  
*that I not want buy herring*  
 'that I don't want to buy herring'

The sentence in (5) is a declarative main clause, whereas the clause in (6) is a declarative subordinate clause. Both represent the same proposition ("I don't want to buy herring") but they differ with respect to the speech act value. The main

clause in (5) expresses a speech act; the sentence is an assertion by which the speaker conveys the information that he or she doesn't want to buy herring. The clause in (6) lacks a speech act value. Without a main clause matrix, this clause does not make a command, ask a question or make an assertion<sup>3</sup>. In other words, there is a typical correlation between V2 word order and speech act value in Swedish.

As mentioned above, main clauses normally display V2 word order, a configuration that can be described in terms of V-to-C movement. There is also a typical correlation between V2 word order and speech act value. This correlation between syntactic structure and semantic/pragmatic interpretation has, in some analyses, been formalized in syntactic models with split CPs.

According to Rizzi's proposal (1997) the C-domain is split into four functional projections: FinP, TopP, FocP and ForceP. For the purposes of this paper, however, it is sufficient to take only two of the suggested projections into account, namely FinP and ForceP. According to Rizzi, the role of the C-domain is to establish a connection between the propositional content of a clause (established in IP) and the context and speech situation in which it occurs. In other words, the C-domain is the part of the clausal structure that anchors the proposition in and relates it to the context or discourse in which it is uttered.

Rizzi (1997, 283) explains the CP as “the interface between a propositional content (expressed by the IP) and the superordinate structure (a higher clause or, possibly, the articulation of discourse, if we consider a root clause)”. According to him the two projections FinP and ForceP play different parts in establishing the relation between the propositional content and the superordinate structure or discourse. The lower projection, FinP, faces inwards, towards the IP, whereas the

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<sup>3</sup> It should be pointed out that there are clauses that fulfill the structural criteria for a subordinate clause classification, but nevertheless can be used to express speech acts, without the presence of a main clause matrix. This is, for instance, often the case with constructions expressing exclamative speech acts. The following would be an example of a such a clause: (i) Att han aldrig kan fatta! ('He just never never gets it!'). Note that this clause is a non-V2-clause, introduced by a complementizer (*att*).



higher projection, ForceP, faces outwards, towards a superordinate clause or the discourse (Rizzi, 1997, 283-285). In ForceP, the clause type and the illocutionary force are specified. Applied to typical main clauses and subordinate clauses in Swedish this would mean that if Force<sup>o</sup> is occupied by a complementizer the structure is connected to a higher CP, meaning that the clause lacks an independent speech act value. But if Force<sup>o</sup> is held by the finite verb, the clause is the highest CP, facing towards the discourse or context, and has illocutionary force, that is, it expresses a speech act.

Summarizing, there is a syntactic and semantic asymmetry between prototypical Swedish main clauses and subordinate clauses, which can be related to verb movement from V to C. The finite verb of a main clause moves from V to C and as a result, main clauses display V2 word order, meaning that the finite verb can only be preceded by one clause constituent. V-to-C movement is associated with illocutionary force, which could be described in terms of a split CP, containing a projection, ForceP, to which the finite verb of a main clause moves. In subordinate clauses, the finite verb does not undergo V-to-C movement, but stays in situ. This is the case because in a subordinate clause, Force<sup>o</sup> contains a complementizer which moves there after being lexicalized in FinP. It connects, or anchors, the clause structure in a superordinate structure and also prevents the finite verb from moving to ForceP, meaning that the clause cannot get an independent speech act value.

## 2.2. The syntax and semantics of “embedded” V2

The division between main clauses and subordinate clauses that was outlined in section 2.1 only accounts for typical cases. As was mentioned in the very beginning, there are clause types that, for different reasons, seem difficult to fit into this prototypical dichotomy. One of these are the so called embedded V2-clauses. An example of such a clause is given in (7).

- (7) Gusten sa att Fantomen har inte tio tigrars styrka.  
*Gusten said that Phantom.the has not ten tigers strength*  
 'Gusten said that the Phantom doesn't have the strength of ten tigers'

The sentence in (7) contains an *att*-clause. The interesting thing about this clause type is that it displays properties that are inconsistent with respect to the division into main clauses and subordinate clauses: they fulfill some of the required criteria for a main clause classification and some for a subordinate clause classification.

On the one hand, one could argue that “embedded” V2-clauses should be considered subordinate, firstly because they seem to be introduced by a complementizer (*att*) and secondly because they, from a logical point of view, seem to constitute necessary complements of the matrix verb. The verb *sa* ('said'), in (7), takes two arguments: a subject and an object. It is hard to even imagine the verb *säga* (to *say*) without some sort of notion of someone saying something. In (7) we see that *Gusten sa X* ('Gusten said X'), and X must undoubtedly be identical to the clause *att Fantomen har inte tio tigrars styrka*. In other words, the “embedded” V2-clause seems to function as an object in relation to its matrix verb *sa* ('said'), and, given the implicit assumption that a main clause cannot be an argument of a verb, this observation points towards an analysis in which the “embedded” V2-clause is to be regarded as a subordinate clause.

On the other hand there are also good reasons for arguing that “embedded” V2-clauses are best analyzed as main clauses. Firstly, the finite verb of these clauses has moved to C, which, as we have seen, is in accordance with the typical pattern of Swedish main clauses (we can rule out V-to-I-movement, since other constituents than subjects may be topicalized).

Apart from the presence of the complementizer *att*, the basic syntactic structure of an “embedded” V2-clause corresponds to that of a typical Swedish main clause. Also, just like Swedish V2-clauses that are unambiguous main

clauses, “embedded” V2-clauses express independent speech acts. They are assertions and the explanation for them having a speech act value most likely lies in the position of the finite verb. It is reasonable to assume that the finite verb of an “embedded” V2-clause moves from V to Force<sup>o</sup>, giving the clause a positive speech act value (cf. Julien, 2007).

Below, I will sum up the properties of “embedded” V2:

A) “Embedded” V2-clauses do not occur in isolation. They must be preceded by a “matrix” clause. That means that we know that any given instance of “embedded” V2 always involves a minimum of two clauses.

B) From a logical point of view, an “embedded” V2-clause seems to function as an argument in relation to the verb of the preceding clause.

C) “Embedded” V2 always contains the word *att* 'that'.

D) The finite verb of an “embedded” V2-clause has moved from V to C. In a split CP model, it is reasonable to assume that it has moved from V to Force<sup>o</sup>.

E) Both the “matrix” clause and the “embedded” V2-clause express speech acts. They are both construed as assertions.

If one considers the properties that are listed above it soon becomes clear that it is in no way obvious how “embedded” V2 should be related to the categories main clause and subordinate clause, nor is it clear how the relation between the two clauses in a sentence containing an “embedded” V2-clause should be described.

One solution that has often been suggested is to analyze “embedded” V2-clauses as structures that contain recursive CPs (eg. Vikner, 1995; Holmberg and Platzack, 1995). According to these analyses, the “embedded” V2-clauses have two CPs: a lower one, to which the finite verb moves and a higher one, which hosts the complementizer that anchors the clause in a superordinate CP. The aim of such an analysis is of course to account for the main-clause-like structural properties and at the same time be able to maintain that the *att*-clause is embedded under a matrix clause.

In the following section, I will give a brief account for the general outline of the recursive CP analysis and point at some central problems that it obviously is unable to solve.

### 3. The recursive CP analysis and problems associated with it

An analysis that aims to describe and explain “embedded” V2-clauses must deal with the inconsistent properties that were described in 2.2. In effect, this means that the analysis has to handle three issues. Firstly it has to provide an account for the fact that the *att*-clause displays V2 word order and has a speech act value of its own. Secondly, it has to give a satisfactory description of the relation between the “embedded” V2-clause and the “matrix” clause that precedes it. This means that the analysis must capture the fact that the “embedded” clause seems to function as an argument of the verb in the first clause. Finally it has to explain the fact that the “embedded” V2 always contains the word *att*, which is normally regarded as a complementizer.

On their own, none of the characteristics of the “embedded” V2 that were mentioned above are very hard to account for. The word order, as well as the illocutionary force of the “embedded” V2-clause can be explained as verb movement from V to Force<sup>o</sup>. The fact that the “embedded” clause seems to constitute an argument in relation to the verb of the “matrix” clause, could be

explained simply by saying that it holds the complement position in the VP of the first clause. The presence of the complementizer *att*, finally, could easily be explained by saying that it is located in Force<sup>o</sup>, introducing the “embedded” clause and anchoring it in the first clause, which is then a CP structure that is superordinate to the “embedded” V2-clause.

What complicates matters is that “embedded” V2-clauses display all of these properties at the same time. Since they are contradictory with respect to the division into main clauses and subordinate clauses, it is problematic to capture the characteristics of “embedded” V2 by applying the basic syntactic models for Swedish clause structures that were presented in 2.1. Somehow, the analysis must provide an explanation for the fact that the finite verb of the “embedded” clause has undergone V-to-C movement and at the same time it must also account for the word *att*, which can be presumed to be a complementizer.

Now, let us take the following theoretical assumptions for valid: Complementizers and finite verbs compete for the same structural position, Force<sup>o</sup>. When the complementizer occupies this position, this has two implications: Firstly, that the complementizer introduces a subordinate clause and anchors it in a higher CP structure, and secondly, that the finite verb is prevented from moving, since the slot which it targets already is taken. If Force<sup>o</sup> is occupied by the finite verb, on the other hand, this means that the CP in question is the highest CP of the clause structure, meaning that it is a main clause that consequently expresses a speech act.

It soon becomes obvious that these general assumptions concerning the properties of the CP in Swedish are incompatible with the characteristics of “embedded” V2-clauses. The reason is of course that these clauses seem to be introduced by a complementizer at the same time as they display V2 word order. These properties cannot be explained or even described in a structural model which only contains one CP, since both the finite verb and the complementizer are assumed to compete for the same slot, Force<sup>o</sup>.

It is not a new observation that there are certain problems associated with describing “embedded” V2 within a structural model containing one CP. A solution that has often been suggested is a recursive CP, that is, an analysis, according to which the “embedded” V2-clause has a syntactic structure containing two CPs. The general idea of a recursive CP-analysis is, of course, that each CP will host one of the two elements that otherwise would compete for the same position. In accordance with the linear structure of the “embedded” V2-clause, the head of the lower CP will then be occupied by the finite verb, whereas the head of the higher one will be occupied by the complementizer (see Vikner 1995 and Holmberg & Platzack 1995).

The advantage of a recursive CP-analysis is that it seems to be able to explain the coexistence of a complementizer and a verb in the second position. At a first glance, it does appear as if a recursive CP-analysis can solve the problems that follow from the contradictory properties of “embedded” V2-clauses: Firstly, it seems to provide a satisfying account for the relation between the first clause and the “embedded” V2-clause. The *att*-clause holds the complement position of the VP in the first clause and, consequently, it functions as an argument in the first clause. Secondly the presence of the word *att* is given an explanation. It is a complementizer which embeds the clause under the matrix. Finally, the analysis accounts for the position of the finite verb. It has in fact moved from V to C; it has moved to the lower C.

However, the recursive CP-analysis is in no way as unproblematic as it might seem at a first glance. In fact, what assuming a double CP, actually boils down to is an attempt to eat the theoretical cake and have it too. If one claims that a clause displays V-to-C movement and has illocutionary force, and at the same time claims that it is subordinated, then, in my opinion, the notion subordination has become quite watered down.

In sections 3.1 - 3.3, I will show that there are empirical facts suggesting that the recursive CP-analysis is not on the right track. In fact, it does not even seem

adequate to analyze “embedded” V2-clauses as embedded or subordinate. Instead the observations to be presented rather point towards an analysis according to which the “matrix” clause, as well as the “embedded” clause, are main clauses. The observations that are presented in sections 3.1 and 3.2 draw on de Haan (2001) who investigates West Frisian. He argues that the complementizer *dat* ('that') is in fact a conjunction and that the “embedded” V2-clause should be analyzed as, in some sense, coordinated with its “matrix” clause.

### 3.1. “Embedded” V2-clauses cannot be topicalized

There are of course a number of possible ways to define the concepts main clause and subordinate clause. One of the more common ways, however, is to apply a functional perspective and define the two categories of clauses on the basis of their interrelations. That is, for instance, what Teleman et al. (1999) propose. They define a main clause as “a clause which is not a constituent of another clause”<sup>4</sup> (Teleman et al., volume 4, 679). A subordinate clause, on the other hand, is defined as “a syntactically subordinate clause”<sup>5</sup> (Teleman et al., volume 4, 462). Now, one might of course say that the definition “syntactically subordinate clause” is quite vague. But given their definition of the notion main clause it seems reasonable to assume that the defining criteria, that Teleman et al. use to separate the two categories of clauses, is whether any given clause constitutes an element within an other clause or not.

No matter if one thinks that a functional definition as the one outlined above is reasonable or not, it is clear that clauses that are regarded as subordinate typically also function as constituents within a superordinate structure. So, for the sake of the discussion, let us assume that a subordinate clause is a part of another clause, as opposed to a main clause, which is not.

Now, as mentioned in section 2.1, one of the characteristics of a declarative

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4 my translation

5 my translation

main clause in Swedish is that the first position (the highest available Spec-CP position) is open to almost all kinds of constituents. Since we above, tentatively, defined subordinate clauses as clauses which function as constituents within other clauses, we predict that they are possible to topicalize. This prediction is carried out. As illustrated by (8), (9) and (10) there normally aren't any problems topicalizing a Swedish subordinate clause that functions as a primary clause constituent.

(8) När Gusten tar emot sitt nobelpris i grammatik ska han bära smoking.  
*When Gusten accepts his Nobel.prize in grammar will he wear smoking*  
 'When Gusten accepts his Nobel Prize for grammar, he will be wearing smoking.'

(9) Att Nobels grammatikpris inte finns glömmes Gusten ofta bort.  
*That Nobels grammar-prize not exists forgets Gusten often PART.*  
 'That the Nobel Prize for grammar doesn't exist is something that Gusten often forgets'

(10) Om man jobbar som kung måste man överräcka priser och klippa band.  
*If one works as king must one hand.over prizes and cut ribbons*  
 'If you work as king, you have to hand over prizes and cut ribbons'

As we can see, all of the sentences in (8) – (10) contain topicalized subordinate clauses which function as constituents within the matrix clause. Described within a syntactic model containing a split CP (with the projections FinP and ForceP) this would mean that the subordinate CP has moved into the Spec-ForceP position of the matrix CP. This movement yields a grammatical result.

If an “embedded” V2-clause is a subordinate clause which functions as a



constituent within a matrix clause, it should be possible to topicalize it just like any other subordinate clause. However, as shown in (11), this is not the case.<sup>6</sup>

(11) \* Att Nobels grammatikpris finns inte glömmer Gusten ofta bort.

*That Nobels grammar.prize exists not forgets Gusten often PART.*

‘That the Nobel Prize for grammar does not exist is something that Gusten often forgets’

As we can see, topicalizing an “embedded” V2-clause yields an ungrammatical result.

### 3.2. “Embedded” V2-clauses are islands for movement

Another problem associated with the recursive CP-analysis is that constituents cannot be extracted from the “embedded” clause and moved into the “matrix” clause. This kind of movement is normally possible in the case of a regular *att*-clause. In (12), below, extraction out of an *att*-clause, which is a complement of a matrix verb is illustrated.

(12) Den boken vet jag att Gusten inte har läst ~~den boken~~.

*That book.the know I that Gusten not has read that book.the*

‘That book, I know that Gusten hasn't read’

In (12) the noun phrase *den boken* (‘that book’) has been moved out of the subordinate clause (in which it is an argument of the verb *läst* (‘read’)) and into the Spec-ForceP position of the matrix clause.

<sup>6</sup> It should be pointed out that not everyone agrees that all cases of topicalized “embedded” V2 are completely ungrammatical. For instance, Julien (2007, p. 145), finds the following Norwegian sentence “only marginally less acceptable” than its counterpart with a topicalized non-V2-clause: (i) at den gutten var ikke som andre glemte de alltid. To my ear, however, the Swedish version of this sentence is ungrammatical.

If one tries to extract a constituent out of an “embedded” V2-clause, the result becomes ungrammatical<sup>7</sup>. Below, (13) is an “embedded”-V2 counterpart of the example presented in (12).

- (13)     ??/\* Den boken    vet jag att Gusten har inte läst ~~den boken~~.  
           *That book.the know I that Gusten has not read that book.the*  
           'That book, I know Gusten hasn't read.'

What (13) illustrates is that “embedded” V2-clauses are islands for movement. This fact is a serious problem for the recursive CP-analysis and, consequently, for the assumption that these clauses are subordinate clauses. In the following, I will suggest that analyzing “embedded” V2 as an instance of subordination is not on the right track.

Two requirements have to be met in order for extraction out of a Swedish *att*-clause to be grammatical. Firstly, the clause must be a CP that occupies a node within a superordinate CP; it has to be a constituent within a matrix clause. Secondly, extraction requires the presence of an empty Spec-CP position in the subordinate clause which the extracted constituent can use as an escape hatch on its way into the superordinate clause. Both of these prerequisites are at hand in the case of a prototypical Swedish *att*-clause and, as far as I can see they should, according to the recursive CP-analysis, also be at hand in the case of “embedded” V2-clauses. Following the recursive CP-analysis, the “embedded” clause ought to occupy the complement position of the matrix VP. This would mean that the clauses involved should be connected in the same way as a regular *att*-clause is connected to its matrix. Furthermore, there is no reason why the highest CP of an “embedded” V2-clause should have a different set of nodes than other *att*-clauses. That is, I take the highest CP in an “embedded” V2-clause, minimally, to contain

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<sup>7</sup> According to Julien (2007) some Swedish speakers from Dalecarlia and Finland can extract from “embedded” V2-clauses. However, to my ear such extraction is quite ungrammatical.

a head, a complement and a specifier and that would mean that the position Spec-CP would be available for the extracted constituent to move out through. In short, one would expect extraction out of an “embedded” V2-clause to be possible if it is subordinated in accordance with the recursive CP-analysis. However, as was shown in (13) this is not the case.

### 3.3. Deictic adjustment is not necessary

Quotation can be done by the use of either direct or indirect speech. Direct speech is presented as a literal reproduction of the original utterance, whereas indirect speech rather is a reproduction of the propositional content of an utterance. Below, one example of each kind of quotation is given. (14) represents the original utterance, which in (15) is quoted in direct speech and in (16) in indirect speech.

(14) Jag äter gröt här.  
*I eat porridge here*  
 'I eat porridge here'

(15) Han sa, jag äter gröt här.  
*He said, I eat porridge here*  
 'He said: I eat porridge here.'

(16) Han sa att han åt gröt där.  
*He said that he ate porridge there*  
 'He said that he ate porridge there.'

In direct speech, the quoted utterance corresponds to the original utterance, with respect to space, time and person (cf. Teleman et al., volume 4, 846). In (15) this manifests itself in three ways. Firstly, the personal pronoun *jag* (*I*) refers to

the speaker who uttered the quoted clause, and not to the person who utters the sentence as a whole. Secondly, the finite verb *äter* (*eat*) is in the present tense, as opposed to the verb of the reporting clause which is in the past tense. This means that the reported event took place at the time for the original utterance. Finally, the adverbial of place *här* refers to the place where the quoted clause was first uttered.

In indirect speech, the quoted utterance has the form of a prototypical subclause. Deictic expressions referring to person, space and time are related to the matrix clause (cf. Teleman et al., volume 4, 850). The point of reference of the reported clause is the ‘here’ and ‘now’ of the matrix clause. In (16), this is shown in three ways. To begin with, we can see that the personal pronoun of the reported clause *han* (*he*) is coreferential with the personal pronoun in the matrix clause. Secondly, we see that the tense of the verb *äter* has been altered from present to past. Thirdly, the adverbial of location has been changed so that it is related to the place where the sentence as a whole is uttered.

The deictic differences between direct and indirect speech can be related to the typical asymmetry between main clauses and subordinate clauses. The fact that a quoted clause, in the case of indirect speech, is deictically adjusted to the matrix clause, could be described and explained along the following lines:

Finiteness can be understood as a feature or property which gives a linguistic expression a point of reference, to which grammatical and deictical categories such as tense, person and location can be related. In effect, this means that finiteness provides a kind of origo, which gives a value to the parameters ‘here’, ‘now’ and ‘I’. The finiteness feature is assumed to be located in the CP and in the case of Swedish it is either checked by the finite verb (main clauses) or lexicalized by a complementizer (subordinate clauses). A main clause has an independent finiteness value, whereas a prototypical subordinate clause does not. Instead, it would seem that a subordinate clause normally is anchored in its matrix clause through the complementizer which links the subordinate clause to the

finiteness value specified in the matrix CP. This means that there can only be one point of reference anchored in the context and discourse, in a structure containing a matrix clause and a prototypical subordinate clause, as is the case in indirect speech. This would explain why deictic expressions, in indirect speech, are adjusted to the ‘here’ and ‘now’ of the matrix clause.

In the case of direct speech, on the other hand, the deictic expressions within the quoted clause are not adjusted to the “matrix” clause. This could be understood as a consequence of the quoted clause having an independent finiteness value. Consequently, direct speech must be construed as two clauses with independent speech act and finiteness values (cf. Petersson, 2008).

Let us now return to the “embedded” V2-clauses. It is a well known fact that these clauses can follow after verbs of saying, which means that they are found in reported speech-constructions. (17) is an example of an “embedded” V2-clause which is used as a quote. This can be compared to the indirect speech construction containing a prototypical subordinate clause, given in (18).

(17) Han sa att jag köper inte sill här.  
*He said that I buy not herring here*  
 ‘He said that I don’t buy herring here’

(18) Han sa att jag inte köper sill här.  
*He said that I not buy herring here*  
 ‘He said that I don’t buy herring here’

As we can see the sentences in (17) and (18) differ in how the deictic expressions in the clauses that represent the quoted utterance are related to the ‘here’ and ‘now’ of the matrix clauses *Han sa* (‘he said’). In (18) both the personal pronoun *jag* (‘I’) and the adverbial of place *här* (‘here’) are adjusted to the ‘here’ and ‘now’ of the matrix clause. More specifically, this means that *jag* (‘I’) refers to

the person who utters the sentence as a whole and that *här* ('here') refers to the place where the whole sentence is uttered. In (17), on the other hand, the deictic expressions of the quoted clause are not adjusted to the finiteness value of the matrix clause. Instead, the personal pronoun *jag* ('I') refers to the speaker who is quoted and *här* ('here') to the place where he made the quoted utterance. It might be worth pointing out that the first person pronoun of the “embedded” V2-clause cannot be understood as being coreferential with the speaker who utters the sentence in (17) as a whole.

The original utterance which is quoted in (17) must have looked like the clause in (19).

- (19) Jag köper inte sill här.  
*I buy not herring here*  
 ‘I don’t buy herring here’

As we can see the original utterance in (19) is identical to the “embedded” V2-clause in (17), except for the word *att*. This means that “embedded” V2 after verbs of saying patterns with direct speech rather than indirect speech. I take this as an indication that the “embedded” V2-clause has an independent finiteness value as well as an independent speech act value. And this would mean that the complementizer of the “embedded” V2-clause does not anchor its finiteness in the preceding clause.

Deictic adjustment in “embedded” V2-clauses is discussed in Julien (2007). She argues that “pronoun change sequence of tense obtains” to some “embedded” V2-clauses and takes this to indicate that they are in fact embedded. The sentences that she uses to show this are cited below, in (20) and (21). (20 a.) and (21 a.) contain “embedded” V2-clauses and (20 b.) and (21 b.) represent what she takes to be “the form that the original utterance or thought must have had”

(Julien, 2007, p. 142-143).<sup>8</sup>

(20) a. Han sa till GP att han **hade** *inte* ens hunnit tänka på OS.  
*he said to GP that he had not even had.time.to think about the Olympics*

'He told GP [a Swedish newspaper] that he had not even had time to think about the Olympics.'

b. Jag **har** *inte* ens hunnit tänka på OS  
*I have not even had.time.to think about the Olympics*

'I have not even had time to think about the Olympics.'

(21) a. Hel-e tid-en visste han at det **var** *ikke* dette han skulle sagt.  
*all.DEF time-DEF knew he that it was not this he should said*

'All the time he knew that this was not what he should have said.'

b. Det er ikke dette jeg skulle sagt.

*it is not this I should said*

'This is not what I should have said.'

What Julien means by saying that “pronoun change and sequence of tense obtains” in these “embedded” V2-clauses is of course that the tense and the personal pronouns of the original clauses have been changed and adjusted to the “matrix” clauses in (20 a.) and (21 a.) However, I would argue that this is jumping to conclusions. I see three problems in connection with the claim that (20) and (21) can be taken to indicate that the “embedded” V2-clauses have been

<sup>8</sup> It should perhaps be pointed out that the sentences in (20) are in Swedish and the ones in (21) are in Norwegian.

deictically adjusted to their “matrix” clauses.

Firstly, to me, it’s not clear why the clauses in (20 b.) and (21 b.) represent “the form that the original utterance or thought must have had”. If (20 b.) and (21 b.) must be the original clauses, then the subjects of the “embedded” V2-clauses also must be coreferential with the subjects of the “matrix” clauses. As far as I can see this is not the case. The pronouns of the “embedded” clauses could just as well have a third referent. This means that the original utterance and thought respectively, may well have had the form of the clauses in (22) and (23), in which case the “embedded” V2-clauses would not be adjusted to their “matrices”.

(22) Han hade inte ens hunnit tänka på OS.  
*he had not even had.time.to think about the Olympics*  
 'He hadn't even had time to think about the Olympics.'

(23) Det var ikke dette han skulle sagt.  
*it was not this he should said*  
 'This wasn't what he should have said.'

The second problem with concluding that the “embedded” V2-clauses are really embedded on the basis of the evidence presented in (20) and (21) is that the same changes to the deictic categories could apply if the utterances and thoughts were reported in a paratactic construction. In other words, these changes do not necessarily have to indicate subordination. This is illustrated in (24) and (25).

(24) Han sa detta till GP: Han hade inte ens hunnit tänka på  
*he said this to GP: He had not even had.time.to think about*  
 OS.  
*the Olympics*  
 'He said this to GP: He hadn't even had time to think about the



Olympics.'

- (25) Hele tiden visste han dette: det var ikke dette han skulle sagt.  
*all time-DEF knew he this: it was not this he should said*  
 'All the time he knew this: this wasn't what he should have said.'

The third, and perhaps most important, objection against Julien's line of reasoning is that the pronoun *han* ('he') can be either deictic or anaphoric. If we change the pronouns of the “embedded” clauses in (20) and (21) to an unambiguously deictic first person singular *jag/jeg* ('I'), the result is a quite clear indication that the “embedded” V2-clause normally will have an independent finiteness value. In (26) the personal pronoun *han* ('he') has been replaced by *jag* ('I'). As a comparison, an equivalent sentence where the *att*-clause is a typical subordinate clause, is given in (27).

- (26) Han sa till GP att jag hade inte ens hunnit tänka på OS.  
*he said to GP that I had not even had.time.to think about the*  
*Olympics*

'He told GP that I hadn't even had time to think about the Olympics.'

- (27) Han sa till GP att jag inte ens hunnit tänka på OS.  
*he said to GP that I not even had.time.to think about the*  
*Olympics*

'He told GP that I hadn't even had time to think about the Olympics.'

What the sentences in (26) and (27) show is that “embedded” V2-clauses differ from regular subordinate clauses with respect to the application of deictic

adjustment. In (26) the pronoun *jag* ('I') refers to the same person as the subject of the first clause *han* ('he'). In (27), *jag* ('I') is coreferential with the speaker who utters the sentence as a whole. It can, under no circumstances, be interpreted as referring to the subject of the matrix clause. In short, the *att*-clause in (27) is deictically adjusted, whereas the “embedded” V2-clause in (26) is not.

I will not completely rule out the possibility that “embedded” V2-clauses, under certain pragmatic circumstances, can display properties which may be regarded as some kind of deictic adjustment. However, I argue that deictic adjustment normally does not apply to “embedded” V2 and that it, in any case, never is necessary. This is clearly shown in (26) and (27). Furthermore I take this to indicate that the complementizer of an “embedded” V2-clause doesn't anchor it in or relate it to the finiteness- or speech act value of its “matrix”.

### 3.4. If an “embedded” V2-clause is a subordinate clause - what is subordination?

How the phenomenon “embedded” V2 is understood and analyzed is largely dependent upon how the notions main clause and subordinate clause are defined. In this section, I will discuss what a definition of the concept subordination might look like, if one assumes that “embedded” V2-clauses are in fact subordinate clauses and that the recursive CP-analysis is on the right track.

Andersson (1975) discusses how the notions subordinate clause and main clause are best defined. He argues that there is reason to make a division between syntactic and semantic subordination. The definitions that he proposes for subordinate clauses and main clauses respectively are given below (Andersson, 1975, 57):

A) “A semantically main clause is a clause that makes a statement, asks a question or gives a command”.

B) “A semantically subordinate clause is a clause that does not make a statement, ask a question or give a command”.

C) “A syntactically main clause is a clause that is not introduced by a complementizer”.

D) “A syntactically subordinate clause is a clause that is introduced by a complementizer”.

If the definitions quoted above are applied, four possible categories of clauses can be distinguished:

- I) Semantically and syntactically main clauses (prototypical main clauses).
- II) Semantically and syntactically subordinate clauses (prototypical subordinate clauses).
- III) Semantically main but syntactically subordinate clauses.
- IV) Syntactically subordinate but semantically main clauses.

Let us now relate the recursive CP-analysis, which is proposed in Julien (2007), to the clause categories that follow from Anderssons definitions.

According to Julien, “embedded” V2-clauses are subordinate clauses that have illocutionary force. If the definitions proposed by Andersson are applied to this analysis, this ought to mean that “embedded” V2-clauses would belong to category III. The reason for this is of course that an “embedded” V2-clause, according to Julien, expresses a speech act and at the same time is introduced by a complementizer (*att*). Such an analysis would perhaps appear to be on the right track since it would seem to account for the structural as well as the pragmatic/semantic properties of “embedded” V2. But in my opinion the status of the presumed complementizer *att* ('that') must be questioned in the case of

“embedded” V2-clauses. In the following, I will highlight the differences between prototypical subordinate clauses and “embedded” V2-clauses, concerning the word *att*.

In section 2.2, I showed that “embedded” V2-clauses deviate from the typical pattern of Swedish subordinate clauses in two significant ways: Firstly, they display V2 word order and secondly, they have independent speech act values. I argued that these properties could be analyzed as the results of the V-to-C movement. More specifically, I assumed that the finite verb had moved from V to Force<sup>o</sup>. This would account for the syntactic properties (V2 word order) as well as the semantic/pragmatic ones (speech act value) of “embedded” V2-clauses.

In sections 3.1 – 3.3, I pointed out three problems associated with analyzing the phenomenon “embedded” V2 in terms of a recursive CP. I showed that the possibilities of topicalization of and extraction out of an “embedded” V2-clause are very limited (if not completely ruled out), contrary to what one would expect if the recursive CP-analysis is on the right track. Furthermore, I showed that deictic adjustment does not have to take place in “embedded” V2-clauses. I took this as an indication that the complementizer of an “embedded” V2-clause does not anchor it in the finiteness- and speech act value of the “matrix” clause.

Given that the observations presented in 3.1 – 3.3 are valid, an analysis according to which the “embedded” V2-clause is a subordinate clause has considerable consequences for the definition of the notion subordination. In the following, I will show that the recursive CP-analysis, in effect, means defining subordination on the basis of one formalistic and/or one functional property.

It is possible to topicalize a prototypical Swedish *att*-clause. It is also possible to extract a constituent out of a prototypical *att*-clause. Furthermore, deictic adjustment applies to these clauses. In my view, this is an indication that a regular Swedish subordinate clause is anchored in its matrix clause through a complementizer located in the highest head position of its C-domain. More specifically, I assume that the role of the complementizer is to relate the

propositional content of a subordinate clause to a higher CP-structure which, in turn, is directly or indirectly anchored in the context or discourse. The finite verb of the matrix CP that has undergone V-to-C movement, gives the structure an independent finiteness value as well as an independent speech act value. A complementizer plays a different role. It relates a subordinate clause and its propositional content to the values specified in the matrix CP. As we have seen, this does not seem to apply to “embedded” V2-clauses: Normally neither topicalization, nor extraction is possible. Furthermore, it has been shown that deictic adjustment normally does not apply.

Let us begin by looking at deictic adjustment. The observation that it is not necessary to adjust an “embedded” V2-clause to its “matrix” could be explained if it is related to the assumption that the finite verb of the “embedded” clause has moved from V to Force<sup>o</sup>. This verb movement gives the “embedded” clause two important properties, namely an independent finiteness value, through a specification in FinP, and an independent speech act value through a specification in ForceP. This is a direct consequence of the independent speech act- and finiteness values which are the results of the V-to-Force<sup>o</sup> movement. If a clause is to express an independent speech act, it cannot be anchored in a matrix clause in the sense that it is directly related to the specifications in the CP of this matrix. A clause that expresses a speech act must have its own point of reference (finiteness) and its own illocutionary force. If a complementizer anchors a clause in a matrix by relating it to the values specified in the higher CP, the clause cannot express a speech act. In other words, a clause cannot represent an independent speech act and at the same time be deictically adjusted to a matrix.

Now, let us turn to topicalization and extraction. A prototypical Swedish *att*-clause can be topicalized and it can also be extracted out of. If one follows the recursive CP-analysis and assumes that the “embedded” V2-clause is merged as the complement of V<sup>o</sup> and that its highest CP has the same set of nodes as a regular CP, one would expect that both operations should be possible also if the

complement of the matrix verb is an “embedded” V2-clause. However, as was shown in 3.1 and 3.2, neither topicalization of, nor extraction out of an “embedded” V2-clause is possible. In my opinion, this would suggest that the “embedded” V2-clause is not connected with its “matrix” clause in the same way as a prototypical Swedish subordinate clause.

The facts concerning topicalization, extraction and deictic adjustment clearly indicate that there is a significant difference between prototypical subordinate clauses and “embedded” V2-clauses, concerning the role of the word *att*. In regular subordinate clauses it functions as a typical complementizer and anchors the subordinated clause in the matrix. This means that the subordinate clause is an integrated constituent of the matrix, which allows for topicalization as well as for extraction. Furthermore, the complementizer relates the finiteness- and speech act values of the subordinate clause to those of the superordinate clause, which means that the subordinate clause has to be deictically adjusted to its matrix. In the case of “embedded” V2-clauses, the complementizer does not anchor the “embedded” clause in its matrix with respect to finiteness and speech act value, nor does it connect the “embedded” clause to the “matrix” in a way that allows topicalization or extraction.

Consequently, analyzing an “embedded” V2-clause as a subordinate clause means that the notion subordination does not necessarily have to have any semantic/pragmatic implications. In effect, this means that only two possible definitions are available: Firstly, the formal definition that a subordinate clause is a clause which is introduced by a complementizer. Secondly, the functional definition that a subordinate clause is a clause that functions as a constituent within another clause. However, I find both of these definitions to be problematic if they are to include “embedded” V2-clauses.

If a subordinate clause is defined as a clause that is introduced by a complementizer and “embedded” V2-clauses are to be analyzed as subordinate, then the question arises: “what does the complementizer do?” As we have seen,

the complementizer of an “embedded” V2-clause doesn’t anchor the clause in its “matrix” with respect to finiteness or speech act value. That is, the presence of the complementizer does not seem to have any semantic/pragmatic implications. Nor does it seem to integrate the “embedded” clause as a constituent of the matrix in the same way as a prototypical subordinate clause is integrated in its matrix. Had this been the case, topicalization and extraction would be possible.

The functional definition, according to which a subordinate clause is a clause that functions as a constituent within another clause, seems problematic to apply to “embedded” V2-clauses. Certainly, from a logical point of view, the “embedded” clause constitutes an argument in relation to the verb of the “matrix” clause. But if it functions as a constituent of the “matrix”, then why isn’t topicalization or extraction possible?

These problems can be solved if, firstly, the word *att* is not analyzed as complementizer in the case of “embedded” V2 and secondly, if “embedded” V2-clauses are not regarded as subordinate but rather independent main clauses, syntactically as well as semantically/pragmatically.

In the following section, I propose an alternative definition of the notion subordination and present a new analysis of “embedded” V2, according to which “embedded” V2-clauses are regarded as independent main clauses.

## 4. “Embedded” V2-clauses are not embedded

### 4.1. Defining main clauses and subordinate clauses

To say that a subordinate clause is a clause that is introduced by a complementizer means giving the notion subordination a formalistic definition. For many purposes such definitions can be very useful. For instance, a formalistic definition of subordination may facilitate the identification of subordinate clauses in a specific language. There are however also certain drawbacks to defining subordination in terms of formal properties. One is that

such a definition will exclude many of the world's languages. It would seem reasonable to assume that all natural languages would have some means of expressing the semantic/pragmatic relations that in many European languages are expressed through subordinate clauses which can be identified from the presence of complementizers. No matter which language is used as the point of departure for the definition, a formalistic definition will exclude other languages because they will lack the particular formal property which is used as a definition of the notion subordination. That is, a formalistic definition will always give rise to a typological mismatch problem (cf. Cristofaro, 2003, 20-22).

Cristofaro (2003) conducts a typological study of the concept subordination. In order to get around the problems that formal definitions inevitably give rise to, she turns the perspective the other way around. That is, rather than trying to determine which functions that can be linked to a specific form, she looks at what forms can be put in connection with a given function. Her basic assumption is that all languages, in some way, make a distinction between asserted and non-asserted linguistic expressions. She writes: "By subordination will be meant a situation whereby a cognitive asymmetry is established between linked SoAs [state of affairs], such that the profile of one of the two (henceforth, the main SoA) overrides that of the other (henceforth, the dependent SoA). This is equivalent to saying that the dependent SoA is (pragmatically) non-asserted, while the main one is (pragmatically) asserted. This situation exists in all languages, and there are consistent criteria allowing us to identify the dependent SoA cross-linguistically" (Cristofaro, 2003, p. 33).

Further, Cristofaro discusses which semantic/pragmatic relations that can exist between two linked states of affairs. She concludes that there are two possibilities: "In principle, then, semantic relations between SoAs can be construed as either conceptually symmetrical (i.e. both SoAs are asserted and have an autonomous profile) or conceptually asymmetrical (i.e. one SoA is non-asserted, and has no autonomous profile)" (Cristofaro, 2003, p. 38).

I will follow the general outline of Cristofaro's proposal, but apply it in a



somewhat modified way. Firstly, I will not use the term SoA, but rather speak simply of clauses. Secondly, I will broaden the definition so that it includes all the basic speech acts (assertion, question and command) and not just assertions. In the following, I will apply these semantically/pragmatically oriented definitions of the concepts main clause and subordinate clause to Swedish.

I argue that the categories main clause and subordinate clause form a strict dichotomy. This dichotomy is quite simple. It is built on the basic assumption that the semantic/pragmatic interpretation of a Swedish clause can be directly related to its syntactic properties. In practice, this means that the criterion which decides whether a clause is a main clause or a subordinate clause is its speech act value. If the clause in question has a speech act value, it is a main clause. If it lacks speech act value, it is a subordinate clause.

As already mentioned, speech act value (or illocutionary force) is a property which is coded in ForceP, in the C-domain. I assume that all clauses, main as well as subordinate, contain a C-domain. Furthermore, I assume that all C-domains, in their turn, contain a ForceP. However, not all CPs can be coded for an independent speech act value.

Clause structures resemble onions or Russian dolls in the sense that they are recursive. A CP can contain a subordinated CP (which thus fills a function within the superordinate one) and that CP can contain yet another CP which in its turn can contain another CP, and so on. I take it that all of these CPs, in principle, should have identical structures. That is to say that they, among other projections, ought to contain a ForceP. However, the idea that all CPs are copies of each other in the sense that they contain the same set of functional projections does in no way mean that they are identical in every respect, especially not as far as their function is concerned.

In the case of Swedish, a clause gets an independent speech act value if the finite verb moves from V to ForceP. In the case of questions and declarative clauses, the verb must check the finiteness feature in FinP, before moving up to

ForceP. In effect, this means that only those CPs which do not themselves function as constituents of higher CPs, can have an independent, positive speech act value. The reason for this is that a subordinate clause is an embedded CP and its subordination manifests itself through a complementizer which occupies a position within the C-domain. The role of the complementizer is to anchor the proposition of the subordinate clause in the higher CP, which in its turn, directly or indirectly, is anchored in the context or discourse in which the utterance is made. That is to say, a complementizer relates the clause which it introduces to a superordinate origo, or point of reference (finiteness). This means that it provides a kind of specification for finiteness value as well as speech act value. If anything, these specifications are to be considered references to the values given in a higher CP. They are not independent values. Thus, subordinate clauses are, through their complementizers, specified for speech act value and finiteness but these values are not independent. Instead, they are references to the specifications that are found in the highest CP.

Put in syntactic terms, speech act value means that a clause has an independent specification in ForceP and such a specification is, in principle, only possible if the clause is the highest CP of the clause structure, and thus anchored directly in the context and speech situation. Irrespective of whether they are lexical elements or operators, the C-domain must be open and available to the elements that can provide an independent, positive value in ForceP. In effect, this means that a clause cannot have an independent speech act value if it is subordinated. The reason for this is that the C-domain of a subordinated clause is occupied by a complementizer that anchors the clause in a higher CP and at the same time prevents the finite verb from moving to ForceP.

As mentioned, the speech act value of a Swedish clause is associated with verb movement from V to C. More specifically, the finite verb of a clause that expresses a speech act first moves from V to FinP (at least in questions and assertions) and then on to ForceP. This means that the line of argument

concerning the connection between semantic/pragmatic status and syntactic structure in Swedish can be summed up in the following way:

Within one clause structure, there can be no more than one given speech act value. This value is coded by the finite verb moving from V to ForceP. Specification for an independent speech act value can only be given in the highest available CP. The specifications that the complementizer provides in subordinate CPs are not independent. Instead, they are related to the speech act value that is specified in the highest CP. Thus, the following applies to Swedish: A clause which C-domain contains a complementizer is anchored in a higher CP and lacks an independent speech act value. A clause that constitutes the highest CP of a clause structure and has a finite verb which has undergone V-to-Force movement, has an independent speech act value.

We can now apply a functional perspective on clause categories and allow for the semantic/pragmatic status regarding speech act value to define the criteria for the categories main clause and subordinate clause: A main clause has an independent speech act value and a subordinate clause lacks speech act value. Applied to Swedish, this means that a main clause contains the highest available CP, to which the finite verb has moved, whereas a subordinate clause is a subordinated CP, the C-domain of which is occupied by a complementizer. In the case of Swedish, the application of speech act value as a defining criterion further means that the term subordination is synonymous to the term subordinate clause.

#### 4.2. The status of *att*

In this section, the main clause/subordinate clause dichotomy that was outlined in the previous section, will be applied to sentences containing an “embedded” V2-clause. Consider (28):

(28) Vi inser att hästar äter inte gurka.

*We realize that horses eat not cucumber*

‘We realize that horses don’t eat cucumber.’

The sentence in (28) contains two clauses: *Vi inser* and *hästar äter inte gurka* (For now, the word *att* is left out of the analysis). Both of these clauses express speech acts; they are assertions. This is mirrored in their syntactic structures. The first, as well as the second clause displays V2 word order. In both cases, this word order must be analyzed as instances of V-to-Force movement.

In 4.1, a subordinate clause was defined as a clause that lacks speech act value. Further, it was established that speech act value is directly linked to V-to-Force movement. Since both of the clauses in (28) have an independent speech act value and display V2 word order, none of them can be analyzed as a subordinate clause; they are both main clauses. This means that the term “embedded” V2 is misleading, since an embedded clause undoubtedly must be a subordinate clause. Instead an “embedded” V2-clause should perhaps simply be called a V2-clause. In order to keep the terminology consistent, however, I will continue to use the term “embedded V2” throughout this paper.

For the sake of the discussion, let us follow Cristofaro (2003, p. 38) and assume that there are two possible relations between two linked clauses within any given sentence, with regards to speech act values. The relation can be either symmetrical or asymmetrical. If it is symmetrical, the clauses are on the same hierarchic level, i.e. they are coordinated. If the relation is asymmetrical, the clauses are on different hierarchic levels, which in effect means that one of the clauses is subordinated to the other.

Since both clauses in a sentence containing an “embedded” V2 have been categorized as main clauses, due to their speech act value and word order, the relation between them cannot be asymmetric. If the clauses are to be analyzed as somehow syntactically linked to each other, the remaining alternative is to assume a symmetric relation. In other words, that the clauses are somehow

coordinated. This is what de Haan proposes for “embedded” V2 in West Frisian: “we assume such clauses to be structural root CPs, not subordinated, but 'coordinated' with the clauses to their left. Consequently, the complementizer *dat* is not a subordinator but a conjunction, connecting two root CPs” (de Haan, 2001, 21). Such an analysis can however, quite easily, be ruled out. First of all, coordination would require some kind of coordinating conjunction. The only possible candidate is the word *att* and to analyze *att* as a coordinating conjunction seems quite far fetched. Secondly, the only possibility, in case the clauses were coordinated, would be an additive relation between the two clauses. That the clauses in a sentence containing an “embedded” V2-clause do not stand in such a relation to each other is illustrated by the examples in (29) and (30).

(29) Vi inser att hästar äter inte gurka.  
*we realize that horses eat not cucumber*  
 'We realize that horses don't eat cucumber.'

(30) \*Vi inser och hästar äter inte gurka.  
*we realize and horses eat not cucumber*  
 'We realize and horses don't eat cucumber.'

The sentence in (29) is a construction containing an “embedded” V2-clause. In (30), *att* has been replaced with the coordinating conjunction *och*. Apart from the fact that this yields an ungrammatical result, it is obvious that the relation between the clauses in (29) doesn't correspond to the relation between the clauses in (30).

Now that both a subordination analysis and a coordination analysis has been ruled out there is only one logical possibility left. A sentence containing an “embedded” V2-clause must be analyzed as two clauses which are separate units. In other words, both clauses have to be considered independent main

clauses which, in principle, are related to each other in the same way as other main clauses in a text.

I have now concluded that both clauses in a sentence containing an “embedded” V2-clause must be analyzed as two independent main clauses. That, however, does not alone solve all problems associated with the phenomenon “embedded” V2. The reason for this is that my paratactic analysis gives rise to two new problems which have to be solved. Firstly, since the word *att*, according to my analysis, cannot be analyzed as a complementizer, nor as a coordinating conjunction, it has no status for the moment. Secondly, given the assumption that a main clause cannot be an argument of a verb, the verb of the first clause in a sentence like (28), would seem to lack an argument, if my paratactic analysis is applied. In the following, I will propose an analysis where both of these problems are solved.

As I have shown, the word *att* does not fill the prototypical function of a complementizer in the case of “embedded” V2-clause. That is, it doesn't anchor the “embedded” clause in a higher CP, with respect to illocutionary force or finiteness. If it had, then the “embedded” clause would have been deictically adjusted. Nor does it integrate the “embedded” clause as a regular constituent within a “matrix”. If it had, then both extraction and topicalization would have been possible.

My conclusion is that *att* shouldn't be considered a complementizer in the case of “embedded” V2-clauses. Instead, the word *att* is a pronominal element which functions as an argument within the first clause of a sentence containing an “embedded” V2-clause. According to my analysis, the word *att* does not occupy the C-domain of the “embedded” V2-clause. Instead it holds the complement position of the VP in the first clause. Its referent is the “embedded” V2-clause.

According to this analysis, the first clause of a sentence containing an “embedded” V2-clause has minimally three constituents, namely a subject, a

finite verb and an object (*att*). The referent of this object is the second clause, which means that *att* is semantically identical with the “embedded” clause<sup>9</sup>. The second clause, which is separate and independent from the first clause, has the structural and semantic/pragmatic properties of a prototypical Swedish main clause. That is, the clause expresses a speech act and its finite verb holds the second position, Force<sup>o</sup>, normally preceded by a topicalized constituent in Spec-ForceP.

In analyses of contemporary Swedish, it is normally assumed that *att* is a subjunction. In other words, *att* is normally considered to be a complementizer and nothing else. Thus, a proposal according to which *att*, in the case of “embedded” V2, is a pronominal constituent within the clause which is traditionally considered a matrix might, at a first, seem somewhat odd. However, if one looks at it from a historic point of view, it will no longer seem that far-fetched to assume that the word *att*, in some constructions, can have a pronominal function. The reason is that the Swedish complementizer *att*, just like German *dass* and English *that*, has developed from the demonstrative pronoun *pat/pät*. It has originally had a demonstrative use, functioning as a constituent within the “matrix”. Gradually, however, “it has moved into the subordinate clause, lost its accent and its actual meaning and finally turned into a pure conjunction<sup>10</sup>” (Wessén, 1965, 74-75)<sup>11</sup>.

Furthermore, *at(t)* is still used as a (normally enclitic) pronoun in some Swedish dialects. It is neuter, singular and corresponds to the standard form *det*.

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9 Another possibility would be to analyze *att* as a kind of citation marker and assume that the first clause of an “embedded” V2-construction contains a Ø-pronoun. According to such an analysis, *att* would resemble the Swedish particle *ba* which is used to mark citation. However, an important difference between *ba* and *att* is that the former can be used without a finite verb, whereas the latter cannot: (i) Hon ba: Gusten är typ miljonär eller nåt! (‘She said: Gusten is like a millionaire or something’). (ii) \*Hon att: Gusten är typ millionär eller nåt! (‘She that: Gusten is like a millionaire or something’). I take this difference to indicate that *ba* has verbal features whereas *att* only has nominal features.

10 My translation

11 From a typological point of view, it is interesting to note that the Russian complementizer *umo* and the Hungarian complementizer *hogy* have also developed from pronouns (Vasmer, 1958; Valéria Molnár, personal communication).

The sentences in (31)-(33), which are taken from Hagren (2008, p. 156, 194 and 211), contain examples of *att(t)* used as enclitic pronouns (underlined).

- (31) ja agade ma lainge för å tal-åmm-att. (province of Blekinge)  
 'jag ängslades länge för att tala om det'  
 'For a long time, I was anxious about telling it'
- (32) så ja va ine guför o komma på-at en gång (south-eastern Blekinge)  
 'så jag klarade inte ens av att komma på det'  
 'so I didn't even manage to come to think of it'
- (33) tess han feck lôv å-na att få jör-at. (province of Östergötland)  
 'tills han fick av henne att göra det'  
 'until she let him do it'

I refer to the word *att* as a pronominal element. The reason that I do not straightforwardly analyze it as a regular pronoun, is that it doesn't seem to have the full set of noun phrase-features that other pronouns have. In particular, it differs from regular, full pronouns with respect to distribution. Unlike other pronouns it can only occupy one structural position, namely the complement of the VP. This difference between *att* and regular, full pronouns is illustrated in (34) and (35).

- (34) Detta sa han: Gusten tycker inte om sin hyresvärd.  
*this said he: Gusten likes not PART. REFL landlord*  
 'This he said: Gusten doesn't like his landlord.'
- (35) \*Att sa han: Gusten tycker inte om sin hyresvärd.  
*that said he: Gusten likes not PART. REFL. landlord*



'That he said: Gusten doesn't like his landlord.'

A further difference between *att* and regular, full pronouns is that it must be immediately followed by its antecedent<sup>12</sup>. This difference is illustrated in (36) and (37).

(36) Gustens hyresvärd sa detta igår: du får inte något varmvatten.  
*Gusten's landlord said this yesterday: you get not any hot.water*  
 'Yesterday Gusten's landlord said this: you won't get any hot water.'

(37) \*Gustens hyresvärd sa att igår: du får inte något varmvatten.  
*Gusten's landlord said that yesterday: you get not any hot.water*  
 'Gusten's landlord said that yesterday: you won't get any hot water.'

I take the fact that *att* does not have the same possibilities with respect to distribution as regular pronouns as an indication that it has lost some of its noun phrase-features. Nevertheless, it has phi-features which are sufficient for allowing it to function as an argument in relation to a verb. Furthermore I assume that *att*, in addition, has at least one semantic feature, namely [+proximity]. This feature can account for the fact that *att* must be immediately followed by its antecedent. Furthermore it makes the reference cataphoric.

That the feature [+proximity] makes the reference cataphoric is worth commenting on. It seems that *att* can be used either on its own or together with a regular pronoun. In the former case, it functions as the argument of the verb. In

<sup>12</sup> Another difference between the pronominal *att* and regular, full pronouns is that the verb of the first clause may be factive if a regular cataphoric pronoun is used. This is ungrammatical if the pronominal *att* is used. The difference is illustrated in (i) and (ii): (i) Han ångrar detta: han köpte inte bilen. ('He regrets this: he didn't buy the car.') (ii) \*Han ångrar att han köpte inte bilen. ('He regrets that he didn't buy the car').

the latter case however, it doesn't seem to function as an argument. Instead it just seems to add the feature [+ proximity] by which it makes the reference of the regular pronoun cataphoric. The function of *att* when it is combined with another pronoun is illustrated in (38) - (41).

(38) ? Han sa det: Gusten har faktiskt inte höns längre.  
*he said it: Gusten has actually not chickens any.more*  
 'He said it: Gusten actually doesn't have chickens any more.'

(39) Han sa det att Gusten har faktiskt inte höns längre.  
*he said it that Gusten has actually not chickens any.more*  
 'He said that Gusten actually doesn't have chickens any more.'

(40) Han sa detta: Gusten har faktiskt inte höns längre.  
*he said this: Gusten has actually not chickens any.more*  
 'He said this: Gusten actually doesn't have any chickens any  
 more.'

(41) ?? Han sa detta att: Gusten har faktiskt inte höns längre.  
*he said this that: Gusten has actually not chickens any.more*  
 'He this that: Gusten actually doesn't have chickens any more.'

The sentence in (38) contains two clauses: *Han sa det* and *Gusten har faktiskt inte höns längre*. The reason that this sentence is very odd is that the pronoun *det* normally has anaphoric (or sometimes deictic) reference. In this sentence, however, the reference must be cataphoric in order for the sentence to be grammatical. If we compare (38) with (39) we notice that the only difference is that the first clause in (39), in addition to the regular pronoun, also contains an *att*. This combination yields a grammatical result. I take this to indicate that *att*,

through its feature [+ proximal] changes the reference of the pronoun *det* from anaphoric to cataphoric. One way of describing this would be to think of *att* as spell out of the feature [+ proximal].

The only difference between the sentences in (38) and (39), on the one hand, and those in (40) and (41) on the other, is that the pronoun, in the latter ones, has been changed to *detta*. This yields the opposite result. (40), which only contains the regular pronoun is completely grammatical, whereas (41) which contains a regular pronoun plus *att* sounds rather odd. The explanation is probably that the pronoun *detta*, in this case, is cataphoric to begin with. Adding an *att*, which is also cataphoric, just results in a kind of tautology.

The conclusion is that *att* can be used on its own or combined with the regular anaphoric pronoun *det*. If it is used on its own, it is an argument which has phi-features as well as the semantic feature [+proximal]. If it is used in combination with the pronoun *det*, it is not the argument of the verb. In that case its nominal features are overridden by those of the regular pronoun. Instead it just adds the proximal feature, making the reference of *det* cataphoric.

In this section, I have presented a new analysis of “embedded” V2, which can be summarized in the following way: Sentences containing an “embedded” V2-clause consist of a minimum of two clauses. Both of them are independent main clauses. The word *att* is not a complementizer, but a pronominal element. It functions as an object within the first clause. Its distribution differs from that of regular pronouns since its set of nominal features is incomplete. Apart from phi-features, I assume that *att* has a semantic feature [+ proximal] which can explain the fact that its antecedent must follow immediately. This feature also ensures cataphoric reference.

### 4.3. Arguments in favor of the proposed analysis

In this section, I intend to give a brief presentation of arguments which support

the paratactic analysis that was outlined in 4.2.

Let us, to begin with, once again consider the facts concerning topicalization and extraction. As was shown in sections 3.1 and 3.2, neither topicalization, nor extraction yields a grammatical result when applied to “embedded” V2-clauses. If “embedded” V2 is analyzed as an instance of subordination this is quite strange. But if the clauses in a sentence containing an “embedded” V2-clause are analyzed as two independent main clauses, it is exactly what one would expect. A prerequisite for both topicalization and extraction is that the clause which is to be topicalized or extracted from is integrated as a constituent within a matrix. According to my analysis, the “embedded” V2-clause is an independent main clause. Consequently it is not a constituent within another clause and thus it cannot be topicalized or extracted from.

The facts concerning deictic adjustment can be explained along the same lines. As was pointed out in section 3.3, deictic adjustment normally doesn't apply to “embedded” V2-clauses. Once again, this is a theoretical problem if the “embedded” V2-clause is analyzed as a subordinate clause. But if it is an independent main clause, then the observations concerning deictic adjustment are in complete accordance with what one would expect. A main clause has its own illocutionary force, as well as its own finiteness and those properties are incompatible with deictic adjustment.

The analysis does not only explain the facts regarding topicalization, extraction and deictic adjustment. All root transformations which are applicable to “embedded” V2-clauses can be explained along the same lines. In other words, the reason that “embedded” V2-clauses can display root phenomena such as initial dislocations or speaker oriented interjections<sup>13</sup>, is that they are in fact main clauses, or roots. Root phenomena apply to root clauses.

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13 (i) is an example of an ”embedded” V2-clause with an initial dislocation *den bilen* (‘that car’). (ii) is an example of an ”embedded” V2-clause containing a speaker oriented interjection *fan* (‘damn it’). (i) Han sa att den bilen, den skulle jag aldrig köpa. (‘He said, that car, that car I would never buy’) (ii) Han sa att nu har jag fan fått nog. (‘He said, damn it, I’ve had it’).

A further argument in favor of the paratactic analysis has to do with which speech acts that “embedded” V2-clauses can express. It is commonly assumed that “embedded” V2-clauses can only express assertions. However, I have found surprisingly many examples of sentences where the “embedded” clause, quite clearly, is an imperative clause. In (42) - (45), a small selection of the authentic examples which I have found by googling is presented. The main verb of the first clause, the pronominal element *att* ('that') and the imperative of the “embedded” clause are in bold.

- (42) Han hälsade mig välkommen i united states och **sa att drick**  
*he greeted me welcome in united states and said that drink*  
 inte för mycket så du hamnar i finkan.  
*not to much so.that you end.up in yail.the*

'He wished me welcome to the United States and said, don't drink to much, so that you end up in jail.'

- (43) Min man **sa att köp** för guds skull ingen färs  
*my husband said that buy for god's sake no minced.meat*  
 där, då vet man inte hur man mår i morgon  
*there, then know one not how one feels in morning*

'My husband said, for god's sake, don't buy any minced meat there, if you do, there's no telling how you'll do tomorrow.'

- (44) läkaren **sa att åk** hem och nys ut den.  
*doctor.the said that go home and sneeze out it*  
 'the doctor said: go home and sneeze it out.'

- (45) Hon **sa att** “**lägg** 10 minuter var dag på bön”.  
*she said that "lay 10 minutes every day on prayer"*  
 'She said "take 10 minutes to pray every day".'

One of the characteristics of imperative clauses is that they cannot be embedded (cf. Platzack & Rosengren, 1998, 178). This means that sentences such as those in (42) - (45) are hard to account for if the “embedded” clause is analyzed as an instance of subordination. To a paratactic analysis, on the other hand, they are not a problem. There are no grammatical restrictions to quoting an imperative clause, by means of paratax. That the sentences in (42) - (45) are in fact paratactic constructions in which the word *att* is a pronominal constituent within the first independent clause is shown by the paraphrase of (45) which is given below, in (46).

- (46) Hon sa detta: **lägg** 10 minuter var dag på bön!  
*she said this: lay 10 minutes every day on prayer*  
 'She said this: take 10 minutes to pray every day'

The sentence in (46), which is an unambiguous instance of paratax, is a paraphrase of (45). As we can see the paraphrase has the same meaning as (45).

Finally, I would like to put forth a prosodic argument in favor of the proposed analysis. According to Roll (2009) “embedded” V2-clauses (he calls them ‘embedded main clauses’) display a prosodic property that is typically associated with main clauses. Just like in prototypical main clauses, there is a ‘left-edge boundary tone’ in “embedded” V2-clauses:

“In Central Swedish, a H tone is phonetically associated with the last syllable of the first prosodic word of utterances (Horne, 1994; Horne et al., 2001). Roll (2004, 2006) found that H appears in embedded main clauses but not

in subordinate clauses. It thus seems that this 'left-edge boundary tone' functions as a signal that a main clause is about to begin” (Roll, 2009, 34). Further, he writes: “The left-edge boundary tone is probably associated with main clause structure in general rather than specifically with assertions, since it also seems to appear in questions” (Roll, 2009, 34).

As we can see, Roll argues that “embedded” V2-clauses differ from regular *att*-clauses, regarding their prosodic properties. A prototypical subclause does not have a left-edge boundary tone, whereas an “embedded” V2-clause does. The boundary tone is related to main clause structure. I take this to indicate that the pronominal element *att*, prosodically, belongs to the first clause and not to the “embedded” V2-clause.

## 5. Summary

In this paper, I have discussed the phenomenon “embedded” V2 in Swedish. I have shown that “embedded” V2-clauses display two important properties that separate them from prototypical subordinate clauses: They have V2 word order and they express speech acts.

“Embedded” V2 has often been analyzed in terms of a recursive CP. According to such an analysis, the “embedded” clause is a subordinate clause which has a double set of CPs: a lower one to which the finite verb moves and a higher one which hosts the complementizer. In this paper, however, I have pointed at three problems related to a recursive CP-analysis. Contrary to what one would expect if the “embedded” V2-clause is in fact subordinated, extraction out of and topicalization of an “embedded” V2-clause yields ungrammatical results. Furthermore, I have shown that an “embedded” V2-clause, unlike a prototypical *att*-clause, does not have to be deictically adjusted to its “matrix” clause. The conclusion that I have drawn from these facts is that the “complementizer” *att* (‘that’) does not anchor the “embedded” V2-clause in, or relate it to, the finiteness and speech act values of the “matrix” clause.

I have applied a functional perspective and defined the categories main clause and subordinate clause on the basis of speech act value. A main clause is a clause that expresses a speech act, whereas a subordinate clause is a clause that does not. Furthermore I have argued that speech act value can be directly related to V-to-Force movement. If the finite verb moves to ForceP, the clause gets a speech act value. If ForceP contains a complementizer, the finite verb is prevented from moving there and, consequently, the clause lacks speech act value.

Following the definitions above, I have concluded that both clauses in a sentence containing an “embedded” V2-clause must be analyzed as independent main clauses, since they both display V2 word order and express speech acts. Crucially, I have argued that, in the case of “embedded” V2, the word *att* (‘that’) is not a complementizer but a pronominal element in the first clause. This means that *att* functions as an argument in relation to the verb of the first clause.

The paratactic analysis was supported by the evidence regarding topicalization, extraction and deictic adjustment. Further, I have shown that it can account for the observation that the “embedded” clause can be an imperative clause. Finally, following Roll (2009), I have argued that the prosodic properties of “embedded” V2-clauses point towards an analysis according to which both clauses are main clauses.

## References

Andersson, Lars-Gunnar (1975): *Form and function of subordinate clause*. Göteborg: Dept. of linguistics, University of Göteborg.

Besten, Hans, den (1983): On the interaction of root transformations and lexical deletive rules. In *On the formal syntax of the Westgermania. Papers from the "3rd Groningen Grammar Talks"*. Groningen, January 1981. Ed. Werner



Abraham, pp. 47 - 131. Amsterdam and Philadelphia: John Benjamins.

Cristofaro, Sonia (2003): *Subordination*. New York, Oxford: Oxford university press.

De Haan, Germen J. (2001): More is going on upstairs than downstairs: Embedded root phenomena in West Frisian. In *The journal of comparative linguistics* 4. pp. 3 - 38. Kluwer Academic Publishers.

Hagren, Kristina (2008): *Hur märks infinitiven? Infinitivkonstruktioner i svenska dialekter med fokus på infinitivmärket*. Uppsala: Institutionen för nordiska språk.

Holmberg, Anders; Platzack, Christer (1995): *The role of inflection in scandinavian syntax*. New York, Oxford: Oxford university press.

Julien, Marit (2007): Embedded V2 in Norwegian and Swedish. In *Working papers in Scandinavian syntax* 80. pp. 103 - 161. Lund: Center of language and literature.

Petersson, David (2008): Förhållandet mellan anföringssats och anförd sats vid direkt anföring. In Josefsson, Gunlög (ed.) *Syntax i gränssnittet – Tre uppsatser i gränsområdet mellan lexikon, syntax och semantik*, pp. 57 - 110. Nordlund 29. Lund: Lund University.

Platzack, Christer; Rosengren, Inger (1998): On the subject of imperatives: A minimalist account of the imperative clause. In *The journal of comparative Germanic linguistics* 1. pp. 177 - 224. Kluwer Academic Publishers.

Platzack, Christer (1998): *Svenskans inre grammatik – det minimalistiska programmet. En introduktion till modern generativ grammatik*. Lund: Studentlitteratur.

Rizzi, Luigi (1997): The fine structure of the left periphery. In Haegeman, Liliane (ed.), *Elements of grammar*, pp. 281 – 337. Kluwer, Dordrecht.

Roll, Mikael (2009): *The neurophysiology of grammatical constraints – ERP studies on the influence of syntax and morphology in Swedish*. Doctoral dissertation: Lund University.

Teleman, Ulf; Hellberg, Staffan; Andersson, Erik (1999): *Svenska Akademiens Grammatik*. Stockholm: Norstedts.

Thráinsson, Höskuldur (2007): *The Syntax of Icelandic*. Cambridge: Cambridge university press.

Vaser, Max (1958): *Russisches etymologisches Wörterbuch*. Heidelberg: Carl Winter Universitätsverlag.

Vikner, Sten (1995): *Verb movement and expletive subjects in the Germanic languages*. New York, Oxford: Oxford University press.

Wessén, Elias (1965): *Svensk språkhistoria III - Grundlinjer till en historisk syntax*. Lund: Almqvist & Wiksell/Gebbers förlag.