Swedish exclamatives are subordinate

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Abstract

In Swedish, there are three basic kinds of exclamatives: wh-, som- and att-exclamatives. Superficially, these clauses display mixed properties with regard to the traditional division into main clauses and subordinate clauses. They have a word order which is typical for subordinate clauses and som- and att-exclamatives are obligatorily introduced by complementizers. On the other hand, they seem to be independent in the sense that they are grammatical without an overtly realized matrix. Due to the fact that they do not need an overt matrix, they have often been categorized as main clauses. In my view, however, Swedish exclamatives are in fact subordinate. In this paper, I argue that they are embedded under overt or covert non-verbal matrices, which consist of interjections or factive adjectives. The subordination analysis that I propose can account for both the typical subordinate clause structure and for the fact that the propositional content of a Swedish exclamative is presupposed.

1. Introduction

This paper is concerned with the distinction between main clauses and subordinate clauses in Swedish. It has long been observed that there is a structural asymmetry between main clauses and subordinate clauses in the Germanic V2-languages. This asymmetry is commonly accounted for in terms of V-to-C movement. Since den Besten (1983), it has been relatively widely accepted that what separates main clauses from subordinate clauses in these languages are the properties of the C-domain. It is commonly assumed that main clauses in the Germanic V2-languages
are characterized by V-to-C movement, as opposed to subordinate clauses, where C° is occupied by a complementizer which prevents the finite verb from moving there.

In recent years, however, this generalization has been questioned in connection with the intense debate about so called embedded V2-clauses (see, for instance Bentzen et al. (2007), Julien (2007) and Petersson (2009)). Embedded V2-clauses challenge the traditional main clause/subordinate clause dichotomy because they look like subordinate main clause structures. In this paper, I turn to exclamatives, a less discussed group of constructions that pose a problem to the dichotomy in question from the opposite direction. Contrary to the so called embedded V2-clauses, these constructions consist of clauses that look like independent subordinate clause structures, meaning that they are grammatical without an overt matrix.

The paper focuses on three kinds of clauses: Wh-exclamatives, exemplified in (1), som-exclamatives, exemplified in (2), and att-exclamatives, exemplified in (3).

(1) Vilken stor katt du (har) köpt!
   Which big cat you (have) bought
   'What a big cat you have bought!

(2) Som ni (har) grisat ner!
   SOM you (have) made.a.mess PART.
   'What a mess you've made!

(3) Att du inte köpt bilen!
   that you not bought car.the
   'Oh, why haven't you bought the car!

These three construction types constitute the basic kinds of exclamatives in
Swedish. Some additional, though marginal, construction types are sometimes assumed to belong to the class of exclamatives in Swedish. For my purposes, however, it suffices to focus on the three kinds exemplified in (1)–(3), which all display mixed properties with regards to the traditional main/subordinate clause dichotomy. For a detailed inventory of Swedish (and Scandinavian) exclamatives, including other possible instances, see Delsing (2010) and Teleman et al. (1999).

Whether or not exclamatives constitute a separate clause type, on a par with declaratives, questions and imperatives has been a matter of intense debate. Some researchers argue that they do (see eg. Delsing (2010) or Zanuttini and Portner (2003)), whereas others argue that they do not (see eg. Rosengren (1994) or D'Avis (2001). The main question in this paper, however, is whether Swedish exclamatives are main clauses or subordinate clauses. Although the answer to this question is probably relevant to the question of whether or not exclamatives should be considered a clause type in its own right, I will not discuss the clause type issue in any detail in this paper, but simply assume that exclamatives do constitute a separate clause type.

The paper has the following outline: To begin with, section 2 provides a short presentation of my basic theoretical assumptions concerning the differences between main clauses and subordinate clauses in Swedish. Section 3 is, first and foremost, intended to serve as a background for subsequent discussions about how Swedish exclamatives are best understood in relation to the main clause/subordinate clause dichotomy. However, the section also includes my preliminary analyses of the three basic kinds of exclamatives in Swedish. In section 4, some Icelandic and Danish data are presented, which serve as a basis of comparison in the subsequent discussions of Swedish exclamatives. Section 5 provides a presentation and discussion of two previous analyses, according to which Swedish exclamatives are main clauses. In section 6, the notion of presupposition is defined and discussed. It is shown that the propositional content is presupposed in all three construction
types. In 7, I return to the core question of whether Swedish exclamatives are main clauses or subordinate clauses. I argue that they are in fact subordinate and elaborate on my preliminary analyses from sections 3.2.1–3.2.3, discussing the details the subordination analysis that I propose. Next, in section 8, the analysis of Swedish exclamatives is related to the main clause/subordinate clause dichotomy. Finally, a summary is given in section 9.

2. Basic theoretical assumptions

The purpose of this section is to give a brief account of the basic theoretical assumptions that I make concerning the dividing line between main clauses and subordinate clauses in Swedish. As was pointed out in the previous section, the overall aim of the present paper is to discuss Swedish exclamatives from a main clause/subordinate clause perspective. The main clause/subordinate clause dichotomy that is outlined in this section is consequently a necessary prerequisite for reaching this goal. However, the purpose of this paper is, first and foremost, to discuss the hierarchical status of Swedish exclamatives. This section is consequently not intended to provide an exhaustive account of the clausal asymmetry in Swedish, but rather a theoretical background for subsequent discussions on the status of exclamatives. For in-depth discussions about matters concerning the relation between V2 and illocutionary force in general and in Mainland Scandinavian in particular, the reader is referred to Andersson (1975), den Besten (1983), Holmberg and Platzack (1995), Vikner (1995), Bentzen et al. (2007), Julien (2007) and Petersson (in preparation).

Swedish belongs to the Germanic V2-languages. It is well-known that these languages, among other things, are characterized by a structural asymmetry between main clauses and subordinate clauses. In the case of the Mainland Scandinavian languages (among which Swedish is found), this asymmetry can easily be observed
in clausal structures that contain a negation (or other sentence adverbials) in its canonical position, i.e. merged between the VP and the TP. In the case of a prototypical Swedish main clause, the finite verb precedes the negation, whereas it, in a subordinate clause, instead is preceded by the negation. In accordance with a widely accepted view, I take it that this structural asymmetry is a reflection of differences in the C-domain. In short, I assume that the difference between the two categories of clauses can be described in the following way: In a main clause, the finite verb moves from V to C°. In a subordinate clause, C° is instead filled by a complementizer, which is base generated in this position. When C° is occupied by a complementizer, the finite verb is prevented from moving there and stays in situ in V (cf. den Besten (1983), Holmberg and Platzack (1995) and Vikner (1995)).

The asymmetry between Swedish main clauses and subordinate clauses is not limited to differences in syntactic structure. It also reflects and corresponds to semantic/pragmatic differences. I follow Petersson (2009), which is an attempt to account for the semantic/pragmatic aspect of the Swedish main clause/subordinate clause asymmetry by applying a simplified version of Rizzi’s (1997) split CP-model. Petersson writes:

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° 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 (Petersson, 2009, p. 108).

In accordance with this description of the main clause/subordinate clause asymmetry in Swedish, I argue that a clausal structure can contain no more than one specification for speech act value. And this specification can only be made in the
highest available ForceP, to which the finite verb moves.

Thus far, I have argued that the categories main clause and subordinate clause form a dichotomy, based on differences in the configuration of the C-domain. However, clauses are not the only linguistic structures that can be used for performing speech acts. This becomes obvious once interjections are taken into consideration. A speaker can make an exclamation (and consequently perform a speech act) by uttering a single interjection, such as *aj* ‘ouch’ or *hoppsan* ‘whoopsadaisy’. I argue that interjections are best regarded as independent Force projections, consisting of a single interjection, base generated in Force°.

Based on the observation that non-verbal elements may be used to convey speech acts, it must be concluded that the hypothesis which stipulates a firm connection between verb movement and speech act value only applies to finite propositions, i.e. clauses.

3. Exclamatives in Swedish – a background

This section provides a general description of the three basic categories of exclamatives in Swedish, exemplified in (1)–(3) above. The account is based mainly on Delsing (2010), Teleman et al. (1999) and Rosengren (1992).

The section is outlined as follows: In 3.1, the basic meaning components and structural properties, common to all three categories of exclamatives are described. This general description is followed by a detailed presentation of *wh*-*, som*- and *att*-exclamatives respectively, in sections 3.2.1–3.2.3. In 3.3, I discuss the possibilities of negating, modalizing and embedding Swedish exclamatives.

3.1 Form and meaning of Swedish exclamatives

Two basic facts will serve as a point of departure to our investigation of Swedish exclamatives. Firstly, Swedish exclamatives have the form of prototypical
subordinate clauses and secondly, they are grammatical and convey speech acts without the presence of an overtly realized matrix. Consider the clauses in (1)—(3), represented below as (4)—(6).

(4) Vilken stor katt du (har) köpt!
    Which big cat you (have) bought
    'What a big cat you have bought!' 

(5) Som ni (har) grisat ner!
    SOM you (have) made.a.mess PART
    'What a mess you've made!' 

(6) Att du inte köpt bilen!
    that you not bought car.the
    'Oh, why haven't you buy the car!' 

The question that arises, considering the contradictory characteristics displayed by the clauses in (4)—(6), is whether exclamatives should be analyzed as main clauses or subordinate clauses.

First of all, let us recapitulate the structural properties commonly associated with the term "subordinate clause" in the case of Swedish. These properties are often summed up in the following four points (cf. Platzack, 1987, p.79):

A) They are introduced by a subordinating element, which can be a complementizer, a pronoun or an adverb.
B) Finite instances of the auxiliary ha ('have') may be omitted.
C) The subject is the first constituent after the subordinating element.
D) If present, sentence adverbials precede the finite verb\(^1\).

The properties listed above constitute typical but not necessary criteria for classifying a clause as subordinate. On a textbook level, the fulfillment of one of these criteria is often considered sufficient for a subordinate clause classification (see, for example, Josefsson, 2009, p. 165).

It should be noted that the criteria in A) - D) are not completely parallel with respect to their applicability. The criteria in A) and C), respectively, can always be employed as tests for determining whether a particular clause is a subordinate clause or not. Criterion A) is straightforwardly binary; a clause either does or does not contain a subordinating element, meaning that A) is applicable to any clause.\(^2\) As for criterion C), there are very few exceptions to the general rule that a clause must contain an overtly realized subject in Swedish, other than in imperative clauses of course, but they cannot be subordinated in contemporary Swedish anyhow. Consequently, criterion C) can also be applied to, practically, any clause. Concerning the criteria in B) and D), however, the picture is somewhat different. Both B) and D) require that the clause contains certain, non-obligatory elements and consequently they cannot always be applied as tests determining whether a particular clause is subordinate or not.

Although a categorization based on the criteria in A)–D) is overly simplified and unsatisfactory, not least due to the differences in applicability, it can nevertheless serve as a preliminary indication as to whether a particular clause is a main clause or a subordinate clause. If we apply the criteria in A)–D) to the exclamatives in (4)–(6), we find that the *wh*-exclamative in (4) fulfils criteria A), B) and C) and that the

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\(^1\) Marginally, a focusing or negating sentence adverbial may precede the subject of a subordinate clause, as exemplified in (i):

(i) Lisa *vet att* bara Kalle kan komma.

*Lisa knows that only Kalle can come*

\(^2\) It should be pointed out that I accept the possibility of covert complementizers.
\textit{som}-exclamative in (5) meets the criteria in A) and B), whereas the \textit{att}-exclamative in (6) fulfils all four criteria.

As mentioned, criteria B) and D) are not always applicable since they require optional constituents. It should, however, be pointed out that \textit{wh}- and \textit{som}-exclamatives can never be tested according to criterion D); inserting a negating or modalizing sentence adverbial into these kinds of exclamatives always renders an unacceptable sentence, irrespective of whether it is placed before or after the finite verb. These restrictions are presumably due to semantic/pragmatic factors, rather than any structural property of the clauses. This matter is discussed in detail in section 3.3.

If we now turn to the basic meanings conveyed by exclamatives we may first note the rather obvious fact that exclamatives are used for making exclamations. Broadly speaking, this means that they express the speaker's surprise about and/or emotional reaction to, a particular state of affairs, conveyed by the clause.

Exclamatives commonly express the speaker's surprise about the high value of a property (a variable \(x\)) in a particular state of affairs. However, Swedish data show that exclamatives are not necessarily expressions of surprise. In Swedish, exclamatives can be used to express either that the speaker is surprised about the high degree of a variable \(x\) or that he or she finds a particular state of affairs somehow remarkable (but not necessarily surprising). Thus, the common semantic/pragmatic denominator for all three basic kinds of Swedish exclamatives can be formulated as a 'reaction to a state of affairs'. There seems to be a clear semantic/pragmatic dividing line that separates \textit{wh}- and \textit{som}-exclamatives from \textit{att}-exclamatives. It appears that the former kinds are always expressions of surprise, whereas the latter kind is normally not.

Let us begin by looking at \textit{wh}- and \textit{som}-exclamatives. As pointed out above, they are expressions of surprise. However, surprise alone does not give us an exhaustive description of the meaning that these clauses convey. Normally, an
additional meaning component is also present. We might call this component ‘qualitative assessment’. Consider (7) and (8).

(7) Vad långhårig du har blivit!
    what longhaired you have become
    'My, your hair has really grown long!'

(8) Som du slåss!
    SOM you fight
    'My, the way you fight!'

Both the *wh*-exclamative in (7) and the *som*-exclamative in (8) involve an implicit scale and the speaker expresses his or her surprise about the high value that a variable $x$ has on this scale. In the case of the *wh*-clause in (7), the speaker is surprised about the length of the listener's hair and in (8) he or she finds the degree (or possibly the manner) to which the listener fights surprising.

In addition to surprise, the speaker typically also expresses a qualitative assessment of the state of affairs denoted in the clause. He or she may find it good or bad, pleasing or displeasing. In isolation, the exclamative clauses themselves, normally, do not give sufficient information as to decide the more exact nature of the speaker's reaction. In order to determine, for instance, whether the speaker finds the particular state of affairs denoted by the clause good or bad, contextual factors must be taken into consideration (Teleman et al, 1999, bind 4, pp 765–766). The state of affairs denoted in (7), for example, is 'your hair has (really) grown long'. Depending on the context and speech situation in which this particular exclamative is uttered, the nature of the speaker's reaction to this state of affairs can differ. In order to decide whether the speaker finds the surprising hair length pleasing or displeasing, we must know, or be able to infer, something about his or her
preferences concerning haircuts.

The *wh*-exclamative in (7) and the *som*-exclamative in (8) both convey the speaker's surprise. *Att*-exclamatives, however, differ from the aforementioned kinds of exclamatives, since they do not typically express surprise. Consider (9).

(9) Att du aldrig kan städa ditt rum!

*that you never can clean your room*

'Why can't you ever clean your room!'

The clause in (9) denotes a particular state of affairs, namely that 'you (can) never clean your room'. A speaker uttering an *att*-exclamative, treats the state of affairs denoted in the clause as known, or immediately inferable, to both himself and the hearer. This is seen in (9), where it does not come as a surprise to the speaker, that the addressee hasn't cleaned his or her room. What the speaker expresses is rather his or her discontentment with the state of affairs denoted in the *att*-clause.

Although an *att*-exclamative, as in (9), does not have to convey a surprise reading, there are contexts where such clauses do express the speaker's surprise about the state of affairs denoted in the clause. Consider (10).

(10) A: Greger säger att grisar är lika mycket värda som människor.

*Greger says that pigs are as much worth as humans*

'Greger says that pigs are just as valuable as people.'

B: Att man ens kan tänka en sådan tanke!

*att one even can think a such thought*

'I can't believe anyone can even think such a thought!'
In the case of (10), it is reasonable to regard the *att*-exclamative in B as an expression of surprise. The speaker is surprised about a state of affairs that he or she has only just become aware of. Consequently, we may conclude that *att*-exclamatives differ from the two other kinds of exclamatives, with regard to the meaning component of surprise. Unlike *wh*- and *som*-exclamatives, an *att*-exclamative does normally not convey the speakers’ surprise about the state of affairs denoted in the clause. This does however not mean that *att*-exclamatives are never expressions of surprise. Provided that certain contextual requirements are met (as in (10)), they may well express surprise, in addition to the obligatorily present meaning of qualitative assessment.

The meaning component that all is always present in all three kinds of Swedish exclamatives is that of 'qualitative assessment'. This is, for instance, seen in (10), where the speaker clearly expresses that he or she is appalled with the fact that someone can even conceive of the idea to claim that pigs are as valuable as people.

To sum up the possible interpretations of the three basic kinds of exclamatives in Swedish, we conclude that they always convey an emotionally oriented reaction to a state of affairs expressed in a proposition P. This reaction always involves a qualitative assessment which can be one of liking or disliking. Further, we may conclude that the three categories of exclamatives differ from each other concerning the possibilities of conveying a surprise reading. *Wh*- and *som*-exclamatives always seem to be associated with a surprise reading, whereas *att*-exclamatives may, but do not have to convey a surprise reading.

Thus far we have seen that exclamatives convey various (emotional) reactions.

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3 It is worth noting that the *att*-exclamative in (10) B, requires a preceding utterance such as that in (10) A. This points towards another difference between *wh*- and *som*-exclamatives on the one hand and *att*-exclamatives on the other, namely that the former kinds are significantly much better in out of the blue contexts than the latter. It seems that *att*-exclamatives have to be reactions to states of affairs that are somehow given or salient in the context, whereas *wh*- and *som*-exclamatives can be used to draw the listeners attention to a state of affairs that is not necessarily mentioned or otherwise contextually salient. I thank Johan Brandtler for bringing this to my attention.
to states of affairs. Let us now turn to their place in a communicative exchange. Exclamatives express exclamations and, as pointed out by Rosengren (1992, p.270), exclamations are typically initiative speech acts. In other words, exclamatives cannot serve as answers. Consider (11)–(13).

(11) Q: Vad tycker du om väderet idag?
   'What do you think of the weather today?'
   # A: Vilket underbart väder vi har fått!
   'What a lovely weather we have today!'

(12) Q: Hur var det på jobbet?
   'How was your day at work?'
   # A: Som jag har jobbat!
   'How I have worked!'

(13) Q: Vad tycker du om katten?
   'What do you think of the cat?'
   # A: Att han är så stor!
   'How big he is!'

The fact that exclamatives normally are not appropriate as answers to questions is not unexpected, considering the nature of the speech act exclamation. Exclamations are immediate verbal reactions to things, states or courses of events that the speaker has only just become aware of. This explains the direct, deictic nature of exclamatives. That a clause expressing such a speech act cannot serve as an answer is more or less self evident. There are, however, apparent exceptions, which are worth commenting on. Consider (14) and (15) below.
(14) A: Greger kom med rosor idag.
   'Greger brought roses today'
B: Vilket charmtroll han är!
   'What a bundle of charm he is!'

(15) A: Greger spöade tydligen upp en åldring igår.
   'Apparently, Greger beat up an old man yesterday.'
B: Att det ens kan finnas såna människor!
   'I can't believe there are people like him!'

The exclamatives in (14 B) and (15 B) connect, and are reactions to their respective preceding statements. In light of this it might perhaps seem reasonable to consider them responsive utterances. However, since exclamatives do not serve as linguistic reactions to questions, it must be maintained that they are not answers. It can further be established that a question/answer-exchange requires two speakers. This does not hold for the sentence pairs in (14) and (15). In both cases, it is throughout possible that both sentences A and B are uttered by the same person. We may thus conclude that the exclamatives in (14 B) and (15 B) cannot be labelled responsive.

As we have just concluded, exclamatives cannot serve as answers to questions. They can however constitute verbal reactions to situations. This is in fact the typical case; the speaker utters the exclamative as a reaction to a particular state of affairs. In that case the exclamative is not, so to speak, motivated by any preceding utterance. However, as illustrated by the dialog pairs in (14) and (15), an exclamative may also constitute a reaction to a preceding statement. In such cases, the exclamative serves as a comment to a linguistically expressed state of affairs. In light of this, we may conclude that a speaker may react to a linguistically expressed stimulus just as he might to a non-linguistic state of affairs which he observes. In other words, one can compare the initial declaratives in (14) and (15) to any other,
non-linguistic, stimuli to which one might react. A speaker may just as well utter the exclamative in (14) in reaction to seeing Greger bring roses for someone. Reacting to a linguistically expressed state of affairs is, in principle, not different from reacting to an observed, non-linguistic state of affairs.

To sum up, exclamatives are typically immediate verbal reactions to non-linguistic states of affairs. Consequently, they normally convey initiative speech acts. But they may also serve as reactions to preceding statements. Crucially, however, an exclamative cannot be used as an answer to a question.

3.2 Detailed descriptions and preliminary analyses

This section serves the two, partly overlapping, purposes of firstly providing more detailed accounts of the three basic kinds of Swedish exclamatives and secondly presenting my preliminary analyses of their respective internal structure. These preliminary analyses will later be elaborated on further in section 7.

3.2.1 Wh-exclamatives

Wh-exclamatives\(^5\) are scalar, meaning that a speaker who utters a wh-exclamative expresses his or her surprise about the high value that a variable \(x\) has on an implicit scale. Consider the examples in (16) and (17).

\(^5\)These clauses are standardly referred to as wh-exclamatives. This particular term is however not entirely satisfactory, since it may suggest that the wh-elements found in exclamatives are semantically parallel to those that introduce questions, and this does not seem to be the case. In wh-questions, the wh-element can be considered to be an operator, which is tied to an open (unspecified) variable in the clause. This does not apply to the elements introducing wh-exclamatives. These wh-elements are not associated with the semantics of questions. Furthermore, wh-exclamatives can also be introduced by så (‘such’) or sådan (‘such’), neither of which can be labeled wh-elements. Nevertheless, for want of a better term, I will stick to the conventional terminology and refer to these clauses as wh-exclamatives (including those introduced by så or sådan). The differences between wh-elements in questions on the one hand and exclamatives on the other will be discussed further in section 7.4.1.
In (16), the speaker expresses that he or she finds the addressee's ears remarkably or surprisingly big and in (17), he or she expresses surprise or astonishment about how small the fish are. In both cases the speaker conveys that he or she thinks that the degree of largeness or smallness, respectively, has a unexpectedly or remarkably high value on an implicit scale (cf. Tellemann et al. 1999, bind 4, p.766 and Delsing, 2010).

Wh-exclamatives may be introduced either by the *wh*-elements *vilken*, lit. 'which' and *vad*, lit. 'what' or by the *sol/such*-elements *så*, lit. 'so', *så(da)n*, lit. 'such' or *sicken* 'such' (Delsing, 2010, p. 18). These elements have different distributions. The most important difference is that between *vilken* and *vad*, as shown by Delsing. He writes: "Vad is adverbial (typically occuring in AP:s), whereas *vilken* only occurs in NP:s. Vad can be used with adverbs, adjectives and verb phrases (which is impossible with *vilken*), and *vilken* may be used with nouns (which is impossible with *vad*)." The difference is illustrated in (18) and (19) (examples from Delsing 2010, pp. 20–21).

(18) a. Vad/ *Vilken dum han är!  

    what/ which stupid he is

b. Vad/ *Vilket du röker ofta!  

    what/ which you smoke often
(19) a. Vilken/ *Vad idiot han är!
which/ what idiot he is
b. Vilket/ *Vad monster du har skapat!
which/ what monster you have created

Drawing on Delsing (2010, p. 21), I assume that *vilken is located in a
determiner position of a DP and that *vad is an adverbial in an AP. This gives us the
structures illustrated in (20) and (21) (after Delsing (2010, p. 21)).

(20) [DP Vilken [idiot]] han är!
which idiot he is

(21) [AP Vad dum] han är!
what stupid he is

The structures represented in (20) and (21) illustrate a point that is highly
relevant to the present study, namely that the wh- or such-element forms a single
constituent with the nominal or adjectival head. On the basis of this observation, we
may preliminarily assume the following structure for wh-exclamatives:

(22) a. \([CP,Spec-CP [DP Vilka idioter]]_{\text{i}} [TP \text{ han } [vP känner e_i]]]!
b. \([CP,Spec-CP [AP Vad dum]]_{\text{i}} [TP \text{ han } [vP är e_i]]]!
c. \([CP,Spec-CP [AP Så snäll]]_{\text{i}} [TP \text{ han } [vP är e_i]]]!

The status of C will be discussed in section 7.4.1.
3.2.2 Som-exclamatives

Just as wh-exclamatives, som-exclamatives are scalar, meaning that a speaker who utters a som-exclamative typically expresses his or her surprise about the high value that a variable x has on an implicit scale. This is illustrated in (23).

(23) Som pojken svettas!
    SOM boy.the sweats
    'My, does he sweat a lot!'

The speaker who utters the exclamative in (23) expresses that he or she is surprised about how much the boy sweats (or possibly the manner in which he sweats). In other words, the verb phrase svettas is modified with respect to degree (or on a more peripheral reading, manner).

As pointed out by Delsing (2010, p.26), som-exclamatives are restricted to modifying verb phrases. They cannot modify adverbials or adjective phrases. Consider the sentences in (24)–(25).

(24) * Som han svettas mycket!
    SOM he sweats much
    Intended meaning: 'My does he sweat a lot!'

(25) * Som han är svettig!
    SOM he is sweaty
    Intended meaning: 'My, is he sweaty!'

(24) is a som-exclamative modifying an adverb phrase (mycket) and (25) is a som-exclamative which modifies an adjectival phrase. As indicated above, both are ungrammatical. However, as can be seen in (26) and (27), these restrictions do not
apply to *wh*-exclamatives.

(26) Vad han svettas mycket!
    *what he sweats much*
    'My, does he sweat a lot!'

(27) Vad han är svettig!
    *what he is sweaty*
    'My, is he sweaty!'

As illustrated in (26) and (27), both adverb phrases and adjectival phrases may be modified by *wh*-exclamatives introduced by *vad* 'what'.

The surface structure of a *som*-exclamative is parallel to that of relative clauses and comparative clauses introduced by *som*. Consider the sentences in (28) and (29).

(28) Han snusar lika mycket som hon röker.
    *he takes.snuff like much SOM she smokes*
    'He takes snuff just as much as she smokes.'

(29) Som hon röker!
    *SOM she smokes*
    'My, does she smoke a lot!'

The sentence in (28) consists of two clauses, a matrix (*Han snusar lika mycket*) and a comparative clause introduced by the complementizer *som, (som hon röker)*. (29) is a *som*-exclamative. As we can see, the exclamative clause displays the very same surface structure as the comparative clause in the preceding example. The obvious
difference between the two kinds of clauses exemplified in (28) and (29) is that the comparative clause requires an overtly realized matrix, whereas the exclamative does not.

A property common to all *som*-clauses is that they, at least on a superficial analysis, seem to lack a constituent. This point is illustrated by the sentence pairs in (30)–(33), where the "missing" constituent is an argument of the verb in the relative clause.

(30) Jag såg mannen *som* du träffade.
   *I saw man. the* SOM you met
   'I saw the man that you met.'

(31) * Du träffade.
   *you met

(32) Som det blev!
   SOM it became
   'Outrageous/fantastic etc., the way things finally turned out!'

(33) * Det blev.
   *it became

The relative clause in (30) is grammatical although it lacks an overt realization of the object, which is otherwise part of the valency of the verb *träffa* 'meet', as illustrated by the main clause in (31) that is ungrammatical due to the missing object. The *som*-exclamative in (32) is parallel to the relative clause. It is grammatical without an overt realization of the predicative, which is normally an obligatory argument of the verb *bli* 'become' in a regular main clause, as we can
gather from the ungrammatical sentence in (33). As we shall see, all three kinds of *som*-clauses and their "missing" constituents can be given a unified account within a minimalist framework.

Under certain conditions, Swedish *som*-clauses may contain overtly realized material in Spec-CP. This is for instance the case in indirect *wh*-questions like the one in (34), where Spec-CP is filled by the pronoun *vem* 'who'.

(34) Karin undrade vem som inte kunde komma på festen.

*Karin wondered who SOM not could come on party.*

'Karin wondered who couldn't come to the party.'

Most Swedish *som*-clauses, however, do not (and indeed cannot) contain any overtly realized constituent in Spec-CP. This is for instance the case with relative clauses introduced by *som*. Following Platzack (2000), Stroh-Wollin (2002) and Brandtler (2010), I assume that such *som*-clauses contain an operator situated in Spec-CP. This operator binds an empty position further down in the structure (in the case of relative clauses, presumably in the *vP*). The operator is coindexed with the empty position and typically has the same reference as the noun phrase that the relative clause modifies. The proposed structure is illustrated in (35).

(35) Mannen_i [CP Op_i C° som [vP Ø_i köpte hunden]]

*man.the SOM bought dog.the*

'The man who bought the dog'

In the relative clause in (35), the operator in Spec-CP binds an empty position in Spec-VP, corresponding to the "missing" subject. The operator is coindexed with
the noun phrase that is modified by the relative clause\(^6\).

This operator analysis can be extended to include comparative clauses introduced by *som*, as in (36).

\[(36) \text{Han snusar lika ofta} \left[\text{CP Op}_1 \text{C}^\circ \text{som} \left[\text{TP hon \ [vP röker }\emptyset\right]\right].\]

*he takes.snuff like often* SOM *she* *smokes*

'He takes snuff just as often as she smokes.'

Returning to the *som*-exclamatives, I can see neither theoretical nor empirical reasons to exclude these clauses from the operator analysis presented above; quite on the contrary. The operator analysis can in fact, very successfully, account for the

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\(^6\) On the basis of negated cleft constructions, Stroh-Wollin (2002) argues that the reference of the constituent to which the operator in a *som*-clause corresponds is contextually determined. Consider (i).

\[(i) \text{Det var inte Kalle som Lisa träffade.}\]

*it was not Kalle* SOM *Lisa met*

'It wasn't Kalle who Lisa met.'

Stroh-Wollin reasons along the following lines: In the relative clause in (i), it is presupposed that Lisa met someone. However, as the matrix clause is negated, this someone cannot be the subject of the main clause. On the basis of examples like the one in (i), she consequently argues that the reference of the operator is determined on the basis of pragmatic/contextual factors. In this case, however, I believe Stroh-Wollin is jumping to a conclusion. She overlooks the crucial fact that *inte Kalle* 'not Kalle' identifies a semantically restricted set. As far as indexation is concerned, there is no principal difference between meeting *Kalle* and meeting *inte Kalle*. Both identify a restricted set. For this reason, I stick to the generalization that the operator of a relative *som*-clause is coindexed with the noun phrase that the relative clause modifies. As a consequence, I have to conclude that *som*-exclamatives differ from relative *som*-clauses in this respect, since the operator in a *som*-exclamative, for obvious reasons, cannot be coindexed with a constituent in the matrix clause. This is discussed further in section 7.4.2.
characteristics of *som*-exclamatives. I argue that the internal structure of a *som*-exclamative is identical to that of any other *som*-clause. In effect, this means that we, by extending the operator analysis to include also the internal structure of exclamative *som*-clauses, can provide a unified account of all Swedish *som*-clauses. Consequently, I further argue that the differences in use and meaning between the three kinds of *som*-clauses are due, not to clause internal but to clause external factors and to the nature of the operator. This is discussed in detail in section 7.

Delsing (2010, p. 26) claims that *som*-exclamatives are always associated with a manner reading. Although a manner reading is certainly possible, I do not agree with Delsing, that all *som*-exclamatives have a manner reading. It seems clear that they can also be associated with a degree reading. In fact, the degree reading even seems more salient and unmarked than the manner reading. Consider (37) and (38).

(37) Som du bor!

SOM you live

'Your flat is really big/small/central...'

(38) Som han svettas!

SOM he sweats

'My, does he sweat a lot!'

The clause in (37) clearly has a manner reading. Consequently, it is reasonable to assume that the operator in Spec-CP binds an empty position corresponding to a manner adverbial. The *som*-exclamative in (38) can only marginally be interpreted as having a manner reading. What it conveys is instead a degree reading. Hence, the operator in Spec-CP binds an empty position corresponding to an adverbial of degree. The interpretation of *som*-clauses that have a degree reading is much more

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7 Example (35) is taken from Delsing (2010).
fixed than that of clauses with a manner reading. They always express that the action denoted by the verb is carried out to a high degree. The clause in (38), for instance, expresses a high degree of sweating.

The different readings of the exclamatives in (37) and (38) can be directly related to lexical restrictions on gradability. The verb bo 'to live' is not gradable. You either live somewhere or you don't. In contrast, svettas 'to sweat' is a clear example of a gradable verb. You can sweat a little, pretty much or very much (and everything in between). This explains why a degree reading is available in (38) but not in (37). As mentioned, the exclamative in (38) can marginally be associated also with a manner reading. Consequently, we may conclude that gradability does not completely block out a manner reading. It should however be emphasized that the degree reading is significantly more salient than the manner reading in cases such as (38), where the verb is gradable. For this reason, I am inclined to argue that the degree reading is the typical and unmarked interpretation and that a manner reading arises only in very specific contexts or in cases where the verb is not gradable and consequently incompatible with a degree reading.

In connection with the discussion concerning the two possible readings of som-exclamatives, it is important to note that those som-exclamatives that convey a manner reading, do not, as such, constitute exceptions to the general characteristic that som-exclamatives are scalar. Both those som-exclamatives that convey a degree reading and those that convey a manner reading involve a scalar meaning. What essentially separates them is the element that is associated with this scalarity. In cases where the som-exclamative conveys a degree reading, it is the action, state or process denoted by the gradable verb that has a high value on an implicit scale. In the case of som-exclamatives expressing a manner reading, on the other hand, it is the manner adverbial that has a high value on the implicit scale. Consider (39).
The operator in (39) corresponds to a manner adverbial such as fint 'nice' or hemskt 'awful'. The crucial point is that this manner adverbial is scalar. Something can, for instance, be nice, pretty nice or even very nice (and everything in between). Consequently, it is the manner adverbial that contributes with scalarity in som-exclamatives which convey a manner reading. What a speaker who utters a som-exclamative like the one in (39) expresses is thus that the covert manner adverbial has an unexpectedly high value on this implicit scale.

Before moving on to att-exclamatives, I will conclude this section by presenting a proposal for a preliminary analysis of som-exclamatives. The structure that I assume is represented in (40).

(40) \[ \text{CP OP}_i \ C^° \text{Som } [\text{TP han } [\text{vP svettas } \varnothing_i]] \] !

As can be concluded from the structural representation in (40), I argue that the internal structure of an exclamative som-clause is identical to that of other som-clauses.

3.2.3 Att-exclamatives

Att-exclamatives are introduced by the complementizer att. They differ from the other two categories of exclamatives in one significant respect. Unlike wh- and som-exclamatives they are polar and do not involve any scalar meaning. Instead, a speaker who utters an att-exclamative expresses that he or she finds it remarkable and possibly surprising that P is the case. Consider (41) and (42).
(41) Att Lars köpt höns!
    that Lars bought chickens
    'My, I didn't know that Lars has bought chickens'

(42) Att Kenneth inte köpt höns än!
    that Kenneth not bought chickens yet
    'Strange, that Kenneth hasn't bought chickens yet!'

In (41) and (42) the speakers express their surprise about the states of affairs denoted in the respective clauses. In the case of (41), the speaker had expected Lars not to have bought chickens, whereas the speaker in (42) contrarily had expected Kenneth to have bought chickens.

There is nothing indicating that the (internal) syntactic structure of an att-clause is not identical to that of a regular, subordinate att-clause. Consider (43).

(43) [CP Att [TP Lars [[NEG-P inte [VP köpt höns]]]]].

As shown in (43), I take it that att-exclamatives have the same structure as other, subordinate instances of att-clauses. Crucially, this means that att occupies the head of C, whereas the finite verb is found in the head of V.

3.3 To modalize, negate and embed exclamatives
In this section, data concerning the possibilities of negating, modalizing and embedding exclamatives are presented. These data are crucial to the subsequent semantic/pragmatic and syntactic analyses in sections 6 and 7 respectively.

Unlike declaratives, Swedish exclamatives may not be modalized by sentence
adverbials. This is shown in (44)–(46).\(^8\)

\[(44)*\] Vilka stora kor Gusten nog har!

\textit{which big cows Gusten probably has}

\[(45)*\] Som pojken faktiskt svettas!

\textit{SOM boy.the actually sweats}

\[(46)*\] Att han kanske flyttat!

\textit{that he maybe moved}

That an exclamative cannot be modalized by a sentence adverbial is presumably due to the fact that its propositional content is presupposed. The speaker presents and treats the proposition denoted by the clause as uncontroversially true, and modalizing a presupposed proposition, particularly with respect to epistemicity, gives rise to a pragmatic/semantic clash, not only in the case of exclamatives. Consider (47).

\[(47)\] # Sture ångrar att han kanske köpte bilen.

\textit{Sture regrets that he maybe bought car.the}

'Sture regrets that he maybe bought the car.'

As a result of the fact that the matrix verb ångra 'regret' is factive, the \textit{att}-clause in (47) (or rather its propositional content) is presupposed. However the \textit{att}-clause is also modalized epistemically by the sentence adverbial kanske 'maybe', and this results in a semantic/pragmatic clash. Expressing doubts as to whether a particular

\(^8\) However, one informant says that he would judge (44) and (46) grammatical if they were modalized by \textit{faktiskt} 'actually'.
state of affairs is true is simply not compatible with presupposing its truth. The same semantic/pragmatic restrictions apply to exclamatives. That the propositional content of exclamatives is presupposed is shown and further discussed in section 6.

Regarding the possibilities to negate the clauses, the discussed types of exclamatives differ from each other. Wh- and som-exclamatives cannot be negated, whereas att-exclamatives can. Consider (48)–(50).

(48)* Vilken fet katt du inte har!

which fat cat you not have

(49) * Som pojken inte svettas!

SOM boy.the not sweats

(50) Att han inte skäms!

that he not is.ashamed

'I can't believe he isn't ashamed of himself!'

The possibilities of negating the different categories of exclamatives can be related to the division into scalar exclamatives on the one hand and polar exclamatives on the other. As pointed out by Rosengren (1992, p. 302), the facts illustrated in (48)–(50) are to be expected. When a speaker utters a wh- or som-exclamative, s/he expresses that s/he finds the value of a variable in the clause remarkably high. The reason why these exclamatives cannot be negated is simply that a negated proposition is incompatible with a scalar reading. One cannot be surprised about the value of a variable x in an event or state of affairs that does not take place or exist, respectively. That att-exclamatives, on the other hand, can be negated is also to be expected. They are polar, meaning that they express that the speaker finds it remarkable or possibly surprising that the propositional content of
the clause is true. The state of affairs that are the source of the emotional reaction/assessment may just as well be P as not P and consequently, att-exclamatives can be negated.

Rosengren's explanation to the restrictions on negating wh- and som-exclamatives is appealing in its simplicity and straightforwardness and it does account for most cases. There are however cases in which it doesn't seem to provide a completely satisfactory explanation. Consider (51) and (52).

(51) Som han ljuger!
    SOM he lies
    'He is always lying!'

(52) * Som han inte talar sanning!
    SOM he not speaks truth
    Intended meaning: 'He never tells the truth!'

As we can see, the clause in (51) is grammatical whereas the negated exclamative in (52) is ungrammatical. However, from a semantic point of view they are very similar. Both express that 'he is lying'. In light of this similarity one would perhaps expect that both would be grammatical.

In order to better understand the restrictions illustrated in (51) and (52), we must once again return to the operator analysis presented in 3.2.2. It was shown that som-exclamatives can be assumed to contain an operator in Spec-CP, which binds an empty position further down in the structure, corresponding to an adverbial of manner or degree. To keep things simple, let us take a som-exclamative with a degree reading as our point of departure. Consider the analysis of (53).

(53) * [CP Op_i Som] han inte talar sanning Ø_i
The operator in (53) binds an empty position which corresponds to an adverbial of
degree. That the clause is ungrammatical is expected, because the predicate cannot
be modified with respect to degree, a fact that can be concluded from the main
clauses in (54) and (55).

(54) Han talar   sanning.

he speaks truth

'He speaks the truth.'

(55) * Han talar   sanning mycket

he speaks truth much

As we can see, the clause in (54) is grammatical. In (55) on the other hand, the
predicate is modified by a degree adverbial, which results in an ungrammatical
sentence. If a certain predicate cannot be modified by an overtly realized degree
adverbial in a regular main clause, we cannot expect the same predicate to be
grammatical when modified in a som-clause containing an operator that binds a
position corresponding to a degree adverbial.

Other restrictions on som-exclamatives can be explained along the same lines.
Consider (56)-(59).

(56) Han       bryter                mycket.

he speaks.with.accent much

'He speaks with a strong accent.'

(57) * Han talar     med brytning mycket.

he speaks with accent much
(58) \([\text{CP } \text{Op}_i \text{ som}] \text{ han bryter } \emptyset,!\]

SOM *he speaks with accent

'My, he really has a strong accent!'

(59) * \([\text{CP } \text{Op}_i \text{ som}] \text{ han talar med brytning } \emptyset,!\]

SOM *he speaks with accent

On the basis of (56), we can conclude that the verb *bryta* 'to speak with an accent' may be modified by a degree adverbial. As seen in (57), the verb+PP-string *tala med brytning* 'speak with an accent' is ungrammatical when modified by the same degree adverbial. It is to be expected that the *som*-exclamatives in (58) and (59) behave accordingly. *Bryta* may be modified by a degree adverbial and this is just as acceptable if this adverbial is covert and bound by an operator. *Tala med brytning*, on the other hand, does not allow an adverbial of degree, irrespective of whether it is overtly realized as in (56) or covert and bound by an operator as in (59).

Having now looked at the possibilities of modalizing and negating exclamatives, we will finally, consider the possibilities of embedding them under overt matrices. As we shall see, all three categories of exclamatives can be embedded under regular declarative matrices. Consider (60)–(62).

(60) Det är fruktansvärt vilka krämpor Gusten har!

*it is terrible which ailments Gusten has*

'They're just terrible, Gusten's ailments!'

(61) Det är hemskt som han svettas!

*it is awful SOM he sweats*

'It's just awful, the way he sweats!'
(62) Det är fantastiskt att pojken inte svimmar!
  *It is fantastic that boy.the not faints*
  'It's amazing that the boy doesn't faint!'

The sentences in (60)–(62) show that embedded exclamatives have the same structure as independent ones, i.e. that of prototypical subordinate clauses.

Concerning the matrices under which exclamatives can be embedded, two properties are of crucial importance. Firstly, the predicates of the matrices are normally factive (cf. Teleman et al., 1999, bind 4 p. 563). Examples of possible predicates are adjectives and participles such as beklämmande 'deplorable', otroligt 'unbelievable', hemskt 'awful', chockerande 'shocking' and förvånande 'surprising'.

The second property that should be mentioned about the matrix clause is the fact that it normally cannot be negated. Consider (63)–(65)

(63) #Det är inte fruktansvärt vilka krämpor Gusten har!
  *it is not terrible which ailments Gusten has*
  'They aren't terrible, the ailments that Gusten has!'

(64) # Det är inte hemskt som han svettas!
  *it is not awful SOM he sweats*
  'It isn't awful, the way he sweats!'

(65) # Det är inte fantastiskt att pojken inte svimmar!
  *it is not fantastic that boy.the not faints*
  'It isn't fantastic that the boy doesn't faint!'

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9 The sentences in (63)–(65) aren't necessarily bad in all contexts and uses. They may be used by a speaker who objects to a particular wording used in a preceding utterance. It should however be emphasized that the negation, in such metalinguistic cases, only alters the factive predicate. It does not cancel the presupposition.
The sentences in (63)–(65) cannot be understood as exclamations of any sort. This is easily explained if one considers the role of the matrix predicate. As we concluded in section 3, an exclamative expresses that the speaker finds $P$, or the high value of a variable in $P$, surprising or remarkable. When an exclamative is embedded, the matrix predicate ('fantastic', 'awful' etc.) is the element that carries the meaning component that something is remarkable or surprising. If the matrix is negated, then this meaning component is negated and that is incompatible with an exclamation of the kind normally expressed by exclamatives.

4. A brief survey of Danish and Icelandic

The purpose of this section is to draw attention to certain features of exclamatives in Danish and Icelandic. These features are relevant, primarily, in connection with the discussions in sections 6 and 7. The Danish data support the view that Swedish exclamatives are subordinate whereas the Icelandic data support the conclusion that Swedish exclamatives are presupposed. For a detailed account of exclamatives in Danish and Icelandic, the reader is referred to Delsing (2010) and Gisli Jónsson, (2010).

4.1 V-to-C movement in Danish exclamatives

Scandinavian exclamatives normally display a prototypical subordinate clause word order. This applies to Swedish, Norwegian and Icelandic alike. Danish, however, deviates from this general pattern. In Danish, $wh$-exclamatives come in two variants, one with subordinate clause word order (as in (66)) and one with main clause word order (as in (67)) (Delsing, 2010, p. 31).
The clause in (66) patterns with the Swedish *wh*-exclamatives in displaying subordinate clause word order. The clause in (67), on the other hand, is different. It has a prototypical main clause word order, where the finite verb occupies the second position. Considering that Danish is a V2 language it is most reasonable to assume that this is an instance of V-to-C movement (or V-to-Force movement, in a split CP model).

The exclamative with the typical main clause word order differs from that with the prototypical subordinate clause word order in one significant respect: It cannot be embedded (Delsing, 2010, p. 32). Consider the ungrammatical sentence in (68), where the exclamative clause has V2 word order, and the grammatical sentence in (69), where the exclamative clause has a prototypical subordinate clause word order.

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It should be mentioned that intuitions seem to differ. According to an informant whom I have been in contact with, the following sentence is grammatical:

i) Det er utrolig hvor har du store fødder!  
    *it is incredible how have you big feet*

However, a possible reason for this informant's judgment of this particular sentence could perhaps be that he perceived it as consisting of two main clauses. The sentence would then correspond to (ii), in which case the second clause isn't embedded and we consequently would expect it to be judged as grammatical.

(ii) It is incredible. What big feet you have got!
(68)* Det er utrolig hvor har du mange penge!

*it is unbelievable how have you many money

'My, what a lot of money you've got!

(69) Det er utrolig hvor mange penge du har!

*it is unbelievable how many money you have

'My, what a lot of money you've got!'

On the basis of the data presented in (68) and (69), I draw the conclusion that Danish *wh*-exclamatives, unlike Swedish ones, come in both a main clause and a subordinate clause variant. The differences concerning the possibilities of embedding the two kinds of Danish exclamatives are to be expected if one simply assumes that different syntactic structures reflect differences in hierarchical status. I argue that those *wh*-exclamatives that display a prototypical main clause structure in Danish are in fact main clauses. Consequently, I assume that the finite verb has undergone V-to-Force-movement in these clauses. This accounts for the surface structure of these exclamatives, but, more importantly, it also explains why they cannot be embedded. That the finite verb has moved from V to Force has two crucial consequences. Firstly, it means that the clause is coded for speech act value and secondly it means that the only possible complementizer position is occupied. Both of these consequences of V-to-Force-movement rule out the possibility of subordination. According to the main clause/subordinate clause dichotomy outlined in section 2, a clausal structure can carry only one specification for speech act value. Considering that speech act value is directly linked to V-to-Force-movement in the Scandinavian languages, embedding a Danish *wh*-exclamative that displays the prototypical main clause word order would violate this rule. The main clause/subordinate clause dichotomy furthermore requires that a subordinate clause must contain a covert or overt complementizer in Force°. This complementizer
anchors the clause in and relates it to the finiteness- and speech act value that is coded in a higher CP. As the relevant clauses display a prototypical main clause word order, which arguably is the result of V-to-Force-movement, it is reasonable to assume that the only possible complementizer position is occupied.  

Concerning those Danish _wh_-exclamatives that have a prototypical subordinate clause structure, I assume that they are structurally parallel to their Swedish counterparts. In section 7, I propose an analysis according to which these clauses are in fact regular subordinate clauses, typically embedded under covert matrices.

### 4.2 Icelandic að-exclamatives

Icelandic has preserved its mood system to a much greater extent than Swedish. Its use of mood is interesting, not least in connection with exclamatives, since it may offer some clues as to how they should be analyzed in relation to the main clause/subordinate clause dichotomy. 

The choice of mood in Icelandic subordinate clauses is largely dependent on the semantic properties of the matrix verb. Depending on whether the matrix predicate belongs to the class of (semi-)factives, non-factives or true factives, the finite verb of the subordinate clause may be either in the indicative or in the subjunctive. Semi-factives such as 'know' or 'discover', normally take complement clauses in the indicative, whereas non-factives such as 'say' or 'believe' and true factives such as 'awful' or 'deplorable' normally take complements in the subjunctive. Crucially, however, there are two different kinds of subjunctives, each of which is associated with its own class of matrix predicates. Sigurðsson (2010) distinguishes between the

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11 In section 6, I argue that the propositional content of a Swedish exclamative is presupposed. I assume that the presupposition is externally licensed through a factive adjective or an interjection, which constitutes a non verbal matrix, under which the exclamative is embedded. However, since I argue that Danish _wh_-exclamatives with V2 word order are main clauses, their propositional content cannot be presupposed in the same way. Tentatively, I propose the following solution to this problem: Danish main clause exclamatives are structurally presupposed in the same way as _wh_-questions. A _wh_-question requests the value of a variable x (corresponding to the _wh_-element) that yields a true proposition. Everything apart from the _wh_-element is presupposed. I argue that Danish main clause exclamatives are structurally presupposed in the same way as _wh_-questions. What separates the two clause types is that the _wh_-word has lost its rogativity in the case exclamative and only conveys a meaning of high degree.
(regular) subjunctive on the one hand and the periphrastic skulu-subjunctives ('shall'-subjunctives) on the other. Non factives normally take complements in the regular subjunctive, whereas true factives take complements in the skulu-subjunctive (Sigurðsson 2010, pp. 43–46). Consider the examples in (70) and (71), which are taken from Sigurðsson (2010, p. 45).

(70) Ég vona að tunglið brosi/*brosir/*skuli brosa.

    I hope that moon.the smiles.SBJV/*smiles.IND/*shall.SBJV smile

    'I hope that the moon smiles.'

(71) Það er gaman að tunglið skuli brosa/*brosi/?brosir.

    it is fun that moon.the shall.SBJV smile/*smiles.SBJV/*smiles.IND

    'It is fun that the moon smiles.'

As illustrated in (70), the non-factive matrix predicate vona 'hope' takes a complement clause in which the finite verb is in the subjunctive. Both the indicative and the skulu-subjunctive render the sentence ungrammatical. In (71), the matrix predicate is a true factive and consequently takes a complement clause in the skulu-subjunctive. The regular subjunctive is ungrammatical after this predicate and the indicative is only marginally acceptable. In a footnote, Sigurðsson comments on the marginally acceptable cases where the subordinate clause is in the indicative even though embedded under a true factive. He argues that the matrix clauses, in these cases, in fact contain a covert factive NP, which would explain the possibility of having the subordinate clause in the indicative. He writes: "True factives can be interpreted as taking a silent factive NP, like the fact, the silent NP in turn heading the complement clause:
(i) a. I regret (the fact) that the moon smiles.
   
   b. (The fact) that the moon smiles is fun.

On a reading where a silent factive NP is semantically present, the complement may at least marginally be indicative" (Sigurðsson, 2010, p.45).

Thus far, we have concluded that the mood of an Icelandic subordinate clause is dependent on whether the matrix predicate belongs to the class of (semi-)factives, non-factives or true factives. Crucially, the periphrastic skulu-subjunctive is firmly linked to true factive matrix predicates. Interestingly, however, this is not the only environment in which the skulu-subjunctive occurs. It is also found in constructions which Sigurðsson call "independent clauses, with a subordinate form" (2010, p. 42). Consider (72)\(^{12}\).

(72) Að Maria skuli vera hér!

\begin{quote}
that Maria shall.subj be here
\end{quote}

'My, I had no idea Maria would be here!'

The clause in (72) is in fact an example of an Icelandic að-exclamative. It is a complementizer headed clause which lacks an overtly realized matrix clause and is used for making polar exclamations. Just as its Swedish counterpart, the att-exclamative, it displays two characteristic properties. Firstly, it has a prototypical subordinate clause structure, being introduced by a complementizer, and secondly it is factive in the sense that its propositional content is presupposed. Considering these properties and the fact that the skulu-subjunctive otherwise typically is found in subordinate clauses embedded under true factives, the idea immediately presents itself, that these seemingly independent að-clauses are in fact embedded under covert, true factives.

\(^{12}\) The example was kindly presented to me by Halldór Sigurðsson.
Note that if mood is disregarded, the Icelandic að-exclamative in (72) patterns with the Swedish att-exclamative. The Icelandic data consequently lends support to the assumption that Swedish exclamatives are factive in the sense that their propositional content is presupposed and that this presupposition is licensed from outside of the clause which denotes the presupposed proposition. An analysis that shares Sigurðsson’s insight is presented in section 6.

5. Previous main clause analyses
In this section, previous approaches to Swedish exclamatives are discussed in closer detail. In most of the analyses that have been put forth in the literature, it is argued (or more often just presupposed) that exclamatives are independent main clauses. Among those that adopt a main clause analysis are Rosengren (1992, 1994), Brandtler (2010), Teleman et al. (1999) and Delsing (2010). In this section, I present and comment on two analyses according to which exclamatives are main clauses, namely Teleman et al. (1999) and Delsing (2010).

5.1 A main clause analysis as suggested by Teleman et al. (1999)
It is the outspoken ambition of Teleman et al. (1999) to provide an exhaustive, yet purely descriptive grammar of the Swedish language. The authors strive to account for the surface structure of grammar, making as few theoretical assumptions as possible (cf. Teleman et al, 1999, bind 1, pp. 37–38). Such an approach is certainly motivated considering the descriptive purpose. Nevertheless, it is not possible to completely avoid making theoretical assumptions and choices, although they perhaps may be implicit. In this section, we will take a look at some of the consequences that the choices made by Teleman et al. have for their account of Swedish exclamatives.

In order to understand how Teleman et al. (1999) have reached their
categorization of exclamatives, we must turn to their definition of subordination. Since they strive to keep the description as close to the surface structure as possible, they are reluctant to assume covert structure (cf. Teleman et al., 1999, bind 1, pp. 37–38). This can be avoided by defining subordination in terms of overt constituenthood. Consequently, Teleman et al. define a subordinate clause as a clause that functions as a constituent in another, overtly realized clause. As a result of this view, the basic categories of Swedish exclamatives must be considered main clauses, since they lack matrices but still function as independent grammatical utterances. There are however instances of exclamatives where a finite matrix clause is realized. In such cases, the exclamatives meet the requirements for a subordinate clause classification. Consequently, Teleman et al. have to conclude that there are both main clause and subordinate clause instances of exclamatives. In fact, they discuss embedded exclamatives (such as _Det är förfärligt vilka stora fötter han har!_ 'It's awful, what big feet he has') in a separate section, together with other subordinate clauses. Interestingly, the authors note in passing that the mentioned types of subordinate exclamatives have the same structure as their independent main clause counterparts. Although they do not comment on this further, it is an important observation, because it would mean that exclamatives would differ significantly from other clause types. The reason for this is that all other Swedish clause types that come in both a main clause and a subordinate clause version, normally display different structures depending on whether they are independent or not. In main clauses, the finite verb undergoes V-to-Force-movement. In subordinate clauses it does not, a difference that can be directly observed on the surface structure. If we are to follow the analysis presented in Teleman et al., however, we would have to conclude that this asymmetry does not apply to Swedish exclamatives.
5.2 A main clause analysis, following Delsing (2010)

The argumentation in this section is largely based on the assumption that Delsing’s (2010) analysis in effect presupposes that Swedish exclamatives are main clauses. It should however be emphasized that Delsing himself does not address the question about whether exclamatives are main clauses or subordinate clauses in Swedish. In my view, however, it follows from Delsing’s analysis that he considers these clauses to be main clauses. The most important reason for my conclusion is the fact that Delsing argues that Swedish exclamatives are asserted, a property which is normally not compatible with subordination.

Delsing's paper provides a survey of syntactic variation in Scandinavian exclamatives. He concludes that there are basically two possibilities as to how such an investigation can be carried out:

Either you define the sentence type of exclamatives in syntactic terms, and study the properties of these, or you define exclamatives in pragmatic terms, and investigate the range of syntactic variation in these. I have chosen to do the latter, mainly because the syntactic properties vary across languages (Delsing, 2010, p. 16).

It should be acknowledged that Delsing's approach does have certain advantages. By choosing to define exclamatives in pragmatic terms, one avoids the risk of overlooking relevant exclamative construction types by limiting the investigation to a specific structural configuration. However, Delsing's approach is also very likely to miss the target completely. The risk is that one ends up studying a particular illocution, rather than a clause type. This problem becomes obvious if we try to define another clause type in a similar way. The speech act 'question' could, for instance, be defined pragmatically as 'an utterance intended as a request for a particular piece of information'. If this definition was also extended to serve as a definition of the clause type 'question', one would necessarily also have to conclude
that a prototypical declarative structure used for making an inquiry is a question with respect to clause type, which would be an unfortunate analysis.

Without presenting further arguments in support of his view, Delsing claims that exclamatives contain an assertion and that this “assertion is related to a presupposition, typically a hidden expectation” (Delsing, 2010, p.16). He then presents the following definition of exclamatives: "I take the defining property of exclamatives to be a mismatch between the assertion and the presupposition. This mismatch often gives rise to a surprise effect” (Delsing, 2010, pp. 16–17).

According to Delsing's view, exclamatives are used to make statements, i.e. their propositional content is asserted. Consequently, what is presupposed is not the proposition denoted by the clause but the expected or normal case. Consider (73).

(73) Vilka stora fötter du har!

*which big feet you have*

'My, what big feet you've got!'

On Delsing's analysis, (73) asserts 'you have big feet' and presupposes the expected case of normal foot size.

Delsing's analysis suffers from three important weaknesses. Firstly it is not clear how he defines the notions of presupposition and assertion. In my view, it is not evident why the expectation of normality is a presupposition. Secondly, it is not made clear how exclamatives get their assertive force. Clearly it cannot be through the otherwise typical V-to-Force-movement.

Thirdly, as implied earlier, Delsing's definition seems more like a definition of a particular illocution (exclamation) than a clause type. This becomes clear if one considers an example such as (74), which is taken from Delsing (2010, p 24).
(74) ÄR jag trött!

*am I tired*

'Boy, am I tired!'

Delsing claims that the clause in (74) is an example of a V1-exclamative, a kind of exclamative which, according to him, is found in substandard varieties of southern Swedish. Structurally they coincide with regular Swedish yes/no-questions, but they are distinguished by a "strong stress on the verb" (Delsing, 2010, pp. 24–25). On my analysis, the clause in (74) is a main clause question, as far as hierarchical status and clause type is concerned. It may perhaps be used to convey an exclamation but an exclamation is a speech act (which can be expressed by a number of different linguistic means), whereas an exclamative (arguably) is a clause type. These notions must be kept apart. The fact that the clause in (74) can be used to express an exclamation does not make it an exclamative, just as a declarative structure employed to ask a question shouldn't be categorized as question, with respect to clause type.

6. Presupposed propositions

On Delsing's analysis, exclamatives contain both an assertion and a presupposition. According to him the proposition denoted by the clause is asserted. What is presupposed is an expectation of normality. Delsing's analysis is however not unchallenged. On the contrary, it has repeatedly been argued that the proposition denoted by an exclamative is presupposed, rather than asserted. Among the proponents of this view are Zanuttini & Portner (2003), who investigate exclamatives on the basis of data from Italian, Paduan and English, and Abel (2010), who discusses English what-a and how-very exclamatives. Also in accounts of Swedish, it has been suggested that exclamatives are presupposed. Although they
do not present any arguments in support of their view, Teleman et al. (1999, bind, 4, p. 767) claim that Swedish exclamatives (or 'expressive main clauses', as they call them), are factive. They write: "In an expressive main clause, the speaker presupposes that the state of affairs that gives rise to the surprise, or that the evaluation is concerned with, is true."¹³ I agree with the analysis that the propositional content of an exclamative clause is presupposed, and in this section, I present arguments supporting the assumption that Swedish exclamatives are factive.

The notion presupposition is often considered to be, in essence, a semantic concept and normally, consistency under negation provides a clear indication that a particular proposition is presupposed. This means that a proposition A presupposes a proposition B if B is true irrespective of whether A is affirmative or negative. This is illustrated below in (75).

(75) a. Kalle ångrar att han köpte bilen.

*Kalle regrets that he bought the car.*

b. Kalle ångrar inte att han köpte bilen

*Kalle does not regret that he bought the car.*

As can be seen in (75), it is true that Kalle bought the car, irrespective of whether the matrix is negated or not. This allows us to conclude that the proposition conveyed by the *att*-clause is presupposed.

Unfortunately, a test of the kind exemplified in (75) cannot be felicitously applied to exclamatives, since their matrices cannot be negated (see section 3.3). Instead, I adopt a pragmatically oriented definition of presupposition (which, as

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¹³ My translation.
such, does not contradict the semantic definition): A proposition is presupposed if the speaker presents and treats it as given and uncontroversially true. According to this view, the crucial difference between an asserted proposition and a presupposed one is that its truth value is up for discussion in the former case but not in the latter. A hearer may object to the truth of the presupposed proposition but it cannot be done in the same direct way as when the proposition is asserted by the speaker. In order to object to a presupposition, its truth value must be explicitly brought up to negotiation by the hearer and that requires more elaborate linguistic means than simply denying the truth of an asserted proposition.

Although I adopt a pragmatic definition of the notion, I maintain firstly that assertion and presupposition are mutually exclusive concepts, and, secondly, that a lexical presupposition normally must be triggered, or licensed, by an element outside of the presupposed proposition\(^{14}\).

Applying the pragmatic definition, we can test whether the propositional content of exclamatives is presupposed by using dialogue pairs. Consider (76)–(79).

\[
\begin{align*}
(76) & \quad \text{Vilken klippa han är!} \\
& \quad '\text{What a great guy he is!}' \\
& \quad \text{- Ja!} \\
& \quad '\text{Yes!}' \\
(77) & \quad \text{Vilken klippa han är!} \\
& \quad '\text{What a great guy he is!}' \\
& \quad ?? \quad \text{- Nej!} \\
& \quad '\text{No!}'
\end{align*}
\]

\(^{14}\) It should be noted that this does not apply to structural or existential presuppositions, which come about through a specific, clause internal structural configuration (\textit{wh}-questions, clefts etc.) or definiteness respectively.
As shown in (76), support (or affirmation) is an expected and accepted answer to the exclamative *vilken klippa han är!* To answer *nej* 'no', on the other hand, is not felicitous. If the second speaker in the dialogue wants to object to the propositional content, then he or she must bring it up to negotiation by using a more marked and lengthy answer, as in (79). This is normally not the case with ordinary declarative clauses, as in (78). When the first speaker, by using a declarative clause, has claimed that Lars is a great guy, the second speaker can object to that by simply answering no. This shows that the truth value of the proposition in the exclamative clause, as opposed to that in the declarative clause, is presented and treated as given or self evident. This suggests that the proposition conveyed by the exclamative is presupposed.

The view that the propositional content of an exclamative is presupposed, is further supported by the fact that exclamatives embed under factive predicates, not under assertive or non-assertive predicates. It is also in accordance with the Icelandic data presented in section 4.2: As was shown, the finite verb of an Icelandic *að*-exclamative is in the periphrastic *skulu*-subjunctive, a mood which is otherwise only found in *að*-clauses embedded under true factives. These Icelandic exclamatives are parallel to the Swedish *att*-exclamatives, save the mood of the
finite verb. Assuming that exclamatives are presupposed, this mood is exactly what is to be expected.

Last but not least, an argument in support of the assumption that the propositional content of an exclamative is presupposed is provided by the fact that exclamatives cannot be modalized by sentence adverbials. If the proposition denoted by an exclamative were asserted, as Delsing proposes, we would expect it to be possible to modalize it through an epistemic sentence adverbial, such as *kanske* 'maybe' or *förmodligen* 'probably'. However, as was shown in section 3.3, the insertion of a modalizing sentence adverbial gives rise to a semantic/pragmatic clash which makes the clause unacceptable. The restrictions on modalizing exclamatives are expected and highly intuitive in light of a presupposition analysis: If the speaker presupposes the truth of a given proposition, we do not expect it to be possible for him or her to express uncertainty concerning the truth of this particular proposition at the same time.

7. The proposal: Swedish exclamatives are subordinate

In this section I propose an analysis according to which Swedish exclamatives are embedded under matrices that in most cases are covert but also may be overtly realized. The proposed analysis provides an explanation both for the typical subordinate clause word order found in Swedish exclamatives and for the fact that the propositional content of an exclamative is presupposed.

7.1 Finite and non-verbal matrices

As was shown in 3.3, all three variants of Swedish exclamatives can be embedded under regular, full matrices. For convenience, this is illustrated once more in (80).
(80) Det är fruktansvärt vad han klagar!

it is terrible what he complains

'My, really complains an awful lot!'

The sentence in (80) is a typical example of what Teleman et al. (1999) would call an embedded exclamative. The matrix clause contains a subject (det), a finite verb (är) and a factive adjective (fruktansvärt). This matrix clause explains both the word order of the exclamative and the fact that it is presupposed. Firstly, because it is subordinated, it has the word order of a prototypical subordinate clause. Secondly, it is embedded under a factive predicate which accounts for the fact that its propositional content is presupposed. The presupposition is externally licensed.

The claim that the wh-clause in (80) is a subordinate clause is quite uncontroversial (it is the analysis proposed by Teleman et al. (1999)). I see no reason to assume that a (superficially) independent exclamative like that in (81) is different.

(81) Vad han klagar!

what he complains

'My, he really complains an awful lot!'

As pointed out in sections 5.1 and 5.2, both Teleman et al. (1999) and Delsing (2010) assume that a wh-exclamative like the one in (81) should be analyzed as a main clause. In doing so, however, they fail to give a convincing explanation both to the word order and the presupposed status of the clause.

A point, which in my opinion is absolutely crucial, is that the internal structure of the independent exclamative in (81), is identical to that of the, clearly,

15 However, it is important to note that there are no structural properties that distinguish these "embedded exclamatives" from regular declarative main clauses that contain a subordinate wh-clause.
subordinated clause in (80). If the clause in (81) were a main clause, then exclamatives would deviate completely from the prototypical Swedish pattern of asymmetry between main clauses and subordinate clauses, with respect to the position of the finite verb.

In my view, it is significantly more consistent and theoretically economical to assume an analysis according to which the exclamative in (81) is a subordinate clause, embedded under a covert matrix with features corresponding to that of the overtly realized matrix in (80). An analysis along those lines accounts for both the word order and the presupposed status of the exclamative clause.

Stroh-Wollin (2008) shows that exclamatives, *wh-* som- and *att*-varieties alike, can be preceded by swear words. This is illustrated below in (82)–(84).

(82) Fan vilka stora fötter du har!
   *damn which big feet you have*
   'Damn, what big feet you've got!'

(83) Fan som det ser ut här inne!
   *damn SOM it looks PART. here inside*
   'It looks god damn awful in here!'

(84) Fan att han aldrig lär sig!
   *damn that he never learns REFL.*
   'Damn it, why doesn't he ever learn!'

Inspired by an analysis originally put forth by Magnusson (2007), Stroh-Wollin suggests that the swear words in sentences like the ones in (82)–(84) in fact constitute non-verbal matrices (i.e. matrices without a verb) under which the
exclamatives are embedded\textsuperscript{16}. On her analysis, this matrix is always present in the structure, whether covert or overtly realized as an interjection. An exclamative would thus have the structure represented in (85) (Stroh-Wollin, 2008, p.77).

(85) a. [Fan [vilka stora fötter du har!]]
   b. [Ø [Vilka stora fötter du har!]]

I believe that Stroh-Wollin is on the right track and I adopt the basic analysis that she proposes.

Teleman et al. (1999, bind 4, pp.760–761), show that all three categories of exclamatives may also be preceded by the word tänk, lit. 'think' and that wh- and som-exclamatives, in addition, also may be preceded by the words se, lit. 'see' and titta, lit. 'look'. This is illustrated in (86)–(88).

(86) Titta vilka feta katter han har!
   look which fat cats he has
   'Boy, what fat cats he's got'

(87) Se som han svettas!
   see SOM he sweats
   'My, does he sweat!'

\textsuperscript{16} Julien (2009) has put forth a similar analysis for certain instances of sentences containing a clause introduced by plus(s) at(t), lit. 'plus that'. Consider (i), which is an example from Julien (2009):

(i) Finns en del spelare som kan bli riktigt grymma i framtiden, plus att de har en bra tränare också.
   'There are a few players that can become really wicked in the future, plus, they’ve got a good coach too.'

On Juliens analysis the sentence in (i) consists of two main clauses, the second of which is introduced by plus att, lit. 'plus that’. Julien argues that plus att, in fact constitutes a minimal matrix (cf. my term, non-verbal).
The elements preceding the exclamatives are interesting from a word class perspective. Firstly, it should be noted that the words *tänk, se* and *titta* have forms that coincide with verbs in the imperative. However, as suggested by Teleman et al. (1999, bind 4, p. 760–761), they are probably better looked upon as imperatives that have drifted semantically and become interjections. In other words, they are “non-verbal” elements. Diachronically, they certainly stem from their imperative counterparts but the imperative meaning is not present in the exclamative constructions. They convey expressive speech acts, not directive ones. The view that they are interjections rather than imperatives is further supported by the fact that they do not take PP complements. The corresponding imperative versions of *tänk, titta* and *se* respectively, all take PP complements. This is decidedly odd in the exclamative constructions. Consider the imperative in (89), and compare it to the infelicitous exclamative in (90).

(89) Tänk på döden!

*think on death.*

'Think about death!' 

(90)?? Tänk på vilken fet katt han har!

*think on which fat cat he has*

'Think about what a fat cat he has!'

---

17 It should be pointed out that the sentence in (90) is grammatical when used as an imperative. However, as an exclamative, it is not felicitous.
Interestingly, parallel analyses have recently been put forth for Hungarian \( \text{képzeld} \) 'imagine' and Norwegian \( \text{tenk} \) 'think'. Fretheim & Vaskó (2011) argue that "the Hungarian form \( \text{képzeld} \) and the Norwegian form \( \text{tenk} \) are lexically ambiguous, either an imperative verb form used in a directive speech act or else a so-called mirativity particle (mirative marker) used in a declarative (representational) speech act, as an indicator of surprise at the truth of the proposition expressed (and the factuality of the state of affairs represented)". Although Fretheim & Vaskó use the term particle and not interjection, their main point is identical to mine: Norwegian \( \text{tenk} \), Hungarian \( \text{képzeld} \) and Swedish \( \text{tänk} \), \( \text{titta} \) and \( \text{se} \) are lexically ambiguous and belong to different word classes depending on how they function in a specific context.

The various swear words that may serve as matrices for exclamatives seem to differ with respect to word class status. The most common of these words, \( \text{fan} \) lit. 'the devil', seems to be a factive adjective.\(^{18}\) This can be concluded from the fact that it may serve as the predicate of a full, finite matrix clause, in a manner that is parallel to other, typical factive adjectives. Consider (91) and (92).

(91) Det är ju \( \text{fan} \) som här ser ut!

\textit{it} \text{is} \text{MOD. SWEAR} \text{SOM} \text{here} \text{looks} \text{PART.}

'It's just awful, the way it looks in here!'

(92) Det är ju \( \text{sorgligt} \) som här ser ut!

\textit{It} \text{is} \text{MOD} \text{sad} \text{SOM} \text{here} \text{looks} \text{PART.}

'It's just sad, the way it looks in here!'

\(^{18}\) Although less common, it seems that NP:s can function in a similar way. Consider (i), in which the matrix contains the NP \( \text{skit} \) (lit. 'shit' or 'crap'):

(i) Det är ju \( \text{skit} \) som här ser ut!

\textit{it} \text{is} \text{MOD} \text{crap} \text{SOM} \text{here} \text{looks} \text{PART.}

'It's just awful, the way it looks in here!'
Other swear words that may function as non-verbal matrices cannot be analysed as adjectives. Instead they must be regarded as interjections, on a par with *tänk*, *titta* or *se*. Examples are *gud* (lit. 'god') and *fy* ('oh', 'damn' etc.). Unlike typical factive adjectives such as *sorgligt* ('sad'), *gud* or *fy* cannot be the predicate of a full, finite matrix clause. This is illustrated in (93) and (94).

(93) a. Gud som här ser ut!
    god SOM here looks PART.

   b. *Det är gud som här ser ut!
      it is god SOM here looks PART.

(94) a. Fy vad han klagar!
    FY what he complains

   b. *Det är fy vad han klagar!
      it is FY what he complains

On the basis of the facts illustrated in (91)–(94), we can draw the rather curious conclusion that *fan* (lit. 'the devil') seems to be an adjective, whereas *gud* (lit. 'god') appears to be an interjection.

### 7.2 Swedish exclamatives are embedded under non-verbal matrices

It is clear that both finite and non-verbal matrices for exclamatives are grammatical. However, when we are to analyse any given exclamative that lacks an overtly realized matrix, we must choose between the two possible structures.

The independent exclamative itself gives few leads as to whether a finite or a non-verbal matrix analysis is more reasonable. However, if an adjective or
interjection is present in front of the exclamative, this may narrow down the possibilities. As was shown in 7.1, an interjection, such as *gud*, lit. 'god' or *tänk*, lit. 'think' cannot serve as complements of a matrix verb. Consequently, we may conclude that all exlamatives that are preceded by interjections must be analysed in terms of a non-verbal matrix. If the exclamative is preceded by an adjective on the other hand, the picture is a bit more complicated. A factive adjective, such as *fan*, lit. 'the devil' or *förskräckligt* 'terrible' may function as a constituent in a full, finite matrix under which the exclamative is subordinated. The fact that this is possible does however not necessarily mean that the presence of an adjective in front of the exclamative allows us to conclude that the structure involves a covert instance of a finite matrix. The reason for this is that we cannot rule out the possibility that the overtly realized adjective is situated in Force°, rather than in the complement of a vP. An exclamative preceded by a factive adjective may, in principle, have the structure represented in (95), just as well as that illustrated in (96).

(95) [CP (Det) Force ° (är) [vP fan]] att han aldrig kommer!

'It is devil that he never comes

'Damn it, why doesn't he ever come!'

(96) [Force° Fan] att han aldrig kommer!

'devil that he never comes

'Damn it, why doesn't he ever come!'

As indicated by the structural representations in (95) and (96), the presence of a factive adjective in front of the exclamative, does not give any decisive evidence as to whether we should assume a full, finite matrix or a non-verbal one in these cases. Nevertheless, I argue that the non-verbal analysis should be chosen over the finite, for three reasons. The first reason is that an overtly realized, non-verbal matrix, can
be associated only with an exclamation reading, whereas a finite matrix could also be used for making a statement (although the different interpretations would presumably be associated with separate prosodic patterns). Secondly, a non verbal matrix, containing an interjection, also accounts for the direct deictic nature of exclamatives. Thirdly, assuming a non-verbal matrix rather than a full finite one, is more economical. When choosing between two analyses involving covert structure, the minimal assumption is to prefer.

7.3 Licensing the presupposition
In section 6, I claimed that certain types of presuppositions must be licensed by an element outside the presupposed proposition. In syntactic terms, this means that the clause denoting the presupposed proposition must be selected by a licensing element in a matrix structure. There are also pragmatic factors which restrict a presupposed proposition from standing alone. That this is the case is easily realized if one considers the notion of presupposition in light of the basic ideas of Grice's cooperative principle. As presented by Grice, the cooperative principle is a superordinate principle which can be divided into the four more specific categories of quantity, quality, relation and manner. The first of these is explained in the following way: "The category of Quantity relates to the quantity of information to be provided, and under it fall the following maxims:

1. Make your contribution as informative as is required (for the current purposes of the exchange).
2. Do not make your contribution more informative than is required" (Grice, 1989, p.26).

Recall the definition of presupposition put forth in section 6: "A proposition is presupposed if the speaker presents and treats it as given and uncontroversially
true”. It is easily realized that a presupposition alone, as defined above, does not meet the requirements of Grice's first maxim of quantity. An isolated proposition which is treated and presented as given and uncontroversially true simply cannot be informative. In fact, it is hard to even imagine an utterance which only conveys presupposed information. In order for the presupposition to be meaningful, it has to be accompanied by a linguistic expression, which at the very least provides us with information as to how the speaker relates to the presupposition 19.

The most typical and least complicated case is when the presupposed proposition is embedded in a declarative matrix structure, containing a licensing element such as a factive predicate. The presupposition is then accompanied by an assertion and licensed by an element within the clause that carries this assertion. This is precisely the case that follows from an analysis according to which the exclamative is subordinated under a full, finite matrix. Consider (97).

(97) (Det är fantastiskt) vilka stora fötter han har!

   *it is fantastic which big feet he has*
   'It is just fantastic, the size of his feet!'

The *wh*-clause in (97) is embedded under a full finite matrix (covert or overt), containing a factive predicate. At a first glance, an analysis along these lines seems appealing, as it provides a straightforward account for how the presupposition is licensed. To argue that a factive predicate presupposes its complement is quite uncontroversial. However, this kind of full matrix analysis has an important drawback to it. The main problem associated with it is the fact that the matrix clause

19 It seems reasonable to assume that this is the intuition that underlies Delsing's analysis, according to which an exclamative, at the same time, contains both an assertion and a presupposition. However, since his analysis of exclamatives only involves one CP, it fails to account for the licensing of the presupposition (it cannot be licensed externally). Moreover, his analysis violates the rule that presuppositions and assertions are mutually exclusive.
(and consequently the sentence as a whole) is identical to and inseparable from a regular declarative clause, typically used to make a statement. In other words, the full matrix analysis fails to give a structural explanation to the unique properties of exclamatives. As we shall see, however, a non-verbal matrix analysis does not suffer from this problem. In fact, such an analysis can account for the presupposed status of the clause's propositional content and at the same time ascribe the matrices of exclamatives a syntactic structure which separates them from other clause types.

In order to understand how interjections license presuppositions, we must consider their communicative function. Typically, a speaker utters an interjection as an immediate response to a particular stimulus, be it a sensation, the perception of an object or a certain state of affairs. On the basis of this, we may first of all conclude that interjections are informative and meaningful and consequently meet the minimal requirements of Grice's first maxim of quantity.

As a second step in understanding how interjections license presuppositions, we may assume that the stimulus that the speaker reacts to exists, provided of course that the speaker adheres to Grice's cooperative principle and its maxim of quality which, essentially, dictates that a speaker should tell the truth (cf. Grice, 1989, p. 27). For instance, if a person exclaims *ouch*, we must assume that he or she is reacting to a painful sensation. Consequently, it can be argued that the utterance of an interjection presupposes the existence of the state of affairs to which the speaker reacts. Similarly, the interjection in a non-verbal matrix presupposes the truth of the proposition in the following clause. Whether or not the state of affairs is actually true to the rest of the world is irrelevant. What is important is that it is true, or treated as true, in the world of discourse.

So far we have concluded that interjections do not require any additional linguistic structure to meet with the first maxim of quantity, and also that the utterance of an interjection presupposes the existence of the stimulus to which the speaker reacts. In light of these facts we can reach a better understanding both of the
surprise effect, commonly associated with exclamatives and of how the propositional content of an exclamative is related to the stimulus, which triggers the linguistic reaction.

An interjection in isolation typically functions as a linguistic signal of an immediate reaction to states of affairs, objects, courses of events etc. that the speaker has only just become aware of. The choice of interjection offers some information about the nature of the reaction and, to a lesser extent, the stimulus to which it forms a reaction. For instance, *aj* 'ouch' signals pain, *oj* 'oh'/wow' etc. signals surprise and *usch* 'yuck' signals disliking or mild disgust. Crucially, however, the interjection itself does not carry any propositional content. The interjection *aj* 'ouch', for example, is not the proposition 'it hurts'. It is a direct linguistic reaction to a state of affairs that is present in the world of discourse. It is reasonable to assume that the aspect of surprise, which is often associated with exclamatives, is directly related to the immediateness of the reaction.

But exclamatives do not always consist of isolated interjections. In fact, the nonverbal matrix that the interjection constitutes often completely lacks overt representation in the utterance. This raises the question of how the overt, subordinate part of the exclamative should be understood, particularly in relation to the matrix. My proposal is that this clause is the (optional) linguistic expression of the stimulus to which the speaker reacts; it is a “propositionalisation” of the stimulus that triggers the utterance.

A consequence of this proposal is that isolated interjections must be considered to be minimal exclamatives.

### 7.4 A formal account of the three basic Swedish exclamatives

In this section, I present the formal analyzes that I propose for Swedish exclamatives. Common to all three basic kinds of exclamatives is that they are assumed to involve a non-verbal matrix under which the *att-, som-* or *wh*-clause is
embedded. However, since the internal structures of the subordinate clauses differ between the three varieties, *att-*, *som-* and *wh*-exclamatives, are discussed in separate subsections.

7.4.1 *wh*-exclamatives

I assume that the *wh*-element, together with a nominal or adjectival head, forms a single constituent which is located in Spec-CP. C contains a complementizer. In most cases this complementizer has no representation in the surface structure. However, if the constituent in Spec-CP is the subject of the clause, the complementizer must obligatorily be present in the surface structure, as illustrated in (98) (this does not apply only to *som*-exclamatives but is true for all instances of *som*-clauses alike). The complementizer is optionally realized in cases where Spec-CP is filled by a non-subject constituent, provided that this constituent is heavy enough. This is exemplified in (99).

(98) Vilken trevlig tant *(som) köpte huset!
    *Which nice *(old).lady SOM bought house.the
    'What a nice old lady who bought the house!'

(99) Vilken otroligt stor och fin trädgård *(som) du har anlagt!
    *which incredibly big and fine garden SOM you have layed.out
    'What an incredibly big and nice garden that you have layed out!'

In my view, the possibility (or, as in (98), even necessity) of realizing a complementizer in C, constitutes a strong argument for assuming that the structure of a *wh*-exclamative always involves a complementizer in C, irrespective of whether it is overt or covert.

The structure proposed for Swedish *wh*-exclamatives, exemplified with (100a),
is shown in (100b).

(100) a Fan vilka mockasiner (som) du har köpt!

\[ \text{Damn} \quad \text{which moccasins (SOM) you have bought} \]

'(Damn), those are quite some moccasins that you have bought!'

b \[ \text{ForceP Fan [Spec-CP vilka mockasiner C (som) [TP du har [vP köpt ]]]} \]

The internal structure of the subordinate clause in (100) is parallel to that of an indirect \textit{wh}-question. Consider (101).

(101) Jag undrar vilka mockasiner (som) du har köpt.

\[ \text{I wonder which moccasins (SOM) you have bought} \]

'I wonder which moccasins that you have bought.'

Jag undrar [Spec-CP vilka mockasiner C (som) [TP du har [vP köpt]]]

However, the indirect question in (101) obviously does not convey the same meaning as the exclamative in (100). As suggested in section 3.2.1 (see footnote 5), this difference is presumably related to differences between the \textit{wh}-elements introducing the two kinds of clauses. In the following, I will attempt to account for the semantic differences between those \textit{wh}-elements that introduce questions on the one hand and those that introduce exclamatives on the other.

Let us begin by looking at \textit{wh}-elements in questions. Basically, a \textit{wh}-word can be assumed to carry the two following features:

A) Rogativity: A semantic feature, Q, responsible for sentence mood (OPEN)

B) Focus feature: A syntactic feature, F, responsible for set creation (\( \lambda x \))
In the case of a regular *wh*-question, the above features interact. The rogativity feature Q of the *wh*-word ensures that the sentence mood operator of the clause has the specification OPEN and that the *wh*-word requests the value of a variable x in the clause. Further, the focus feature F determines a set of alternatives (Jackendoff (1972), Rooth (1985)). Consequently, F contributes by creating a set of possible, alternative propositions. The set of alternative propositions, the so-called “presuppositional set” is defined originally by Jackendoff (1972) as the set of the set of values which, when substituted for x in Presupp (x), yield the true proposition and is symbolized with the expression \( \lambda x \text{Presupp}(x) \).

In the answer to the *wh*-question – in the assertion of a declarative sentence – the focus is obligatorily a member of the presuppositional set:

\[
\text{Focus } \in \lambda x \text{ Presupp}(x)
\]

This means that the answer to a *wh*-question contains the focus constituent which corresponds to the variable of the question: Consider (102).

(102) A: - Vad åt Kalle?

\textit{what ate Kalle}

'What did Kalle eat?'

B: - Gröt.

'porridge.'

At the time when the question 'what did Kalle eat' is asked, a presuppositional set (an open proposition) is created since x may assume a number of possible lexical values ('bananas', meatballs', 'a lingon berry' etc.). As B answers the question, a certain value is ascribed to x and all other possible values are excluded. This gives us the focus of
the clause. Although all other possible values are excluded, they are of course, in a sense, present as a basis of comparison.

In the case of a *wh*-exclamative, the *wh*-element only carries the F-feature and contributes to set creation. Crucially, it is not endowed with the rogativity feature and consequently cannot be regarded as an open proposition. As opposed to *wh*-questions, *x* has a fixed value in a *wh*-exclamative. The selection of a high value on the scale, formalized as $\lambda x$ created by F and the exclusion of all other possible values is obligatory. The other degrees on the scale are however still relevant as a basis of comparison.

What distinguishes the *wh*-elements found in *wh*-questions from those found in *wh*-exclamatives is thus that the former has the combination of two relevant features – rogativity and focus – ensuring the creation of an open set whereas in the latter only the focus feature (leading to set creation) is present. The absence of the rogativity feature in *wh*-exclamatives explains also the fact that the subordinate clause in a Swedish *wh*-exclamative may be introduced by lexical items such as så 'so' or sicken 'such'/ 'so', elements that never introduce questions (see also Rosengren (1994), p.47). Så and sicken are not rogative but they do select a high value from a set of possible values on an implicit scale.

### 7.4.2 Som-exclamatives

The structure that I assume for *som*-exclamatives bears some resemblance to *wh*-exclamatives. The Spec-CP slot is occupied by an operator which binds, and is coindexed with, an empty position further down in the structure, presumably in the vP. C is obligatorily filled by an overt complementizer (*som*). The operator may be thought of as a covert counterpart to the *wh*-element situated in the Spec-CP of *wh*-exclamatives. The structure that I assume for *som*-exclamatives is given in (103).
(103) Fan som han ljuger!

*damn* SOM he lies

'Damn it, he does nothing but lie!'

\[
[\text{ForceP } \text{Fan} \ [\text{Spec-CP OP}_1 \text{C som} \ [\text{TP han} \ [\text{vP ljuger } \emptyset]]]]
\]

A remark should be made on the relation between the operator in Spec-CP and the variable that it binds. The exact nature of the variable bound by the operator is determined entirely on contextual factors. For obvious reasons it cannot be coreferential with any constituent within the matrix, a fact that separates *som*-exclamatives from relative clauses introduced by *som*. The operator in a relative clause is typically coreferential with its antecedent.

### 7.4.3 Att-exclamatives

The internal structure of an *att*-exclamative is identical to that of regular *att*-clauses. The proposed analysis is given in (104).

(104) Fan att Kalle var hemma!

*damn* that Kalle was home

'Damn it, I didn't think Kalle would be home!'

\[
[\text{ForceP } \text{Fan} \ [\text{CP att} \ [\text{TP Kalle} \ [\text{vP var hemma}]]]]
\]

As we can see in (104), what separates *att*-exclamatives from "regular" *att*-clauses is not the internal structure of the subordinate clause, but rather the nature of their respective matrices. "Regular" *att*-clauses, on the one hand, are subordinated under a prototypical, finite matrix, whereas *att*-exclamatives, on the other hand, are embedded under smaller, non-verbal, deictic matrices.
8. Exclamatives in the main clause/subordinate clause dichotomy

According to the analysis proposed in 7, Swedish exclamatives fit well in to the main clause/subordinate clause dichotomy outlined in section 2. The dichotomy is based on the differences between Swedish main clauses and subordinate clauses regarding the properties of the C-domain. The strong hypothesis is that there is a one-to-one correlation between a clauses' syntactic structure and its semantic/pragmatic status. I argue that Swedish main clauses are characterized by V-to-Force-movement and that this property corresponds to the semantic notion of speech act value. The dichotomy stipulates that only the highest available CP in a clause structure, to which a finite verb has moved, can carry illocutionary force. In principle, any one clause structure can carry no more than one speech act value and that value is coded by the finite verb moving to the highest available Force projection.

In subordinate clauses, the head of the CP is occupied by a complementizer (overt or covert) which anchors it in and relates it to the finiteness and speech act value of a higher CP. Since the system is recursive, this CP can be linked to another CP, which in its turn may be connected to yet another CP, and so on. The complementizer blocks V-to-Force-movement in the subordinate clause, rendering a word order where the finite verb stays in situ in the vP.

The hypothesis which stipulates a firm connection between verb movement and speech act value only applies to finite propositions, i.e. clauses. It does not exclude the possibility of coding of speech act value without V-to-Force-movement in non-verbal utterances. This way, we can account for interjections and other non-verbal elements, which can be used to convey speech acts and consequently must be considered non-verbal codifications of speech acts. In the case of interjections, we may assume that they are base generated directly in Force, whereas AP:s and NP:s must be assumed to have been generated further down in the structure, before moving to Force°.
Considering these non-verbal matrices and adding them to the overarching analysis of the relation between Force and speech act value, we may make the following generalization: If the highest available Force° is filled by an element other than a complementizer, the structure in question is coded for speech act value.

The hypothesis that V-to-Force-movement is associated with speech act value and incompatible with subordination is further supported by data from Danish, where \( wh \)-exclamatives come in two varieties. In Danish, a \( wh \)-exclamative may have the prototypical subordinate clause word order or display V2 word order. Crucially, only the former variety may be embedded under a matrix clause. Consequently, Danish can be assumed to have both main and subordinate clause instances of exclamatives, as opposed to Swedish which only allows subordinate exclamatives.

9. Summary

This paper has been concerned with Swedish exclamatives from a hierarchical point of view. The question that has been in focus is whether they are main clauses or subordinate clauses.

Three basic kinds of exclamatives were distinguished, namely \( wh \)-exclamatives, \( som \)-exclamatives and \( att \)-exclamatives. All three kinds are characterized by displaying prototypical subordinate clause word order and at the same time being independent in the sense that they are grammatical without an overt matrix. It was shown that Swedish exclamatives cannot be modalized by sentence adverbials and that they cannot be used as answers to questions. It was further shown that they can be embedded under matrices containing factive predicates. These facts, it was argued, are all in accordance with the analysis that the propositional content of an exclamative is presupposed by a factive element in an overt or covert matrix.

In addition to the possibility of embedding exclamatives under full finite matrices, it was shown that they also may be preceded by non-verbal matrices, consisting of interjections. On the basis of these facts an analysis was put forth,
according to which all three categories of exclamatives in Swedish are subordinate to matrices. These may be either covert or overt but are always present in the structure. It was shown that this analysis can account both for the prototypical subordinate clause structure (i.e. complementizer and V-in-situ) and for the fact that the propositional content of an exclamative is presupposed.

Following the analysis that exclamatives are in fact subordinate clauses, it was concluded that they fit well into the subordinate clause/main clause dichotomy outlined in section 2. They are not coded for an independent speech act value (which is in accordance with the fact that they are presupposed). This is mirrored in their internal syntactic structure. In exclamatives, the head of C is occupied by a complementizer, which relates the clause to a higher Force projection, in this case a non-verbal matrix. Consequently, what distinguishes the three investigated kinds of exclamatives from the other, basic, clause types in Swedish is not the internal structure of the subordinate clauses but the nature of the matrix. In an exclamative, the matrix minimally consists of a non-verbal element (typically an interjection or an adjective) situated in Force°. Since the matrix is non-verbal, it does not contain a TP, which means that it does not, and indeed cannot, be specified for tense relations. This explains why exclamatives cannot refer to the past or the future. The non-verbal matrix is a direct deictic, linguistic reaction to a stimulus, be it an object, an event or a state of affairs. The subordinate clause (i.e. the clause which we often regard as the whole exclamative) is a "propositionalization" of the stimulus to which the exclamation (i.e. the matrix) is a reaction.
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