VP ELLIPSIS IN ENGLISH AND SWEDISH

A COMPARATIVE STUDY

Linda Emilia Hedberg

Universidad del País Vasco/Euskal Herriko Unibertsitatea

Tutor: Vidal Valmala Elguea
Departamento de Filología Inglesa y Alemana

Trabajo Fin de Grado
Grado en Estudios Ingleses
Curso 2014/2015

Abstract

This comparative study analyses the verb phrase ellipsis phenomenon in English and in Swedish, which exhibit both similarities and differences. In this analysis, VP ellipsis –an elided verb phrase whose meaning is recovered by that of another, semantically identical verb phrase in its surrounding– is treated as a full-fledged syntactic structure that is omitted in the Phonological Form as a result of a [E] feature. This syntactic structure is the same in English and Swedish in contexts of VP ellipsis, which occur when the ellipsis licensor head is a modal or an auxiliary in Swedish, adding to the case of English infinitival *to* and pleonastic *do*, both of which are potential licensors of English VP ellipsis.

The most striking dissimilarity between these two languages is due to the nature of the support verbs. English *do* and Swedish *göra* are different in both semantic and syntactic nature and do not merge in the same position. *Göra* is not a licensor of VP ellipsis in Swedish, as *do* is in English, but a licensor of VP pronominalization. When *göra* is present the verb phrase is pronominalized instead of elided. Moreover, the Swedish support verb can coexist with auxiliaries and modals since it may be non-finite. This is because it behaves similarly to a main verb. In the case of English, *do* is completely grammaticalized and need to be finite which makes it incompatible with auxiliaries and modals.

The study also looks at the V2 effect in verb second languages that has consequences in the extraction of arguments from the ellipsis site. In English both subjects and objects can move out from the elliptical structure simultaneously. In Swedish, which is a V2 language, this is impossible in cases of both VP ellipsis and VP pronominalization due to competition for the landing site when a sentence is projected.

Table of Contents

1. Introduction

The main goal of contemporary theoretical linguistics is to develop a theory of the correspondence between sound and meaning, and "nowhere does this sound-meaning correspondence break down more spectacularly than in the case of ellipsis" (Merchant, 2001:1). Ellipsis is the omission from speech or writing of a word or words that are in some way unnecessary since they can be understood from the context. It is parasitic on redundancy, and permits the economy of expression by omitting the linguistic structures that would otherwise be needed to express certain information. Ellipsis is a phenomenon common to all natural languages. However, languages differ in how they allow redundancies to be reduced by the grammar. Because of this, the possibility for ellipsis, being language and structure specific, cannot exclusively be attributed to general principles of information redundancy, but must be encoded in some way in the syntax (Merchant, 2001). Ellipsis comes, then, in many forms. It can be the omission of a single word, phrases or even whole, complex sentences.

One type of ellipsis is VP ellipsis (commonly abbreviated VPE) which is the deletion of a verb phrase (VP)[1]. A VP is a phrase containing an untensed verb[2] and its complements. Also, it may contain adjuncts, which in basic terms are phrases that provide additional information to the VP. For instance, *eat the apple* in *Teddy will eat the apple* is an example of a VP in which *eat* is the verb (V) and *the apple* a determiner phrase (DP) which is its complement (here as a direct object). Consequently, in accurate contexts, such as being the reply to the question *Who will eat the apple?*, the string *eat the apple* can be omitted and leave the sentence with the two-word string *Teddy will* without making it ungrammatical:

(1) a. Who will eat the apple?
b. Teddy will [~~eat the apple~~].

What is important here –and the essence of ellipsis– is that, although *eat the apple* is not pronounced or, in this case, written, the interpretation of the sentence does not change: understood from the context, what Teddy will do is eat the apple and nothing

[1] Later on it will be argued that it is, in fact, a vP taking as its complement a VP.
[2] That is, a verb lacking features that tell us about time, person, etc., only providing its semantic content.

else. Without its context, that is, the question, however, the sentence does not make sense and **Teddy will* is ungrammatical (ungrammatical sentences are indicated by the asterisk *).

Traditionally, this phenomenon –VP ellipsis– was thought to solely be a feature of the English language. Nonetheless, it is indeed a phenomenon that is present in other languages, too, although it is "relatively limited in its distribution across the world's languages compared to other ellipsis phenomena" (Aelbrecht, 2010:13). Among the languages that are considered to allow VP ellipsis is the Swedish language. English and Swedish, then, share this linguistic characteristic as shown in (2):

(2) a. Vem ska äta äpplet?
Who will eat apple.DEF
'Who will eat the apple?'
b. Teddy ska [~~äta äpplet~~].
Teddy will eat apple.DEF
'Teddy will.'

However, this is not always the case. VP ellipses vary in form and are restricted to certain contexts and syntactic environments. As will be discussed in this paper, these forms and syntactic environments are not always the same in English and Swedish and, as a consequence to this, some instances of English VP ellipsis may not have counterparts in Swedish, or vice versa. This is evident in (3-4) where the equivalent of the English sentence is ungrammatical in Swedish:

(3) John didn't go to the wedding, but Karen did.
(4) *John gick inte på bröllopet, men Karen gjorde.
John went not to wedding.DEF but Karen did
Intended: 'John didn't go to the wedding, but Karen did.'

Due to the data in (1-4) two assumptions can be made: 1) English and Swedish are both languages that allow VPE, and 2) they differ in some way.

1.1. Aim and outline

This comparative study has the aim to compare the VP ellipsis phenomenon[3] in English and Swedish, and try to identify the similarities and differences encountered in these two languages regarding this aspect. As will be discussed, English and Swedish have some syntactic features in common (for instance, both are non-verb-raising languages), but there are also dissimilarities between the two. Perhaps the most significant one is that Swedish is a verb second language, whereas English is not.

The study will be restricted to a generative derivational approach, highly Minimalist, dealing with VP ellipsis as an instance of PF-deletion, which will be briefly explained in section 2. Section 3 will deal with a more specific description of the VPE phenomenon with examples from English. Last section will be dedicated to the case of Swedish, and to compare Swedish VP ellipsis with VP ellipsis in English. Mainly, I will focus on the differences and no extensive analysis of the similarities will be presented. Consequently, a brief account on Swedish VP pronominalization (VPP) will be carried out since, in contexts where VP ellipsis seems to be impossible, the VP is pronominalized as *det* 'it' since the ellipsis site cannot be left out fully unpronounced.

Worth mentioning, and in order to avoid confusion, previous research cited in this paper may be on other East Scandinavian languages (Danish and/or Norwegian). This will not affect the outcome of the study since these languages behave similarly, if not identically, in contexts of VP ellipsis and VP pronominalization.

2. Theoretical background

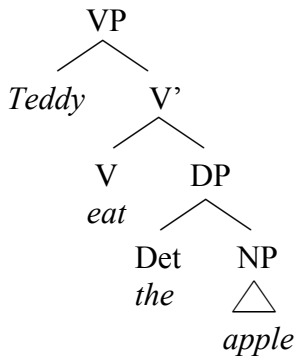
Many studies on VP ellipsis have been carried out with the outcome of a variety of different analyses concerning this phenomenon. Even within the same approach there are disagreements on how VPE should be treated syntactically. This is the case of the generativist approach. Before going any further with the VPE analysis, it would therefore be useful to have a look at the most relevant concepts and ideas of this approach.

[3] Due to format restrictions on this paper, I will focus on the syntactic structure only, leaving out issues concerning logic scope, focus and other phenomena that are involved in the processing of ellipsis. Hence, very simple examples will be provided in order to get a general view of the structure in both languages, and some types of VPE may not be discussed.

2.1. Generative Grammar

Generative Grammar, developed by Noam Chomsky in the late 1950's, seeks to explain the human language as a computational system. According to this approach, a sentence in any language is generated by binary relations between linguistic entities. These entities may be lexical or functional, and are being puzzled together to form bigger ones and finally whole grammatical sentences. For example, the verb phrase *eat the apple* in *Teddy will eat the apple* may be represented like in the tree structure in (5), in which the verb phrase (VP) is the maximal projection of the verb (V), which with the determiner phrase (DP) constitutes the intermediate projection V'. Moreover, *Teddy*, the agent of the action *eat the apple* is born in the specifier position of the VP:

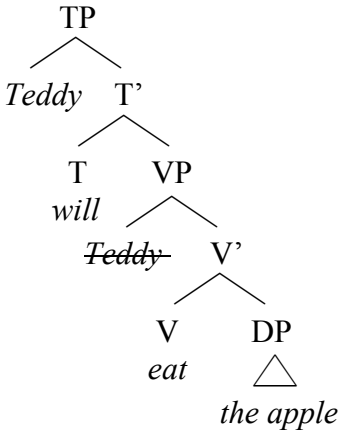
(5)



The representation in (5) is the "starting point" of the syntactic derivation and embodies what is called the Deep Structure (DS) of the sentence, in which lexical components are semantically connected. This semantic connection represents the argument structure[4] of the head (V) of the phrase. When grammatical components are added (in this case the future tense *will*), the syntactic derivation forms the Surface Structure (SS) of the sentence which may imply movement of some constituents. In *Teddy will eat the apple*, *Teddy* moves up in the structure for merely functional reasons: in English the word order is Subject-Verb-Object and the subject needs to receive the Nominative Case (that is assigned by Tense). The VP in (5) is therefore attached to the functional tense phrase (TP) as illustrated in (6):

[4] In Semantics, the notion of argument structure refers to the relations between lexical items in meaning.

(6)



Furthermore, the SS is what actually is uttered, and is sent to the interface levels: one, the Logic Form (LF), represents the meaning or interpretation of the sentence, and the other, the Phonological Form (PF), what is actually pronounced, that is, the structure that is physically present. Importantly, and of interest to this paper, in cases of ellipsis there is a mismatch between these two forms in that LF consists of more information than what is physically present in PF.

Parting from this idea, the generativist approach has been developed –and is constantly developing– in order to find an explanation as accurate as possible to universal human grammar, and its syntactic structure.[5]

2.2. The Minimalist Program

One approach within Generative Grammar is the so-called Minimalist Program that, as the name indicates, seeks a grammar as minimalistic as possible in the projection of a sentence. According to Miminalism, language is a mapping of meaning and sound that is shaped by the capacities and constraints of conceptual, articulatory and perceptual systems and reduces, thus, the representations of language to two components: in this view, LF and PF are the only ones needed (Kupier & Nokes, 2014). This is due to the assumption that the representations of utterances consist of phonological information and semantic information, the combination of the two being the output, the spell-out, of the grammar. Both need to be meaningful to their respective systems or they will be uninterpretable and crash. The requirements of a correct derivation are called 'interface conditions' which suggests that every word in the lexicon is a collection of semantic, phonological and syntactic features. These features may be unvalued, and

[5] For a more extensive account on Generative Grammar, see Chomsky (1957), and Kuiper and Nokes (2014).

need to combine with valued features in order to be interpretable in LF. This operation is called Agree, and consists in a 'probe' (a head with at least one unvalued feature) searching for the closest 'goal' which contains the same valued feature. This search takes place in the c-command domain of the probe, that is, the domain of the head's sister. Once the unvalued features are valued, the uninterpretable features are eliminated (Platzack, 2009). Additionally, syntactic representations are built up in 'phases' (the maximal projection of v and C) which suggests that when a phase is complete, the head's complement structure is transferred to the interfaces and consequently no longer available for syntactic operations. So, according to the Minimalist Program, syntactic features trigger derivational operations, which are ways of combining items to create syntactic structures (Kupier & Nokes, 2014).

Going back to the structure in (6), in Minimalist terms, the node that contains T merges with the VP *eat the apple*. This Merge is a so-called external Merge since it integrates a new constituent into the derivation. Another type of Merge is the internal Merge and it only affects constituents that are already part of the derivation, making them be pronounced earlier than they would have been in their original position. The "movement" of *Teddy* is one example of an internal Merge, which is triggered by a valued case feature and a EPP[6] feature in T. *Teddy*, being the subject of the sentence, is copied and merged into [Spec, TP] in order for the features to be checked. In doing so, *Teddy* leaves a silent copy where it originally merged[7] (Kupier & Nokes, 2014).

2.3. The theory of Ellipsis

In syntactic theory, the notion of ellipsis is referred to as the missing, unpronounced linguistic entity in an utterance whose semantic and logic content, i.e. its meaning, is recovered by that one of another, pronounced, entity in its surrounding.[8] This inference of meaning, the relationship between an elided entity (the so-called remnant) and its visible antecedent[9], constitutes "a mismatch between sound and meaning" making the interpretation of an utterance richer than what is actually pronounced (Aelbrecht, 2010:1).

[6] The EPP is the hypothesis of the obligatoriness of subjects.
[7] Different to the traditional view, the Minimalist approach sees instances of internal Merge as instances of Copy and Merge, and not displacement. In this study I will, nevertheless, use the terms 'movement' and 'trace.' For more on the Minimalist Program, see Chomsky (1995), and Kupier and Nokes (2014).
[8] It may be argued, however, that the antecedent in not necessarily linguistic. See Merchant (2004) for more on this matter.
[9] Some may think this relationship is based on co-reference rather that on antecedence. See Johnson (2001) for discussion and arguments in favour of antecedence.

The syntactic structure of an elided element has been discussed and studied widely. Consequently, the absence of linguistic material in the pronunciation has made generative grammarians see ellipsis differently and a variety of accounts, both non-structural and structural, have been developed in order to explain this phenomenon. The non-structural approaches assume that, in very general terms, the ellipsis site is empty, that is, it lacks a syntactic structure of its own and is, therefore, a so-called 'empty proform' that is copied into LF. On the contrary, the structural approaches view the ellipsis site as a full-fledged syntactic structure, being elided either at the Deep Structure or Surface Structure levels, or in the Phonological Form (for more on theories of ellipsis, see Aelbrecht, 2010; Lobeck, 1995; Merchant, 2001; Winkler, 2005).

According to the Minimalist Program, any instance of ellipsis, and thus VP ellipsis, is an instance of PF-deletion. This view is based on the Phonological Reduction Hypothesis (PRH) proposed by Chomsky and Lasnik in 1993, which takes the elliptical sentences to be "formed by a rule of the PF-component that deletes the phonologically redundant information" (Winkler, 2005:47). More specifically, "ellipsis is licensed via an Agree relation between a [E] feature and the ellipsis licencing head [and this] occurs in the course of derivation, as soon as the licensing head is merged" (Aelbrecht, 2010:14). Due to this, the ellipsis site, i.e. the elided structure, becomes inaccessible for further operations. Hence, the syntactic structure of VPE is identical to its non-elliptical counterpart. Only when [E] is present is the VP silenced.

Johnson (2001) provides evidence that VP ellipsis "recycles" the linguistic content of its antecedent and thereby re-invokes its denotation. As seen in (7), the pronoun *she* can only be referring to an existing spouse, which is not present in the first conjunct, which indicates that the ellipsis site has rich syntactic structure containing the instance of the DP *spouse*:

(7) a. *Uncle John doesn't have a spouse because *she* is very ignorant.
b. Uncle John doesn't have a spouse but uncle Bill does [~~have a spouse~~] and s*he* is very nice.

This phenomenon is called The Missing Antecedent Phenomenon and has "a straightforward expression under the derivational approach," since, without a complete

syntactic structure of its own, *she* would not have an antecedent (Johnson, 2001:18). Similarly, in cases of extraction like (8), VP ellipsis recovers the syntactic form from its antecedent:

(8) I know which book Max read, and [which book]$_i$ Oscar did [~~read t$_i$~~].

On the contrary, in (9) the sentence is ungrammatical when substituting the ellipsis site with *do it*[10]:

(9) *I know which book Max read, and which book Oscar did do it.

This is, argues Johnson (2001:18), because "pronouns have no syntactic form beyond the lexical item they constitute."

In this study I will follow this idea and analyse VPE in English and in Swedish as a full-fledged syntactic structure, which is elided in PF due to a [E] feature.

3. English VPE

As seen in (10), the verb *dine* with its complement *soup*, forming the VP *dine soup*, is interpreted as the action that Peter will do, too:

(10) Mary will dine soup, and Peter will [~~dine soup~~], too.

Due to the contextual relation between the elided VP and its antecedent, the interpretation of (10) is, then, 'Mary will dine soup, and Peter will dine soup, too.' If this were not the case, however, the sentence would be ungrammatical and no instance of VPE would occur, as in (11):

(11) *Mary will dine soup, and Peter will [~~go to the store~~], too.

[10] Note that English *do it* is argued to be an overt deep anaphor and should not be compared to Swedish VPP despite similarities in form. For more on this see Houser et al. (2007).

Furthermore, not all sentences with VPE are grammatical despite having a clear interpretation. In (12) the elided VP is identical to its antecedent, but the sentence is ungrammatical:

(12) *Mary came to close the door, but Peter didn't come to [~~close the door~~].

There are thus contexts –in terms of both meaning and grammar– in which VPE in English is not possible.

3.1. Restrictions on VPE

3.1.1. Recoverability

In terms of meaning, the same restrictions on ellipsis are found in all languages. In cases of VPE, a VP can only be left unpronounced if there is a straightforward way for the hearer to recover its meaning. This restriction is called 'recoverability' and is satisfied only if the elided expression is e-GIVEN (ellipsis-given). Basically, an expression counts as e-GIVEN if it has a salient antecedent and if there is mutual entailment[11] between them (for more on this issue, see Merchant, 2001 and Aelbrecht, 2010). This condition would explain the ungrammaticality of (11), in which *go to the store* is not e-GIVEN since it does not entail *dine soup*, nor vice verse.

However, as seen in (12), there are syntactic restrictions, too, and these vary cross-linguistically. Even though a verb phrase is equally e-GIVEN in all languages, there are cases in which it cannot be elided.

3.1.2. Licensing of English VPE

The syntactic environment seems to play a crucial role in deciding whether VPE can take place or not, and these licensing criteria depend on the specific language and what lexical material (licensing heads) can be left alone in PF. As illustrated in (13), the licensing heads of English VPE vary:

(13) a. He goes to school, and she does [~~go to school~~], too.
b. He has made a cake, and she has [~~made a cake~~], too.
c. He went home, and she did [~~go home~~], too.

[11] In Semantics, A entails B if A is true, then B is true. In mutual entailment, B also entails A.

d. He is singing, and she is [~~singing~~], too.
e. He has been studying all night, and she has been [~~studying all night~~], too.
f. He will read the book, and she will [~~read the book~~], too.
g. He can swim, and she can [~~swim~~], too.
h. *He began singing after she began [~~singing~~].
i. He cleaned the apartment although he didn't want to [~~clean the apartment~~].

As can be observed in (13), the elided VP can be preceded by auxiliaries (13b, d, e), modals (13f, g), infinitival *to* (13i) and the support verb *do* (13a, c), but not by a main verb (13h). Lobeck (1995) explains this fact with the argument that the ellipsis site must include an intermediate projection and that it needs to be head governed by a term related to tense; that is, VPE is ungrammatical when T is empty. This is not because of the licensing criteria on VPE *per se*, but because the tense and inflectional affixes need to have a host. In other words, Aelbrecht (2010) summarises that the lexical material in the head of TP must be modals, *have*, *be*, or infinitival *to*. On the other hand, as seen in (13h), English main verbs do not license VPE. This is because they do not undergo verb movement to T and no lexical material is available. When no modal or auxiliary is available the so-called dummy *do*, the English support verb, is inserted in order to fill T with lexical material and function as a host to inflectional morphemes. Moreover, Johnson (2010) and Lobeck (1995) also consider negation (Neg) to be a licensor of English VPE, based on the grammaticality of sentences like (14):

(14) Mary has bought a car, but Carl hasn't/has not [~~bought a car~~].

However, whether this assumption is correct or not is not of relevance to this paper[12]. For that reason I will follow Aelbrecht (2010) and only consider modals, *have*, *be* and infinitival *to* to be the licensors of English VPE. In addition, these are licensors independently if there are more "verbs" following them. In sentences like (15), it may

[12] In both English and Swedish Neg occurs between T and vP and will not have any, at least direct, effects on the behaviour of VPE in these languages.

seem that *been* is a potential licensor of English VP since it is the closest item to its left:

(15) Mary was studying all night, and I should have been [~~studying all night~~], too.

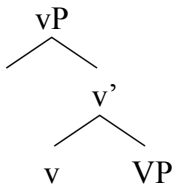
Aelbrecht (2010) argues that non-finite *have* and *be* do not license English VPE since the presence of a finite auxiliary is obligatory. If there is no finite auxiliary present the sentence is ungrammatical as seen in (16):

(16) a. *I hadn't been thinking about that, but I recall Morgan having been [~~thinking about that~~].
b. *I hadn't thought about it, but I recall Morgan having [~~thought about it~~].

3.2. The English ellipsis site

In previous sections, it has been assumed that English VPE consists of a full-fledged syntactic structure omitted in PF if it is e-GIVEN and has an appropriate syntactic licensor. What that syntactic structure actually looks like has been a question that many linguists have tried to answer. Aelbrecht (2010) and Platzack (2012), with others, share the opinion that the ellipsis site of the verb phrase (at least in English) is the maximal projection of little v, i.e. vP, which takes as its complement a VP, as shown in (17):

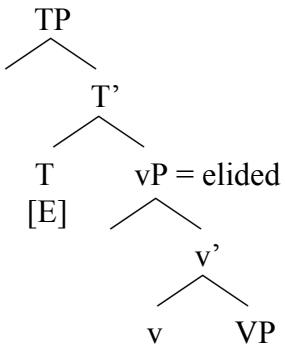
(17)



Little v is distinct to "normal" V in that it is merely functional. Being a so-called 'light verb,' it introduces the agent of a verb having an unvalued Ak-feature (action feature) associated with the Extended Projection Principle (EPP) (Platzack, 2012). The structure in (5) is thus not completely accurate, since *Teddy* (being an agent) is merged in [Spec, vP] rather than in [Spec, VP]. In addition, vP is the sister of T, in which the

licensor of English VPE is situated, having the feature [E] that triggers deletion of its complement:

(18)

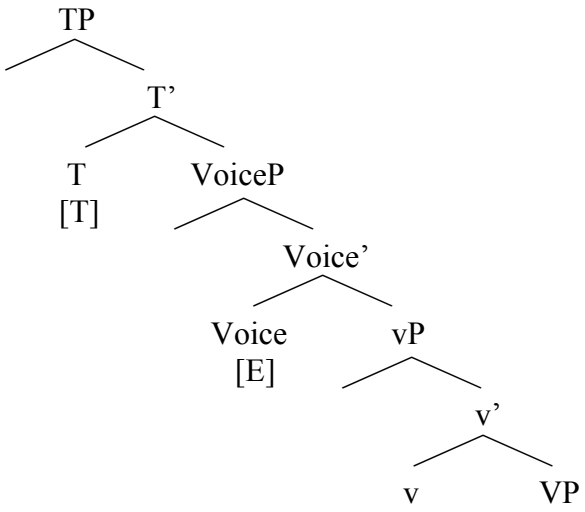


However, as mentioned previously, the Merge of this [E] feature causes the inaccessibility for any further syntactic operation in the ellipsis site. With a structure like (18), no extraction from the ellipsis site would be allowed, contrary to fact. In (19) both the subject (*I*) and the object (*Petra*) are extracted from the vP without resulting in ungrammaticality:

(19) John I haven't met, but Petra$_i$ I$_j$ have [$_{vP}$~~t$_j$ meet t$_i$~~].

To explain these extractions and cases like (15), in which there is lexical material between the licensor and the elided VP, Aelbrecht (2010:178) proposes the structure illustrated in (20), in which a Voice Phrase is inserted between TP and vP:

(20)



In (20) there is an ellipsis feature [E] in Voice that needs to be checked against a T head via Agree. This feature [E] has the category feature [T], and the inflectional feature [*u*T], which accounts for the presence of non-finite auxiliaries following the licensing head in VPE sentences (*have*, *been*, etc.). Also, according to this structure, both objects and subjects can be extracted out of the ellipsis site before the [E] feature is checked and therefore a sentence with VPE is no more restricted to movements than its non-elliptical counterpart. Hence, English VPE is licensed by a T head and deletes vP, but leaves the aspectual and passive auxiliary heads untouched. Aelbrecht (2010) assumes that Voice is the clause-internal phase head, and not vP that is argued by others. In this way, there is a phase edge [Spec, VoiceP] between the licensor and the ellipsis site that attracts all constituents that still need to undergo syntactic operations.

4. The case of Swedish

Swedish, like English, is a non-verb-raising language. That is, in a derivational approach with Merge and Copy, the main verb (V) does not internally merge in T to check the feature of tense. A piece of evidence to this is that lexical items such as adverbs can be found between T and V and block this operation. This is seen in (21) were the adverb *ofta* 'often' is located between the auxiliary in T and the verb (the same goes for English):

(21) Maria har ofta gjort det misstaget.
Maria has often made that mistake.DEF
'Maria has often made that mistake.'

Cross-linguistically, this feature has been related to the compatibility with VP ellipsis. Research has driven linguistics to conclude that every non-V-raising language should allow VPE, in some way or another. On the other hand, languages that do have their verb raised to T, that is the case of Spanish and German, for example, do not allow this type of ellipsis (Sailor, 2012). However, despite of this similarity, differences in the nature of VP ellipsis are indeed found between these two languages. Platzack (2012)

argues that, in Swedish, VPE with auxiliaries is much more acceptable than VPE with *göra*-support (like English *do*-support), as seen in (22)[13]:

(22) a. *Lisa läste inte boken, men Johan gjorde.
Lisa read not book.DEF but Johan did
Intended: 'Lisa didn't read the book, but Johan did.'

b. Lisa hade inte läst boken men Johan hade.
Lisa had not read book.DEF but Johan had
'Lisa hadn't read the book but Johan had.'

c. Lisa kunde inte läsa boken men Johan kunde.
Lisa could not read book.DEF but Johan could
'Lisa couldn't read the book but Johan could.'

The data in (22) suggest that Swedish VPE with auxiliaries behave in the same way as in English. In (22b) and (22c), it seems that auxiliaries and modals, respectively, are licensors of Swedish VPE. In (22a), however, the sentence is ungrammatical with *göra*-support. In order to be grammatical, the proform *det* 'it' is inserted after the support verb. Swedish *göra*-support seems to be equivalent to English *do*-support but different in that the obligatory proform *det* 'it' is inserted as the complement of the support verb in order to construct a grammatical sentence. The contrast is illustrated in (23):

(23) a. John loves bananas, and Mary does, too.

b. Johan älskar bananer, och Mary gör också *(det).
Johan loves banana.PL and Mary does too it
'Johan loves bananas, and Mary does, too.'

Furthermore, infinitival *att* 'to' in Swedish is not a licensor of VPE[14] (Teleman et al., 1999).

[13] For more information about the VP in Swedish, see Teleman et al. (1999) and Platzack (2009).
[14] Why this is I will not discuss in this paper.

4.1. Swedish VPP

As seen in (23b), when the proform *det* is present the sentence is grammatical but not otherwise. Houser et al. (2007) call this phenomenon VP pronominalization (VPP) in which the VP, instead of being elided like in English, is pronominalized as a surface anaphor with its own syntactic structure identical to the internal structure of the VP in VPE. According to the authors, the proform occurs in place of a verb phrase and stands in an anaphoric relationship to the verb phrase of the preceding clause. Additionally, if *det* is a surface anaphor, it presumably exhibits the Missing Antecedent Phenomenon. This assumption is correct, which is evident from the grammaticality of (24):

(24) Jag red inte på nån kamel, men Johan gjorde det och han säger att den stank.
I rode not on any camel but Johan did it and he says that it stank
'I didn't ride on any camel, but Johan did and he says it stank.'

In lines with Johnson (2001), like in English VPE, *det* contains the antecedent of the camel that Johan rode (the same one that stank). This piece of data indicates that *det* is a proform with a full-fledged syntactic structure of the VP.

Importantly, whereas in context of *göra*-support VPP is obligatory, it is optional with modals and auxiliaries in T. Sentences like (22b, c) may, thus, be uttered as in (25):

(25) a. Lisa hade inte läst boken men Johan hade det.
Lisa had not read book.DEF but Johan had it
'Lisa hadn't read the book but Johan had.'
b. Lisa kunde inte läsa boken men Johan kunde det.
Lisa could not read book.DEF but Johan could it
'Lisa couldn't read the book but Johan could.'

The proform can also be fronted as seen in (26):

(26) Lisa kunde inte läsa boken, men det kunde Johan.
Lisa could not read book.DEF but it could Johan
'Lisa couldn't read the book, but Johan could.'

This type of fronting is characteristic in Swedish since it is a verb second language, unlike English.

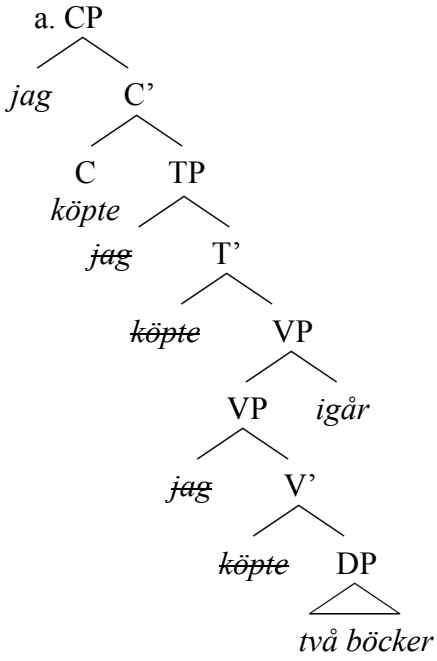
4.2. Verb second languages and VPE

In contrast to English, Swedish is a verb second (V2) language. A V2 language is a language that exhibits a V2 effect in matrix clauses: the verb is located in the second position as illustrated in the Swedish examples in (27):

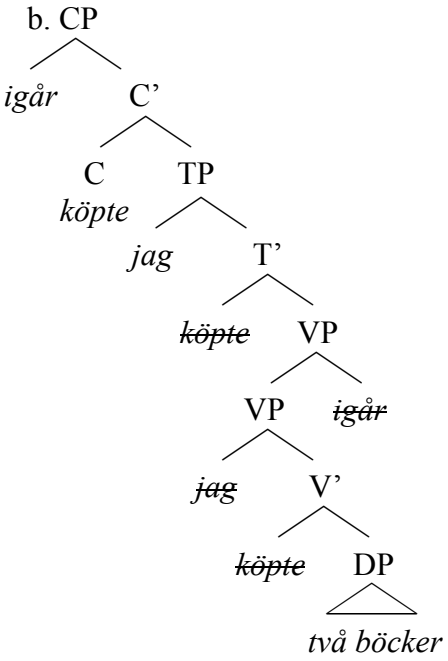
(27) a. Jag köpte två böcker igår.
I bought two book.PL yesterday
'I bought two books yesterday.'
b. Igår köpte jag två böcker.
Yesterday bought I two book.PL
'Yesterday I bought two books.'

In (27a) the verb follows the subject as it does in English. However, and what characterises a verb second language like Swedish, in (27b) subject-verb inversion occurs. This is due to the movement of the adverb *igår* 'yesterday' to the front of the sentence that triggers the verb to move via T to C. Whereas in (27b) this V2 pattern is obvious, the structure in (27a) is more complicated. The linear order may suggest that there is no movement, but linguists disagree on this issue. Concerning subject initial clauses, two hypotheses about the internal structure have been proposed. One takes the landing site, i.e. the place to which the verb moves and is spelled-out, to be T. The other one sees no difference in the projection of these two sentences and proposes that, as in with subject-verb inversion, the landing site is C (Waldmann, 2012). Platzack (2009) and Richards (2001), among others, argue for the latter, and both sentences in (27) are thus projections of C (CP) as represented in (28):

(28) a.



b.



This is consistent with declarative main clauses containing adverbial adjuncts, which are inserted after the tensed verb as illustrated in (29):

(29) a. Johan dricker ofta kaffe på jobbet.
Johan drinks often coffee on work.DEF
'Johan often drinks coffee at work.'

b. Johan har ofta druckit kaffe på jobbet.
Johan has often drunk coffee on work.DEF
'Johan has often drunk coffee at work.'

It seems clear, then, that declarative main clauses in V2 languages like Swedish do, in fact, involve verb movement out of the VP, to a position well outside that domain.

However, the verb second characteristic does not seem to, at least directly, affect a language's compatibility with VP ellipsis. There are languages, such as German, that are verb second but do not allow VP ellipsis. Furthermore, as Sailor (2014) suggests, the process of VPE in Swedish occurs before any movement of V, blocking the movement *per se*. This idea is consistent with Aelbrecht's (2010) "timing of ellipsis" discussed in previous sections. As has been argued, the Minimalist feature-based approach assumes that, when ellipsis is triggered it is so during the derivation, and not post-syntactically. The triggering of ellipsis happens, thus, during the syntax and has clear syntactic consequences, leaving the elided constituent inaccessible to further operations. Subsequently, Sailor (2014) claims that T is not a trigger for V movement in Swedish, and suggests that the verb only is prompted to leave VP upon being probed by C, the merger of which would take place after the VP has already been elided (in contexts of VPE). In such an event, he suggests, movement through T would only occur to satisfy locality constraints on head movement (a head cannot pass a head position without leaving a copy), and not to satisfy any feature demands of T. In other words, in a derivational approach the Swedish verb remains *in situ* until C is merged and its features are checked.

Also Vikner (1995) shows that Verb-to-Tense does not take place in Swedish when V2 is blocked, as happens in most embedded clauses when T is filled by another lexical item. This assumption is strengthen by the data in (30) and the position of the adverbial *ofta* 'often' (which adjoins to VP):

(30) a. Jag tror inte att Peter ofta äter tomater.
I think not that Peter often eats tomato.PL
'I don't think that Peter often eats tomatoes.'
b. *Jag tror inte att Peter äter ofta tomater.
I think not that Peter eats often tomato.PL
Intended: 'I don't think that Peter often eats tomatoes.'

In (30), the adverbial needs to be inserted between the subject and the verb in order to form a grammatical sentence (30a). This means that the V-to-T movement is blocked and the verb does not move to T, hence it stays *in situ*. If the Swedish verb moved to T independently of V2 movement to C, then it would be expected that the verb passed the adverb in non-V2 environments such as (30b), contrary to fact. This implies that the only VPE derivations that converge in Swedish are those in which C is able to attract a verbal element that is already outside of the elided VP, such as an auxiliary, a modal, or a pleonastic verb inserted in T as a last resort, like in English (Sailor, 2014). Consequently, an analysis similar to Aelbrecht's illustrated in (20) should be able to explain both Swedish VPE with verb movement and VPE in English (Platzack, 2012; Salior, 2014).

However, the V2 pattern seems to have effects on the different possibilities to extract lexical material from the ellipsis site. As discussed in the section on English VPE, extraction of both subjects and objects are allowed simultaneously. In Swedish, this is not the case.

4.3. Extraction from Swedish VPP: competition for [Spec, CP]

Subjects of transitive verbs and unergative verbs are called external arguments and are merged in the specifier position of vP ([Spec, vP]). These raise later on to subject position in T ([Spec, TP]) and further on to C in Swedish. In cases of VPP, like English, Swedish allows this kind of extraction:

(31) Kalle tittade inte på TV igår, men jag gjorde det.
Kalle watched not on TV yesterday but I did it
'Kalle didn't watch TV yesterday, but I did.'

However, no extraction of complements (internal arguments) is allowed in Swedish VPP, in contrast to English VPE:

(32) *Jag vet inte vilken bok Tom läste, men jag vet [vilken bok]$_i$ Mary gjorde [$_{det}$ ~~läste t_i~~].
I know not which book Tom read but I know which book Mary did it
Intended: 'I don't know which book Tom read, but I know which book Mary did.'

(33) I don't know which book Tom read but I know [which book]$_i$ Mary did [$_{VPE}$ ~~read t_i~~].

As illustrated in (32-33), the Swedish sentence is ungrammatical when there is an extraction of this type. It seems that when extraction of a constituent within the VP is operating, Swedish does not allow VPP. However, as seen in (34), extraction out of VP is indeed possible with unaccusative verbs, when the internal argument has the function of subject:

(34) Jag väntade på att äpplet skulle falla ner från trädet, och det gjorde det.
I waited for to apple.DEF would fall down from tree.DEF and it did it
'I waited for the apple to fall from the tree, and it did.'

Contrary to English, Swedish appears to allow only one type of extraction: that of the subject. Presumably, if the proform has the same structure as the VPE (recall that this structure is identical in Swedish and English), no such restriction would exist, as in the case of English. Houser et al. (2007) explains this problem by looking at the interaction between VPP and verb second movement. In Swedish, as mentioned in previous sections, the proform can appear in two positions:

(35) a. Han säger att han lärde sig att simma, och självklart gjorde han **det**.
He says that he learned REF to swim and of course did he it
'He say he learned to swim, and of course he did.'

b. Han säger att han lärde sig att simma, och **det** gjorde han självklart.
He says that he learned REF to swim and it did he of course
'He says he learned to swim, and of course he did.'

In (35a), *det* appears in the canonical verb phrase position, and in (35b) it appears clause-initially. In the latter, the proform has moved up to [Spec, CP] as a result of verb second movement. Instances where it appears unfronted arise when some other element occupies the same site, as is the case of the adverb *självklart* 'of course.' The authors suggest that the problem arises due to competition for the landing site in [Spec, CP] whose constituent must be checked with an unvalued feature [uA'] in C. The proform is suggested to have a [top] feature and the internal argument a [wh] feature, both of which are valued [A'] features. If this assumption is correct, the probe will select the closest goal to fulfil the Agree operation and only movement of the whole vP (the proform *det*) is grammatical as it contains the internal argument and hence is closest. Whether this is accurate or not, it seems clear that there is a competition for [Spec, CP] that is triggered by V2 movement.

4.4. Extraction from Swedish VPE: recoverability constraints?

Presumably, if the VPE site has the same syntactic structure and allows the same types of extractions as its non-elliptical counterpart, sentence (36) would allow VPE:

(36) John har jag inte träffat, men Petra$_i$ har jag [träffat t_i].
John have I not met but Petra have I met
'John I haven't met, but Petra I have met.'

However, when the VP is elided, the resulting sentence is anomalous:

(37) #John har jag inte träffat, men Petra$_i$ har jag [~~träffat t_i~~].
John have I not met but Petra have I met
Intended: 'John I haven't met, but Petra I have.'

If the elided structure is the same as the ellipsis site and allows the same extractions, these constraints would be merely semantic (the auxiliary may be interpreted as the main verb *ha* 'have, possess' and "break" the recoverability).

As seen in (25), VPP is optional with modals and auxiliaries in T, but when fronted as in (26), it seems to be obligatory independently of the licensor:

(38) a. Jag har inte träffat Johan, men det$_i$ har Kalle [~~träffat Johan~~]$_i$.
I have not met Johan but it has Kalle
'I haven't met Johan, but Kalle has.'

b. *Jag har inte träffat Johan, men har Kalle [~~träffat Johan~~].
I have not met Johan but has Kalle
Intended: 'I haven't met Johan, but Kalle has.'

If extraction (of at least objects) triggers V2 movement and if VPP is obligatory in such operation, then, in lines with Houser et al. (2007), I propose there is a competition for [Spec, CP] between *det* and *Petra* in (37) similar to the case in (32). The difference would be that in (32) *det* is obligatory "from start" and thus visible, whereas in (37) VPP has not yet occurred which explains the absence of the proform.

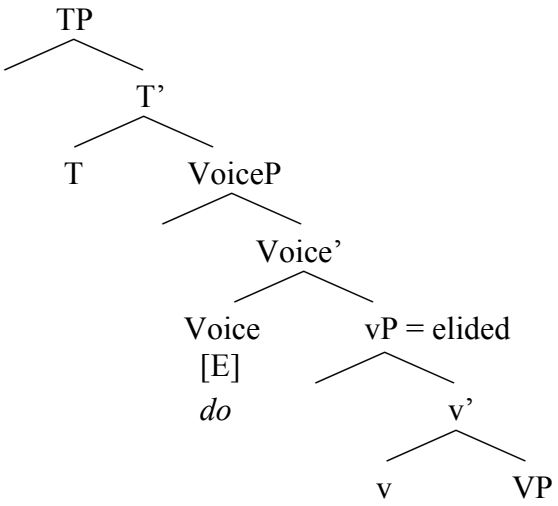
4.5. VPP in contexts of Swedish göra-*support*

When the VP is elided, there is no V in VP to move to T and pick up tense and, just like in English, Swedish *göra* 'do' is inserted as a consequence of the VP being elided before any head movement occurs (Houser et al., 2006; Platzack, 2012). As already mentioned, in Swedish VPE is blocked in contexts when pleonastic *göra* is inserted, and VPP is obligatory. This means that the Swedish support verb is not a potential licensor of VPE in Swedish whereas, like in English, modals and auxiliaries are. When the verb stays *in situ* and no extraction of objects is done (that triggers V2 movement), the main difference between English and Swedish in contexts of VPE appears to have its origin within the verb phrase and, specifically, in contexts of *do/göra*-support.

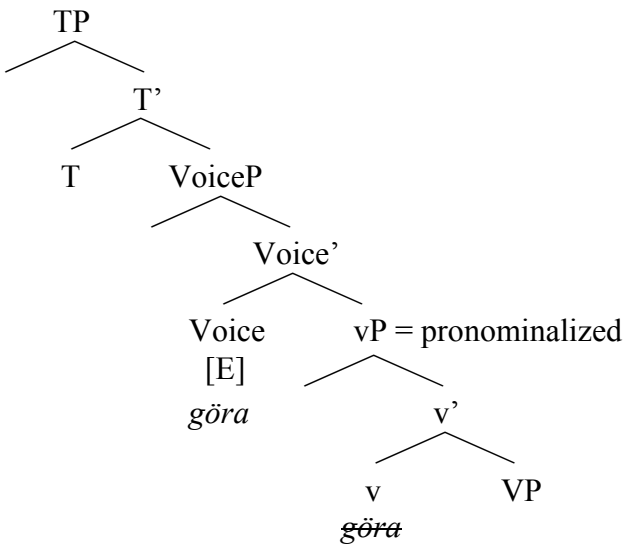
One explanation to this instance of VPP in Swedish –why the VP is pronominalized and not elided in contexts of *göra*-support– could be the nature of the support verb itself that, as argued in Platzack (2012), is slightly different to the support verb in English (and in other languages, such as Danish and Norwegian, in both of which VPP is optional). He suggests that Swedish *göra* behaves more like an ordinary verb and that it is less grammaticalized than the English support verb. This, he argues, is due to the position in which the support verb merges in the derivational process: in English, *do* merges in little v (that is the equivalent to Aelbrecht's Voice) whereas Swedish *göra* is merged in √ (Aelbrecht's v) to later on move to little v in order to be spelled-out. What is important here is that *göra* is suggested to externally merge within the vP, similar to a main verb. The internal structure would, therefore, be

different in the two languages as can be seen in (39), where (39a) represents the English structure and (39b) the Swedish one[15]:

(39) a. *English VPE with* do-*support*



b. *Swedish VPP with* göra-*support*



As illustrated in (39) Voice has a feature [E], causing the non-pronunciation of its sister vP. In Swedish, however, the unpronounced copy of *göra* blocks VP ellipsis since the support verb is part of the elided structure. Instead, the verb phrase is pronominalized and takes the form *det.*

[15] For the purpose of this paper, I have simplified Platzack's (2012:299) structure and adopted it to Aelbrecht's in (20). Hence, for Platzack Voice is v, and both v and V are roots √.

Another difference is that there is an unvalued tense feature in the head of the VP in Swedish. This indicates, Platzack (2012) argues, that both the support verb and the main verb are inflected for tense. This is seen in the phenomenon of VP topicalization (VPT)[16] which in Swedish, in general, involves a finite verb (Källgren & Prince, 1989) whereas in English the topicalized verb is always non-finite (the topicalized verbs are in bold):

(40) a. Johan lovade att köra bilen, och **körde** bilen gjorde han.
Johan promised to drive car.DEF and drove car.DEF did he
'John promised he'd drive the car, and drive the car he did.'
b. *John promised he'd drive the car, and **drove** the car he did.

So, the English support verb must always be tensed and is therefore incompatible with an auxiliary. Merging in Voice, its uninterpretable but valued tense feature cannot be checked since the auxiliary selects for it. This may explain why in cases with auxiliaries, Swedish, unlike English, has the optionality of *göra*-support (and, consequently, VPP). This is evident by the ungrammaticality of (41) with an auxiliary preceding the English support verb (note that no VPP is formed in the English variant):

(41) *John can't pay, but Maria can do.

Platzack (2012) suggests that, although the spell-out of *göra* is optional in contexts of VPP with auxiliaries, *göra* is indeed merged into the derivation in order to trigger VPP and sentences like (42) are grammatical in Swedish:

(42) Johan ska inte resa utomlands i sommar, men jag ska (göra (det)).
Johan will not travel abroad in summer but I will do it
'Johan won't travel abroad this summer, but I will.'

Platzack's (2012) account on Swedish *göra*-support seems convincing and a reasonable explanation to the differences in English and Swedish. It does account for

[16] Similarities between VPE and VPT have made linguists discuss whether VPE actually is an elided VP that first has underwent topicalization. See Johnson (2001) for more information about this hypothesis.

the coexistence of auxiliaries and *göra*-support and for the topicalized verb that in Swedish is tensed. Also, it explains why extraction of complements is not possible in VPE, since, apparently, what is syntactically there, but not seen, is VPP.

However, like Sailor (2014) and Houser et al. (2006), he does not consider cases of questions like in (43), that to me seem like VPE with *göra*-support:

(43) a. Jag borstar tänderna fem gånger om dagen.
I brush teeth.DEF five times a day.DEF
'I brush my teeth five times a day.'
b. Gör du (det)?
Do you (it)?
'Do you?'

If Swedish *göra*-support can be seen as English *do*-support at all, then to say it is not compatible with VPE would be risky, due to the data in (43)[17]. In a question like this in which the elided VP clearly is the remnant of the antecedent *borstar tänderna fem gånger om dagen* 'brush my teeth five times a day,' the insertion of the proform *det* is optional and the VP can be elided completely in context of *göra*-support, contrary to Platzack's (2012) assumptions. In this kind of structure, VPE in Swedish seems grammatical independently of the licensor, as seen in (44):

(44) Har/ kan/gör/ska/måste du [$_{VPE}$]?
Have/can/ do/ will/must you [$_{VPE}$]?

Similarly, Sailor (2013) observed that dependent tag questions with VPE are allowed in Danish and Norwegian. However, Axelsson (2011) claims that, although perfectly grammatical, these types of structures are more unnatural in Swedish (this is also illustrated in Holmes and Hinchliffe, 1994:349). Yet, what is crucial here is that, if in dependent tag questions there are what syntactically seem to be grammatical instances of VPE in Swedish, it is presumably so in independent questions as well. This would be in favour of instances like (43) that, at least to me, look like instances of VPE. It

[17] My own native intuitions would consider this grammatical. However, nowhere in the literature have I found analyses about these instances. Further research on this issue is necessary.

could, thus, be the case that Swedish in fact allows VPE in –at least one– contexts of *göra*-support.

5. Conclusion

In this study, a feature-based derivational account of VP ellipsis has been used in order to compare the VPE phenomenon in English and in Swedish. Consisting of a full-fledged syntactic structure, VPE is blocked for further operations once it is elided in the Phonological Form (PF).

In the introduction I made two assumptions: 1) English and Swedish are both languages that allow VPE, and 2) they differ in some way. Given the data in this paper, it is clear that both English and Swedish allow VPE but that they, at the same time, differ in form and distribution.

Firstly, both languages behave very similarly when the licensor is an auxiliary or a modal verb. In these cases of "pure" VPE, in which no optional VPP/*göra*-support is present, I suggest that the ellipsis site is identical in both languages, since the differences in the syntactic structure that may be found (position of the verb and subject/object extraction from the ellipsis site) are triggered by other phenomena after the [E] feature is merged and the elliptical structure is sent to the interfaces. The most significant characteristic responsible for these changes seem to be the V2 pattern that in Swedish conveys more restrictions on, at least, extraction of direct and indirect objects than in English. On the other hand, not being a V2 language, English allows the same extractions out of the elided VP as its non-elliptical counterpart.

Secondly, and due to its linguistic nature, the Swedish support verb *göra* is not a potential licensor of VPE, but, instead, triggers VPP. However, in independent questions with VPE, it could be argued that Swedish VPE indeed can be licensed by the support verb *göra*. Concerning this issue, further research is necessary, but there may be an explanation to this: Platzack (2012) mentions the process of grammaticalization and suggests that, whereas the English support verb has reached the third stage, that is, it has become fully grammaticalized, the Swedish one is at stage one. Danish and Norwegian have both the optionality of VPP in contexts of *do*-support, and lay, thus, between Swedish and English. Perhaps Swedish *göra* is moving in the same direction, and will behave like the support verbs of its Scandinavian neighbours in the future.

References

Aelbrecht, L. (2010). *The Syntactic Licensing of Ellipsis*. *Linguistic Aktuell/Linguistics Today, 149*. W. Abraham & E. van Gelderen (eds.). Amsterdam: John Benjamins Publishing Company.

Axelsson, K. (2011). A Cross-Linguistic Study of Grammatically-Dependent Question Tags: Data and Theoretical Implications. *Studies in Language 35*(4), 793-851.

Chomsky, N. (1957). *Syntactic Structures*. The Hague: Mouton.

Chomsky, N. (1995). *The Minimalist Program*. Cambridge MA: The MIT Press.

Holmes, P, & Hinchliffe, I. (1994). *Swedish: a Comprehensive Grammar*. London/New York: Routledge.

Houser, M., Mikkelsen, L., Strom-Weber, A., & Toosarvandani, M. (2006). Gøre-Support in Danish. Ms, UC Berkeley.

Houser, M., Mikkelsen, L., & Toosarvandani, M. (2007). Verb Phrase Pronominalization in Danish: Deep or Surface Anaphora? In E. Brainbridge & B. Agbayani (eds.), *Proceedings of the Thirty-Fourth Western Conference on Linguistics*, 183-195.

Johnson, K. (2001). What VP Ellipsis Can Do, and What it Can't, but not Why. In M. Baltin & C. Collins (eds.), *The Handbook of Contemporary Syntactic Theory* (pp. 439-479). Oxford/Malden: Blackwell Publishers.

Källgren, G., & Prince, E. (1989). Swedish VP-Topicalization and Yiddish Verb-Topicalization. *Nordic Journal of Linguistics 12*, 47–58.

Kuiper, K., & Nokes, J. (2014). *Theories of Syntax: Concepts and Case Studies*. London/New York: Palgrave Macmillan.

Lobeck, A. (1995). *Ellipsis: Functional Heads, Licensing, and Identification*. New York/Oxford: Oxford University Press.

Merchant, J. (2001). *The Syntax of Silence: Sluicing, Islands, and the Theory of Ellipsis*. New York/Oxford: Oxford University Press.

Merchant, J. (2004). Fragments and Ellipsis. *Linguistics and Philosophy 27*, 661-738.

Platzack, C. (2009). *Den Fantasktiska Grammatiken: en Minimalistisk beskrivning av Svenskan*. Lund: Lunds Univesitet.

Platzack, C. (2012). Cross Germanic Variation in the Realm of Support Verbs. In Ackema, P., Alcorn, R., Heycock, C., Jaspers D., Van Craenenbroeck, J., & Vanden Wyngaerd, G. (eds.), *Comparative Germanic Syntax. The State of the Art* (pp. 270-310). Amsterdam: John Benjamins.

Richards, N. (2001). *Movement in Language: Interactions and Architectures*. New York/Oxford: Oxford University Press.

Sailor, G. (2013). Tag Questions and the Typology of VP Ellipsis. Ms., UCLA.

Sailor, G. (2014). The Typology of Head Movement and Ellipsis: a Reply to Lipták and Saab. Ms., UCLA.

Teleman, U., Hellberg, S., & Andersson, E. (1999). *Svenska Akademiens Grammatik*. Stockholm: Nordstedts Ordbok.

Vikner, S. (1995). *Verb Movement and Expletive Subjects in the Germanic Languages*. Oxford Studies in Comparative Syntax. New York/Oxford: Oxford University Press.

Waldmann, C. (2012). Moving in Small Steps Towards Verb Second: A Case Study. *Nordic Journal of Linguistics, 34*(3), 331-359

Winkler, S. (2005). *Ellipsis and Focus in Generative Grammar. Studies in Generative Grammar, 81*. H. van Reimsdjik, H. van der Hulst and J. Koster (eds.). Berlin/New York: Mouton de Gruyter.