Head Conjuncts: Evidence from Old Swedish

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It is sometimes taken for granted that heads as well as phrases may form coordinate conjuncts. Still, what looks like a head may be a phrase with only the head visible. This loophole is shut, however, when we turn to Old Swedish stylistic fronting. In certain contexts, only single-word expressions are fronted, which leads to the conclusion that head fronting is indeed going on. When these heads originate in a coordinate structure, they must constitute the entire first conjunct, and cannot be part of an elliptic phrasal conjunct; otherwise, the ellipsis is not properly licensed.

Keywords: head conjuncts, stylistic fronting, PF movement, Old Swedish, coordinate asymmetries, remnant movement

1 Introduction

This article deals with the size of coordinate conjuncts. More specifically, it aims to answer the following question: can conjuncts be smaller than phrases—that is, heads? In the previous literature, it has been maintained that head conjuncts indeed exist (Borsley 2005, te Velde 2006, Zhang 2010). If this were correct, any theory of coordination that presupposes that conjuncts are always phrases (see, e.g., Kayne 1994, and similar approaches as in Johannessen 1998) would have to be rejected.

However, I will show that unambiguous head conjuncts are harder to come by than appears to be the case at first. What looks like head coordination could in fact be coordination of phrases that have been vacated of everything except the head prior to being moved to the left (remnant movement). In order to find truly nonphrasal conjuncts, I turn to the Scandinavian construction known as *stylistic fronting* (SF). In a subtype of SF that occurs in Old Swedish, the fronting takes place in the presence of an overt (albeit pronominal) subject. In this particular context, no unambiguous phrases (i.e., units larger than a single word) are ever fronted, only single words; see (1). Here, two such elements, the nonfinite verb *ofra* 'sacrifice' (in (1a)) and the simplex object *pianist* 'service' (in (1b)), have moved from their base position in the V domain to the left of the finite verb. Remnant movement of a phrase (as suggested by Franco (2009) and Ott (2009) for SF in general) cannot be justified here, since nothing that is clearly a phrase is ever targeted. Head movement is thus the only possible analysis.

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- (1) a. þa han ofra_j wilde t_j vm en høghtiðes dagh as he sacrifice.INF wanted.PST on a high.time day 'as he wanted to make an offering on a holiday' (Fleg:3)
 - b. æn han þianist_j for ma ei t_j vppe halda if he service can not uphold.INF 'if he cannot fulfill any (military) service' (MEL:KB:XX)

I will argue that the pronominal subject cliticizes to the complementizer (following Platzack 1988), thereby not disturbing the required adjacency between the finite elements (i.e., the complementizer and the finite verb) and the fronted element. This adjacency requirement (originally formulated by Bošković (2001) and modified slightly here) is, in a way, as puzzling as a purely descriptive empty-subject requirement; nevertheless, the adjacency account makes correct predictions about the distribution of SF that reference to empty subjects cannot.

Sometimes, the fronted heads in clauses with cliticized subjects originate in a coordinate structure; this is shown in (2), where the first of two conjoined nonfinite verbs (which share the sentence-final objects) is stylistically fronted.

(2) ath iak saalth_j haffwer t_j ok vinlegha vplathit minom elskelegom that I sold.ptc have.prs and amicably leased.ptc my.dat beloved.dat moderbrodher Karl Styrkarsson allan min ærffdadel i Westraarse uncle Karl Styrkarsson all.acc my inheritance in Westraarse 'that I have sold and amicably made available to my beloved uncle Karl Styrkarsson all my inheritance in Västerås' (SDHK:16663)

I will argue that SF is an operation that takes place after Spell-Out, in PF (following Sigurðsson (2010) and also drawing on ideas put forward by Egerland (2013)). Consequently, although the coordinate split in (2) appears to violate the Coordinate Structure Constraint (CSC; first formulated by Ross (1967)), because the entire first conjunct moves to the left, stranding the rest of the coordinate structure, narrow syntax, where the CSC applies, is not involved in the actual fronting of the first conjunct. Still, what leads up to the fronting is certainly syntactically relevant. In order to feed the PF component proper material for SF in clauses with a pronominal subject, the syntactic component needs to be able to derive a coordinate structure in which the first conjunct is a head. If it were only able to derive phrasal conjuncts, (2) would not be possible.

Certainly, the fronted head in (2) could be part of a phrasal conjunct, out of which it has been extracted; indeed, unilateral extraction from the first conjunct, usually referred to as a violation of the across-the-board restriction (first described by Ross (1967)), is attested in other contexts in older Swedish—for instance, relativization (Magnusson (Petzell) 2007, Petzell 2010). However, such an analysis predicts that SF of conjunct-internal material should occur in general, which is not the case. Also (and crucially), a phrasal first conjunct in (2) would contain a gap corresponding to the shared object. Since such gaps need to be prosodically licensed locally by the governing

verb (Hartmann 2000, te Velde 2006), the fronting of *saalth* 'sold.PTC' (even if it does occur in PF) is predicted to be impossible, contrary to fact.

2 Outline

The article is organized as follows. I begin in section 3 with an overview of various coordinate data that appear to indicate that a conjunct can be smaller than a phrase. I argue, however, that while nonphrasal status is certainly feasible in many cases, unambiguous examples are hard to come by. In section 4, I address SF in Scandinavian, directing special attention toward Old Swedish. Here, heads as well as phrases can be stylistically fronted, but in clauses with pronominal subjects, only heads can be targeted. This particular context serves as a fruitful testing ground for conjunct size, more specifically when SF and asymmetric coordinate extraction conspire. Whether such extraction constitutes an ATB violation (extraction of part of a conjunct) or a CSC violation (extraction of a whole conjunct) is the topic of section 5. Only the former analysis has independent empirical support. However, it can be questioned, given what is known about certain prosodic requirements of coordinate ellipsis; it is also weakened by the fact that no other types of unilateral extraction of conjunct parts occur with SF. The clue to distinguishing between the two alternatives is the locus, as it were, of SF. If we assume that this fronting takes place after Spell-Out, an assumption that is independently supported, the whole-conjunct approach is the only one possible: in PF, coordinate asymmetries would be irrelevant, unlike the demand for prosodic licensing. I thus conclude that heads may indeed be conjuncts. Section 6 summarizes the findings of the article.

3 Alleged Head Conjuncts

In this section, I review coordinate structures that have been (or could be) claimed to consist of head conjuncts. First, I discuss Borsley's (2005) critique of Kayne's (1994) account of object sharing in coordination (section 3.1); then, I briefly consider coordinate compounds (section 3.2). In neither case is the head analysis called for.

3.1 Verbs Sharing an Object

Although the example in (3a) at first appears to involve the coordination of two verbal heads ([$_{V^0}$ criticized], [$_{V^0}$ insulted]) sharing an object ([$_{DP}$ his boss]), the structure must, according to Kayne (1994:61) "include an empty category"; see (3b).

(3) a. John criticized and insulted his boss.
(Kayne 1994:61)
b. John criticized [e]_i... [his boss]_i
(Kayne 1994:61)

Kayne's conclusion is forced by his Linear Correspondence Axiom, which is incompatible with heads being conjuncts (1994:59). Thus, in (3b), there is a phrasal conjunct comprising a verbal head and an invisible object ([VP criticized [e]]). Kayne's assumption of an empty category is

criticized by Borsley (2005:471), who takes "empty category" to mean deletion. If an example such as (4a) is derived through deletion of the first object (see (4c)), (4a) should mean the same thing as (4b), where both objects are explicit. But, as Borsley notes, "the meanings are different" (2005:472).

- (4) a. Hobbs criticized and insulted many people. (Borsley 2005:471)
 - b. Hobbs criticized many people and insulted many people. (≠ (4a))
 (Borsley 2005:471)
 - c. Hobbs criticized many people and insulted many people

Borsley's critique presupposes a very specific interpretation of the notion of empty category. However, it is not clear why an empty nominal slot in a coordinate structure would always represent a deleted full DP. In fact, evidence from Swedish suggests that there must be different types of empty elements in coordination, depending on the nature of the shared element. As shown in (5)–(6), the sharing of an object between two verb forms can come about in different ways. In contexts where an object in the first conjunct can be coreferential with a pronoun in the second conjunct (as in (5a)), a shared object can follow either the first (see (5b)) or the second conjunct (see (5c)). In contrast, when it is not possible to use such a pronominal object (as in (6a)), a shared object needs to follow the second conjunct (see (6c); 1 cf. the ungrammatical (6b)). I will use the label *pro* to refer to the empty elements that covary with pronouns (such as the empty object after *läste* 'read.PST' in (5b)). Note that none of the examples involving a shared or pronominalized object (i.e., (5a–c), (6c)) has the same meaning as a corresponding example containing an explicit full DP (see (5d), (6d)).

- (5) a. Han köpte en bok och läste den. he bought.pst a book and read.pst it
 - b. Han köpte en bok och läste. he bought.pst a book and read.pst
 - c. Han köpte och läste en bok.
 - he bought.pst and read.pst a book
 - d. Han köpte en bok och läste en bok. $(\neq (5a-c))$ he bought.pst a book and read.pst a book
- (6) a. *Han köpte få böcker och läste dem. he bought.pst few books and read.pst them
 - b. *Han köpte få böcker och läste.he bought.PST few books and read.PST

¹ Such sharing to the right, as it were, is commonly called *right node raising* (RNR), a term introduced by Postal (1974). The specific prosodic requirements of RNR are addressed in section 5.3.

² Coordination is not the only domain in which *pro* occurs in Swedish; in parasitic gap constructions, the empty element is referentially restricted in the same way as empty elements in noninitial conjuncts (see Engdahl 2001:129ff.).

- c. Han köpte och läste få böcker. he bought.pst and read.pst few books
- d. Han köpte få böcker och läste få böcker. (≠ (6c)) he bought.pst few books and read.pst few books

Let us consider the coordinate structures in (5c) and (6c), where the two verbs share a final object. If an empty element is present in the first conjunct (as Kayne (1994) assumes), what is the precise nature of this element? As noted, simple deletion is not tenable. And the element cannot be *pro*, since sharing of unpronominalizable elements is indeed possible in this context (as in (6c)). In Magnusson (Petzell) 2007:301, I assume that when unpronominalizable elements are shared in coordination, they always correspond to traces in the conjuncts involved. Such an assumption in fact makes the correct prediction that (6b) is bad (see (7a)) and (6c) is good (see (7b)). In (7a), the antecedent *få böcker* 'few books' is too deeply embedded in the initial conjunct to c-command its trace in the second conjunct. In (7b), on the other hand, the final placement of the shared object is derived by remnant movement of the entire coordinate structure from where *få böcker* has first been symmetrically extracted, providing a configuration in which all traces are properly c-commanded.

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(7) a. Han *[[köpte [få böcker]<sub>j</sub>] och [läste *t<sub>j</sub>]].
b. Han [köpte t<sub>i</sub> och läste t<sub>i</sub>]<sub>k</sub> [få böcker]<sub>i</sub> t<sub>k</sub>.
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Even when the shared element is pronominalizable, as in (5c), the structure in (7b) is valid; see (8a). *Pro* is certainly semantically compatible with *en bok* 'a book' (i.e., they can be coreferential), but it needs to find its reference in the preceding context, which excludes the analysis in (8b).

(8) a. Han [köpte t_j och läste t_j]_k [en bok]_j t_k.
b. Han köpte *pro och läste en bok.

To sum up, all of the types of object sharing addressed in this section have been analyzed as elliptic coordination, but with different sorts of null elements that account for the different distribution displayed by different sorts of shared elements. To simply assume that coordination of heads is licit, as Borsley (2005) implies it is, would not help us understand this contrast. The head approach certainly derives both (5c) and (6c), but it offers no explanation for the difference between (5a-b) and (6a-b).

3.2 Coordinate Compounds

A remnant movement analysis would be applicable not only to the sharing of an object at the right edge of the sentence (RNR) discussed above, but also to coordinate compounds, exemplified in (9). As Arstein (2005) points out, this type of split compound coordination can have a distribu-

³ The point made here is reminiscent of the one made by Kayne (1994:62–63) in connection with the distribution of French clitics.

tive reading (*Paul is a neurochemist and Jane a biochemist*) that a pure deletion analysis cannot handle; see example (10), which would be the source of deletion but which has another meaning (each has two degrees).

- (9) Paul and Jane are neuro- and biochemists.
- (10) Paul and Jane are neurochemists and biochemists. $(\neq (9))$

An analysis of (9) in terms of head coordination is compatible with this semantic discrepancy between (9) and (10), since structural identity is clearly not presumed. However, if (9) represents an elliptic structure created by remnant movement of the entire coordinate complex (as shown in (11)), then (9) and (10) are structurally different as well, which explains the semantic discrepancy.

(11) Paul and Jane are [[neuro t_i] and [bio t_i]]_k chemists_i t_k .

In other words, head coordination is not the only way to derive a distributive reading in coordinate compounds.

4 Scandinavian Stylistic Fronting

In this section, I first give a brief overview of SF in Old Swedish and Modern Icelandic (section 4.1).⁴ I show that the two varieties differ in one crucial respect: in Old Swedish, but not in Modern Icelandic, there are contexts where the target of fronting cannot be a phrase, only a head. This difference is formalized in section 4.2. I also consider SF of elements that are contained in a coordinate structure, concluding that the fronted element can indeed be a head, but that it is not evident whether the head represents an entire conjunct or just part of one (section 4.3).

4.1 The Difference between Old Swedish and Modern Icelandic

In Modern Icelandic,⁵ finite clauses where the subject position is empty (typically embedded clauses) may contain an element just before the finite verb; examples of such fronting, commonly referred to as stylistic fronting (SF), are shown in (12). Either there is no explicit subject at all, as in the relative clauses in (12a–b), or there is a clause-initial subject, such as the interrogative pronoun in (12c). Which element is fronted when there are multiple available candidates has attracted the interest of several scholars (starting with Maling (1980) for Icelandic, followed by Pettersson (1988) and Falk (2007) for Old Swedish). I will not pursue that matter here.⁶ For

⁴ Traditionally, *Old Swedish* refers to Swedish texts from 1225 until 1526. Here, I have used only texts composed before the middle of the 1400s. The reason for avoiding later texts is to ensure that my sample does not contain any early instantiations of the Early Modern Swedish OV system, which overlaps with SF to a greater extent than the Old Swedish OV system (see the discussion of OV at the end of section 4.1).

⁵ Much of this is true of Faroese as well (see Barnes 1987, 1992; see also Thráinsson 2012). None of the other modern Scandinavian languages allows SF (not even archaic dialects such as Övdalian, as Garbacz (2010) shows).

⁶ It may be noted, however, that the inventory of elements eligible for SF appears to be more versatile in Old Swedish than in Icelandic. For instance, stylistically fronted objects are often perceived as archaic by speakers of Icelandic (Holmberg 2000:449n6, Anna Hannesdóttir, pers. comm.), whereas object SF is quite commonplace in Old Swedish (see below).

present purposes, it suffices to conclude that the fronted element can be a phrase (as with the PP in (12b)), but it can also be a single-word expression that could represent a head (i.e., a head-like element), as with the fronted verbs in (12a,c).

- (12) a. þeir sem búið_j hafa t_j í útlöndum those that lived.ptc have.pts in out.lands.dat 'those who have lived abroad' (Thráinsson 2007:371)
 - b. þeir sem [í Danmörku]_j hafa verið t_j those that in Denmark.dat have.prs been 'those who have been in Denmark' (Thráinsson 2007:381)

(13) a. [VP ti Gelesen] hat

(Fanselow 2002:119)

c. Hann spurði hver sullað_i hefði t_i bjórnum. he asked.pst who spilled.ptc had.pst beer.def 'He asked who had spilled the beer.' (Hrafnbjargarson 2004b:91)

But how can we exclude the possibility that what looks like a fronted head (i.e., $[v^0]$ buið] in (12a) and $[v^0]$ sullað] in (12c)) is in fact a fronted phrase from which everything but the head in question has moved in a previous step of the derivation (i.e., $[v^0]$ buið t] and $[v^0]$ sullað t])? Such a remnant movement account of SF has been proposed by Franco (2009) and Ott (2009) (apparently independently of each other). Thráinsson (2007:368n15), on the other hand, takes a general stand against any analysis that involves remnant movement, claiming that such analyses make it very difficult to distinguish between types of movement. Shortly, I will argue that the all-phrasal account of SF does not hold. It seems a bit categorical, however, to disregard any remnant movement approach solely on the grounds invoked by Thráinsson (2007); as Bański (2002) shows for Polish, different sorts of movement, although superficially targeting the same string, could be differentiated by different prosody. Also, as Fanselow (2002) argues for German, remnant movement may well occur but is perhaps more restricted than first appears to be the case: Fanselow thus questions the previously well-established analysis of German participle fronting as a case of remnant VP fronting (first suggested by Den Besten and Webelhuth (1990); see (13a)), concluding, however, that such fronting does occur elsewhere (deriving, for instance, (13b)).

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read.ptc has.prs Peter the book not 'Peter has not read the book.'

(Den Besten and Webelhuth 1990:77)

b. [VP Den Hubert seinen Wagen tv] habe ich noch nie waschenv sehen tj the Hubert his car have.prs I yet never wash.INF seen.ptc 'I have never yet seen Hubert wash his car.'
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Peter [das Buch], nicht t_i.

Let us now return to the all-phrasal account of SF suggested by Franco (2009) and Ott (2009). Given that unambiguous phrases such as [PP] if Danmörku can be the target of SF, how

can we know that fronted single-word (i.e., head-like) elements are not phrases where nothing but the head is visible? Apparently, head-like and phrasal fronting occur in the same contexts. The only way to exclude an all-phrasal approach would be to find a context where, for some independent reason, it is not tenable to treat the fronted element as an (elliptic) phrase.

Contrary to most descriptions of SF in Modern Icelandic, Hrafnbjargarson (2004b) maintains that it is indeed (at least marginally) possible to have SF even in clauses with a filled subject position. In other words, the requirement that there can be no explicit subject if SF is to take place would not be absolute. However, it is not the case that any explicit subject is licit. It can only be a phonetically weak pronoun. Furthermore, marginal acceptance can be achieved only if the fronted element is a head-like one (as in (14a)); a fronted phrase is completely ungrammatical (see (14b)).

- (14) a. ?Allt sem 'ann lesi δ_j hafði t_j í bókinni var satt. all that he(weak) read.ptc had.pst in book.def.dat was true 'Everything that he had read in the book was true.' (Hrafnbjargarson 2004b:117)
 - b. *Allt sem 'ann $[i\ b\acute{o}kinni]_j\ haf\acute{o}i\ lesi\acute{o}\ t_j\ var\ satt.$ all that he(weak) in book.def.dat had.pst read.ptc was true (Hrafnbjargarson 2004b:118)

Hrafnbjargarson interprets this discrepancy as an effect of phrasal fronting and head fronting targeting different positions. Most accounts of SF treat the complementary distribution of overt subjects and fronted elements as an indication that subjects and fronted elements occupy the same syntactic slot in some sense (see Thráinsson 2007:368 and the references cited therein; also see the overview in Falk 1993:185–188 and Angantýsson 2011:181ff.). In Hrafnbjargarson's analysis, this slot corresponds to a specific projection into which subjects and stylistically fronted elements are assumed to move. With no subject present (as in (12)), there can be fronting to the head position (see (12a,c)), as well as to the specifier position of this projection (see (12b)). But if there is a pronoun in the specifier (as in (14a)), there is certainly room for a head, whereas phrasal fronting is predicted to be illicit. In other words, this appears to be the context we are looking for in order to distinguish phrasal fronting from head fronting: if it works with a pronoun, it is a head; if it does not, it is a phrase.⁷ Still, speakers of Icelandic disagree about whether (14a) is marginally acceptable or in fact as ungrammatical as (14b) (see Sigurðsson 2010:177n27). And if the empirical basis is a bit shaky, it seems that the remnant movement account (Franco 2009, Ott 2009) remains an option after all.

However, in Old Swedish, precisely the contrast in (14) appears to have been real. But before we proceed to that, we need to consider some basic SF data. First, SF occurs in clauses with an

⁷ Hrafnbjargarson's (2004b) choice of projection is quite controversial: Focus Phrase (FocP). As Thráinsson (2007: 389n23) points out, it is difficult to comprehend how pronominal subjects (let alone unstressed ones) can ever carry focus features.

empty subject position (just as in Icelandic); see (15)–(16). In (15), apparently phrasal elements (such as the direct objects in (15a–b), the predicative in (15c), and the indirect object in (15d)) are stylistically fronted. In (16), by contrast, there is fronting of what looks like single heads (such as the single-word objects in (16a–b), the predicative adjective in (16c), and the nonfinite verb in (16d)); for a more detailed descriptive overview, see Delsing 2001 (cf. also Falk 1993: 179ff.)).8

- (15) a. them som [hans lagh oc tro]_j hafwa t_j forsmåt them that his law and faith have.prs despised.ptc 'those who have despised his law and faith' (Birg:182)
 - b. ær [slikæ arwuþhis lön]_j skal t_j wp takæ that such work.gen pay shall up take.INF 'that is supposed to collect wages for such work' (Vidh:305)
 - c. huxa huat [almoghans tarf ellr skadhi] $_{j}$ må t_{j} wara remember.INF what people.DEF.GEN need or harm may.PRS be.INF 'remember what may be of need or harm for the people' (Kstyr:32)
 - d. i huarium köpstaþ, sum [væghfarande mannum]_j skulu t_j sæliæ mat ok in every.DAT town that traveling men.DAT should sell.INF food and öl ok hæstafoþer ok alla þera þorft beer and horsefeed and all.ACC their necessity 'in every town that should sell food, beer, feed for horses, and all they may need to travelers' (MEL:KB:XXIII)
- (16) a. huar sum fribj skal tj bibia each that peace shall ask.INF 'anyone who is to ask for peace' (ÖgL:EB:Outline)

⁸ I disregard examples with an adverbial PP preceding the finite verb. Such elements were freer in their distribution in Old Swedish than they are in Icelandic; see (i), where an explicit (nonpronominal) subject is followed by a PP and the finite verb. Consequently, a preverbal PP, even if it occurs in a subjectless clause, can never be taken as an unambiguous instance of SF (as in Icelandic; cf. (12b)), since it cannot be excluded that it is in fact structurally parallel to (i), where SF is excluded.

⁽i) Kan þet ok sua varþa, æt nakar þianisto man af alder ællæ krankdom ær ei siæluer för can it also so become.inf that some.nom official of age or illness is not self.nom for 'it can also be that some official is not present due to (old) age or illness'

(MEL:KB:XII)

- b. þem sum hona_j skulu t_j skuþa a kunungx væghna them that her should behold.INF at king.GEN direction 'those who should behold her in the king's stead' (MEL:KB:XII)
- c. then thrättande som högxster $_{j}$ war t_{j} aff them the thirteenth that highest was of them 'the thirteenth that was highest (in rank) of them' (K-M:251)
- d. jak är en läkiare som läkia $_j$ kan t_j thän skadha man faar aff ordhom I am a physician that heal.INF can the injury.ACC one gets of words.DAT 'I am a physician who can heal the injury you get from words' (B-J:15)

In addition, as already hinted, we find examples that are reminiscent of the Icelandic (14a); consider the examples in (17), where head-like elements are fronted in clauses with pronominal subjects: nonfinite verbs in (17a–b), a pronominal object in (17c), and a predicative participle in (17d).⁹

- (17) a. at the warit_j haffwa t_j göta konunga that they been have.PRS Gothic kings 'that they have been Gothic kings' (Pkrön:227)
 - b. Suåsom wi sea $_j$ måghom t_j thz trä som ä flyter i watne as we see.INF may.1PL.PRS the wood that always floats in water.DAT 'as we may see the wood that always floats in water' (Kstyr:43)
 - c. þa han hona_j hafwær swa t_j fæst as he her has.prs so betrothed.ptc 'as he has thus betrothed her' (Håkansson 2011:128)

- (i) hwat han them_j swaradhe t_j til thera spörninga what he them answered.PST to their questions 'what he answered them in reply to their questions' (Platzack 1988:227)
- (ii) vtan gamblamestara och kennara thz äpterlata j scripther if.not old.masters and connoisseurs it leave.prs in writings 'if old masters and connoisseurs do not leave it behind in writings' (Pkrön:219)

⁹ Platzack (1988) assumes that examples such as (i) involve the same sort of pronominal SF as (17c). However, in (i), the fronted element (*them*) has moved over a simple finite verb, not a complex of auxiliary and nonfinite main verb as in (17c). Such simplex movement is most likely a case of OV (possibly some sort of object shift), not SF, since the same order occurs with explicit subjects, as shown in (ii); see also the discussion below.

d. äpte ty han lärderj warder t_j af witrom ok since he taught.ptc.nom becomes.prs by lettered.ptc.dat and röntom mannom experienced.ptc.dat men.dat 'since he is taught by lettered and experienced men' (Kstyr:41)

Still, we lack the corresponding ungrammatical example (cf. (14b)) needed to completely rule out a phrasal approach to (17). Since we cannot, of course, test the intuition of native speakers, we need to look for indirect evidence. Let us therefore turn to the domain of object-verb (OV) order, which I have investigated in a previous article (Petzell 2011). There, I claim that in Old Swedish it was highly dispreferred to move an object over several verbs; see (18a), where the object (*rættæ korn tyund* 'right grain tithes') has moved to the left of both the nonfinite main verb (*giöra* 'do.INF') and the finite auxiliary (*wil* 'wants'). Instead, simplex movement, where the object surfaces to the left of the lower verb, was favored; see (18b). Looking more closely at the corpus used in Petzell 2011, there are 71 examples displaying the order in (18b') and only 11 displaying the order in (18a').

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(18) a. hwar sum [rættæ korn tyund]<sub>j</sub> wil t<sub>j</sub> giöra t<sub>j</sub> each that right grain.tithes wants.prs do.inf 'anyone who wants to contribute the right amount of grain tithes' (UL:25)
a'. O<sub>j</sub> Vf t<sub>j</sub> Vnf t<sub>j</sub>
b. þy at hon hafðe [siin klæde]<sub>j</sub> saalt t<sub>j</sub> because that she had.pst refl clothes sold.ptc 'since she had sold her clothes' (Fleg:11)
b'. Vf O<sub>j</sub> Vnf t<sub>j</sub>
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The OVfVnf category in Petzell 2011 includes no head-like objects that precede the verbal cluster, either in subjectless clauses (as in (16a-b)) or in clauses with a pronominal subject (see (17c)); I instead analyze these as cases of SF (Petzell 2011:166). In fact, the SF analysis may be applicable in more cases. In Petzell 2011, I do not take into account the fact that all the remaining 11 OVfVnf cases are subjectless. In such contexts, however, SF can target phrases, as we have seen (see (12b), (15a-d)). Consequently, all examples of OVfVnf order in the Old Swedish sample may represent SF of phrasal objects. Taking this generalization into account, there is no need to talk about preference at all; the Old Swedish distribution of preverbal phrasal objects is simply the effect of two different constructions cooccurring: OV, which occurs only within a simplex VP but with all types of subjects (see (18b)), and SF of phrasal objects, which is unaffected by verbal boundaries but instead restricted to clauses without an explicit subject (see (18a)).

Let us now turn to the word order in (19), where a phrasal object occurs before the entire verbal complex, even though the clause has an overt subject (unlike the subjectless (18a)). This

example comes from Early Modern Swedish, which had a different OV system from Old Swedish. In Early Modern Swedish, it was preferable to move the object as far to the left as possible, thereby creating examples of this sort (Petzell 2011:174). There are 31 cases of Early Modern OVfVnf in the corpus used in Petzell 2011 (disregarding head-like objects as before); 25 of these have an overt subject, and 10 of them contain, in addition, an unambiguously phrasal object (as in (19)). The dominant order in Old Swedish (i.e., VfOVnf), still occurs in the Early Modern texts but is slightly less common (28 examples) than OVfVnf.

(19) tå iagh [mitt ährende]_j hadhe t_j uthrättat t_j as I my errand had.pst executed.ptc 'as I had done my errand'
(Gyll:16)

Now, if SF always involves movement of phrases, as Franco (2009) and Ott (2009) suggest, examples like (19), involving phrasal fronting and a pronominal subject, are expected to exist in a variety that allows SF in clauses with a pronominal subject, as Old Swedish apparently does (see (17a–d)). However, examples like (19) are not found in Old Swedish. Certainly, there are cases were more than a head-like element comes between a pronominal subject and the finite verb, but they are (unlike (19)) finite verb–final; see (20a). Verb-final clauses were possible in Old Swedish with any subject, as can be seen in (20b). Consequently, although verb-final clauses may indeed look like SF clauses—namely, when there is only one nonsubject before the finite verb (as with the phrasal object in (20a))—all verb-final contexts need to be disregarded, since there is always the possibility that they are structurally parallel to (20b) (see also Falk 1993:170).

- (20) a. æt han sua goþan hæst miste that he so good.ACK horse lost.PST 'that he lost such a good horse' (MEL:KB:XVIII)
 - b. äpter thy alzmektogher gudh och iomfru maria mik nadher giffwa insofar almighty.NoM God and Virgin Mary me mercy.PL give.PRS 'insofar as almighty God and the Virgin Mary give me mercy' (Pkrön:219)

In sum, the conclusion we must draw from the lack of Old Swedish equivalents to (19) is that the examples in (17) do indeed involve head movement; see the analyses of (17a–d) in (21).

¹⁰ As can be seen, I make a structural distinction between OV, where O precedes a complex predicate (i.e., (19), and (18a) as I treat it in Petzell 2011), and SF involving an object (i.e., (15a–b,d), (16a–b), and (18a) in the present account): OV involves step-by-step movement from postverbal to interverbal to preverbal, whereas SF involves a single movement from intermediate position to target position. The analysis of OV is hardly controversial, but the SF account deserves a comment. I assume that the object needs to reside in the intermediate position when SF applies, reflecting the fact that the object is a stronger candidate for SF than the nonfinite verb (cf. the Old Swedish SF hierarchy in Falk 2007: 91). On the other hand, when nonfinite verbs are fronted instead of objects (as in (16d) and (17b)), the SF hierarchy is not necessarily violated (as in (26) below); rather, this is a case of the verb being fronted from a VO structure, a possible, but highly marked word order in Old Swedish (Delsing 1999). However, nothing hinges on formulating the difference between OV and SF exactly as I have done here.

```
(21) a. at the [v_0] warit hafwa
                                         [<sub>VP</sub> t<sub>i</sub> göta
                                                           konunga]
         that they
                        been have.prs
                                                   Gothic kings
      b. Suåsom wi [vº sea]<sub>i</sub>
                                   måghom
                                                   [<sub>VP</sub> t<sub>i</sub> thz trä
                                                                       som . . . ]
                            see.INF may.1PL.PRS
                                                           the wood that
      c. þa han [D^0 \text{ hona}]_i hafwær [VP]_{DP} t_i] swa fæst]^{11}
         as he
                      her
                              has.prs
                                                    so betrothed.PTC
      d. äpte ty han [Ptc<sup>0</sup> lärder]<sub>i</sub>
                                                warder
                                                                [PtcP ti af witrom
                                                                                               ok
         since
                   he
                              taught.PTC.NOM becomes.PRS
                                                                        by lettered.PTC.DAT and
         röntom
                                  mannom
         experienced.PTC.DAT men.DAT
```

This conclusion, in turn, means that the remnant movement approach to SF cannot be universally valid. 12

4.2 The Structure of Stylistic Fronting

Platzack (1988) proposes that the subject pronoun in clauses with SF (as in (17a–d)) cliticizes to the complementizer, in effect creating a clause without a subject, which is a prerequisite for SF. This is shown with example (17a) in (22a). Platzack provides orthographic evidence to support the claim that cliticization to C was indeed possible in Old Swedish; see (22b–c), where there is a reduced form of the masculine pronoun *han* directly after the complementizer (*aen* in (22b)) and another reduced form attached to the finite verb (*-an* in (22c)); also see Alexiadou and Fanselow 2002:239–240, where the authors adopt Platzack's analysis to be able to explain the loss of V-to-T movement in Mainland Scandinavian.

```
(22) a. [CP at-the
                     [TP ____ warit haffwa göta
                                                     konunga]]
                              been have.PRS Gothic kings
     b. at aen
                      aer thiwaer at thyft
                                                    therae
        that he(weak) is thief
                                 of stolen.property this
        'that he is the thief of this stolen property'
        (Platzack 1988:228)
     c. tha bindr-an
                         han
        then binds.prs-he him
        'then he binds him'
        (Platzack 1998:228)
```

But the clitic account is unable to explain the lack of phrasal fronting in such contexts on its own. In addition, something like Hrafnbjargarson's (2004b) analysis is therefore needed, relating

¹¹ Following Abney (1987), I take pronouns to be DPs with only the head present, which in this case is fronted, stranding the DP. Note, however, that 3rd person pronouns (such as *hona* 'her') may combine with determiners in some languages (e.g., Hebrew), as shown by Ritter (1995), who therefore argues that 3rd person pronouns are instead Num heads within the complement of D⁰.

¹² SF in clauses with pronominal subjects has been attested elsewhere: Old and Middle Danish (Hrafnbjargarson 2004a), Middle English (Kroch and Taylor 1997), Sardinian (Egerland 2013), Old Italian (Cardinaletti 2003). It lies beyond the scope of the present article to further investigate these varieties.

the possibility of SF in these cases to the relative lightness of the subject—that is, to the notion that a pronoun is more on a par with a null subject, in some respects, than with a full-fledged DP subject. Let us combine the two approaches into an account of SF that derives this type of construction both in subjectless clauses and in clauses with pronominal subjects (as in Old Swedish), but that also leaves the door open for the latter clause type to be excluded (as in Icelandic).

Suppose that the pronominal subject does cliticize to the complementizer (as Platzack (1988) argues), but that prior to cliticization it has moved to the same phrase as stylistically fronted elements do, located above the canonical subject position (in TP) just below the complementizer (as Hrafnbjargarson (2004b) suggests; also see Bošković 2001). In (23), this phrase is descriptively labeled *SP* (*S* for *stylistic fronting*):¹³ in (23a), the pronoun moves to the specifier position of SP, where it cliticizes to the complementizer, in effect stripping the clause of an overt subject (see (23b)). There is now room for a fronted head (as in (23c)), but not for a phrase (see (23d)), since the only place for a phrase (i.e., the specifier) has already been occupied by the subject clitic (here indicated by the elimination of the maximal SP level).¹⁴

- (23) a. [CP at [SP [Spec thei] [S' [TP ti haffwa warit göta konunga]]]]
 - b. [CP at-the_i [S' [TP t_i haffwa warit göta konunga]]]
 - c. [CP at-the; [S' warit; [TP haffwa t; göta konunga]]]
 - d. *[CP at-the; [S' [göta konunga]; [TP ti haffwa ti warit]]]

SF in subjectless clauses would have the general structure given in (24a), where SP can harbor either a phrase or a head, but not both (see (24b)). The reason for this restriction is presumably the same as the reason that only cliticizable material may enter Spec,SP if a head is subsequently to be fronted (cf. the nonclitic subject in (24c)), and also the same reason that Spec,TP may not contain overt material (as in (24d)). What, then, unites all the illicit structures in (24)—that is, (24b–d)? Adopting a slightly modified version of Bošković's (2001) explanation for the empty subject requirement, we could rule out the unwanted output on the grounds that these examples fail to keep the stylistically fronted element adjacent to the finite elements of the clause, that is, both the complementizer and the finite verb. ¹⁵ In (24b), the double fronting prevents such adjacency, and in (24c) and (24d), the subject cuts off the link between the fronted element and the complementizer, (24c), and the finite verb, (24d). By contrast, in (23c), where the subject pronoun is attached to the complementizer, and in (24a), where there is no overt subject at all, the adjacency requirement is met.

¹³ This descriptive label is intended to indicate that I leave open the question as to what triggers fronting in the first place. What is relevant here is that fronting takes place and that it is restricted in a certain fashion (however, see section 5.3, where I consider Egerland's (2013) suggestion that SF is driven by a defocusing/backgrounding feature).

¹⁴ This is somewhat simplified. Presumably, it is only the D head that incorporates into the C complex, leaving an empty DP structure behind in Spec,SP, as shown in (i) (cf. Kayne's (1991) account of Romance clitics as head incorporation). However, nothing hinges on the details in the cliticization analysis being formulated exactly like this.

⁽i) [CP at-[D0 the] [SP [DP ____]] ...

¹⁵ Bošković's (2001) original suggestion is that the fronted element—or rather, the head of the phrase to which the fronted element moves—needs to be adjacent only to the finite verb. For more detailed discussion of the adjacency account, see section 5.3.

Why such adjacency should be required is of course an intriguing question, but I will not dig deeper into the matter here. Still, the account is more than just a statement of the facts. First, it felicitously predicts that there will be no SF in nonfinite clauses, as shown in (25).

(25) *Hún vonast til að skrifað_j hafa t_j um þessar tilraunir fyrir she hopes.prs for to written.ptc have.inf about these experiments before jól.
Christmas
(Sigurðsson 2010:179)

Second, it predicts that SF should not care, as it were, about overt subjects, as long as they do not block the required adjacency. The Old Swedish example in (26a) appears to lend support to this prediction. What we have here, according to Falk (2007:94-95), is a relative clause with a postverbal subject, where the negation is stylistically fronted, surfacing between the finite verb and the complementizer. In Falk's analysis, the relative scarcity of examples of this kind is explained by the fact that the subject is itself part of and also highest in the hierarchy of elements that can undergo SF, which, in most cases, leads to the generation of SV order. However, the clause in (26a) represents a violation of the SF hierarchy, Falk argues, targeting the element that is just below the subject on the ladder, namely, negation (2007:96). The order in (26a) would thus be parallel to other hierarchy violations, such as the one in (26b), where the direct object is stylistically fronted over an indirect object. In the majority of cases, it is the other way around; that is, the indirect object is above the direct object in the hierarchy, just as the subject is above negation. Falk's idea that the subject is the top candidate for SF could certainly be incorporated into my analysis, where SP, as shown above, is a possible landing site for subjects. I will not go into details here, however, since doing so would add nothing significant to the argumentation. Neither will I try to formalize the possibility that the SF hierarchy can sometimes be violated (but see footnote 10).

- (26) a. þæn sum egh_j biþær klokkarin t_j til the.one that not begs.prs sexton to 'anyone who the sexton does not ask for' (Falk 2007:94)
 - the minnæ_j giwæ præsti t_j æn öre
 those less give.PRS priest.DAT than penny
 'those who give less than a penny to the priest'
 (Falk 2007:93)

Let us, instead, return to the proposed adjacency requirement on SF. This requirement is clearly met in (26a), since the subject (albeit overt) comes after the finite verb, thus not interfering

between the verb and the fronted element. Such relative inversion (i.e., VS word order in a relative clause) was possible in older Swedish, but is not an option in modern Scandinavian, including Icelandic, which explains why there are no Icelandic counterparts to (26a). As I show in Petzell 2013, allowing such VS order has nothing to do with SF per se, but is linked to the fact that in earlier stages of Swedish (and possibly other older Scandinavian varieties), the canonical subject position was lower than it is today (see also Magnusson (Petzell) 2007 and Håkansson 2008).

In sum, the crucial difference between Icelandic SF and Old Swedish SF is the application of pronominal cliticization (as in (23b)); as we have seen, pronominal SF is, at best, only marginally acceptable to some native speakers of Icelandic (cf. (14a)), indicating that most Icelandic speakers have the structure in (24c) or (24d) for pronominal and nonpronominal subjects alike. Why (23b) is not possible in Icelandic is, of course, an intriguing question. However, pursuing it lies beyond the scope of this article.

4.3 Stylistic Fronting and Coordination Conspiring

Both Icelandic and Old Swedish SF can target elements originating in a coordinate structure, as shown in (27). Old Swedish (as illustrated above) allows SF in subjectless clauses, as well as in clauses with an overt pronominal subject. Coordination-internal elements may be fronted in both these cases: thus, the first of two conjoined verbs is fronted in both (27a), where the subject is a clause-initial relative pronoun, and (27b), where the subject position is filled by the personal pronoun wi 'we' (see also the parallel example in (2)). In Icelandic, on the other hand, only subjectless clauses are possible arenas for fronting (disregarding the highly marginal—and, for many speakers, totally ungrammatical—example in (14a)); see (27c). ¹⁶

- (27) a. then rådha_j må t_j ok styra landom ok almogha which rule.INF may and govern.INF lands.DAT and people.DAT 'which may rule and govern the lands and the people' (Kstyr:6)
 - b. at wi hørt_j hafwa t_j och granlica ouerlæset the breff oc that we heard.ptc have.prs and thoroughly over.read.ptc the letters and beuisning, som Aszur Niclisson hauer evidence that Aszur Niclisson has.prs 'that we have heard and thoroughly read through the letters and evidence that Aszur Niclisson has' (SDHK:18212)

- (i) Huar ofmikit spar ok göme jorderikes godhz each too.much saves.prs and hides.sbjv earth.realm.gen goods 'he who saves too much and would hide worldly goods' (Kstyr:46)
- (ii) [ofmikit_i [[t_i spar] ok [göme jorderikes godhz]]]
- (iii) [ofmikit_j spar t_j] ok [göme jorderikes godhz]

¹⁶ The conjoined verbs in (27) all share an object. When there is no such sharing (as in (i)), we cannot determine whether a fronted element has been extracted from the coordinate structure (see (ii)) or whether SF is conjunct-internal (see (iii)). All such cases are therefore disregarded here.

c. þeir sem heyrt_j hafa t_j og séð allt¹⁷ those that heard.ptc have.prs and seen.ptc all 'those who have heard and seen everything'

As argued in section 4.1, only examples with pronominal subjects (e.g., (27b)) involve unambiguous head fronting; compare the two possible analyses of (27a) and (27c) in (28a-a') and (28c-c') respectively, with the single analysis of (27b) in (28b).

- (28) a. then [VP råda]_i må t_i ok styra landom ok almogha
 - a'. then råda_i må t_i ok styra landom ok almogha
 - b. at wi hørt, hafwa t, och granlica ouerlæset the breff...
 - c. þeir sem [VP heyrt], hafa ti og séð allt
 - c'. þeir sem heyrt_i hafa t_i og séð allt

However, although the fronted element in (27b) is a head (see (28b)), it is not evident what it leaves behind in the coordinate structure from which it originates. It could be that it does constitute a head conjunct (see (29a)). At this stage, however, we cannot exclude the possibility that the extracted head is only part of a phrasal conjunct in a coordinate structure involving the same sort of sharing to the right (RNR) that was discussed in section 3.1; see (29b) (cf. (7b), (8a)). Here, the conjuncts share an object (the breff oc beuisning som . . . 'the letters and evidence that . . . ') insofar as they both contain object traces. The placement of the object after the second conjunct follows from the subsequent movement of the entire coordinate structure to the left of the extracted object. As a last step, the verbal head of the first conjunct is stylistically fronted.

The second conjunct in (27b) is clearly larger than a single head: the manner adverb *granlica* 'thoroughly' modifies the second verb *ouerlæset* 'over.read.PTC' but not the first one (also see (2), where the same is true for *vinlegha*). ¹⁸ In (29b), there would thus be VP + VP coordination, and in (29a) V + VP coordination. A priori, neither structure is more likely than the other. Indeed, considering that it is the coordinate structure itself that is under scrutiny here, we need to be careful not to be guided by any presupposed idea that balanced coordination (VP + VP) is somehow more natural than unbalanced (V + VP). ¹⁹

- (29) a. at wi hørt_j hafwa [$_{VP}$ [$_{t_j}$ och [$_{VP}$ granlica ouerlæset]] [the breff oc beuisning som Aszur Niclisson hauer]]
 - b. at wi hørt_j hafwa [[$_{VP}$ t_j t_i] och [$_{VP}$ granlica ouerlæset t_i]]_k [the breff oc beuisning som Aszur Niclisson hauer]_i t_k

¹⁹ Only if constituent-level symmetry between conjuncts is presupposed does the second, larger conjunct indicate an XP+XP coordination (cf. Kayne 1994:61n9).

¹⁷ Thanks to Anna Hannesdóttir, University of Gothenburg, for providing me with this Icelandic example and others. ¹⁸ (2) and (27b) are the only examples of their kind in my sample. Since pronominal SF is much less common than ordinary SF and the combination of SF and coordinate split is unusual on the whole, such a scarcity of examples is hardly surprising. Nevertheless, it is hard to know whether the lack of examples parallel to (2) and (27b), but with single verbs in the second conjunct, is an indication that V+V was not an option, or whether it is merely a coincidence that both (2) and (27b) contain a narrow adverbial modification in the second part of the coordinate structure. I will leave these questions open. For present purposes, it is sufficient that there are initial conjuncts that could be heads.

On the contrary, we get a first indication that (29a) is in fact more likely than (29b) when we consider more SF examples in a coordinate context. As we have seen, the fronted nonfinite verbs in (27) all share an object with the second nonfinite verb. However, nothing visible is stranded in the first conjunct. Looking more closely at the data, we see that such stranding only occurs in Old Swedish when the extracted element belongs to both conjuncts, as in (30a–b). The same restriction holds for Icelandic; see (31a–b).²⁰

- (30) a. the [al höghmäle]_j skulu [t_j wägha ok t_j röna medh skiäl ok sannind] who all high.cases should weigh.INF and try.INF with cause and truth 'who should weigh and try all important cases with cause and truth' (Kstyr:71)
 - b. huadh almoghanom_j må wara [t_j tarf ella t_j skadhi] what people.Def.DAT may be.INF need or harm 'what may be of need or of harm for the people' (Kstyr:32)
- (31) a. þeir sem miki δ_j hafa [borðað t_j og drukkið t_j í Danmörku] they that much have.PRS eaten.PTC and drunk.PTC in Denmark.DAT 'those who have eaten and drunk a lot in Denmark'
 - b. *þeir sem mat_j hafa [borðað t_j og drukkið mjólk í Danmörku] those that food have.prs eaten.prc and drunk.prc milk in Denmark.dat

Unlike the fronted verbs in (27), which could represent the whole first conjunct, the fronted elements in (30a-b) and (31a) are clearly only parts of conjuncts. Why stylistically fronted parts of conjuncts need to be tied to all conjuncts involved is an intriguing question, to which I will return in section 5.4. For now, suffice it to say that this apparent symmetry restriction on conjunct parts speaks strongly against the analysis in (29b). Here, the verb is a conjunct part that is extracted from the first conjunct, but the presence of data such as (30a-b) and (31a) and the absence of data such as (31b) indicate that such extraction is in fact illicit (at least in this sort of context). Still, to simply conclude that (29a) is the winner and that head conjuncts are thus a reality is a bit premature. In fact, to assume that an entire conjunct is extracted, as in (29a), is quite problematic, as I will explain further in the next section.

5 Searching for True Head Conjuncts

In the previous section, I concluded that it appears more likely that the fronted nonfinite verb in (27b) is a fronted head conjunct (see (29a)) than that it is an extracted part of a phrasal conjunct (see (29b)). Judging from what is known about coordinate asymmetries in general, this conclusion is unexpected: extraction of parts of conjuncts has been shown to be a syntactic possibility, whereas whole-conjunct extraction is not attested (section 5.1). However, fronting of part of a

²⁰ In section 5.4, I argue that SF does not extract anything; instead, the shared element is external to the coordinate structure when SF applies.

conjunct, in the cases at hand, causes crucial problems for the phonological component (section 5.2). The important task, then, is to determine the locus of SF: is it syntax or is it phonology (section 5.3)? Arguing for the latter, I single out the head conjunct account (i.e., (29a)) as the winner. Finally, I offer some remarks on the role of coordination in PF (section 5.4).

5.1 Other Instances of Unbalanced Coordination

Here, we will be concerned with two basic types of coordinate asymmetry in Old Swedish: violations of the first part of the Coordinate Structure Constraint (CSC, formulated by Ross (1967); see (32a)), and violations of the across-the-board (ATB) restriction (in the sense of Petzell 2010;²¹ see (32b)).

- (32) a. *CSC*, *part 1*In a coordinate structure, no conjunct may be moved. (Ross 1967:89)
 - b. ATB restriction

nate structure

In a coordinate structure, no element contained in a conjunct may be moved out of that conjunct unless the same element is moved out of all conjuncts. (Petzell 2010:183)

As stated above, (27b) involves SF of a head, which consists of either a whole conjunct or part of a conjunct. The former situation violates the CSC; the latter, the ATB restriction. See (33), which is a repetition of (29), accompanied by a characterization of the nature of each of the asymmetries.

- (33) a. at wi hørt $_j$ hafwa [$_{VP}$ [$_{tj}$ och [$_{VP}$ granlica ouerlæset]] [the breff that we heard.PTC have.PRS and thoroughly over.read.PTC the letters oc beuisning som Aszur Niclisson hauer]] and evidence that Aszur Niclisson has.PRS CSC violation, since the head conjunct [$_{V^0}$ hørt] has been extracted from the coordi
 - b. at wi hørt_j hafwa [[$_{VP}$ t_j t_i] och [$_{VP}$ granlica ouerlæset t_i]]_k [the breff oc beuisning som Aszur Niclisson hauer]_i t_k

ATB violation, since the head $[v^0 \text{ hørt}]$ has been extracted from the VP conjunct in the coordinate structure

In order to fully evaluate the two analyses in (33), we need to know whether the ATB restriction, on the one hand, and the CSC, on the other, could in fact be violated in other contexts. From the

²¹ The ATB restriction is no more than a conflation of the second part of Ross's original CSC, which states that parts of conjuncts cannot move (1967:89), and the so-called ATB exception, adding that such movement is actually possible if movement occurs out of all conjuncts (i.e., across the board), a generalization formulated by Ross later in the same work (1967:97; see also Williams 1977, 1978). Grosu (1973) suggested that the CSC be divided in two: the Conjunct Constraint and the Element Constraint, a terminology that has not really caught on in the linguistic community (see, however, Zhang 2010:30).

coordinate data presented in section 4.3, it seems that SF does not combine with ATB violations. Still, it is only ATB violations that have been attested elsewhere.

Knowledge of coordination in older Scandinavian is quite fragmentary. The only extensive investigation into the matter is my own study of ATB violations in Early Modern Swedish (Petzell 2010, which is based on my dissertation, Magnusson (Petzell) 2007), where I show that coordinate structures could violate the ATB restriction in a variety of ways until the mid-18th century. The oldest texts that I investigate in Petzell 2010 are from the beginning of the 17th century. The Old Swedish data we have been discussing so far are all older than that. There is, however, no reason to believe that the conclusions reached in Petzell 2010, on the whole, would not be valid for earlier stages of the language as well. Preliminary results presented by Falk (2011) indicate that ATB violations were indeed commonplace during the Old Swedish period.

As for CSC violations, no proper investigation of historical Swedish has been made. However, given what is known from comparative studies of coordinate asymmetries, no search for such examples is likely to succeed: true violations of the CSC seem to be universally scarce (if not nonexistent), whereas ATB violations do occur; see Johannessen 1998:234–235 (see also Zhang 2010:23–26).

In sum, there is independent support for ATB violations, but not for CSC violations. Given these findings, the analysis in (33b), where the fronting violates the ATB restriction, would be preferable to that in (33a), where the CSC is violated. In other words, at this point we have no independent support for the tentative conclusion reached in section 4.3 that conjuncts can be heads.

5.2 RNR Demands Prosodic Prominence

Although (33b) won the last battle, the war is far from won. Is (33b) at all tenable? If it involves the same type of object sharing that was discussed in section 3.1, namely RNR, we indeed expect it to comply with the restrictions with which RNR usually complies. However, what is peculiar about the RNR in (33b) is that the first verbal head moves further to the left as a case of SF. As I stressed in section 4.3, no such unilateral extraction of other conjunct-internal elements (objects, adjectives, etc.) ever occurs. Also, as will be evident below, the object trace is left without a proper prosodic licenser when the verb is fronted.

In her comprehensive study of various types of coordinate ellipsis, Hartmann (2000:106) formulates the prosodic requirements of RNR as follows: "a RNR construction always contains a narrow focus on the contrasting elements immediately preceding the targets." A typical RNR example is given in (34a). In the movement-based analysis of RNR, the targets correspond to the two traces created when the shared object moves out of the coordinate structure; see (34b). The contrasting elements are the two verb forms *hated* and *loved*.

```
(34) a. John hated but Lisa loved the president. b. [[\ldots] hated t_j] but [\ldots] loved t_j]]_k [the president]_j t_k
```

The contrast need not entail opposition (as in (34)). RNR may involve elements that stand in a purely additive relation to each other, as with *chopped* and *fried* in (35). This is also the case in

the examples discussed in sections 3.1 and 3.2, where single verbs and first parts of compounds both share a sentence-final argument; see the two elements *criticized* and *insulted* in (36a) (cf. (3a), (4a)) and *neuro* and *bio* in (36b) (cf. (9)).

- (35) a. He chopped and she fried the potatoes.
 - b. $[[\ldots \text{chopped } t_i] \text{ and } [\ldots \text{fried } t_i]]_k$ [the potatoes]_i t_k
- (36) a. [[criticized t_i] and [insulted t_i]]_k his boss_i t_k
 - b. [[neuro t_i] and [bio t_i]]_k chemists_i t_k

What the examples in (34)–(36) have in common is that the targets (i.e., the traces) are all preceded by an element that is prosodically prominent and corresponds to a similar but in some respect contrasting element in a previous or subsequent conjunct. Borrowing the terminology of te Velde (2006:312), we could say that the gaps are licensed by a prosodic feature.

By contrast, in (33b), the first target (t_i) is preceded by an element that lacks phonological features altogether (t_j) , since the verb has been extracted and fronted. Object sharing should not be able to come about in this sort of configuration, because a proper licenser of the object gap is missing. Therefore, (33b) is not an acceptable analysis of (27b). (33a), on the other hand, contains no object gaps that need licensing, since there is only one object that is the complement of the conjoined verbs.

5.3 Stylistic Fronting in PF

How should (27b) be analyzed, then? As we have seen, both alternatives (i.e., (33a-b)) appear to be impossible: (33a) violates the CSC and (33b) contains a prosodically unlicensed object gap. How can this be? I propose that the solution lies in the apparent extrasyntactic nature of SF. Holmberg (2000:469) stresses that this sort of fronting in Icelandic is expletive in nature. Indeed, it is applicable in more or less the same clause types as the expletive pronoun *það* 'it' (Holmberg 2000:467, Thráinsson 2007:375ff.). In addition, it has hardly any semantic effect on the clause (Holmberg 2000:466, Thráinsson 2007:370). Both of these characteristics suggest that the movement in question takes place after Spell-Out. In other words, it appears to be a PF operation. This approach has been implemented by Sigurðsson, who maintains that SF is an effect of what he calls the *Fill the Left Edge* requirement, (2010:184–185), which is a "PF or performance target" (2010:179), different from syntactic movement.

However, as Holmberg notes, the lack of stylistically fronted auxiliaries suggests that there is a semantic side to the matter as well (2000:468). The fact that SF can distinguish between auxiliary and main verbs certainly appears to be problematic for the PF account, as stressed by Egerland (2013). Egerland maintains (drawing on general suggestions made by Erteschik-Shir (2006, 2007)) that it is the assignment of information-structural features (which target only lexical, not functional words) that explains why the auxiliary (a functional word) is not available for SF (2013:72). However, as far as I can understand, Egerland's account is fully compatible with SF being a PF phenomenon. If SF is indeed triggered by a background feature (or rather, an unspecified information-structural feature), as Egerland suggests (2013:69), this feature would be visible

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in PF. If such features were not, there would, for instance, be no proper assignment of stress to elements bearing a focus feature.

A PF account of SF clearly offers a promising way out of our deadlock, since it differentiates between (33a) and (33b). The prosodic requirements of RNR must be relevant in PF. Therefore (33b), where these requirements are not met—that is, there is no contrasting focus before the target—must be rejected. On the other hand, the extraction of the stylistically fronted head in (33a) causes no problems: the coordinate structure is kept syntactically intact and is not split until it reaches PF, since the split is motivated by a PF process (i.e., SF). As a consequence, we have no reason to exclude (33a) on the grounds that it constitutes a CSC violation. The beating about the bush regarding the analysis of (27b) has thus come to an end: it must be analyzed as in (33a), where the first conjunct of the coordinate structure is a head.²²

Now, let us address the empty subject requirement of SF in light of the proposed PF analysis. In section 4.2, I analyzed this requirement as a demand for adjacency between the fronted element and the complementizer/finite verb, largely following Bošković (2001). To account for the fact that pronouns do not block the licensing of SF in Old Swedish, I assumed that cliticization precedes the evaluation of adjacency. If SF is a PF phenomenon, PF would be the locus of all the different steps involved: subject cliticization, the actual fronting, and adjacency evaluation. In other words, PF needs to involve movement, and it also needs to be quite complex in the sense that a certain derivational order can apply. Such a conclusion is fully in line with Sigurðsson's (2010) proposal that PF is larger than traditionally assumed. It is also compatible with recent approaches to PF within Distributed Morphology; see, especially, Kandybowicz's (2008:11–12) proposal of a layered PF, where processes such as morphological fusion (e.g., cliticization) precede phonological mapping operations (under which the adjacency evaluation would fall). Furthermore, SF is not unique in taking place after Spell-Out: according to Agbayani and Golston (2010), PF movement occurred in Classical Greek, creating split constituents that narrow syntax cannot derive.

Still, it is not evident how the adjacency requirement is to be formulated more precisely. In Bošković's version, the head of the phrase to which stylistically fronted elements move is an abstract verbal affix, "which must merge under PF adjacency with a verb (more precisely a finite verb given that stylistic fronting cannot occur in infinitives)" (2001:250). If a subject comes between this affix and the finite verb, there can be no adjacency. In my modified account, I propose a requirement for double adjacency in order to account for blocking effects both between the fronted element and the complementizer (see (24c)) and between the fronted element and the finite verb (see (24d)). As a consequence, the affix account cannot be adopted; instead, the demand for adjacency must be directed, as it were, toward the fronted element itself.

Finally, the adjacency account, in both Bošković's version and mine, presupposes that finiteness can be identified within PF. Exactly how this comes about is not entirely clear. Are finite

²² The split of this coordinate structure is simply derivationally later than coordinate splits of the type shown in (i), from present-day Swedish, where the first of two conjoined subjects is fronted.

⁽i) *Kalle_i har [t_i och Lisa] ätit gröt. Kalle has.prs and Lisa eaten.ptc porridge

This sort of DP-fronting would constitute syntactic movement in Sigurðsson's (2010) sense, which means that it would create a fatal violation of the CSC (since it occurs in syntax).

features indeed visible in this more syntactic Sigurðssonian PF? Or is there something else about the elements at hand that enables PF to single them out? In order to resolve the issue, a more thorough discussion of the nature of PF is clearly needed. I have started such a discussion here, but it will have to be continued elsewhere.

5.4 Head Conjuncts and the Status of the Coordinate Structure in PF

What implications do the findings presented here have for a theory of coordination? In a way, the progression of this article bears a resemblance to losing your keys and then discovering that you had them all along. Although the conjuncts addressed in section 3 could be treated as phrases, the SF story shows that head conjuncts are a syntactic reality after all, in effect ruling out the all-phrasal approach to conjuncts (in, e.g., Kayne 1994 and Johannessen 1998). However, there are necessarily restrictions regarding what heads are eligible for coordination. Otherwise, we would expect all sorts of coordinated clitics to occur, for instance, which is contrary to fact (as the French example (37) shows).

(37) *Jean te et me voit souvent.

Jean you and me sees often
(Kayne 1994:59)

Minimalist approaches to coordination that acknowledge the existence of head conjuncts naturally have to account for this. Zhang (2010) incorporates Chomsky's (1994) bare phrase structure approach into her theory of coordination, making constituent level (head or phrase) irrelevant; instead, all conjuncts are required to be nonprojecting (Zhang 2010:37ff.). Another proposal is presented by te Velde (2006); in his view, it is conjunctions that are nonprojecting (and in that way similar to adverbs, in the spirit of Travis 1988), simply conjoining individually derived structures (heads as well as phrases) into coordinate complexes.²³

We need not go into the details of these two analyses. Both could easily, it seems, incorporate the crucial Old Swedish coordination involving a raised head conjunct and a second, slightly larger conjunct (as in (2) and (27b)). Neither te Velde's nor Zhang's analysis entails the demand for constituent-level symmetry. In other words, the V + VP structures in (33a) can be derived straightforwardly.²⁴ However, both analyses appear to lack some restrictive component that can prevent the system from deriving illicit head coordination (as in (37)), without excluding the head conjuncts that we do want the system to derive.

Here, the conjunction does not head a phrase of its own. Instead, two separate chunks of structure (individually derived) are conjoined by och 'and', which, being a nonprojecting head, is assigned the same label as the first conjunct. This complex but in itself incomplete structure is later merged with the internal argument the breff... 'the letters...' (the common object) and the external argument wi 'we' (the common subject), forming a complete transitive VP.

²³ If projection is dispensed with altogether, as suggested by Chomsky (2013), te Velde's (2006) distinction of defective projecting, as well as Zhang's (2010) nonprojecting projecting, would have to be translated into something like nonlabeling labeling. Their points—namely, that conjunctions are different from other heads (te Velde) and that coordinated heads are different from independent heads (Zhang)—would remain the same, as far as I can understand.

²⁴ For instance, in te Velde's (2006) model, the V+VP structure would look something like (i).

⁽i) [V'] hørt [V'] och [V'] granlica ouerlæset]]] heard.ptc and thoroughly over.read.ptc

Te Velde actually addresses the very example shown in (37). Although derived by the syntactic component, it can still felicitously be blocked because clitics lack the prosodic prominence that, in te Velde's view, all coordinate conjuncts are required to have (2006:116n28). At first, this strategy appears to exclude our SF cases as well: in the syntactic domain, they are complete (see (38a)), but in PF, the coordination is split (see (38b)), leaving the first conjunct as prosodically problematic as the clitic conjuncts in (37); compare (38c).

However, it is not evident what status coordination has in PF. One might, for instance, inquire whether the notion of conjunct is really relevant (as te Velde implies it is). Above, I have argued that coordinate structures must not be split in syntax (CSC violations), but that PF does not care, as it were, about such asymmetries. The reason that PF does not care may be that the coordinate structure is irrelevant in PF, or at least that it is not active in the way it is in syntax. In that case, we can exclude the ungrammatical clitics in (37) without taking the coordinate structure per se into account. A pronominal clitic of the sort occurring in (37) needs a verbal host, and there simply are not enough hosts in (37). (38c) is, by contrast, unproblematic: the first conjunct would contain no phonological features (after SF has applied) and would therefore, naturally, be irrelevant in PF.

Furthermore, if the coordinate structure is deactivated in PF, this may explain the lack of SF of conjunct-internal material. As observed in section 4.3, only elements that are shared by all conjuncts may be stylistically fronted (see (39a), which is a modified version of (30a)). This symmetry restriction is clearly unrelated to the SF. Similar sharing occurs in clauses without any fronting, as can be seen in (39b).

- (39) a. the [al höghmäle]_j skulu [[wägha ok röna] t_j medh skiäl ok sannind] who all high.cases should weigh.inf and try.inf with cause and truth 'who should weigh and try all important cases with cause and truth' (Kstyr:71)
 - b. ath wi hafuom [[vplathit oc andhuardhat] honum wart goozs] that we have.lpl.prs leased.ptc and transmitted.ptc he.dat our estate 'that we have leased and transmitted our estate to him' (SDHK:16673)

In other words, *al höghmäle* 'all high.cases' in (39a) is not extracted from the coordinate structure, but is external to it (just like the objects in (39b)) when SF applies. Consequently, the only part of a coordinate structure that we need to assume is accessible for fronting is the entire first conjunct. As we have seen, such conjunct fronting occurs both in clauses with pronominal subjects (as in (2), (27b)) and in subjectless clauses (as in (27a,c)). The fronting of a shared complement (as in (39a)), however, occurs only in the latter context. Obviously, a complement is always a

phrase, never a head (as shown in (40a), from present-day Swedish). And, as we know, only heads may be fronted in Old Swedish clauses involving pronominal subjects; thus, the lack of complement sharing in such contexts is expected. I illustrate this limitation in (40b) using the same present-day Swedish forms as in (40a) (owing to the obvious lack of negative data).

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(40) a. att han har [[varit och förblivit] [_{AP} glad]]*[_{A^0} glad]] that he has.prs been.ptc and remained.ptc happy b. att han [_{A^0} glad]_j har *[[varit och förblivit] t_j] that he happy has.prs been.ptc and remained.ptc
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On the other hand, fronting of a head within a shared complement is predicted to be possible in clauses with a pronominal subject; given that the complement is outside the coordinate structure, its content should (just like parts of complements in the simple clauses in (21)) be accessible for SF. As shown in (41), this prediction is borne out. This example features a pronominal subject (*iak* 'I') and two coordinated passive verbs that share a PP complement: the complement of P is relativized, but P itself is stylistically fronted.

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(41) Swa var änkte hionalagh höuiskare än thz Op<sub>i</sub> som iak [P<sup>0</sup> aff]<sub>j</sub> [[afladhis so was no marriage nobler than it that I of conceive.PST.PASS ok föddis] [PP t<sub>j</sub> t<sub>i</sub>]] and born.PST.PASS 'Thus, no marriage was nobler than the one that I was conceived and born from' (Birg2:128)
```

To sum up, SF may target an initial conjunct but not part of it, indicating that the more embedded elements of the coordinate structure are inaccessible for movement at this stage of the derivation. However, it is clearly too drastic to conclude that PF has no access whatsoever to parts of conjuncts. As I argue in Petzell 2010, there appears to be purely phonological matching between conjuncts in PF, which suggests that the internal structure of conjuncts is indeed visible in some sense. Also, a prerequisite for prosodic licensing of coordinate gaps in RNR structures of the sort discussed in sections 3.1 and 5.2 is that the conjunct where the gap resides can be reached and reviewed in PF.

6 Summary

The aim of this article has been to determine whether all coordinate conjuncts are phrases or whether heads can be conjuncts. I have argued that for alleged head conjuncts posited in the literature, a phrasal account is equally as good as (in the case of coordinate compounds) or even preferable to (in the case of object sharing) a head conjunct analysis.

To get to the bottom of the question at hand, I have considered Scandinavian stylistic fronting. Such fronting may target phrases, which makes it difficult to fully rule out the possibility that even when a head-like element occurs, it is in fact a phrase containing nothing but a head. However, in Old Swedish (unlike Modern Icelandic, the variety usually invoked in the literature

on SF), there is a context where SF cannot target phrases, namely, clauses with a pronominal subject; here, only head-like elements can be fronted. Since phrases never occur, we are forced to conclude that the head-like elements are indeed heads and not remnant phrases.

Having established that the clauses with pronominal subjects are unambiguous head contexts, I have considered a particular subtype of such cases where the first of two coordinated verbs is fronted. While it is certainly clear that head fronting is going on, it is not clear what the extraction of the verbal head in fact leaves behind: is the fronted verb really a full nonphrasal conjunct, or is it merely part of an elliptic phrasal conjunct? Both possibilities are problematic. I have shown that the latter alternative (phrasal conjunct) is incompatible with the prosodic requirements of coordinate ellipsis; also, it predicts that SF should occur with conjunct-internal elements in general (not only with verbs), which is not the case. The former alternative (head conjunct) instead involves a severe type of coordinate asymmetry, known to be banned from syntax in general. Still, this asymmetry turns out to be irrelevant, since the extraction creating it appears to be extrasyntactic, occurring in PF. Here, however, the violation of prosodic requirements is, naturally, crucial. In sum, the head conjunct analysis is favored.

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