COORDINATION AND WORD ORDER IN THE HISTORY OF SWEDISH

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ABSTRACT

This article deals with the relations between coordination and word order in the history of Swedish. In Present-day Swedish, the finite verb always raises to $C^0$ in main-clause coordination, whereas it always remains in situ (in VP) in subordinate clause coordination. In Older Swedish, either verbal position was possible in both cases. In addition, VS word order was used in contexts where it would be ungrammatical today. Subordinate conjuncts with $V$ in $C^0$, main-clause conjuncts with $V$ in $V^0$, and VS conjuncts are all analysed as parts of coordination, in which only the first conjunct contains a trace after an extracted element; this type of trace asymmetry characterizes a wide range of coordinate structures in Older Swedish. In the modern language, on the other hand, a trace in a first conjunct is always matched with equivalent traces in all subsequent conjuncts (the traces occur across-the-board).
1. INTRODUCTION

In Present-day Swedish, the position of the finite verb in the second conjunct of a coordinate structure depends on whether the coordination occurs within a main clause or a subordinate clause. In the former case, the verb is always in first position, preceding adverbials (cf. *kom i en diskussion med honom* in (1a) below). In the latter case the order between V and Adv is the reverse, i.e. the adverbial precedes the verb (cf. *också var* in (1b)). In Older Swedish, on the other hand, no such constraint was in place: both word orders were possible in both contexts. In other words, in addition to patterns of the type shown in (1a–b), we find V-Adv word order in subordinate clauses and Adv-V order in main clauses; this is illustrated in (2a–b).²

(1) a. Jag var igår hos Olivekrantz och [Vfin *kom*] [Advlp i en diskussion med honom] fram till den slutsatsen

  *I visited Olivekrantz yesterday and came to that conclusion in a discussion with him.*

b. vilka inte bara övade sig i språk utan [Advlp *också*] [Vfin *var*]

  *who didn’t just practice their language skills, but were also very fond of playing music,*

  *singing songs and playing games*
(2)  a. [...] hwilcka icke allenast öfwade sig i Språk uthan

who not just practiced REFL in language but

[Vfin woro] [AdvP och] mächta älskande både till Music,

were also very loving both to music

Sång och Speel […] (Kiöping *1621: 126)³

sing and play

‘who didn’t just practice their language skills, but were also very fond of playing music,
singing songs and playing games’

b. Jag var igår hoos H:r Olivekrantz och [AdvP i discours]

I was yesterday by Mr. O. and in discussion

[Vfin kom] fram med den materien. (Bark *1662: 12)

came PART with that conclusion

‘I visited Mr. Olivekrantz yesterday and came to that conclusion in a discussion (with him).’

Older and Present-day Swedish also exhibit differences concerning conjuncts that, unlike those in
(1)–(2), contain an overt subject. In declarative contexts where Present-day Swedish only accepts
conjunct initial V2 word order (see (3a) below), Older Swedish is more liberal: second conjuncts
may display V2 as in the modern variety, but also V1 (i.e. VS); see (3b).

(3)  a. Det är precis så som käre bror skriver, och [vi har vetat det länge].

it is precisely so as dear brother writes and we have known it for-long
b. Det är aldeles så, som k. Bror skrifver, och \textit{hafva vij det länge vetat].

\textit{it is precisely so as dear brother writes and have we it for-long known}

‘It’s just as my dear brother writes, and we’ve known it for long.’

(Bark *1662: 43)

The differences between Present-day Swedish (PdSw.) and Older Swedish (OSw.) are summarized in table 1 below.

\textbf{Table 1. Conjunct word order in Present-day and Older Swedish}

<table>
<thead>
<tr>
<th>second conjunct</th>
<th>context</th>
<th>word order</th>
</tr>
</thead>
<tbody>
<tr>
<td>lacking a subject</td>
<td>PdSw. m.cl. coo.</td>
<td>*Adv-V (V-Adv oblig.; cf. (1a))</td>
</tr>
<tr>
<td></td>
<td>OSw. m.cl. coo.</td>
<td>OKAdv-V (cf. (2b))</td>
</tr>
<tr>
<td>containing a subject</td>
<td>PdSw. sub. cl. coo.</td>
<td>*V-Adv (Adv-V oblig.; cf. (1b))</td>
</tr>
<tr>
<td></td>
<td>OSw. sub. cl. coo.</td>
<td>OKV-Adv (cf. (2a))</td>
</tr>
<tr>
<td></td>
<td>PdSw. m. cl. (decl.) coo.</td>
<td>*VS (V2 oblig.; cf. (3a))</td>
</tr>
<tr>
<td></td>
<td>OSw. m. cl. (decl.) coo.</td>
<td>OKVS (cf. (3b))</td>
</tr>
</tbody>
</table>

Although word order in the history of Swedish has attracted the interest of several linguists in the past, coordination has seldom been taken into consideration. Previous work on V-Adv word order in a subordinate context and Adv-V word order in a main-clause context, as well as studies of
declarative VS, have focused on the syntax of simple clauses. In the generative literature, all three phenomena have been assumed to be dependent on the presence of agreement morphology on the finite verb: V-Adv word order in simple subordinate clauses is usually analysed as a consequence of V-to-I movement, triggered by agreement (see e.g. Platzack 1988, Falk 1993a and Holmberg & Platzack 1995); Adv-V sequences in main-clause contexts, as in (2b), are treated by Falk (1993b) as structures containing instances of subject pro, structurally licensed and identified by the inflected verb; Platzack (1987) proposes that the finite verb in declaratives can be preceded by an empty position, i.e. that declaratives can exhibit VS word order (cf. (3b)) only if the verb contains agreement morphology.⁴

According to Wessén (1965) and Larsson (1988), the last generation of Swedes that acquired number agreement was born in the beginning of the seventeenth century; person agreement was lost before 1500. The older word order in non-initial conjuncts illustrated in (2a–b) and (3b) above does not seem to be dependent on verbal agreement. If agreement were a relevant factor, we would expect the modern usage to emerge with the first generation having acquired a grammar without agreement. This is, however, not the case; the archaic coordination patterns are still present four or five generations after the final loss of agreement, which is shown in table 2 below.⁵ The second column in the table specifies the ratio between the older subordinate V-Adv-conjuncts (cf. (2a)) and the modern Adv-V conjuncts (cf. (1b)). The third and fourth columns show the frequency per 100 pages of main-clause Adv-V conjuncts (cf. (2b)) and declarative VS conjuncts (cf. (3b)) respectively.⁶
Table 2. Conjunct word order in Older Swedish.

<table>
<thead>
<tr>
<th></th>
<th>subordinate V-Adv/Adv-V ratio</th>
<th>frequency of main-clause Adv-V</th>
<th>frequency of declarative VS</th>
</tr>
</thead>
<tbody>
<tr>
<td>authors born 1611–1724</td>
<td>60/40</td>
<td>8/100 pp.</td>
<td>41/100 pp.</td>
</tr>
<tr>
<td>authors born 1737–1785</td>
<td>21/79</td>
<td>&lt;0.3/100 pp.</td>
<td>1/100 pp.</td>
</tr>
</tbody>
</table>

Apparently, the older V-Adv, Adv-V and VS conjuncts are still present in the language well into the eighteenth century (cf. the second row in the table), long after the last remnants of the verbal agreement system had been lost. In fact, the radical decline of the older patterns (cf. the third row in the table) appears to be an effect of a general change of the principles of coordination. What at first glance looks like a mere word order difference between the two varieties of Swedish can, in other words, be analysed as a difference regarding coordination structure. The nature of this difference is investigated below.

The remainder of this article is dominated by two major sections: one primarily empirical (section 2) and one more theoretical (section 3). Section 2 contains a presentation of a) coordination in general, and b) coordinate asymmetries in particular. It is shown that Older Swedish, unlike the modern language, permits certain types of coordinate asymmetries that constitute violations of the so-called Across-the-Board restriction. It is maintained that this cluster of asymmetries includes the older V-Adv, Adv-V, and VS conjuncts. The relevant
discrepancy between Present-day and Older Swedish can thus be analysed as a difference regarding the ATB restriction.

Section 3 is devoted a) to introducing a split C domain where the V2 position and the inverted position of the finite element are treated as separate and b) to elaborating a feature-based derivation of ATB phenomena which is not construction specific, and which is, we argue, theoretically better motivated than previous analyses of the ATB restriction; section 3 is concluded by an account of the change from Older to Present-day Swedish, accompanied by a note on the possible extra-linguistic triggers for the change.

Finally, the implications of the findings in this study are discussed briefly in section 4.

2. COORDINATION AND EXTRACTION

Following Kayne (1994; who is in turn inspired by Munn 1993), we assume that the conjuncts of a coordinate structure are specifiers or complements in a Coordinate Phrase (CoP) headed by the conjunction. According to Kayne, human languages universally disallow two phrases to mutually c-command each other; phrase structure is, in other words, always antisymmetric. This limitation correctly rules out as ungrammatical the combination of two DPs on the same hierarchical level, which is illustrated in (4a–b) below. With a conjunctional head separating the two DPs as in (5a), on the other hand, the two phrases no longer c-command each other; the outcome is thus grammatical (5b).9

(4) a. [XP [DP Kalle] [DP Lisa]]
As illustrated by Johannessen (1998), there are a number of factors indicating that conjunctions are indeed heads within a distinct phrase (CoP); for example, they are elements that subcategorize for other elements, a characteristic quality of heads (pp. 74–96). She also demonstrates that conjunctions bear more resemblance to functional heads (e.g. temporal affixes) than lexical ones (e.g. verbal heads) – for instance, they belong to a closed lexical class and lack ‘descriptive content’ – thereby concluding that CoP must be a functional phrase (pp. 96–107).

2.1. The Coordinate Structure Constraint and the Across-the-Board exception

Since Ross (1967), it has been well known that movement in a coordinate structure is restricted in certain ways. Ross formulated these restrictions as the Coordinate Structure Constraint (CSC), in (6).
(6) CSC: In a coordinate structure, no conjunct may be moved, nor may any
element contained in a conjunct be moved out of that conjunct. (Ross 1967: 89)

Let us consider the example in (7a) below; here, the subject constitutes a coordinate structure
(CoP) that contains two DP conjuncts (*Kalle, Ola*). Just like simple subjects, this complex subject
can be raised to the highest specifier position in the C domain; see (7b). However, if only one of
the two conjuncts moves there, the first part of the CSC (‘no conjunct may be moved’) is
violated. Consequently, the example in (7c), where the first DP, *Kalle*, has moved leaving the
second DP, *Ola*, behind, is ungrammatical.

(7) a. **Idag har \([\text{CoP} [\text{DP Kalle}][\text{Coo och}][\text{DP Ola}]]\) ätit mat i bamba.**

   *today have Kalle and Ola eaten food in canteen*

   ‘Today, Kalle and Ola have eaten food in the canteen.’

b. **[\text{CoP} [\text{DP Kalle}][\text{Coo och}][\text{DP Ola}]], har t_i ätit mat i bamba idag.**

   *Kalle and Ola have eaten food in canteen today*

   ‘Kalle and Ola have eaten food in the canteen today.’

c. ***[\text{DP Kalle}], har [\text{CoP} t_i [\text{Coo och}][\text{DP Ola}]] ätit mat i bamba idag.**

   *Kalle has/have and Ola eaten food in canteen today*

The CSC blocks not only the separation of conjuncts, as in (7c), but also movement out of a
conjunct, as in (8a) below. Here, the relativized constituent (Op) has moved from its complement
position within the first AP conjunct to the highest specifier position, thus violating the second
part of the CSC (‘nor may any element contained in a conjunct be moved out of that conjunct’).

If, on the other hand, the complement of the preposition på, ‘on’, is not relativized (i.e. does not move), the coordinate structure fully complies with the CSC; see (8b).

(8) a. Jag träffade din kompis Lisa

*I met your friend Lisa

*Opå som Ivan hade varit [AP arg på t] och

that Ivan had been angry on and

[AP dum mot Kalles syster]

mean against Kalle’s sister

b. Jag träffade din kompis Lisa som sade

*I met your friend Lisa that said

att Ivan hade varit [AP arg på Pelle] och [AP dum mot Kalles syster]

that Ivan had been angry on Pelle and mean against Kalle’s sister

‘I met your friend Lisa, who said that Ivan had been angry with Pelle and mean to Kalle’s sister.’

The ban on extraction of conjunct-internal elements is not a general one. If both conjuncts contain traces of an initial constituent, the coordination is perfectly grammatical; see (9).
This kind of symmetrical movement is usually labelled ‘movement across-the-board’ since Ross (1967: 97; cf. also Williams 1977, 1978). Consequently, the addition to the CSC that must be formulated to prevent examples like (9) from being critical counter-examples is typically called ‘the Across-The-Board-Exception’ (ATBE), quoted below from Johannessen (1998).10

(10) ATBE: ... unless the same element is moved out of all conjuncts. (Johannessen 1998: 215)

The structure in (8a), where Op moves out of one of the two conjuncts (i.e. unilateral extraction from the CoP), thus constitutes a violation of the second part of the CSC in (6) since it is not covered by the ATBE in (10), whereas the structure in (9) does not, since movement occurs symmetrically. This difference is illustrated in (11):

(11) a. XP₁[ti] & [ti]

no violation of the second part of the CSC (given the ATBE) (cf. (9))
b. \[ \text{XP}_i [t_i] \& [ ] \]

violation of the second part of the CSC (since unilateral extraction is not covered by the ATBE) (cf. (8a))

The first part of the CSC will not be discussed any further in this article; what concerns us here is the second part of the CSC and the ATBE. For ease of reference, the combination of the latter two can be reformulated as a single restriction; see (12) below. We will simply call it the ATB restriction.

\[
\begin{align*}
\text{(12) The ATB restriction (= second part of the CSC + the ATBE): In a coordinate structure, no element contained in a conjunct may be moved out of that conjunct unless the same element is moved out of all conjuncts.}
\end{align*}
\]

Coordinate structures that do not comply with the ATB restriction (e.g. (8a)) will be referred to as ATB violations.

2.2. ATB violations

Violations against the ATB restriction that occur in Present-day Swedish are of two different kinds. Either the context in which the violation occurs is semantically highly restricted, or there is no real violation. The latter kind includes certain coordinate structures that contain pronouns instead of traces, just as coordinate structures often do in e.g. Hebrew. According to Sells (1984), Hebrew permits second conjuncts without a trace of an extracted element even though the first
conjunct contains such a trace; see (13a) below. In order for the coordination to work, however, there must be a pronoun in the second conjunct that is co-referential with the extracted element (oto ‘him’). In fact, such a pronoun may also occur in simple clauses, in (13b), indicating that we are not dealing with a phenomenon that is specific to coordination. What seems to be the case is that the pronoun is really a trace with phonological features, i.e. there is no real trace asymmetry between the conjuncts in (13a); such pronouns are commonly referred to as resumptive or, as Sells (1984:16) puts it, ‘Operator bound’. In Present-day Swedish, resumptive pronouns are inserted in similar contexts only if a trace would constitute a violation of the so-called that-trace filter (see Chomsky & Lasnik 1977); cf. example (13c) from Engdahl (1985: 8). Just as in Hebrew, resumptive pronouns also occur in simple clauses (see (13d)).

(13) a. ha ʔiš Opj še  Rina [roca tj] ve

    the man that R loves and

    [ohevet otoj yoter mikulam] (Sells 1984: 78)

    wants him more-than anyone

    ‘the man Rina wants and loves more than anyone’

b. ha ʔiš Opj še  pagašti otoj (ibid.)

    the man that met-I him

    ‘the man I met’
c. Det finns ord som jag ofta träffar på men inte minns hur de stavas

‘There are words that I often meet but not remember how they are spelt.’

d. Det finns ord som jag inte minns hur de stavas

‘There are words that I not remember how they are spelt.’

Moreover, ATB violations occur in coordinate structures where the connection between the conjuncts is particularly close. Some of these structures represent pseudo-coordinations of the type ‘GO+DO something’; see (14) below, where there is a gap corresponding to the topicalized element only after the second verb. Formally, we are dealing with coordination, but semantically there is only one event involved. Apparently, this mono-eventuality makes it possible to circumvent the formal demand for parallel extraction gaps.

(14) Här är buteljen som jag gick till och köpte

‘Here is the bottle that I went to and bought.’

There are also ATB violations in coordination that do not follow the ‘GO+DO something’ pattern but still resemble pseudo-coordination insofar as the conjuncts are intimately connected; first, consider the English examples in (15a–b) from Lakoff (1986). In (15a) the isolated gap is in the second part of the coordination just as in the examples in (13), while in (15b) the gap is associated with the first verb. Johannessen (1998) notes that the relationship between the
conjuncts in examples like (15) is one of consequence: a consequence of the eating is the (not) getting. To claim, as is implied by Johannessen, that the presence of such a relationship is a prerequisite for ATB violation is, however, hardly motivated. It would be more accurate to characterize the restriction as a requirement for mono-eventuality within the coordinate structure, since such a characterization would explain the ATB violation both in examples like (15) and examples like (14), while a requirement for consequence would not. Apparently the ‘eating of herbs’ and the ‘getting cancer’ must be interpreted as the beginning and end of one single event (cf. the single event GO+BUY in (14)), but it is hardly justified to maintain that the buying in (14) is a consequence of the going.

(15)  a. [What kind of cancer]$_j$ can you [eat herbs] and [not get tj]?

       b. [What kind of herbs]$_j$ can you [eat tj] and [not get cancer]?

The fact that consequence and mono-eventuality indeed often go together as in (15) is illustrated by the Present-day Swedish examples in (16a–b), where the relativized object corresponds to a trace in the first but not the second conjunct. This ATB violation is, as we can see, only licit if the second conjunct contains an adverbial signalling consequence; (16b) containing därmed ‘thereby’, is thus acceptable, but (16a), lacking därmed, is not.


       we saw a nude-dog that L petted and

       [gjorde bort sig totally]

       made PART REFL totally
b. Vi såg en nakenhund Opj som Lisa [klappade tj] och [därmed gjorde bort sig totalt]

‘We saw a nude (crested) dog that Lisa petted thereby making a complete fool of herself.’

Without the adverbial, the content of the second conjunct is perceived as something separate from ‘petting of the dog’; with the adverbial present, on the other hand, ‘Lisa making a fool of herself’ cannot be interpreted as an independent event, but only as a direct consequence of and thereby, in a way, a part of ‘petting the dog’ in the first conjunct.11

2.2.1. ATB violations in Older Swedish

In Older Swedish ATB violations are more widespread than in the modern language, where they are rather marginal. In many cases, Older Swedish coordinate structures certainly obey the ATB restriction just as coordinate structures in Present-day Swedish do (see (17) below), but coordinations involving extraction from the first conjunct only are also well attested; see (18)–(19). In (18) the conjuncts share the same subject but are asymmetrical with respect to the topicalized object. In (19) neither the subject nor the topicalized phrase is shared by the conjuncts. The only thing that signals that the second conjunct is indeed part of the same subordinate structure as the first conjunct is – in (19b–c) – the sharing of the finite verb, and – in (19a) – the post-adverbial position of the finite verb that typically signals subordination;12 note that E (which occurs in (18a’), (19b) and (19c)) represents an empty category that – unlike traces
– is always co-referent with an overt element (or more accurately with a head of a chain) within the coordinate structure.

ATB gaps as in Present-day Swedish

(17)  a. hvadh gudh vil at iagh skal lida och utstå här i wärden (Horn *1629: 10)

*what god wants that I shall suffer and endure here in world-the*

‘What God wants me to suffer and endure in the world.’

a’. hvadhj gudh vil at iagh skal [VP lida tj] och [VP utstå tj här i wärden]

ATB violation: same subject – VP coordination

(18)  a. […] thet iag inte wile höra af vtan fölga honom

*which I not wanted hear PART but follow him*

hwart thet bar på. (Horn *1629:92)

*where it lead on*

‘which I didn’t want to obey; instead, I wanted to follow him wherever that might lead’

a’. thetj iagi [VP t, wile, höra af tj] vtan

[VP t, E, fölga honom hwart thet bar på]
b. Och altså kommer jagh först och främst at

and thus come I first and foremost to

ödmjukast betacka min hjertans Syster för

most-humbly thank my heart’s sister for

den oföränderliga nåden (som) Mon Coeur alstedigt

the unchanging grace that Mon Coeur always

bibehåller för migh och dher till medh altidh

keeps for me and there to with always

behugnar migh medh dhess aldrakiäaste brefv. (Karl XII *1682: 20)

pleases me with its all-dearest letters

‘First and foremost, I will thus most humbly thank my dear sister for the constant grace of hers that
she lets me be in; in addition, she always pleases me with her dearest letters.’

b’. Op j (som) [Mon Coeur], [vp alstedigt t, behållar t, för migh] och
[vp dher till medh altidh t, behugnar migh medh dhess aldrakiäaste brefv]
ATB violation: different subject – IP coordination

(19) a. [...] rekommendation till H:K: M: tt att

  recommendation to His Royal Majesty to

sökia någhon frihete hwilkett däm bleff

search some freedom which them became

tillsaghd t och dee till tacksamhet läffwade

to-said and they as gratitude promised

migh een Ohm spansk wijn (Rosenhane *1611: 53)

me one barrel Spanish wine

‘recommendation to His Royal Majesty to request some freedom, which was told to them, who as a token of gratitude promised me a barrel of Spanish wine.’

a’. hwilkett, [IP t; däm bleff tillsaghd] och

[IP dee till tacksamhet läffwade migh een Ohm spansk wijn]

b. Tillförende hafwer ther ochså warit een Fyrfota,

  before has there also been a quadruped

hwileken tå war död och Huden sedan upfyllter

which then was dead and skin-the later up-filled

med Boomull (Kiöping *1621: 85)

with cotton

‘Before, there has been a quadruped there, which was now dead; afterwards its skin had been filled with cotton.’
b’. hwilken tå warv död och
    [IP Huden sedan E upfyllter med Boomull]

c. […] en syster, som jag hjerteligen älskade och
    a sister that I dearly loved and
    hon mig tilbaka. (Rålamb *1716: 17)
    she me back
    ‘a sister that I loved dearly, and she loved me back’

c’. Opj som [IP jag hjerteligen älskade, tj] och
    [IP hon E, mig tilbaka]

Although ATB violations are marginally possible in Present-day Swedish, the difference between the modern language and Older Swedish is striking; all the coordinate structures in (18)–(19) would be totally ungrammatical today. For ATB violations to be acceptable in the modern language, they must, as was pointed out above, occur in a coordinate structure where the conjuncts express components of the same event. Such a demand is absent in Older Swedish. The conjuncts lacking an ATB gap clearly express an event of their own. This is emphasized in (18a) by the fact that the content of the second conjunct contrasts with the content of the first conjunct, and in (18b) by the adverbial ther till medh ‘in addition’ indicating that something new and separate is introduced in the second conjunct.

The examples in (19) illustrate the relative independence of the contents of the second conjunct even more clearly. Here, the second conjunct introduces a subject, the reference of which is identical with (19a: däm-de; 19c: Op-hon) or part of (19b: Huden = ‘the skin of hwilken’) the reference of a participant in the first conjunct. For instance, the sister in (19c) is
the relativized object in conjunct 1 but the subject in conjunct 2. Obviously, there is a need for 
two separate events if the sister is to play two different parts.

None of the ATB violations retrieved from the corpus of Older Swedish involve unilateral 
extraction from non-initial conjuncts. In section 3, we argue that this distributional gap has to do 
with the unique status of the first conjunct being the only part of the coordinate structure that is 
accessible for movement on a clausal level. There are, however, examples that contain 
something that at first glance seems to be resumptive pronouns; see (20) below, where the 
relevant pronouns are in boldface.

(20) […] hvilka de ristat up t j med knifvar, och

   which they cut up with knives and

sedan slagit färg deri, och lätit dem så sedan

   then poured colour there-in and let them so then

gro ihop. (Salvius *1706: 2)

grow together

‘which they had cut open with knives; then, they had poured paint into them, and then they 
had let them grow together.’

Unlike Hebrew, which also permits non-initial conjuncts containing pronouns instead of gaps (cf. 
(13a)), Older Swedish does not permit simple clauses with the same type of pronoun (cf. (13b)). 
Since true ATB violations are indeed a prominent feature of Older Swedish, it seems reasonable 
to assume that the pronouns in (20) are really ordinary (i.e. non-resumptive) pronouns, and that 
the coordinate structure constitutes an ATB violation just as the examples in (18)–(19). If we, on
the other hand, treat the pronouns in (20) as resumptive, we would falsely predict the occurrence of simple clauses displaying pronouns instead of gaps.

Coordination similar to the one in (20) was apparently also possible in Early Modern English, as illustrated by Roberts (1999); see (21) with the relevant pronoun in boldface.

(21) I often got Honey out of hollow Trees, which, I mingled it with water, or eat it with my Bread (Swift, Bk. 4, Ch. 10: 283, from Roberts 1999: 326)

Whether this example is of the Older Swedish type, i.e. a straightforward violation of the ATB restriction, or rather like the Hebrew examples is hard to say at this point; further studies on the coordination patterns of earlier stages of English are needed.

2.2.2. Adv-V, V-Adv, and VS conjuncts as ATB violations

As mentioned in the introduction, Adv-V conjuncts in main-clause coordination have been analysed in the generative literature as CP structures with a postverbal subject gap (Falk 1993b; cf. also Magnusson 2003); see (22a) (= (2b)) and the CP analysis in (22b).
Such an analysis is problematic in several respects. If there really is a subject gap after the finite verb in C\(^o\), i.e. in spec-IP, one would expect subject gaps to occur in all types of clause where the subject is in that position, e.g. subordinate clauses and questions. However, spec-IP gaps in non-declarative contexts appear to have become obsolete as early as the fourteenth century (Håkansson 2008), which is approximately 400 years before the loss of main-clause Adv-V conjuncts.

Moreover, a CP analysis would falsely predict that it would be possible to use subject-less conjuncts introduced by other types of preverbal phrase that can reside in spec-CP, e.g. objects and predicative adjectives. However, adverbials are the only type of phrase that precedes the verb in these contexts. In fact, some examples even contain more than one adverbial; see (23a) below (cf. also [\[AdvP dher till medh\] \[AdvP altidh\] behugnar in (18b) above). Since multiple adverbials are otherwise associated with adjunct positions in the left periphery of VP (see the simple clause in (23b)), we can assume that the Adv-V conjuncts actually represent VP structures containing conjoined adverbials; see the analyses of (22a) and (23a) in (23c–d).
(23) a. (jag) fant altid kostnaden öfwerstiga inkomsten

I found always cost-the surpass income-the
til några 1000 Procent, och [Advp således] [Advp på

to some 1000 percent and consequently on
intet wis] kan få namn af Oeconomie,

no way can get name of economist
utan snarare […] (Rålamb *1716: 92)

but rather
‘I always found the cost to be higher than the income up to several thousand percent; consequently, I can by no means deserve to be named an economist, but rather …’

b. att kaffe [VP [Advp förmodligen] [Advp ännu]

that coffee probably still
[Advp till trots af lagen och till båtnad för vissa
to spite of law-the and to benefit for some
personers kassor] ti, drickes af många i
persons’ assets is-drunk by many in
hufvudstaden] (Wahlström *1776: 14)

capital-the
‘that many people in the capital probably still drink coffee in spite of the law and to the benefit of the assets of some’

c. jag, ... fantv [VP [Advp altid] t, t, kostnaderna öfwerstiga inkomsten ...] och

[VP [Advp således] [Advp på intet wis] t, kan få namn af Oeconomie]
Unlike the first VP conjuncts in (23c–d), which contain traces of the V2 verb in C°, the second VP conjuncts, with Adv-V order, have the finite verb in situ. The two pairs of VP conjuncts certainly share the subject, i.e. contain traces of jag and Jag respectively, but with respect to verbal traces the coordination violates the ATB restriction. The ATB violations discussed above all involve unilateral movement of phrases, as do the ATB violations that are considered in the literature on coordination. Given that heads, e.g. finite verbs, are moveable elements as well, they should be of equal relevance in this context as phrases. Main clause Adv-V conjuncts can thus be considered to be absent in the modern language for the same structural reason as second conjuncts in coordination with asymmetrical phrasal movement of the type discussed in 2.2.1; both are part of coordinate structures that involve movement in violation of the ATB restriction, movement of heads in the former case, movement of phrases in the latter.

The ATB difference can also explain the distribution of second-conjunct VS word order. In Present-day Swedish, VS conjuncts are in fact possible in declarative clauses, but only if they share an initial constituent with the first conjunct. This demand is met in (24a); the initial phrase sådan makt ‘such influence’ is the object of both har ‘has’ and ha ‘have’, i.e. correspond to traces in both the initial and non-intitial conjunct. The typical VS conjunct in Older Swedish does not, however, share any constituent with the previous conjunct; see (24b). In this example, the initial phrase The ‘they’ is the subject of hafwa ‘have’ but has no structural connection to the VS
conjunct. (cf. also (3b)). Apparently, the unilateral movement of *The* out of the first conjunct constitutes an ATB violation.\(^{14}\)

(24) a. Sådan makt har inte denna ordlista och *är den*  

    *such influence has not this dictionary and is it*  

    inte avsedd att ha. (SAOL 13th edn, preface)\(^{15}\)  

    *not intended to have*  

    ‘This dictionary does not have, and is not intended to have, that kind of influence.’

a’. Sådan makt\(_{t_j}\) har inte denna ordlista \(_{t_j}\) och  

\(_{t_j}\) *är den inte avsedd att ha \(_{t_j}\)*

b. The hafwa mycket swåra Mussqveter, och *slår theras Hane* öfwer ått

    *they have very heavy muskets and strikes their cock over towards*  

    Mynningen, och icke till Anslaget. (Kiöping *1621: 59)*  

    *muzzle-the and not to lock-the*  

    ‘They have very heavy muskets; the cock on these is released towards the barrel and not the lock.’

b’. The\(_{t}\) hafwa \(_{t}\) mycket swåra Mussqveter och

\(_{t}\) *slår theras Hane öfwer ått Mynningen och icke till Anslaget*

As for V-Adv conjuncts, at first glance there does not seem to be any ATB violation involved at all; cf. (25a) (= (2a)) below and the analysis thereof in (25b). Both conjuncts contain traces of the
relativized subject (hwileka), and nothing else appears to have been extracted out of the coordinate structure.

(25) a. […] hwileka icke allenast öfwade sig i Språk uthan

  who not just practiced REFL in language but

  woro och mächta älskande både till Music,

  were also very loving both to music

  Sång och Speel […]

  sing and play

  ‘who didn’t just practice their language skills, but were also very fond of playing music, singing songs and playing games’

b. hwileka_[C' (som) ti icke allenast öfwade sig i Språk] uthan

  [C' woro ti och mächta älskande både till Music Sång och Speel]

However, as we argue in section 3, there is reason to assume two positions for finite heads within the C domain. Adopting this split CP analysis, both VS and V-Adv coordination must be treated as structures with asymmetrical head movement in violation of the ATB restriction just as Adv-V coordination. All three types would, in other words, belong to the same large cluster of coordinate structures that are ungrammatical in Present-day but grammatical in Older Swedish due to the different status of the ATB restriction in the two varieties.
3. A SPLIT C DOMAIN AND A FEATURE-BASED ACCOUNT OF ATB PHENOMENA

Following Chomsky (2001) and Pesetsky & Torrego (2001), we can assume that the syntactic system is driven by the elimination of uninterpretable features. An uninterpretable feature ([uF]) is always eliminated by an interpretable counterpart ([F]); either [F] moves to a position structurally local to [uF] – this is the case if [uF] is marked with an EPP feature (see (26a)) – or a link is established from a distance between [uF] and a lower position containing [F] ((26b)). In the remainder of the article, relevant features are normally not included in the analyses of data but instead discussed in the text.

(26) a. \[[F], [\text{[uF]_EPP}}, t_i\]

```
\[\]
```

b. \[[\text{[uF]}], [F]\]

```
\[\]
```

Section 3.1 introduces a split C domain where the V2 position and the inverted position of the finite element are treated as two separate heads containing different features; movement from the lower to the higher of these heads is, we argue, a structural prerequisite for fronting of non-subjects to the highest specifier position in the clause. In 3.2, we present a feature-based account of coordination symmetry in general and ATB phenomena in particular. Conjunct symmetry with respect to extraction gaps is assumed to be the effect of the selectional properties of the head of...
the coordinate structure (&) rather than the outcome of some ATB principle; in light of the new proposal, the coordination data from Older and Present-day Swedish are revisited in section 3.3. Finally, in section 3.4, there is a brief discussion of how the change from Older to Present-day Swedish might have come about, accompanied by a note on the possible extra-linguistic triggers for the change.

3.1. The C domain

The C domain is the part of the clause that always has a role to play in the coordinate structures under investigation. The C analysis argued for below is to a large extent inspired by the analysis argued for by Stroh-Wollin (2002); she has in turn developed the ideas presented in Branigan (1996), Rizzi (1997) and Platzack (1998), but unlike the latter she maintains that main clauses and subordinate clauses are structurally different, i.e. represent different phrase types. In the present analysis, the spirit of Stroh-Wollin’s analysis is maintained, but the difference between independent utterances and subordinate clauses is reduced to a question of feature distribution.16

All finite clauses are treated as structurally identical maximal projections labeled TypePs. Type0 hosts uninterpretable features associated with clausal type ([utype]EPP) and structural status ([ustatus]EPP). The interpretable features that are capable of eliminating [utype]EPP are of several kinds ([dec] gives a declarative reading, [rel] a relative reading, [excl] an exclamative reading etc.), but the ones that are capable of eliminating [ustatus]EPP are but two: [comp], which makes the clause subordinate, and [force], which makes it independent. The complement of Type0, FinP, also hosts two uninterpretable features, one attracting the finite head (the verb or the
complementizer) ([ufin]EPP) (cf. Holmberg & Platzack 1989, 1995) and one attracting the subject ([ufinsubj]EPP) (cf. Branigan 1996). The features of the C domain in Present-day and Older Swedish respectively are presented in (27):

(27)  a. Present-day Swedish  

<table>
<thead>
<tr>
<th>Structure</th>
<th>Feature</th>
<th>Feature</th>
<th>Feature</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>TypeP</td>
<td>[u\text{type}]EPP</td>
<td>[u\text{status}]EPP</td>
<td>[u\text{insubj}]EPP</td>
<td>[u\text{fin}]EPP</td>
</tr>
<tr>
<td>FinP</td>
<td>EPP</td>
<td>EPP</td>
<td>EPP</td>
<td>EPP</td>
</tr>
</tbody>
</table>

b. Older Swedish  

<table>
<thead>
<tr>
<th>Structure</th>
<th>Feature</th>
<th>Feature</th>
<th>Feature</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>TypeP</td>
<td>[u\text{type}]EPP</td>
<td>[u\text{status}]EPP</td>
<td>[u\text{insubj}]EPP</td>
<td>[u\text{fin}]EPP</td>
</tr>
<tr>
<td>FinP</td>
<td>EPP</td>
<td>EPP</td>
<td>EPP</td>
<td>EPP</td>
</tr>
</tbody>
</table>

As we can see, the C structure is identical in the two varieties except for one detail: in Older Swedish, [ufinsubj] is not marked with the EPP feature present in the modern language. Before motivating this difference, the basics of the analysis are illustrated in (28); the first parts of the subordinate and main clauses in (1)–(2) serve as examples.

(28)  a. Subordinate clause (Pd. Sw.)

[TypeP vilkai (som er) [FinP ti ts [IP ti inte bara övade sig i språk]]]

who that not only practiced REFL in language

a’. Main clause (Pd. Sw.)

[TypeP Jagi varv [FinP ti tv [IP ti igår tv hos Olivekrantz]]]

I was yesterday by O.
b. Subordinate clause (Older Sw.)

[TypeP hvilcka; (som) [FinP t₁ t₆ [IP t₁ icke allenast öfvade

who that not only practiced

sig i Språk]]]

b'. Main clause (Older Sw.)

[TypeP Jag varv [FinP t₁ t₇ [IP t₁ igår t₇ hoos H:r Olivekrantz]]]

I was yesterday by Mr. O.

In both varieties the main-clause verb var raises from V₀ to Fin⁰, across the adverbial igår, to eliminate [ufin]EPP. From there, it moves to Type⁰, where its force feature eliminates [ustatus]EPP establishing the clause as an independent speech act. What type of speech act the clause expresses is determined by the feature that moves to spec-TypeP to eliminate [utype]EPP. Here, the subject (jag in both the older and the modern example), marked with a declarative feature ([dec]), is responsible for this elimination. In a similar fashion, an initial phrase in the subordinate clauses determines clause type: both the modern vilka and the older hvilcka are relative pronouns, marked with the feature [rel], which eliminates [utype]EPP. The other uninterpretable feature, [ustatus]EPP, is eliminated by the complementizer (in these cases an unrealized som), whose comp-feature establishes the clause as subordinate.¹⁷ Since the complementizer is base-generated in Fin⁰, where its fin-feature eliminates [ufin]EPP, the finite verb (övade/öfvade) must remain in VP to the left of the adverbials (inte bara/icke allenast).

In the examples in (28), the difference concerning the EPP feature on [ufinsubj] is not visible, not even structurally, since the subject is topicalized. In clauses with inversion, on the other hand,
S is lower in Older Swedish (spec-IP) than in Present-day Swedish (spec-FinP), as illustrated in (29).

(29)  

a. \[[\text{TypeP} \text{ Hans blod haf\textsubscript{r}v}] [\text{FinP t\textsubscript{v}}] [\text{IP jag upp\textsubscript{\text{a}} Jawa}

\text{his blood have I upon Jawa}

\text{sedt s\textsubscript{\text{a}}ljas f\textsubscript{\text{o}}r een Rijkzdal}]] (Ki\text{"o}ping *1621: 11)

\text{seen be-sold for one Rijkdal}

‘I have seen his blood being sold on Jawa for one Rijkdal.’

b. Pd. Sw.: \[[\text{TypeP} \text{ hans blod harv}] [\text{FinP jag t\textsubscript{v}}] ...

\text{his blood have I}

The reasons for assuming the [ufinsubj] difference between Present-day and Older Swedish are twofold. First, Older Swedish permits second conjuncts with S-Adv-V word order in main-clause coordination; see the examples in (30a–b). As argued for in 2.2.2, a preverbal adverbial (Adv-V) indicates that the verb remains in situ, i.e. in VP. Since definite subjects (as the subjects in the S-Adv-V sequences in (30a–b)) are never realized inside VP, the S-Adv-V subjects must be in a higher subject position: spec-IP or spec-FinP. If they are assumed to be in spec-FinP as in Present-day Swedish, we are unable to account for the absence of V2; the uninterpretable verbal feature in Fin° ([ufin]\textsubscript{EPP}) cannot be left uneliminated; see the structures in (30c–d). Overt verbal movement over A to I° is, on the other hand, not expected to occur at this relatively late stage of Swedish (cf. Falk 1993a). Consequently, only if the S-Adv-V subjects are assumed to reside in spec-IP is it possible to predict the post-adverbial position of the finite verb; see (30c’–d’).\textsuperscript{18}
(30) a. Och ehuruwä Wattnet uthi Persiska Inloppet är

and although water-the in Persian entrance is

mycket salt, hafwa the lijkwäl een mycket frisk

very salty have they still a very healthy

Syn, och theras Ögon aldrig förderfwas […] (Kiöping *1621: 79)

eyesight and their Eyes never are-ruined

‘Although the water in the Persian entrance is very salty, they still have very good eyesight; their eyes are never ruined.’

b. dänne dagh hadhe iagh låthit uthskriffwa Häradz

this day had I let summon hundred’s

Tingh, män Laghläsaren emoth min wethskap

court but law-reader-the against my knowing

hadhe uppskutit till dän 16 […] (Rosenhane *1611: 37)

hade postponed-it to the 16th

‘On this day, I had summoned the court of the hundred; but the judge had – without me knowing – postponed it until the 16th.’

c. [TypeP [ehuruwä Wattnet uthi Persiska Inloppet är mycket salt] hafwa ] [FinP

the t, lijkwäl een mycket frisk Syn] och

*[FinP theras Ögon [FinP [ufin]EPP] aldrig förderfwas]]

d. [TypeP [dänne dagh] hadhe, yan [FinP iagh t, låthit uthskriffwa Häradz Tingh] män

*[FinP Laghläsaren [FinP [ufin]EPP] emoth min wethskap hadhe uppskutit till
dän 16]]
c’. [TypeP [ehuruwäl Watnet uthi Persiska lnloppet är mycket salt] hafwaₐ, [IP the
    tₐ lijkwäl een mycket frisk Syn] och
    [IP theras Ögon [to e] aldrig förderfwas]]

d’. [TypeP [dänne dagh] hadheₐ, [IP iagh tₐ låthit uthskriffwa Häradz Tingh] män
    [IP Laghläsaren [to e] emoth min wethskap hadhe uppskutit
till dän 16]]

Second, it was possible in Older Swedish to use second conjuncts with VS word order not only in
a main-clause context, but also inside a subordinate clause; see (31a). With the subject in spec-
FinP as in Present-day Swedish, the initial finite verb would have to reside in Typeₐ, which
would mean that we are dealing with coordination on a TypeP level (cf. (31b)). If the subject
resides in spec-IP, on the other hand, we can assume the example to involve FinP+FinP
coordination; cf. (31c).

(31) a. Blef han för den skul så ondh på henne och sade,
    became he for that sake so mad on her and said
  at hon nu har någ råt om migh och skule hon nu
    that she now has enough cared about me and should she now
inte längre inbila sig något herewäle öfwer mig. (Horn *1629: 80)
    not longer imagine REFL any dominance over me

‘Therefore, I was very angry with her, and he said that she has now cared for me enough
and she shouldn’t imagine that she could dominate me any longer.’
b. \([\text{TypeP at hon nu har någ råt om migh}] \text{ och} \]
\([\text{TypeP skule hon nu inte längre inbila sig något herewäle öfwer mig}]\]

c. \([\text{TypeP at, [FinP t, hon nu har någ råt om migh] och} \]
\([\text{FinP skule hon nu inte längre inbila sig något herewäle öfwer mig}]\]

The most critical problem with the TypeP analysis in (31b) is that it involves coordination of two TypePs with different structural status. The status of conjunct 1 is subordinate, since it is headed by the feature [comp] (associated with the complementizer), but the status of conjunct 2 is independent, since it is headed by [force] (associated with the finite verb). Apart from the fact that the VS sequence in this particular context must be interpreted as being part of the complement of the verb *säga* ‘say’, which means that it is indeed subordinate, we lack independent support that Older Swedish, unlike the modern counterpart, in fact allowed for TypePs with a different structural status (main clauses and subordinate clauses) to be coordinated. None of these difficulties arise if the conjuncts in (31a) are treated as FinPs as in (31c), which is only possible if the subject in Older Swedish is assumed to be in spec-IP.

3.1.1. Topicalization, inversion and violations of Shortest Move

It should be stressed that spec-TypeP movement has nothing to do with information structure. It is certainly evident that the clause-initial position has relevance for what is perceived as the topic
of an utterance (cf. the label topicalization), but it is not at all clear why this should be a matter of syntax (cf. Engdahl’s 1999 critique of Rizzi 1997, who assumes focus and topic features to syntactically motivate phrasal movement to the C domain; cf. also Platzack 2008). In our view, it is syntactically relevant only that \( \text{utype}\)\textsubscript{EPP} needs to be eliminated, i.e. that something with a relevant interpretable feature moves into TypeP.\(^{20}\) Syntax does not, however, specify why this or that constituent is raised to first position in a certain case. This latter concern lies outside the domain of syntax proper. All phrases that are compatible with placement in spec-TypeP are assumed to have the status of possible spec-TypeP candidates in every derivation. This means that syntax does not care what phrase eventually ends up in spec-TypeP, as long as some phrase does.\(^{21}\)

However, it is well known that syntactic operations seem to be restricted by some sort of economy principle, stating that feature matching always needs to be as local as possible. This principle is usually labelled Shortest Move (SM) and appears in the literature in several versions (cf. e.g. Rizzi 1990, Chomsky 1995). Here, we will assume the SM formulation of Richards (1998), which is quoted in (32); minimal domain means maximal phrase.

\hspace{1cm} (32) \hspace{1cm} \textbf{Shortest Move (SM)}

A feature F must attract another feature G, such that G’s minimal domain is not separated from F by any other feature that could participate in this attraction relation. (Richards 1998: 614)

Since subjects have always raised to a higher spec-position than other spec-TypeP candidates prior to the merging of Type\(^{0}\), the type feature associated with the subject ([dec], [rel] or [wh])
will always be structurally closer to $[\text{utype}]_{\text{EPP}}$ than any other type-feature in the clause. This is illustrated in (33). Only in (33a) do we have a structure that complies with SM; in (33b) and (33c), a phrase within VP marked with the type-feature [dec] (the adverbial $[\text{pp} \ i \ \text{själva verket}$] and the object $[\text{dp} \ \text{en björn}]$ respectively) has moved across FinP to spec-TypeP in violation of SM, since VP (the minimal domain of both $[\text{pp} \ i \ \text{själva verket}]$ and $[\text{dp} \ \text{en björn}]$) is separated from $[\text{utype}]_{\text{EPP}}$ by the dec-feature of $[\text{dp} \ \text{jag}]$ in spec-FinP.22

(33) a. Jag såg i själva verket en björn.
   I saw in self work-the a bear
   ‘I actually saw a bear.’

   a’. $[\text{TypeP} \ [\text{utype}]_\text{EPP} \ \text{jag} \ \text{såg} \ \text{[FinP} \ ti \ tv \ ... \ [\text{vp} \ [\text{i \ \text{själva verket}] \ ti \ tv \ [\text{en björn}]]]]]$
   [dec] [dec] [dec]

b. I själva verket såg jag en björn
   in self work-the saw I a bear
   ‘Actually, I saw a bear.’

   b’. $[\text{TypeP} \ [\text{utype}]_\text{EPP} \ [\text{i \ \text{själva verket}] \ \text{såg} \ \text{[FinP} \ \text{jag} \ ti \ tv \ ... \ [\text{vp} \ ti \ tv \ [\text{en björn}]]]]]$
   [dec] [dec] [dec]

c. En björn såg jag i själva verket.
   a bear saw I in self work-the
   ‘A bear, I actually saw.’
c’. \[\text{TypeP}\ [\text{utype}]_{\text{EPP}} [\text{en björn}] \ \text{såg}_v [\text{FinP}\ \text{jag}\ t_v \ ... \ [\text{VP}\ i\ \text{själva\ verket}\ t_i\ t_j]\]]

Apparently, the SM violations in (33b–c) are not crucial; clauses with fronted non-subjects are indeed perfectly grammatical. As illustrated by Richards (1998: 614–27), there are several other constructions in other languages that seem to violate SM, e.g. object shift in Icelandic and certain participle constructions in French. Characteristic of the SM violations discussed by Richards is that they are all preceded by operations that do not violate SM.

For instance, objects in Icelandic can move out of VP only if the verb that takes the object also has left VP. This is illustrated in (34): in (34a), where les ‘reads’, has moved to the C domain, object shift is permitted; in (34b), on the other hand, where the main verb lesið, ‘read’, remains in VP and the auxiliary hef ‘have’, is the V2-verb, object shift is ungrammatical.

(34) a. Ég les bókina ekki.
   \[I\ \text{read}\ \text{book-the not}\]
   ‘I don’t read the book.’

b. *Ég hef bókina lesið.  
   \[I\ \text{have}\ \text{book-the read}\]

According to Richards, there are two functional phrases above VP (XP, YP); the lower of them (XP) contains features that attract the subject, while the features of the higher phrase (YP) can be matched by any nominal element. In clauses with no object shift, the subject moves through both XP and YP on its way to a higher subject position in the I-domain. In clauses with object shift, on
the other hand, the nominal features in YP are matched with corresponding features associated with the object; this type of movement will inevitably violate SM, since the object has to move across the structurally closer nominal candidate in XP (the subject) to get to YP. If the SM-violating movement of the object is accompanied by verbal movement out of VP, the outcome is grammatical; see (35a). If no head movement takes place, the derivation fails; see (35b).

(35) a. \[ YP \text{ bókina}_j \text{ les}_v \{XP \text{ égi} \text{ t}_v \{VP \text{ ekki} \text{ t}_1 \text{ t}_v \text{ t}_j \}\]

b. \[*YP \text{ bókina}_j \{XP \text{ ég} \{VP \text{ t}_1 \text{ lesið} \text{ t}_j \}\]

The raising of the verb from V° to X° to Y° in (35a) – the necessary prerequisite for object shift – certainly obeys SM; there is no intervening element that could have taken part in the operation instead of the verbal head. The fact that a licit operation with respect to SM (head movement out of VP) appears to be able to ‘save’ an otherwise illicit operation (object-to-spec-YP) leads Richards to the assumption that there must be some kind of loophole in the grammar of human languages. He formulates this loophole as a universal principle, Principle of Minimal Compliance (PMC), stating that a given restriction may be circumvented if it is previously obeyed. PMC is quoted in (36) below and commented upon in the following.

(36) **Principle of Minimal Compliance (PMC)**

For any dependecy D that obeys constraint C, any elements that are relevant for determining whether D obeys C can be ignored for the rest of
the derivation for purposes of determining whether any other dependency D’ obeys C.

Richards’ definition of relevance:
An element X is relevant for determining whether any dependency D with a head A and a tail B obeys constraint C if
a. X is along the path of D (that is, X = A, X = B or A c-commands X and X c-commands B) and
b. X is a member of the class of elements to which C makes reference.
(Richards 1998: 601)

In the Icelandic example, Constraint C corresponds to SM (but other principles are, Richards argues, also affected by PMC). D would be the movement of the verb from X⁰ to Y⁰ that takes place in (35a). Consequently, X comprises everything from Y⁰ (the head A) to the trace left behind in X⁰ (the tail B), i.e. the subject in spec-XP. What PMC states, then, is that the V movement over the subject in (35a) results in the subject being ignorable with respect to SM when the next movement operation (object-to-spec-YP) takes place.25

Let us now reconsider the structures in (33b’) and (33c’) above (repeated below as (37a–b)). As already noted, the movement of the non-subjects (the adverbial and the object respectively) to spec-TypeP violates SM, since the subject is a structurally closer candidate for fronting. However, the raising of the verb from Fin⁰ to Type⁰ – an operation that fully obeys SM – includes the subject in path D (spec-FinP is between the head of the verbal movement, Type⁰, and its tail, Fin⁰).26 Given PMC, the subject is not taken into consideration when the next movement
is being evaluated with respect to SM. Long-distance fronting of VP elements can thus be permitted.²⁷

(37)  a. \[\text{TypeP [utype]EPP [i själva verket] såg}_v [\text{FinP jag } t_v \ldots [\text{VP } t_j \ t_v [\text{en björn}]]]\]

\[\text{dec} \quad \text{dec} \quad \text{dec}\]

b. \[\{\text{TypeP [utype]EPP [en björn] såg}_v [\text{FinP jag } t_v \ldots [\text{VP [i själva verket] } t_i \ t_j]\}\]

\[\text{dec} \quad \text{dec} \quad \text{dec}\]

This analysis of long-distance fronting can straightforwardly be extended to subordinate clauses. In the relative clause in (38) below, the relativized object of såg has moved to spec-TypeP over the subject in spec-FinP. Just as in main clauses, such an operation must be preceded by head movement from Fin° to Type°, since the dec feature of the subject that is structurally closer to [utype]EPP than the rel feature of the object needs to be hidden from the SM-mechanism; the raising of såg in (37a–b) and the raising of som in (38a’) thus serve the same purpose.

Consequently, to invert with the subject cannot be viewed as a strictly verbal phenomenon, but a characteristic of all finite heads, i.e. both complementizers and finite verbs.²⁸

(38)  a. björnen som jag såg

\[
\text{bear-the that I saw}
\]

‘the bear that I saw’

a’. \[\text{TypeP Op}_j \text{ som}_v [\text{FinP jag } t_v \text{ såg } t_j]\]

\[\text{dec}\]
In this context, it is important to stress that inversion is indeed independently motivated by feature elimination; in other words, we are not just dealing with last-resort movement whose sole purpose is to block SM violation. This is supported by the fact that yes/no questions and all subordinate clauses have inverted word order between the finite element and the subject; see (39).

(39) a. Såg du en björn?
   saw you a bear
   ‘Did you see a bear?’

   a’. [TypeP Q såg [FinP du t en björn]]

   b. att du såg en björn
   that you saw a bear
   ‘that you saw a bear’

   b’. [TypeP att [FinP du t såg en björn]]

Since no phrasal movement across the subject has occurred, neither in (39a) (the operator Q is merged directly in spec-TypeP) nor in (39b) (spec-TypeP is not present), we must assume the inverted order between the finite element (såg and att respectively) and the subject to be motivated merely by feature matching (the elimination of [ustatus]EPP).
Adopting the split-C analysis presented above, the older V-Adv and VS conjuncts must be analysed as ATB violations with respect to head movement. Bear in mind, first, that it is justified to assume a lower S position (spec-IP) in Older Swedish than in the modern language (spec-FinP) (cf. the discussion in 3.1). Thus, inversion does not in itself constitute an unambiguous indicator that Fin-to-Type-movement has occurred. Such movement can be assumed only if the presence of TypeP can be motivated on other grounds. This is not the case when we consider V-Adv and VS conjuncts. Nothing indicates that they constitute TypePs of their own, i.e. independent speech acts or subordinate clauses. Instead, they appear to constitute structurally smaller units, FinPs, embedded under the same TypeP as the preceding conjunct; see the analyses of (40a–b) (= (24b), (25a)) in (40c–d).

(40) a. The hafwa mycket swåra Mussqveter, och slår theras Hane öfwer ått
they have very heavy muskets and strikes their cock over towards
Mynningen, och icke till Anslaget.

muzzle-the and not to lock-the

‘They have very heavy muskets; the cock on these is released towards the barrel and not the lock.’
The essential property shared by the VS initiated second conjunct in (40c) and the V-Adv initiated one in (40d) is that they both lack a trace in Fin that is present in the first conjunct. In addition, the conjunct preceding the VS conjunct contains an isolated extraction trace of the initial subject (as already noted in section 2.2.2). On this account, V-Adv conjuncts, VS conjuncts and Adv-V conjuncts are all part of the same cluster of coordination asymmetries in Older Swedish; just as the coordinate structures considered in section 2.2.1 above, they involve coordination internal trace-asymmetries in violation of the ATB restriction. Treating these cases as structurally identical in this respect is certainly empirically motivated. Since they all disappear
from the language as from the middle of the eighteenth century, they are expected to be dependent of the same parameter.

Without the split-C domain, the V-Adv conjuncts would not be included in the group of ATB violations. Assuming a simple CP, no asymmetrical extraction is involved in these cases. Instead, C holds different finite elements in the two conjuncts; cf (41) below (= (25b)) where conjunct 1 is headed by the complementizer and conjunct 2 by the finite verb.

(41) hwilcka[\text{C'} (som) t icke allenast öfwade sig i Språk] uthan
    \[\text{C'} woro t och mächta älskande både till Music Sång och Speel]\n
In order to exclude V-Adv conjuncts from Present-day Swedish we would – given this monophrasal C approach – need to assume that the critical difference between Older Swedish and its modern counterpart is that only the former permitted conjuncts with different types of finite heads. The assumption of such a discrepancy, however, lacks independent support.

3.2. Coordination symmetry

The well-known ATB exception to movement out of a coordinate structure was presented in section 2.2. However, it is both theoretically and empirically unappealing to analyse the demand for parallel traces in coordination as a consequence of some kind of ATB mechanism being part of UG. First, the ATB mechanism would be construction specific, i.e. unable to predict anything else than the distribution of gaps in coordination. Second, it is not empirically justified. Even in
modern languages like Present-day Swedish and English, ATB violations are marginally permitted if the semantics are right. And in Older Swedish, they are, as we have seen, commonplace.

There have been various attempts to derive ATB phenomena from more general principles of coordination (see e.g. Gazdar 1980: 172–76, te Velde 2006: 269–78). Solving the theoretical problems with the ATB restriction does not, however, automatically solve the empirical ones: even if we would formulate a coordination principle that could be considered theoretically more appealing than the ATB restriction à la Ross (1967), we would still end up with a severe empirical problem, unless the absolute demand for gap symmetry (which rules out Older Swedish as a possible human language) were modified.

In the following, we propose a theory of coordination that is compatible both with languages like Present-day Swedish, which normally comply with the ATB restriction in its traditional form, and languages like Older Swedish, where symmetric gaps are optional. We assume that the head of coordinate structures demands symmetry between its specifier and complement; the spec-compl parallelism is thus seen as an effect of the valency structure of the coordinator (cf. Roberts 1999). To claim that coordinate symmetry can be derived from the head of the coordination is certainly not controversial. The question is how the notion of symmetry should be analysed. Following te Velde (2006), we define symmetry as feature identity; if a feature [F] is contained both within the specifier and within the complement of a CoP, the head-based demand for symmetry is met to some degree.
3.2.1. Matching features in coordination

According to te Velde, coordinate symmetry is established when features within a coordinate structure are matched: ‘coordinate matching in narrow syntax identifies phonetic features that need not be spelled out in PF, resulting in coordinate ellipsis. Coordinate matching in LF targets semantic features for establishing semantic parallels.’ (2006: 6). Unlike te Velde, we assume that coordinate parallels can be not only semantic but also phonological.29 Certain types of gap in coordination, e.g. conjunction reduction and gapping, are indeed best treated as some kind of redundancy deletion as suggested by te Velde, since the gap in these cases corresponds to an overt equivalent inside the coordinate structure. ATB gaps, however, never correspond to an overt constituent, but instead to another gap. In the next subsection, we argue that this gap-symmetry follows from the demand for phonological symmetry within the coordinate structure.

3.2.2. Separate matching domains

Within a simple clause, a topicalized XP is connected to traces in a movement chain. The establishment of the link between the head of the chain and the lower positions could be analysed as follows. In the purely mechanical syntactic device, where PF and LF are not yet involved, the movement chain comprises only a series of identical elements (or more accurately, bundles of semantic and phonological features) merged into different positions in the structure ($XP, XP, XP$ etc.). This derivational stage is illustrated in (42a); copies of the DP vilket are found in two positions: in spec-TypeP and in the complement of $V^o$. When the feature bundles in the tree are evaluated at interface level, we must assume that somehow a link is established between those
bundles that are identical. Presumably in order to reduce redundancy, all phonological features within such a link, except the ones not c-commanded by any of the other ones (i.e. the highest bundle), are deleted. Thus, since both instances of *vilket* in (42a) represent identical feature bundles, only the first one is realized and eventually pronounced; see (42b).30

(42) a. **Before feature matching**

*vilket jag hörde vilket*

*which I heard which*

b. **After feature matching**

*vilket jag hörde vilket*

The question is how to analyse deleted copies in coordination. Thus far, we have simply treated shared elements in a coordinate structure as elements that have moved out of all conjuncts. Coordinate copies would, then, be part of the identity link established at the clausal level; see (43a–b), where only the head of the chain keeps its phonological features just as in (42b).

(43) a. **Before feature matching**

*vilket jag hörde vilket men du ignorerade vilket*

*which I heard which but you ignored which*

b. **After feature matching**

*vilket jag hörde vilket men du ignorerade vilket*
This analysis of symmetric gaps in coordination is problematic. If the *vilket*-copy after *ignorerade* is really part of the same chain as the other two copies, we are forced to assume that chains were established differently in Older Swedish. As we saw in section 2.2.1, ATB gaps in non-initial conjuncts were only optional, which would mean that chains in Older Swedish, unlike chains in the modern grammar, could be terminated before the conjunction. There is, however, no independent support for a deviating system of chain establishment in Older Swedish. Moreover, it is difficult on the whole to understand how the interface mechanism, responsible for the creation of chains, would interact with conjunctural heads. To account for examples like (43b) we would need to postulate ad hoc that complete chains (such as the chain in (42b)) must be elaborated if they are followed by a conjunction.

A more intuitive way of analysing parallel unrealized copies in coordination would be to indeed treat them as an effect of the establishment of symmetry within the coordinate structure, independent of the establishment of clausal chains. Let us assume that the simple clause is a domain for feature matching that is superordinate to the domain for feature matching that the CoP constitutes. This superordination means that feature matching and deletion within the clausal domain will always precede and thus have consequences for feature matching and deletion within the coordination domain. With this approach, symmetric gaps in coordination (see (44a) below) are derived as follows.

Consider first the clausal domain inside the box in (44b); at this stage, a link is established between the initial *vilket*-copy in spec-TypeP and the lower copy after *hörde*, whereby the phonological features associated with the latter are deleted. The next step in the derivation is illustrated in (44c), where the coordination domain is inside the box; here, feature symmetry
between the conjuncts is evaluated and established. Since only the first conjunct was previously part of the clausal domain where the phonological features of all non-initial *vilket*-copies were deleted, we have an asymmetric coordination: the two *vilket*-copies are certainly semantically identical, but only the first copy lacks phonological features. In order for the conjuncts to be adequately symmetrical, the phonological features of the second copy must be deleted as well; see (44d).

(44)  

a. *vilket jag hörde__ men du ignorerade__*  

which I heard but you ignored

b. **Deletion of phonological features in a movement chain**

\[
\text{[TypeP} \text{vilket}_j \text{(som)} \ [\text{FinP} \text{jag hörde} \text{vilket}_{i}] \\
\text{men} \ [\text{FinP} \text{du ignorerade} \text{vilket}_{j}]\]
\]

c. **Phonological asymmetry between conjuncts**

\[
\text{[TypeP} \text{vilket}_j \text{(som)} \\
\text{[FinP} \text{jag hörde} \text{vilket}_{i}] \text{men} \ [\text{FinP} \text{du ignorerade} \text{vilket}_{j}]\]
\]

d. **Phonological symmetry between conjuncts**

\[
\text{[TypeP} \text{vilket}_j \text{(som)} \\
\text{[FinP} \text{jag hörde} \text{vilket}_{i}] \text{men} \ [\text{FinP} \text{du ignorerade} \text{vilket}_{j}]\]
\]
In sum, parallel gaps in conjuncts are treated as unrealized elements of the same kind: elements with deleted phonological features (‘traces’). The deletion is, however, motivated differently in initial and non-initial conjuncts respectively. In an initial conjunct, deletion has nothing to do with the coordinate structure but is externally motivated: the phonological features are part of a feature bundle that comprises a non-initial link in a movement chain within the clausal matching domain ((44b)). Deletion in non-initial conjuncts, on the other hand, follows from the coordination-internal establishment of symmetry. The conjunction demands that a feature bundle in its specifier lacking phonological features (a ‘chain trace’) correspond to a semantically and phonologically identical bundle in its complement (a ‘symmetry trace’). How this approach to coordination can help us formalize the coordinate differences between Present-day and Older Swedish illustrated in section 2.2 is the topic of section 3.3.

3.3. The selectional properties of [\&]

The selectional properties of conjunctions are sometimes identical in Present-day and Older Swedish. *Ty* ‘for’ for instance, always takes non-elliptical TypePs headed by [force] as its specifier and complement in both varieties, *utan* ‘but’ always demands a negated specifier etc. Conjunctions that allow for elliptical structures to occur in its specifier and complement, on the other hand, seem to have been less sensitive to phonological asymmetry in Older Swedish than in the modern language. We will refer to this kind of conjunctions as [\&].

As argued above, non-initial gaps in coordination can be analysed as elements, the phonological features of which have been deleted as a consequence of the establishment of
feature symmetry between conjuncts. In Present-day Swedish, a trace inside the specifier of \[\&\] that has no realized counterpart within the coordinate structure (a chain trace) must – under normal circumstances, disregarding e.g. pseudo-coordination – be linked to an identical trace in the complement of \[\&\] (a symmetry trace). If a chain trace is not matched with a symmetry trace, the coordination is not symmetrical enough for \[\&\]; the result is thus ungrammatical as illustrated in (45a). Accordingly, the FinP coordination in (45b) is fine, since both conjuncts contain copies of the initial object, but the FinP coordination in (45c) is not, since only the first conjunct contains such a copy.

(45)  

a. *vilket jag inte ville lyda utan följa med honom  

\[\text{which } I \text{ not wanted obey but follow PART him}\]

a’. \text{[TypeP vilketj (som) jagi \[VP inte t\_i ville, lyda t\_j]\] utan \[VP t\_i E, följa med honom]]\]

b. en kvinna som jag älskade och min mor faktiskt tyckte om  

\[\text{a woman that I loved and my mother actually liked PART}\]

‘a woman that I loved and my mother actually liked’

b’. \text{[TypeP Opj soms [FinP jag t\_s älskade t\_j] och [FinP min mor t\_s faktiskt tyckte om t\_j]]}\]

c. *en kvinna som jag älskade och hon mig tillbaka  

\[\text{a woman that I loved and she me back}\]
c'. \[TypeP \text{Opj som}\_n \[FinP \text{jag t}_\text{s älskade t}_j\] och \[FinP \text{hon t}_\text{s E}_\text{v mig tillbaka}]\]

Apparently, the coordinator [&] in Older Swedish was less sensitive to coordinate asymmetries than it is today. First conjuncts sometimes contained isolated traces, i.e. chain traces that are not matched with traces in subsequent conjuncts. This is illustrated in (46) below. In (46a) (= (18a)), the object *thet* is co-referent with a trace in the first VP conjunct, but there is no corresponding trace in the second conjunct (cf. the ungrammatical (45a) above). In (46b) (= (19c)), the IP conjuncts are in an equally asymmetrical relation to each other; the first conjunct contains a copy of the object *Op*, but the second conjunct does not (cf. (45c)).

(46) a. […] thet \_ jag inte wile \_ höra af \_ vtan fölga honom

   \[which \_ not \_ wanted hear \_ but \_ follow him\]

   hwart thet bar på.

   \[where \_ lead on\]

   ‘which I didn’t want to obey; instead, I wanted to follow him wherever that might lead’

a'. \[TypeP \text{thet} \_ (som) \_ iagi \[VP \_ inte t}_\text{s wile, v höra af t}_j\] vtan

\[VP t}_\text{s E}_\text{v, fölga honom hwart thet bar på]}\]

b. […] en syster, \textit{som jag hjerteligen älskade och hon mig tillbaka}.

   \[a sister \_ that \_ I \_ dearly \_ loved \_ and \_ she \_ me \_ back\]

   ‘a sister that I loved dearly, and she loved me back’

b'. \[TypeP \text{Opj som} \_ [IP \_ jag hjerteligen älskade, t}_j\] och \[IP \_ hon E}_\text{v mig tillbaka]}\]
The coordinate structures, in which the older subordinate V-Adv conjuncts, main-clause Adv-V conjuncts and declarative VS conjuncts are included, all exhibit the same type of trace asymmetry as the coordinate structures in (46). As noted in section 3.1.2, V-Adv conjuncts and VS conjuncts most probably represent FinPs preceded by conjuncts containing an isolated chain trace in Fin°. In the former case (V-Adv conjuncts), the coordination occurs within a subordinate clause, i.e. within the complement of [comp]. This means that the finite head of the first FinP conjunct must be a complementizer that raises to Type°, eliminating \([\text{estatus}]_\text{EPP}\). In the latter case (VS conjuncts), the coordinate structure is the complement of a Type° hosting a force feature associated with the finite verb of the first conjunct. In both cases, the elimination of \([\text{estatus}]_\text{EPP}\) results in traces in Fin° in the first conjuncts (of the complementizer and the finite verb respectively); the Fin positions in the second conjuncts, on the other hand, contain overt verbs (V-Adv/VS). Three examples are analysed in (47), one with a VS conjunct (47a) (= (40a)), and two with V-Adv conjuncts (47b–c) ((47c) = (40b)).

(47)    a.  The hafwa mycket swåra Mussqveter, och slår theras Hane öfwer ått

      they have very heavy muskets and strikes their cock over towards

      Mynningen, och icke till Anslaget.

      muzzle-the and not to lock-the

      ‘They have very heavy muskets; the cock on these is released towards the barrel and not the lock.’

      a’.  \([\text{TypeP}\]

      Thei hafwav \([\text{FinP}\] t_i t_v \text{ mycket swåra Mussqveter] och

      \[\text{FinP}\] slår theras Hane öfwer ått Mynningen och icke till Anslaget\)]
b. Hon kan lefva i 6. eller 7. vekors tid utan mat,

*she can live in 6 or 7 weeks time without food*

[…], hvilket vi själva prövade om bord,

*which we ourselves tested on board*

och hade af dem vår dageliga kost. (Salvius *1706:4)

*and had of them our daily fare*

‘She (a turtle) can survive without food for six or seven weeks, which we tested on board and they provided us with food.’

b'. [TypeP hvilketj (som) [FinP t i själva prövade t om bord] och [FinP hade E af dem vår dageliga kost]]

c. […] hwilcka icke allenast öfwade sig i Språk uthan

*who not just practiced REFL in language but*

woro och mächta älskande både till Music,

*were also very loving both to music*

Sång och Speel […]

*sing and play*

‘who didn’t just practice their language skills, but were also very fond of playing music, singing songs and playing games’

c’. [TypeP hwilckaj (somaj) [FinP t i icke allenast öfwade sig i Språk] uthan [FinP t i woro och mächta älskande både till Music Sång och Speel]]
The FinPs preceding VS conjuncts normally contain an isolated trace of the initial phrase as well, as in (47a); the subject of the first conjunct, *the*, moves asymmetrically from the first spec-IP position (via spec-FinP) to spec-TypeP. The FinP’s preceding V-Adv conjuncts also contain such a trace if the initial phrase is a non-subject, as in (47b) where the object *hvilket* is co-referent with a trace only in the first conjunct. If the initial phrase, on the other hand, is a subject, it is typically linked to a copy in both conjuncts as in (47c).32

As was pointed out in section 2.2.2, the fact that the Adv-V conjuncts are initiated by the adverbial indicates that the verb remains in V⁰ in these cases, unlike the verb in V-Adv/VS conjuncts, and that the coordinate structure consists of two VPs. Since the VPs are coordinated within a main clause, i.e. a structure in which the finite verb in the first conjunct has moved out of VP to eliminate the uninterpretable features in Fin⁰ and Type⁰, the first conjunct contains a verbal trace, whereas the second one does not. If the phrase in spec-TypeP is the subject, it is always shared by the conjuncts; see (48a) below (= (22a)).33 Non-subjects in spec-TypeP are, on the other hand, sometimes linked to an isolated trace in the first conjunct; this is the case in (48b).

(48) a. Jag var igår * hoos H:r Olivekrantz och * i discours * kom

$I$ was yesterday by Mr. O. and in discussion came

fram med den materien.

$PART$ with that conclusion

‘I visited Mr. Olivekrantz yesterday and came to that conclusion in a discussion (with him).’

a’. $[TypeP$ Jag, var, $[VP$ igår $t_i$, $hoos$ H:r Olivekrantz] och $[VP$ i discours $t_i$, $kom$

fram med den materien]]
b. Glödande Kohl och rödheeta Jernstycken slukade de in
   glowing coal and red-hot iron-pieces swallowed they in
   och inthet gofwe sig ther wid [...] (Kiöping *1621:152)
   and not gave REFL there by
   ‘they devoured glowing pieces of coal and red-hot pieces of iron, and they didn’t restrict
   themselves to that’

b'. [TypeP [Glödande Kohl och rödheeta Jernstycken] slukade, de i
[VP t, t in t] och [VP inthet t, gofwe sig ther wid]]

In sum, the coordinator [&) in Older Swedish permits isolated traces in the first of its conjuncts,
but modern [&) does not. These isolated traces in Older Swedish are sometimes left by phrases
(as in (46a–b)), sometimes by heads (as in (47c) and (48a)) and sometimes by both (as in (47a–b)
and (48b)). Adopting this analysis of coordination, the word-order differences between older and
modern conjuncts in main and subordinate clauses – the starting point of this study – cannot be
viewed as differences regarding main and subordinate clauses as such. Main clause Adv-V
conjuncts and subordinate V-Adv conjuncts, as well as VS conjuncts and several other
asymmetrical conjunct types, are possible in Older Swedish but impossible in the modern
language, due to the different status of traces within coordinate structures in the two varieties.

In this context, it can be noted that it is not only with respect to traces that the older
coordinator was more liberal than the modern one. Also the distribution of E-gaps, i.e. gaps that
are co-referential with an overt element within the coordinate structure, was less strictly regulated
in Older Swedish than in the modern language. Deletion of subjects is restricted in Present-day
Swedish to contexts where the gap is in the same syntactic position as its antecedent; examples
like (49a) are thus ungrammatical. In addition, the antecedent must indeed be the subject; identical position is not enough, as we can see in the ungrammatical (49b), where the clause-initial object of the first conjunct (Bilar) is coreferent with the clause-initial E-subject in conjunct 2.

(49)  

a. *[TypeP 1682 föddes [Karl XII]] och [TypeP Ei dog 1718]

   in-1692 was-born Karl XII        and                  died in-1718

b. *[TypeP Bilar såg jag där] och [TypeP Ei kör på vägarna]

    cars saw I there and                  move-about on roads-the

In Older Swedish, on the other hand, these precise types of asymmetry were allowed; see (50a–b). Apparently, the older [&] was more lenient on coordinate gaps in general: chain-traces as well as E-gaps could lack exact parallels within the coordinate structure.34

(50)  

a. derom wittna Råds Protocollen ock mine

   there-about witness council’s protocols and my

Annotationsböcker öfwer alla de måhl, som

notebooks over all the cases that

jag öfwerwarit, ock finnas uti mitt

I been-present-at and are-found in my

lilla Bibliotek. (Palmstierna *1696:115)

little library

‘This is indicated by the protocols of the council and by my notes about all those cases that I have participated in; these protocols and books are in my little library.’
a’. [TypeP derom wittna [Råds Protocollen ock mine Annotationsböcker ...]] ock [TypeP

Ei finnas i mitt lilla Bibliotek]

b. [...] them koka the, och smaka lijka

    them boil they and taste just

som Palsternacka (Kiöping *1621:14)

    like parsnip

‘They boil them, and they taste just like parsnips.’

b’. [TypeP them, koka the] och [TypeP Ei smaka lijka som Palsternacka]

If the difference between Older and Present-day Swedish with respect to trace-asymmetries is
treated as a discrepancy with respect to some sort of ATB restriction à la Ross (1967), the
difference in (49)–(50) could not be linked to the same overall change; there are simply no
extraction traces involved in the latter case. The lack of such a link would, however, be
unfortunate, since the two phenomena disappear at the same time, during the late eighteenth
century.

Moreover, a strictly binary analysis of coordinate traces labeling Present-day Swedish a +ATB
variety (trace symmetry mandatory) and Older Swedish a ±ATB variety (trace symmetry
optional) could not easily account for the gradual nature of coordinate symmetry. As we have
seen, the demand for correlation between chain trace and symmetry trace is not absolute in
Present-day Swedish but can be relaxed if the conjuncts involved express components of the
same event (as in e.g. pseudo-coordination; cf. the discussion in section 2.2 ), which indicates a
somewhat flexible notion of symmetry. Such flexibility is certainly less problematic if symmetry is considered to be the effect of the selectional properties of [ ] rather than the outcome of a universal ATB principle. The fact that selectional properties are sometimes flexible is not very surprising. That universal principles would be is, however, hardly expected.

Why children who were born in the middle of the eighteenth century did not acquire the older, more liberal coordinator, i.e. why the modern principles of coordination emerged, is the topic of section 3.4. 35

3.4. The change from Older to Present-day Swedish

Amongst the older coordinate structures that contain isolated chain traces in the first conjunct, only two of the more frequent types would be structurally unambiguous in a context of intergenerational transmission, namely those with Adv-V and those with VS word order. Verb initial conjuncts lacking a subject (i.a. V-Adv conjuncts) could, on the other hand, be reanalysed as something else than parts of asymmetrical FinP coordination. While a V-initial string could be interpreted as either a VP, FinP or TypeP conjunct, Adv-V and VS strings must be VP and FinP conjuncts respectively. In other words, a radical reduction of the Adv-V/VS frequency in the use of the older generation would leave the younger generation, acquiring the language, with very few clues that the older coordinator, in fact, permitted isolated traces. 36

Interestingly, one of the texts in the older part of the corpus contains no VS conjuncts or main-clause Adv-V conjuncts whatsoever. The author of the text, Lars Salvius (b. 1706), was the leading Swedish publisher of his time; in this capacity he was also one of the most influential normative linguists. Although he does not use any Adv-V or VS conjuncts, his grammar is, no
doubt, of the older type. In fact, he seems deliberately to avoid Adv-V and VS conjuncts. His text
is a revised edition of an older text from the seventeenth century, a travel book written by Nils
Matson Kiöping (b. 1621). The original text contains a great number of the older Adv-V and VS
conjuncts, all of which are altered in Salvius’ eighteenth century edition.

Salvius’ dislike of Adv-V/VS could be interpreted as a reflection of tendencies that were
already present in the spoken language and that eventually lead to a spontaneous reanalysis of
[&]. It is, however, difficult to rule out completely the possibility that Salvius, and normative
linguists like him, in fact invented this standard,\textsuperscript{37} i.e. that the change was instigated from above.
Salvius not only avoids main-clause Adv-V conjuncts, but also subordinate Adv-V conjuncts
with no trace asymmetries (i.e. the modern type). In effect, all finite conjuncts without a subject
in his text are verb-initial. As a consequence of avoiding VS conjuncts, no conjuncts that do have
a subject are, on the other hand, ever introduced by the verb. This strict division between
conjuncts lacking and conjuncts having an overt subject almost seems to be too elegant to be the
result of a spontaneous change of peoples’ speaking habits; not even the modern, fully
standardized language exhibits this extreme degree of symmetry. If Salvius’ exclusion of Adv-
V/VS conjuncts can in fact be perceived as part of an ambition to oppose asymmetry and
obscurity (in this particular case represented by Kiöping’s text) in favour of symmetry and
simplicity, this would certainly harmonize with the ideals of his time. In the age of enlightenment,
reason, order and clarity were, as we know, fundamental notions all over Europe.\textsuperscript{38}
4. CONCLUDING REMARKS

Coordination involving trace asymmetries between the conjuncts – ATB violations – occurred in Older Swedish in many different guises: not only asymmetrical extraction traces left by phrases were permitted, but also asymmetrical verbal traces; sometimes the two were even contained within the same coordinate structure. Although ATB violations are attested in modern languages, they are always marginal and semantically restricted. In comparison, the possibilities in Older Swedish of producing trace asymmetries seem almost unlimited. This unique position taken by Older Swedish is, however, probably just temporary. Coordination is indeed a phenomenon rarely considered by those interested in historical syntax. Actually, this holds true for almost all linguists dealing with authentic corpora. The field of coordination thus emerges as a branch of linguistic research that is – perhaps more than any other field – characterized by the introspective method. Hopefully, there will be more corpus-based studies of coordination in the future, both historical and contemporary ones. It would be especially interesting to compare the coordinate structures in Older Swedish presented in this article with coordinate structures that can be retrieved during different stages of the other Scandinavian languages. It would be surprising if – even after such a comparative investigation – the ATB violations found in Older Swedish still lack parallels.

1 This article is based on the findings presented in my Swedish thesis from 2007: Gränsöverskridande koordination. Syntaktisk förändring i äldre svenska. However, the article is not a mere adaptation in English of the thesis, given that it introduces both new data and a modified analysis. I gratefully acknowledge the role of the following institutions/foundations in providing the financial support for my research: The Faculty of Arts, University of Gothenburg (PhD position), Einar Hansens Allhemsstiftelse (postdoctoral award); Wilhelm och Martina Lundgrens
vetenskapsfond (travel grant), Birgit och Gad Rausings stiftelse för humanistisk forskning (travel and equipment grant), Åke Wibergs Stiftelse (grant for living expenses). I would like to thank Anders-Börje Andersson, Elisabet Engdahl, Ida Larsson (University of Gothenburg) and Malin Petzell (University of London) for reading and commenting on an earlier version of the article, as well as native speakers Oliver Bond and Lutz Marten (University of London) for helping me with grammaticality judgements. Thanks are also due to the anonymous reviewers for important and useful comments. Any remaining errors and/or inconsistencies are of course my responsibility.

2 Present-day Swedish refers to the language used by native speakers of Swedish in the late twentieth and early twenty first centuries. Older Swedish refers to the language in 25 Swedish texts from the seventeenth, eighteenth and nineteenth centuries. All investigated texts are written in an informal style, typically comprising diaries, personal letters and travel books. Texts of this type are more likely to reflect the spontaneous grammar of the author than formal texts, such as legal documents and religious works; sometimes the latter contain linguistic traits that only occur in the written language. The texts that make up the corpus are listed in the end of the article.

3 * indicates year of birth.

4 Platzack’s (1987) analysis of verb-initial declaratives has been challenged by Mörnsjö (2002); cf. also Magnusson (2003).

5 There are still today remote dialects where agreement is preserved (e.g. Övdalian). A majority of the authors in the corpus were, however, born in the central Swedish area (surrounding the capital Stockholm), where agreement was lost first.

6 The total amount of investigated text is 1616 pages. Instances/100 pp. is admittedly a rather approximate measurement of frequency, but we do not really need finer tools in order to illustrate such a massive difference as the difference between the early and late part of the corpus. The only author in the early part who deviates from the overall pattern is Salvius (*1706), who does not use main-clause Adv-V or declarative VS at all; more is said about this in section 3.4 below. In the late part, only one author displays all three archaic word orders: Armfelt (*1757). He is also the only author in the corpus who was born in Finland, i.e. the very outskirts of the area in which Swedish is and was spoken. It is not very surprising, of course, that the modern usage apparently spread later to more remote parts of the linguistic community.

7 In Present-day Swedish, the V-Adv/Adv-V ratio would be 0/100, the Adv-V and VS frequency 0/100pp.
This chronological mismatch would not, of course, constitute an argument against a correlation between the phenomena at hand and verbal agreement, if it could be successfully argued that the use of the archaic patterns - after the loss of agreement - should be treated as belonging to the written language only. However, nothing suggests that this was the case.

Prior to Kayne (1994) headless phrases were normally assumed to be blocked by the so-called X-bar principle (cf. e.g. Chomsky 1970, Jackendoff 1977), demanding that all phrases must have a head. Within a Kaynian framework, the X-bar principle is instead reduced to a mere consequence of the more general antisymmetry constraint (the Linear Correspondence Axiom).

This is not formulated as an explicit part of the CSC in Ross (1967), nor in the revised edition (1986).

Heycock & Kroch (1994) argue that coordination of the type illustrated in (i) involves unilateral extraction of the topicalized DP from the first of the conjuncts, i.e. movement that would constitute an ATB violation.

(i) Diesem Vorschlag will die Kommission folgen und
this proposal wants the commission follow and
eine neue Unterkommission einsetzen. (from Heycock & Kroch 1994: 272–73)
a new sub-commission initiate
‘The commission will follow this suggestion and set up a new sub-commission.’

Schwartz (1998), on the other hand, maintains that examples like these could just as well be treated as coordination of full main clauses (CPs) with extensive initial gapping in the second conjunct, i.e. coordinate structures that fully obey the ATB restriction. We will not discuss German coordination here, but as far as Swedish is concerned, it is quite clear that similar examples do not represent violations of the ATB restriction, since they are only possible in a main-clause context; see (ii)–(iii):

(ii) Artikeln hade han skrivit ut och dessutom satt i alla
article-the had he printed out and in-addition put in all
papper i en pärn.
papers in a folder
‘He had printed the article and in addition filed all papers.’

(iii) *artikeln, som han hade skrivit ut och dessutom satt
article-the that he had printed out and in-addition put
The difference between (ii) and (iii) is predicted if the second conjunct is assumed to represent an elliptical CP structure as suggested by Schwarz (1998). A CP structure initiated by an ordinary subject and a finite verb, albeit phonologically unrealized, is expected to be ungrammatical in a subordinate context, but acceptable in declaratives; cf. the structures in (iv–v):

(iv) \[ \text{CP Artikeln hade han skrivit ut} \] och \[ \text{CP (han) (hade) dessutom satt in alla papper i en pärm} \]

(v) \[ \text{artikeln, CP Op som han, hade, skrivit ut} \] och \[ *\text{CP (han) (hade) dessutom satt in alla papper i en pärm} \]

impossible introduction of a subordinate CP

12 Formally, the S-Adv-V string in (19a) could be analysed as an IP conjunct on the main-clause level (cf. (30a–b) below), even though such an analysis would be hard to motivate semantically. In either case, however, we are dealing with coordination that violates the ATB restriction.

13 Such an approach obviously clashes with the fact that the extracted element in pseudo-coordination always has its base-position in the non-initial conjunct (cf. the example in (14) above). It would hardly be controversial, however, to assume that the conjuncts of pseudo-coordination do not have the same independent status as conjuncts in ordinary coordination with respect to the ATB restriction. On pseudo-coordination in Scandinavian, see e.g. Josefsson (1991), Wiklund (2007).

14 VS conjuncts similar to the ones in Older Swedish still occur in Modern Icelandic, at least in the written language (Sigurðsson 1990). Whether coordinated VS in Icelandic should be regarded merely as an archaic trait in the written code reminiscent of an earlier stage of Icelandic where the same types of asymmetries as in Older Swedish were permitted, or as a reanalyzed part of the modern Icelandic grammar is a question that lies outside the scope of this article. So does VS in disjunctive coordination, i.e. after eller, ‘or’; disjunctive VS conjuncts are possible in Present-day Swedish and do not constitute any violation of the ATB restriction (Magnusson 2007a:233–34; cf. also Hulthén 1948 and Johannessen 2005).

15 SAOL (i.e. Svenska Akademiens ordlista) is a normative Swedish dictionary.
In Magnusson (2007a) the analysis of the C domain resembles that of Stroh-Wollin to a further extent. There, independent utterances are treated as ForcePs (a label originally suggested by Rizzi 1997), whereas subordinate clauses are labelled CompPs.

That there is indeed a covert complementizer present in relative clauses introduced by pronouns is supported by the fact that the finite verb always remains in situ. If there were no complementizer, we would expect V2 word order.

Note that second-conjunct S-Adv-V order is perfectly grammatical in Present-day Swedish when the coordinate structure is embedded under a complementizer (i.e. occurs in a subordinate clause), since a complementizer can be shared between the conjuncts. Obviously, such sharing of the finite verb is impossible if there is an additional finite verb in situ inside the second conjunct (as in S-Adv-V conjuncts).

(i) att du inte har sovit och jag aldrig kan vakna
   that you not have slept and I never can wake-up

(ii) [TypeP att_t, [FinP du t inte har sovit] och [FinP jag t aldrig kan vakna]

Within the FinP conjuncts in (31c), however, the status feature of the highest head is presumably irrelevant; what matters here is the fin-feature that is present in both conjuncts.

In this context, relevant means ‘capable of eliminating [utype]EPP’. The only two features of this sort that have been mentioned so far are [dec], which is associated with every phrase that can initiate a declarative clause, and [rel] with which all phrases that initiate relative clauses are marked. In addition, there are of course other relevant features that clause initial phrases and/or heads can be marked with: [wh] in constituent questions, [excl] in exclamatives, [imp] in imperatives etc. A further discussion of different type-features, their distribution and compatibility with the status-features [force] and [comp] is beyond the scope of this article; see Magnusson (2007a: 203–25).

This treatment of movement to the clause-initial position bears some resemblance to the analysis of A’-movement in Platzack (1996). However, the notion [repel], introduced by Platzack to account for movement that is not triggered by feature-attraction, still implies that syntax ‘knows’ what constituent raises above C⁰.

The movement of [en björn] in (33c) across [i själva verket] does not constitute a violation of SM since the dec-features of these phrases are contained within the same minimal domain: VP. Allowing adverbials like [i själva verket] to reside in VP (rather than in the lower part of IP) certainly requires us to think of the VP as something more extensive than standardly assumed. Still, such an account is not crucial. There are alternative ways of accounting for why the adverbial does not comprise a block for the object, without presupposing that they are both VP internal. It
could be that the notion *minimal domain* is to be understood differently (including larger chunks of structure than maximal phrases). It could also be that the adverbial is in fact hidden by the same type of operation that hides the subject (as argued below). We will not, however, pursue any of these alternatives here. After all, our main concern is the relation between subjects and non-subjects (not the relation between different non-subjects).

23 This fact is usually referred to as ‘Holmberg’s generalization’ since Holmberg (1986).

24 Negations never occur below the finite VP in Icelandic. Insertion of *ekki* after *bókina* in (34b) – in order to keep the examples more parallel – would thus make it hard to illustrate that it is indeed object movement that is ungrammatical.

25 Why the feature driven system would contain an imperfection of this sort is, of course, difficult to answer. It could be that PMC is in fact merely an effect of principles such as SM. If we think of SM as a mechanism that is external with respect to the syntactic device that is responsible for the merging and matching of features, the device would in itself be indifferent to the locality of a given feature matching. Long distance matching would instead be blocked by the external SM mechanism evaluating every feature matching that occurs to make sure that it is as economical (i.e. local) as possible. We can assume that such an evaluation with a positive outcome results in the temporary immunity of the evaluated structural sequence (the path D) for an additional derivational step. On this account, the imperfection in the system (PMC) can be characterized as an effect of the SM mechanism and the syntactic device being unsynchronized; the locality evaluation simply cannot keep up with the pace of the syntactic derivation.

26 We must of course assume that not only spec-FinP but in fact the entire chain that it heads is indirectly included in path D; otherwise, the subject trace in spec-IP would always block the fronting of non-subjects. It follows from this assumption that the subject in Older Swedish, which is situated in spec-IP but probed by and thereby linked to [ufinsubj] in Fin′, would be an indirect part of path D as well.

27 To analyse inversion as a PMC-motivated phenomenon was first suggested by Platzack (2004) dealing with wh-questions. Note also that this analysis to some extent resembles the treatment of inversion within the asymmetrical analysis of V2 (cf. Travis 1984, Zwart 1993), where movement of the finite verb over S occurs only to create a landing site for fronted elements.

28 The fact that [dec] can never co-occur with [comp] inside TypeP (cf. (i–ii)) is irrelevant as far as the elimination of [utype]EPP is concerned. Both [dec] on the subject and [rel] on the relativized object are capable of eliminating [utype]EPP; the fact that [dec] and [comp] are incompatible is a separate matter.
Why te Velde uses the term ‘phonetic features’ rather than ‘phonological features’ seems unclear. In our view, phonetic realization is not part of narrow syntax, but an effect of the conversion – via the PF interface – of phonological features to actual articulation.

Note that although realization is a necessary prerequisite for articulation, the latter is not a necessary consequence of the former. Neither in the strictly mechanical syntactic device ((42a)) nor in PF ((42b)) is it directly decided that the first vilket-copy is eventually going to be pronounced. Articulation is only relevant when the phonological features have been translated into phonetic features outside the PF interface. The fact that the connection between realization (i.e. non-deletion of phonological features) and articulation is indeed indirect is supported by the fact that empty elements can be more or less sensitive vis-à-vis their closest phonetic environment. An unrealized object like detta in (i) does not affect the articulation of the surrounding words jag and där; they are pronounced as if there was nothing between them. If we, however, consider topic-drop (see (ii)) the empty element [det] may certainly be surrounded by phonetic stuff (Nej, visste), but it is crucial that some amount of articulatory space is reserved for the empty slot; cf. the ungrammatical (iii), where Nej visste is pronounced just as jag där in (i). It is possible to correctly predict the difference between (i) and (iii), if one assumes that the former involves an unrealized element (detta) and the latter a realized, and therefore articulatory relevant, element that has been articulatory reduced at a later stage ([det]).

(i) Detta såg jag detta där

this saw I this there (‘This, I saw there.’)

(ii) A: Hörde du att Kalle och Lisa gift sig?

heard you that K and L married REFL

B: Nej [det] visste jag inte.

no it knew I not (‘No, I didn’t know that.’)

(iii) *Nej visste jag inte (cf. Nej (pause) visste jag inte)

no knew I not
Normally [&] is articulated as och, ‘and’, but it can also come out as men, utan, eller and samt or be silent (asyndesis). We will not discuss the differences between these conjunctions, but instead focus on the properties they share.

Isolated traces of initial subjects occur in conjuncts preceding V-Adv conjuncts whose subject corresponds to a relative operator (Op); see (i–ii).

(i) mitt quarter, som war ett faseliget stort gammalt stenhus och kallas

my quarters that was a dreadfully big old stone-house and is-called

på fransyska caserne [...] (von Lingen *1708:10)

on French caserne

‘my quarters that comprised a very old house of stone, which is called caserne in French’

(ii) [Comp Op, som, [FinP t, t, war ett faseliget stort gammalt stenhus] och [FinP Op kallas på fransyska caserne]]

For a discussion of several types of Older Swedish structures with Op-subjects below TypeP, see Magnusson (2007b).

This obligatory sharing of subjects is due to the fact that spec-VP may not contain the head of a definite subject chain (including both a visible XP and an invisible Op/E).

Exactly how this general lenience should be formalized is a question that falls outside the scope of this article.

Whether this difference regarding coordinate selection might be related to the difference with respect to subject position (spec-FinP in Present-day Swedish vs. spec-IP in Older Swedish; see 3.1 above) is not entirely clear; addressing that question here would, however, lead us too far away from the main path of the article.

Indeed, asymmetries such as (i) with unilateral phrasal movement and initial gapping (i.e. examples with neither Adv-V nor V-Adv/V-word order) would be unambiguous as well. Since coordination of this sort, however, occurs far less often than Adv-V and VS conjuncts, we must assume the latter to be of greater importance when it comes to language acquisition.

(i) som jag gav henne och hon mig en boll

that I gave her and she me a ball
Presumably, sporadic occurrences of this sort of asymmetries were simply regarded as isolated expressions more similar to proverbs by language learners never confronted with a full scale Adv-V/VS usage.

37 Cf. Langer (2001) who argues that the loss of tun-support in standard German during the early 1700s is due to the ban of the phenomenon by prescriptive grammarians as from the mid 1600s. Cf. also Konopka (1996) who maintains a more moderate view, arguing that successful prescriptions are in fact often based on the early picking up of tendencies just starting to become established in the language usage.

38 It is worth mentioning that Rålamb (born in 1716) is a mirror image of Salvius regarding the use of Adv-V/V-Adv word order. Rålamb exaggerates the use of Adv-V, which results in a text containing an abundance of archaic main-clause conjuncts but mostly modern subordinate clause conjuncts, whereas Salvius not only removes the archaic Adv-V conjuncts in main clauses but also drastically reduces the perfectly modern Adv-V conjuncts in subordinate clauses in favour of V-Adv conjuncts. This distributional chiasm must be understood as a consequence of the two authors’ differing purposes. Salvius wants his text to be modern, thereby avoiding all kinds of Adv-V word order; Rålamb, on the other hand, most probably seeks to give his readers the impression that his text is older than it really is (the fictional main character in Rålamb’s novel is said to have been born in 1630), a purpose that increased Adv-V frequency neatly serves.

**Sources**


Wahlström, Pehr *1776 = Wahlström, Pehr, 1800. Bref till en vän under en Resa i Landsorterna. Stockholm. [genre: fictional letters; pages investigated: 50]


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