

Chapter 4

The development of Swedish particle placement

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This paper is concerned with the word order of particle constructions in the history of Swedish. Unlike the other Germanic languages, present-day Swedish only allows the order particle–object. In older Swedish, both of the orders particle–object and object–particle were possible, as in e.g. present-day Norwegian. We trace the development of the present-day Swedish word order in texts from the 15th to the 19th century. Furthermore, we show that the development is not tied to changes in pronominal object shift, and suggest that the present-day word order is a consequence of a reanalysis of the particle from phrasal modifier to head (cf. the Head Preference Principle proposed by van Gelderen 2004).

Keywords: verb particle, argument placement, Late Modern Swedish, Head Preference Principle, pronominal object shift

1 Introduction

As is well known, standard present-day Swedish differs from all of the other (North) Germanic languages in only allowing the order verb particle–object, cf. (1a) and (1b) (see e.g. Svenonius 1996, 2003; Toivonen 2003; Lundquist 2014a).¹

- (1) a. Han kastade bort boken/den.
he threw away book.DEF/it
- b. *Han kastade boken/den bort.
he threw book.DEF/it away
'He threw the book/it away.'

¹Unless otherwise indicated, all examples are from present-day Swedish.



This restricted word order is a rather recent development in the history of Swedish. Up until the 18th century, Swedish showed variation in word order in a way that greatly resembles modern Norwegian dialects and Icelandic (as well as English): pronouns tended to precede particles (2a), whereas full DP objects often (but not always) followed the particle (2b–c).

- (2) a. slogo resan mik i häll
 beat giant.DEF me PART
 ‘the giant killed me’ (*Didrik*, ca. 1450, p. 58)
- b. han ... slog sunder dørrernæ
 he broke PART door.DEF.PL
 ‘he broke the doors’ (*Didrik*, ca. 1450, p. 58)
- c. oc slog swerdit sunder
 and broke sword.DEF PART
 ‘and broke the sword’ (*Didrik*, ca. 1450, p. 48)

This paper is concerned with the development of the strict order particle–object in the history of Swedish. The article has two objectives. First, we aim to give an accurate description of the change in word order with respect to verb particles and direct objects. The focus is on the 17th–19th centuries, which is the period where we see the most rapid change. Secondly, we discuss different ways of modelling the change in a generative framework. We show that the change in particle constructions cannot be a direct consequence of the shift from OV order to VO order in the history of Swedish. We argue that it should not be analyzed in terms of a change in headedness or in available argument positions in the verb phrase, nor can we link it to a general change in pronominal object shift. Instead, we propose that the change is best described as a reanalysis of the particle. We propose that in older Swedish, the particle is a phrasal modifier of a result-encoding phrase, whereas in present-day Swedish it is the head of said phrase. The change can thus be captured by the so-called Head Preference Principle (van Gelderen 2004). We will see that not all particle-like elements behave in the same way in older Swedish, and that not all elements or contexts change at the same time. Most evidently, in the context of a PP, directional adverbs do not behave like particles in older Swedish, but in present-day Swedish they do. Overall, the category of particles appears to be syntactically more homogeneous in present-day Swedish than in Swedish before the middle of the 17th century.

The structure of the article is as follows. In §2, we give a brief description of the category of verb particle, in the sense it is used in the literature on the Ger-

manic languages. We also go through the characteristics of particles in present-day Swedish and give an overview of what is included in our study of older Swedish. §3 introduces the historical corpus, and in §4 and §5 we present the results from the corpus study. In §6, we discuss possible analyses of the change. We discuss the connection between the change in word order in particle constructions and the shift from OV order to VO order, and possible changes in object shift and VP-internal argument positions, but propose that the change is best understood as a change in the properties of the particle. §7 briefly discusses some recent developments and concludes the paper.

2 Verb particles in Germanic and Swedish

Verb particles in the Germanic languages in general, and the Nordic languages in particular, have been extensively discussed (see e.g. Áfarli 1985; den Dikken 1995; Svenonius 1996; Wurmbbrand 2000; Dehé 2002; Ramchand & Svenonius 2002; Toivonen 2003; Aa 2015). Verb particles may at first appear to be a fairly heterogeneous category, but they share some characteristics throughout the Germanic languages, which we discuss below.

In §2.1, we give a very brief overview of the most characteristic properties of particles. §2.2 introduces some standard diagnostics for identifying particles in present-day Swedish. In §2.3, we discuss how particles can be identified in the historical records and look at some problematic cases.

2.1 Particles

Particles have been described as “intransitive prepositions” (e.g. Emonds 1976; Svenonius 1996; Faarlund 2019: 137), where the internal argument has been dropped. The core function of regular prepositions is to locate an external “figure” argument, either spatially or temporally, in relation to an internal “ground” argument; see the locative preposition *i* ‘in’ (3a). In the most straightforward instances, particles fulfil a similar function to that of prepositions: they locate a figure argument with respect to an implicit ground; see the adverbial particle *in* ‘in’ in (3b). The implicit ground argument of a particle can be realized as a prepositional phrase; see (3c) where both a particle and a ground-introducing preposition are present.

- (3) a. Hon ställde mjölken i kylskåpet.
 she put milk.DEF in reffridgerator.DEF
 ‘She put the milk in the refrigerator.’

- b. Hon ställde in mjölken.
she put in milk.DEF
'She put the milk in (the refrigerator).'
- c. Hon ställde in mjölken i kylskåpet.
she put in milk.DEF in refrigerator.DEF
'She put the milk in the refrigerator.'

In the examples above, *mjölken* 'the milk' is the figure argument, which is located with respect to the ground argument *kylskåpet* 'the refrigerator'. In (3b), the ground is only implicit: the milk is located inside something, and from world knowledge (and context) we can speculate that the ground is most likely a refrigerator.

It is, however, clear that not all verb particles establish a simple figure-ground relation. In example (4) below, the same verb and particle as in (3) are used, but the semantic relation is not a simple figure-(implicit) ground relation:

- (4) Hon ställde in konserten.
she put in concert.DEF
'She cancelled the concert.'

Another characteristic of particles is that they add an endpoint to otherwise atelic event descriptions, as shown in the pair below:

- (5) a. Han dansade i rummet. (atelic, locative PP)
he danced in room.DEF
'He danced in the room.'
- b. Han dansade in i rummet. (telic, particle + PP)
he danced in in room.DEF
'He danced into the room.'

Due to this property, it has been suggested that the verb particle is associated with a result-encoding phrase inside the verb phrase, which it either heads or modifies (e.g. Ramchand & Svenonius 2002). Support for this idea comes from pairs such as (6a–b) below, where it looks like the particle *sönder* not only adds an endpoint to a complex event, but also introduces its own argument, similar to a verb:

- (6) a. Han dansade sönder sina skor på fem minuter.
he danced broken POSS.REFL shoes in five minutes
'He danced his shoes broken in five minutes.'

- b. * Han dansade sina skor i/på fem minuter.
 he danced POSS.REFL shoes for/in five minutes.
 ‘He danced his shoes for/in five minutes.’

Despite the facts illustrated in (5–6), many particles change neither the Aktion-sart/telicity nor the valency of the predicate, as already illustrated in (3) above. That is, particles often modify or specify a result of an event already named by the verb (see 7), sometimes in combination with a PP (cf. 3c).

- (7) Han stängde (igen) fönstret.
 he closed PART window.DEF
 ‘He closed the window.’

From a morphosyntactic perspective, it is important to point out that even in clearly non-transparent verb-particle combinations, the verb and the particle do not form a syntactic word. This is most evident from the Germanic V2 languages, where the syntactic subject and sentence adverbs may intervene between verb and particle when the main verb moves to the V2 position (see Áfarli 1985):

- (8) Därför ställde hon inte in konserten.
 therefore put she not in concert.DEF
 ‘Therefore, she didn’t cancel the concert.’

We will return to the formal analysis of particles in §6 below. For now, the reader should keep in mind the following properties of verb particles: they behave like intransitive prepositions, they tend to induce or modify endpoints in event descriptions, and they behave like independent words. In the next section we will look at diagnostics for particles in present-day Swedish.

2.2 Identifying particles in present-day Swedish

It is often not evident how verb particles should be identified in corpora (see e.g. Larsson & Roxendal 2020 for discussion). Words from different classes (e.g. prepositions, adverbs, and adjectives) can be used as particles. Only in a few exceptional cases can particles be lexically identified; in present-day Swedish, this is the case for instance with *ihjäl* ‘to death’ which is only used as a verb particle, or *an* ‘to’ which is always either a particle or a prefix.

There are, however, some prosodic and syntactic diagnostics to distinguish particle constructions from constructions with verb + PP, or verb + adjectival small clause. In present-day Swedish, word order is often used as a diagnostic:

since a particle always precedes the object, examples like those in (9) must involve AdvPs or APs.

- (9) a. Hon körde honom hem.
she drove him home
'She drove him home.'
b. Hon torkade den ren.
she wiped it clean
'She wiped it clean.'

In traditional grammars, prosody is an important way of identifying particles in present-day Swedish (see e.g. Teleman et al. 1999/3: 417). In (10a), verb + particle form a maximal prosodic word (in the sense of Myrberg & Riad 2015), and the accent is on the particle (as indicated with the capital letters). In (10b), the locative preposition forms a (prosodic) constituent with the noun phrase, and the verb is accented.

- (10) a. skriva PÅ kontraktet
write PART contract.DEF
'sign the contract'
b. SKRIVA på en bit papper
write on a piece paper
'write on a piece of paper'

Moreover, the object and particle do not form a syntactic constituent that can be topicalized. Compare again the particle construction in (11a) with the locative prepositional phrase in (11b).

- (11) a. *På kontraktet skrev jag.
PART contract.DEF wrote I
Intended: 'The contract, I signed.'
b. På en bit papper skrev jag.
on a piece paper wrote I
'On a piece of paper, I wrote.'

On the other hand, it is sometimes possible to topicalize the particle by itself, at least in a limited set of contexts, and with directional particles (see Teleman et al. 1999/3: 427). Typically, contrast is required, as in (12). In the same contexts, verbs can be topicalized, stranding the object; see (13). Prepositions cannot be topicalized in the same manner.

- (12) Hon gav honom rejält med stryk, men ihjäl slog hon honom inte.
 she gave him properly with beating but PART beat she him not
 ‘She gave him a proper beating, but she didn’t beat him to death.’
- (13) Kysst har jag henne inte, bara hållit henne i handen.
 kissed have I her not only held her in hand.DEF
 ‘I haven’t kissed her, only held her hand.’ (Holmberg 1997)

Another way of identifying particles in present-day Swedish is that they obligatorily incorporate into participles (even in verbal passives; see Lundquist 2014b and references therein). Consider the contrast between the canonical periphrastic passive in (14a) and the pseudopassive in (14b).

- (14) a. Kontraktet blev på-skrivet.
 contract.DEF was PART-write.PTCP
 ‘The contract was signed.’
- b. Kontraktet har blivit skrivet på.
 contract.DEF has been write.PTCP on
 ‘The contract has been written on.’ (pseudopassive)

In (14a), *på* is incorporated into the passive participle, and the only interpretation is that the passive involves the particle verb *skriva på* ‘sign’. In (14b), on the other hand, *på* has not been incorporated and must therefore be analyzed as a locative preposition. The complement of the preposition has been promoted to subject, stranding the preposition.

Word order, prosody, constituency, and incorporation can thus be used to identify particles in present-day Swedish, at least in many cases. We return to some more problematic cases in the next section, where we discuss how we can identify particles in older Swedish texts.

2.3 The particles in this study

None of the diagnostics discussed above can be directly applied to historical corpus data. Rather, to identify particles in older, written texts, we have to rely partly on our intuitions about the properties of the present-day Swedish translational equivalents of the relevant particle-like elements we find in the corpus. In this study, we have included constructions that would have the word order and prosody of present-day Swedish particles. Moreover, we have used the possibility of an object *preceding* a prepositional element to identify particles in older Swedish (as in present-day Icelandic and Norwegian): in older Swedish, the

order object–particle is possible, whereas the order complement–preposition is not.² Examples with the order object–preposition/particle are therefore included among the particle constructions in the historical study.³

However, even in present-day Swedish, there are cases where the diagnostics mentioned do not disambiguate particles from prepositions or adverbs. We will look at some core cases below and specify how we treat them in the diachronic corpus.

2.3.1 Directional prepositions

As pointed out by Svenonius (2003), directional prepositions are accented in Swedish, and therefore prosodically indistinguishable from particles. In traditional grammars, examples like (15a), with stress on the preposition *i* ‘in’, are treated as particle constructions, due to their prosody, whereas the locative example in (15b), with stress on the verb, is not.

- (15) a. Hon hoppade *i* vattnet.
she jumped in water.DEF
‘She jumped into the water.’
b. Hon HOPPADE *i* vattnet.
she jumped in water.DEF
‘She jumped in the water.’

It is generally difficult to test whether the preposition/particle in examples like (15a) incorporates into a participle, since there are other interfering restrictions

²There is one systematic exception, involving *r*-pronouns (e.g. *der* ‘there’), which precede prepositions in Old Swedish (Delsing 2014). It is also possible that complex prepositions like *emot* ‘toward’ could follow their complements in older Swedish (Falk p.c.) – this would make it particularly difficult to distinguish prepositional from particle uses.

³In 15th–18th century Swedish, the preposition *till* ‘to’ can follow a benefactive object. Examples like (i) are included among the particle constructions.

- (i) skrev och Påwen till
wrote also pope.DEF to
‘wrote also to the pope’ (Swart, 1560, p. 52)

In present-day Swedish, the only possible order is *till*-DP, and *till* heads a PP with the benefactive/goal as a complement. That is, the modern correspondent to (i) is not included among the particle constructions. In the historical study, only examples with the order DP–*till* have been included, and, given that there is word order variation in particle constructions, this might skew the quantitative data somewhat in favour of the older word order.

on periphrastic passives in Swedish (see e.g. Engdahl 2006). Some constituency tests fail with directional prepositions; (16a) can for instance only have a locative reading. However, examples like (16b), which are directional as well, and have stress on *över*, suggest that the preposition and DP might form a constituent (see Tungseth 2006). In other words, (16a) shows that directional prepositions can behave like particles (see 11a above), but (16b) shows that they do not necessarily do so.

- (16) a. I vattnet hoppade hon.
in water.DEF jumped she
‘She jumped in the water’
Not: ‘She jumped into the water.’
- b. Det var över gatan hon gick.
it was over street.DEF she went
‘It was across the street she went.’ (Svenonius 2003: 12b)

As discussed in §2 above, many prepositional particles can be said to take an object that has the thematic role of figure, whereas the ground argument of PPs remains implicit. In directional constructions like (16a), the subject is, however, the figure, and the DP *vattnet* ‘the water’ is the ground.

In the present study, we have followed traditional grammars and also included cases with prepositional elements that take ground arguments among the particles, if other diagnostics (e.g. prosody) point toward a particle analysis. In this way, we can investigate whether these constructions pattern with other particles in the history of Swedish. We will, however, code them as “ground” particles and take their special semantics into consideration in the analysis.

2.3.2 Directional adverbs preceding directional prepositions

Another difficulty involves directional particles/adverbs in the context of a PP, as in (17a). Here, it is possible to treat the adverb as part of the PP, and that is what is also suggested by the possibility of the word order in the authentic example in (17b) and the topicalization in (17c).

- (17) a. Hon kastade upp honom i luften.
she threw up him in air.DEF
‘She threw him up in the air.’

- b. Hon kastade honom upp i luften.
she threw him up in air.DEF
'She threw him up in the air.' (Lindgren, *Känner du Pippi Långstrump*, 1947)
- c. Upp i luften kastade hon honom.
up in air.DEF threw she him
'She threw him up in the air.' (from Larsson & Lundquist 2014)

The examples in (17) do not necessarily all have the same structure. In present-day Swedish, (17a) requires an analysis of *upp* as a particle, whereas in (17b) the word order (object–adverb) rules out that analysis. In older Swedish, on the other hand, (17b) could also be analyzed as involving a particle. We have therefore included both cases corresponding to (17a) and (17b) in the study, but we have annotated them so that they can easily be treated separately. As we will see in the following, the word order in (17b), with the object preceding the particle in the context of a PP, is the rule in older Swedish, but gradually becomes less frequent.

2.3.3 Modified particles

We have excluded a few cases with modified particles, like (18). Here, the particle necessarily follows the object, in (older) Swedish as in the other Germanic languages (but see §7 below). Examples like these are rare in the historical texts, and they are uncommon even in the present-day corpora; we return to them briefly in §7. Modified particles are not included in the corpus study.

- (18) Vi kastade {stenen} långt ut {*stenen}.
we threw rock.DEF far out rock.DEF
'We threw the rock far out.'

2.3.4 Particles and reflexive objects

Simple reflexive objects show a somewhat variable behaviour with respect to particle placement in present-day Swedish. We find at least three patterns, as exemplified in (19) below (see Lundquist 2014c and references therein).

- (19) a. Hon tog sig in i rummet.
she took REFL in in room.DEF
'She got herself into the room.'

- b. Hon la sig ner i sängen.
 she lay REFL down in bed.DEF
 ‘She lay down in the bed.’
- c. Hon klädde upp sig igår.
 she dressed up REFL yesterday
 ‘She dressed up yesterday.’

In (19a), the reflexive object precedes the particle, and the particle carries typical particle stress. In (19b), the reflexive also precedes the particle, but the particle does not carry particle stress – the stress is on the verb. Finally, (19c) has the typical word order of a present-day Swedish particle construction, with the particle preceding the reflexive. We will exclude reflexives from our statistical analysis of the change, but we will briefly comment on the first attestations of the order in (19c). It should be noted that this word order is absent in the other North Germanic languages.

2.3.5 Particles that describe co-movement of subject and object

In the present study, we have also disregarded cases where the particle gives the direction of both the subject and the object argument (see Toivonen 2003). An example is given in (20); here both *I* and *she* go out.

- (20) Jag följde henne ut.
 I followed her out
 ‘I followed her out.’

In these cases, objects have to precede particles in present-day Swedish. The particle does not carry particle stress, and it cannot be incorporated into passives.

Finally, we have excluded particle verbs with clausal complements, as clausal complements always followed particles in older Swedish, as they do in the other North Germanic languages and English (e.g., *I found out that John won the race*/**I found that John had won the race out.*)

To summarize, we have largely followed traditional Swedish grammars when identifying particles in older Swedish texts. We have intentionally been rather liberal and included everything that would lend itself to a particle analysis in present-day Swedish, since this makes it possible for us to investigate how the particle category should be delimited, rather than assuming an a priori stable category. However, we do not include constructions with reflexive or clausal objects, nor examples where the particle follows the object in present-day Swedish. In addition to present-day Swedish particles, we have included cases that

behave like particle constructions in older Swedish (e.g., by allowing word order variation). This includes cases where present-day Swedish has a prefixed verb, e.g., older Swedish *billa någon in* for present-day *inbilla någon* ‘make somebody believe’, or older *gå någon an* for present-day *angå någon* ‘concern somebody’.

3 The corpus

The study uses a corpus of 18 texts from the period ca. 1450–1849. Together with data from previous studies, one text (*Didrik av Bern*, ca. 1450) represents Late Old Swedish. The choice of this particular text is based on the results from Ljunggren (1932), who shows that it has a considerable number of particles that follow the non-finite verb; this allows us to investigate the order between particle and object (independently of OV order). In addition, the corpus includes several texts that are generally assumed to reflect the language of Central Sweden (Stockholm, Uppsala, and surroundings) better than other texts from the same period, for instance *Peder Swarts krönika* (1560), and the autobiography of Agneta Horn (1657). Kiöping’s travel description (published in 1674) and the edition by Salvius (1743) are versions of the same text, and therefore allow for good comparison. Finally, the corpus contains 13 plays from the period 1734 to 1849, taken from the corpus of Swedish drama dialogue (Melander Marttala & Strömquist 2001). As historical sources, these plays are particularly interesting and useful, since the authors often attempt to reflect the spoken language of their time. As we will see in §5, the plays can, however, be more or less liberal.

In the following, we will refer to the texts with reference to the author’s year of birth (when known), rather than the dating of the text; since our interest is in the grammatical competence of the individual, we assume that year of birth is more important than the time of writing or publication. The first text in our corpus that belongs to the traditional Late Modern Swedish period is the play *Svenska sprätthöken* by Carl Gyllenborg (born 1679).

In all, the data consist of 1525 sentences with particles that have been manually excerpted and annotated. In the presentation below, we restrict the discussion to sentences with pronominal or full DP objects, and further exclude reflexive objects and double object constructions; double objects will, however, be discussed briefly in §6 below. The quantified data include 1144 sentences with verb particles. These have been annotated for word order (object–particle or particle–object) and type of object (pronoun–full DP). In addition, we have distinguished between different types of particles: prepositions (e.g., *i* ‘in’), adverbs (*ut* ‘out’), complex particles (*uti* ‘in’, *emot* ‘toward’), and elements like *ihjäl* ‘to death’, which always

have a particle function. We also note the presence of a prepositional phrase related to the particle (as in *throw up in the air*). We have further annotated what meaning the particle carries (directional, metaphorical, etc.), but since it is often hard to come up with strict criteria for different types of meaning, we will only briefly make reference to this level of annotation.

In §4, we describe the word order in particle constructions in Old and Early Modern Swedish up until the beginning of the 17th century. In §5, we look more closely at the period from the middle of the 17th century onwards, which is when the modern word order was established.

4 Particle placement in Old and Early Modern Swedish

Old Swedish had the same word order possibilities in particle constructions as the other North Germanic languages did (see e.g. Ljunggren 1932; Diderichsen 1941; Hróarsdóttir 2008). There was considerable variation in word order, not least since the languages alternated between OV and VO structures. In §4.1, we briefly describe the word order possibilities in Early Old Swedish (with data from previous work). §4.2 is concerned with the patterns we find in texts from the Late Old Swedish period to the beginning of the 17th century, where VO order was increasingly becoming the norm.

4.1 Particle placement in Early Old Swedish

The Old North Germanic languages all showed variation between VO and OV order.⁴ Particles and objects could therefore either follow or precede a non-finite verb, and the order between particle and object could also vary. In the Old Swedish medieval laws, it is common for both object and particle to precede a non-finite verb, as in (21a) (examples from Ljunggren 1932 and Falk p.c.).⁵ We also find the VO patterns of present-day Norwegian and Icelandic; see (21b) where the object precedes the particle, and (21c) where the particle precedes the object. As far as we are aware, the order particle–object–verb is not attested (cf. Hróarsdóttir 2008 on Icelandic).

⁴According to Delsing (1999), there was a drop in the frequency of OV in the 14th century. OV was, however, to some extent revived again towards the end of the 15th century, and it survived (to some degree) until the 18th century (see also Petzell 2011). See §6 for further discussion.

⁵All Early Old Swedish examples have been checked with the electronic text versions available through *Fornsvenska textbanken*, which is available here: <https://project2.sol.lu.se/fornsvenska/>

- (21) a. O-part-V:
vil maþer træþi up taka
want man plowing up take.INF
‘someone wants to start plowing’ (EWL, 13th c.)
- b. V-O-part:
þa skal han bindæ han wiþ
then should he tie.INF him PART
‘then should he tie him to the crime’ (UL, 13th c.)
- c. V-part-O:
Vil by takæ in mark sinæ
want farm fence.INF in land POSS.REFL
‘a farm wants to fence in its land’ (EWL, 13th c.)

The general rule is that object and particle appear on the same side of the verb, but there are also examples where the object and the particle appear on opposite sides of the verb; see (22). These cases appear to be less common (see Ljunggren 1932), and it is hardly a coincidence that (22b) involves a heavy object.

- (22) a. O-V-part:
þa skal lanz asyn næmnæ til
then shall land.GEN inspection appoint.INF PART
‘then shall an inspection of the land be appointed’ (EWL, 13th c.; from Falk p.c.)
- b. part-V-O:
þa skal af takæ. hemfylgh sinæ alt þét
then shall away take.INF dowry POSS.REFL all that
ær vnöt ær
which unnecessary is
‘shall then take away all the dowry that is necessary’ (EWL, 13th c.; from Ljunggren 1932)

In the oldest texts, particles precede the non-finite verb in a majority of the cases: 75% in the Elder Westrogothic Law (EWL, ca. 1220) and 87% in the Law of Uppland (UL, 1296) according to Ljunggren (1932: 95). This is not unexpected, given that OV order dominates in these laws. In later texts, with more VO order, particles more often follow the verb. In Early Old Swedish, particles do not precede finite verbs in V2 position (with a small number of exceptions), but this becomes a possibility from the 14th century onwards.

However, particle placement does not fully pattern with other OV and VO structures (as they seem to in the shift from OV to VO in Icelandic; see Hróarsdóttir 2008). Instead, the order exemplified in (22b), with the particle preceding the non-finite verb and the object after the verb, becomes more common when OV order is lost, presumably due to the emerging possibility of incorporating the particle into the verb. As shown by Ljunggren (1932, 1937), the incorporation of particles into verbs started to be frequent in the 15th century (particularly in formal genres, influenced by Latin).

In the next section, we look more closely at particle placement in three texts from the period 1450–1674.

4.2 A closer look at the ordering of post-verbal objects and particles

In this section, we investigate the three oldest texts in the corpus, namely *Didrik av Bern* (*Didrik*, ca. 1450), *Peder Swarts krönika* (Swart, 1560), and *Nils Matson Kiöpings resa* (Kiöping, 1674). Although they were written in different centuries, they largely show the same patterns with respect to the ordering of objects and particles, at least once we disregard OV patterns and particle incorporation.

Firstly, there is a clear difference between pronominal and non-pronominal objects in all three texts; see Table 1. Overall, around half of the non-pronominal objects follow particles in the texts, whereas only 8% of the pronouns do.

Table 1: The placement of post-verbal particles and objects in three older Swedish texts

Text	Part–pronoun	Part–DP	Total
<i>Didrik</i> (ca. 1450)	2/18 (11%)	41/97 (42%)	43/115 (37%)
Swart (1560)	3/26 (12%)	35/74 (47%)	38/100 (38%)
Kiöping (1674)	1/27 (4%)	30/49 (61%)	31/76 (41%)
Total	6/71 (8%)	106/220 (48%)	112/291 (38%)

Both indefinite and definite full DPs can precede particles in all three texts. Examples from *Didrik av Bern* are given in (23):

- (23) a. oc bröt mang slot nid
 and tore many castles down
 ‘and tore down many castles’ (*Didrik*, ca. 1450, p. 32)

- b. slog swerdit sunder
broke sword.DEF PART
'broke the sword' (*Didrik*, ca. 1450, p. 48)

Heavy DPs are, on the other hand, placed after the particle, as in (24):

- (24) Sände så in till Stocholm en gammall Biscop, benempd...
sent so in to Stockholm an old Bishop called
'then sent into Stockholm an old Bishop, called...' (Swart 1560: 4)

As we saw in §2 above, it is not always clear whether an adverb should be treated as a particle in the context of a directional PP. The order adverb–object–PP forces a particle analysis (given standard assumptions), but in the three older Swedish texts, there are no such examples. Rather, in the context of a PP, the object always precedes the adverb, if it is not extraposed as in (24). Examples are given in (25); there are in all about 40 such examples in the three texts.

- (25) a. skött han eelden in på Staden
shot he fire.DEF in on town.DEF
'he shot in fire on the town' (Swart 1560: 30)
b. burit Wedh och Eeld up i Huuset
carried wood and fire up to house.DEF
'carried wood and fire up to the house' (Kiöping, b. 1621, p. 66)

Moreover, different prepositions can show different patterns, and they should probably not all be given the same analysis. For instance, with the particle verb *slå till* 'strike', the particle *till* always precedes the object (26).⁶ Compare this with *slå aff* 'beat off' in (27), where *aff* follows the object. There are 8 examples with *slå till* 'strike' or *ramma till* 'strike' in the text by Swart, and 3 of these have pronominal objects, as in (26b); these are the only examples with the order particle–pronoun in this text.

- (26) a. att the skulle slå till fiendener then dagen
that they would hit PART enemy.PL.DEF that day.DEF
'that they would strike the enemies that day' (Swart, 1560, p. 25)

⁶This pattern is also found in modern Norwegian with *slå til*. Tungseth (2006) suggests that *til* is not a particle, but heads a PP.

- b. att slå till them medh Dalekaraner på then andra sidone
 to hit PART them with Dalecarlian.PL.DEF on the other side.DEF
 ‘to strike them with the Dalecarlians on the other side’ (Swart, 1560, p. 18)
- (27) när Her Götstaff förste gongen slogh fiendenar aff wid Westerårs
 when Sir G. first time.DEF beat enemy.PL.DEF off by Västerås
 ‘when Sir Gustaf for the first time beat the enemies off by Västerås’
 (Swart, 1560, p. 54)

If the object clearly has the thematic role of ground, it also always follows the particle – even when it is pronominal; see (28). In *Didrik av Bern*, there are 16 examples that clearly involve a (spatial) ground; all have the object after the particle.

- (28) myn brynia kom icke aff mik stundom i et halfft aar
 my hauberk came not off me sometimes for a half year
 ‘my hauberk sometimes did not come off me for half a year’ (*Didrik*, ca. 1450, p. 8)

Given these word order patterns, there is, in fact, little evidence that examples like (26) and (28) should be treated as particle constructions in Old and Early Modern Swedish. Instead, we suggest that they are best analyzed as involving (directional) PPs. By excluding this small group of cases, we can maintain an otherwise solid generalization with respect to word order in the older texts: pronouns precede particles. At the same time, we are left with a more homogeneous category of particles which includes constructions with objects that have the semantic role of figure, and which looks much like the particle category *in*, for instance, present-day Norwegian. Recall from §2.3 above that the cases with ground objects do not seem to behave like particle constructions in Norwegian either. We will therefore conclude that older Swedish particles should be given the same analysis as present-day Norwegian particles; this will be of some importance in the discussion in §6.1 below.

All the examples where pronouns follow a particle in the three texts either clearly have a ground object or involve *slå till* ‘strike’. There is, however, one exception in the most recent text; see (29). In this example, the pronoun *them* ‘them’ is not the ground, but the figure, and it would precede the particle in the normal case.

- (29) bryta aff them som een Tobacks-pijpa
break off them like a tobacco-pipe
'break them off like a tobacco pipe' (Kiöping, b. 1621, p. 143)

If we do not include examples like (26) and (28) among particle constructions, we can conclude that pronouns obligatorily preceded the particle in the 15th and 16th centuries, but that we might see the small beginnings of change in the 17th century text. The later text also has a somewhat higher incidence of non-pronominal objects after particles.

As noted, the order between full DPs and particles varies in Old and Early Modern Swedish. There are, however, specific cases where non-pronominal objects more generally precede the particle. Most clearly, this is the case in examples like (30), where the implicit ground argument is the possessor of the object ('the head').

- (30) lot han hwgga hoffudit aff
let he cut head.DEF off
'he had his head cut off' (*Didrik*, ca. 1450, p. 10)

Since complements of prepositions are sometimes implicit in Old Swedish PPs, one could analyse examples like (30) in much the same way as cases with explicit possessors, like (31). In other words, it is possible that examples like (31) also should not be treated on a par with other particle constructions.

- (31) hugga hoffudit aff thin son
cut head.DEF off your son
'cut your son's head off' (*Didrik*, ca. 1450, p. 42)

To sum up this brief description of the ordering of particles and objects in Swedish up until the 17th century, pronouns are placed before a particle, whereas the placement of non-pronominal objects varies. There are, however, a couple of cases where what have here been included in the study of particle constructions, on the basis of present-day diagnostics, should rather be analyzed as PPs.

5 The development of the modern word order

As we have seen, the placement patterns of post-verbal objects in relation to particles appear to be largely stable up until the 17th century: full DP objects either precede or follow the particle, whereas pronouns always appear in front

of the particle. However, in late 17th century texts that more closely reflect the spoken language of the time, we can note a change towards the modern word order. In this section, we investigate the establishment of the modern system, which takes place in the period from the 17th to the 19th century.

5.1 Overview of the change

Table 2 below gives the frequency of the order particle–object in all of the texts investigated (including the three oldest ones).

Table 2: Particle placement in older Swedish texts

Text	Particle–pronoun	Particle–DP	Total
<i>Didrik</i> (ca. 1450)	2/18 (11%)	41/97 (42%)	43/115 (37%)
Swart (1560)	3/26 (12%)	35/74 (47%)	38/100 (38%)
Kiöping (b. 1621)	1/27 (4%)	30/49 (61%)	31/76 (41%)
Horn (b. 1629)	34/70 (49%)	35/58 (60%)	69/128 (54%)
Gyllenborg (b. 1679)	17/36 (47%)	39/44 (89%)	56/80 (70%)
Lagerström (b. 1691)	7/13 (54%)	13/23 (57%)	20/36 (56%)
Modée (b. 1698)	9/34 (26%)	30/48 (63%)	39/82 (48%)
Salvius (b. 1706)	6/28 (21%)	66/83 (80%)	72/111 (65%)
Dalin (b. 1708)	7/13 (54%)	23/24 (96%)	30/37 (81%)
Stagnell (b. 1711)	13/29 (45%)	43/60 (73%)	56/89 (63%)
Kexél (b. 1748)	9/10 (90%)	17/18 (94%)	26/28 (93%)
Ristell (b. ca. 1750)	8/8 (100%)	14/15 (93%)	22/23 (96%)
Envallson (b. 1756)	3/4	21/21 (100%)	24/25 (96%)
Enbom (b. 1759)	7/14 (50%)	29/33 (88%)	36/47 (78%)
Stridsberg (b. 1755)	9/10 (90%)	21/23 (91%)	30/33 (91%)
Wetterbergh (b. 1804)	6/6	21/21 (100%)	27/27 (100%)
Blanche (b. 1811)	9/11 (82%)	26/26 (100%)	35/37 (95%)
Jolin (b. 1818)	21/23 (91%)	46/51 (90%)	67/74 (91%)

As we saw in the previous section, pronouns preceded particles in earlier texts, with very few exceptions. From Horn (born 1629) and onwards, this is no longer the case. Rather, the order between particle and object pronoun appears to be fairly free in the 17th and 18th centuries, before a more or less stable particle–object order developed in the 19th century. Sentences with full DP objects follow a similar development, but with a higher baseline of particle–object order. In

Figure 1, we show the particle placement over three stages: pre-change (1450–1621), change (1629–1711), and post-change (1748–1818).

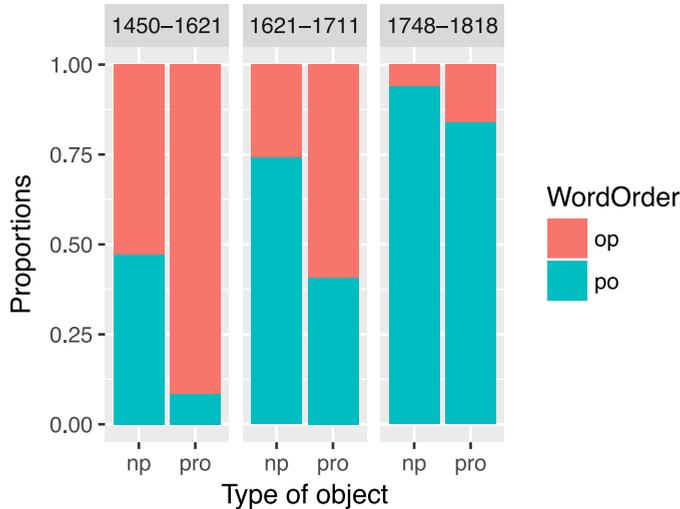


Figure 1: Particle placement with pronominal and non-pronominal objects in three periods (op = object–particle order; po = particle–object order)

Focusing on individual texts, we note a clear increase in the incidence of the modern word order in the play *Swenska sprätthöken* (1737) by Gyllenborg (born 1679). This text is generally assumed to be a good representative of the spoken language of the upper classes in Central Sweden at the time (see e.g. Widmark 2000). From the 18th century onwards, we see effects of style and register in the texts: more conservative texts have more object–particle order, while the development of the particle–object pattern progresses rapidly in the more modern texts. At the end of the century, the modern pattern is almost fully established, for instance in the play by Ristell (born ca. 1750) from 1787. This play can also be considered one of the best sources on the spoken language in Central Sweden at the time. The change is illustrated in Figure 2, where we distinguish more modern and more conservative texts. Considering only the texts that we assume best represent the spoken language in Central Sweden at their time, we can observe a cleaner S-shaped curve.

To summarize, the change can first be observed in the texts by Agneta Horn (b. 1629) and Carl Gyllenborg (b. 1679). This is not unexpected – these are a couple of the historical texts that best represent the spoken language in Central Sweden

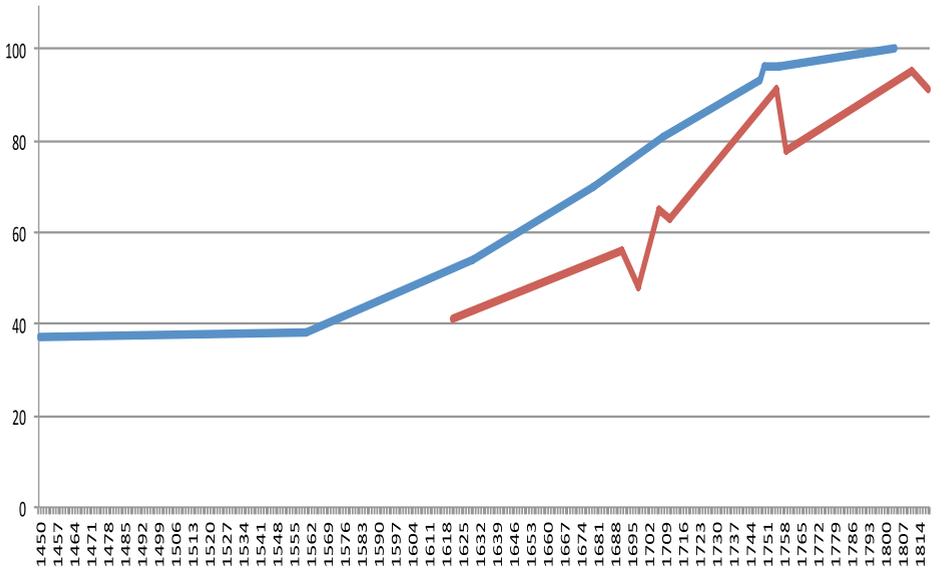


Figure 2: The development of the order particle–object in more and less conservative texts. The blue line shows texts that are assumed to represent the spoken language of their time. The red line includes more conservative texts.

at their time (as is evident from spelling, morphology, and syntax). The spoken language of Central Sweden is an important source for the modern Swedish standard language (see Larsson & Petzell 2022 [this volume]).

5.2 Different objects, particles, and contexts

In the development of the modern word order, we can first note a change in the placement of pronominal objects. In the earliest period, there are, as we saw in §4 above, only a few examples of pronouns following particles. With a single exception, all of these cases involve either the preposition *till* or ground objects, and they should arguably be treated as involving PPs. In the text by Horn (b. 1629), we find the first clear examples of modern particle order with pronominal objects: clearly non-prepositional particles precede pronominal objects that do not carry the semantic role of ground. In the text by Horn, the order particle–pronoun occurs with all types of particles, unlike in the texts discussed in §4.2 above. As in the older texts, objects with the thematic role of ground follow the particle; see (32a). In addition, particle verbs like *tycka om* ‘like’ (lit. ‘think about’) and *hålla av* ‘like’ (lit. ‘hold off’) always have the particle before the object. However, we

find pronouns following particles in other cases as well; see (32b) and especially (32c), where the internal argument carries the role of figure. However, note that most pronouns (51%) still precede particles in Horn's text; one example is given in (33). 40% of the full DP objects have the old word order.

- (32) a. när hon skule kläda på mig
when she would dress PART me
'when she would dress me' (Horn, b. 1629, p. 38)
- b. så torde di inte häler så gå åt oss
so dared they not either so go PART us
'so didn't they dare to get at us so, either' (Horn, b. 1629, p. 11)
- c. at iag icke länge sedan har gråtit vt dem
that I not long ago have cried out them
'that I hadn't long ago cried them [my eyes] out' (Horn, b. 1629, p. 38)
- (33) Och toge de mig vp
and took they me up
'and they took me up' (Horn, b. 1629, p. 29)

In the 18th century, we find examples of pronouns following non-prepositional particles even in the more conservative texts (by Modée and Salvius); see the examples in (34) with particle-pronoun order and the examples in (35) with pronouns preceding particles.

- (34) a. tvungit ut dem
forced out them
'forced them out' (Modée, b. 1698)
- b. åto up dem så råa som de voro
ate up them as raw as they were
'ate them up as raw as they were' (Salvius, b. 1706, chapter 79)
- (35) a. skulle betala det ut
would pay it out
'would pay it out' (Modée, b. 1698)
- b. kände mig igen
recognize me PART
'recognized me' (Salvius, b. 1706, chapter 76)

We have not systematically investigated the ordering of particles and reflexives; recall from §2 that there is still variation in the placement of reflexives in

present-day Swedish. However, we can note that from Horn onwards, it is possible to find examples of reflexives following the particle:

- (36) a. Iag kune kläda på mig
 I could dress PART REFL
 ‘I could dress myself’ (Horn, b. 1629, p. 65)
- b. sedan vi hade väl friskat up oss
 as we had well freshened up REFL
 ‘as we had freshened up well’ (Salvius, b. 1706, chapter 21)

The difference between pronominal and non-pronominal objects was retained well into the Late Modern Swedish period. By the beginning of the period, the modern word order was the general rule with non-pronominal objects for some writers. Gyllenborg (b. 1679) has only a few examples of the old order with non-pronominal objects, whereas around half of the pronominal objects are placed before a particle. Examples are given in (37) and (38).

- (37) a. Binda dem up bakom öronen
 bind them up behind ears.DEF
 ‘bind them up behind the ears’
- b. om mina maner ej stå alla an
 if my manners not befit all PART
 ‘if my manners do not befit everyone’ (Gyllenborg, b. 1679)⁷
- (38) a. Tar upp ett hoprullat papper
 picks up a up-rolled paper
 ‘picks up a rolled-up paper’
- b. så godt som kiöra ut mig
 as good as drive out me
 ‘as good as expel me’ (Gyllenborg, b. 1679)

We can also note that Olof von Dalin, who is often taken to mark the introduction of the new period (see Larsson & Petzell 2022 [this volume]), only has one example with a non-pronominal object in the old word order; it is given in (39).

- (39) om våra förfäder skulle nu sätta sina hufwuden upp
 if our forefathers would now put their heads up
 ‘if our forefathers would now put their heads up’ (Dalin, b. 1708)

⁷When referring to texts in the electronic corpus of Swedish drama dialogue, we give only the author and year of birth, not the page number.

Note that the particle in (39) is an adverb. This does not appear to be a coincidence. Rather, it seems that word order variability remained somewhat longer with adverbs than with prepositions. In fact, all examples of the old word order with non-pronominal objects in the text by Horn have either an adverb or involve the preposition *till* with a benefactive object; see (40a) and (40b). Examples like (41), from the older text by Kiöping, with other prepositional constructions combined with non-pronominal objects, are completely missing from Horn's text.

- (40) a. Skulle han lösa sin fas hus in
would he redeem POSS.REFL father's house PART
'would he redeem his father's house' (Horn, b. 1629, p. 52)
- b. skrifwit min h[är] f[ar] til
written my sir father to
'written to my father' (Horn, b. 1629, p. 49)
- (41) a. Sedan taga the Blyringarna aff
then take they lead.ring.PL.DEF off
'then they take off the lead rings' (Kiöping, b. 1621, p. 98)
- b. Måste sluta alla våra lukor till
must close all our hatches PART
'must close all our hatches' (Kiöping, b. 1621, p. 44)

In §4.2 above, we saw that objects always precede directional adverbs followed by PPs in the three oldest texts in the corpus. This is still the case in the text by Horn; see (42).

- (42) kasta mig in til fru eba
threw me in to Madam Ebba
'threw me in to Madam Ebba' (Horn, b. 1629, p. 13)

The first clear examples in the corpus of particles preceding object + directional PP are found in the text by Salvius from 1743; see (43). Here, we see a clear difference between the Late Modern Swedish text and the earlier version of the same text by Kiöping; cf. (25b) above.

- (43) De fiska hvar dag up pärle skal af botnen til största myckenhet
they fish every day up pearl shells of bottom.DEF of largest quantity
'Every day they fish up the largest quantity of pearl shells from the bottom' (Salvius, b. 1706, chapter 72)

In the 18th and 19th centuries, there is still variation in these contexts. Even in the youngest text in the corpus, there are examples of the order object–particle + PP, where present-day Swedish would require a different word order. One such example is given in (44).

- (44) lägger några vedträn som legat framför kaminen in i densamma
 puts some logs that lain in.front.of stove.DEF in to the.same
 ‘puts some logs that have lain in front of the stove into it’ (Jolin, b. 1818)

In addition to the directional particles followed by PPs, there is one other type of context where the old word order is retained, namely where present-day Swedish no longer has a construction with a free particle. For instance, the example in (37b) involves the particle *an*; in present-day Swedish, *an* would have been prefixed (*anstå* ‘befit’). Similar examples are given in (45). It seems that these elements often lack the typical semantic characteristics of verb particles: they do not introduce an endpoint or a figure argument; see e.g. the stative VP in (45c).

- (45) a. Och gaf mig inte öfwer för något litet
 and gave me not PART for something small
 ‘and didn’t abandon me for a small thing’ (Horn, b. 1629: 24)
 Present-day Swedish: *övergav*
- b. så godt som för ingen ting falla en ährlig Karl til
 so good as for no thing fall an honest man PART
 ‘is passed on to an honest man for almost nothing’ (Modeé, b. 1678)
 Present-day Swedish: *tillfalla*
- c. hör mig ej mera till
 belong me not more PART
 ‘no longer belongs to me’ (Enbom, b. 1759)
 Present-day Swedish: *tillhör*

To sum up, we can identify three stages in the development of the Swedish word order in particle constructions:

Pre-change (–1629): Light pronouns obligatorily precede particles, while full DP objects either follow or precede particles. Examples with ground objects or with a PP should not be included among the particle constructions.

Change (authors born 1629–1711): In the text by Horn (b. 1629) we find the first clear instances of particles preceding pronominal (and sometimes reflexive) objects. The frequency of the order particle–object increases rapidly, but object–particle order is still common, especially with pronouns.

Post-change (authors born 1748–1818): In the texts by authors born after 1748 (i.e., texts from the late 18th century onwards) we find a system that looks like the present-day Swedish system, with particles more or less obligatorily preceding objects. We still find at least two more or less systematic types of counterexamples: 1) particles appearing together with directional PPs; and 2) particles with atypical semantics, i.e. that neither provide an endpoint nor take a figure external argument (see 45).

In §7, we discuss changes that may have taken place more recently.

6 Discussion

As stated in §2.2 above, the empirical investigation of particles in the historical texts started with a rather liberal definition of *particle*. Among other things, we included particle-like elements combined with a PP, although they sometimes seem to form a constituent with the PP in present-day Swedish. Moreover, we included examples with objects that have the semantic role of ground, as opposed to the prototypical figure role of arguments of particles. As noted, these particles do not seem to behave like particles with respect to word order in, for instance, present-day Norwegian.

By including the less typical cases, we can investigate what should be included in the particle category in older Swedish. In fact, we find that the category is not historically completely stable. Firstly, the cases with a prepositional element + a ground object do not behave like particle constructions in the older texts, but rather seem to pattern with PPs. This also includes the examples with *slå till* ‘strike’, although, in this case, it is less clear that the object is a ground than in the examples with a locative meaning. Secondly, examples with an adverb followed by a PP do not behave like particle constructions either, at least not until the middle of the 18th century; here, the order object–particle is obligatory in the older texts, and it has continued to be a possibility even into the present day. We propose that the particle here is best analyzed as part of the PP in older Swedish, but that it has been reanalyzed as a regular verb particle; we return to this below. Finally, there are cases where what seems to be a particle in older Swedish no longer is. In present-day Swedish, these cases are either verbal prefixes (e.g. *stå an* – *anstå* ‘befit’) or have completely disappeared from the language. In many cases, the particle-like element does not have the resultative semantics typical of verb particles.

In addition to the changes in what is included in the particle category, we can identify three separate (but related) word order changes: 1) the emergence of

particles preceding light pronominal objects; 2) the establishment of a categorical particle–object order in constructions without a directional PP, and 3) a change in the word order in constructions with particle + PP. Related to the last point, we also believe that there has been a more recent development, where the frequency of modified particles (e.g. *throw the stone far out*) has decreased. We return to this in §7.

In this section, we discuss possible analyses of these changes. We will in turn look at what we see as the two main alternatives. Firstly, one could analyze the change in particle constructions as being on a par with the change from OV to VO order, i.e. either as a consequence of the headedness of the particle or in terms of argument shifts across the particle head (as suggested for the development of VO order, e.g. by Petzell 2011). In an account along such lines, the word order change in particle constructions would be another step toward a consistent head-initial language. An alternative is to assume that Swedish particles have become different, and that the word order change is a consequence of a reanalysis of the particle.

In the following, we discuss these two possibilities in turn. In §6.1, we briefly compare the word order change in particle constructions with the change from OV order to VO order. Although this alternative might seem initially appealing, we will see that it is problematic to assume object movement across a verb phrase-internal head in 17th and 18th century Swedish. Moreover, the analysis fails to account for the parallels between older Swedish and present-day Norwegian. In §6.2, we look more closely at pronominal argument shifts in older Swedish, and we observe that the word order change in Early and Late Modern Swedish is limited to constructions with a particle: object shift across negation is not affected. Finally, in §6.3, we will propose that the observed changes in particle constructions are best understood as resulting from one single underlying change: a reanalysis of particles from phrasal modifiers to heads in the verb phrase. By assuming that the particle was a phrase in older Swedish, we can more straightforwardly explain the word order variation. At the same time, this allows us to account for other changes in the properties of particles that took place during the same period, e.g. the loss of the possibility to combine adverbial particles with a double object structure. Finally, the more recent change in constructions with particle + PP follows from the same underlying change: in older Swedish, the particle modified the PP, whereas in present-day Swedish, there is a strong preference for treating the particle as a head. We will tentatively suggest that this also accounts for a drop in the use of modified particles.

6.1 OV to VO and OP to PO

The shift to strict particle–object order partly overlaps with the shift from OV order to VO order. The change from OV to VO had mainly taken place during the 13th century (see e.g. Delsing 1999), but OV structures increased in the late 15th century, and residual OV word order is not hard to find in the 16th and 17th century texts. It is perhaps tempting to view the two changes as one and the same, i.e., as a shift to a consistent head-initial word order.

In fact, the two changes share some characteristics, most notably that pronouns seem to stick to the old patterns longer than fully fledged DPs. Delsing (1999: 174) notices that after 1375, the attested OV patterns usually have pronominal objects (but not just personal pronouns), or bare NP objects, that seem to form a complex event with a light main verb (presumably not very different from a particle structure). However, even in the medieval laws, OV is not completely obligatory with pronominal objects, but occurs in around 70–80% of the cases (see Delsing 1999 and Table 2). Object–particle order with pronominal objects, in contrast, seems to have been fully obligatory until the late 16th century. In the time period when the word order in particle constructions began to change, several types of OV structures can be found. The object could either appear to the left of a verb complex consisting of a finite verb and one or several non-finite verbs, or directly to the left of the main verb (see Petzell 2011, 2012). During the 16th century, there was an increase in structures with non-finite verbs preceding the finite verb, presumably arising from German influence.

The OV-to-VO change has been analyzed in at least two different ways that in principle could be generalized to the shift from object–particle (OP) to particle–object (PO) order:

- There was a change in a headedness parameter: whereas both verb phrases and particle phrases were originally head-final, at a later stage, both vP/VP and ParticleP became head-initial.
- The possibility of vP-internal argument shift became more restricted over time, i.e., landing sites for arguments inside the vP disappeared, leading to both VO and PO orders.

With regard to particles, both of these options turn out to be problematic from a comparative perspective: all the North Germanic languages and English lost the OV order centuries ago, but only Swedish developed a strict ordering of objects and particles. The stable variation found in Icelandic, Norwegian, and English (which looks much like the variation in older Swedish) can hardly be accounted

for in terms of headedness. We will therefore not pursue that possibility further, but still briefly discuss the correlation between OV-to-VO and OP-to-PO expected from the second option.

OV structures in older Swedish have been analyzed as DP movement from a low VP position (the complement of V) to a higher specifier inside the extended verb phrase (Delsing 1999; Petzell 2011, 2012). In principle, the same account could be given for the old object–particle order: object–particle orders can be treated as a residue of OV, where the object lands in a low specifier position (possibly of the particle). In (46) below, we give three possible landing sites for the objects, corresponding to the specifier of the particle, the main verb, and the finite auxiliary (or possibly an even higher specifier), respectively.⁸

- (46) Eftersom han <₃ hunden> ska <₂ hunden> kasta <₁ hunden> ut
 since he dog.DEF will dog.DEF throw dog.DEF out
 hunden.
 dog.DEF

In Table 3, we compare the proportion of particle–object order (PO) to the proportion of VO in four texts (where we have access to the VO data, from Petzell 2012). Although the proportions of both VO and PO increase over time, as seen in Table 3, the shift to VO order is, as expected, earlier than the establishment of the strict PO order. Specifically, we see clearly different proportions for PO and VO for pronouns in the last text in the sample (Salvius, b. 1706), which suggests that the OP order was freely available, and maybe even preferred, at a stage where other VP-internal shifts were rarely available.

We could in principle assume that Swedish lost its landing positions within the verb phrase gradually, and that the lowest ones were available the longest. This would mean that the other North Germanic languages (and English) kept a low landing position in the verb phrase, a position either headed by or modified by the particle. There is one crucial problem with such a proposal, and that concerns regular object shift.⁹ A well-known difference between particles in Swedish and the other North Germanic languages is that particles block object shift in Swedish, but not in the other languages (see e.g. Holmberg 1986; Sells 1998). In

⁸Petzell (2012) analyzes the German-like order Object–Main Verb–Finite Aux as a result of pied-piping of the main verb by the object.

(i) Eftersom han [[hunden] sälja [hunden]] ska [[hunden]-sälja [hunden]].
 since he dog.DEF sell dog.DEF will dog.DEF sell dog.DEF

⁹Erik Petzell (p.c.) points out that there is another problem with such a proposal, namely that in the loss of OV order, short movement of the object (giving the order V_{aux} -object- V_{main}) seems to disappear before long movement (giving the order object- V_{aux} - V_{main}); see Petzell (2012).

Table 3: The frequency of particle–object and verb–object order in four Modern Swedish texts. (The number of examples is given in parentheses.) The data on VO order is taken from Petzell (2012).

	PO, pro	VO, pro	PO, DP	VO, DP
Swart (1560)	11.5% (26)	40% (10)	47% (74)	72.7% (11)
Kjöping (b. 1621)	3.7% (27)	40% (45)	58% (43)	62.0% (37)
Horn (b. 1629)	49.2% (69)	53% (88)	60% (58)	88.6% (35)
Salvius (b. 1706)	18.7% (32)	73% (23)	80% (82)	96.8% (31)

Swedish, a particle behaves just like a verb inside the verb phrase; compare (47a) with (47b) and (47c).

- (47) a. Jag kastade den inte.
 I threw it not
 ‘I didn’t throw it.’
- b. Jag har {*den} inte {*den} kastat {den}.
 I have it not it thrown it
 ‘I haven’t thrown it.’
- c. Jag kastade {*den} inte {*den} ut {den}.
 I threw it not it out it
 ‘I didn’t throw it out.’

(47a) illustrates object shift: when the verb has moved out of the verb phrase, a light pronominal object can shift across the sentence adverbial. If the verb remains in the VP, object shift is impossible, as seen in (47b); this is often referred to as Holmberg’s generalization (after Holmberg 1986). In (47c), the verb has moved out of the VP, but object shift is still impossible: it is blocked by the particle.

The restrictions on pronominal object shift are the same in Swedish as in the other North Germanic languages, with the exception of shift across particles. In the other North Germanic languages (exemplified with Norwegian in (48)), a light object pronoun must shift across both the particle and the sentence adverb (in the context of verb movement). Swedish seems to have been like present-day Norwegian up until the 18th century (although the relevant examples are few); see the examples in (49).

- (48) Jeg kastet {den} ikke {*den} ut {*den} (Norwegian)
 I threw it not it out it
 ‘I didn’t throw him out yesterday’

- (49) a. Män thet går henne inte an
 but it concerns her not PART
 ‘but it doesn’t concern her’ (Horn, b. 1629, p. 55)
- b. känner du mig inte igen
 recognize you me not PART
 ‘don’t you recognize me’ (Modeé, b. 1698)

It is unclear why a VP-internal landing site, e.g. in the specifier of a particle phrase, would be required for the pronominal object to shift into the TP. Compare this with object shift in the context of a verb without a particle, where we standardly assume that the object moves directly from an internal argument position to TP, independent of the presence of landing sites within the VP. Rather, the literature on contemporary North Germanic object shift (e.g. Thráinsson 2001) shows that it is impossible to shift over overt heads, as exemplified with a verbal head in (47b) above and a prepositional head below:

- (50) a. Jag ska {*den} inte köpa {den} imorgon.
 I will it not buy it tomorrow
 ‘I will not buy it tomorrow’
- b. Jag litar {*honom} inte på {honom}.
 I trust him not on him
 ‘I don’t trust (on) him’

This suggests that object shift in the present-day North Germanic languages is qualitatively different from the movement of objects around verbs in earlier OV stages. On the other hand, the obligatory shift of light pronominal objects around particles in older Swedish (and in present-day Norwegian and Icelandic) looks more like typical object shift.

In the next section, we take a closer look at pronominal object shift in our historical corpus and compare it to the placement of objects relative to particles. We will suggest that the well-established generalization that pronouns do not move across heads should also be maintained for particle constructions in the present-day North Germanic languages. This means that the particle is not a head, for instance, in present-day Norwegian. Rather, it is a phrasal modifier of a resultative phrase low in the verbal domain. We propose that this was the case in Swedish as well, up until the middle of the 17th century, and that the particle was then reanalyzed as a head.

6.2 Pronominal object shift and word order variation in particle constructions

Present-day Swedish differs from present-day Danish and (varieties of) Norwegian in the optionality of pronominal object shift: whereas light pronominal objects obligatorily shift around negation and other sentence adverbs in the contexts of V-to-C movement in Danish and Norwegian, this shift appears to be optional in Swedish (see Bentzen 2014 and references therein); compare the present-day Swedish example in (51a) with the Norwegian example in (51b). In the Swedish data in the Nordic word order database (Lundquist et al. 2019), 30% (144/478) of the pronominal objects are *not* shifted but follow negation. In corpus data, around 90% of pronouns with nominal antecedents shift in Swedish (see e.g. Andréasson 2008); pronouns with non-nominal antecedents or type reference shift less frequently.

- (51) a. Jag köpte {den} inte {den} igår. (present-day Swedish)
 I bought it not it yesterday
 'I didn't buy it yesterday'
- b. Jeg kjøpte {den} ikke {*den} igår. (Norwegian)
 I bought it not it yesterday
 'I didn't buy it yesterday'

We have investigated the placement of object pronouns and reflexives in relation to negation in the 18 texts in our historical corpus; the results are given in Table 4. Reflexives have been included here, since they shift in the same way as weak pronouns, but we have excluded 41 pronouns with non-nominal antecedents entirely, since they show a different pattern (with only 37% object shift in this corpus). On the other hand, we have included possibly contrasting pronouns with nominal reference, and they account for almost all of the examples with non-shifted pronouns.

It seems clear from the results in Table 4 that pronominal object shift is (almost) obligatory in older Swedish; as many as 90% of the pronouns shift across negation. Although the number of examples is small in the individual texts, we can conclude that the placement of pronouns in relation to negation is stable during the period.

There are, as we saw in §4 above, only a few examples of pronouns following particles in the oldest texts in the corpus. With a single exception, all these cases involve either the preposition *till* or ground objects, and they should arguably be treated as involving PPs. In these texts, object shift also appears to be obligatory (although the examples are few). However, unlike what we saw with the order

4 The development of Swedish particle placement

Table 4: Placement of personal object pronouns and reflexives relative to negation in older Swedish

Text	Pronoun–negation	Reflexive–negation
<i>Didrik</i> (ca. 1450)	10/10	1/1
Swart (1560)	10/10	5/6
Kiöping (b. 1621)	5/5	6/6
Horn (b. 1629)	28/29	7/7
Gyllenborg (b. 1679)	11/12	5/5
Lagerström (b. 1691)	10/12	17/19
Modée (b. 1698)	16/17	21/21
Salvius (b. 1706)	2/2	2/2
Dalin (b. 1708)	8/10	4/4
Stagnell (b. 1711)	4/4	1/2
Kexél (b. 1748)	3/4	2/2
Ristell (b. ca. 1750)	3/4	4/6
Stridsberg (b. 1755)	7/7	6/6
Envallsson (b. 1756)	8/12	4/4
Enbom (b. 1759)	11/13	3/5
Wetterbergh (b. 1804)	6/6	4/4
Blanche (b. 1811)	2/2	2/2
Jolin (b. 1818)	17/19	1/3
Total	161/178 (90%)	96/105 (91%)

of particles and pronouns, there was no general increase in the frequency of the order negation–pronoun in the 17th century. Recall that we find the first clear examples of modern particle order with pronominal objects in the text by Horn. In principle, this order could be seen as just an absence of object shift around the particle. However, there is otherwise nothing particularly unusual about Horn’s placement of pronominal objects. Notably, she consistently shifts pronominal objects around negation, with a single exception, and there, the pronoun is contrasted; see (52).

- (52) När han gaf hene någet, sade iag: Hwar före gefwa i inte mig
 when he gave her something said I why give you not me
 och
 too
 ‘When he gave her something, I said: Why don’t you give me, too’ (Horn,
 b. 1629, p. 78)

Before the middle of the 17th century, the placement of pronouns in relation to particles patterned with object shift, and we could in principle treat particles as regular adverbs. However, from Horn onwards, such an analysis is no longer possible. The data in Table 4 strongly suggest that the change in particle–pronoun placement is not related to changes in general object shift.

We propose that the order pronoun–particle in older Swedish (up until the middle of the 17th century) and present-day Norwegian should be treated together with object shift, and that the placement of pronouns and DPs was regulated by different mechanisms in earlier stages of Swedish. We suggest the following analysis: the figure argument is the specifier of the result phrase.¹⁰ At earlier stages, the particle was merged as a light phrasal modifier of ResP, and could either surface to the left or the right of the specifier, which for simplicity we will state in terms of the branching directionality of the modifier. The pronominal object always shifts past the phrasal modifier, a movement/shifting operation that is identical to regular object shift (which can be stated either as a syntactic movement, or as PF cliticization of a light pronoun to a non-adverb element).

We illustrate the options in Figure 3, which provides possible derivations of (the correspondences of) *Kalle threw out the dog* and *Kalle threw it out* in older Swedish. Firstly, in Figure 3a, the adjunct of ResP branches to the left, and will therefore linearly precede the object DP. If the object is a pronoun, it shifts to a higher specifier in the VP (here, spec-VP) and will precede the particle. In Figure 3b, the adjunct branches to the right, and both DP and pronominal objects will precede the particle.

The branching alternation we see above, we suggest, is similar to that of light temporal and spatial adverbs that may left- or right-adjoin to the vP, either preceding the whole vP-internal cluster of verbs (53a), or following the whole vP (53b), but never appearing inside the verb cluster:

- (53) a. Kalle borde idag ha kastat ut hunden.
Kalle should today have thrown out dog.DEF
'Kalle should have thrown out the dog today.'
- b. Kalle borde ha kastat ut hunden idag.
Kalle should have thrown out dog.DEF today
- c. Kalle borde ha (*idag) kastat (*idag) ut (*idag) hunden.
Kalle should have today thrown today out today dog.DEF

¹⁰Note that the figure argument will be promoted to subject if the verb is intransitive, as in e.g. *Maria dansade in i rummet* ('Maria danced into the room'), where Maria is the figure.

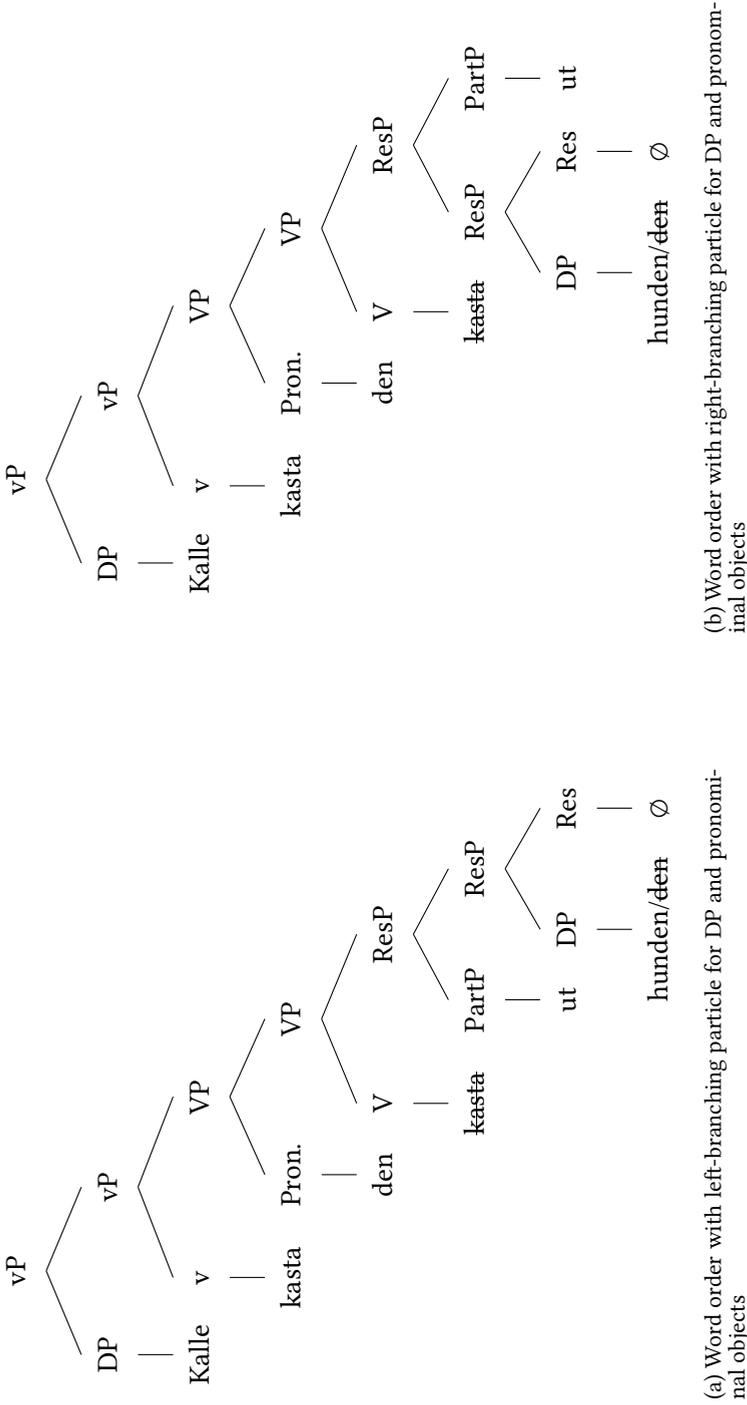
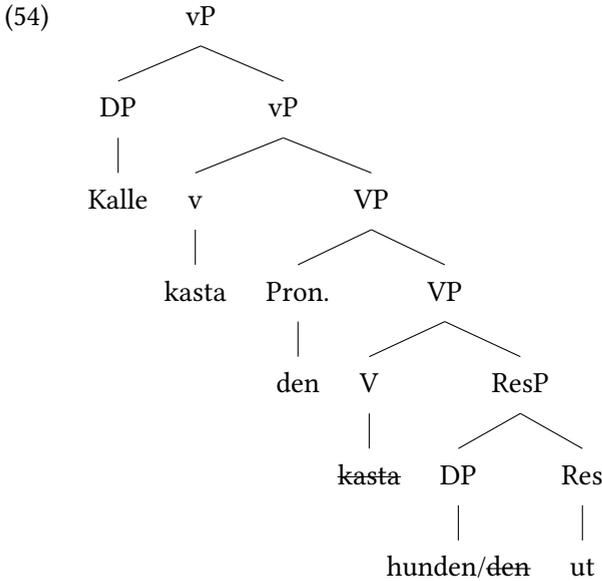


Figure 3: Structure of verb particles in older Swedish

Now, present-day Swedish is different, and we have argued that the change should not be understood as a change in branching or argument shifts. Instead, we propose that the particle has been reanalyzed as the head of the result phrase; the structure is given in (54).

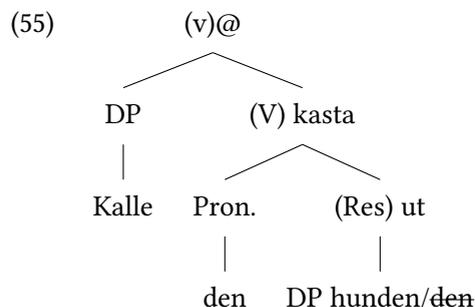


However, a standard minimalist/generative framework with an LCA-based (Kayne 1994) spell-out procedure will not directly be able to capture why the reanalysis led to a categorical change in word order. In (54), it might appear as if the particle should end up at the end of the sentence, i.e. after both DPs and pronouns. However, we will build on Mirror Theory, as originally formulated by Brody (2000), and developed e.g. in Adger et al. (2009), Ramchand (2014), and Svenonius (2016), and assume that specifiers and heads are linearized independently of each other. The heads in the clausal spine form a span, which is spelled out at a given point in the tree. In Swedish, we assume this point to be *v*, as indicated by the @ sign in (55) below. In the tree in (55), the span of heads will spell out directly after the syntactic subject.¹¹ The presence of only one spell-out point

¹¹The subject will generally move to a higher position, but when it does not (as in existential constructions), it surfaces after the particle, as in (i).

- (i) Det har aldrig stått ut någon med det.
 it has never stood out anyone with that
 ‘No one has ever endured that.’

in the span of heads ensures that all heads are spelled out in the same position with respect to specifiers.



In Swedish, we can state that the heads in the vP cluster up in a left-right order at the left edge of the vP. Verbs in Swedish today form a cluster, in which nothing generally intervenes (of course, here we exclude V in C):

- (56) Eftersom Kalle förmodligen snart redan borde ha kunnat kasta
 since Kalle probably soon already should have been.able.to throw
 ut hunden...
 out dog.DEF

We will leave a full technical account aside here. In the next section, we will briefly look at a couple of other consequences of the reanalysis of the particle.

6.3 Phrase to head

In the previous sections, we have pointed out some problems with directly linking the change in particle placement to a change in the available argument positions in the verb phrase and object shift. Instead, we have proposed that the word order change in particle constructions in Swedish should be understood as a consequence of a reanalysis of particles from phrases to heads: Swedish particles have been reanalyzed from phrasal modifiers of ResP to Res heads. Since the heads in the verb phrase are linearized together before arguments and adjuncts in Late Modern Swedish, the reanalysis leads to the fixed modern word order.

This means that the change is another example of the Head Preference Principle (van Gelderen 2004) at work. This principle states that when there is no evidence to the contrary, a word will be analyzed as a head rather than a phrase. van Gelderen (2004) introduces this principle as one of several economy principles which are part of universal grammar and guide children's acquisition of a

language. The principle has previously been invoked to account for the reanalysis of negation (see e.g. van Gelderen 2008) and the loss of V2 order with certain question words in varieties of Norwegian (Westergaard et al. 2017).¹²

We can identify two stages in the change. Firstly, there is a stage at which particles start to behave like heads. This stage can be identified by the possibility of unambiguous particles that precede light pronominal objects, as first observed in the text by Horn from the middle of the 17th century. As discussed above, the assumption is that weak pronouns obligatorily shift across adverbial phrases, including both negation and the older phrasal particles, but that they cannot shift across a head. In the second stage, the particle has to fill the Res head, and the modern word order becomes obligatory.

In this analysis, the word order change is tied to a reanalysis of the particle. In fact, we can note a couple of other changes that occurred around the same time, which arguably are also a consequence of the change in the syntax of particles. Firstly, in older Swedish, adverbial particles could occur in double object constructions, as in (57). This is no longer possible in present-day Swedish, regardless of word order; compare (58) and (59).

- (57) a. så ge mig hit en skål
 so give me here a bowl
 ‘so give me a bowl here’ (Gyllenborg, b. 1679)
- b. torde jag ... kunna betala den Narrn sin fulla lön ut
 ought I be.able.to pay the fool.DEF his full salary out
 ‘I ought to be able to pay the fool his full salary’ (Modée, b. 1698)
- (58) a. Ge mig (* hit) en skål. (present-day Swedish)
 give me here a bowl
- b. Jag betalar honom (*ut) hans fulla lön.
 I pay him out his full salary
- (59) a. *Jag betalar ut honom hans fulla lön.
 I pay out him his full salary
- b. *Jag betalar honom hans fulla lön ut.
 I pay him his full salary out

This restriction can be explained by the assumption that the head responsible for the introduction of indirect objects competes for the same position (i.e., Res) as the present-day Swedish particle (see e.g. Ramchand 2008).

¹²Other similar principles have also been proposed, e.g. *Minimize structure* (Cardinaletti & Starke 1999; Breitbarth et al. 2020). In the present context, nothing hinges on the precise formulation of the economy principles.

Moreover, in the 18th century, particle incorporation became obligatory in constructions with past participles. Although examples are admittedly rare, cases like those in (60) can be found in the 16th and 17th centuries. From the 18th century onwards, particles always incorporate into participles (see Lundquist 2014b); see (61).

- (60) a. bleff ... förd vth till galgan
 was taken out to gallows.DEF
 ‘was taken out to the gallows’ (Swart, 1560, p. 40)
- b. blef sat in i kiörkan den sama hösten
 was put in to church.DEF the same fall.DEF
 ‘was put in the church the same fall’ (Horn, b. 1629, p. 14)
- (61) a. blev in-satt i kyrkan (present-day Swedish)
 was in-put in church.DEF
- b. * blev satt in i kyrkan
 was put in to church.DEF

Leaving the analysis of particle incorporation aside, we conclude that there are several reasons to assume that the word order change is a consequence of a change in the syntax of particles, rather than, for instance, in the general principles of linearization in Swedish or the possibility of argument shifts.

While we find the first evidence for particles as heads in the middle of the 17th century, it took considerable time before the Res head was obligatorily filled. We saw in §5 above that the preference for particles in Res depends partly on the type of element and the context. Prepositions were generally affected before adverbs, and in the context of a PP, the adverb was often a phrasal modifier well into the 19th century. A few elements never occur as independent particle heads in Res – for instance, the particle *an* becomes a prefix instead.

Now, there are some elements that are sometimes included among the present-day particles, which still allow for word order variation; see (62). In traditional grammars, the phrase *till fånga* lit. ‘to captivity’ is for instance treated as a particle only when it precedes the object: as noted in §2.2 above, word order is typically taken as a diagnostic for particle constructions in present-day Swedish. As in older Swedish and modern Norwegian, pronominal objects are preferred in the position before the particle, whereas full DP objects tend to follow it.

- (62) a. Ta {dem} till fånga {? dem}
 take them to captivity them
 ‘capture them’

- b. Ta {tyskarna} till fånga {tyskarna}
take German.PL.DEF to captivity Germans.PL.DEF
'capture the Germans' (Teleman et al. 1999/3: 420)

These cases with word order variation tend to involve clearly phrasal 'particles', like *till fånga* in (61), *i ordning* 'in order', or *färdigt* 'ready'. We propose that they in fact still involve phrasal modifiers in present-day Swedish, regardless of word order. In other words, the word order variability that we see in examples like (62) is a remnant of the older Swedish pattern, which we also still find more generally in the other Germanic languages.

In the next section, we briefly discuss later developments in the distribution of particles in Swedish and conclude the paper.

7 Further developments and conclusion

In this paper, we have traced the development of the present-day Swedish word order in particle constructions, mainly in texts from the (Late) Modern Swedish period. Unlike other significant changes in the history of Swedish (most notably the shift from OV to VO), the old word order seems to have been stable until the middle of the 17th century, and the change is not shared with any of the other North Germanic languages. We have suggested that the word order variation found in Old Swedish (and modern Icelandic and Norwegian) is due to the branching of the Result modifier (the particle) and a general shifting of pronouns (that we also see in object shift across sentence adverbs). The present-day Swedish word order, on the other hand, we propose is a consequence of a reanalysis of the particle as the head of ResP; it is spelled out together with the other verbal heads and will always precede all verbal complements.

The reanalysis can first be detected in our data in Agneta Horn's text (b. 1629), and the change was approaching its conclusion by the beginning of the 19th century, at least if conservative texts are disregarded (see Figure 2) – the change thus largely took place during the Late Modern Swedish period. We have further seen that not all particles and contexts behave alike. Adverbs, particularly in the context of a directional PP, are more reluctant to change. Salvius (b. 1706) is the first in our corpus who has the order particle–object–PP. We have suggested that in older Swedish, there was a preference for treating the particle/adverb as a modifier of the PP. This possibility still exists in present-day Swedish, as evidenced from the example in (17b) above, repeated here as (63).

- (63) Hon kastade honom upp i luften.
 she threw him up in air.DEF
 ‘She threw him up in the air.’ (Lindgren, *Känner du Pippi Långstrump*, 1947)

However, in present-day Swedish, there is a clear preference for analysing the adverb as a head of Res, when possible. Examples like (63) are marginal, and they hardly occur in the production of (younger) speakers. In fact, data from elicited production provide no examples (see the data in the Nordic word order database, Lundquist et al. 2019, which includes precisely contexts like this).¹³ A quick search in the corpus of Swedish prose-fiction 1800–1900 (part of Korp; Borin et al. 2012) shows that there are examples of the order in (63), where our modern intuitions would prefer the order particle/adverb–object; an example is given in (64).¹⁴

- (64) för att hon sände henne ut till faror, lidanden och kanske döden!
 for that she sent her out to dangers suffering and maybe death.DEF
 ‘because she sent her out to danger, suffering and maybe death!’ (SPF, 1880)

It seems that in these cases, the change in the syntax of the particle has not yet reached its conclusion, even in the 20th century. In the end, the change leads to a larger but syntactically more homogeneous category of particles.

There are a couple of other cases of further developments that also require closer study. Firstly, we noted in §6.3 above that there are cases with particles that still behave like phrasal modifiers and which allow word order variation, e.g., with *i ordning* ‘in order’ or *färdigt* ‘ready’. Whether the preferences have changed during the last century or so, we do not know, but we can suspect that also in some of these cases, a structure with the particle as head of Res might have become an option, or even a preference. Consider also modified particles, as in the example in (18), repeated as (65).

- (65) Vi kastade {stenen} långt ut {*stenen}.
 we threw rock.DEF far out rock.DEF

¹³The database is available here: <https://tekstlab.uio.no/nwd>

¹⁴We have searched for the object pronouns *henne* ‘her’ and *honom* ‘him’ followed by the particle *ut*. The corpus is available here: <https://spraakbanken.gu.se/korp/>

Here it is clear that a head analysis of the particle is not available. However, our impression is that modified particles, where the object precedes the particle, are often marginal in present-day Swedish, and less common than in, for instance, Norwegian. With our intuitions, (66), where the modifier is stranded at the end of the sentence, is preferred to (65). Here, there appears to be individual variation and possibly ongoing change, but this also needs to be investigated further.

- (66) Vi kastade ut stenen långt.
we threw out rock.DEF far
'We threw the rock far out'

The difference between Swedish and Norwegian is even more clear with the modifier *helt* 'completely'. Here, splitting the particle and the modifier is the default strategy in Swedish, while they must stay together in Norwegian, surfacing after the object:

- (67) a. Jag slet ut mig helt (present-day Swedish)
I wore out me completely
b. ?? Jag slet mig helt ut
I wore me completely out
'I wore myself out completely'
- (68) a. *Jeg slet ut meg helt (present-day Norwegian)
I wore out me completely
b. Jeg slet meg helt ut
I wore me completely out
'I wore myself out completely'

It seems then that the possibility of treating the particle as a head in the verb phrase emerged in the 17th century and has continually gained ground since then. Today, a head analysis seems to be strongly preferred, whenever possible. However, the variation with regard, for example, to modified particles needs to be investigated further. Since examples are not very frequent in the corpora, it is hard to study whether this construction has changed over time in Swedish. Another case where we find a strong preference for having an overt Res head is in cases of what we may call particle doubling. Here, a ground-introducing preposition is doubled as a particle, preceding the direct object. As far as we know, these were not available at earlier stages of Swedish, and they are strictly ungrammatical in the other Mainland North Germanic languages. We give examples in Swedish (69) and Norwegian (70) below.

(69) Present-day Swedish

- a. Skär vitkålen och lägg på den på pizzan.
 cut cabbage.DEF and put on it on pizza.DEF
 ‘Cut the cabbage and put it on the pizza’
- b. Släng i honom i poolen!
 throw in him in pool.DEF
 ‘Throw him in the pool!’

(70) Present-day Norwegian

- a. Skjær hodekålen og legg (*på) den på pizzan.
 cut cabbage.DEF and put on it on pizza.DEF
 ‘Cut the cabbage and put it on the pizza.’
- b. Kast (*i) ham i bassenget!
 throw in him in pool.DEF
 ‘Throw him in the pool!’

There are additional unresolved questions. Among other things, we have left a full discussion of the Old Swedish placement of particles aside, and not provided an analysis of particle incorporation. It is not unlikely that both of these are key to a final answer to the question of why the syntax of particles has changed in this way in Swedish, but not in the other North Germanic languages; a reanalysis from phrase to head is otherwise a natural development. Part of the answer might be that particle incorporation was much more common in older Swedish than in the other North Germanic languages (see e.g. Ljunggren 1932) and that this opened up the possibility of reanalysis, perhaps aided by the shift from OV to VO order. However, it is probably also important that this change took place rather recently, in a period when the North Germanic languages were being standardized as distinct national languages (partly in opposition to each other), and when schooling became more generally available and obligatory. It seems clear that sociolinguistic factors like these need to be invoked to explain why the modern word order was established so quickly and spread to all of Sweden; variation is now only found in the most peripheral or archaic dialects (see Lundquist 2014a; cf. the examples from Orust in Larsson & Petzell 2022 [this volume]).

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Abbreviations

EWL	Elder Westrogothic law	PO	Particle–Object order
LCA	Linear Correspondence Axiom	UL	Law of Uppland
OP	Object–Particle order	VO	Verb–Object order
OV	Object–Verb order		

Texts investigated

Blanche, August (b. 1811). *Hittebarnet* [The foundling]. Stockholm, 1848. See Melander Marttala & Strömquist (2001). Available through LB.

von Dalin, Olof (b. 1708). *Den afwundsuke* [The jealous one]. Stockholm, 1739. See Melander Marttala & Strömquist (2001). Available through LB.

Didrik = Sagan om Didrik af Bern [The story of Didrik of Bern]. ca. 1450. Edited by Gunnar Olof Hyltén-Cavallius. (Svenska fornskriftsällskapets samlingar 10.) Stockholm: Norstedts, 1850–1854. Pp. 1–79 have been investigated. Available through FTB/Korp.

Enbom, Per (b. 1759). *Fabriks-flickan* [The factory girl]. Stockholm, 1796. See Melander Marttala & Strömquist (2001). Available through LB.

Envallson, Carl (b. 1756). *Kusinerna eller Fruntimmers-sqvallret* [The cousins or the gossip of the women]. Stockholm, 1807. See Melander Marttala & Strömquist (2001). Available through LB.

Gyllenborg, Carl (b. 1679). *Swenska sprätthöken* [The Swedish dandy]. Edited by Lennart Breitholtz & Einar Törnqvist. Stockholm: Gebers, 1959. Available through FTB/Korp. See Melander Marttala & Strömquist (2001). Original (from 1740) available through LB.

Horn, Agneta (b. 1629). *Beskrivning över min vandringstid* [Description of my life]. Edited by Gösta Holm. Stockholm: Almqvist & Wiksell, 1959. Available through FTB/Korp.

Jolin, Johan (b. 1818). *Barnhusbarnen eller Verldens dom* [The children of the orphanage or the judgement of the world]. Stockholm, 1849. See Melander Marttala & Strömquist (2001). Available through LB.

- Kexél, Olof (b. 1748). *Sterbhus-kammereraren Mulpus eller Caffé-huset i Stora Kyrkobrinken* [The chief accountant of the estate Mulpus or the coffee house in the main church hill]. Stockholm, 1776. See Melander Marttala & Strömquist (2001). Available through LB.
- Kiöping, Nils Mattson (b. 1621). Nils Matssons Reesas korta Beskrifning [The short description of the journey of Nils Mattsson Kiöping]. In *Een kort Beskrifning Uppå Trenne Reesor och Peregrinationer, samt Konungarijket Japan*. Printed by Johan Kankel in Wisingsborgh, 1674. Available through Korp.
- Lagerström, Magnus (b. 1691). *Le Tartuffe eller Den skenhelige* [Le Tartuffe or the hypocrite]. Stockholm, 1731. Translation. See Melander Marttala & Strömquist (2001).
- Modée, Reinhold Gustaf (b. 1698). *Håkan Smulgråt* [Håkan Cheapskate]. Stockholm, 1739. See Melander Marttala & Strömquist (2001). Available through LB.
- Ristell, Adolf Fredrik. (b. 1744). *Några mil från Stockholm* [A few miles from Stockholm]. Manuscript from 1787. Edited by Gösta Langenfeldt & Bo Thörnqvist. Stockholm: Department of Scandinavian languages, 1974.
- Salvius, Lars (b. 1706). *Beskrifning om en resa genom Asia, Africa och många andra hedna länder, som är Giord af Nils Matson Kiöping för detta Kongl. Maj:ts skeps lieutenant* [A description of a journey through Asia, Africa, and many other pagan countries, which is made by Nils Matson Kiöping, former lieutenant of the Royal Navy]. Printed in Stockholm, 1743. Available through Korp.
- Stagnell, Johan (b. 1711). *Den lyckelige banqueroutieren* [The happy bankrupter]. Stockholm, 1753. See Melander Marttala & Strömquist (2001). Available through LB.
- Stridsberg, Carl (b. 1755). *Friman eller Den enslige och de resande fruntimren* [Friman or the loner and the travelling women]. Stockholm, 1798. See Melander Marttala & Strömquist (2001). Available through LB.
- Swart, Peder Andersson (b. ca. 1500). *Konung Gustaf I:s krönika* [The chronicle of king Gustaf I]. 1560. Edited by Nils Edén. Stockholm: Ljus, 1912. Pp. 1–61 (until Anno & tc 1523) have been investigated. Available through FTB/Korp.
- Wetterbergh, Carl Anton (b. 1804). *Pröfningen* [The test]. Stockholm, 1842. See Melander Marttala & Strömquist (2001). Available through LB.

Electronic corpora

FTB: Fornsvenska textbanken [The text bank of Old Swedish]: <https://project2.sol.lu.se/fornsvenska>

Korp: https://spraakbanken.gu.se/korp/?mode=all_hist

LB: The Swedish literature bank: <http://www.litteraturbanken.se>

SPF: Swedish prose fiction 1800–1900. Available through Korp.

References

- Aa, Leiv Inge. 2015. *The grammar of verb-particle constructions in spoken Norwegian*. Trondheim: Norwegian University of Science & Technology. (Doctoral dissertation).
- Adger, David, Daniel Harbour & Laurel J. Watkins. 2009. *Mirrors and microparameters: Phrase structure beyond free word order* (Cambridge studies in linguistics 122). Cambridge, New York: Cambridge University Press.
- Áfarli, Tor A. 1985. Norwegian verb particle constructions as causative constructions. *Nordic Journal of Linguistics* 8(1). 75–98. DOI: 10.1017/S0332586500001268.
- Andréasson, Maia. 2008. Not all objects are born alike: Accessibility as a key to pronominal object shift in Swedish and Danish. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of the LFG08 Conference*, 26–45. Stanford: CSLI.
- Bentzen, Kristine. 2014. Object shift. *Nordic Atlas of Language Structures (NALS) Journal* 1(1). 332–343.
- Borin, Lars, Markus Forsberg & Johan Roxendal. 2012. Korp: The corpus infrastructure of Språkbanken. In Nicoletta Calzolari (Conference Chair), Khalid Choukri, Thierry Declerck, Mehmet Uğur Doğan, Bente Maegaard, Joseph Mariani, Asuncion Moreno, Jan Odijk & Stelios Piperidis (eds.), *Proceedings of the eighth international conference on language resources and evaluation (LREC'12)*, 474–478. Istanbul, Turkey: European Language Resources Association (ELRA).
- Breitbarth, Anne, Christopher Lucas & David Willis. 2020. *The history of negation in the languages of Europe and the Mediterranean: Volume II: Patterns and processes*. 1st edn. Oxford; New York: Oxford University Press.
- Brody, Michael. 2000. Mirror theory: Syntactic representation in perfect syntax. *Linguistic Inquiry* 31(1). 29–56. DOI: 10.1162/002438900554280.

- Cardinaletti, Anna & Michal Starke. 1999. The typology of structural deficiency: A case study of the three classes of pronouns. In Henk van Riemsdijk (ed.), *Eurotyp*, 145–234. Berlin, New York: De Gruyter. DOI: 10.1515/9783110804010.145.
- Dehé, Nicole. 2002. *Particle verbs in English: Syntax, information structure and intonation* (Linguistik Aktuell/Linguistics Today 59). Amsterdam: John Benjamins. DOI: 10.1075/la.59.
- Delsing, Lars-Olof. 1999. Från OV-ordföljd till VO-ordföljd: En språkförändring med förhinder [From OV to VO word order: A linguistic change with obstacles]. *Arkiv för nordisk filologi* 114. 151–232.
- Delsing, Lars-Olof. 2014. *Svenskans r-pronomen*. [Swedish r-pronouns.] Talk given at the Möte för nätverket i nordisk syntaxhistoria, Stockholm 6–7 november 2014 [Meeting for the network for Nordic syntax history, Stockholm 6–7 November 2014]. Stockholm.
- den Dikken, Marcel. 1995. *Particles: On the syntax of verb-particle, triadic, and causative constructions* (Oxford studies in comparative syntax). Oxford; New York: Oxford University Press.
- Diderichsen, Paul. 1941. *Sætningsbygningen i Skaanske lov, fremstillet som grundlag for en rationel dansk syntaks*. [The sentence structure in the Scanian law, presented as a foundation for a rational Danish syntax.] Copenhagen: University of Copenhagen. (Doctoral dissertation).
- Emonds, Joseph E. 1976. *A transformational approach to English syntax: Root, structure-preserving, and local transformations*. New York: Academic Press.
- Engdahl, Elisabet. 2006. Semantic and syntactic patterns in Swedish passives. In Benjamin Lyngfelt & Torgrim Solstad (eds.), *Demoting the Agent* (Linguistik Aktuell/Linguistics Today 96), 21–45. Amsterdam: John Benjamins. DOI: 10.1075/la.96.04eng.
- Faarlund, Jan Terje. 2019. *The syntax of mainland Scandinavian*. First edition (Oxford linguistics). Oxford, New York: Oxford University Press.
- Holmberg, Anders. 1986. *Word order and syntactic features in the Scandinavian languages and English*. Stockholm: Stockholm University. (Doctoral dissertation).
- Holmberg, Anders. 1997. The true nature of Holmberg's generalization. *North East Linguistics Society* 27(1). 203–217.
- Hróarsdóttir, Thorbjörg. 2008. Verb particles in OV/VO word order in Older Icelandic. *Working Papers in Scandinavian Syntax* 82. 43–81.
- Kayne, Richard S. 1994. *The antisymmetry of syntax* (Linguistic inquiry monographs 25). Cambridge, MA: The MIT Press.

- Larsson, Ida & Björn Lundquist. 2014. Objektsplacering vid partikelverb i norska dialekter och äldre svenska. [Object placement with particle verbs in Norwegian dialects and older Swedish.] In Janne Bondi Johannesen & Kristin Hagen (eds.), *Språk i Norge og nabolanda*, 99–131. Oslo: Novus.
- Larsson, Ida & Erik M. Petzell. 2022. Introduction: Morphosyntactic change in Late Modern Swedish. In Ida Larsson & Erik M. Petzell (eds.), *Morphosyntactic change in Late Modern Swedish*, 1–52. Berlin: Language Science Press. DOI: 10.5281/zenodo.5792951.
- Larsson, Ida & Johan Roxendal. 2020. Till den historiska korpuslingvistikens: Stavningsnormalisering och automatisk annotering av verbpartiklar i en historisk text. [To the historical corpus linguistics: Spelling normalisation and automatic annotation of verbal particles in a historical text.] In Daniel Sävborg, Eva Liina Asu-Garcia & Anu Laanemets (eds.), *Studier i svensk språkhistoria 15: Språkmöte och språkhistoria*, 161–173. Tartu: University of Tartu Press.
- Ljunggren, Karl Gustav. 1932. *Studier över förhållandet mellan verbalpartikel och verb i fornsvenskan*. [Studies in the the relation between verbal particle and verb in Old Swedish.] Lund: Lund University. (Doctoral dissertation).
- Ljunggren, Karl Gustav. 1937. *Studier över verbalsammansättningen i 1500-talets svenska*. [Studies in the verbal compound in 16th century Swedish.] Lund: Gleerups.
- Lundquist, Björn. 2014a. Verb-particles: Active verbs. *Nordic Atlas of Language Structures (NALS) Journal* 1(1). 110–118.
- Lundquist, Björn. 2014b. Verb-particles: Particle placement in passives. *Nordic Atlas of Language Structures (NALS) Journal* 1(1). 119–126.
- Lundquist, Björn. 2014c. Verb-particles: Placement with respect to reflexive pronouns. *Nordic Atlas of Language Structures (NALS) Journal* 1(1). 127–135.
- Lundquist, Björn, Ida Larsson, Maud Westendorp, Eirik Tengesdal & Anders Nøklestad. 2019. Nordic Word Order Database: Motivations, methods, material and infrastructure. *Nordic Atlas of Language Structures (NALS) Journal* 4(1). 1–33.
- Melander Marttala, Ulla & Siv Strömquist. 2001. *Korpusen Svensk dramadialog: Användarhandbok [The corpus Drama dialogue in Sweden: A manual]* (FUMS 202). Uppsala: Department of Scandinavian Languages, Uppsala University.
- Myrberg, Sara & Tomas Riad. 2015. The prosodic hierarchy of Swedish. *Nordic Journal of Linguistics* 38(2). 115–147. DOI: 10.1017/S0332586515000177.
- Petzell, Erik M. 2011. OV-ordföljd i svenskans historia [OV word order in the history of Swedish]. *Arkiv för nordisk filologi* 126. 141–191.
- Petzell, Erik M. 2012. OV and V-to-I in the history of Swedish. In Ans M.C. van Kemenade & Nynke de Haas (eds.), *Historical Linguistics 2009: Selected papers from the 19th International Conference on Historical Linguistics, Nijmegen, 10-15*

- August 2009* (Current Issues in Linguistic Theory), 211–230. Amsterdam: John Benjamins.
- Ramchand, Gillian. 2008. *Verb meaning and the lexicon: A first-phase syntax* (Cambridge studies in linguistics 116). Cambridge; New York: Cambridge University Press.
- Ramchand, Gillian. 2014. Deriving variable linearization: A commentary on Simpson and Syed (2013). *Natural Language & Linguistic Theory* 32(1). 263–282. DOI: 10.1007/s11049-013-9225-5.
- Ramchand, Gillian & Peter Svenonius. 2002. The lexical syntax and lexical semantics of the verb-particle construction. In Line Mikkelsen & Christopher Potts (eds.), *Proceedings of the twenty-first West Coast Conference on formal linguistics*, 101–114. Somerville, MA: Cascadilla Press.
- Sells, Peter. 1998. Scandinavian clause structure and object shift. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of the LFG98 Conference. The University of Queensland, Brisbane*, 26–45. Stanford: CSLI.
- Svenonius, Peter. 1996. The optionality of particle shift. *Working Papers in Scandinavian Syntax* 57. 47–75.
- Svenonius, Peter. 2003. Swedish particles and directional prepositions. In Lars-Olof Delsing, Gunlög Josefsson, Halldor Armann Sigurðsson & Cecilia Falk (eds.), *Grammar in focus: Festschrift for Christer Platzack*, 343–353. Lund: Department of Scandinavian Languages, University of Lund.
- Svenonius, Peter. 2016. Spans and words. In Daniel Siddiqi & Heidi Harley (eds.), *Morphological metatheory* (Linguistik Aktuell/Linguistics Today 229), 201–222. Amsterdam: John Benjamins. DOI: 10.1075/la.229.07sve.
- Teleman, Ulf, Staffan Hellberg, Erik Andersson & Lisa Holm. 1999. *Svenska akademiens grammatik [The grammar of the Swedish Academy]*. 1st edn. Stockholm: Svenska Akademien.
- Thráinsson, Höskuldur. 2001. Object shift and scrambling. In Mark R. Baltin & Chris Collins (eds.), *The handbook of contemporary syntactic theory* (Blackwell handbooks in linguistics), 148–202. Malden, MA: Blackwell Publishers.
- Toivonen, Ida. 2003. *Non-projecting words: A case study of Swedish particles* (Studies in Natural Language and Linguistic Theory 58). Dordrecht: Springer. DOI: 10.1007/978-94-010-0053-6.
- Tungseth, Mai. 2006. *Verbal prepositions in Norwegian: Paths, places and possession*. Tromsø: University of Tromsø. (Doctoral dissertation).
- van Gelderen, Elly. 2004. *Grammaticalization as economy* (Linguistik aktuell/Linguistics today 71). Amsterdam: John Benjamins.
- van Gelderen, Elly. 2008. Negative cycles. *Linguistic Typology* 12(2). DOI: 10.1515/LITY.2008.037.

- Westergaard, Marit, Øystein A. Vangsnes & Terje Lohndal. 2017. Variation and change in Norwegian *wh*-questions: The role of the complementizer *som*. *Linguistic Variation* 17(1), 8–43. DOI: 10.1075/lv.17.1.02wes.
- Widmark, Gun. 2000. Boksvenska och talsvenska. Om språkarter i nysvenskt talspråk [Book Swedish and colloquial Swedish. On language kinds in Modern spoken Swedish]. In *Boksvenska och talsvenska: Ett urval uppsatser samlade till författarens 80-årsdag 31 juli 2000* (Skrifter utgivna av Institutionen för Nordiska Språk vid Uppsala Universitet 50), 19–56. Uppsala: Department of Scandinavian Languages, Uppsala University.
- Wurmbrand, Susi. 2000. The structure(s) of particle verbs. Unpublished ms. McGill University.