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Long Object Shift does not apply to objects

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Abstract

The term 'Object Shift' means that a weak object pronoun has been raised to a position to the left of a sentence adverbial. In Swedish, there are mainly two positions to which a weak object pronoun can be raised; one of them is called 'Long Object Shift' or 'LOS'. In this paper, I deal with argument structures in constructions with LOS in Old Swedish. The purpose is to provide more clues on the nature of 'the launching site' for those pronouns that are moved by LOS. Using a generative model for Case assignment, θ -role assignment and argument structures in the V-domain, I argue that the pronominal arguments that are moved by LOS are merged in a specifier-position, either spec-VP or in a [DP XP] configuration. Put differently, I argue that LOS does not apply to objects. The most salient results of my study indicate that LOS in Old Swedish was an uncommon option for some verbs and four verbs stood out: *möta* 'meet', *te* 'show/reveal', *synas* 'become visible' and *uppenbara* 'show/reveal'; LOS occurs more frequently with divalent verbs that do not select an external (ACTOR) argument, as compared to verbs that do select ACTOR-arguments; shifted objects are most often assigned an EXPERIENCER-role; pronouns in dative are more common than pronouns in accusative in constructions with LOS.

Keywords: Object Shift, Long Object Shift, argument structures, Case assignment, θ -role assignment, transitivity, Old Swedish.

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1. Introduction

In this paper, I deal with a phenomenon related to word order variation in the Scandinavian languages. Within the field of linguistics, it is usually referred to as 'Object Shift' (or 'OS'¹) – a phenomenon that poses many intriguing questions related to syntax, phonology, morphology, semantics and pragmatics. In what follows, OS will be dealt with from a Swedish viewpoint, and there are mainly two types of OS in Swedish: Short Object Shift (or 'SOS') and Long Object Shift (or 'LOS'). With this paper, I aim to provide more clues concerning LOS by conducting a combined corpus-based and corpus-driven investigation on LOS in Old Swedish.

In Chapter 1, I will present the topic of my investigation in more detail: argument structures of the verbs involved in the type of Object Shift called 'Long Object Shift' in Old Swedish. In addition, I will provide some insight into the previous research on Object Shift, and some interesting diachronic observations that will be important in this paper.

1.1 Object Shift

An instance of Object Shift in the Scandinavian languages means that an object has been raised to a position to the left of a sentence adverbial. As opposed to Icelandic, where OS of a full DP (i.e. a determiner phrase) is permitted in a main clause under certain circumstances, OS in the other Scandinavian languages only affect unstressed (so-called 'weak') pronominal objects. In other words, OS only affects personal pronouns and reflexives such as *honom/ham*, *henne/hende* or *oss/os* (i.e. 'him', 'her' or 'us', respectively) in Danish, Norwegian, Faroese and Swedish.

The phenomenon *per se* was first recognized within the generative paradigm (see Holmberg 1984); in order to explain why elements involved in OS behave in different ways in the Scandinavian languages, Holmberg (1986, 1999) among many others have tried to identify specific properties related to this operation (see e.g. Holmberg & Platzack 1995, Josefsson 1992, 2010, Vikner 2005, Thráinsson 2001, Andréasson 2013, Heinat 2008 etc.). While some researchers emphasize the importance of phonological properties, others have suggested that pragmatic or morphological properties are equally (or more) important. However, the verbs that are involved in Long Object Shift (or 'LOS') have not received much

¹ For a full list of abbreviations, see Chapter 8, section 8.1 in appendix.

attention in the literature, which leaves us with at least one unanswered question: what type(s) of verb facilitate or exclude Long Object Shift in Swedish?

In this paper, OS will be dealt with from a Swedish perspective and Old Swedish in particular. There are mainly two positions to which a weak object pronoun can be raised. These two positions will be recognized as Short Object Shift (or 'SOS') and Long Object Shift (or 'LOS'), both of which are demonstrated with the verb *möta* 'meet' in the following examples in (1), given in Modern Swedish (or 'MSw'):²

- | | | | | | | |
|--------|--------------|--------------|------------------|------------------|--------------|--------------------------|
| (1) a. | Där | mötte | <i>chefen</i> | inte | <u>oss</u> . | (Object <i>in situ</i>) |
| b. | Där | mötte | <i>chefen</i> | <u>oss</u> | inte. | (SOS) |
| | <i>there</i> | <i>met</i> | <i>chief-the</i> | <i>us</i> | <i>not</i> | |
| c. | Där | mötte | <u>oss</u> | <i>chefen</i> | inte. | (LOS) |
| | <i>there</i> | <i>met</i> | <i>us</i> | <i>chief-the</i> | <i>not</i> | |
- 'In there, the chief did not meet us'

In (1a), the weak object pronoun *oss*, 'us', holds its canonical position (i.e. it is *in situ*), whereas in (1b) and (1c), *oss* has undergone OS: in (1b), *oss* has been raised to a position between the inverted clause subject *chefen*, 'the chief', and the negation *inte*, 'not', and in (1c), the same object pronoun has been raised to a position following the finite verb *mötte*, 'met' and preceding the clause subject. In fact, SOS (i.e. (1b) above) is applicable in all Scandinavian languages, whereas LOS (i.e. (1c) above) is only applicable in Swedish. This means that Swedish permits for verb > object > subject (or 'VOS') word order, even though in general, all Scandinavian languages are considered to be SVO (i.e. subject > verb > object) languages of V2-type.

In the following, the type of OS that was illustrated in (1c) will be in focus. More specifically, I will focus on argument structures of the verbs that are used in these constructions. In line with Håkansson (2008), who draws on Alexiadou & Anagnostopoulou (2001), I will assume that the following holds for Old Swedish: one argument may stay in the VP, and the object may move to the T-domain for pragmatic reasons. As a point of departure,

² For ease of exposition, the verbs are all boldfaced, the pronominal objects are all underlined and the clause subjects are all in italics in every example throughout this thesis. Note that in (1a), the weak object appears in what is assumed to be its canonical position (see position 'N2b' in the sentence model in Chapter 2, Figure 2).

I will start off from Delsing (1999:38), who gives a few, interesting examples that might be instances of LOS in Old Swedish, one of which is repeated in (2) below:³

- (2) thær **skulu** hanum *upplændingiær* **mötæ** (UL Kgb II)
there shall.PL him.DAT Upplanders-the.NOM.PL meet
'The Upplanders shall meet him there'

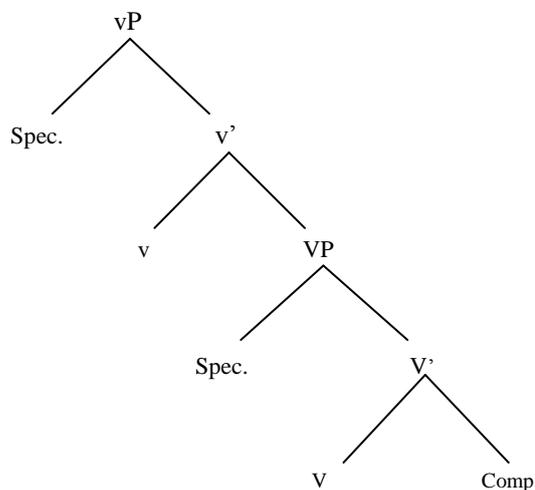
Again, the verb *möta*, 'meet' is constructed with LOS, and just like in (1c), the pronominal object in (2) (i.e. *hanum* 'him', in this case) has been raised to a position in between a verb and the clause subject *upplændingiær* 'the Upplanders' in the middle field. But as opposed to (1c), the pronominal object in (2) has been raised in between two verbs, namely the auxiliary verb *skulu* 'shall' and the main verb *möta*. However, seeing that Old Swedish had OV-structures, Delsing (1999:38f) claims that constructions such as (2) are compatible with LOS in Modern Swedish, and if so, instances with LOS in Old Swedish may tell us more about the verb and the pronouns involved, since the Case system with verbs was more comprehensive (i.e. observable) in Old Swedish, which sometimes gives clues concerning argument structures.

With my investigation, I aim to provide more clues as to what type of argument is preferred (i.e. dative or accusative) in constructions with LOS, and what types of verbs favour LOS in Swedish. In other words, I will be focusing on the 'from what' (i.e. 'the launching site') of the pronouns in constructions with LOS. I will just briefly discuss 'the landing site', and in this connection, I will draw on Håkansson (2008). For my main aim, I use terms from *Swedish Academy Grammar* (SAG; Teleman et al. 1999, part I – IV) and generative terms for explanative and descriptive purposes. In particular, I use a sentence model influenced by the one in SAG (ibid) and a model for θ -role assignment and argument structures in the V-domain from Platzack (2010), where certain θ -roles are mapped onto constituents in specific syntactic positions. Put more precisely, I assume that four out of eight theoretically possible argument structures are relevant with respect to LOS. Then, mainly drawing on Josefsson (1992, 2010), I assume that it is one specific type of argument structure that facilitates LOS as an option in Swedish, i.e. the argument structure for those verbs which do not select an external (ACTOR)

³ Observe that 'UL' is short for *Upplandslagen*, and 'Kgb' is short for *Konungsbalk*; this manuscript is dated to 1297.

argument.⁴ For example, verbs like *möta* correspond to this argument structure, schematized as follows:

Figure 1:



I. $[\text{v}^{\text{P}} \emptyset [\text{v}' \text{möta} [\text{v}^{\text{P}} \underline{\text{DP}} [\text{V}' \text{DP}]]]]]$

To test whether this argument structure is the one that facilitates LOS, I excerpt instances with LOS word order in Old Swedish, and in order to properly deal with this data in my analysis, I draw on Delsing (2014). This makes it possible to predict both Case assignment and θ -role assignment on nominal arguments. In this connection, I relate LOS to *Abstract Case*, *Lexical* contra *Structural Case* (see Holmberg 1986, Holmberg & Platzack 1995 and Delsing 2014), *Semantic Case* (see Falk 1997) and the decline of the Old Swedish Case system (see Delsing 2002, 2014). Last, I draw on Falk (1997) when discussing *Impersonals* and *Free Datives* in relation to LOS, and on Lundin (2002) when discussing reflexive constructions and passive constructions in relation to LOS. Through this, I identify six types of verbs, which, potentially, could yield LOS word order in Old Swedish.

The applied method of my investigation is a mixed synchronic/diachronic corpus study. Put more specifically, I use five narrative texts (dated within the period 1300 – 1500), which are subcategorized into two groups: *Early Old Swedish* (i.e. 14th century texts) and *Late Old Swedish* (i.e. 15th century texts). From these digitalized texts, I excerpt linguistic data by using personal pronouns and verbs as strings of excerption, and in addition, I use three main principles of excerption, based on typological criteria. Furthermore, as operative definitions, I adopt some terminology from Falk (1997), which concern argumenthood (i.e. how to

⁴ In this respect, I draw on both Josefsson (1992, 2010) and Berger (2013).

distinguish subjects from objects through morphological case), valency of the particular verbs (i.e. univalent, divalent or trivalents) and categorization of special types of constructions which potentially could yield LOS word order in Old Swedish. The excerpted data is first presented in examples and statistics, and then, it is compared diachronically. After that, I deal with the same data synchronically, that is, I deal with it as a whole when giving my structural analysis. Here, I use the *Old Swedish Dictionary* (Söderwall 1884 – 1918) and the Delsing (2014) model for Case/ θ -role assignment in Old Swedish, when arguing that the pronominal objects that are possible in LOS are ‘born’ in a specifier-position. Here, I draw on Lundin (2002), when arguing that shifted accusatives are special in that they are introduced in a [DP XP] configuration.

Now, before turning to the theoretical part, I will provide some insight into the earlier research on OS in the Scandinavian languages. Thereafter, I will present some interesting diachronic observations that concern OS.

1.1.1 Previous research on OS

For over three decades, OS in the Scandinavian languages has been a vividly debated enigma within the field of linguistics. The phenomenon raises a number of intriguing questions, such as why does OS apply to full DP objects in Icelandic, whereas only pronominal objects may undergo OS in the other Scandinavian languages. Yet another puzzling fact is that, among the Scandinavian languages, LOS is only applicable in Swedish. In the following section, I will give a brief overview of the previous research, and I will highlight those parts that concern LOS in Swedish.

As mentioned before, OS was first recognized by Holmberg (1984). Later, in Holmberg (1986), he points out that morphology is important with regard to OS in the mainland Scandinavian languages, because “[p]ronouns are the only items that have case morphology in the mainland Scandinavian [...] and pronouns are the only items which are moved by Object Shift” (p. 207). In addition, Holmberg & Platzack (1995) claim that Case triggers OS: “the reason that the shifted object moves [...] is that it must be Case-licensed” (p. 161). However, there is at least one problem with this line of reasoning: in a broad sense, Case in Faroese is comparable to Case in Icelandic, and yet, OS in Faroese only affect pronouns, whereas full DPs as well as pronouns may undergo OS in Icelandic. So if Case were the only clue, this difference would not be fully accounted for. Notwithstanding, when exploring Old Swedish, case morphology and abstract Case may help identify argument structures of the verbs that facilitate LOS; I will return to this in more detail in Chapter 2 below.

Another important aspect of OS is a generalization often referred to as *Holmberg's generalization* (or 'HG'), see Holmberg (1986). Holmberg (1999) restates and modifies HG: “Scandinavian Object Shift is dependent on verb movement in the sense that an unmoved verb always blocks Object Shift” (p. 1). In his (1999) paper, Holmberg assumes that OS occurs postsyntactically (in a stylistic component), and that pragmatic properties (primarily a feature defined as [\pm Focus] on nominal arguments) are important with regard to OS: “Object Shift is clearly a special case of a very general, if not universal phenomenon: Sentence constituents which encode 'old information' move leftwards” (p. 21). This means that pragmatic properties may be important, and that LOS is restricted by the position of the main verb, as is shown in the contrast between (3a, b) and (3c, d) below:⁵

- (3) a. Därför **ville** *medlemmarna* inte **välja** honom till ordförande
Therefore AUX. members-the not elect him for chairman
- b. *Därför **ville** honom *medlemmarna* inte **välja** till ordförande (LOS in MSw)
Therefore AUX. him members-the not elect for chairman
'Therefore, the members did not want to elect him for chairman'
- c. Därför **valde** *medlemmarna* inte honom till ordförande
Therefore elect members-the not him for chairman
- d. Därför **valde** honom *medlemmarna* inte till ordförande (LOS in MSw.)
Therefore elect him members-the not for chairman
'Therefore, the members did not elect him for chairman'

To this, Holmberg adds that “any phonologically visible category, be it a verb, a preposition, a verb particle, or another argument, which governs the object in VP, blocks Object Shift” (p. 34). To a large extent, this clarifies the restrictions that apply to LOS in Modern Swedish, but as is seen in (3d), an object may sometimes cross another argument (in this case, the subject *medlemmarna* ‘the members’). Notwithstanding, a pronoun may not be raised across a verb particle, as is illustrated with the particle *ut* ‘out’ in (4a) and (4b) below:

⁵ In Swedish, it is only finite verbs that move to the second position of a main clause.

(4) a. *Jag sparkade inte ut honom*

I kicked not out him

b. **Jag sparkade honom inte ut*

I kicked him not out

'I did not kick him out'

The contrast above illustrates the blocking effect of an unmoved particle. On the other hand, HG does not fully apply for OS in Swedish, and to some extent, this could be related to OV-versus VO-structures, as we shall see in section 1.1.2 below.

Taking a somewhat different position, Josefsson (1992, 2010) argues that weak pronouns behave in a manner similar to clitics. In Josefsson (2010), she takes this idea one step further and claims that weak pronouns form a prosodic unit with a host:

[t]he host for the object pronoun can be a verb, but also the last word of a DP subject, or an adverbial. If the subject is in a sentence initial position [...] the verb is normally the host, and if another constituent occupies Spec-CP, the subject will serve as a host of the object. (p. 16)

In other words, Josefsson claims that the shifted objects may clitize to another element: “the whole sequence (*för*)*modligen honom* is one prosodic word, [fɔrˈmu:dlɪgənhɔnɔm]” (p. 17) in e.g. “*Mikael såg förmodligen honom inte*”, meaning roughly 'Mikael probably did not see him'. However, a potential problem with this line of reasoning is that one or several adverbials may intervene between the verb and the subject in constructions with LOS, and if so, we face the following question: how many of these elements shall we consider as clitics?⁶

Following a similar line of reasoning, Heinat (2007) stresses the importance of phonological properties when dealing with LOS and shifted reflexives in Swedish. Heinat draws on Cardenaletti and Starke (1999), who in turn assumes that three types of pronouns can be distinguished: Strong pronouns, weak pronouns and clitics. In his conclusion, Heinat

⁶ Holmberg (1993:31, footnote 3) gives the following examples, where one or several adverbials intervene between the object *mej* 'me' and the subject *Helge* (a proper name):

- 1) a. Numera **gör** mej alltså inte längre *Helge* lika irriterad som förr
- b. Numera **gör** alltså mej inte längre *Helge* lika irriterad som förr.
- c. Numera **gör** alltså inte mej längre *Helge* lika irriterad som förr.
- d. Numera **gör** alltså inte längre mej *Helge* lika irriterad som förr.

“So nowadays Helge doesn’t any longer make me as irritated as before”

claims that there is a difference between pronouns and reflexive in reflexive constructions with LOS; I will return to this in section 2.1.3.

Even more concerning the phonological properties, SAG (1999) states that monosyllabic pronouns are preferred over disyllabic equivalents in constructions with LOS:

An object will only precede the subject if it is positioned in the clause initial position, and when an unstressed, case marked (preferably *monosyllabic*) pronoun is moved across an adjacent subject (My italics and my translation; SAG 1999, part IV, p. 79).

To this, SAG adds that LOS is only licit if the pronominal object precedes a DP-subject (cf e.g. SAG 1999, part IV, p. 21, footnote 2). See also Josefsson (1992). This means that LOS is not licit if the object and the subject are both unstressed pronouns.⁷

Another observation concerns the lexico-semantic properties involved in LOS. Josefsson (1992) adds that LOS may partly be dependent on the thematic properties of the verb: “[i]t seems as though it is more difficult to raise an object pronoun over an AGENT subject than over subjects assigned other theta-roles” (p. 66). In Josefsson (2010), she tests this by using two different verbs: *slå* ‘hit’, which normally selects an external (agent) argument, and *möta* ‘meet’, which does not. These are used in constructions with and without LOS, when Josefsson elicits grammaticality judgments, and interestingly, she observes a difference in acceptance between these two verbs (p. 11): her results suggest that LOS may be favoured by those verbs which do not select an external (AGENT) argument (i.e. the *möta*-type). In the present study, I hope to deepen our insights about the role played by the argument structure of the predicate.

All things considered, the previous research has made LOS more intelligible. To mention a few important contributions, we now know that LOS in Modern Swedish requires verb movement, and that the arguments involved must have case distinctions. Furthermore, we know that LOS involves morphological and phonological properties, and that LOS may involve specific lexico-semantic and pragmatic properties as well. However, the verbs involved in LOS have not received much attention in the literature, and hence, some questions

⁷ For the sake of concreteness, two examples may illustrate this restriction:

- (i) Där **mötte** honom *fadern*
there met him father-the
'His father met him there'
- (ii) *Där **mötte** honom *han*
there met him he
'He met him there'

remain unanswered. For this reason, I will further test the claim that LOS is favoured by those verbs that lack an external argument (cf. Josefsson 1992, 2010). But first, I will provide some interesting diachronic observations that may help shed some more light on LOS.

1.1.2 A diachronic view on OS in mainland Scandinavian

As mentioned before, Delsing (1999) observes what might be instances of LOS in Old Swedish. And even though he does not deal with this particular phenomenon, he presents a few interesting examples. For convenience, (2) above will be repeated as (5) below; the verb *möta* ‘meet’ is constructed with a shifted pronoun in dative in Old Swedish:

- (5) thær **skulu** hanum *uppländingiær* **mötæ** (UL Kgb II)
there shall.PL him.DAT Upplanders-the.NOM.PL meet

‘The Upplanders shall meet him there’

To some extent, (5) is compatible with (1c) above, although one significant difference is that the pronominal object in (5) has been raised in between two verbs. Such movements are not possible in MSw (see 1.2 above, on HG), because the main verb (*möta* below) would block the object:

- (6) Där **skulle** *upplänningarna* **möta** honom (Object *in situ*)
there should Upplanders-the meet him

- (7) *Där **skulle** honom *upplänningarna* **möta** (LOS)
there should him Upplanders-the meet

‘The Upplanders should meet him there’

Examples like (5), (6) and (7) illustrate a difference between LOS in MSw. and what might be LOS in OSw: LOS in Modern Swedish does not apply in clauses with two verbs. For this reason, it might seem appealing to relate (5) to the phenomenon called ‘Scrambling’ in German, since ‘scrambling’ of objects does not seem to be restricted by the position of the main verb (cf. Thráinsson 2001).

On the other hand, the LOS-like instances in Old Swedish, such as (5), seem to mainly affect pronominal objects, and the fact that Old Swedish had overt OV-structures (cf. Delsing 1999), could perhaps explain why LOS was permitted in between two verbs, thus conforming to HG. In fact, there are still OV-like structures that permit OS in Modern Swedish, such as

the particle construction illustrated in (8a) and (8b) below, but these are exceptions. In contrast, a pronominal object *must* precede the particle in Modern Danish and Norwegian, which is illustrated in (8c) and (8d) below (cf. Vikner 2005:397ff, Holmberg 1999:2ff):

- (8) a. Hon **tog** inte dem **på** sig (object *in situ* in MSw.)
b. Hon **tog** dem_i inte t_i **på** sig (SOS in MSw.)
She took them not on herself
'She did not put them on'
c. Peter **smed** det_i ikke t_i **ud** (SOS in MDa., Vikner 2005:398)
Peter threw it not out
d. De **kastet** meg_i ikke t_i **ut** (SOS in MNo., Holmberg 1999:2)
They threw me not out
'Peter/They did not throw it/me out'

All of these examples illustrate instances of Short Object Shift in a particle construction in the mainland Scandinavian languages, and these instances might be related to OV- contra VO-structures. That is, in OV-structures, the weak pronominal object need not move *across* the verb (or the particle), since it may be base-generated in a position to the left of the verb (or the particle), thus conforming to HG.

Another interesting diachronic observation is that the same verb (and more or less the same words) as in (5) could be used to construct LOS in Modern Swedish, as in (9):

- (9) Där **mötte** honom inte *upplänningarna* (LOS in MSw)
there met him not Upplanders-the
'The Upplanders met him there'

Hence, (1), (5) and (9) suggest that LOS was (and still is) acceptable with the verb *möta*, 'meet' in Swedish, which in turn poses an interesting question. In Berger (2013), it was noted that *möta* stood out in the sense that it occurred often in constructions with LOS in MSw. And even more, Platzack (ms. p. 8) notes that LOS seems to have been applicable in all the Scandinavian languages during the Middle Ages and he gives an interesting example from the Danish-Norwegian historical grammar (Falk & Torp 1900). Again, we see the verb *möta* in what might be an instance of LOS, but this time, in a Danish text from the 16th century:

- (10) da Roland kom nær slottet, **møtte hannem en ridder** (Falk & Torp 1900:290)
when Roland came near castle-the met him a knight
'When Roland reached the castle, a knight met him'

According to Platzack (ms.), the possibility to construe LOS in Danish and Norwegian was lost due to parametric change related to null-subject clauses and properties of the head C. However, for the purpose of this paper, it suffices to observe that (5), (9) and (10) pose a question worth pursuing: why is a verb like *möta* 'meet' so frequent in constructions with LOS?

To summarize, constructions with LOS in Old Swedish will be in focus in this paper, and this is interesting for several reasons. First of all, except for Platzack (ms.), an investigation on LOS in Old Swedish has never been conducted before. The fact that constructions with LOS constitutes VOS word order in Swedish, poses two questions worth pursuing: what verb type(s) favour LOS, and what type of position does the object occupy in constructions with LOS? To address the former question, I will conduct a corpus study and search for constructions with LOS in Old Swedish texts written in the period 1300 – 1500. This particular period of time may provide some more clues that could help solve the LOS-puzzle, since the Case system with verbs was more comprehensive than it is in Modern Swedish. In the next chapter, I will return to Case in Old Swedish when discussing the theoretical considerations of my investigation.

2. Theory

In this chapter, I will state the main assumptions that will be adopted in my investigation. I will use both descriptive and explanative terms in order to properly deal with the excerpted data. That is, I will use a descriptive framework when describing the excerpted data, and a generative approach when giving structural analyses. Additionally, this chapter provides the central notions concerning morphological case (henceforth 'm-case'), abstract Case licensing and types of constructions with *EXPERIENCER*-arguments in Swedish. Last, I will sum up the central notions and present my hypothesis.

2.1 Theoretical framework and basic assumptions

First of all, I will use the terminology in SAG (1999, part I - IV) as a descriptive framework, especially when discussing the linear sentence positions. Furthermore, I will use a sentence

model influenced by the one in SAG (1999, part IV, p. 675). This model is illustrated in Figure 2 below:⁸

Figure 2. *Sentence model*

Clause-initial field		Middle field				Clause-final field			
F.	V1	LOS	N1	A1	N2a	V2	N2b	A2	Ex.
1. Där	mötte		<i>chefen</i>	inte			<u>oss</u>		
There	met		chief-the	not			us		
2. Där	mötte	<u>oss</u>	<i>chefen</i>	inte					
There	met	us	chief-the	not					
3. ther	scula		<i>smalenningia</i>		<u>honom</u>	möta			
there	shall		Smalanders-the		him	meet			
4. thær	skulu	<u>hanum</u>	<i>upplændingiær</i>			mötæ			
there	shall	him	Upplanders-the			meet			

Figure 2 provides a frame for the central positions and fields. As can be seen, the overarching fields are the following three: *Clause-initial field*, *Middle field* and *Clause-final field*. Regarding the positions, i.e. *F.*, *V2*, *LOS*, *N1*, *A1*, *V1*, *N2a*, *N2b* and *Ex.*, *V* stands for verbal position 1 and 2; *N* is for nominal position 1 and 2 (*a* and *b* for VO- and OV-structures, respectively); *A* is for adverbial position 1 and 2; *F.* and *Ex.* are for first position and extra position, respectively. In what follows, I will use these notions when discussing positions of the constituents involved in constructions with LOS.

As for the explanative part of my investigation, I will assume a generative approach and use the theoretical machinery explicated in Platzack (2010).⁹ In particular, I will assume that it is a feature-driven computational system that builds structures, and that this system is driven by the need to delete unvalued (or uninterpretable) features before the derivation of a full

⁸ For the sake of comparison, I have included the example in 3, pointed out to me by Delsing (personal communication). This example is excerpted from a digitalized version of *Konungxbalken*, part VI in *Kristoffers Landslag* (or 'KrL:KB VI'), which is dated to 1442. In 3, the object is *in situ* in an OV-structure (compare Delsing 1999:38). For more information on the original of *KrL:KB VI*, see Fornsvenskatextbanken.se

⁹ Platzack (2010) is a textbook which provides the basic notions used within the Minimalist program (see Chomsky 1995).

clause is completed.¹⁰ Below, I will present the V-domain, which has a central role for my analysis of constructions with LOS in Swedish, and for ease of exposition, I will start by depicting a basic phrase structure template with a head, a complement and a specifier (abbreviated **v**, **Spec.** and **Comp.** in figure 3 below):¹¹

Figure 3:

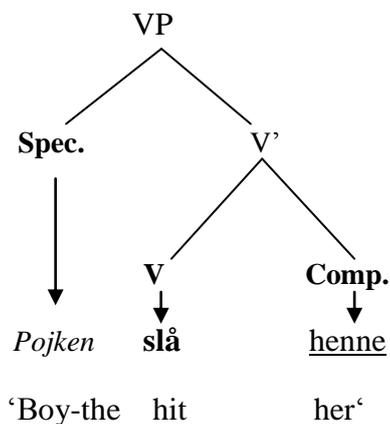


Figure 3 illustrates the outcome of the basic operation *Merge* within the V-domain of a transitive verb (cf. Chomsky 1995:226 and p. 243ff). As expressed in Lundin (2002), “the computational system that derives the particular sentences starts by picking up two elements (α and β)“, which in turn produce “a projection [$_{\alpha}$ α β] with an internal binary structure“ (p. 29). Hence, Figure 3 above illustrates how the merged head **v** and complement have formed a projection **V'**, which in turn is merged with the external argument (i.e. the subject *Pojken*) in the specifier, to form a constituent: **VP**. It should also be noted here that the notions *specifier* and *complement* are relational: the specifier of **VP** is also the subject of **VP**; the complement of **VP** is also the object of **VP** (cf. Chomsky 1995:55).

However, Figure 2 does not provide a full picture of feature-driven movement or the θ -role assignment within the **VP**, and thus, it needs to be extended in order to depict the argument structures that will be relevant with regard to LOS. Let us first turn to the θ -role assignment. Drawing on Platzack (2011:171ff), who in turn assumes Baker’s universal principle 'UTAH':

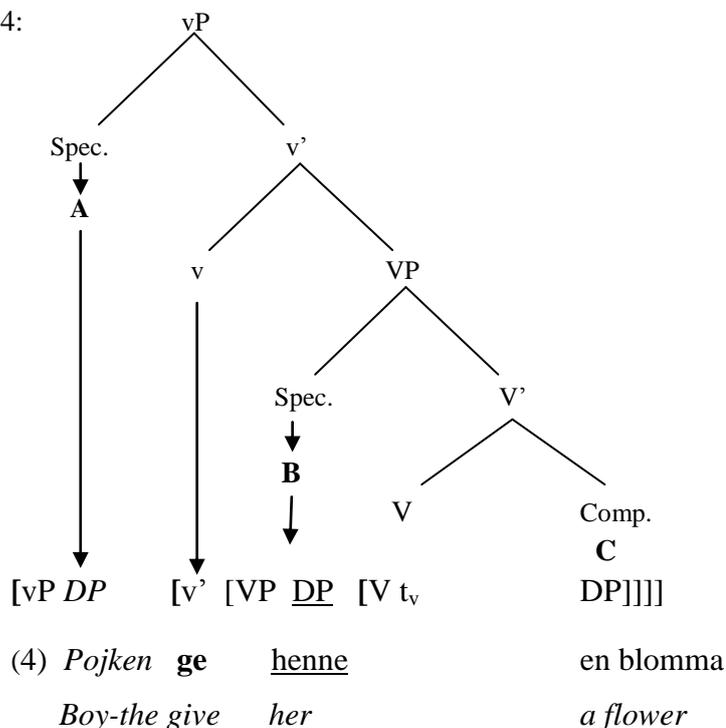
¹⁰ For instance, a possible unevaluated feature on a noun phrase -- let us call it ‘*event measurement*’, i.e. a limitation on time for the event in question, here abbreviated as $-\tau$ -- gets deleted through the operation *Agree* with a valuated τ on a verb. If not, the derivation crashes. See Platzack (2011:65ff) for a more detailed discussion.

¹¹ Throughout, I follow standard practice in assuming binary branching. Observe also that the structure in Figure 3 could be notated with square brackets:

(1) [VP *Pojken* [V' *slå* *henne*]]
Boy-the hit her

The Uniformity of Theta Assignment Hypothesis (1997), I will elaborate on the idea that certain θ -roles are mapped onto constituents in specific syntactic positions in the VP and in the phrase above VP. Hence, I will now include another phrase above VP, namely (little) vP:¹²

Figure 4:



According to Platzack, the three thematic groups that are illustrated in Figure 3 (i.e. **A**, **B** and **C** above) are associated with different θ -roles: an argument bearing an AGENT-role is assumed to be first merged in **A** (the *ACTOR*-group), an argument with a RECIPIENT-role in **B** (the *EXPERIENCER*-group), and an argument with a THEME-role in **C** (the *THEME*-group), as is shown in (4).¹³ With this model, it is possible to depict 8 different argument structures and to demonstrate how certain thematic structures may be mapped onto certain syntactical relations in the V-domain.

In the case of LOS, four of the potential argument structures are relevant, at least *prima facie*: LOS requires a verb that selects at least two nominal arguments. In other words, LOS requires either a transitive (i.e. divalent) or a ditransitive (i.e. trivalent) verb, i.e. a verb that

¹² Observe that Figure 4 is a simplification of the model in Platzack (2010): he uses a root phrase below vP to explain categorial differences (see 2011:68f), but these are not relevant for the purpose of this paper.

¹³ To clarify even more, the *ACTOR*-group may include roles such as AGENT, CAUSE etc.; the *EXPERIENCER*-group may include roles such as RECIPIENT, BENEFICIENT, MALEFICIENT, GOAL etc.; and the *THEME*-group may include roles such as RESULT, THEME, PATIENT etc. (cf. Platzack 2010).

selects two or three arguments, respectively. Consequently, the possible argument structures are the following four:

- a. [vP DP [v' [VP DP [V' DP]]]]
- b. [vP DP [v' [VP DP [V' Ø]]]]
- c. [vP Ø [v' [VP DP [V' DP]]]]
- d. [vP DP [v' [VP Ø [V' DP]]]]

An example of (a) has already been given in Figure 3 above: (a) depicts the argument-structure of trivalent verbs, i.e. ditransitives such as the *give/send*-type, where argument X (i.e. *Pojken*, 'the boy') gives argument Y (i.e. *henne*, 'her') argument Z (i.e. *en blomma*, 'a flower'). For concreteness, I will also give examples that correspond to the argument structures of divalent verbs:¹⁴

(11) b. [...[vP *Han* [v' **skrämma** [VP henne [V' Ø]]]]

He *scare* *her*

(12) c. [...[vP Ø [v' **möta** [VP henne [V' *mannen*]]]]

meet *her* *man-the*

(13) d. [...[vP *Hon* [v' **döda** [VP Ø [V' honom]]]]]

She *kill* *him*

Although it might seem trivial, it should also be noted in passing that verbs could be constructed with other arguments than DPs. For instance, a Small Clause, i.e. a clause that expresses "a non-finite proposition or a non-finite nexus relation" (Lundin 2003:11f), could be merged as a complement in V', as in the infinitive construction: "*Mikael hörde [henne spela piano]*", meaning 'Mikael heard her play the piano'.¹⁵ As I see it, the corresponding argument structure would then be similar (but not identical) to the one in (c), and given the

¹⁴ Note that (d) is somewhat problematic: the object *honom* 'him' could be taken to be either an EXPERIENCER- or a THEME-argument. However, I will follow Platzack (2010:74 and 182) and assume the latter, i.e. that *honom* carries a *PATIENT*-role (associated with the THEME-group).

¹⁵ In accordance with Lundin (2002:13) and Platzack (2010:213, footnote 112 and p. 217), I assume that e.g. an object predicative construction or an object-(accusative)-with-infinitive construction (called 'Exceptional Case Marking' or 'ECM constructions' in the generative literature) could be analysed as two types of Small Clauses. Note, however, that in the literature, there is no consensus concerning which constructions are to be included in the Small Clause category. Typically, though, they lack a finite verb and constitute a syntactic subject-predicate relation.

relative notion of specifier, *henne* 'her' could be seen as the subject of a Small Clause, since it would be generated in the specifier of the Small Clause.

Returning to LOS, it was noted in Berger (2013) that trivalent verbs (i.e. the *give/send*-type) were only used exceptionally with LOS, which is in line with the Josefsson (1992) assumption. That is, it seems to be more difficult “to raise an object pronoun over an AGENT subject than over subjects assigned other theta-roles“(p. 66). Furthermore, Berger (2013) observed that the verbs often assign an *EXPERIENCER*-role to the shifted object (i.e. *henne*, *honom* and *dem*, which were the only pronouns that were included in that investigation). If this is a general tendency, the shifted pronominal object should merge in **B**, and it follows that (b) or (c) may be the most relevant argument structures with regard to LOS. To this, we may add that two verbs stood out in Berger (2013): *möta* and *vänta* 'wait'. Interestingly enough, the Norwegian equivalents are discussed in Julien (2009), because they “are not really transitive; that is they have no external argument” (p. 100). In this paper, Julien argues that verbs like *möta* could have its two arguments “appear in their base orders” (p. 77), which in a LOS-construction with *möta* would mean that a (covert) expletive (i.e. *det* i.e. ‘it/there) may be situated in spec-TP.¹⁶ Notwithstanding, the observations in Berger (2013) and Julien (2009) suggest that (c) may be the most relevant structure with respect to LOS in Swedish.

Before turning to movement of constituents (henceforth ‘Move’), I will now include another central notion, namely the distinction between A-positions and A'-positions. Platzack (2011:93ff) points out that A-positions are positions where elements such as subjects and objects are base-generated (i.e. **A**, **B** and **C** in figure 3 are A-positions in this respect). While A-positions are also assumed to be positions to which elements have to move in order to attain featural agreement (i.e. *Agree*, or *Match*, in Platzack's terms), the so called A'-positions are positions to which elements can move in order to meet other requirements (such as moving to the clause-initial position for reasons of topicality, contrast or the like). In this connection, it should be noted that it is standard to assume that those elements that are base-generated in A'-position (such as adverbials) may not move to A-positions because they bear incompatible features (cf. Platzack 2010:93ff).

Until now, we have only dealt with the VP, but the clause has more structure; I will now give a very short presentation of the three overarching domains within the generative framework: C, T and V. The highest domain, called C, contains features that e.g. “anchor the clause in the reality, i.e. with respect to discourse, the speaker's here and now, point of view

¹⁶ I will return to the implications of this assumption in Chapter 3, section 3.3.2 and 3.3.3 below.

etc.”; the T-domain hosts “temporal information” tied to inflectional properties;¹⁷ last, in the V-domain, “[t]he act, event, or state is given its semantic value [...] of which the functional projection vP is the highest part” (Lundin 2003:34). Apart from the hierarchical order, C, T and V correspond to the three overarching fields: Clause-initial field, middle field and clause-final field (compare Figure 1 above). Now for the sake of concreteness, the following example may further disambiguate how e.g. the verb from Figure 3 moves from the head V to the head C in order to “anchor” the clause in the speaker’s here and now in a derivation of full clause:

- (14) [^{CP} Pojken_j [^{C'} gav_i [^{TP} t_{subj} [^{T'} [^{vP} t_{subj} [^{V'} t_v [^{VP} henne [^{V'} t_v en blomma]]]]]]]]]]]
Boy-the gave her a flower
 'The boy gave her a flower'

As we see in (14), the ditransitive verb *ge* ‘give’ has moved directly from v to C’, which is called *Move* (or *Internal Merge*, see Platzack 2010:78ff).¹⁸ In Old Swedish, however, an intermediate v-to-T movement is commonly assumed (see Platzack 2010:137, footnote 84). Notwithstanding, in (14), we also see that the clause subject *pojken* ‘the boy’ has moved from spec-vP (an A-position) through spec-TP (another A-position) to spec-CP (an A’-position).¹⁹

In the next section, I will briefly discuss movement of the subject and the object in LOS. Through this, I aim to point out arguments in favour of the assumption that the landing site of the pronominal object is in the T-domain in Old Swedish.²⁰

2.1.1 LOS and *Move*

Although the main purpose of this paper is not to account for the landing site of the object, I will nevertheless discuss this issue briefly here.

Håkansson (2008) does not deal with LOS, but he presents data indicating that movement to spec-TP was less restricted in Old Swedish, as opposed to Modern Swedish. Most

¹⁷ Note that T is sometimes referred to as I (short for ‘inflectional’); I will return to some of these inflectional properties that may be related to T in Old Swedish in section 2.1.1 below.

¹⁸ This movement is probably driven by the need to delete an unvalued feature in C’ that requires the verb to hold the second position of a main clause in Modern Swedish. Movement from V to C in main clauses is the movement that is common to all V2-languages.

¹⁹ The first movement (i.e. from spec-vP to spec-TP) is probably driven by a so-called EPP-feature: a feature that requires that a visible constituent moves to this position in order to delete EPP in Modern Swedish (cf. Platzack 2010:78ff). Movement from spec-vP to spec-TP is the movement that is common to all languages with a VP-external subject position. Movement from spec-TP to spec-CP is probably driven by pragmatic features, linking the subject-argument to the discourse.

²⁰ Even though LOS is applicable in MSw., I will not discuss possible diachronic differences or similarities concerning the landing site in this paper.

importantly, he draws on Molnár (2003) when arguing that elements were attracted to spec-TP for pragmatic reasons, rather than syntactic reasons. In his line of reasoning, Håkansson uses the distinction A-position contra A'-position, and he argues that spec-TP did not have EPP and that it was an A'-position in Old Swedish. To support this, Håkansson (2008:159f) draws on e.g. Westman (1974) when pointing out that spec-CP is mostly used as a position for subjects in Modern Swedish, as compared to Old Swedish, where spec-CP to larger extent was used as a position for adverbials. According to Håkansson, this indicates that, in Old Swedish, both spec-CP and spec-TP were positions for optimal topical elements (cf. p. 162f). If this is correct, I find it reasonable to assume that a pronominal object may be raised to the T-domain in Old Swedish for pragmatic reasons.²¹

Furthermore, Håkansson (2008) draws on Alexiadou & Anagnostopoulou (2001) and their *Subject in Situ Generalization* (or 'SIG'). In short, SIG states that when the derivation of a full clause is completed, the VP may only contain one nominal argument, either the subject or an object.²² Assuming that this holds for Old Swedish, Håkansson (2008:204ff) concludes that only one instance in his investigation seems to be a counterexample to SIG.²³ However, Håkansson (ibid) questions the legitimacy of this example, due to the fact that adverbials may precede and/or follow the subject in the middle field in both Old Swedish and Modern Swedish (cf. also in Holmberg 1993:31, footnote 3 and Platzack 2010:167). For these reasons, I will use different principles of excerption, to which I will return in section 3.3.2 below.

For the purpose of this paper, I will adopt the Håkansson (2008) analysis and assume that spec-TP was an A'-position in Old Swedish, and that only one argument may stay within the

²¹ Note that I do not point out spec-TP as the landing site for objects in LOS, since this analysis would face at least one problem, both in Old Swedish and in Modern Swedish: LOS with a ditransitive verb may indicate movement of two arguments, i.e. both the object and the subject. The example below was brought to my attention by Delsing (personal communication):

(i) Varför **köpte** honom Erik inte [VP t_o t_s en cykel]
Why bought him Erik not a bike
'Why didn't Erik buy him a bike'

For this reason, it is perhaps more reasonable to consider two distinct positions in the T-domain, but I will not pursue this possibility in the present paper.

²² This holds for arguments that are assigned structural Case (see Alexiadou & Anagnostopoulou 2001:210). I will return to Case in Old Swedish in the next section.

²³ Håkansson (2008) gives the following example (p.204):

(i) tha taker ater [VP siälin sin licama]
then takes back soul-the-NOM its body
'then the soul takes back its body'

Here, Håkansson (ibid) argues that *ater* 'back' could be interpreted as either an adverbial or a particle, and it is not clear where the subject *siälin* 'the soul' is positioned.

VP, i.e. either the subject or an object. In addition, I will assume that a prerequisite for LOS is that specific verb types (those which lack an external argument and correspond to the argument-structure in (c) above) provide more than one possible linear word order in Old Swedish, namely (A) or (B):²⁴

- A. XP > FV > Subj. > Obj. > VP
- B. XP > FV > Obj. > Subj. > VP

For ease of exposition, consider now the following two derivations, given in Old Swedish, which may further illustrate the movement of arguments in constructions with LOS:

(14) [^{CP} ther [^C **scula** [^{TP} *smaleningia* ... [^{VP} honom [^V t_{subj} **möta**]]]]]]
there shal.PL Smalanders-the.PL him.DAT meet

(15) [^{CP} thær [^C **skulu** [^{TP} hanum ... [^{VP} t_o [^V *upplændingiær* **mötæ**]]]]]]
there shall.PL him.DAT Upplanders-the.PL meet
 ‘There shall the Upplanders/Smalanders meet him’

The important observations in (14) and (15) are the basic operation *Merge*, the absence of an external argument in vP (compare the argument-structure (c) in section 2.1 above) and the movement of one of the nominal arguments (i.e. either the subject *upplændingiær/smaleningia*, ‘the Upplanders/Smalanders’, or the object *hanum* ‘him’).

In order to further clarify *Merge* and the potential argument structures related to LOS in Old Swedish, I will now add a few more pieces to the LOS-puzzle, starting with Case.

2.1.2 Adding Case²⁵

As mentioned, LOS only affects pronominal objects, and in Swedish, pronouns have m-case. That is, depending on the syntactical function of the pronominal argument, pronouns are distinguished by means of different forms, e.g. *han* ‘he-NOM’, or *honom* ‘him-Oblique’, respectively (cf. SAG 1999, II, p. 247). Thus, m-case on pronouns has a distinctiveness function in Swedish.

²⁴Observe that ‘XP’ is a variable in the schematic description, where ‘P’ stands for phrase, and ‘X’ stands for whatever category (e.g. preposition) that may hold this position.

²⁵Note that I will follow standard practice and use a capital C on *Case* to emphasize that I mean Case in a grammatical sense.

Following Chomsky (1981), Holmberg (1986) states the following with regard to the notion Abstract Case:

The central principle in Case Theory is the principle stipulating that every NP which has phonological features should have Case, where Case may be abstract or morphological [...] In English and the mainland Scandinavian languages Case is always abstract except in the case of personal pronouns and in the case of genitive. (p. 16)

In other words, Holmberg (ibid) claims that even if Case is not visible, as is the case for full DPs in Modern Swedish, all nominal arguments must nonetheless have Case. In accordance, Holmberg & Platzack (1995) assume that nominative Case can be assigned directly or indirectly (cf. p. 46), and that nominative is tied to an unvalued feature in the head T (or the head I, in their terms, cf. p. 49f). Hence, one can either assume that nominal arguments have to move in order to get assigned nominative locally, i.e. *Agree* and EPP, or that nominative gets assigned through long-distant agreement of features or feature bundles, i.e. *Agree* without EPP (Platzack, personal communication). Sketching on Holmberg & Platzack (1995:35), this could be illustrated schematically as [TP [T^[NOM] ... [VP]]]. By hypothesis, then, direct Case assignment means that the nominal argument would be situated in spec-TP, whereas indirect Case assignment would mean that the nominal argument stays within the VP.

In contrast to Modern Swedish, Case and other inflectional properties were more extensive in Old Swedish. For example, Old Swedish had subject-verb agreement (in person and number), and both full DPs and pronouns were inflected for dative, accusative, nominative or genitive in Old Swedish, depending on aspects of the structural and lexical environment (see e.g. Delsing 2002, 2014). For instance, a preposition like *med* or *mz* 'with' was linked to dative: when a nominal element merged with the preposition *med*, the nominal element would be assigned dative, as in *mz biscopenum* 'with bishop-the.DAT'. In contrast, such comprehensive inflectional properties are not found in Modern Swedish.

When studying the decline of the Old Swedish Case system, Delsing (2014) observes a paradigmatic change that concerns pronouns in dative: the dative forms *mær*, *þær* and *sær* were replaced by accusative forms, i.e. *mik*, *tik* and *sik*, 'me', 'you' and 'itself/themselves/himself/herself', respectively (p. 28f). Additionally, Delsing (2002:931) notes that *them* 'them.DAT-PL' often "replaces the acc. forms", i.e. *tha* or *thö*. Thus, during the investigated period (i.e. 1300 – 1500), some case distinctions are already lost, i.e. *sik*, *mik*,

tik, os and *them* are ambiguous between dative and accusative (cf. Delsing 2002, 2014); I will return to the question of how to handle this in section 3.3.3.

Moreover, Delsing (2014) observes several syntagmatic changes, i.e. that specific Case forms were no longer used in specific constructions (cf. p. 28f). When describing this in more detail, he draws on Holmberg (1986) and uses the distinction *lexical/structural* Case: “structural Case is determined by the position” and “lexical Case is determined by specific verbs” (my translation; cf p. 38). To clarify, lexical Case is to be considered an idiosyncratic property connected to the head (i.e. a verb, a preposition or an adjective), whereas structural Case operates with featural agreement related to specific sentence positions (see Holmberg 1986:216).

For the purpose of my investigation, the most important observations in Delsing (2002, 2014) are (i) the aforementioned paradigmatic changes, and (ii) the following syntagmatic change: after the 13th century, “dative is the only remaining lexical Case and it is in general associated with the *EXPERIENCER*-group”, and “this entails that the THEME-role is assigned structural Case, either nominative or accusative” (my translation; Delsing 2014:34f). Combining these observations and the model in Figure 4 above, Delsing illustrates Case assignment in Old Swedish after 1300 as follows in Figure 5 (cf. Delsing 2014):

Figure 5. *Lexical/Structural Case and θ -role assignment in Old Swedish*

	Thematic role families		
Case assignment	A	B	C
Structural Case	Nom.	Nom/Acc.	Nom/Acc.
Lexical Case		Dat.	

Although Figure 5 is a simplification of the Case system with verbs in Old Swedish; it can still be used to predict Case assignment. That is, this model makes it possible to distinguish nominal arguments in argument structure terms, not just in terms of the m-case they appear with.

Furthermore, the model in Figure 5 is similar to the Old Swedish Case system with verbs explicated in Falk (1997), the difference being that she uses a tripartite Case distinction: semantic, lexical and a hierarchical (i.e. structural) Case (see p. 44ff). In other words, she adds the term semantic Case and notes that this could be a remnant from an earlier stage in Swedish: semantic dative or accusative could appear “on an optional argument which carried

one of the following two θ -roles: EXPERIENCER or RECIPIENT” (My translation; p. 47), both belonging to **B** in Figure 5; I will return to this in the next section.

Regarding lexical Case (i.e. dative), Falk clarifies that verbs assigning lexical Case were subcategorized for dative which would remain intact regardless of the diathesis of the verb (p. 46).²⁶ In connection to this, Falk also notes that accusative Case seems to only appear in Old Swedish when there is another nominal argument in nominative in the same construction (see e.g. p. 75). This suggests that little *v* is important, perhaps even “crucial for licensing of accusative Case”, as is stated by Holmberg & Platzack (1995:34, see also p. 130). Put more precisely, accusative may require that an argument (in nominative) is merged in (or moves through) spec-vP and that is what I will assume here.

Concluding, the fact that Old Swedish had a more extensive Case system with verbs might tell us more about the verbs that allow LOS, since the correlation between Case and argument structure is (more or less) predictable. Using the Delsing (2014) model in Figure 4, I will be able to predict Case assignment on nominal arguments and to distinguish objects from subjects: the subject will presumably reflect nominative (and agree in number and person with the finite verb), whereas objects may either reflect accusative or dative, depending on whether or not the verb had lexical Case and whether or not there is another argument in nominative in the construction. The latter indicates that accusative Case is related to the presence of little *v* (or the presence of an argument in spec-vP). In line with Holmberg & Platzack (1995), I will assume that nominal arguments can get Case either directly or indirectly; in addition, I will adopt Falk’s tripartite distinction of the Case system with verbs in Old Swedish. Thus, I will assume the following with regard to Case in Old Swedish:

- The Case system with verbs in Old Swedish is semantic, lexical and/or structural in nature. Structural Case operates on featural agreement (directly or indirectly); Lexical Case (i.e. dative) is an idiosyncratic property tied to the head *V*; Semantic Case is reflected on an optional argument; Both Lexical and Structural Case are assigned to spec-VP.
- Nominative Case could be assigned directly, through movement and local Case assignment in a T-spec-TP relation, or indirect at a distance, from T to VP.
- Licensing of accusative Case is related to the presence of an argument in spec-vP.

In the next section, I will explicate this further when discussing constructions with *EXPERIENCER*-arguments, which could yield LOS in Old Swedish.

²⁶ See also Delsing (2014:31f).

2.1.3 Atypical verbs with *EXPERIENCER*-arguments

Except for the transitives and ditransitives that has been mentioned above, I will now draw on Falk (1997) and relate LOS to two special types of verbs that take *EXPERIENCER*-arguments in Old Swedish; *impersonals* and verbs that allow *free datives*.²⁷ In addition, I will discuss verbs that take reflexives and passive ditransitives in relation to LOS.

For the impersonals (such as *mik angrar thz*, 'I.DAT regret it.NOM'), Falk argues that these verbs assigned lexical Case in Old Swedish.²⁸ For example, if the verb was divalent (which it has to be in order to yield LOS), it would assign dative to its most prominent argument (i.e. the *EXPERIENCER*-argument merged in **B** in Figure 5, section 2.1.2 above); the following argument (i.e. the *THEME*-argument merged in **C**) was then assigned structural nominative (cf. p. 63). To clarify the typical structure of impersonals, Falk (p. 88) uses the following example, and for ease of exposition, I have added the corresponding argument structure that I assign to it below the example in (16):

- (16) Henni **likar** thätta” (Falk 1997:88)
 Her.DAT *likes* *this.NOM*
 'She likes this'
 (c). [vP Ø [v' [VP henni [V' **likar** thätta]]]] (Ø = empty position)

Furthermore, Falk claims that it is in impersonal constructions, such as that in (16), that we find the oblique subject candidate: this element “usually signifies a person” which is (normally) “located in the clause-initial position or immediately following the finite verb” (My translation; p. 19). (In Chapter 3, I will return to the debated question concerning the subjecthood of the oblique constituent in impersonal constructions). In addition, Falk claims that the subject position (i.e. spec-TP) may be left empty in impersonal constructions, and that the choice of subject in these constructions (and in passive ditransitive constructions) may be related to properties outside of the grammatical system (cf. p. 40f). With regard to LOS, then, the impersonal verb *must* be divalent and we should find a dative argument preceding a nominative argument.

Apart from the mentioned type, Falk discusses a type of verb that allows *free datives*, that is, she claims that an optional dative-argument may be added to e.g. a construction which is

²⁷Note that in SAG it is claimed that the verbs in the impersonal constructions typically describe an event or state without obvious agentivity (cf. 1999, part IV, p.58).

²⁸Nota bene: this does not mean that all verbs which assigned lexical Case were impersonals.

constructed with a verb that typically selects only one argument. This optional argument is typically a pronoun reflecting semantic dative and bearing a benefactor/recipient-role (cf. p. 46). For instance, Falk states that a *free dative* could be found in constructions with the following word order: V + DP + PP, e.g. *komma honom till hjälp*, *'come him to help' (cf. p. 56ff).²⁹ Yet, since LOS requires two nominal arguments, we should get V + DP + DP + PP (as in *kom honom grannen till hjälp* *'came him neighbor-the to help'). For the sake of comparison, we see a compatible phenomenon with *baka* 'bake' in Modern Swedish, as in (17) below:

- (17) a. *Hans mamma bakade (honom) en tårta till födelsedagskalaset*
His mother baked (him) a cake for birthday-party-the
'His mother baked (him) a cake for the birthday party'

In (17) above, the object (*honom* 'him') is optionally added, and the sentence would be licit without this object. That is, the argument is not a true argument of the verb.

Another group of verbs that could yield LOS word order in Swedish are those that take reflexives.³⁰ At least in Modern Swedish, the reflexive pronoun could be moved by LOS, which means that the reflexive would be inverted in relation to its antecedent (i.e. the subject; compare (18a) or (19a) below). Furthermore, Lundin (2002) states that reflexives behave in two different ways syntactically: "When the reflexive pronoun replaces a DP, as object complement of an ordinary verb, it behaves exactly like this DP" and "[i]f the reflexive object is obligatory selected [...] the reflexive has no θ -role of its own" (p. 104). To give two examples, the verb *tvätta* 'wash' could be constructed with a replaceable reflexive pronoun, as in "Nu tvättar Eva (sig)", i.e. 'Now, Eva washes herself', compared to "Nu tvättar Eva barnet", i.e. 'Now, Eva washes the child'. In contrast, the reflexive pronoun is obligatorily selected by the verb *ångra* 'regret' in "Nu ångrar Eva *(sig)", meaning 'Now, Ewa regrets this', as compared to *"Nu ångrar Eva barnen", i.e. *'Now, Eva regrets the children'. The following four examples in Modern Swedish may illustrate this in relation to LOS:³¹

²⁹ Note that it is not clear whether it is the verb or the complement of the PP that assigns Case here.

³⁰ Note that reflexive pronouns come in two different forms in Swedish; either the nominal pronoun *sig* (third person, both numbers), or the object pronouns *mig*, *dig*, *oss* or *er* 'you'-PL. SAG claims that when a reflexive pronoun appears as an obligatory complement of a verb, it has no clear referent (1999, III, p. 261).

³¹ For (19), I assume the argument structure in (i) below, where *sig* carries an EXPERIENCER-role. As for (18), I will disregard these types, since it is not clear to me whether these reflexives have no θ -role at all, or if they somehow share θ -role with their antecedent.

- (18) a. Därför **nöjde** sig *Mikael* med fyra exempel (LOS in MSw)
Therefore contented REFL. Mikael with four examples
- b. ”Därför **nöjde** *Mikael* sig med fyra exempel”
Therefore contented Mikael REFL. with four examples
'Therefore, Mikael was contented with four examples'
- (19) a. Nu **tvättar** sig *studenten* (LOS in MSw)
Now washes REFL. student-the
- b. ”Nu **tvättar** *studenten* sig”
Now washes student-the REFL.
'Then, the student washed himself'

In (18), the reflexive pronoun *sig* cannot be replaced by another nominal argument, not without strongly affecting the grammaticality. The opposite goes for (19), i.e. one can replace *sig* and still construct an acceptable sentence.³² In the case of LOS, it is likely that both of these types could be found in Old Swedish. The verbs that select reflexives in Old Swedish could be either divalent or trivalent, and in addition, we may assume that the verbs cannot be both impersonal and select reflexives in Old Swedish, since “most of the impersonal verbs could not be constructed with a reflexive pronoun” (My translation; Falk 1997:95).

Lundin (2002) provides a somewhat similar structural analysis of constructions with reflexives and passive-*s* constructions.³³ In the case of passives, she claims that the potential “AGENT-role is absorbed by the passive-*s*” and for reflexives, she states that “the phonetic

(i) [vPDP [v'[VP DP[V']]]]

³² Observe that there are mainly two criteria to distinguish these two types of reflexives: one type may be replaced by another nominal argument, and *själv* 'self' may be added, as in (iii). Neither is possible with reflexives that are obligatorily selected, as is illustrated in (i) and (ii) below:

- (i) Mikael ångrar sig (*själv) nu
*Mikael regrets REFL (*self) now*
'Mikael regrets this now'
- (ii) *Mikael ångrar honom/henne/oss/mig/dig nu
Mikael regrets him/ her/ us/ me/ you now
- (iii) Mikael tvättar sig (själv) på torsdagar
Mikael washes REFL (self) on Thursdays
'Mikael washes himself on Thursdays'

Although, note on the side that *själv* can be used either as a pronoun (as in (i) and (iii) above), or as a *free predicative* (cf. SAG 1999, part III, chapter 18, § 46 - 52).

³³ Addendum: there are mainly two ways to express passive diathesis in Swedish: on the one hand, passivization by means of morphology, i.e. with a passive-*s* on the verb, and on the other hand, periphrastic passivization, i.e. with an auxiliary verb + participle. Furthermore, passivization affects the valency such that the AGENT-argument will be presupposed in the expressed proposition (cf. SAG, 1999, part IV, §34).

realization of *sig* in v° [i.e. the head v] prevents a passive reading, since *sig* and the passive-*s* compete for the same structural position” (Original italics and my markings; p. 116f). In accordance, I will assume that the passive-*s* absorbs agentivity and that those reflexives that do not carry a θ -role of their own should be separated from the other type of reflexives. However, I will not assume that the unreplaceable reflexives are realized in the head v , since they need not be adjacent to the verb, as in e.g. (18b) above. If I find constructions with unreplaceable reflexives and LOS in Old Swedish, I will refer to these as *inverted reflexive constructions*. The replaceable reflexives will be called *object-reflexives* (cf. Lundin 2003) and they will be treated together with the other pronominal objects.

Last, given the notion of lexical Case (see section 2.1.2), ditransitives could in principle be passivized and still yield LOS word order: when passivized, a ditransitive verb with lexical Case would select an indirect object in dative, and this argument would retain its m-case form even though it has been raised to a VP-external position. Thus, if this argument is pronominal, it could precede a lower DP-argument in nominative, and consequently, the argument structure of the passive (ditransitive) constructions would be similar (but not identical) to the one for impersonals (compare (16) above).

To sum up, we now have two overarching types of verbs, namely transitives (i.e. divalents) and ditransitives (i.e. trivalents). Whithin these two groups, we have four subtypes that will be presented seperately. Below, I present the predicted types and how they will be dealt with:³⁴

- All instances with verbs that select two nominal arguments will be classified as *divalent constructions*.
- All instances with verbs that select three nominal arguments will be classified as *active trivalent constructions*.
- In both of these groups, we may see an alternation between *passive* contra *active* diathesis. Passive-*s* constructions (of ditransitives) will be presented separately. The following subtypes will also be presented seperately: *impersonals*, *free datives* and *inverted reflexive constructions*.

Above, all of these types have been related to syntactic and morphological patterns in Old Swedish. In section 3.3.3 below, I will return to these categories in more detail, and next, I will recapitulate the key notions and state my proposal concerning LOS.

³⁴ Recall that LOS requires two nominal arguments, and consequently, passive divalent verbs are not expected.

2.2 Key notions

In a broad sense, different researchers have pointed out different properties related to LOS (compare section 1.2 above). Some researchers have claimed that prosody and phonological properties are of great importance, since (except in Icelandic) only unstressed pronouns undergo OS (see Josefsson 1992, 1993, 2010, Heinat 2008 etc.). For the same reason, others have claimed that morphological properties are equally important (see e.g. Holmberg & Platzack). Furthermore, some have pointed out an interaction between prosodic, morphological and pragmatic features which may drive the pronominal object out of the VP (see e.g. Holmberg & Platzack 1995, Holmberg 1999). In other words, LOS could be triggered by a feature in the C-domain which is “responsible for the formally marked type of discourse linking”, i.e. “the so called cohesion in discourse” (Molnár 2003:235). These assumed pragmatic and phonological features could perhaps provide an explanation that is external to the grammatical system itself.

However, neither of the proposed properties can fully account for the peculiar lexico-semantic properties that seem to be involved in LOS (see Josefsson 1992, 2010). In order to gain more clues about these properties, the question that concern the verb(s) involved in LOS needs to be brought to the fore. In the following, I will assume that LOS is possible in six types of constructions (see section 2.1.3), all of which entail specific syntactic and morphological patterns (compare 2.1.1 and 2.1.2 above). Furthermore, the tripartite Case distinction with semantic, lexical and structural Case, and the model for Case/ θ -role assignment in section 2.1.2 will be used to distinguish arguments. I will now turn to my hypothesis and the related research questions.

2.2.1 Hypothesis and research questions

To properly address the questions concerning types of verbs in LOS, we may start off with the following quotation: “LOS is optional for those verbs that allow it” (Josefsson 2010:11). With this in mind, I assume that LOS needs to be accounted for by means of a special rule, namely that the specific verb has (at least) one lexical property that provides the possibility to extract one of its DP-arguments out of the VP. Inspired by Josefsson (1992, 2010), I assume that especially divalent verbs without an *ACTOR*-argument facilitates LOS as an option. To be more explicit, a tentative hypothesis that concerns the verbs involved in LOS would be the following one:

Long Object Shift is facilitated by those verbs that select two internal arguments (of which one is a pronoun) and no external (ACTOR) argument (cf. Josefsson 1992, 2010 and Berger 2013).

To this, I assume that only one DP-argument can stay in its base-generated position (i.e. in accordance with SIG and Håkansson (2008), see section 2.1.1 above), and that the shifted pronominal object may be located in the T-domain in Old Swedish.

Furthermore, I will reject the idea that we find the shifted object in the C-domain, because (i) “the pre-subject pronouns need not be adjacent to C” (Holmberg 1993:31, footnote 3). Instead, I will follow Håkansson (2008), who argues that the head T did not have EPP in Old Swedish, in contrast to Modern Swedish. This suggests a more complex T-domain and that the subject did not have to be raised to spec-TP in Old Swedish.

Departing from the possible argument structures explicated in Platzack (2010), I will now propose that the licit object movement in constructions with LOS is derived as follows in Old Swedish:

(20) a. "... **mötte** henne *mannen*" (with LOS)

'... met her man-the'

[TP DP ... [VP t_{DP} [V t_v DP]]



b. "... **mötte** *mannen* henne" (without LOS)

'... met man-the her'

[TP DP... [VP DP [V t_v t_{DP}]]



At this point, nothing prevents the lower argument from moving to a higher position in (20), and to test the stated hypothesis, I will use these questions, which will help clarify the argument structure of the verb involved in LOS:

- What is specific about the verb types that are constructed with LOS in Old Swedish, and in which type of construction do they occur?
- Which sort of pronominal argument occurs most often in these constructions in Old Swedish?
- What are the differences and similarities between constructions with Long Object Shift in texts from Old Swedish, as opposed to (more) modern (versions of) Swedish?
- How does the use of Long Object Shift in Swedish texts differ over time?

To sum up, I suggest the following with regard to LOS in Old Swedish: (i) the main verb select two internal arguments (one of which is a pronoun) and no external argument. To this, I assume that only one of the arguments can stay in its base-generated position, and that the shifted pronominal object may be located in the T-domain.

In the following chapter, I will describe the chosen corpora and provide an outline of the method. Through this, it will become clear how I aim to answer the stated research questions.

3 Method and Data

In this chapter, I will start off by outlining the procedure of my investigation. Then, I will provide a description of the two corpora that have been chosen. Next, I will turn to the question of how to find constructions with LOS in the Old Swedish texts. In this connection, I will also explain my principles of excerption and how this requires specific categorization. Last, I will provide the central operative definitions which will be used in my investigation.

3.1 An overview of the procedure

In order to gain more insight with regard to LOS in Swedish, I have carried out a combined corpus-based and corpus-driven empirical investigation. In other words, the corpus-based approach means that I deduced a tentative hypothesis before I departed (compare section 2.2.1 above). This hypothesis was, however, modified in the light of the data that I found in five different Swedish texts from two different historical periods. Hence, I added the corpus-driven approach through inductive reasoning (cf. Baker 2010).

To test my hypothesis and answer my stated research questions, my investigation has proceeded as follows: first, I excerpted constructions with LOS from five different texts (dated within two different periods of time). Assuming that languages change over time, I chose two texts from the 14th century and three texts from the 15th century, which in turn

allows me to distinguish possible diachronic differences and similarities between these two periods. Second, since I assume that argument structure has an impact on LOS, I try to determine whether there is a specific type of verb that favours LOS. In order to do so, verb frequencies in constructions, both with and without LOS, have been measured and compared statistically. In this way, altered word orders provide a statistic benchmark for 'normal' distribution of the arguments. In addition, different types of constructions (with LOS) have been measured and described, and the same goes for different kinds of pronouns in constructions with LOS. All of these steps contributed in clarifying the argument structure of the verb(s) involved in LOS

The last step was to analyze the excerpted data. Here, all instances of LOS were tested against my hypotheses in section 2.2.1 above. Put more precisely, I looked at accusative and dative context in every instance of LOS, which also means that I deal with the excerpted data synchronically.

3.2 Linguistic data³⁵

The data in my investigation consists of a corpus with five narrative texts from two different historical periods in Old Swedish. These texts will be categorized in two periods: *Early Old Swedish* (or 'EOSw', i.e. 1300 - 1350) and *Late Old Swedish* (or 'LOS_w', i.e. 1450 - 1500); two respectively three texts are selected from each period. It should also be noted that all texts are digitalized, and they have all been downloaded from *Fornsvenska Textbanken*.³⁶

For the *Early Old Swedish* period, I have chosen two texts: *Fornsvenska legendariet* and *Pentateuchparafrasen* (henceforth, 'Leg' and 'Moses' respectively). The original of *Leg* is from 1276 - 1307, and the original of *Moses* is from around 1330. The excerpted manuscript of *Leg* (*Codex Bildstenianus*; henceforth 'LegBi') is dated to the early 15th century. The excerpted manuscript of *Moses* (*Codex Thott*; henceforth 'Moses-A') is dated to the first half of the 15th century. In sum, *LegBi* and *Moses-A* form a corpus of approximately 250 000 words.

Three texts have been chosen for the *Late Old Swedish* period: *Barlam och Josaphaat*, *Linköpingslegendariet* and *S: t Anna och Emerencia* (henceforth 'Bar & Jos', 'Link-Leg' and 'EmAn' respectively). The original of *Bar & Jos* is from 1442, and the excerpted manuscript (*Codex Holm A49*; henceforth 'B&J') is from the same period. The original of *Link-Leg* is

³⁵ I have consulted Åström (2003) concerning the dating of the Old Swedish texts.

³⁶ To find each cited page in these documents, you should look for # in the downloaded document. See www.fornsvenskatextbanken.se

from 1500, and the excerpted manuscript (*Vadstena Codex Linc B70a*; henceforth 'Link-NR') consists of the 15 legends that were translated by Nils Ragvaldi in the 15th century (cf. Delsing 1999:45). The original of *EmAn* is also from 1500, but it was translated by Lars Elofsson (see *Fornsvenska Textbanken*). The excerpted manuscript (henceforth 'Em-An') is from 1500 – 1525. Altogether, these three texts form a corpus of approximately 105 000 words.

The main motivation behind the choice of narrative texts is the intuition that constructions with LOS suggest an instance of unexpected or uncontrollable experience; a spatiotemporal frame (e.g. an adverbial) holds the clause-initial position and the pronominal object is situated in-between the clause subject (a DP) that is assumed to be in focus. Thus, narrative contexts could be a possible prerequisite for the use of LOS in Swedish. This is in fact supported indirectly in Berger (2013), since many of the excerpted constructions with LOS were found in corpora with fictional texts.

3.3 Search methods and Categorizations

3.3.1 Excerpted strings

First of all, it should be noted that the texts that form the corpuses in my investigation are not annotated, i.e. they are not syntactically tagged (e.g. constituents are not marked for syntactic function). Therefore, I will have to use one word at a time when searching for constructions with LOS. This has an impact in that it limits my investigation in several ways, which will become clear as we proceed.

Second, recall that Delsing (1999) observed that the movement of pronominal objects to the left of a sentence adverbial in Old Swedish mainly concerns weak object pronouns (see section 1.3 above); I will assume this to indicate instances of LOS in Old Swedish, and thus, I will quantify the linguistic data by using pronouns as strings of excerption. In connection to this, I will use etymological data in SAOB (*Swedish Academy Dictionary*) and *Old Swedish Dictionary* (Söderwall 1884 - 1918), which will provide alternate spellings of Swedish pronouns in the different periods of time. For reasons of demarcation, I will only use the following pronouns (with varied spelling):³⁷

³⁷ Nota bene: I have always used SPACE before and after every string, since the digital corpora are not annotated.

- *hona/hana* ('her.ACC'), *henne* ('her.DAT'),
- *hancæ/han* ('him.ACC'), *honom*, ('him.DAT'),
- *mik* ('me.DAT/ACC'),
- *thik* ('you.DAT/ACC'),
- *them* ('them.DAT/ACC'),
- *os* ('us'.DAT/ACC'),
- *sik* (REFL.DAT/ACC; 'itself','himself','herself' and 'themselves').

The fact that I use personal pronouns and a reflexive as strings of excerption, entails that the verbs in constructions with LOS will not be known beforehand. Consequently, some unknown verbs (perhaps verbs that are no longer in use) might be revealed as the investigation proceeds.

In order to determine the 'normal' distribution of the arguments of the specific verbs in the excerpted constructions, I will have to count all instances of each verb. That is, I will count how many times one verb (say *giva* to 'give') occurs in the text and then compare them statistically to the number of excerpted instances with this verb and LOS in the same text. The same goes for the mentioned pronouns, and this will for instance show how often a specific verb is constructed with LOS in Old Swedish. When searching for the verbs, I will use the root or parts of the verb as strings, e.g. *möt-* in *möter* 'meet'. Of course, this means that I will have to sort out and distinguish verbs from e.g. nouns or participles.³⁸ Again, SAOB and Söderwall (1884 - 1918) will provide alternate spellings, and in this case for the verbs from different periods of time (e.g. *giva* 'to give' was spelled *giuer* or *gifver* etc.). If needed, I will also consult the aforementioned dictionaries in order to explain any ambiguous meaning of the excerpted verbs.

To sum up, the strings will provide linguistic data that could indicate whether or not LOS occurs more often with any specific verb, and the same goes for the above mentioned pronouns. Furthermore, the contrast between total numbers of instances with each verb and the total numbers of instances with LOS will indicate how common or uncommon LOS was in the two Old Swedish varieties.

³⁸ Observe that I will not excerpt every possible spelling or synonym of each verb, due to the extensive spelling variation in each text. However, it is unlikely that this will have a severe impact on the results of my investigation.

3.3.2 Word order types and Principles of excerption

Apart from the above stated strings, I will use typological criteria when excerpting and categorizing relevant linguistic data. First of all, since verb movement is required for LOS to be licit, I will only excerpt constructions which yield the word order of a main clause, i.e. clauses where a finite verb holds the second position (cf. **V1** in the sentence model in section 2.1 above).³⁹ Second, when searching for constructions with LOS, two principles of excerption arise immediately: the (main) verb must be at least divalent, and the object must be a pronoun that immediately follows the finite verb and precedes the clause subject.⁴⁰ Furthermore, the fact that LOS constitutes VOS word order in Swedish entails that an element other than the subject or the object is to be expected in the clause-initial position (see **F.** in the sentence model in section 2.1 above). In addition, the VOS-criterion does not prevent other constituents from holding a position between the object and the subject. Below, I formulate the three types of strings that will be excerpted, based on the mentioned criteria.⁴¹

- I. FV > Obj. pro > Subject
- II. FV > Obj. pro > SA/VP-element > Subject
- III. FV > Obj. pro > (SA) > Subject > VP-element.

These principles implicitly suggest that the excerpted constructions will have to be categorized into three overarching categories. I will name these categories as follows: type I *Subject in clause-final position*, type II *Subject Postposed*, and type III *True LOS*.

The constructions that will be categorized as type I will have no element indicating the subjects' position. That is, except for the finite verb and the pronominal object, there will neither be a constituent preceding nor following the subject. In these cases, we cannot tell which position the subject is in.

With respect to the constructions that will be categorized as type II, these will have (at least) one constituent (a SA) holding the position between the object and the subject. Such constructions will indicate that the subject is situated either in the VP or in a postposed

³⁹ Note that, in principle, this does not exclude V1-clauses, such as yes/no-question clauses: "**Mötte** henne *inte pojken igår?*", meaning 'Did the boy not meet her yesterday?'.
⁴⁰ On the question of how to distinguish the subject from the object, see section 2.1.1 above and 3.3.3 below.

⁴¹ Nota bene: 'VP-element' is a cover term for elements such as a Small Clause, an Infinitival Phrase, another DP or a PP. Further, I will assume that an element, such as a phrase or a Subordinate Clause, is holding the clause-initial position in (I), (II) and (III). Nevertheless, I will also include clauses where the clause-initial position may seem to be empty, if the word order is compatible to one of the principles, and if there are good reasons to believe that the finite verb holds the second position.

position, i.e. in a position located to the right of the VP (cf. **Ex** in the sentence model in section 2.1). Still, if nothing follows the subject, we can not be sure of its position.

As for type III, a VP-element following the subject will indicate that the subject is either situated in the VP, or in the T-domain. This type may be held as evidence that indicates movement of objects. Although theoretically, one could argue that there is a covert expletive (i.e. *thz* 'it/there' in Old Swedish, or *det* 'it/there' in Modern Swedish) situated in the subject position (i.e. spec-TP) in a construction with LOS (and a univalent or a divalent verb). Consequently, both arguments in a type III construction could be analyzed as situated in the VP.⁴²

Apart from that, I will also discuss the complexity of the subjects in all the examples that I give, since heavy noun phrases are often postposed (cf. SAG 1999, part IV, 40ff). That is, I will discuss heaviness and lightness, e.g. a bare noun as opposed to a noun phrase with several attributive elements, and what impact it might have on the linear word order.

Summarizing, I will only excerpt V1-clauses (i.e. question clauses with the verb positioned in **V1**) and main clauses in which the finite verb holds the second position. Furthermore, the main verb must be at least divalent, and one of the arguments in these constructions must be a pronominal DP. All the principles entail that I will separate constructions according to their linear word order: type I do not provide conclusive evidence concerning the structural position of arguments. Constructions of type II and III could, however, be held as legitimate empirical evidence, but in two different ways; either movement to the left, or movement to the right of the V-domain. Note finally that for both type II and III, there could be two objects preceding the subject, and for this reason, I will count every moved object as an instance of LOS, i.e. when the object(s) precede the subject. Finally, type I, II and III together will capture constructions with LOS word order, and this might provide some clarifying insights into the diachronic development of LOS in Swedish.

3.3.3 Operative definitions

As operative definitions, I will adopt some notions from Falk (1997). As has been mentioned above, I will e.g. use the term *free datives* as in Falk (ibid) for those constructions where an optional argument (a pronominal argument in dative which carries the *EXPERIENCER*-role) is not a true argument of the verb. In Old Swedish, we may find *free datives* in V + PP constructions, as in *komma henne till hjälp* 'come to help her', as was mentioned before. Here, it should also be noted that it is often uncertain whether Case assignment is linked to the

⁴² I will return to this in more detail in section 3.3.3 below.

complement of PP or the verb. Nevertheless, these constructions could be organized linearly so that an optional (pronominal) argument (i.e the *free dative*) precedes the subject of the main verb and thus potentially yielding a LOS word order (compare section 2.1.3 above). In the following, I will call these constructions *V + Optional Dative*. In order to determine whether or not an optional argument has been added to these constructions, I will look at the verb frequencies in every instance of each relevant verb to see how many arguments the specific verb normally selects. For this task, I will also use the list of such verbs in Falk (ibid) and Söderwall (1884–1918).

Second, I will adopt the Falk (1997) definition of the term *impersonal construction*, and in these, we will find the oblique subject candidate in Old Swedish. Whether this oblique element is to be considered a subject or an object in the Scandinavian languages is a disputed question. For instance, Sigurðsson (1989) shows that the oblique elements behave like the nominative subjects in Modern Icelandic.⁴³ Sigurðsson illustrates this through many well-known 'subjecthood tests' (cf. p. 204ff), yet he stresses that “the ‘prototypical subject’ has three properties not shared by the oblique subject: it is nominative, it is agentive [...] it enters into an agreement relation with the finite verb” (p. 209). Therefore, Sigurðsson (1989, 1992) argues that the oblique elements are objects that promote to subjects. In accordance, Barðdal & Eythórsson (2005) also argue that the oblique elements are subjects, and furthermore, they claim that this holds for Old Swedish as well. However, Falk (1997) shows that there is no conclusive evidence to support such a claim (most of Sigurðsson’s tests are not applicable). Hence, the oblique elements may just as well be interpreted as objects (cf. p. 38). If so, impersonal constructions with an oblique constituent could yield a LOS word order, in which an oblique element precedes a *THEME*-argument in nominative. In this connection, I should also stress that I classify all nominatives as subjects, even if this criterion is questionable (see Falk 1997 and Barðdal & Eythórsson 2005). By doing this, I do not intend to determine the grammatical status of the oblique constituents; rather, it should be interpreted as an operative definition.

Third, I will distinguish transitive verbs from ditransitive verbs and call the former *divalents* and the latter *active trivalents*. Furthermore, I will classify verbs as *divalents* if they

⁴³ In Chapter 6, Sigurðsson (1989) gives many examples with verbs that take oblique subject candidates in Modern Icelandic, one of which is repeated in (i) below:

(i) Mér er kalt (Sigurðsson 1989:204)
Me.DAT is cold
 'I am freezing'

select two nominal arguments and as *active trivalents* if they select three nominal arguments. This is of course a simplification, and I will postpone the detailed discussion concerning what type of arguments the verb has selected until Chapter 5. In addition, I will identify passive verbs (i.e. passive ditransitives) as a separate group, called *verbs with s-form* for operative purposes.⁴⁴

Fourth, I will distinguish LOS with reflexive pronouns that can be replaced, which will be called *object-reflexives*, from those reflexives which cannot, called *true reflexives*. The latter ones will be identified as a separate group, called *inverted reflexive constructions*, and these will be left unaccounted for, for reasons of ambiguity concerning θ -role assignment. The former group will be treated as any other pronominal object, but I will count instances where it is unclear whether the verb takes a true reflexive or an object-reflexive as an *inverted reflexive construction*.

Fifth, the subject in type III constructions will be further defined, since we cannot exclude the possibility that both arguments are situated in the VP. As mentioned, there might be a covert expletive situated in spec-TP in constructions with a verb that selects two internal arguments (e.g. impersonals). If so, we should get a definiteness effect (cf. Safir 1982, 1985) on the clause-final argument (i.e. the associate of the expletive), because that is what we see when the expletive is visible: “Det mötte mig *en katt* i dörren”, meaning *‘There met me a cat at the door’”, as compared to *‘Det mötte mig *katten* i dörren’, meaning *‘There met me the cat at the door’. Put simply, DE means that the clause-final argument in a Swedish expletive construction must be indefinite.⁴⁵ For this reason, I will sort out and count instances with a definite subject separately.⁴⁶ Furthermore, I will sort out and count instances of type III where there is a SA preceding the subject, called +SA. Both of these may (with more certainty) indicate that the pronominal object has moved out of the VP.

Last, I will consult Söderwall (1884 – 1918) and Wessén (1956), when discussing correlations between Case assignment and argument structures in my analysis. That is, in Chapter 5, I will consult Söderwall (ibid) in order to determine whether the verb takes dative or accusative. As a complement, I will also use the older texts to determine valency and whether a specific verb takes dative or accusative. In this way, it will become clear whether

⁴⁴ Addendum: I call them *verbs with s-form*, because it might not be clear whether the verb has a medial s-form or a passive-s.

⁴⁵ To my knowledge, Modern Swedish and Old Swedish behave alike in that a clause-final subject in an expletive construction must be indefinite.

⁴⁶ In Swedish, nouns may take a suffixed article, which makes the phrase that they head definite, and furthermore, proper names are inherently definite (cf. Delsing 2002:926). Note also that with regard to LOS, it is only possible to assume covert (or ‘empty’) expletives with those verbs that select two internal arguments. Thus, active transitive verbs are not possible.

pronouns in ambiguous forms (such as *mik* and *tik*, 'me' and 'you', respectively) occur in an accusative or dative context, and hence, whether they could be taken to be assigned accusative or dative. In addition, I will use to Söderwall in order to determine whether a verb has an attested active form or not, which will help determine if the verb is to be considered a verb with passive-*s* in any ambiguous case.

Having discussed the theoretical considerations, we have now reached a point where we may start to describe the linguistic data that were excerpted from five Old Swedish texts. In the end, I will compare the findings diachronically.

4. Describing the excerpted data

In this chapter I will establish an empirical base for my analysis. I will present the excerpted data from the two different corpuses in examples and statistics and the chapter is organized as follows: I will start by briefly describing the semantics of the excerpted verbs, and then I will turn to the verb frequencies. Second, I will provide some examples of each word order type (i.e. I, II and III). In this part, I will also use the sentence model explicated in section 2.1 above, and discuss sentence positions, types of constructions with LOS (such as *Verbs with s-form, impersonals* etc.), heaviness contra lightness of the clause subjects, and morphology. In the last case, I will only gloss morphology that is relevant for the construction: passive diathesis on the verb (PASS), reflexive pronouns (REFL), m-case on the shifted object (DAT/ACC) and subject-verb-agreement in number (PL). Note also that the subject will be glossed with nominative (NOM), if it is inflected in nominative or a form compatible with nominative. Third, I will discuss the distribution of pronouns in different morphological forms, and at the end of this chapter, I will provide a summary of the observations and compare the excerpted data diachronically.

4.1 LOS in *Early Old Swedish*

Beginning with the texts from the 14th century (called 'LegBi' and 'Moses-A'), the semantically salient group among those verbs that appear in LOS are the experiencer verbs. In this group, I define e.g. *tycka* 'think', *te* 'show/reveal', *synas* 'become visible', *känna* 'feel', as verbs that describe some kind of experience (mental or physical).

With regard to the verb frequencies in these two texts, I found 28 different verbs that could be constructed with LOS word order. Of these 28 verbs, I found a total number of 3972

instances, of which 89 instances, i.e. 2%, were constructions with LOS of type I, II or III.⁴⁷ This indicates a rarity of LOS in *Early Old Swedish* for these verbs. In this connection, it should also be noted that two verbs stood out in these two texts: *möta* ‘meet’ and *te* ‘show/reveal’. For both texts, the total number of instances with *möta* was 84, of which 17, i.e. 20%, were instances of LOS. As for *te*, the total number of instances was 199, of which 27, i.e. 14%, were instances of LOS. This is indicative that they might have a lexical property that favours LOS as an option.

However, as we shall see, the different types of constructions, which are to be categorized as either type I, II or III, will reduce the number of instances with LOS that indicates movement of objects to the middle field.

4.1.1 Word order types

As we proceed, I will discuss sentence positions and word order, m-case and heaviness contra lightness of DP-subjects in each of the different types of constructions. First, I will start with the *inverted reflexive constructions*, since these will be left out in my analysis. Note that no such construction of type II were excerpted from this corpus, and hence, I give one example of type I with *wenda* ‘turn around’ in (21a), and two examples of type III, one with *wenda* in (21b) and one with *böghia* ‘bend’ in (21c), all of which are from *LegBi*:

- (21) a. J samu stundh **wende** sik siælfþ skipit som sanctus marchus war jnnan (p. 251)
At same time turned REFL self ship-the.NOM that Sanctus Marchus was inside
'At the same time, the ship that Sanct Marchus was on turned around by itself'
- b. Ok **wænde** sik paulus til dyonisiium [...] (p. 340)
And turned REFL. Paul to Dyonysus
'And then Paul turned to Dyonysus'
- c. tha **bögdhe** sik træt nidher til jordhinna (p. 70)
then bent REFL tree-the-NOM down to ground
'then, the tree bent down to the ground'

⁴⁷ In the appendices, I have included the tables for each verb in each text, and in this list, all verbs are translated.

First of all, notice that the subject-DP in the type I construction in (21a) stands out as being heavy. That is, more than one attributive element is part of the subject DP, which might have affected the choice of postposing the subject.⁴⁸

Most importantly, we also see that the reflexives (i.e. *sik*) are inverted in relation to their antecedents (e.g. *sik skipit* 'itself ship-the' as opposed to *skipit sik* 'ship-the itself' in (21a) above). In (21a), we also see that *sjælf* 'self' is added, but even so, I have identified all three of these reflexives as true reflexives for the following reasons: (i) I identify *sjælf* in (21a) as a free predicative (which modifies the manner of motion described by the verb *wenda* 'turn around'), and (ii) these reflexives carry no θ -role of their own (i.e. they cannot be replaced).⁴⁹ Altogether, I found five inverted reflexive constructions with true reflexives in this corpus: two with *wenda*, one with *kiænna* 'feel', one with *böghia* 'bend' and one with *orsäkta* 'excuse'. In what follows, all of these will be counted separately.

Now, let us have a look at the other constructions that have been categorized as type I. Below, I give one example with *möta* 'meet', one with *te* 'show/reveal', one with *koma* 'to come' and one with *synas* 'become visible', respectively:

- (22) a. J thesso port, som aurea kallas: **mötir** thik *anna thin* *hustru* (LegBi, p. 4)
In this gate, that Aurea called, meet you, Anna your.NOM wife
'In this gate, called Aurea, your wife Anna, will meet you'
- b. Tha **tedhis** hanum *fæghre* *skugge* (p. 130)
Then show-PASS him.DAT beautifuler.NOM shadow.NOM
'Then, the most beautiful shadow appeared before him'
- c. thy **komo** tik *thæsse licammas qual* (p. 175)
thus come.PL you these bodily anguish.NOM
'thus, the bodily anguish will come to you'
- (23) tha **synis** honum *en stighi* *aff iordhinne oc op til himilsins* (Moses-A, p. 218)
then show him.DAT a path.NOM of earth and up to sky
'Then, a path that stretches from earth up to the sky became visible to him'

⁴⁸ Notice that there seems to be no constituent holding the clause-initial position in (1b). However, the context implies that it should be read as 'and then Paul turned to ...', suggesting that the verb is positioned in V1(cf. *LegBi* p. 340).

⁴⁹ In this case, *sjælf* is comparable to the phrase 'by itself'. See also Lundin (2002:105ff), for a discussion on *vända* and *själv* in Modern Swedish.

These examples represent type I, and as can be seen, there are no VP-element following the nominative subjects. That is, *anna, thin hustru* 'Anna your wife', *fæghre skugge* 'beautifuler shadow' and *thæsse licammas qua* 'these bodily anguish' in (22) or *en stighi ...* 'a path ...' in (23) are positioned in a clause-final position. Note also that these constructions seem to provide the possibility of postposing these subjects, which is seen on the difference in heaviness of the subject between (22) and (23).

In (22b), we also see that this verb have the *s*-form, indicating that it is in passive diathesis. This verb (i.e. *te* 'show/reveal') has an attested active form in Old Swedish (Söderwall 1884 - 1918; *te*), which further supports that it is passivized with an *s*-suffix. Therefore, all instances with *te* and a suffix-*s* (as in *thedis*) have been categorized as verbs in *s*-form.⁵⁰ In (23), *syntes* appears to be a verb with *s*-form as well, and according to Söderwall (1884 - 1918; *synte*), it has an attested active form. However, only one instance of *synte* 'show' is attested in Söderwall (ibid), which suggests that this verb might have undergone change. Actually, Falk (1997) classifies *synas* 'become visible' as an impersonal verb in medial *s*-form that takes an optional dative (cf. p. 57f and 97f). For this reason, I classify *synas* as an impersonal verb, even if this might be a simplification.

In addition, we see in (22c) that the verb *koma* (which normally only takes one argument) is constructed with an optional argument (i.e. *thik*, 'you'), and hence, it has been categorized as V + Optional Dative.

To sum up, the subject-DPs appear to be situated in a clause-final position in constructions such as those in (22) and (23), yet we cannot be sure, since there is no SA preceding or a VP-element following the subjects. For these two texts, the following constructions have been categorized as type (I): 16 instances with *te* in *s*-form (as in (1b) above), 16 instances with divalent verbs (as in (22a) above) and one with V + Optional Dative (i.e. the one with *koma* 'to come' in (22c) above), and one impersonal with *synas* in (23).

Turning now to the constructions which have been categorized as type II: one example with *möta* 'meet', one with *te* 'show/reveal' and one with *höra til* 'benefit', illustrate how there is a constituent in the middle field in-between the subject and the object:

⁵⁰ Note that this is a simplification: *te* should perhaps be categorized as an impersonal verb in medial-*s* form (see Söderwall 1884 – 1918; *teas* 'show/reveal'), but this is unfortunately not clear in every instance.

- (24) Nw **möter** honum oc annar konunger melchissedech som var badhe konungir oc
gudz prester oc biskoper (Moses-A, p. 181)
*Now meet him.DAT also other.NOM king.NOM Melchissedech which was both
king, God's priest and bishop*
'Now, another king, Melchissedech, who was both king and God's priest and bishop,
also meets him'
- (25) En midhsomars apton **thedhis** hanum j sømpne en riddare som sagdhe sik heta
valuamum (LegBi, p. 686)
*A midsummer's eve, reveal-PASS him.DAT in sleep a knight.NOM that said REFL.
name Valuamus*
'A midsummer's eve, a knight who said his name was Valuamus, appeared before him
in his sleep'
- (26) ”tha **hörir** honum til tw thing” (Moses-A, p.458)
then befit him.DAT to two.NOM thing.-NOM
'then, two things befit him'

Above, we see that there is a SA (i.e. *oc* 'also') and a VP-element (i.e. *j sømpne* 'in sleep') in between the dative object (i.e. *hanum* 'him.DAT') and the nominative subjects (i.e. *annar konunger* ... 'another king ...', and *en riddare* ... 'a knight ...') in (24) and (25) respectively. The SA in (24) is probably situated in the middle field (i.e. in **A1**), whereas the VP-element in (25) is probably situated in the clause-final field, i.e. **A2** (compare Chapter 2, Figure 2). In (24) and (25), we also see two heavy subject-DPs, i.e. more than two attributive elements is part of these DPs. Just like for the *inverted reflexive construction* in (21a), then, it might be the case that heaviness has an impact on the distribution of the DP-subjects.

As for (26) with *höra til*, the VP-element *til* 'to' is a particle which intervenes between the object (i.e. *honum*) and the subject (i.e. *tw thing*) and I classify this complex predicate as a V + Optional Dative, because *höra til* can have two meanings, according to Falk (1997:60); it could either mean 'belong to' or 'befit'. In the former case, the verb selects an obligatory argument, whereas in the latter, it permits for an optional dative argument. In (6), the context suggests the latter reading (cf. *Moses-A*, p. 458).

In summary, (21) – (26) suggest that the subjects might have been postposed to the extraposition (i.e. in **Ex.**). This is supported by fact that the subject in (21a), (23), (24) and (25) are heavy DPs. In these two texts, there were nine examples of type II; three with

divalent verbs, of which all three were constructed with *möta*; three V + Optional Dative, of which one was constructed with *höra till*, one with *koma*, one with *dugha* 'befit' (included in Falk 1997); two constructions with *te* in *s*-form and one impersonal with *sömpde* 'befit' (included in Falk 1997).

Now, for the third category, i.e. the so called *True LOS*, recall that the main requirement was that there should be a VP-element following the subject, which could point out the position of the subject and indicate movement of objects to a position in the middle field (i.e. **LOS** in the sentence model in Chapter 2, Figure 2 above).⁵¹ Below, instances of LOS with *te* 'show/reveal', *synas* 'become visible' and *möta* 'meet' illustrate the word order of type III:

- (27) Thridhia daghin **tedhis** henne *eet altare* høght gen himnum (LegBi, p. 63)
Third day-the show-PASS her.DAT an alter.NOM high towards sky-the
'On the third day, an alter stretching high into the sky appeared before her'
- (28) a. Oc **syntis** henne *träith* **wara** lostelikt (Moses-A, p. 160)
And appear her.DAT tree-the.NOM be odd
'And then, the tree seemed strange to her'
- b. oc **möter** honum *esau* mz fyra hundrath män (p. 225)
and meet him.DAT Esau with four hundred men
'and Esau meets him with four hundred men'

The examples in (27) and (28) illustrate how there is a VP-element following the subject, i.e. *høght gen himum* 'high towards sky-the' and *vara ærlighast* 'be honest-most' in (27), and *mz fyra hundrath män* 'with four hundred men' in (28). Note also that all the subjects are short (or 'light'), as compared to e.g. (21a).⁵² Notice also that the subject in (27) is indefinite, whereas the subjects in (28a,b) are definite. Definiteness is indicated either with a suffixed article, as in *trä-ith* (i.e. 'tree-the') in (28a), or inherently, as with the proper name *Esau* in (28b), whereas indefiniteness is indicated with the prenominal article *eet* 'an' in (27).

Except for the divalents illustrated by *möta* in (28b), I found nine constructions with verbs with *s*-form (all of which were constructed with *te*), and four impersonal constructions (see

⁵¹ Addendum: most optimal would have been to find instances with LOS of type III and a SA positioned in A1 preceding the subject, but no such construction was found in these two texts.

⁵² As for (28a) with the divalent *möta*, the clause-initial position seems to be empty (*oc* could be either a conjunction, i.e. 'and' as in 'and met him', or an adverbial, i.e. 'also met him'). However, the context implies that the name *Esau* is to be interpreted as the clause subject, and hence it is not a coordinated clause with an omitted subject (cf *Moses-A* p. 225); therefore, it is reasonable to believe that the verb holds the second position.

(28a) above) of type III. Even though there seem to be a difference in agentivity between these two types, their arguments behave alike syntactically. That is, a pronominal object in dative is often situated far to the left in the clause, and it is followed by a DP-argument in nominative.

Moreover, I found ten instances with active, trivalent verbs (see (29) below), and in addition, I found four instances of V + Optional Dative, two with *koma* (see (30) below), which have been categorized as type III. One example of each type of construction from *LegBi* is illustrated below:

- (29) J samu stundh **recte** hanum *sanctus marchus* stang j hændher (p. 256)
At same-the time handed him.DAT Sanctus Marchus pole in hands
'At the same time, Sanctus Marchus handed to him a pole in his hands'
- (30) En dagh [...] **kom** hanum *en rædelikir diæwl* for øghon (p. 591)
One day came him.DAT a fearsome.NOM devil for eyes
'One day, a fearsom devil appeared before his eyes'

In these examples, there is either a PP (i.e. *for øghon* 'before eyesv) or another DP (i.e. *stang j hændher* 'pole in hands') holding the clause-final position. In different ways, constructions such as these deviate from the pattern illustrated in (27) and (28): in (29), the verb requires a prototypical AGENT, i.e. an external argument; the V + Optional Dative constructions, such as the one in (30), are constructed with verbs that typically only select one argument and it is not obvious where the optional argument is inserted. Thus, (29) and (30) clearly pose potential problems for my analysis, but I will leave them aside for now and return to them in Chapter 5.

As we have seen, all instances of type III imply that the subject cannot be postposed, since there is a VP-element holding the clause-final position (i.e. **A2** or **Ex.** in Chapter 2, Figure 2). This also means that they indicate movement of objects, presumably to the position called **LOS** in the middle field. For these texts, the following types of constructions have been categorized as type III: 12 instances with divalent verbs; nine with verbs in *s*-form; seven impersonals; ten with active trivalent verbs; three with V + Optional Dative. In type III constructions where I assume that the verb (as *möta*, for instance) selects two internal arguments, I have identified 13 instances with a definite subject, as compared to nine with an indefinite subject.

To sum up this section, we have seen that the subject in constructions of type I and II seem to be heavy, as opposed to those in constructions of type III. Furthermore, it seems to be verbs in *s*-form and divalent verbs that favour LOS, which is indicative that they might have some lexical property in common. However, verbs with *s*-form were fewer than active, trivalent verbs in constructions of type III, which poses a problem for my analysis. The total number of different constructions and each word order category are illustrated in Table 1 below:⁵³

Table 1. *Construction and word order types with LOS in Early Old Swedish*

Constructions	I	II	III
Verbs with <i>s</i> -form	16	2	9
Divalents	16	3	12
Active trivalents			10
Impersonals	1	1	7
V + Optional Datives	1	3	3
Total	34	9	41
Inverted reflexives	1		4
Total	35	9	45

Above all, this table reduces the constructions with LOS that indicate movement of objects to a total number of 45 instances. Note also that I have identified 13 definite subjects, as opposed to nine indefinites in type III constructions where I assume that the verb selects two internal arguments. Now, given the described data at hand, these questions are yet to be answered: is it the case that any specific pronoun occurs more often than others in constructions with LOS in *Early Old Swedish*, and if so, could this tell us more about the argument structures *per se*? In order to answer this, I will now turn to the distribution of different pronouns in the constructions with LOS.

⁵³ Note that *inverted reflexive constructions* are presented separately, for reasons that have already been mentioned (see Chapter 2, section 2.1.3).

4.1.2 Pronominal objects

To investigate whether any specific pronoun occurs more often than others in constructions with LOS, the use of different pronominal objects has been counted in each text. Table 2 below illustrates how many instances of each pronoun that has been found in constructions (of all three word order types) with and without LOS in *LegBi* and *Moses-A*:⁵⁴

Table 2. *Pronominal objects in constructions with LOS in Early Old Swedish*

Obj. pro	Total	LOS	LOS %
<i>Honum (DAT)</i>	1308	45	3, 44%
<i>Henne (DAT)</i>	335	8	2, 39%
<i>Hona (ACC)</i>	220	2	0, 91%
<i>Them (DAT/ACC)</i>	1674	8	0, 48%
<i>Mik (DAT/ACC)</i>	550	2	0, 36%
<i>Tik (DAT/ACC)</i>	521	3	0, 58%
<i>Os (DAT/ACC)</i>	247	15	5, 67%
Total	4855	83	2%
<i>Han (ACC/NOM)</i>	5131	1	0, 02%
Total	9986	84	1%

As can be seen, the table above underlines the rarity of constructions with LOS. Furthermore, it shows that, in these two texts, the two most common pronouns in constructions with LOS were *honum*, 'him.DAT', and *os*, 'us'.

With regard to pronouns inflected for either dative or accusative, Table 2 indicates that pronominal objects in dative are more used than pronominal objects in accusative. This is seen in the difference between the use of the dative object *henne*, 'her', i.e. 2,39%, as compared to 0,91% for the equivalent pronoun in accusative, i.e. *hona*, 'her'. Even if the use

⁵⁴ Note that accusative *han* 'him' is presented separately, due to the extensive use of this pronoun and the ambiguous Case distinction. However, one instance with *han* in accusative will be dealt with in Chapter 5. Note also that five instances of *sik* have been left out, since they occur in *inverted reflexive constructions*.

of dative *honum* seems to support this, it cannot be compared with the use of accusative *han*: it is not clear whether *han* reflects nominative or accusative, and since there are too many instances of *han* in both texts, I will not try to distinguish them in this paper.

A somewhat similar ambiguity appears with *mik* 'me', *tik* 'you', *them* 'them' and *os* 'us', but the relatively low number of instances makes it possible for me to deal with them within the scope of this paper. Recall that the distinct dative forms were replaced by the accusatives around 1300, suggesting that they might have been inflected for dative when occurring in dative contexts. To further clarify this, I will look at accusative and dative contexts (i.e. the lexical environment, e.g. if the verb normally assigned accusative or dative) in Chapter 5 below. Altogether, 28 of instances from this corpus will be discussed, as they will further clarify the correlation between argument structures and Case assignment with regard to LOS.

Concluding this section, we have seen that the use of different pronouns in constructions with LOS suggests that lexical Case might have affected the distribution of arguments, since one sort of pronoun in dative is more used than its equivalent in accusative. However, we have seen many instances with pronouns in ambiguous form, which needs to be investigated further in order to provide a clear picture of the correlation between Case/ θ -role assignment and argument structures. I will return to this in Chapter 5, but first, let us turn to the data excerpted from the *Late Old Swedish* corpus.

4.2 LOS in Late Old Swedish

Once again, the excerpted data suggest that it is the experiencer verbs that seem to favour LOS word order. To give some examples from the 15th century texts (i.e. 'B&J', 'Link-NR' and 'Em-An'), I found constructions with LOS and verbs of consideration, e.g. *tykka* 'think', *bör* 'ought to', *wndhersta* 'understand'; verbs of perception, e.g. *synas* 'become visible', *oppenbara* 'show/reveal', all of which denote experiences of some sort.

In view of this corpus being less extensive than the *Early Old Swedish* corpus (compare Chapter 3, section 3.2 above), the verb frequencies indicate that the use of constructions with LOS is relatively stable. That is, in the corpus for *Late Old Swedish*, I found 32 different verbs that could be constructed with LOS. Of these 32 verbs, I found a total amount of 1681 instances, of which 85, i.e. 5% were instances with LOS. Thus, just like in *Early Old Swedish*, LOS seems to have been an uncommon option for these verbs. Furthermore, specific verbs stood out once again: *möta* 'meet', *synas* 'become visible' and *oppenbara* 'show/reveal'. For these texts, the total number of instances with *möta* was 48, of which 10, i.e. 21%, were instances of LOS; for *synas*, the total number of instances was 78, of which 16, i.e. 21%, were

instances of LOS; the total number of instances with *uppenbara* was 47, of which 18, i.e. 38%, were instances of LOS.

To determine types of constructions and distinguish how many instances with LOS indicate movement of objects in *Late Old Swedish*, I will now turn to the different word order types that have been excerpted from this corpus.

4.2.1 Word order types

Once more, I start by giving some examples of *inverted reflexive constructions*. After that, I will be giving examples with other constructions that have been categorized as type I, II and III, respectively.

Unlike what we have seen in the *Early Old Swedish* corpus, I found *inverted reflexive constructions* of all three types in the *Late Old Swedish* corpus. Below, I give three examples with *uppenbara* 'show/reveal', a verb that was found with 18 instances of LOS. The following examples are all from *Link-NR* and they illustrate type I, II and III, respectively:

- (31) *tha **uppenbaradhe sik** en aldrogher man* (p. 191)
then revealed REFL. an.NOM older.NOM man
'Then, an older man revealed himself'
- (32) *I hennas langsamma krankdom **uppenbaradhe sik henne** idhkeleka herran ihesus cristus, iomfru maria, sanctus petrus apostolus oc hælga ängla [...]* (p. 431)
In her long illness revealed REFL. her continually lord-the.NOM Jesus Christ, Virgin.NOM Mary, Sanctus Petrus apostle and holy angels [...]
'During her long illness, the Lord Jesus Christ, the Virgin Mary, Sanctus Petrus the apostle and holy angels revealed themselves before her continuously'
- (33) *nar han haffde nakra dagha äptherfölkt sin wilia, **uppenbaradhe sik honom** sanctus seruacius i sömpnen sighiandhis [...]* (p. 185)
when he had some days after-followed his will, revealed REFL. him Sanctus Seracius in sleep saying
'When he had followed his own will for some days, Sanctus Seracius revealed himself to him in his sleep, saying'

First of all, the verb *uppenbara* is constructed with a true reflexive (i.e. *sik*) that precedes the subject in all three examples. Second, we see that in (32), there is a SA (i.e. *idhkeleka* 'continuously') in **A1**, whereas in (33) there is a VP-element (i.e. *i sömpnen ...* 'in sleep ...') in

A2 following the subject. Third, we actually see two objects that precede the subject (i.e two instances of LOS: *sik henne/honom*) in (32) and (33), belonging to type II and type III, respectively.⁵⁵ In turn, this might indicate a complex structure, but since only three such constructions were found throughout this investigation, I will exclude these in my analysis. In this corpus, I found 24 instances of LOS in 21 instances of inverted reflexive constructions with the reflexive pronoun *sik*; which will be presented separately in the tables below.

Turning to the other constructions, I give one example with *synas* 'become visible' (from), one with *möta* 'meet', one with *brista* 'be short of' and one with *förwilla* 'mislead', respectively. All of these illustrate the word order of type I:

- (34) mith mällan the bärghen **syntes** os en man, som war c alna högher (Link-NR, p. 459)
middle between those mountains show us a man, that was hundred ellses high.NOM
'In between those mountains, we saw a man that was one hundred ellses high'
- (35) a. tha the ingingo **mötte** thom andre män skinande mz myklo klarhe (B&J, p 104)
when they entered met them other.NOM men shining with much clarity
'When they entered, they met men who shined with great clarity'
- b. tho **brast** hanom eth huilkit hans glädhi munde mykit kränkia (B&J, p. 4)
then lacked him one.NOM which his joy.NOM could much derogate
'then, he was short of one thing, which could derogate his joy'
- (36) om samma nattena i mörkret ridhandes, **förwiltes** henne wäghen (Em-An, p. 638)
on same night-the in darkness riding, misled-PASS her road-the.NOM
'on that same night, when she was riding in the dark, she was misled on the road'

Again, we see the possibility to postpose the subject, at least in (34) and (35). (Compare type I and type II, section 4.1.1 above). In addition, we see four different types of constructions: In (34), we see an instance of LOS constructed with the impersonal verb *synas*; in (35a), we have the divalent verb *mötte*. The verb *brast* in (35b) is included in Falk's list (1997): it is a verb that could be constructed with an optional argument in dative (cf. p. 59). For this reason, (35b) have been categorized as V + Optional Dative. In (36), the verb *forwilla* has the *s*-form (see e.g. SAOB; *förvilla*).

⁵⁵ Recall that I count every moved pronominal object as an instance of LOS. Thus, (13) and (14) are counted as two instances each, since it is reasonable to believe that both *sik* and *honom* have moved.

Most importantly, there are no constituents following the subjects in these constructions. Hence, we cannot be sure of the subject's position. For these three texts, the following constructions have been categorized as type I: one instances with verbs in *s*-form (i.e. (36) above), 15 with divalent verbs, such as (35a) above, three V + Optional Dative (one with *brast*, one with *koma* 'to come' and one with *tilkoma* 'add') and five impersonals, such as (34) above.

Regarding the instances that have been categorized as type II, I only found four constructions in this corpus. These are repeated in (37a), (37b) and (37c) are from *Em-An* and (38) is from *Link-NR*:

- (37) a. nar hon haffde han takit, **förgiks** henne strax *aldher törst oc besklighet* (p. 654)
when she had him taken perish-PASS her soon all.NOM thirst and skill
'When she had taken him, all of her thirst and skills was perished'
- b. Oc som hon tiith kom, **mötte** henne ther *the hälga tre konungha*" (p. 640)
And as she there came met her there the holy three kings.NOM
'And when she came there, the three holy kings met her'
- c. tha **kom** henne i hogh *then päninggen hon haffde* (p.716)
then came her in memory that money-the she had
'Then, she remembered that money she had'
- (38) tha **kom** os wndher näsanar *otholeliken lokt*
oc aldra wärsta, aff huilke ondhe lokt wi wordhom maxsan
som halff dödhe ällar wtlöse [...] (p. 458)
then came us under noses-the unbearable.NOM smell and the worst,
from which evil smell we felt almost half dead or senseless [...]
'Then, the most evil of smells came to our noses, and because of that,
we felt almost half dead or at least senseless'

Above, we see that one of the DP-subjects is heavy, i.e. in (38), indicating the possibility to have the subject positioned in **Ex**. Furthermore, we see either a PP or an AdvP in **A2**, e.g. *ther* 'there' and *wndher näsanar* 'under noses' in (37b) and (38) that intervenes between the subject and the object. In (37a), it is a SA, i.e. *strax*, 'soon', that intervenes in **A1**. However, since nothing follows the subject in these instances, we may assume that the subjects are postposed, which is supported by the heaviness of the subject in (38).

Apart from this, we see three different kinds of constructions in (37) and (38): (37c) and (38) have been identified as V + Optional Datives with the verb *koma*. In (37a), we have a verb in *s*-form (i.e. *förgiks* ‘perished’, see Söderwall 1884 – 1918: *forganga*), whereas in (37b), it is the divalent verb *möta* again.

Turning now to the third and last type, I give one example with *synas* ‘become visible’ (from *Link-NR*, p. 68), one with *tilöka* ‘add’ (from *Link-NR* p. 278), and one with *wndersta* ‘understand’ (from *Link-NR*, p. 161), respectively. All of these illustrate the word order of type III:

- (39) Oc **syntes** henne tha *hymerikis drotnigh* *iomffru maria* *sighiandis* [...]
and show her so heaven-kingdom queen.NOM Virgin Mary saying
‘And so, the queen of the heavenly kingdom, Virgin Mary, showed up before her, saying ...’
- (40) swa **tilöktes** henne *gwdelika oc dygdhelika gärnigga* i *siälenne* *jnwörtes*
so add-PASS her godlike and virtuous deeds.NOM in soul-the internal
‘then godlike and virtuous deeds was added to her in her soul internally’
- (41) tha **kwnne** honom *enghen* **wndersta**
then could him no-one.NOM understand
‘After that, no one could understand him’

In these three examples, we see that a VP-element holds the position following the subject, e.g. the PP *i siälenne* ‘in soul-the’ in (40), and the non-finite main verb *wndersta* in (41). Notice also that the subject (... *maria*, i.e. ‘... Mary’) in (39) is definite, whereas the subjects in (40) and (41) are indefinite.⁵⁶

Apart from that, we see an optimal construction with a SA in **A1** preceding the subject (i.e. *tha* ‘then’) and a VP-element (i.e. the participle *sighiandis* ‘saying’) following the subject in (39). However, (39) is one of only three +SA constructions of type III in this corpus.

What is more, the examples above illustrate four different types of constructions: in (39), we see an impersonal construction with *synas*, and the one in (40) is a construction with *tilöka* which has the *s*-form. As for (41), it is an OV-structure, where the divalent, non-finite main verb *wndersta* holds a clause-final position, namely **V2**.

⁵⁶ Addendum: the subject in (40) has no suffixed definite article, and the subject in (41) is an indefinite pronoun, i.e. *eghen* ‘no-one’.

Furthermore, I found three constructions with active trivalent verbs (one with *giva* 'give' and two with *begaffwa* 'endow'), and four V + Optional Dative constructions (one with *swara* 'answer', one with *koma* 'come' and two with *wart* 'become') of type III. Below, I give two clarifying examples:

(42) Oc här ower **gaff** them *gudh* marghfalla nadher (Link-NR, p. 392)
And here over gave them God.NOM of-many-kinds grace.ACC

'And therefore, God gave them grace of many kinds'

(43) förra än iak faar glädhi [...] **komber** mik *stor dröffuile* **oppa**" (Em-An, p. 629)
until I get joy come me great grief.NOM upon

'Until I see joy, a great grief will come upon me'

In these examples, we see that the subject DPs are light, at least compared to e.g. (38) of type II above. Just like in (39) – (41), we see that a VP-element follows the subject in (42) and (43): a third DP, i.e. *marghfalla nadher* 'of-many-kind grace', in (42) and a particle (or PP), i.e. *oppa* 'upon' in (43). However, recall that constructions such as (42) and (43) pose potential problems to my analysis, because (i) trivalent verbs require an AGENT (i.e. an external argument), and (ii) it is not clear where the optional argument is inserted in a V + Optional Dative construction. Given the stated hypothesis (compare Chapter 2, section 2.2.1 above), this calls for further attention. In this corpus, the following constructions have been categorized as type III: 18 impersonals; three active trivalents; five divalents; five V + Optional Datives and two instances with Verbs with *s*-form. Excluding all active transitive verbs, I have identified eight instances with a definite subject, as opposed to eleven instances with indefinite subjects in constructions (such as impersonals) where I assume that the verb selects two internal arguments.

Concluding this section, instances of type I and II indicate that the heaviness of the DP-subjects might have affected the distribution. In addition, it seems as though impersonal verbs favour LOS word order in *Late Old Swedish*, and in this corpus, I only found three active, trivalent verbs of type III and four verbs in *s*-form. The total number of different constructions and each word order category are illustrated in Table 3 (below):

Table 3. *Constructions and word order types with LOS in Late Old Swedish*

Constructions	I	II	III
Verbs with <i>s</i> -form	1	1	2
Divalents	15	1	7
Active trivalents			3
Impersonals	5		18
V + Optional Dative	3	2	2
Total	24	4	33
Inverted reflexive	8	2	11
Total	32	6	44

Again, the table reduces the number of constructions with LOS that indicate movement to **LOS** to a total of 44. Note also that I have identified eight instances with a definite subject, as opposed to eleven indefinite subjects in type III constructions where I assume that the verb selects two internal arguments.

Moreover, Table 3 indicates a decrease in the use of verbs in *s*-form and divalents, but an increase in the use of impersonals (compare Table 1, section 4.1.1 above). Note also on the side that Table 3 shows an increased use of inverted reflexive constructions, of which 18 instances of LOS were constructed with *oppenbara* 'show/reveal' and a true reflexive (i.e. *sik*). Thus, it could be the case that *oppenbara* + REFL. replace *te* 'show/reveal' in passive diathesis: no instances with LOS and *te* in passive have been attested in this corpus, and the meaning of *te* and *oppenbara* is more or less the same. I will return to this below, but first let us turn to the different pronouns excerpted from the *Late Old Swedish* corpus.

4.2.2 Pronominal objects

Once more, by looking at the use of different pronominal objects in constructions with and without LOS, one might discern certain patterns. Below, Table 4 illustrates how many of each

pronoun was found in constructions (of all three word order types) with and without LOS in *B&J*, *Link-NR* and *Em-An*:⁵⁷

Table 4. *Pronominal objects in constructions with LOS in Late Old Swedish*

Obj. pro	Total	LOS	LOS %
<i>Honom (DAT/ACC)</i>	453	16	3, 53%
<i>Henne (DAT/ACC)</i>	438	21	4, 91%
<i>Them (DAT/ACC)</i>	499	6	1, 00%
<i>Mik (DAT/ACC)</i>	352	5	1, 42%
<i>Tik (DAT/ACC)</i>	373	1	0, 26%
<i>Sik (DAT/ACC)</i>	720	5	0, 69%
<i>Os (DAT/ACC)</i>	214	7	3, 27%
Total	3049	61	2%

As before, Table 4 underlines the rarity of LOS, but this time, we also see that all pronouns have ambiguous form: I only found 12 instances of *hona* in this corpus and none of them were shifted. This suggests that the case distinction between dative and accusative have been lost, which means that I will have to consider these pronouns to be in ambiguous m-case in Chapter 5.

Excluding 24 instances of LOS (i.e. 21 *sik*, two *henne* and one *honom*), Table 4 shows that, in these three texts, two other pronouns occurred frequently in constructions with LOS: *honum*, 'him', and *henne*, 'her'. However, this does not tell us anything about the argument structure of the verb that permits LOS, since all pronouns have ambiguous form in the *Late Old Swedish* corpus. I will now compare the observations from the two corpuses in a summary and conclude this chapter.

⁵⁷ Observe that neither *han* 'him.ACC' nor *hona* 'her.ACC' have been attested in *Link-NR* or *Em-An*, and note that 21 instances of shifted true reflexives (i.e. *sik*), plus two instances of *henne* and one of *honom*, have been left out: these were included in inverted reflexive constructions. The total number of shifted pronouns will therefore be 61, as opposed to the total number of 85 instances of LOS.

4.3 Comparison and summary of observations

First of all, the excerpted data suggests that LOS should be taken as an option for some verbs, though an uncommon one. This is supported partly by the verb frequencies (i.e. 2% of 3972 in EOSw. and 5% of 1681 in LOSw.), partly by the frequencies of distributed pronouns in each text (see Table 2 and Table 4, section 4.1.2 and 4.2.2, respectively).

Counting shifted pronouns, I found 174 instances altogether: 89 instances in constructions of type I, II and III in EOSw, and 85 instances in constructions of type I, II and III in LOSw. As we have seen, 89 of these instances (i.e. 51% of 174) were included in constructions that may indicate movement of objects, i.e. they were categorized as type III. However, 69 (i.e. 39% of 174) of these instances suggest (with more certainty) that the pronominal object has moved to the **LOS**-position.⁵⁸ However, I cannot exclude the possibility of there being a covert expletive in type III constructions with verbs that select two internal arguments (e.g. impersonals): I found just as many definite subjects as indefinite subjects in these constructions. Hence, this needs to be more thoroughly studied in future research.⁵⁹

Regarding what sort of pronoun occurred in instances of LOS (and excluding 29 instances of LOS in inverted reflexive constructions), I excerpted a total number of 89 instances of pronouns in ambiguous forms, 53 instances of pronouns in unambiguous dative and three instances of pronouns in unambiguous accusative (see section 4.1.2 and 4.2.2 above). This means that I will deal with 145 instances in the next chapter.

Furthermore, it seems to be the case that experiencer verbs facilitate LOS word order as an option. That is, the semantically most salient group of verbs among those that appear with LOS was the experiencer verbs, and interestingly, specific verbs stood out. These are presented in Table 5 below:⁶⁰

⁵⁸ Note that all active transitive verbs (such as *hjälpa* 'help', *giva* 'give', *swara* 'answer' and *böghia* 'bend') and three +SA instances of type III are included in these 69 instances: (i) active transitives cannot have a covert expletive situated in the subject position, and (ii) +SA instances have a sentence adverbial in-between the shifted object and the clause subject and a VP-element following the subject, thus contradicting that two arguments appear in their base-generated positions.

⁵⁹ Note, however, that this would contradict SIG, if both arguments need to be assigned Structural case.

⁶⁰ Compare appendices.

Table 5. *Verbs that stood out during the investigated period (1300 – 1500)*

Verb	EOSw			LOS _w		
	Total	LOS	LOS %	Total	LOS	LOS %
<i>möta</i> 'meet'	84	17	20 %	48	10	21 %
<i>te</i> 'show/reveal'	199	27	14 %			
<i>synas</i> 'become visible'	108	4	3 %	78	16	21 %
<i>oppenbara</i> 'show/reveal'				47	18	38 %
<i>Other verbs</i>	3581	41	1 %	1508	41	3 %
Total	3972	89	2 %	1681	85	5 %

Table 5 indicates that specific verbs favour LOS in Old Swedish, and subsequently, it indicates that the verb *te* (in passive) might have been replaced by the verb *oppenbara* (with a true reflexive) and/or the impersonal verb *synas* during the Old Swedish period. However, this needs to be more thoroughly studied, which is beyond the scope of this paper.

Another interesting observation that can be seen in Table 5, is that *synas* was found with LOS in both periods. It occurred in four out of five texts, but so did *möta*, which indicates that the choice of LOS may not solely be dependent on the meaning of the verb itself, but presumably also by the syntactic structures that these verbs take part in. That is, they might be lexically specified or subcategorized for specific arguments, and we have in fact seen hints of a correlation between lexical Case and LOS: (i) pronominal arguments in dative were used more often than accusatives (at least for *henne* 'her.DAT' (2,69% of 335) contra *hona* 'her.ACC' (0,91% of 220) in *Early Old Swedish*), and (ii) we have seen that verbs in *s*-form have played a central role in the use of LOS in *Early Old Swedish*, whereas impersonals have played a central role in the *Late Old Swedish* corpus. These facts imply that lexical Case and the choice of subject may have affected the possibility of LOS.

Additionally, we have seen that the subject DPs are sometimes modified by several attributive elements in instances of word order type I and II. Thus, it might be the case that these constructions facilitate the possibility of postposing the subject, which, in turn, may be related to topic and focus (i.e. given versus new information) and different strategies to

distribute focal and topical elements. Subsequently, constructions of type I and II are not necessarily instances of LOS. However, this too, needs to be more thoroughly investigated, and I will defer this task to future research.

In the next chapter, I will try to further clarify the correlation between argument structure, Case/ θ -role assignment and LOS. By looking at accusative and dative contexts, I will try to define 145 shifted pronouns as either accusatives or datives, and hereby, try to point out the launching site for the pronouns in constructions with LOS. Last, I will reevaluate my stated hypothesis in the light of the analyzed data.

5. Analysis

The main purpose of this chapter is to try to point out the argument structures of the verbs that have been constructed with LOS, excerpted from 14th and 15th century Swedish texts. Hereby, I aim to point out the ‘launching site’ of the argument that undergoes LOS. In what follows, I will argue that the pronominal object which is moved by LOS is base-generated in a specifier-position and that accusatives are special in that they are merged in a [DP XP] configuration.

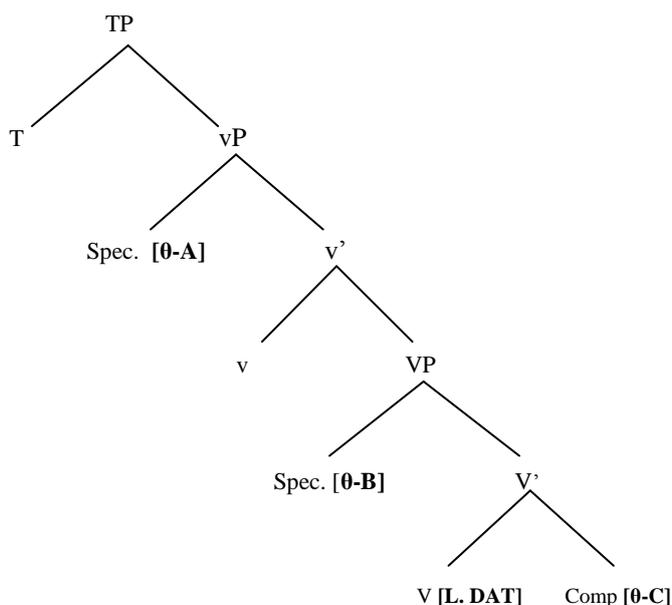
After having recapitulated the adopted terminology, I will discuss the correlation between argument structures, θ -role assignment and Case assignment in constructions with LOS. In addition, I will relate every example that I give to one of the following constructions: *Impersonals*, *Passive* and *Active Ditransitives*, *V+ Optional Datives*, *Divalents*.⁶¹ As we proceed, I will discuss similarities and differences. Last, I will reevaluate my proposal.

5.1 Recapitulating the analytical tools

For convenience, I will start off by repeating and extending the model for the syntactic operations *Merge*, *Agree*, *Move*, *Case* and *θ -role assignment*. The syntactic tree and its equivalent in square brackets below, provide a frame for my structural analysis:

⁶¹ Recall that I leave aside 29 instances, for reasons that have already been mentioned (see section 2.1.3). Note also that I will use the terminology in SAG for those verbs that do not match any of the mentioned categories.

Figure 5:



1: [TP ... [vP [v' [VP [V' [V [L. DAT] Comp [θ-C]]]]]]]]

In Figure 5, I have only included features that are relevant for my analysis:⁶² the T-domain should be seen as the 'landing area'; lexical dative is annotated as [L.DAT] on the head V and **A** (spec-vP), **B** (spec-VP) and **C** (the complement of V) are A-positions which are central positions for θ -role assignment, i.e. roles associated with the following groups: *ACTOR*, *EXPERIENCER* and *THEME*, respectively. Recall also that I assume spec-TP to be an A'-position in Old Swedish. Furthermore, I assume that object predicative constructions and object-with-infinitive constructions could be seen as Small Clauses, and I assume that the *EXPERIENCER*-group is closely related to dative after 1300 (see Chapter 2).

5.2 LOS and argument structures

As has been stated, I will deal with a total number of 145 shifted pronouns. I have identified 53 instances of morphologically unambiguous datives (i.e. *honom* 'him.DAT' or *henne* 'her.DAT') and three instances of unambiguous accusative (two with *hona* 'her.ACC' and one with *han* 'him.ACC'). Furthermore, I have consulted Söderwall (1884 – 1918) when identifying the ambiguous cases (i.e. *mik*, *tik*, *sik*, *os*, *them*, *honom* and *henne* 'me', 'you', 'itself', 'us', 'them', 'her' and 'him') as occurring in either accusative or dative contexts,

⁶² Recall that I assume structural nominative to be tied to an unvalued feature on the head T, and that structural accusative requires the presence of another argument in nominative (see Chapter 2, section 2.1.2).

depending on the lexical environment and syntactic valency of each verb. For ease of exposition, these numbers are summarized in Table 6 below:⁶³

Table 6. *Classified pronouns*

Types	Morphology		Lexical/Syntax		Total	LOS %
	DAT	ACC	DAT	ACC		
<i>DATIVES</i>	53				53	37 %
<i>ACCUSATIVES</i>		3			3	2 %
<i>AMBIGUOUS</i>			76	12	88	61 %
Total	56		88		144	100 %

As can be seen, unambiguous datives are more common than unambiguous accusatives (i.e. 53 against 3, out of a total of 144, or 37% against 2%). Additionally, we have 76 instances of the ambiguous pronouns which have been classified as occurring in dative contexts, whereas only 12 have been classified as occurring in accusative contexts. In what follows, I will clarify how I have classified the ambiguous forms as either accusatives or datives, depending on which θ -role they carry, syntactic valency of the main verb and whether the verb takes dative or accusative according to Söderwall (ibid). I will start with pronouns in dative and dative contexts (henceforth 'Datives'), and after that, I will deal with pronouns in accusative and accusative contexts (henceforth 'Accusatives'). All instances will be related to the model for argument structures in Figure 5 above.

⁶³ Note that I leave aside a quirky instance with *os* 'us', which defies all explanations. This instance is constructed with the two coordinated predicates "*wäffia oc klanda*" 'push us to our knees', repeated in (i) below:

(i) "[...] **wil** *os landzherran wäffia oc klanda*" (Moses-A, p. 245)
'want us governor-the consider and blame'

Söderwall (1884 - 1918) includes the exact same construction, and he translates the two coordinated predicates "*wäffwia oc klanda*" to "*bringa på fall*", which roughly means 'to push us on our knees'. Unfortunately, it is unclear which of these two verbs should be considered the main verb, and subsequently, it is not possible to tell whether *os* is assigned accusative or dative (both are possible; see Söderwall 1884 – 1918: *wäffwia*).

5.2.1 LOS with Datives

When looking closely at the instances of LOS with a morphologically ambiguous pronoun, I noted that 76 out of 88 were found in dative contexts. Typically, these instances were constructed with a verb that takes dative, such as divalents like *möta* 'meet', *gagna* 'benefit', *swara* 'answer' or *hiälpa* 'help'; active ditransitives such as *giva* 'give', *begaffwa* 'endow' or *kiänna* 'teach' (called 'active trivalents' in Chapter 4), passive ditransitives such as *te* or *tilöka* (called 'verbs with *s*-form' in Chapter 4), impersonals such as *synas* 'become visible' or *tykka* 'think' and V + Optional Dative, such as *koma* 'come'. As we shall see, all of these verbs take objects in dative in one way or another in Old Swedish.

Let us start with verbs that clearly select an *ACTOR*-argument, and for this purpose, let us have a look at a prototypical ditransitive verb: *giva*. Altogether, I found 13 instances of the ditransitive type, three of these were instances with *giva*. This verb was constructed with *henne* 'her.DAT', *them*, 'them', and *os*, 'us'. For the sake of comparison, I repeat two instances with *giva* below, one with *them* (from *Link-NR*) in (1a), and one with *henne* in (from *LegBi*) in (1b) below:⁶⁴

- (1) a. Oc här ower **gaff** them *gudh* marghfalla nadher (p. 392)
 And here over gave them god.NOM of-many-kinds grace.ACC
 'And therefore, God gave them grace of many kinds'
- b. **Gaff** henne *en judhe:* The boior som [...] (p.114)
 gave her.DAT a jew.NOM those shackles that
 'Then, a Jew gave her those shackles that... '

First of all, (1) clearly points out spec-VP as a launching site for the pronominal objects, schematized as [*DP* [*DP* [*DP*]]]. In these instances, the subject-DPs carry AGENT-roles, the pronominal objects carry RECIPIENT-roles, and the THEME-roles are carried by the arguments in accusative. Furthermore, it should be noted that ditransitives assign dative in general in Old Swedish (see Wessén 1956, part III, p. 12f), and consequently, instances such as those in (1) will be counted as datives merged in spec-VP.

⁶⁴ Note that I start from (1), for ease of exposition.

Three other verbs that should be mentioned in this connection are *känna* 'teach', *biwdha* 'bid' and *forbiwdha* 'forbid'.⁶⁵ Below, I give two examples with *känna*, one where it takes three DP-arguments, i.e. in (2a), and one where it takes two DP-arguments and one XP-argument, repeated in (2b), both from *Moses-A*. To these, I give one example with *biwdha* and one with *forbiwdha* from *Moses-A* in (3) and (4), respectively:

- (2) a. J thässon **kännir** os *abraham* godhan sidh oc rätta thro (p.188)
In these teaches us.DAT Abraham good.ACC moral and right.ACC faith
 'With this, Abraham teaches us good morals and the right faith'
- b. Mz thässon **känner** os *abram/* [^{XP} at wi skulom ey ...] (p. 181)
With this teaches us.DAT Abraham that we shall.PL not
 'With this, Abraham teaches us that we shall not ...'
- (3) Tha **biwdher** os *the hælgha scriff/* [^{XP} at **göra** ey ...] (p. 457)
then bids us.DAT the holy scripture.NOM to do not
 'Then, the Holy Scripture bids us to neither do ...'
- (4) oc **forbödh** os *gudh samuledh* [^{XP} at **stridha** widh them] (p.431)
and forbids us.DAT God simultaneously to fight with them
 'And then at the same time, God forbade us to fight them'

Again, we see how three arguments point out spec-VP as the launching site for pronominal objects, just like *giva* does in (1): X **teaches/bids/forbids** Y (to) Z, as compared to X **gives** Y Z. In addition, these instances suggest that this type of verb selects an external argument in spec-vP, and that the pronominal objects carry an EXPERIENCER-role. The same goes for (2), (3) and (4), the only difference being that the *ACTOR*-arguments (e.g. *abraham* 'Abraham' in (2b) above) are followed by a XP-argument in (2b), (3) and (4): either a Subordinate Clause or an Infinitival Phrase is merged as a complement in V'.⁶⁶ All three of these verbs usually select dative, and therefore, I count these objects as datives, generated in spec-VP.

⁶⁵ Note on the side that I found one instance with *känna* and *sik* where the verb has another meaning, namely 'feel': "oc **kiände** sik *alla* hela. ok wæl lækta" (LegBi, p. 427), i.e. 'and felt REFL. all whole and fully cured'. This instance has been excluded in my analysis, because I identify it as an *inverted reflexive construction*.

⁶⁶ In the literature, the type of infinitival XPs in (3) and (4) are referred to as 'Control Clauses' (see Platzack 2010). Even if the pronominal object has a special relation to these XPs, I follow standard analyses and assume that pronouns are not extracted out of Control Clauses (Platzack 2010:197 - 200, and p. 146f)

Now, the type of divalent verb which only takes two DP-arguments, one of which is an ACTOR of some sort, could be illustrated with *hiälpa* 'help' in (5) and *fylghia* 'follow' in (6a) and (6b) (henceforth abbreviated 'Divalent with ACTOR'):

- (5) swa at ey **hiälper** them *iubileus* (Moses-A, p. 375)
so that not helps them.DAT *Jubileus*

'And so, Jubileus will not help them'

- (6) a. oc **foldho** honom *fiandana* (Em-An, p. 702)
and followed him enemies-the-NOM

'and the enemies followed him'

- b. ok **fylgdhu** hanum *mange iudha* til garizim bergh (LegBi, p. 301)
and followed.PL him.DAT many jewes.NOM to Garizim mountain

'and many jewes followed him to the mountain Garizim'

As for *hiälpa*, it normally takes two arguments, of which one is a dative (see Söderwall 1884 – 1918: *hiälpa*). Exceptionally, however, it could also be constructed with a XP argument as a complement in V', as in one other instance of LOS: "Hwath **hiälper** os thz [XP thz wi dräpom waar brodher]" (Moses-A, p. 231), meaning roughly 'What will it help us to kill our broders'.

Regarding *fylghia* in (6), it takes dative as is seen in (6b). Hence, these objects should also have been merged in spec-VP, and the typical argument structure of this type of verb could be schematized as [DP [DP [Ø]]]. To be more explicit, this means that I take the pronominal objects in (5) and (6) to carry a θ -role associated with the *EXPERIENCER*-group, and the subjects to carry an AGENT-role.

Turning now to *gagna* 'benefit', *standa* 'await' and *möta* 'meet', which will represent the group of divalent verbs which are constructed without an ACTOR-argument (henceforth abbreviated 'the *möta*-type'). The former two were only found in one instance each, whereas *möta* was found in 27 instances altogether. Below, I repeat one example with *gagna* in (6), one with *standa* in (7) and one with *möta* in (8a). For the sake of comparison, I repeat one instance with an unambiguous dative pronoun and *möta* in (8b). As we shall see, the following examples suggest that all of these verbs select a dative *EXPERIENCER*.⁶⁷

⁶⁷ Note that *epte* 'after' could be interpreted as a particle (see Söderwall 1884 – 1918: *epte standa*). This suggests an OV-structure. In fact, we still have this verb in MSw: *återstå* 'remain' which could be used in a particle construction such as "Då står dig tusen strider åter", meaning roughly 'Then, a thousand battles await you still'.

- (6) hwat **gangnar** mik *tidhelika rikedom* (Link-NR, p. 665)
what benefits me temporal wealth.NOM
 'How does temporal wealth benefit me'
- (7) Æn **stande** thik *manga pinur* **epte** (LegBi, p. 413)
Still awaits you.DAT many torments-NOM after
 'Still, a tough battle awaits you afterwards'
- (8) a. oc **mötte os** *og konung/* mz myklom her oc starkom (Moses-A, p. 433)
and met us.DAT Og king-the.NOM with many army and strong
 'And Og the king met us with a strong and big army'
- b. oc **möter** honum *esau* mz fyra hundrath män (p.225)
and meet him.DAT Esau with four hundred men
 'and Esau meets him with four hundred men'

In all of these instances, the objects carry an EXPERIENCER-role, and the nominative subjects carry a THEME-role, denoting something that is being focused by the verb. Furthermore, there is no clear agentivity in these events. Especially with *möta*, it is not clear whether X meets Y, or the reversed. In fact, *möta* has two properties in common with the impersonal type: (i) *möta* selects a pronoun in dative which behaves in a manner similar to the oblique elements in the impersonal constructions (i.e. these pronouns occur in the same positions); and (ii) *möta* denotes an event which has no clear agentivity. This suggests that *möta* could be redefined as an impersonal verb. In each case, the *möta*-type should, in my opinion, be treated on par with impersonals and passive ditransitives; I will return to this below. For now, we may conclude that (6), (7) and (8) are constructed with verbs that normally assign dative, and since these objects carry EXPERIENCER-roles, I count them as datives merged in spec-VP, schematized as follows: [Ø [DP [DP]]].

At this point, then, we may direct our attention towards passive ditransitives and impersonals, since these two types are also constructed without an ACTOR-argument. The former will be represented with *tykka* 'think' and *synas* 'become visible'; the latter will be represented with *te* 'show/reveal'. These verbs are experiencer verbs which assigned lexical dative in Old Swedish, as we shall see below. For the sake of clarity, I will start by repeating one instance with a pronoun in ambiguous form and *te* in (9), one with *synas* in (10) and one with *tykka* in (11):⁶⁸

⁶⁸ For Modern Swedish, SAG claims that these types of verbs take *subject predicatives* (see 1999, part III, p. 354ff).

- (9) Tha **thedis** them *en ledhir jnnan blamans like* [...] (LegBi, p. 208)
Then revealed them.DAT a grotesque.NOM before-was blue-man's alike
'Then, in a blue man's guise, a grotesque figure appeared before them'
- (10) Än om ena nath **syntes** mik *gudz ängil* när mik (Link-NR, p. 466)
So on one night appeared me God's angel.NOM close me
'And that night, God's angel seemed to be close to me'
- (11) ”Nar iak [...] **tykker** mik *äpther mith klena oc litla förstandh*
thz [^{XP} *wara mögheliket*]” (Em-An p. 586)
When I [...] thinks me after my simple mind and meager knowledge
it be possible
'When I [...] I think, in spite of my simple mind and meager
knowledge, it would be possible'

Assuming that spec-vP is empty in the argument structure of impersonals, the pronominal objects may be taken as an *EXPERIENCER*-argument in instances such as (10) and (11), paraphrased as follows: Y **considers** Z. In (11), I take the subject Z to be part of the infinitival XP, i.e. “det vara möjligt”, meaning 'it to be possible'. In contrast, *te* has been identified as a passive ditransitive, and thus we may assume that instances such as (9) convey an implicit AGENT, as in: X (an implicit ACTOR) **shows** Y (the *EXPERIENCER*-argument) Z (the *THEME*-argument). Thus, seeing that these pronouns are arguments found in contexts where they are assigned lexical dative, I assume that they are datives generated in spec-VP, wherein they receive an *EXPERIENCER*-role.

To support this, we may compare (9), (10) and (11) with instances constructed with *tycka*, *te* and *synas* and morphologically unambiguous pronouns, since they illustrate the effect of lexical Case in a more straightforward fashion. In (12), I repeat one instance with *te* and *honom* 'him.DAT', and in (13), I repeat one instance with *synas* and *henne* 'her.DAT':⁶⁹

- (12) J samu stund **tedhis** hanum *sanctus iacobus* ridhande (LegBi, p.169)
At same time reveal him.DAT Sanct Jacob riding
'At the same time, Sanct Jacob came riding and revealed himself before him'

⁶⁹ Note on the side that *te* should perhaps be seen as an impersonal verb in (12), rather than a passive ditransitive: argument X (the object) **sees** argument Y (the subject) may be a more reasonable reading than: Z (implicit argument) **shows** argument X argument Z (riding).

- (13) Oc syntis henne trääth **wara** lostelikt (Moses-A, p. 160)
And appear her.DAT tree-the.NOM be odd
 'And then, the tree seemed strange to her'

Just like in (9) – (11), the pronominal objects are assigned an EXPERIENCER-role in (12) and (13), i.e. they are either perceiving or considering a *THEME*-subject in nominative. More importantly, (9) and (12) illustrate that all pronouns that are selected by *te* in passive retain their m-case regardless of diathesis on the verb, supporting the fact that *te* assign lexical dative.

In comparison, the instances in (9) – (13) also convey a subtle but interesting difference between passive ditransitives and impersonals: at least in (9), agentivity may be taken to be expressed implicitly, while in e.g. (13), agentivity seems to be missing. For these reasons, it is reasonable to believe that the impersonal and passive ditransitive verbs in (9) – (13) correspond to a similar type of argument structure, plausibly the one in (A):

A [TP ... [vP [v' [VP DP [V' DP]]]]

This is also compatible to the argument structure of the *möta*-type: [\emptyset [DP [DP]]]. In what follows, I will further elaborate on the argument structure in (A), and for now, it suffices to note that the data presented so far suggests that impersonals, passive ditransitives and the *möta*-type should be treated on par, and that the selected pronouns should be counted as datives generated in spec-VP.

Turning now to *V + Optional Datives*; this type will be represented with *koma* 'come', which is a verb that normally selects only one argument in Old Swedish. Yet in (14) below, we see that a pronominal argument has been added. Altogether, I found ten instances with *koma*; two instances are repeated in (16) and (17) below.⁷⁰ To this, I repeat one instance with *koma* and an unambiguous dative pronoun in (16b):

⁷⁰ Note that I also found two instances with *wara* 'become', which have been classified as *V + Optional Datives*. One of them is a copula + predicative construction, where the pronoun may be taken as an optional argument merged in the specifier of the adjectival phrase, schematized as [DP XP]. The other is a periphrastic passivization of the coordinated predicates *fäst oc giffuin* 'married and given', where *wara* is an auxiliary verb. Both *fäst* and *giffuin* are ditransitives, suggesting that the pronoun might have been merged in spec-VP.

- (14) a. förra än iak faar glädhi [...] **komber** mik *stor dröffuilse* **oppa** (Em-An, p. 629)
until I get joy *come* *me* *great grief-NOM* *upon*
'Until I see joy, a great grief will come upon me'
- b. En dagh [...] **kom** hanum *en rædelikir diæwl* *for* *øghon* (LegBi, p. 591)
One day *came* *him.DAT* *a fearsome devil-NOM* *before eyes*
'One day, a fearsome devil came before his eyes'

First, it should be noted that these pronouns are optionally added and could be left out in Old Swedish. Second, notice that *oppa* 'upon' follows the subjects in (14a). At first glance, *oppa* may look like a preposition (and in fact, it could be used as such), but having a closer look in Söderwall (1884 - 1918: *koma upa/upa koma* 'take place/will happen') reveals that *oppa* should rather be taken as a particle.⁷¹ As I see it, it is unclear where these pronominal objects are base-generated, but it is likely that these are merged as optional *EXPERIENCER*-arguments with semantic Case (i.e. dative) in a specifier-position. Perhaps they are base-generated in spec-VP, since this position is 'available' in these constructions. As for the subjects, they are introduced in the complement of V', where it receives a THEME-role.

At this point, then, we may conclude that 76 instances of morphologically ambiguous pronouns occurred in dative contexts. In other words, these pronouns were selected by a verb (or, exceptionally, another head) that assigns dative, all of which belonging to one of the following types: ditransitives (active or passive), impersonals, divalents (with or without an ACTOR) and V + Optional Datives (without an ACTOR). These types were also constructed with 53 shifted pronouns in unambiguous dative. Applying the adopted terminology, I will now further elaborate on the argument-structure in (A) in Figure 6, and simultaneously, I present the distribution of shifted morphologically and lexically/syntactically defined Datives:

⁷¹ In Söderwall, two somewhat similar constructions (without LOS) are noted: "nar honum **kom** *nogor bedröuelse pa*" (meaning roughly, 'when a great grief came upon him'), and "os *thetta upa koma*" (meaning, 'this came upon us').

Figure 6. *Argument structures and the distribution of shifted Datives*

	Types of verbs	LOS
A (i) [TP ... [vP DP [v' [VP <u>DP</u> [V' DP]]]]]	(i) <i>Ditransitives</i>	13
(ii) [TP ... [vP DP [v' [VP <u>DP</u> [V']]]]]]	(ii) <i>Divalents with ACTOR</i>	11
(iii) [TP ... [vP [v' -s θ [VP <u>DP</u> [V' DP]]]]]	(iii) <i>Passive ditransitives</i>	31
(iv) [TP ... [vP Ø [v' [VP <u>DP</u> [V' DP]]]]]	(iv) <i>Impersonals and the möta-type</i>	74

First of all, (Ai) and (Aii) in Figure 6 illustrate that LOS is acceptable even when there is an external argument in spec-vP. Thus, the stated hypothesis cannot hold. However, LOS seems to be preferred with verbs that have no external argument in spec-vP: (Aiii) and (Aiv) correspond to e.g. *möta*, *te* and *synas*, all of which stood out (see Chapter 4, section 4.3). This suggests that LOS may be related to the treatment of subjects: In ditransitives and divalents with *ACTOR*-arguments, it is possible to see the subject as demoted to a lower position (in the T- or V-domain); in passive ditransitives, the external argument could be seen as implicitly expressed and a passive-*s* may absorb agentivity (cf. (Aiii); see also Lundin 2003); in impersonals and the *möta*-type, there is no obvious agentivity and the subject may be focused in a lower position (i.e. in the T- or V-domain). This goes for the V + Optional Datives as well, but they correspond to either (Aii) or (Aiv). In each case, all instances point out spec-VP as primary the launching site for pronominal objects that are moved by LOS.

Why, then, is LOS preferred with (Aiii) and (Aiv)? One possible answer could be that, when there is no argument intervening between the launching site and the landing site, shifting an object is less costly. That is, it may be the case that LOS is related to some sort of minimality condition (see Chomsky 1995), e.g. that the pronominal argument may not move across an AGENT if they have matching ϕ -features. However, this question needs to be more thoroughly investigated, which is beyond the scope of this paper.

Concluding this section, 76 out of 88 instances of LOS with morphologically ambiguous pronouns occurred in dative contexts, and to these, I found 53 instances of unambiguous datives. Thus, for these 129 instances of LOS, I have argued that the launching site is a specifier-position, namely spec-VP. This is also where the pronominal object gets assigned dative and an *EXPERIENCER*-role. Furthermore, I suggested that LOS could be related to different strategies to demote the subject, either through passivization of ditransitives, or to use of verbs that take no external argument, both of which in turn may facilitate the possibility to

raise a pronominal argument. In other words, it could be the case that it is less costly to raise a pronominal DP when there is no argument in spec-vP.

In the next section, I will turn to a few instances of pronouns in accusative and pronouns in ambiguous form occurring in accusative contexts; I will argue that these pronouns are special in that they are merged with a verb that takes a Small Clause complement.

5.2.2 LOS with Accusatives

With regard to pronouns in unambiguous accusative (i.e. *hona* 'her' and *han* 'him'), I excerpted only three instances, and these were constructed with the following verbs: *lypta* 'lift', *vælia* 'choose' and *ledha* 'lead', all of which take accusative. I will begin with *lypta* in (19) and *vælia* in (20) below, both from *LegBi*, since they have been constructed with a XP that may be analyzed as a Small Clause (annotated as 'SC' within brackets):⁷²

(19) Hwar dagh siw sinnum **løpte** hona ængla [^{SC} høgth gen himnum] (p. 271)

Every day seven times lifted her.ACC angels.NOM high towards sky-the

'Seven times every day, angels lifted her high towards the sky'

(20) **Vildo** han alle [^{SC} til biscop] **vælia** (p. 28)

Wanted.PL him.ACC all.NOM.PL for bishop elect

'All of them wanted to elect him for bishop'

First of all, these verbs are agentive divalent verbs, i.e. they are active transitives. Second, we see that *vælia* and *lypta* take a XP complement which could be taken to be linked to the pronominal objects in a kind of secondary predication (cf. SAG 1999, part III, p. 373). Put more specifically, I take it that these XPs to be Small Clauses that denote what the PATIENT-argument will become in (19) and specify the result state in (20).

Furthermore, as we see in (19) and (20), the mentioned verbs select a nominative subject that could be taken to have been base-generated in spec-vP, because (i) the pronominal objects are all assigned accusative, and (ii) these subjects bear a θ -role linked to the *ACTOR*-group. That is to say, these subjects are initiators in the events of lifting or choosing the pronominal object, which bears a θ -role associated with the *THEME*-group.⁷³ Therefore, I

⁷² Regarding (19), I see it as an object with predicative construction, where "lyft [henne högt]", i.e. 'lift her high', could be compared to "släpp [dem lösa]", i.e. 'let them loose'. That is, in accordance with Lundin (2002), I see [henne högt] as "constituting a conceivable entity" (p. 86f). Compare also Platzack (2010:217ff), where he illustrates how *plocka* 'pick' can have an alternative argument structure when it is constructed with a resultative Small Clause.

⁷³ In accordance, Falk (1997:48f) assumes that objects selected by *løpte* in Old Swedish bear a THEME-role.

find it reasonable to believe that these objects (i.e. the pronouns *hona* 'her.ACC' in (19) and *han* 'him.ACC' in (20) above) have been merged as a part of these Small Clause XPs, schematized as [DP XP]. Put differently, it seems to be the case that these objects enter the derivation in a dual relation: the whole [DP XP] is an object of the verb contained in V', and the pronoun is the subject of the Small Clause in which it forms the base of predication.

In seven other instances with morphologically ambiguous pronouns, I found compatible verbs that take Small Clause XP complements. Two of these were constructed with *wäkka* 'awake', one of which (from *Moses-A*, p. 392) is repeated in (21) below; two were constructed with *läggia* 'lay down' + object-reflexives, one of which is repeated in (22) (from Link-NR, p II:671); one was constructed with *skapa* 'transform' + object-reflexive (from Link-NR, p 269), and one other (again from *Moses-A*, p. 187) was constructed with *kalla* 'call', repeated in (23) and (24), respectively. All of these assign accusative:

- (21) Oc är thetta gudhlik sannind **Wäkker** os godh natura [^{SC} til godhan hugh]
and be this godly truth awakens us.ACC good nature.NOM to good sense
'If this is a godly truth, then the good nature will awaken us in a good mood'
- (22) tha **lagdhe** sik dywret [^{SC} stilla för honom]
then layed REFL. animal-the peacefully before him
'then the animal layed down peacefully before him'
- (23) i samma stwndh **skapadhe** sik diäfwllen [^{SC} i ena blodh]
in same moment transformed REFL. devil-the to a bloodcloth
'at the same time, the devil transformed himself into a bloodcloth'
- (24) Oc swa **kallar** them dauid i psaltarenom
and so calls them.ACC David in psalm-the
'And that is what David calls them in the psalm'

In (21) – (24), we see these verbs select nominative subjects with *ACTOR*-roles, and that these are followed by a Small Clause. The same goes for (25), and here, *them* is the base of predication for *swa* 'that', and the base structure may be schematized as follows: “*Dauid* **kallar** [them swa] ...” (i.e. 'David calls them that ...'), schematized as [DP XP]. To this, we may add that these verbs normally take accusative, and consequently, these verbs may be taken as Accusatives inserted in an argument structure which correspond to the (B) below.

Returning to *ledha*, this verb has been found in two instances, one with *hona* 'her.ACC' and one with *os* 'us' in (25) (from *Moses-A*, p 408f). In (25), we actually see yet another instance

where the verb has been constructed with a Small Clause XP and a shifted pronominal object, just like in e.g. (19) – (24) above:

- (25) ower thenna tima **ledher** os hãlghe män
 mz wars herra kãnnedom ... [^{SC} til himelrikis]"
over this hour lead us.ACC holy men-NOM
with our lord knowledge ... to heaven
 'During this hour, holy men lead us to heaven with the knowledge of our lord'

Therefore, I propose that these objects could be taken to be base-generated in a specifier-position of the Small Clause XP contained in V', and that this may be the primary 'launching site' for shifted objects in accusative:

B. [TP ... [vP DP [v' [VP [V' [DP XP]]]]]]
 ↑

However, five other instances point in an opposite direction and defy (B) as a base structure: one instance with *finna* 'find', one with *skyla* 'covered', one with *sammansanka* 'summon', one with *sambla* 'gather' and one with *vnderstanda* 'understand'. These verbs normally take accusative in Old Swedish, indicating that the pronouns should be counted as Accusatives in e.g. (27) and (28) below:⁷⁴

- (26) som han kom [...] **skylte** henne *sancta anna* mz sin mantil" (Em-An p. 683)
When he came [...] covered her. Sancta Anna with her mantle
 'When he came, Sancta Anna covered her with her mantle'

- (27) tha **funnu** os *røuara* (LegBi, p. 351)
 then found.PL us.ACC thief.PL.NOM
 'Then, the thieves found us'

Even if no Small Clause XPs was found in these instances, there is at least one argument in favour of seeing some of these pronouns as base-generated in a specifier-position: *finna*,

⁷⁴ Note that *vnderstanda* could take either dative or accusative in Old Swedish (see Söderwall 1884 1918: *vnderstanda*). However, I assume the latter because (i) it takes accusative in both texts from the *Early Old Swedish* corpus and (ii) I assume that its subject is merged in spec-VP, where it receives structural nominative and an EXPERIENCER-role.

sambla and *vnderstanda* may select a Small Clause in Old Swedish.⁷⁵ This suggests that they should be grouped with those verbs which correspond to the argument structure of (B). Yet, since I have no empirical evidence to support that *finna*, *sambla* and *vnderstanda* could be constructed with both LOS and a SC contained in V', I will leave them unaccounted for. Concerning *skyla* and *sammansanka*, these verbs might perhaps take an accusative object in a specifier-position at some other point in the derivation, but at the moment, it is not clear to me how they are best accounted for.

To sum up this chapter, datives are more frequent than accusatives, and the latter ones seem to be special: I have argued that accusatives are introduced in a [DP XP] configuration, and we have seen that seven out of 12 verbs (or nine out of 15 instances of LOS) have been constructed with a Small Clause complement, which is syntactically and semantically linked to the shifted pronominal object in a secondary predication. Therefore, I propose that datives are introduced in spec-VP and that accusatives are introduced in a [DP XP] configuration, even though I have not been able to account for every instance. I will now conclude this paper and reevaluate my stated hypothesis in the light of the analyzed data.

⁷⁵ For the sake of clarity, I give two examples, one with *finna* and one with *vnderstanda* (without LOS) and a what could be analysed as a SC (i.e. the ECM constructions, or infinitival XPs marked in brackets) from *Early Old Swedish*:

- (i) "Ok **funnu** *the sik* [XP wara komna]" (LegBi, p. 251)
and found they REFL. IV. arrived
'And they found themselves to have arrived'
- (ii) "Tha **wndherstodh** *judas sik* [XP wara son sinna konu]" (LegBi, p. 244)
Then understood Judas REFL IV. son his wife
'Then, Judas understood himself to be the son of his own wife'

Arguably, then, *sik* could be taken to be merged in a specifier-position in the SC, contained in V'. See also Söderwall (1884 – 1918; *sambla*).

6 Concluding remarks

The stated hypothesis predicted that LOS should be facilitated by those verbs that select two internal arguments and no external (ACTOR) argument. In fact, LOS was found with several types of verbs without external arguments, e.g. impersonals and passive ditransitives, and I found 129 instances of pronouns in dative. These facts point out spec-VP as the primary launching site for objects that undergo LOS. Additionally, the distribution of dative pronouns in different types of constructions indicates that LOS is favoured by those verbs that select two internal arguments. However, the hypothesis cannot account for those instances of LOS which are constructed with an external argument and a dative argument, e.g. ditransitives. Still, these instances were fewer as compared to those without an external argument, indicating that LOS may be related to some sort of minimality condition. Therefore, I suggest that future research take this into consideration.

Another problem for the stated hypothesis is that it cannot account for those verbs that select pronouns in accusative. As we have seen, these verbs also take external arguments and it is more likely that the shifted pronouns are merged in another type of specifier than spec-VP. Having seen that seven out of 12 verbs (or nine out of 15 instances) were constructed with an XP that may be analyzed as a Small Clause, I proposed that accusatives, too, are base-generated in a specifier-position, but in a [DP XP] configuration contained in V'. If this is on the right track, it raises at least one challenging question for future research: Why is it not applicable to shift an object pronoun out of a complement-position?

Apart from leaving aside five verbs that take accusatives and the complex predicate *wäffia oc klanda* 'push us on our knees', I had to leave aside instances with LOS in inverted reflexive constructions as well (i.e. 29 of 174 instances of LOS, i.e. 17%, constructed with eleven different verbs). The main reason for doing so was that it is unclear if the reflexive pronoun carries a θ -role of its own. However, seeing that the passive ditransitive verb *te* might have been replaced by *uppenbara* + reflexive, it may well be the case that these reflexives are also introduced in a specifier-position. These elements are perhaps introduced by a special type of head and not as a cliticizing, suffix-like element. Hence, it could be productive to treat them on par with passive ditransitives in future research.

To sum up this paper, we may conclude the following: 51% of the excerpted data may indicate movement of objects (i.e. 89 of 174 instances were categorized as word order type III constructions). Of these, I claimed that 69 instances (i.e. 39%) indicate movement with more

certainty. However, the definiteness effect (or DE) in instances with LOS and verbs that only select two internal arguments needs to be studied more thoroughly in future research. Furthermore, we have seen a tendency to shift datives, as compared to accusatives (i.e. 129 Datives against 15 Accusatives, out of a total of 144 instances); LOS seem to have been an uncommon option for some verbs in Old Swedish and four verbs stood out: *möta* 'meet', *te* 'show/reveal', *synas* 'become visible', *openbara* 'show/reveal'; there is a correlation between specifier-positions and the pronouns that are moved by LOS, i.e they are either base-generated in spec-VP or in a specifier of a XP complement that may be analyzed as a Small Clause. In other words, these pronouns are either the subject of VP or the subject of a Small Clause XP, hence the title: Long Object Shift does not apply to objects.

7 Literature

Alexiadou, Artemis & Elena Anagnostopoulou (2001).

“The Subject-in-Situ Generalization and the Role of Case” in *Driving Computations*.

Linguistic Inquiry 32.2. 193 – 231

Andréasson, Maia (2013). “Object shift in the Scandinavian languages:

The impact of contrasted elements” in *Nordic Journal of Linguistics* 36: 153 – 186

Baker, Paul. (2010). “Corpus Methods in Linguistics.”

In *Research Methods in Linguistics*, ed. Lia Litosseliti, 93-113.

London – New York: Continuum.

Baker, Mark. (1997). “Thematic roles and syntactic structure” in

Elements of grammar: handbook in generative syntax. Haegeman, Liliane (red.)

Dordrecht: Kluwer Academic Publishers

Barðdal, Jóhanna, and Thórhallur Eythórsson. (2005).

“Oblique subjects: A common Germanic inheritance.” in *Language* 81:824–881

Berger, Mikael (2013). *Ledföljdsvariation –*

verben, semantik och syntax i samband med långt objektsflytt i svenska

Linnéuniversitetet. Växjö. Kandidatuppsats.

Chomsky, Noam (1981). *Lectures on government and binding: the Pisa lectures*,

Foris, Dordrecht

Chomsky, Noam (1995). *The minimalist program*. Cambridge, Mass.: MIT Press

Delsing, Lars-Olof (1999). “Från OV-ordföljd till VO-ordföljd:

en språkförändring med förhinder.” in *Arkiv för nordisk filologi*. 1999 (114), s. [151]-232

Delsing, Lars-Olof (2002). “The morphology of Old Nordic II: Old Swedish and Old Danish“

in *The Nordic languages: an international handbook of the history of the*

North Germanic languages. Vol. 1.

Bandle, Oskar, Braumüller, Kurt, Elmevik, Lennart & Widmark, Gun (red.)

Berlin: de Gruyter

Delsing, Lars-Olof (2014). ”Stora katastrofen – med för- och efterskalv”

in *Studier i svensk språkhistoria. 12, Variation och förändring*.

Stockholm: Acta Universitatis Stockholmiensis

Falk, Cecilia (1997). *Fornsvenska upplevarverb*. Lund: Lund Univ. Press

Falk, Hjalmar & Torp, Alf (1899-1900). *Dansk-norskens syntax i historisk fremstilling*..

Kristiania:

Heinat, Fredrik. (2007). "Long object shift and agreement." in

Working Papers in Scandinavian Syntax 81: 65-77

Holmberg, Anders (1986): *Word order and syntactic features in the Scandinavian languages and English*. Diss. Stockholm: Univ.

Holmberg, Anders (1993). "Two subject positions in IP in Mainland Scandinavian"

in *Working Papers in Scandinavian Syntax* 52: 29 – 41

Holmberg, Anders (1999): "Remarks on Holmberg's generalization"

in *Studia Linguistica* 53: 1–39

Holmberg, Anders and Platzack, Christer (1995).

The role of inflection in Scandinavian Syntax.

New York. Oxford Univ. press.

Håkansson, David (2008). *Syntaktisk variation och förändring:*

en studie av subjektlösa satser i fornsvenska. Diss. Lund : Lunds universitet, 2008

Josefsson, Gunlög (1992): Object shift and weak pronominals in Swedish.

in *Working Papers in Scandinavian Syntax* 49: 59–94

Josefsson, Gunlög (2010): "Object shift and optionality.

An intricate interplay between syntax, prosody and information structure."

in *Working Papers in Scandinavian Syntax* 86: 1–24

Julien, Marit. (2009): "Clause-final subjects in English and Scandinavian."

in *Nordic Journal of Linguistics* 32.1, 73–109

Lundin, Katarina (2002). *Small clauses in Swedish: towards a unified account*.

Diss. Lund : Univ., 2003

Molnár, Valéria (2003). "C" in *Grammar in focus: festschrift for Christer Platzack 18*

November 2003 = Grammatik i fokus : festschrift till Christer Platzack den 18 november 2003. Vol. 2. Delsing, Lars-Olof (red.), 235-248

Lund: Institutionen för nordiska språk, Univ.

Platzack, Christer (2010). *Den fantastiska grammatiken: en minimalistisk beskrivning av svenskan*. uppl. Stockholm: Norstedt

Platzack, Christer (ms). "The emergence of a parametric difference within mainland Scandinavian". Lund.

Safir, K.J., (1982). Syntactic chains and the definiteness effect. Ph.D. dissertation, MIT.

Safir, K.J., (1985). Syntactic chains. Cambridge: Cambridge University Press.

SAG = Svenska Akademiens grammatik 1–4. (1999). Ulf Teleman, Staffan Hellberg & Erik Andersson. Stockholm: Nordstedts Ordbok

Sigurðsson, Halldór Ármann. (1989). *Verbal Syntax and Case in Icelandic*.

In a Comparative GB Approach. Lund: Dept. of Scandinavian Languages.

Söderwall, K. F. (1884-1918). *Ordbok öfver svenska medeltids-språket* Lund.

Thráinsson, Höskuldur (2001). "Object shift and Scrambling" in *The handbook of contemporary syntactic theory*. (red.) Baltin, Mark Reuben & Collins, Chris Oxford: Blackwell

Vikner, Sten (2005). Object Shift. In *The Blackwell Companion to Syntax*. Henk van Riemsdijk & Martin Everaert (eds.), p. 392 – 436. Oxford: Blackwell

Wessén, Elias (1965). *Svensk språkhistoria. 3, Grundlinjer till en historisk syntax*. 2. uppl. Stockholm: Almqvist & Wiksell

Åström, Patrik (2003). *Register till Samlingar utgivna av Svenska fornskriftsällskapet 1844-2000: utgivna skrifter och däri använda fornsvenska handskrifter*.

Uppsala: Svenska fornskriftsällsk

Fornsvenska Textbanken: www.fornsvenskatextbanken.se

Svenska Akademiens Ordbok (SAOB): <http://g3.spraakdata.gu.se/saob/>

7.1 Excerpted texts

B&J = *Barlam och Josaphaat*. The original is from 1442. The excerpted manuscript, Codex Holm A49, is from the same period. The whole text has been excerpted.

Link-NR = *Linköpingslegendariet*. The original is from 1500. The excerpted manuscript, Vadstena Codex Linc B70a, is from 1500 – 1525. The 15 legends that were translated by Nils Ragvaldi have been excerpted. In the digitalized version, these legends are organized as follows: p. 276 – 432, 386 – 389, 448 – 451, 443 – 447, 433 – 442, 478 – 480, 271 – 275, 154 – 157, I:331 – I:336, 64 – 69, 263 – 270, II:660 – II:667, 452 – 477, 158 – 196.

Em-An = *S: t Anna och Emerencia*. The original is from 1500. The excerpted manuscript, Vadstena Codex Linc B70a, is from 1500 – 1525. The whole text has been excerpted: 585 – 727.

LegBi = *Fornsvenska legendariet*. The original is from 1276 – 1307. The excerpted manuscript, Codex Bildstenianus, is from the early 15th century. The whole text has been excerpted.

Moses-A = *Pentateuchparafrasen*. The original is from around 1330. The excerpted manuscript, Codex Thott, is from the first half of the 15th century. The whole text has been excerpted.

7.1 Quoted texts

UL = *Upplandslagen*. The original is from 1297. The excerpted manuscript, Codex Ups b12, is from around 1350. One example has been quoted (from Delsing 1999:38): it was originally excerpted from “Konungsbalk” (p. 87 – 101).

KRL = *Kristoffers landslag*. The original is from 1442. The excerpted manuscript, Codex Holm b23a, is from the same period. One example has been excerpted from “Konungsbalker” (part VI).

8. Appendix

8.1 Abbreviations

v/V' = V-bar

θ = Theta/semantic role

τ = 'Time' feature

t = trace

\emptyset = Empty position

ϕ = Person, number and gender feature

Spec = Specifier

Comp = Complement

VP = Verb Phrase

EPP = Extended Projection Principle

\neg = unvalued feature

AdvP = Adverbial phrase

ACC = Accusative

AUX = Auxiliary verb

DAT = Dative

DE =Definiteness effect

DP = Determiner Phrase

FV = Finite verb

IV = Infinitive verb

NEG = Negation

NOM = Nominative

Obj. pro = pronominal object

OV = Object > Verb word order

PASS = Passive diathesis

PL = Plural

PP = Preposition phrase

REFL = Reflexive pronoun

SA = Sentence adverbial

SC = Small Clause

VO = Verb > Object word order

VP-element = Cover term

EOSw = Early Old Swedish

LOS_w = Late Old Swedish

MDa = Modern Danish

MNo = Modern Norwegian

MS_w = Modern Swedish

OS_w = Old Swedish

LOS = Long Object Shift

HG = Holmberg's generalization

SOS = Short Object Shift

SIG = Subject in situ generalization

8.2 Verbs and pronouns in Early Old Swedish

Verbs	Strings			Frequency	LOS
1. <i>Fylghia</i> 'follow'	fylg-	følg-		8	1
2. <i>Gifua</i> 'give'	gaf-	gif-	giw/u-	371	1
3. <i>Bøghia</i> 'bow'	bøgh-	bøyg-	bøgd-	6	1
4. <i>Löpta</i> 'lift'	løp-	lup-	lop-	29	1
5. <i>Ledha</i> 'lead'	led-	leid-		109	1
6. <i>Ræda</i> 'advice'	ræd-	rad-	red-	161	1
7. <i>Vælia</i> 'choose'	vald-	væli-		13	1
8. <i>Ræcka</i> 'hand'	rec-	ræc-	ræk-	9	1
9. <i>Standa</i> 'await'	staa-	stand-		14	1
10. <i>Fina</i> 'find'	fun-	fan-	fin-	110	1
11. <i>Dugha</i> 'befit'	dugh-			6	1
12. <i>Kienna</i> 'feel'	kiæn-	kien-		57	1
13. <i>Gøra</i> 'make'	gior-			331	1
14. <i>Synas</i> 'show/reveal'	syn-	synt-	syne/i/a-	38	1
15. <i>Wenda</i> 'turn around'	wæn-	wen-		68	2
16. <i>Tykka</i> 'think'	thyk/t-	thok/t-	thot-	23	1
17. <i>Koma</i> 'come'	kom-	komo-	komm-	518	4
18. <i>Møta</i> 'meet'	möt-	møt-		55	10
19. <i>Te</i> 'show/reveal'	ted-	thed-		199	25
LegBi				2125	56

Pronouns	Strings			Total	LOS
<i>Henne</i> 'her.DAT'	hænne/æ	henne		230	8
<i>Honom</i> 'him.DAT'	hanum	honum	honom	653	33
<i>Han</i> 'him.ACC'	hana/æ	Han (NOM/ACC)		2904	1
<i>Hona</i> 'her.ACC'	hona			167	2
LegBi				3954	44

Pronouns	String			Total	LOS
<i>Mik</i> 'me.ACC/DAT'	mik			302	0
<i>Tik</i> 'you.ACC/DAT'	tik	thik	thic	226	3
<i>Os</i> 'us.ACC/DAT'	oss	os		68	0
<i>Them</i> 'Them.ACC/DAT'	them	thom	thøm	803	6
<i>Sik</i> 'itself ... ACC/DAT'	sik			944	4
LegBi				2343	12

Verbs	Strings			Total	LOS
1. <i>Höra til</i> 'benefit'	hör-	tilhör-		117	1
2. <i>Sömpda</i> 'benefit'	sömp-	somnp-		11	1
3. <i>Wäffia</i> 'consider'	wäf-	väf-	weff-	1	1
4. <i>Orsäkta</i> 'excuse'	orsäk-			3	1
5. <i>Kalla</i> 'call'	kalla-			246	1
6. <i>Biwda</i> 'bid'	biwd-			81	1
7. <i>Ledha</i> 'lead'	led-			122	1
8. <i>Koma</i> 'come'	kom-			390	1
9. <i>Gifua</i> 'give'	gaf-	gif-	giw/u-	436	1
10. <i>Forbjwda</i> 'forbid'	förb-	förb-	forb-	97	2
11. <i>Wäkka</i> 'awake'	wäk-			7	2
12. <i>Kiænna</i> 'teach'	kiæn-	kän-		106	2
13. <i>Synas</i> 'show/reveal'	synt-	syne/i/a-		70	3
14. <i>Hjelpa</i> 'help'	hiälp-	hielp-		35	3
15. <i>Tykka</i> 'think'	thyk-	thok-	tot-	51	3
16. <i>Te</i> 'show/reveal'	ted-	thed-		45	2
17. <i>Möta</i> 'meet'	möt-	møt-		29	7
Moses-A				1847	33

Pronouns	Strings			Total	LOS
<i>Henne</i> 'her.DAT'	hænne/æ	henne		105	1
<i>Honom</i> 'him.DAT'	hanum	honum	honom	655	13
<i>Han</i> 'him.ACC'	hana/æ	han (NOM/ACC)		2226	0
<i>Hona</i> 'her.ACC'	hona			53	0
Moses-A				3039	14

Pronouns	Strings			Total	LOS
<i>Mik</i> 'me.ACC/DAT'	mik			248	2
<i>Tik</i> 'you.ACC/DAT'	tik	thik	thic	295	0
<i>Os</i> 'us.ACC/DAT'	oss	os		179	14
<i>Them</i> 'Them.ACC/DAT'	them	thom	thøm	871	2
<i>Sik</i> 'itself ... ACC/DAT'	sik			558	1
Moses-A				2151	19

8.3 Verbs and pronouns in Late Old Swedish

Verbs (MSw.)	Strings (OSw.)	Total	LOS
1. <i>Vphäva</i> 'raise'	vphä- häv-	1	1
2. <i>Bör</i> 'ought to'	bör	13	1
3. <i>Brista</i> 'be short of'	brast- brist-	2	1
4. <i>Swara</i> 'answer'	swar- svar-	84	1
5. <i>Angra</i> 'regret'	ang-	2	1
6. <i>Möta</i> 'meet'	möt- möt-	29	2
B&J		131	7

Pronouns	Strings			Total	LOS
<i>Henne</i> 'her.ACC/DAT'	hænne/æ	henne		17	0
<i>Honom</i> 'him.ACC/DAT'	hanum	honum	honom	222	3
<i>Han</i> 'him.ACC'	hana/æ	han (NOM/ACC)		730	0
<i>Hona</i> 'him.ACC'	hona			12	0
B&J				981	3

Pronouns	Strings			Total	LOS
<i>Mik</i> 'me.ACC/DAT'	mik	mic	migh	188	1
<i>Tik</i> 'you.ACC/DAT'	tik	thik	thic/thig	173	1
<i>Oss</i> 'us.ACC/DAT'	oss	os		35	0
<i>Them</i> 'them.ACC/DAT'	them	thom	thöm	142	1
<i>Sik</i> 'itself ...ACC/DAT'	sik	sigh		149	1
B&J				687	4

Verbs (MSw.)	Strings (OSw.)			Total	LOS
1. <i>Tilkoma</i> ‘add’	tilkom-			6	1
2. <i>Opptända</i> ‘enlighten’	‘opptän-	tänd-		7	1
3. <i>Oppresa</i> ‘raise’	oppres-	res-		5	1
4. <i>Tilreda</i> ‘prepare’	tilred-	red-		11	1
5. <i>Tilöka</i> ‘endowe’	tilök-	ökt-		10	1
6. <i>Hals örghia</i> ‘strangle’	hals örg-	halsörg-		1	1
7. <i>Koma</i> ‘come’	kom-			296	1
8. <i>Giffua</i> ‘give’	gif-	gaf-		109	1
9. <i>Betänka</i> ‘consider’	betänk-			7	1
10. <i>Gagna</i> ‘gain’	gagn-	gangn-		1	1
11. <i>Vnderstanda</i> ‘understand’	wndhers-	vndhers-	w/v/unders-	47	1
12. <i>Hwälfva</i> ‘arch’	hwäl-	hväl-		1	1
13. <i>Skapa</i> ‘create’	skap-	skaf-	scaf-	11	1
14. <i>Samla</i> ‘gather’	saml-			6	1
15. <i>Laggia</i> ‘lay (down)’	läg-	lad-	lagd-	38	2
16. <i>Begaffua</i> ‘endowe’	begaf-	begaw-	begof-	7	2
17. <i>Swara</i> ‘answer’	swar-	svar-		62	2
18. <i>Möta</i> ‘meet’	möt-			9	4
19. <i>Oppenbara</i> ‘reveal’	oppen-	vppen-		37	12
20. <i>Synas</i> ‘become visible’	syn-	synt-	synth-	69	13
Link - NR				740	49

Pronouns	Strings			Totalt	LOS
<i>Henne</i> ‘her.ACC/DAT’	hænn(e)æ)	henne	Hænne	250	15
<i>Honom</i> ‘him.ACC/DAT’	hanum	honum	honom	231	6
<i>Han</i> ‘him.ACC’	hana/æ	Han (ACC/NOM)		619	0
<i>Hona</i> ‘her.ACC’	hona			0	0
Link-NR				1100	21

Pronouns (MSw.)	Strings (OSw.)			Totalt	LOS
<i>Mik</i> ‘me.ACC/DAT’	mik	mic	migh	164	2
<i>Tik</i> ‘you.ACC/DAT’	tik	thik	thic/tigh	85	0
<i>Os</i> ‘us.ACC/DAT’	oss	os		117	7
<i>Them</i> ‘them.ACC/DAT’	them	thom	thöm	162	1
<i>Sik</i> ‘itself ... ACC/DAT’	sik	sigh		379	18
Link-NR				907	28

Verbs	Strings			Total	LOS
1. <i>Höra</i> 'hear'	hörd-	hör-		95	1
2. <i>Forwilla</i> 'mislead'	förwi-	förvil-	forvil-	2	1
3. <i>Forganga</i> 'perish'	förgi-	forgi-		2	1
4. <i>Dröma</i> 'dream'	dröm-			1	1
5. <i>Fylghia</i> 'follow'	fold-	föl-	fylg-	10	1
6. <i>Skyla</i> 'cover'	skyl-			3	1
7. <i>Sammankalla</i> 'gather'	sammansank-			1	1
8. <i>Wara</i> 'become'	war			444	2
9. <i>Koma</i> 'come'	kom-			209	3
10. <i>Synas</i> 'become visible'	syn-			9	3
11. <i>Tykka</i> 'think'	t(h)yk-	tot-		14	3
12. <i>Möta</i> 'meet'	möt-			10	4
13. <i>Oppenbara</i> 'reveal'	oppen-	vppen-		10	6
Em-An				810	28

Pronouns	Strings			Total	LOS
<i>Henne</i> 'her.ACC/DAT'	hænne(æ)	henne	hänne	248	9
<i>Honom</i> 'him.ACC/DAT'	hanum	honum	honom	171	7
<i>Han</i> 'him.ACC'	hana/æ	Han (ACC/NOM)		618	0
<i>Hona</i> 'her.ACC'	hona			0	0
Em-An				1037	16

Pronouns	Strings			Total	LOS
<i>Mik</i> 'me.ACC/DAT'	mik	mic	migh	84	2
<i>Tik</i> 'you.ACC/DAT'	tik	thik	thic/thig	115	0
<i>Os</i> 'us.ACC/DAT'	oss	os		62	0
<i>Them</i> 'them.ACC/DAT'	them	thom	thöm	195	3
<i>Sik</i> 'itself ... ACC/DAT'	sik	sigh		192	7
Em-An				648	12

8.4 Register of argument selection

Verb selecting DAT.

Angra 'regret'
Begafwa 'endowe'
Brast 'lacked'
Biwdha 'bid'
Bör 'ought to'
Dröma 'dreamed'
Dugdhe 'befit'
Forwilla 'misled'
Förbiwdha 'forbid'
Forganga 'perished'
Fylghia 'follow'
Gagna 'benefit'
Giora 'inflict'
Giffua 'give'
Hals örgdha 'strangle'
Hiälpa 'help'
Höra 'hear'
Hörir til 'befit'
Kiænna 'teach'
Koma 'come'
Möta 'meet'
Rædha 'advised'
Räcka 'hand'
Standa 'await'
Synas 'become visible'
Swara 'answer'
Sömpde 'befit'
Te 'show/reveal'
Tilkomo 'add'
Tilöka 'add'
Tykka 'think'
Wara 'become'

ACC.

Finna 'find'
Kalla 'call'
Ledha 'lead'
Läggia 'lay down'
Lypta 'lift'
Skapa 'transform'
Samman sanka 'summon'
Sambla 'gather'
Skyla 'cover'
Vnderstanda 'understand'
Vælia 'choose'
Wäkka 'awaken'

True REFL.

Böghia 'bend'
Bethänkia 'consider'
Kiænna 'feel'
Hvälva 'arch'
Oppenbara 'reveal'
Oppresa 'raise'
Opptända 'enlighten'
Orsäkta 'excuse'
Til redha 'prepare'
Vphäfua 'raise'
Wenda 'turn around'

Unidentified

Wäffia oc klanda 'make fall'