

**Oblique Subjects and Stylistic Fronting  
in the History of Scandinavian and English**

**The Role of IP-Spec**

**Ikke-nominative Subjekter og Stilistisk Fremflytning  
i den skandinaviske og den engelske Sproghistorie**

**IP-Spec Positionens Rolle**

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Ein var þá tunga á Englandi sem í Noregi og í Danmörku.  
En þá skiptust tungur í Englandi er Vilhjálmur bastardur  
vann England. Gekk þaðan af í Englandi valska er hann  
var þaðan ættaður.

*Gunnlaugs saga ormstungu*

In those days, the same language was spoken in England  
as in Norway and Denmark. But the language changed in  
England when William the Bastard conquered England.  
After that, French was used in England because he was  
of French descent.

*The saga of Gunnlaug Serpent-tounge*



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# Abbreviations

## LANGUAGES

Be.	Bengali				
Da.	Danish	MD.	Middle Danish	OD.	Old Danish
En.	English	ME.	Middle English	OE.	Old English
Fa.	Faroese				
Ge.	German				
Ic.	Icelandic			OI.	Old Icelandic
No.	Norwegian			ON.	Old Norse
Sw.	Swedish	MS.	Middle Swedish	OS.	Old Swedish
MSc.	Mainland Scandinavian (Danish, Norwegian, Swedish)				
ISc	Insular Scandinavian (Faroese, Icelandic)				

## GRAMMATICAL RELATIONS

SG	singular	1	first person	MASC	masculine
PL	plural	2	second person	FEM	feminine
DU	dual	3	third person	NEUT	neuter
INF	infinitive			PRES	present tense
IND	indicative			PAST	past tense
SUBJ	subjunctive			PROG	progressive
SUP	supinum (NOM/ACC.SG.NEUT past participle)			PASS	passive
NOM	nominative			CLASS	classifier
ACC	accusative			CL	clitic
DAT	dative				
GEN	genitive				
OBL	oblique				



# Chapter 1

## Introduction

The focus of this thesis is one of the most prominent positions in the sentence structure, namely the canonical subject position, also called IP-Spec in the generative tradition. The two topics of my dissertation, oblique subjects and stylistic fronting, have in common that IP-Spec is where dative subjects occur and until now it has been assumed that IP-Spec is the position that stylistically fronted elements move into.

The thesis is a synchronic study of the role of IP-Spec in Icelandic as well as a diachronic study of the role of IP-Spec in the history of the Mainland Scandinavian languages and English. It is synchronic to the extent that I will try to show which role IP-Spec plays in the agreement relation in present-day Icelandic, for instance, the verb can only show agreement in person if there is a nominative element in IP-Spec. It is diachronic to the extent that I will try to show that IP-Spec could be filled with oblique case marked elements at the older stages of Danish and English.

IP-Spec cannot be filled with all kind of elements. It is, for example, marked to have oblique elements in IP-Spec. This we can see from the fact that the predicates that assign dative or accusative to the subject are much fewer than the predicates that assign nominative to the subject. But some oblique elements seem to be more marked than other oblique elements. For instance, it is perfectly fine to have animate oblique subjects in IP-Spec in Icelandic but it is not perfectly fine to have inanimate oblique subjects in IP-Spec.

Since Maling (1980, 1990) IP-Spec has played the central role in the analysis of stylistic fronting in Icelandic. In the second part of this thesis, I will come to other conclusions, as I will try to show that IP-Spec does not play a role in the analysis of stylistic fronting.

The central issues in the morphosyntactic development of Danish, Faroese, Icelandic, Norwegian, Swedish, and English that are dealt with in this study are the loss of morphological case and the loss of  $V^\circ$ -to- $I^\circ$  movement and stylistic fronting. The focus will not be on the morphological changes in the system itself, it will rather be on the loss of constructions which have dative subjects. Likewise, the focus will not be on the loss of  $V^\circ$ -to- $I^\circ$  movement as a result of

a morphological change, rather I will try to shed light on which role stylistic fronting plays in the loss of V°-to-I° movement.

The study has two goals, a theoretical one as well as an empirical one. The theoretical goal of my study is twofold. Firstly, I would like to try to pursue the hypothesis that Optimality Theory (OT) can be used in a comparative study of languages. Secondly, I would like to try to stretch this hypothesis further to find out whether OT can be used to account for language change. As for the empirical goal of my study, I have on one hand tried to make use of the historical sources that are available for the older stages of the Scandinavian languages and English, and on the other hand I have tried to compare the historical data to the relevant constructions in modern Faroese and Icelandic. As a working hypothesis, I have taken a starting point in Icelandic and tried to find out whether similar constructions existed at the older stages of Scandinavian and English. I have then tried to find out how the change happened. For example, in Icelandic, stylistic fronting is a leftwards movement of various elements, adverbs, participles, verb particles, prepositional phrases, etc. into a position that precedes the finite verb. The sentence in (1a) shows the unmarked word order in Icelandic, where the participle follows the finite verb. In (1b), the participle has undergone stylistic fronting:

- (1) Ic. a. Allir sem höfðu borðað kæstan hákarl veiktust  
*All that had eaten fermented shark sick.PASS*  
 'Everyone that had eaten fermented shark became sick'
- b. Allir sem **borðað**<sub>i</sub> höfðu t<sub>i</sub> kæstan hákarl veiktust  
*All that eaten had fermented shark sick.PASS*  
 'Everyone that had EATEN fermented shark became sick'

Stylistic fronting is not possible in the mainland Scandinavian languages as shown in the Danish examples in (2):

- (2) Da. a. De mennesker som havde spist rådden haj blev syge  
*The people that had eaten rotten shark became sick*  
 'The people that had eaten fermented shark became sick'
- b. \*De mennesker som **spist**<sub>i</sub> havde t<sub>i</sub> rådden haj blev  
*The people that eaten had rotten shark became*  
*syge*  
*sick*

To find out whether Old and Middle Danish had stylistic fronting, it is possible to use historical

sources, i.e. published versions of manuscripts, to search for the same type of constructions as those in which stylistic fronting takes place in Icelandic.

In this chapter, I would like to provide an introduction to the two theoretical frameworks used in this thesis, Optimality Theory (Prince & Smolensky, 1993) and the Minimalist Program (Chomsky, 1995). In section 1.3, I would like to point out the differences between doing a diachronic study on Old and Middle Danish on the one hand and Old and Middle English on the other. The main difference lies in the fact that there exist almost no electronic corpora for the older stages of Danish, whereas excellent electronic corpora exist for the older stages of English. In section 1.4 the canonical subject position and the facts that make IP-Spec such a prominent position will be discussed. I will also try to compare the subject position in the Diderichsen tradition and Government and binding.

In addition to this introduction, the thesis falls into two parts: *Case and agreement* and *Stylistic fronting*. Part I, *Case and agreement*, consists of three chapters. In chapter 2, *Case and verbal morphology*, the focus will be on the morphological differences between Insular Scandinavian (Faroese and Icelandic) and Mainland Scandinavian (Danish, Norwegian and Swedish), and also how morphological case markers were lost in the Mainland Scandinavian languages, in particular Danish. I also suggest a hypothesis about how constructions with dative subjects and nominative objects were reanalyzed as constructions with nominative subjects and non-nominative objects. In section 2.4, *Non-nominative subjects in Old and Middle Danish*, the subject-hood tests that were used to prove the existence of oblique subjects in Icelandic will be used to show that Old and Middle Danish had non-nominative subjects. In the last section of chapter 2, I argue that Old English had dative subjects and that the reanalysis from DAT-NOM constructions (i.e. constructions with dative subjects and nominative objects) to NOM-ACC constructions (i.e. constructions with nominative subjects and accusative (oblique) objects) could not have been a structural reanalysis but rather a reanalysis in case assignment. In this section, I will use data from three historical English corpora, the *York-Toronto-Helsinki Parsed Corpus of Old English Prose* (YCOE), the *York-Helsinki Parsed Corpus of Old English Poetry* and the *Penn-Helsinki Parsed Corpus of Middle English* (PPCME2), to support this hypothesis.

In chapter 3, I present two different analyses of agreement in DAT-NOM constructions. In the first analysis, I show, based on the observation that number agreement is dependent on person

agreement, that Samek-Lodovici's (1996, 2002) account for impoverished agreement has to be elaborated in order for it to be able to account for Icelandic. In the second analysis, I show that the same effect can be derived with fewer theoretical assumptions, i.e. if it is assumed that agreement is correspondence in features between the verb and a nominative DP.

In chapter 4, *Getting rid of the worst*, I present an analysis of why accusative subjects cannot be inanimate in Icelandic. The idea behind the analysis is that it is marked to be an accusative subject but it is even more marked to be an inanimate accusative subject. The same idea lies behind the analysis in section 4.17 where the person restriction in Icelandic DAT-NOM constructions (i.e. that nominative objects cannot be first or second person) will be accounted for by means of harmonic alignment of markedness hierarchies.

In the second part, *Stylistic fronting*, I present a minimalist analysis of stylistic fronting in Icelandic. In this chapter, I show that Old and Middle Danish had stylistic fronting. I also show that absence of  $V^{\circ}$ -to- $I^{\circ}$  movement in specific clause types in Icelandic gives evidence for the observation that stylistic fronting played a role in the loss of  $V^{\circ}$ -to- $I^{\circ}$  movement in Mainland Scandinavian.



## 1.1 Optimality Theory

More than a decade ago, Alan Prince and Paul Smolensky (Prince & Smolensky, 1993) developed the theory which is known as Optimality Theory (OT). Since then, many introductions to OT have been published, e.g. Archangeli & Langendoen (1997) which is a collection of introductory papers, Kager (1999) which is an introduction mainly to OT phonology, McCarthy's (2002) thematic guide to OT, and Müller (2000) which is an introduction to OT syntax (in German). OT has gained much popularity within the field of phonology, but substantial amount of literature has also been written on OT syntax (cf. e.g. Barbosa et al. 1998, Dekkers et al. 2000, Grimshaw 1997*b*, Legendre et al. 2001, Vikner 2001).

Optimality Theory differs from other (generative) theoretical approaches in one fundamental way: In OT, constraints are violable, i.e. a violation of a constraint does not necessarily result in ungrammaticality. If a constraint has been violated to avoid a violation of a higher ranked constraint this constraint violation does not have to be fatal. If, however, a constraint that is more important than other constraints has been violated, this violation is fatal (i.e. results in ungrammaticality). That constraints are violable is one of four central ideas of OT (cited here from Grimshaw 1997*b*: 373):

- (3) a. **Constraints may be violated**
- b. **Constraints are ordered in a hierarchy**  
          A grammar is a particular ordering of constraints
- c. **Constraints are universal**  
          In all languages, the same constraints apply, except that they are ordered differently from language to language. Language variation is variation in the constraint hierarchy.
- d. **Only the optimal candidate is grammatical**  
          All non-optimal candidates are ungrammatical. The optimal candidate of two is the one with the smallest violation of the highest constraint on which the two candidates differ.

The constraints are part of the constraint component (CON). They are ranked in a hierarchy such that one constraint dominates another constraint. A violation of a higher ranked constraint (a

more important constraint) is more “expensive” than the violation of a lower ranked constraint (a less important constraint). If a candidate A violates a more important constraint X and another candidate B violates a less important constraint Y, candidate B is optimal because candidate A did worse on a more important constraint.

The candidates in a candidate set are generated by GEN (the Generator). GEN is the part of the grammar that contains inviolable and unranked constraints such as CASE and the THETA-CRITERION which state that every argument in a clause has to be assigned case and a theta-role or that all structures are binary structures, i.e. structures obey X-bar-theory. GEN generates a candidate set that is composed of all the logically possible structures of an input. In other words, a candidate set is put together from different versions of the same sentence.<sup>1</sup>

- (4) The *input* for a verbal extended projection is a lexical head plus its argument structure and an assignment of lexical heads to its arguments, plus a specification of the associated tense and aspect. (Grimshaw, 1997b: 375-376)

When GEN has generated the candidate set, the candidate set is evaluated by another component of the grammar, the function H-EVAL (Harmony Evaluation). H-EVAL determines which candidate is the optimal candidate, based on the constraint hierarchy (i.e. CON) of the language. The candidates can for example either differ with respect to word order or something which was not in the input (as for example an expletive subject) has been added to the output. A typical set of competing candidates is given in (5), in this case a subject infinitive in Danish:

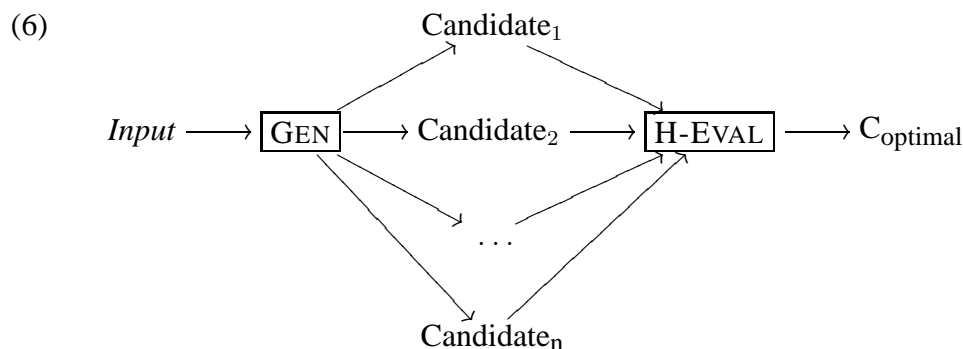
- (5) Da. a. \*At ofte Ken havde set Eksorsisten ...  
           *That often Ken had seen Exorcist-the ...*  
       b. At Ken ofte havde set Eksorsisten ...  
           *That Ken often had seen Exorcist-the ...*  
       c. \*At Ken havde ofte set Eksorsisten ...  
           *That Ken had often seen Exorcist-the ...*  
       d. \*At Ken havde ofte Eksorsisten set ...  
           *That Ken had often Exorcist-the seen ...*  
       e. \*At Ken Eksorsisten ofte set havde ...  
           *That Ken Exorcist-the often seen had ...*

---

<sup>1</sup> Attempts have been made to dispense with the input in OT syntax, see e.g. Heck et al. (2002).

... kom ikke som en overraskelse  
 ... came not as a surprise  
 'That Ken had often seen the Exorcist did not come as a surprise'

The linguist has to find out which constraints are relevant in this context and how the constraints are ranked, such that only (5b) is grammatical in Danish and only (5c) in Icelandic and only (5e) in German. The process from input to output is shown in (6):



There are two types of constraints, *markedness* constraints and *faithfulness* constraints (cf. e.g. Kager 1999: 9-10). Faithfulness constraints are constraints that demand that the output is identical to the input, i.e. faithful to the input. For example if there is an element in the input that is not represented in the output, some faithfulness constraint will be violated. Markedness constraints are constraints that ban structures that are universally marked, i.e. \*X. Markedness constraints are in conflict with faithfulness constraints, because faithfulness constraints favor candidates that contain as much information as possible, whereas markedness constraints favor candidates that contain as little information as possible. Markedness constraints are “surface” constraints, i.e. when evaluating whether a markedness constraint has been violated or not, only the output is looked at. In addition to these two basic types of constraints, Smolensky (1995) includes two more complex constraint types in CON, namely constraints derived by harmonic alignment and locally conjoined constraints (I will come back to local constraint conjunction in chapter 3 where it becomes relevant for my analysis).

Some constraints cannot be reordered with respect to each other. Constraints that are derived by the *harmonic alignment* of two prominence scales form universally fixed constraint rankings. Prominence scales are scales such as  $a > b$  where single elements are ordered in a hierarchy. A prominence scale should be read as ‘a is more prominent than b’. Harmony scales are scales such as  $X/a \succ X/b$  where combined elements are ordered in a hierarchy. These should be read

as 'the combination of  $X$  and  $a$  is more harmonic than the combination of  $X$  and  $b$ '. Constraint rankings are dominance hierarchies as for example  $*X/B \gg *X/A$  and should be read as 'the constraint  $*X/B$  is higher ranked than the constraint  $*X/A$ '.

Prince & Smolensky (1993: 149, (212)) define harmonic alignment as follows:

(7) *Harmonic Alignment:*

Suppose given a binary dimension  $D_1$  with a scale  $X > Y$  on its elements  $\{X, Y\}$ , and another dimension  $D_2$  with a scale  $a > b > \dots > z$  on its elements  $\{a, b, \dots, z\}$ . The *harmonic alignment* of  $D_1$  and  $D_2$  is the pair of harmony scales  $H_X, H_Y$ :

- a.  $H_X: X/a \succ X/b \succ \dots \succ X/z$
- b.  $H_Y: Y/z \succ \dots \succ Y/b \succ Y/a$

The *constraint alignment* is the pair of constraint hierarchies  $C_X, C_Y$ :

- i.  $C_X: *X/Z \gg \dots \gg *X/B \gg *X/A$
- ii.  $C_Y: *Y/A \gg *Y/B \gg \dots \gg *Y/Z$

The first step of harmonic alignment is to combine the two prominence scales to form the *harmony scales* in (7a) and (7b). This is done in the following way. First, the first member of the first prominence scale is combined with all the members of the second prominence scale from left to right. This gives the harmony scale in (7a) which states that it is more harmonic for  $X$  to be  $a$  than it is for  $X$  to be  $b$  or  $z$ . Likewise, it is more harmonic for  $X$  to be  $b$  than  $z$ . Second, the second member of the first prominence scale is combined with all the members of the second prominence scale, this time from right to left. This gives the harmony scale in (7b) which states that it is more harmonic for  $Y$  to be  $z$  than it is for  $Y$  to be  $b$  or  $a$ . Likewise, it is more harmonic for  $Y$  to be  $b$  than  $a$ . Constraint alignment, which is the second step of harmonic alignment, creates the universally fixed constraint rankings shown in (7i) and (7ii). The idea is that since it is less harmonic for  $X$  to be  $z$  than it is for  $X$  to be  $a$ , the combination of  $X$  and  $z$  must be more marked than the combination of  $X$  and  $a$ . Similarly, since it is less harmonic for  $Y$  to be  $a$  than  $z$ , the combination of  $Y$  and  $a$  must be more marked than the combination of  $Y$  and  $z$ . Therefore, the constraint alignments in (7i) and (7ii) have the opposite sequence of the harmonic alignments in (7a) and (7b). This gives a constraint ranking that states which is more marked the one or the other. As these are markedness constraints, they are negated with a  $*$  and should be read 'Don't be  $X$  and  $a$ ' and 'Don't be  $X$  and  $b$ '. For further discussion on the use

of harmonic alignment in syntax, see Aissen (1999, 2001, 2003), Müller (2000: 301-310), and Øvrelid (2003).



A competition is illustrated with a tableau where the constraints are ranked from left to right. The higher ranking a constraint has, the further to the left it occurs in the tableau. Constraints that are crucially ranked with respect to each other (i.e. that one constraint crucially dominates another constraint) are separated by a solid grid line, whereas constraints that are not ranked with respect to each other are separated by a dotted or barred grid line. The pointing hand, , marks the optimal candidate, \* a constraint violation and \*! a fatal violation. Shaded cells indicate that a violation of the relevant constraint is not crucial because a higher constraint has been fatally violated.

Tableau i	Ranking priority: Higher	←→ Lower			
Input	Candidate set ↓	CON <sub>1</sub>	CON <sub>2</sub>	CON <sub>3</sub>	CON <sub>4</sub>
(a)	Candidate <sub>1</sub>	*!		*	**
(b)	Candidate <sub>3</sub>		*!		
 (c)	Candidate <sub>2</sub>			*	**
(d)	Candidate <sub>4</sub>			**!	

In the tableau, candidate (c) is the optimal candidate. It violates CON<sub>3</sub> once and CON<sub>4</sub> twice. None of these violations are fatal because candidates (a) and (b) do worse on higher ranked constraints, candidate (a) on CON<sub>1</sub> and candidate (b) on CON<sub>2</sub>, and because candidate (d) has two violations of CON<sub>3</sub>. The second violation is fatal since candidate (c) only violates this constraint once. CON<sub>1</sub> and CON<sub>2</sub> are not crucially ranked (indicated by the barred grid lines), but the other constraints are. If CON<sub>3</sub> dominated CON<sub>2</sub>, candidate (b) would be the optimal candidate, if CON<sub>4</sub> dominated CON<sub>3</sub>, candidate (d) would be the optimal candidate. With these constraints, candidate (a) will never come out as the optimal candidate because it is *harmonically bounded* by candidate (c). Candidates (a) and (c) have an almost identical constraint violation profile. Both violate CON<sub>3</sub> once and CON<sub>4</sub> twice. In addition to these violations, candidate (a) violates CON<sub>1</sub>. Therefore, it will not matter how the constraints in the tableau are ranked, candidate (a) will always have one extra violation over the violations candidate (c) has. Prince & Smolensky (1993: 156, (224)) define harmonic bounding as follows:

(8) **Harmonic Bounding**

In order to show that a particular structure  $\phi$  does not appear in the outputs of a grammar, it suffices to show that any candidate structure A containing  $\phi$  is less harmonic than one competing candidate B (of the same input). (B provides a harmonic (upper) bound for A).

In OT, as in any other generative theory, it is assumed that an innate Universal Grammar (UG) enables children to acquire a language such rapidly as they do, irrespective of their social status or intelligence. The assumption is that UG accounts for the similarities that can be observed in the languages of the world. Not only can closely related languages such as Danish and Icelandic be very similar, similarities can also be found in languages that are not related. For example, Basque and Kallalisut (West Greenlandic) have the same type of case markers (Pott, 1873), and Icelandic and Georgian are both considered to have dative subjects.

A theory of UG has to be a restrictive theory (to account for the speed of acquisition) and liberal (to account for the differences between languages). In OT, restrictiveness is explained by means of GEN and CON which are both sets of innate (and therefore, universal) constraints. The constraints in GEN are inviolable in all languages, whereas the constraints in CON are violable in all languages. The liberal side of UG (i.e. that languages are different) is reflected in the constraint hierarchy of CON (which should be the only language specific part of the grammar). No languages have exactly the same constraint ranking, thus no language looks exactly like another language.

## 1.2 The minimalist program

Like Optimality Theory, the *Minimalist Program* (Chomsky, 1995) is an offspring of the formal syntactic theory called *Government and Binding Theory/Principles and Parameters* (Chomsky 1981, 1986). The basic idea of Principles and Parameters is that UG is restricted by principles that constrain the number of possible grammars and that differences between languages can be explained through parameters that are adjusted during the period of acquisition. In OT, the principles have been replaced by GEN and the parameters by CON.

The assumption is that both principles and parameters are innate, the difference being that unlike the parameters, the principles are set at the pre-linguistic stage. Therefore, the principles determine the properties where language variation cannot be found. A parameter on the other hand determines the language specific properties. The idea behind parameters is that one parameter should relate several different surface properties of a language. The hypothesis is that the fewer parameters the child has to set, the quicker it would be able to acquire a language.

The Minimalist Program was meant to reduce the complexity of Principles and Parameters. The hypothesis is that language is a “perfect system” that is best represented as a computational system; a language faculty in the brain that interacts with other systems in the brain. Chomsky (1995: 2) assumes that the language faculty contains two components: a cognitive system and performance systems. The cognitive system stores information, whereas the performance systems access this information and uses it. The two interact with linguistic representations.<sup>2</sup>

The basic notion of minimalism is *Economy*, i.e. we should put as little effort into language as possible. Therefore, language is as efficient as it is. Economy conditions are for example *Last Resort* and *Full Interpretation*. *Last resort* tells us not to insert anything into a sentence unless everything else fails. A good example is English *do*-insertion:

- (9) En. a. Ken saw the Exorcist  
b. \*Ken did see the Exorcist  
c. Ken did not see the Exorcist  
d. \*Ken saw not the Exorcist

---

<sup>2</sup>In this section, I will only be concerned with the theoretical assumptions of minimalism that are relevant for my analysis, namely movement due to feature checking. For a more thorough introduction to minimalism, see e.g. Adger (2003), Chomsky (1995), Platzack (1998) (in Swedish) and Radford (1997, in press).

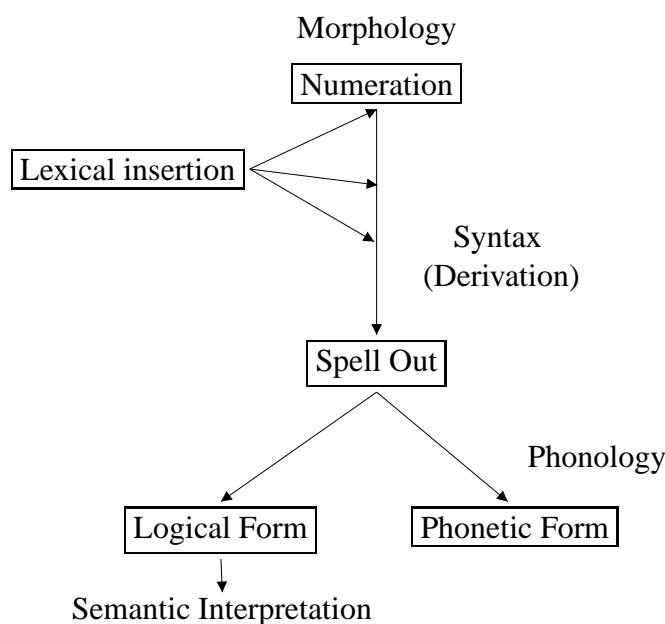
(9b) shows that *do* cannot be inserted optionally, whereas (9c) and (9d) show that *do* must be inserted if there is a negation in the sentence.

*Full interpretation* tells us not to include anything in an utterance which does not contribute to the interpretation of this utterance. For example the verb *like* in (10) can only be mono-transitive. In (10a), *like* has a subject (*Ken*) and an object (*the Icelandic punk CD*), adding another argument as in (10b) yields ungrammaticality:

- (10) En. a. *Ken liked the Icelandic punk CD*  
 b. \**Ken liked Sten the Icelandic punk CD*

The course of the derivation is shown in (11):

(11)



Before a derivation starts, a numeration that contains the lexical items that will eventually end up being in the sentence are sent to the syntactic system and phrase structures are built from the bottom up. According to Chomsky (1995: 228) an *inclusiveness condition* prevents new objects from being inserted in the course of the derivation:

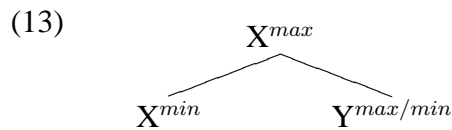
- (12) **Inclusiveness Condition** (cited here from Chomsky 1995: 228):

A “perfect language” should meet the condition of inclusiveness: any structure formed by the computation [...] is constituted of elements already present in the lexical items



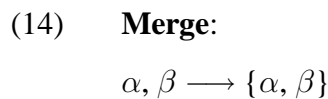
[...] no new objects are added in course of computation apart from rearrangements of lexical properties (in particular, no indices, bar levels in the sense of X-bar theory, etc. ...).

In minimalism, structures are binary, as in X-bar-theory, but the intermediate levels of X-bar-theory have been removed. All that is distinguished are minimal ( $X^{min}$ ) and maximal ( $X^{max}$ ) projections.  $X^{min}$  does not contain a projection of X and  $X^{max}$  does not project any further:

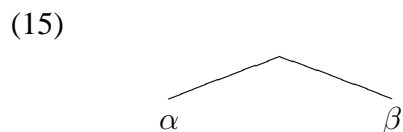


In the structure in (13),  $X^{min}$  projects  $X^{max}$ , Y is maximal because it does not project, and Y is minimal because it does not contain a projection of Y. A typical element of type Y is an adverb or a clitic.  $X^{min}$  and  $X^{max}$  are dependent on the structure configuration and they can change in the course of the derivation.

Two different operations are used to build phrases, *merge* and *move*. Merge builds bigger structures from smaller structures, the smallest element being the lexical item in the input:



The formal notation  $\{\alpha, \beta\}$  can also be represented in a structure such as (15):

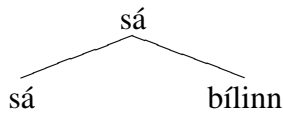


As I have mentioned, structures are built from the bottom up. Take the Icelandic sentence in (16) as an example:

- (16) Ic. Strákurinn sá bílinn  
 Boy-the.NOM saw.3SG.PAST car-the.ACC  
 'The boy saw the car'

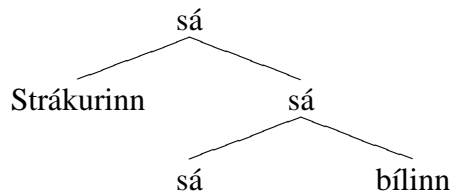
First, merge takes the verb and its complement and combines them as in (17). The verb is the head, therefore the structure has the verb as a label:

(17)



Then, the subject is merged with the structure in (17), as in (18). The verb is still the head of the phrase, therefore the phrase still has the verb as its label:

(18)

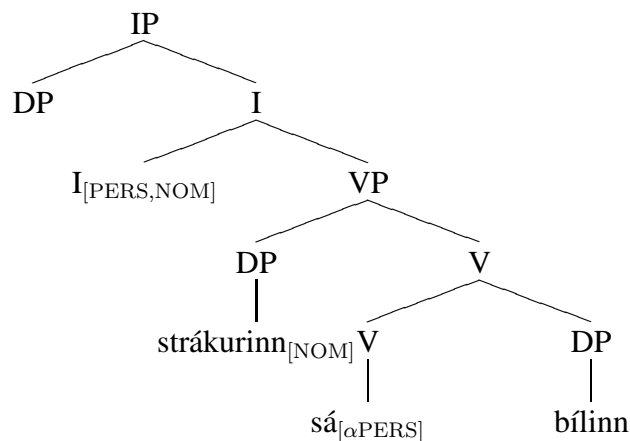


The lexical elements in this structure, *strákurinn* 'the boy', *sá* 'saw', and *bílinn* 'the car' have features which are called interpretable features. Interpretable features have an effect on the semantics of a sentence and they should be accessible at all interfaces. For example, *bílinn* has the interpretable features [+noun], [+plural], and [+masculine], and *sá* has the interpretable features [+verb] and [+past].

In the numeration for this sentence there are also features, which are called uninterpretable features or  $\phi$ -features. These features do not have an effect on the semantics of a sentence. Typical  $\phi$ -features are case and agreement, features which have to be checked against other features and deleted before the end of the derivation is reached. For example, we might assume that Icelandic has a strong uninterpretable person/number feature on  $I^\circ$  and that this feature has to be checked and deleted before the end of the derivation is reached.

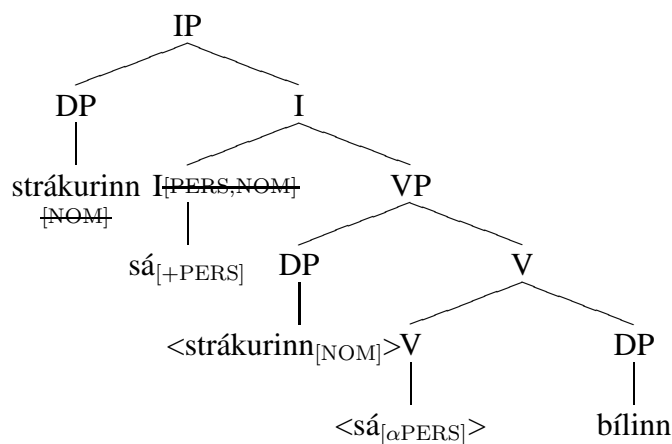
This is where the operation *move* comes into the picture. Move moves already merged items into positions higher up in the structure. Move is triggered by uninterpretable features, which means that movement can only take place if there is need for it. Take the structure in (18) as an example. If some functional projection that contains a  $\phi$ -feature, e.g. [PERSON], is merged with the structure in (18), we have the structure in (19). Here, I have replaced the labels with the more conventional labels for the ease of the reader.

(19)



In (19), I has the uninterpretable features [PERS] and [NOM]. To check and delete these features, *sá* 'saw' moves to I and *strákurinn* 'the boy' to IP-Spec. When moved, a word leaves a *copy* in the position in which it was base-generated (indicated by putting the word into < >):

(20)



The uninterpretable [PERS] feature matches the interpretable feature [ $\alpha$ PERS] on *sá* 'saw'. Thereby the feature on I is checked and deleted. I also has an uninterpretable case feature, [NOM], that matches the uninterpretable case feature on *strákurinn* 'the boy'. When *strákurinn* moves into IP-Spec, the case feature on the DP and the case feature on I match and both are checked and deleted. Now all uninterpretable features have been checked and deleted and the derivation can be sent to Spell Out. From there, it is sent to PF where the sentence is pronounced and to LF where the sentence is interpreted.

### 1.3 Using electronic corpora

As I have mentioned, it is possible to use historical sources to find out whether an older stage of a language had certain types of constructions that do not exist in the modern language.

A good example of such historical sources are the two versions of the Middle Danish manuscript *Sjælens Trøst* (Cod.Ups. C 529 and Cod.Holm. A 109). The two texts are the oldest texts in the corpus *Dansk Sprog- og Stilhistorisk Database* (Ruus, 2001), both dated ca. 1425. To find out whether Middle Danish had stylistic fronting, it is possible to search for the types of constructions in *Sjælens Trøst* where stylistic fronting can take place in modern Icelandic. It is for example possible to look for all relative clauses that are introduced by the relative particle *som* 'that'. In *Sjælens Trøst*, there are 729 relative clauses introduced by *som*. 671 of those are subject relative clauses or relative clauses with a subject pronoun (in Icelandic, stylistic fronting can be found in subject relative clauses and relative clauses with a weak subject pronoun). In 209 subject relative clauses, stylistic fronting can be found (cf. section 5.4.3 for a more detailed discussion). In (21), a participle has undergone stylistic fronting:

- (21) MD. Tha mintis honum thæt som **skrifvit**<sub>i</sub> staar t<sub>i</sub>  
Then remembered him that which written stands  
'Then he remembered what is written' (1425, *SJTR*)

It is difficult to conduct such a study on the older stages of Danish. Relatively few corpora exist for Middle Danish, none for Old Danish. The Middle Danish corpora are usually not morphologically or syntactically tagged. Therefore, the results that I show in this thesis should be taken with precaution as they probably only show a part of the state of affairs in Old and Middle Danish.

In this study, I have used the corpus *Dansk Sprog- og Stilhistorisk Database* (Ruus, 2001) which comprises Middle Danish and Early Modern Danish texts from the period 1425 to 1787. For Old Danish texts and Middle Danish texts not included in Ruus (2001), I have used published versions of manuscripts such as Uldaler & Wellejus (1968), Diderichsen (1931-1937), and Bertelsen (1905), to name a few. To make the search easier, Ken Ramshøj Christensen and I have scanned the texts listed in (22) and created a small corpus of raw text files which I will call *the Århus Corpus of Old Danish (ACOD)*.<sup>3</sup>

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<sup>3</sup>Cf. Appendix A, page 235, for more information on the historical sources used in this study.

(22) Texts in the ACOD (approx. 35000 words):

a. from Uldaler & Wellejus (1968):

*Eriks sjællandske lov* 'Erik's law of Zealand'

*Henrik Harpestreng*

*Jyske lov* 'Law of Jutland'

*Mariaklagen* 'The wail of Mary'

*Sjællandske kirkelov* 'Church law of Zealand'

*Skånske kirkelov* 'Scanian church law'

*Skånske lov* 'Scanian law'

*Valdemars lov ældre redaktion* 'Valdemar's law older edition'

*Valdemars lov yngre redaktion* 'Valdemar's law younger edition'

b. from Bertelsen (1905):

*St. Pouls Nedfart til de dødes Rige* 'St. Poul's descent to the land of the dead'

With a raw text file, it is possible to generate a concordance which can be used to search for lexical items. A search in the text *Skånske lov* 'Scanian law' as published in Uldaler & Wellejus (1968: 19-38) for the lexical item *ær* that can either have the meaning of English 'that' or 'is' gives a result as shown in (23):

(23) Result when searching for Old Danish *ær* 'that/is':

```
Ær hun eig mæth barne oc ær thær gothra quinnæ withni til.  
andra arfwa æn børn sin tha ær alt thæt han a bæthe i fæ oc 12 iortho  
hafwær han eth barn tha ær alt halft thæt ær han a hafwær han flere  
ær alt halft thæt ær han a hafwær han flere børn.  
tha late the ut hwærth hinum ær handa 18 mellin hafwær iorthen.  
sithan the æra lagwagsin tha ær hin withær hwærn ær handa mællin hafwær  
ær hin withær hwærn ær handa mællin hafwær  
hafwær føre laga hæfth ær han 27 hafwær ofna hafwath.
```

For Old Icelandic, there exists a lemmatized concordance of the Sagas of the Icelanders (Rögnvaldsson et al., 1996) and various (diplomatarian and text critical) versions of the Old Icelandic manuscripts (cf. e.g. van Weenen 1988).

The situation is somewhat different for Old and Middle English as there exists a series of syn-

tactically annotated corpora. The York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE) (Taylor et al., 2003)<sup>4</sup> is a morphosyntactically annotated corpus of 1.5 million words of prose text and the Penn-Helsinki Parsed Corpus of Middle English (PPCME2) (Kroch & Taylor, 2000)<sup>5</sup> is a syntactically annotated corpus of 1.3 million words of prose text.<sup>6</sup> The York-Helsinki Parsed Corpus of Old English Poetry (The York Poetry Corpus) (Pintzuk et al., 2001) is the third corpora in the *English Parsed Corpora Series*.<sup>7</sup> This corpus is comprised of 78 thousand words of poetry. The three corpora are based on the diachronic part of the Helsinki Corpus.<sup>8</sup>

A syntactically annotated corpus makes it possible to do an exhaustive search for specific structures as for example all structures where a dative NP precedes a nominative NP and to find out how frequent the structure is. The annotation scheme of a corpus contains tags or labels which indicate of which category the tagged word is. These tags are called part-of-speech labels (or POS labels). The tagged version of the Old English example in (24) is given in (25):

(24) OE. & cwædon þæt him eallum þa wel licodon  
*and said.3PL that them.DAT all.DAT they.NOM well liked.3PL*  
 'and said that all of them liked them well' (cobede 32.2811)

(25) &\_CONJ cw+adon\_VBDI ,\_, +t+at\_C him\_PRO^D eallum\_Q^D +ta\_ D^N  
 wel\_ADV licodon\_VBDI ,\_. cobede,Bede\_4:5.276.32.2811\_ID

The POS labels in (25) are: CONJ = Conjunction, VBDI = Verb past tense indicative, C = Complementizer, PRO = Personal Pronoun, Q = Quantifier, D = Determiner, and ADV = Adverb. Extended POS labels are indicated by a ^. In (25), there are two extended POS labels, ^D = Dative and ^N = Nominative.

When the example in (24) has been tagged as in (25) it can be parsed automatically with a computer. The outcome is illustrated in (26):

<sup>4</sup>Information on the YCOE is available at <http://www-users.york.ac.uk/~lang22/YCOE/YcoeHome.htm>.

<sup>5</sup>Information on the PPCME2 is available at <http://www.ling.upenn.edu/mideng/>.

<sup>6</sup>There is one non-prose text in the PPCME2, *The Ormulum*.

<sup>7</sup>Cf. <http://www.ling.upenn.edu/mideng/ppcme2dir/YCOE/doc/annotation/parsed-corpora-series.htm>.

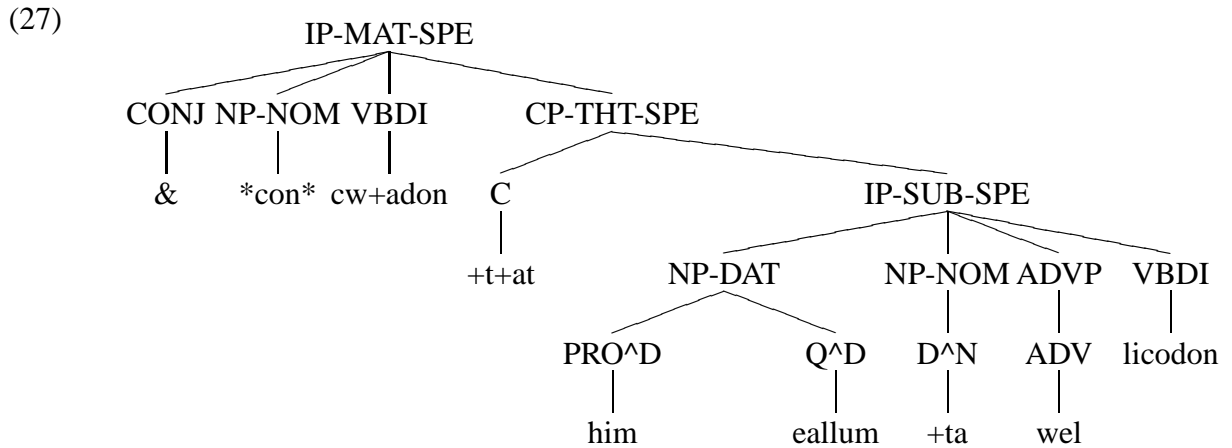
<sup>8</sup>Information on the Helsinki Corpus is available at <http://helmer.hit.uib.no/icame/cd/>.

(26) Automatically parsed version of (25)

```
( ( IP-MAT-SPE (CONJ &)
      (NP-NOM *con*)
      (VBDI cw+adon)
      ( , , )
      (CP-THT-SPE (C +t+at)
        (IP-SUB-SPE (NP-DAT (PRO^D him) (Q^D eallum))
          (NP-NOM (D^N +ta))
          (ADV (ADV wel))
          (VBDI licodon)))
      ( . , ) ) (ID cobede,Bede_4:5.276.32.2811))
```

Here, the syntactic labels have been added. Each node is dominated by an IP, either a matrix IP (IP-MAT) or a subordinate IP (IP-SUB). Other syntactic labels in (26) are NP (Noun Phrase) and CP-THT (that clause). The second node in (26), (NP-NOM \*con\*), means that a subject has been deleted under conjunction. The parsed version of a sentence is analyzed by means of a flat, i.e. non-binary, tree structure, based on two relations: *dominance* and *precedence*.

The parsed version in (26) is equal to the tree structure in (27):



To search for a specific structure, two files are needed. A query that contains the search criteria must be written and an input file that contains parsed text. (28) is an example of a query file:

```
(28) node: IP*
      query: (IP* iDoms NP-DAT)
```

The first line in the query file declares which node is the domain of the search. In this case it is

any IP (indicated by the \*). The second line is the query itself. Here an output file with every structure where an IP immediately dominates an NP marked for dative will be produced, i.e. all the cases where a dative NP is an argument of a verb, not for example of a preposition.

The output file contains four parts, a preface, header, footer and summary. The structures are given in the header. The example in (29) is one token from the output file:

(29) One token from the output file generated with the query file in (28)

```

/~*&
& cw+adon, +t+at him eallum +ta wel licodon,
(cobede,Bede_4:5.276.32.2811)
*~/

/*
8 IP-SUB-SPE: 9 NP-DAT
*/

(NODE (8 IP-SUB-SPE (9 NP-DAT (10 PRO^D him)(11 Q^D eallum))
                                (12 NP-NOM (13 D^N +ta))
                                (14 ADVP (15 ADV wel))
                                (16 VBDI licodon))
      (ID cobede,Bede_4:5.276.32.2811))

```

The footer contains statistics about the header:

(30)

```

/*
FOOTER
source file: ..\Ycoe\oe-psd\cobede.o2.psd
hits found: 1070
tokens containing the hits: 916
total tokens searched: 4923
*/

```

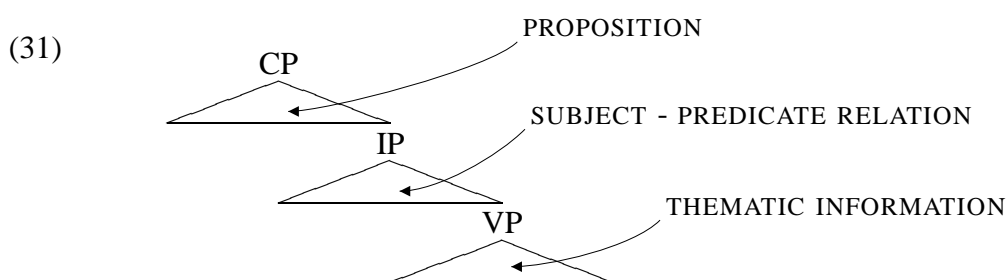
Here, the query was run on only one file. 1070 hits were found in 916 tokens, i.e. an IP immediately dominated a dative NP 1070 times in 916 sentences. The input file that the search was conducted on contains 4923 tokens.

The output file can be used to search further for more specific structures, as for example all structures where the dative NP precedes a nominative NP. In section 2.4, I will use the results from my search in the three English Corpora to argue that the change from DAT-NOM to NOM-ACC was not a change in word order (i.e. a structural reanalysis) but rather a reanalysis in case assignment, i.e. that in Old English and Middle English certain verbs had dative subjects that were replaced by nominative subjects.



## 1.4 The subject positions

Every clause can be split up into three different layers of projections, CP, IP, and VP, where each layer has its own function:



The VP layer contains the thematic information and the argument structure of the clause. Here the verb assigns its  $\theta$ -roles to its arguments. The IP layer is the layer of grammatical functions, i.e. inflectional morphology and agreement relations. The IP layer contains the canonical subject position, IP-Spec. The CP layer is the discourse layer of the clause, it typically contains topic/focus information and information that links propositions to the discourse (cf. Platzack 2001).

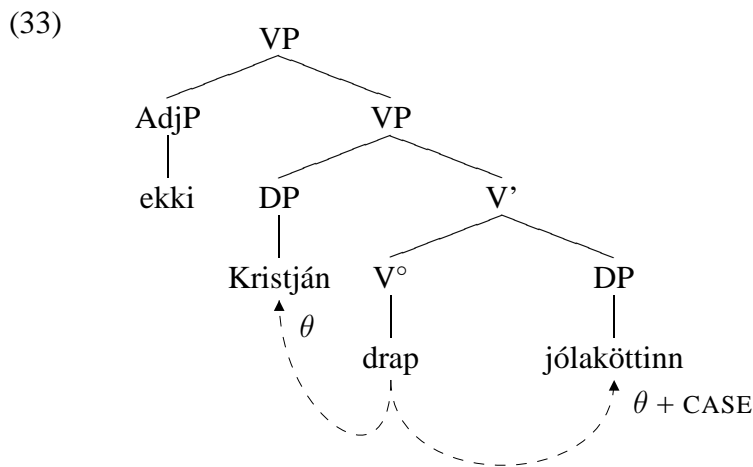
### 1.4.1 Thematic roles and case

Not every sentence has an object, but every sentence necessarily has a subject. In (32a), the verb has two arguments, an object *jólaöttinn* 'the Christmas cat', and a subject, *Kristján*. In the passive in (32b), *jólaötturinn* 'the Christmas cat' is the subject. The ungrammatical example in (32c) only has an object, *jólaöttinn*:

- (32) Ic. a. Kristján drap ekki jólaöttinn  
*Kristján killed not Christmas cat-the*  
 'Kristján did not kill the Christmas cat'
- b. Jólaötturinn drapst ekki  
*Christmas cat-the killed.PASS not*  
 'The Christmas cat was not killed'
- c. \*Drap ekki jólaöttinn  
*Killed not Christmas cat-the*

The clause in (32c) fails to fulfill the requirement that is known as the *subject requirement*, i.e. the requirement that the specifier of IP should be filled. It also fails to fulfill the THETA CRITERION because the verb has not assigned one of its  $\theta$ -roles.

IP-spec is also known as the canonical subject position. It is not the position where the subject is base-generated, but it is the position that the subject moves into to be assigned case. In section 1.2, I showed how the subject was merged with the verb inside the VP. In the Scandinavian languages, the negation marks the left edge of the VP to which it is adjoined:



Inside the VP, the verb *drepa* assigns two  $\theta$ -roles. It assigns the  $\theta$ -role AGENT to its external argument (the subject), and the  $\theta$ -role PATIENT to its internal argument (the object). According to the THETA CRITERION, each argument has to be assigned one and only one  $\theta$ -role and furthermore, each  $\theta$ -role has to be assigned to one and only one argument (Haegeman & Guéron, 1999: 138). This means that each argument can only receive one  $\theta$ -role from the predicate, and that each  $\theta$ -role can only be assigned once.

The verb assigns the object its case inside the VP but in *Government and Binding Theory*, the assumption was that the subject could not be assigned case in its base-generated position, VP-Spec. According to the CASE FILTER, (34), all overt arguments must be assigned case.

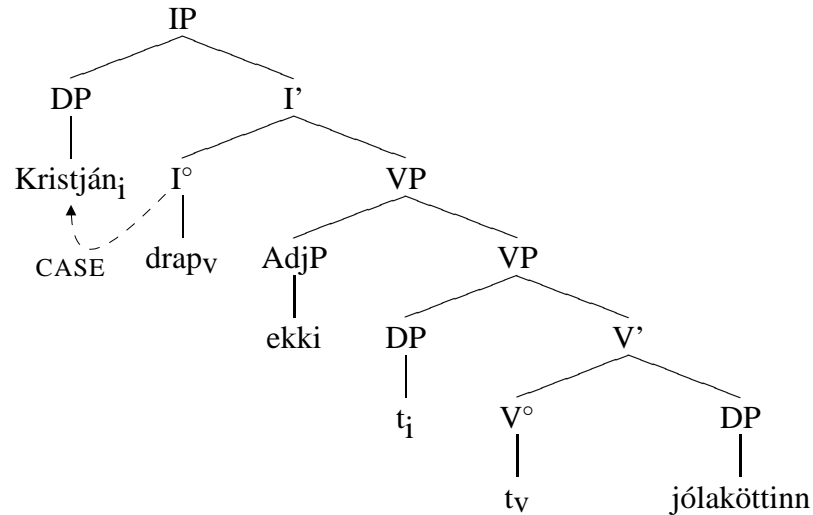
(34) **The CASE FILTER** (adapted from Haegeman & Guéron 1999: 144)

\*[NP<sub>overt</sub> – case]

Therefore, the subject must move to some other position to be assigned case. This position is the canonical subject position, IP-Spec. When the subject moves, it leaves a copy or a trace in the position where it was base-generated (indicated with *t* for trace). That the finite verb precedes

the negation also indicates that the verb has moved out of the VP in Icelandic. In minimalism, the assumption is that the subject moves to IP-Spec to check case features on  $I^\circ$ .

(35)



In the tree in (35), the subject, *Kristján*, is base-generated in VP-Spec and the verb *drap* 'killed' in  $V^\circ$ . The subject moves to IP-Spec and is assigned case by  $I^\circ$ . Here, the subject is assigned nominative because the verb is not specified in the lexicon as a verb that assigns accusative, dative or genitive to its subject.

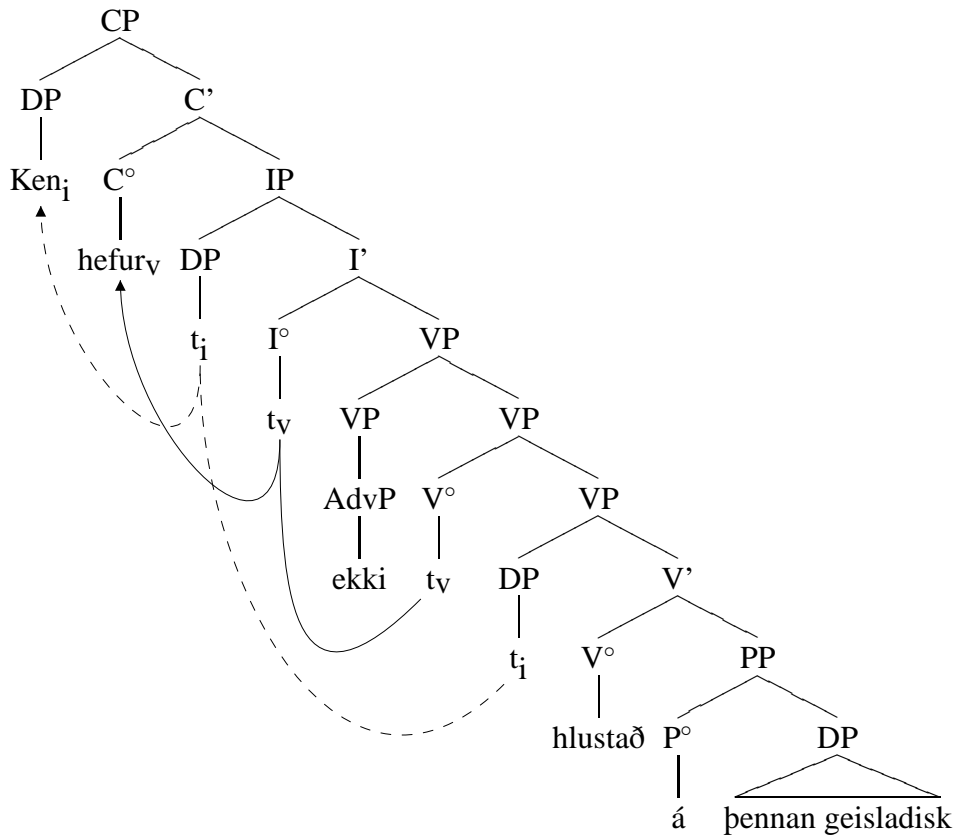
#### 1.4.2 Main vs. embedded clauses, expletive subjects

It is, however, well known that IP-Spec is not the only subject position in Icelandic (cf. e.g. Bobaljik & Jonas 1997, McCloskey 1997: 215-217, Rögnvaldsson 1982, 1983, 1984*a*, 1984*b*, Sigurðsson 1989, 1991*b*, Thráinsson 1986, 1999, Vikner 1995*a*). For example, the subject can occur in two different positions in a V2 clause, either in CP-Spec, (36), or in IP-Spec, (38), if an object has been topicalized, in this case the complement of a preposition.

- (36) Ic. Ken hefur ekki hlustað á þennan geisladisk  
       Ken has not listened to this CD  
       'Ken has not listened to this CD'

The structure of the example in (36) is given in (37):

(37)

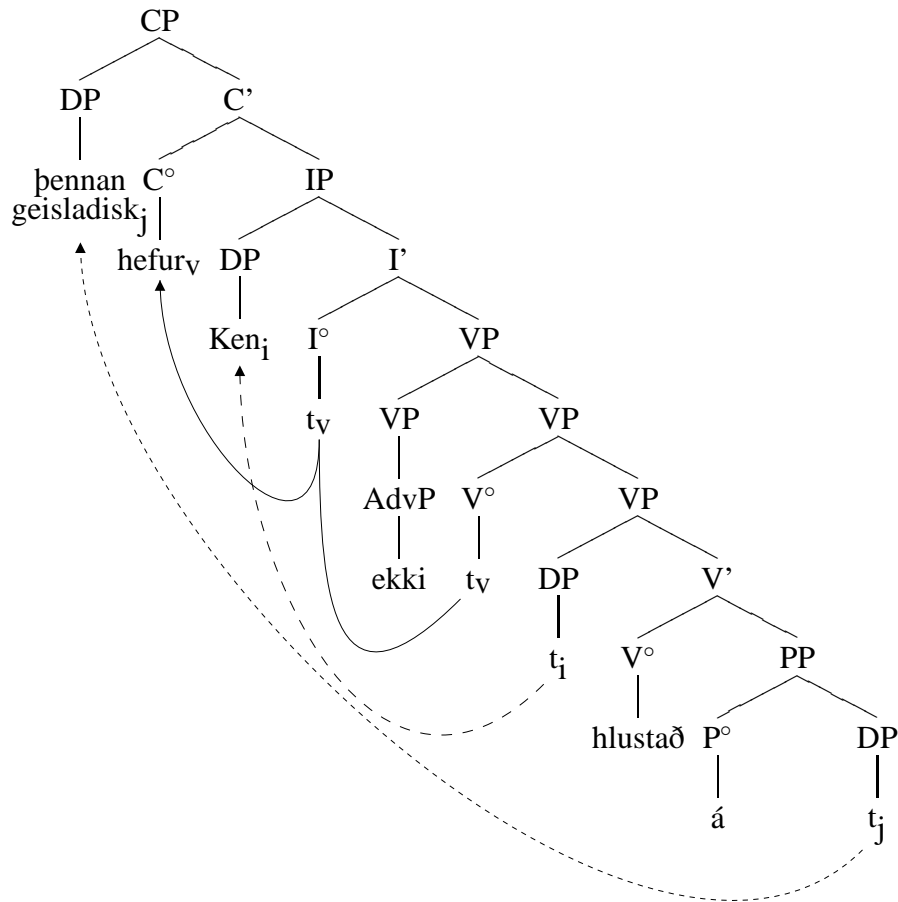


In the tree in (37), the verb moves from  $V^\circ$ , where it is base-generated, to  $I^\circ$ , to pick up the inflectional ending. To fulfill the verb second requirement, the verb moves further into  $C^\circ$ . The subject moves from VP-Spec, where it is base-generated and where it is assigned its  $\theta$ -role, into IP-Spec where it is assigned case. If nothing is topicalized, the subject moves into the highest position, CP-Spec. If something else has been topicalized, the subject stays in IP-Spec, where it immediately follows the finite verb in  $C^\circ$ :

- (38) Ic. þennan geisladisk hefur Ken ekki hlustað á  
*This CD has Ken not listened to*  
 'This CD, Ken has not listened to'

The structure of the example in (38) is given in (39). Here, the complement of the preposition has been topicalized, i.e. it has moved into CP-Spec. As in the tree in (37), the verb moves from  $V^\circ$  to  $I^\circ$  to  $C^\circ$  to fulfill the V2 requirement. Here we also see the subject occupying the canonical subject position, i.e. IP-Spec.

(39)



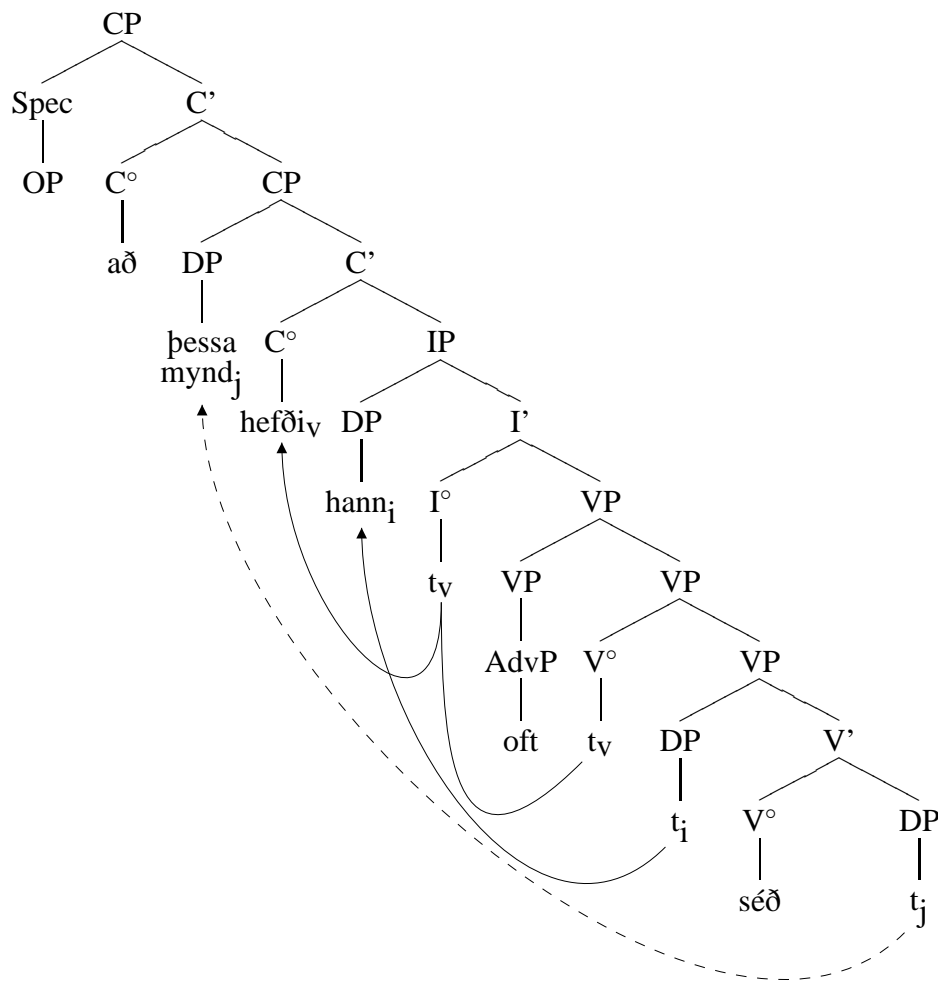
In embedded clauses in Icelandic, topicalization is very limited. It can be found with bridge verbs like *segja* 'say', (40b) and in clauses embedded under some non-bridge verbs like *viðurkenna* 'admit', (41):

- (40) Ic. a. Ken sagði að hann hefði oft séð þessa mynd  
*Ken said that he had often seen this film*  
 'Ken said that he had often seen this film'
- b. Ken sagði að [þessa mynd]<sub>i</sub> hefði hann oft séð <sub>t<sub>i</sub></sub>  
*Ken said that this film had he often seen*  
 'Ken said that he had often seen this film'
- (41) Ic. Ken viðurkenndi að [þessa mynd]<sub>i</sub> hafði hann ekki séð <sub>t<sub>i</sub></sub>  
*Ken admitted that this film had he not seen*  
 'Ken admitted that he had not seen this film'

The reason why topicalization is allowed in examples like (40b) and (41) is that all bridge verbs and some non-bridge verbs can embed V2 clauses (for a more detailed discussion of embedded V2, cf. Vikner 1995a: 65ff.). The structure of the embedded clause in (40b) is given in (42). The complementizer *að* 'that', which is in C°, can embed another CP which makes topicalization

possible:

(42)



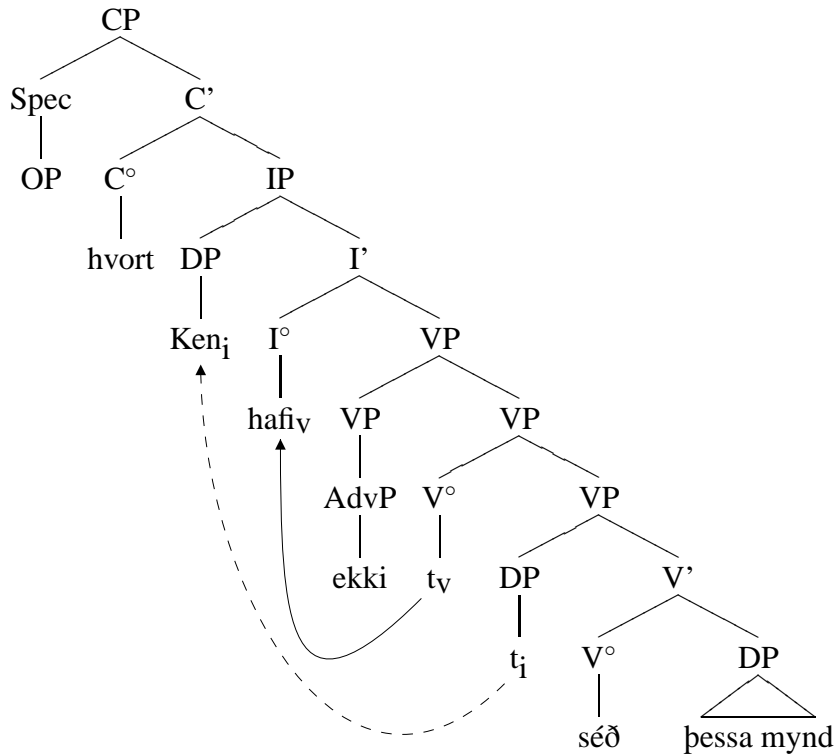
However, V2 is not allowed in all embedded clauses. In embedded questions like (43b) topicalization is not allowed:

- (43) Ic. a. Ég vildi vita hvort Ken hafi ekki séð þessa mynd  
 I wanted know if Ken has not seen this film  
 'I wanted to know whether Ken has not seen this film'
- b. \*Ég vildi vita hvort [þessa mynd]<sub>i</sub> hafi Ken ekki séð t<sub>i</sub>  
 I wanted know if this film has Ken not seen

The difference between the position of the subject in the embedded clause in (40a) and the embedded clause in (43a) is that in (40a), the subject is in CP-Spec, whereas in (43a), the subject is in IP-Spec. Unlike the complementizer *að* 'that', the complementizer *hvort* 'whether' cannot embed a second CP. Therefore, there is no position into which the object in (43) could

have been topicalized:<sup>9</sup>

(44)



This is one of the subject-hood tests for Icelandic (cf. Sigurðsson 1989: 204-209): In embedded questions, the complementizer is always immediately followed by the canonical subject position, IP-Spec. But CP-Spec and IP-Spec are not the only subject positions in Icelandic. As Sigurðsson (1989: 300-303, 1991*b*) and Vangsnes (2000) show (cf. also Rögnvaldsson 1982, 1983, and Thráinsson 1986), there are several different subject positions for indefinite (or in some way quantified) subjects:

- (45) Ic. a. Það hafa **einhverjir óvitar** sennilega brotið  
           EXPL have some           idiots probably broken  
           rúðuna  
           window-the
- b. Það hafa sennilega **einhverjir óvitar** brotið  
           EXPL have probably some           idiots broken  
           rúðuna  
           window-the

<sup>9</sup>In section 5.6, I will elaborate on the role of CP-recursion in embedded clauses in Icelandic.

- c. \*Það hafa sennilega brotið **einhverjir óvitar**  
*EXPL have probably broken some idiots*  
 rúðuna  
*window-the*
- d. Það hafa sennilega brotið rúðuna **einhverjir**  
*EXPL have probably broken window-the some*  
**óvitar**  
*idiots*  
 'Some idiots have probably broken the window'

That the subject precedes the adverb in (45a) indicates that the subject has moved out of the VP into IP-Spec. The expletive subject is inserted in CP-Spec. In (45b), however, the subject follows the adverb, which must indicate that it has not moved out of the VP. Instead, the subject is in VP-Spec and the expletive has been inserted in IP-Spec and then moved to CP-Spec. In (45d), the subject has undergone *Heavy Subject Shift* (which is one of the subject-hood tests for Icelandic Sigurðsson 1989: 207-208) but the example in (45c) shows that the subject cannot come in between the verb and the object.

Bobaljik & Jonas (1997) argue against analyzing (45b) as an instance of a VP-internal subject. Instead, they argue that the adverb is adjoined to TP and that the two different subject positions that can be observed in (45a,b) are AgrSP-Spec and TP-Spec in a split IP. Bobaljik & Jonas list three arguments in favor of their analysis. Their first argument is that non-quantificational subjects must precede sentence adverbs such as *aldrei* 'never', floating quantifiers and the negation. These elements are all VP adjoined in Icelandic and mark the left edge of the VP. However, as the example in (46) shows, a non-quantified subject may follow VP adverbs like *sennilega* 'probably':

- (46) Ic.      ?Það hafa sennilega **börn** sungið þessi lög  
*EXPL have probably children sung these songs*  
 'Children have probably sung this song'

Bobaljik & Jonas's second argument is that subjects in the lower position, as in (45b), precede the object if it has been shifted out of the VP, i.e. if the object has undergone object shift. However, object shift is rather marked in transitive expletive constructions, (47b):

- (47) Ic. a.   Það brutu einhverjir óvitar ekki þessa rúðu  
*EXPL broke some idiots not this window*



- b. ??Það brutu einhverjir óvitar þessa rúðu oft  
*EXPL broke some idiots this window often*  
 'Some idiots often broke this window'

A third argument, as Bobaljik & Thráinsson (1998: 56, fn. 21) point out, comes from Jonas & Bobaljik (1993). In clauses with multiple modals or auxiliaries, the subject must precede all the non-finite verbs, i.e. it must be positioned above the thematic VP. This also holds for quantified subjects as the examples in (48) show:

- (48) Ic. a. Það myndu **einhverjir óvitar** sennilega hafa gert þetta  
*EXPL would some idiots probably have done this*  
 b. Það myndu sennilega **einhverjir óvitar** hafa gert þetta  
*EXPL would probably some idiots have done this*  
 c. \*Það myndu sennilega hafa **einhverjir óvitar** gert þetta  
*EXPL would probably have some idiots done this*  
 'Some idiots would probably have done this'

In (48a), the subject precedes the sentence adverb *sennilega* 'probably' but the subject may also follow the sentence adverb as the example in (48b) shows. (48c) shows that the subject cannot stay in the position in which it is base-generated. The explanation may be that the subject must move to have its case checked by the modal as the assumption is that non-finite verbs cannot check case on the subject.

### 1.4.3 The Diderichsen tradition

In the Diderichsen tradition (cf. Diderichsen 1962, Hansen 1984, Togeby 2003, and Vikner 1999b), the sentence is divided into four fields, the conjunction field (Da. *forbinderfelt*), the initial field (Da. *fundamentfelt*, Ge. *Vorfeld*) the middle field (Da. *nexusfelt*, Ge. *Mittelfelt*) and the final field (Da. *indholdsfelt*). The sentence table in (49) is language specific for Danish. For the syntactic analysis of for example German, a different kind of table would be needed (cf. Wöllstein-Leisten et al. 1997: 53-75) and as Diderichsen (1941: 89) himself points out a different kind of table would be needed for the syntactic analysis of Icelandic and Old Danish.

Originally, there were two different tables for main clauses and embedded clauses (cf. Diderichsen 1962: 162, 186, Hansen 1984: 44, 72-74, Jørgensen 2000a: 63-79, and Togeby 2003). Platzack (1985: 71 fn 5), taken up by Heltoft (1986: 108), was the first to suggest that

the main clause model and the embedded clause model could be collapsed in one model.

(49) *Diderichsen's sentence table* (based on Hansen 1984: 44-49, Togeby 2003, and Vikner 1999b: 86)

Conjunc- tion field	Initial- field	Middle field				Final field					
		v	n	a	A	V	N	A			
				a	A	v	V	IO	DO	bound	free

In the middle field, *v* is the place of the finite verb, *n* is the place of the subject and *a* is the place of negation and sentence adverbs. The sentence table captures V2 in main clauses as *v* in the middle field corresponds to  $C^\circ$  in the generative tradition and *n* to IP-Spec. The sentence table does not have a position that corresponds to VP-Spec, so the subject is inserted directly into the *n* position in the middle field. Furthermore, the sentence table does not have a position that corresponds to  $I^\circ$  in the generative tradition. The difference between main clauses and embedded clauses in Danish (i.e. that Danish does not have  $V^\circ$ -to- $I^\circ$  movement) is therefore captured in the following way. In embedded clauses, the *v* position that is occupied by the verb in main clauses is occupied by the complementizer. A finite verb occupies the *v* position in the final field and a non-finite verb occupies the *V* position in the final field.

## **Part I**

### **Case and agreement**



## Chapter 2

### Case and inflectional morphology

The five Scandinavian languages are often divided into two groups (Haugen, 1976: 23) according to their syntactic and morphological properties. In the first group, Mainland Scandinavian (MSc), there are three languages: Danish, Norwegian and Swedish. In the second group, Insular Scandinavian (ISc), there are two languages: Faroese and Icelandic. In addition to Faroese and Icelandic, the language Norn, which was spoken on Orkney and Shetland (Norn is described in Barnes 1998), belonged to the group of Insular Scandinavian.

Although Faroese is syntactically closer to the Mainland Scandinavian languages than Icelandic (like the MSc languages, Faroese lacks  $V^o$ -to- $I^o$  movement), it is traditionally grouped with Icelandic because of its morphological and lexical similarities to Icelandic. Spoken Faroese and spoken Icelandic are not mutually intelligible but the written languages are in the same way as written Danish and one of the Norwegian written standards, *bokmål* 'Dano Norwegian', are mutually intelligible. This is due to the etymological nature of the Faroese written standard that was created in the middle of the 19th century (Petersen et al., 1998: 1).

The common Scandinavian language, Ancient Nordic (AD. 200-800), found in the rune inscriptions (cf. e.g. Krause 1971), differentiated between four cases: nominative, accusative, dative, and genitive, and two numbers: singular and plural (as well as dual in the pronominal system). This case system is preserved in the ISc languages to a large extent. Both Faroese and Icelandic mark nominative, accusative and dative on nouns. Both languages have a morphological genitive but unlike Icelandic, genitive is only used with pronouns in Faroese:

(1) Faroese and Icelandic *hestur* 'horse':

	<i>Nom</i>		<i>Acc</i>		<i>Dat</i>		<i>Gen</i>	
Fa.	hestur	–	hest	–	hesti	–	(hests)	'horse'
	hestar	–	hestar	–	hestum	–	(hesta)	'horses'
Ic.	hestur	–	hest	–	hesti	–	hests	'horse'
	hestar	–	hesta	–	hestum	–	hesta	'horses'

The MSc languages, do not mark case on nouns, only number:

- (2) Danish *Hest* 'horse':

	<i>Nom</i>		<i>Obl</i> <i>Acc Dat</i>
Da.	hest	–	hest
	heste	–	heste

The only morphological case found in the MSc languages is in the pronominal system, where a distinction is made between subject case and object case, i.e. nominative and oblique (Jørgensen 2000*b*).

- (3) Danish *han* 'he' and *de* 'they':

	<i>Nom</i>		<i>Obl</i> <i>Acc Dat</i>		<i>Gen</i>
Da.	han	–	ham	–	(hans)
	de	–	dem	–	(deres)

Although Faroese and Icelandic have preserved most of the case morphology found in Old Norse, Faroese differs from Icelandic in one fundamental way. As Holmberg & Platzack (1995: 172-176) observe, Faroese does not seem to have inherent case in the same way as Icelandic does. For instance, dative is not always preserved in the passive of mono-transitive verbs in Faroese (cf. Barnes 1986, Petersen et al. 1998: 174-175, 196-199, Smith 1994: 260-261, 265), (4), as in Icelandic, (6):

- (4) Fa. Eg hjálpti honum  
*I.NOM helped him.DAT*  
 'I helped him'

- (5) Fa. a. Hann varð hjálptur  
*He.NOM became.3SG helped.NOM.SG.MASC*  
 'He was helped'

- b. \*Honum varð hjálpt  
*Him.DAT became.3SG helped.SUP*

- (6) Ic. Ég hjálpaði honum  
*I.NOM helped.1SG him.DAT*  
 'I helped him'
- (7) Ic. a. \*Hann var hjálpaður  
*He.NOM was.3SG helped.NOM.SG.MASC*  
 b. Honum var hjálpað  
*Him.DAT was.3SG helped.SUP*  
 'He was helped'

Dative is, however, preserved in the passive of mono-transitive verbs like *takka* 'thank' as the examples in (8) and (9) show (cf. also Petersen et al. 1998: 196-197):

- (8) Fa. Eg takkaði honum  
*I.NOM thanked him.DAT*  
 'I thanked him'
- (9) Fa. a. \*Hann varð takkaður  
*He.NOM became.3SG thanked.NOM.SG.MASC*  
 b. Honum varð takkað  
*Him.DAT became.3SG thanked.SUP*  
 'He was thanked'

Referring to Barnes (1986), Smith (1994: 265) claims that datives of GOALS are always preserved in the passive, i.e. that the dative is preserved in the passive of di-transitive verbs like *give* and *sell*. The examples in (10) and (11) are adapted from Smith (1994: 265, (17)):

- (10) Fa. Hann seldi bóndanum hasa kúgvina  
*He.NOM sold.3SG farmer-the.DAT that.ACC.FEM cow-the.ACC*  
 'He sold the farmer that cow over there'
- (11) Fa. a. \*Bóndin varð seld handa  
*Farmer-the.NOM became.3SG sold.NOM.SG.FEM that.NOM.FEM*  
*kúgvinn*  
*cow-the.NOM*  
 b. Bóndanum varð seld handa  
*Farmer-the.DAT became.3SG sold.NOM.SG.FEM that.NOM.FEM*  
*kúgvinn*  
*cow-the.NOM*  
 'The farmer was sold that cow over there'

It is not a question that there is an ongoing development with respect to preservation of dative in the passive in Faroese. Although it is a stipulation, it is tempting to say that preservation of dative is an instance of lexicalization since it only occurs within a small class of verbs. As for the di-transitive verbs, there might be another explanation. In the passive of verbs like *selja* 'sell' the accusative on the indirect object is absorbed so the object of the passive verb is nominative. If the dative had been absorbed as well, we would end up having two nominative arguments in the sentence.



## 2.1 Inflectional morphology

The same observations can be made for the verbal inflection. Ancient Nordic and its descendant, Old Norse, had very rich verbal morphology, which is mostly preserved in modern Icelandic. In Icelandic, verbs are inflected for three persons in two numbers, in both present tense and past tense. Icelandic is the only Scandinavian language that has two moods, indicative and subjunctive.<sup>1</sup>

(12) Icelandic *kalla* 'call':

		<i>Indicative</i>		<i>Subjunctive</i>	
		<i>Present</i>	<i>Past</i>	<i>Present</i>	<i>Past</i>
<i>singular</i>	1	kalla	kallaði	kalli	kallaði
	2	kallar	kallaðir	kallir	kallaðir
	3	kallar	kallaði	kalli	kallaði
<i>plural</i>	1	köllum	kölluðum	köllum	kölluðum
	2	kallið	kölluðuð	kallið	kölluðuð
	3	kalla	kölluðu	kalli	kölluðu

In Faroese, only present tense singular is marked for person. First person singular is marked with the suffix *-i*, and second and third person singular with the suffix *-Vr*. Otherwise, Faroese still inflects verbs for number, but according to Petersen et al. (1998: 259) the number distinction in the past tense of the regular verbs has disappeared in most Faroese dialects.

(13) Faroese *kalla* 'call':

		<i>Present</i>	<i>Past</i>
<i>singular</i>	1	kalli	kallaði
	2	kallar	kallaði
	3	kallar	kallaði
<i>plural</i>	1	kalla	kallaðu
	2	kalla	kallaðu
	3	kalla	kallaðu

<sup>1</sup>In the regular paradigm, subjunctive is only marked in the present tense.

The MSc languages have lost almost all of the rich verbal morphology found in Old Norse. Only tense is morphologically marked in the three languages.

(14) Danish *kalde* 'call':

		<i>Present</i>	<i>Past</i>
<i>singular</i>	1	kalder	kaldte
	2	kalder	kaldte
	3	kalder	kaldte
<i>plural</i>	1	kalder	kaldte
	2	kalder	kaldte
	3	kalder	kaldte

The fact that Icelandic has  $V^\circ$ -to- $I^\circ$  movement and that Faroese and the Mainland Scandinavian languages do not have  $V^\circ$ -to- $I^\circ$  movement has been related to the difference that can be found in the inflectional morphology of the Scandinavian languages. Roberts (1985: 46) and Kosmeijer (1986) originally had the idea that there was a relation between  $V^\circ$ -to- $I^\circ$  movement and *strong inflectional morphology*, i.e. that if a language has strong inflectional morphology (where person is distinctively marked in every tense), the language has  $V^\circ$ -to- $I^\circ$  movement. Later, the observation on the relationship between rich inflection and  $V^\circ$ -to- $I^\circ$  movement has been revised in many different ways. One is Rohrbacher (1994: 108, (35), 1999: 116, (39)):

(15) A language has V to I raising if and only if in at least one number of one tense of the regular verb paradigm(s), the person features [ $1^{ST}$ ] and [ $2^{ND}$ ] are both distinctively marked.

As Vikner (1997: 195-196, 205, 208) argues, this formulation makes the wrong predictions for northern late Middle English. According to Rohrbacher (1999: 169) and Roberts (1993: 266), the northern late Middle English dialects had  $V^\circ$ -to- $I^\circ$  movement in the 15th century but in these dialects, neither first person nor second person was distinctively marked:

(16) Northern late Middle English *heren* 'hear' (taken from Vikner 1999c: 114, (22), based on O'Neil 1978: 265, Pinsker 1959: 178, Schäufele 1994: 4):

		<i>Present</i>	<i>Past</i>
<i>singular</i>	1	her(e)	herde
	2	heres	herdest
	3	heres	herde
<i>plural</i>	1	heres	herde(n)
	2	heres	hearde(n)
	3	heres	herde(n)

Bobaljik (1995, 1997: 1039) proposed an alternative formulation:

(17) **Evidence for fusion**

If the appearance of Tense morphology blocks the appearance of Agreement morphology, then Tense and Agreement Vocabulary Items are in complementary distribution, and T and Agr must be fused. (Bobaljik, 1995: 43, 48, (21))

A similar formulation was rejected by Vikner (1995*b*) for the reason that such a generalization would predict that Yiddish would have  $V^\circ$ -to- $I^\circ$  movement even though Yiddish did not have person inflection in its only tense (Yiddish has only one non-periphrastic tense cf. e.g. Vikner 2001: 9, (22)). Instead, Vikner (1997, 2001) proposes what I will refer to as *Vikner's Generalization*:

(18) **Vikner's Generalization**

An SVO-language has  $V^\circ$ -to- $I^\circ$  movement if and only if person morphology is found in all tenses. (Vikner 1997: 200, (12b), 207, (23), 2001: 10, (23))

Vikner's Generalization might however be too strong. As the examples in (19) show,  $V^\circ$ -to- $I^\circ$  movement can be found in Danish at least up to the beginning of the 17th century (the example in (19), is the earliest example I could find of  $V^\circ$ -to- $I^\circ$  movement in the corpus *Dansk Sprog- og Stilhistorisk Database* Ruus 2001):

- (19) Da. och sagde til mig, om ieg **uaar icke** till friidtz, att ...  
and said to me if I was not content that ...  
'and told me, if I were not content, that ...' (Dec. 27, 1615, *CHRIVSAM*)

But as shown in the table in (20), Middle Danish had lost almost all person morphology already ca. 1350 although it should be mentioned that according to Brøndum-Nielsen (1928-74: VIII.12-16, 65-72, 121-125), first person singular present tense (-*æ*), first person plural present tense and past tense (-*um*), second person plural present tense and past tense (-*in*) and third person plural past tense (-*o*) are distinctively marked in some manuscripts, especially those influenced by the Scanian dialect of southern Sweden.

(20) Middle Danish (ca. 1350) *høre* 'hear' (cf. also Vikner 1999a: 117, (25))

		<i>Present</i>	<i>Past</i>
<i>singular</i>	1	<i>hørær</i> ( <i>høræ</i> )	<i>hørðæ</i>
	2	<i>hørær</i>	<i>hørðæ</i>
	3	<i>hørær</i>	<i>hørðæ</i>
<i>plural</i>	1	<i>høræ</i> ( <i>hørum</i> )	<i>hørðæ</i> ( <i>hørðum</i> )
	2	<i>høræ</i> ( <i>hørin</i> )	<i>hørðæ</i> ( <i>hørðin</i> )
	3	<i>høræ</i>	<i>hørðæ</i> ( <i>hørðo</i> )

In a corpus study of twelve texts from the Early Modern Danish period (1500-1700), Sundquist (2003: 241) reports that the frequency of V°-to-I° movement is 45% in embedded clauses in three texts written in the period 1500-1550.<sup>2</sup> The frequency for V°-to-I° movement has decreased to 12% in embedded clauses in five texts written in the period 1600-1700.<sup>3</sup> Sundquist (2003: 245) claims that only if we adopt the weaker version of the “rich agreement hypothesis” proposed by Bobaljik & Thráinsson (1998) and Bobaljik (2002: 132, (5)) (cited here from Sundquist 2003: 234, (2)) can we explain why V°-to-I° movement was found in Danish for over 250 years after the verbal morphology was lost.

(21) **Rich agreement hypothesis (weak version):**

If a language has sufficiently rich morphology then it has verb raising.

<sup>2</sup>One of the texts from the period 1500-1550 that Sundquist (2003) includes in his study is the text *Sermons* by Peder Palladius. Henrik Jørgensen (personal communication) tells me that this text should be used with precaution since this is a 16th century text that is edited in the 17th century.

<sup>3</sup>One of the texts from the period 1650-1700 that Sundquist (2003) includes in his study is the text *Memoirs of Leonora Christina* which is according to Henrik Jørgensen (personal communication) predominantly OV. It should, however, be mentioned that Sundquist discarded all sentences that could be analyzed as instances of verb final in his study.

Yet, Sundquist (2003) does not take a standing point in how sufficiently rich the morphology has to be in order for verb raising to take place.

### 2.1.1 Case morphology

As mentioned above, the Insular Scandinavian languages have preserved the morphologically differentiating four case system found in Ancient Nordic and Old Norse, whereas the Mainland Scandinavian languages have almost no case morphology at all. Unlike Faroese and Icelandic, the Mainland Scandinavian languages and English do not mark nominative, accusative, dative, and genitive overtly on nouns:

(22) *Morphological case in Scandinavian and English. Nouns:*

	<b>Icelandic</b>	<b>Faroese</b>	<b>Norwegian</b>	<b>Danish</b>	<b>Swedish</b>	<b>English</b>
NOM.SG	hestur	hestur	hest	hest	häst	horse
ACC.SG	hest	hest				
DAT.SG	hesti	hesti				
GEN.SG	hests	(hests)	—	—	—	—
NOM.PL	hestar	hestar	hestar	heste	häster	horses
ACC.PL	hesta	hestar				
DAT.PL	hestum	hestum				
GEN.PL	hesta	(hesta)	—	—	—	—

As can be seen in the table in (22), Danish, Norwegian, Swedish, and English do not differentiate between nominative and oblique case on nouns. Faroese and Icelandic have almost identical case marking. The only difference is that nominative and accusative plural have coalesced in Faroese, and that the use of genitive in Faroese is limited to place names and pronouns. Mainland Scandinavian and English do not have a morphological genitive.

The situation is slightly different within the pronominal system of the six languages. Here, Faroese and Icelandic still differentiate between the four cases, and the MSc languages and English between nominative and oblique. The situation is somewhat more complicated in Norwegian. In the pronominal system of Norwegian, there is much dialectal variation with respect to the nominative/oblique distinction. In many Norwegian dialects, there is no difference be-

tween nominative and oblique in second person plural and/or third person singular and/or third person plural. A few other Norwegian dialects lack the distinction in first person plural or in second person singular (Marit Julien, personal communication). The Mainland Scandinavian languages do not mark genitive on first and second person pronouns, instead, the possessive pronoun is used.

(23) *Morphological case in Scandinavian and English. Pronouns:*

	<b>Icelandic</b>	<b>Faroese</b>	<b>Norwegian</b>	<b>Danish</b>	<b>Swedish</b>	<b>English</b>
NOM.SG	hún	hon	ho	hun	hon	she
ACC.SG	hana	hana	ho / henne	hende	henne	her
DAT.SG	henni	henni				
GEN.SG	hennar	hennara	hennar	hendes	hennes	hers
NOM.PL	þær	tær	dei	de	de (dom)	they
ACC.PL	þær	tær	dei	dem	dem (dom)	them
DAT.PL	þeim	teimum				
GEN.PL	þeirra	teirra	deira	deres	deras	their

Table (22) shows that Faroese and Icelandic exhibit almost the same morphological properties within the noun declension. If compared to Old Norse, the three languages have almost the same case marking:

(24) Old Norse *dagr* 'day', Icelandic and Faroese *dagur* 'day'

	Old Norse	Icelandic	Faroese
NOM.SG	dag- <b>r</b>	dag- <b>ur</b>	dag- <b>ur</b>
ACC.SG	dag	dag	dag
DAT.SG	deg- <b>i</b>	deg- <b>i</b>	deg- <b>i</b>
GEN.SG	dag- <b>s</b>	dag- <b>s</b>	(dag- <b>s</b> )
NOM.PL	dag- <b>ar</b>	dag- <b>ar</b>	dag- <b>ar</b>
ACC.PL	dag- <b>a</b>	dag- <b>a</b>	dag- <b>ar</b>
DAT.PL	døg- <b>um</b>	dög- <b>um</b>	døg- <b>um</b>
GEN.PL	dag- <b>a</b>	dag- <b>a</b>	(dag- <b>a</b> )

Traditionally, based on the Old Norse/Proto-Germanic inflectional system, Icelandic is said to have twelve inflectional classes (Guðfinnsson 1957 (summarized in Hrafnbjargarson 2003), and Kress 1982). However, according to Pétursson (1992) there are fifty-five inflectional classes, and according to Rögnvaldsson (1990) there are sixty classes. Based on the traditional view, Müller (2003) assumes the number of inflectional classes in Icelandic to be nine in the strong declension, and three in the weak declension. The Faroese dictionary (Poulsen et al., 1998: 1429-1434) lists fifty-three inflectional patterns in the masculine gender, and thirty-four in feminine and neuter respectively. These patterns can be reduced to inflectional classes that resemble the number of inflectional classes in Icelandic. According to Lockwood (1977: 28-38), there are three inflectional classes in masculine and neuter respectively, and four in feminine.

### 2.1.2 Loss of morphological case markers in MSc

Old Norse had primary stress on the first syllable (Faarlund 1994: 43), whereas inflectional endings had secondary stress. This had effects in the morphological system of the MSc languages because early on, vowels were reduced to *æ* (or schwa) in unstressed syllables. In Old Danish, for example, the sounds *u*, *i*, and *a* coalesced to *æ* in unstressed syllables, which meant that there was no difference between some case forms (Karker 2001: 77). Earlier, nominative masculine lost the case ending *-r* so there was no difference between nominative and accusative in

the early 13th century.

In the edition of the Old Danish manuscript *Valdemars lov* that is said to be written in the 15th century (the text is traced back to the 13th century) the word *mothær* 'mother' is both nominative and accusative (Old Norse/Faroese/Icelandic *móðir* 'mother-NOM' vs. *móður* 'mother-ACC'):

- (25) OD. a. ællær theræ mothær      sithen hun fec theræ fathær  
         or      their mother.NOM since she got their father  
         'or their mother since she married their father'
- b. ær      han ærfde      sithen han fec theræ mother  
         that he inherited since he got their mother.OBL  
         'that he inherited since he married their mother'

(13th century, *VLOV2.46.13*)

### 2.1.3 Dative

Dative is morphologically marked in six of the texts in the ACOD. Those are *Skånske kirkelov* 'Scanian church law', *Skånske lov* 'Scanian law', *Eriks sjællandske lov* 'Erik's law of Zealand', *Jyske lov* 'Law of Jutland', one edition of *Valdemars lov* 'Valdemar's law' and *Mariaklagen* 'The wail of Mary'.<sup>4</sup> The texts in these manuscripts are traced to the late 12th century, the 13th century and the early 14th century (cf. appendix A).

The dative plural marker *-um* started to disappear around the turn of the 14th century. At the same time, or even earlier, dative and accusative had coalesced in the pronominal system. About the use of dative in this period, Skautrup (1944-68: I.267) says (my translation):

- (26) The dative form in singular has disappeared everywhere, and its function has been taken over by the common nominative-accusative form, [...] In the Scanian law, some old, freely used dative forms can be found but otherwise, the dative is limited to fixed constructions [...] With the exception of place names, dative plural *-um* is almost only preserved in the sources written in the runic alphabet as well as manuscripts that are influenced by the Scanian dialect. In the manuscript AM 455,12° of Erik's law, few rests can be found: *børnum* 'children', *husum* 'houses', *wapnum* 'weapons', *handum* 'hands' etc., in manuscripts of *Jyske lov*, they are very seldom: *loghum* 'law', *hæfthum* 'traditions', and *sakum* 'things'.

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<sup>4</sup>The six manuscripts make a corpus of 27000 words.



In the edition of *Valdemars Lov* that is said to be written in the beginning of the 14th century (the text is traced to the middle of the 13th century), dative plural is marked:

- (27) OD. *tha ma han ækki bondænum meræ for gøræ ...*  
*then may he not farmer-the.DAT more bewitch ...*  
 'Then he may not bewitch the farmer more ...' (13th century, *VLOV.55.22*)

Dative is also marked in earlier texts such as *Skånske lov*:

- (28) OD. *Thetta wilia summi men ath logum hafwa*  
*This want some men to law.DAT have*  
 'This, some men want as law' (1200, *SKLOV.21.11*)

*Jyske lov* was neither written in the runic alphabet, nor influenced by the Scanian dialect of southern Sweden. In the edition of *Jyske lov* as published in Uldaler & Wellejus (1968: 73-98), dative is marked three times:

- (29) OD. *wæri them meth loghum*  
*defend them with law.DAT*  
 'defend them with law' (13th century, *JLOV.83.12*)

The three examples are all examples of the word *logh* 'law' marked for dative (*loghum*). In all three cases, *loghum* occurs as a complement of the preposition *meth* 'with', which strongly indicates that it is lexicalized, in the same way as dative and genitive singular are lexicalized in the modern Mainland Scandinavian languages. In Danish, nouns occur in the dative singular with prepositions such as *fra* 'from', *i* 'in', etc. in constructions such as (30):

- (30) Da. *gå fra borde / være i hænde*  
*go from board.DAT / be in hand.DAT*  
 'to leave a boat / to be in hands'

In Norwegian, nouns also occur in the dative singular with prepositions such as *av* 'of', *i* 'in', and *fra* 'from'. In the *Oslo Corpus of tagged Norwegian Texts* (henceforth *the Oslo Corpus*),<sup>5</sup> I found eight occurrences of the word *bord* 'board/table' marked for dative (*borde*) as a complement of the prepositions *fra* 'from', *til* 'to', *i* 'in' and *av* 'of' and three of the word *hus* 'house' marked for dative (*huse*) as a complement of the preposition *av*:

<sup>5</sup>The Oslo Corpus is available online at <http://www.tekstlab.uio.no/norsk/bokmaal/>.

- (31) No. a. går fra borde til borde  
 goes from board.DAT to board.DAT  
 'reaches from board to board'
- b. går man av huse  
 goes one of house.DAT  
 'one goes from house to house'

In the MSc languages, nouns can similarly occur marked for genitive with the preposition *til* 'to' which assigned genitive to its complement in Old Norse. (32) is an example of a lexicalized genitive in Danish. In the *Oslo Corpus*, I found forty-one occurrences of the preposition *til* 'to' with *bord* marked for genitive, (33).

- (32) Da. at sætte sig til bords  
 to sit SELF to table-GEN  
 'to sit down for a meal'
- (33) No. Ho hører det blir bedt til bords  
 She hears there becomes asked to table-GEN  
 'She hears that people are asked to sit down for the meal'

In four of the manuscripts mentioned, *Skånske kirkelov*, *Skånske lov*, *Eriks sjællandske lov*, and *Valdemars lov*, dative is marked.<sup>6</sup> In my search, I included all environments where dative is marked or would have been marked. For example, I included all the cases where the indirect object of *bøte* 'pay someone a penalty' is marked for dative and all the cases where the indirect object is not marked for dative. Likewise, I included all the cases where a preposition occurs with a noun marked for dative and the cases where the noun is not marked for dative. I discarded all cases where a preposition would have assigned accusative (i.e. all cases where a preposition denotes movement). All examples of ambiguous case marking were discarded, i.e. all nouns that belong to the weak declension, except cases where case marking is disambiguated by an adjective (*-um* was also used to mark dative on adjectives). The masculine singular pronoun is included in the figures for three texts, *Skånske kirkelov*, *Skånske lov*, and *Eriks sjællandske lov*, because in these three texts, *han* 'him-ACC' and *hanum* 'him-DAT' are distinctive. In other parts of the pronominal system, accusative and dative have coalesced. Pronouns other than masculine singular are therefore not included in the figures, unless oblique case has been preserved in

<sup>6</sup>As I have mentioned, dative is also marked in *Jyske lov* and in *Mariaklagen*. Because dative seems to be lexicalized in the two texts, I did not include them in my search.

the passive. In some texts, examples of dative of possession can be found in addition to dative assigned by adjectives. I do not include those cases in the tables below.

(34) Dative plural marking in four Old Danish texts:

Text	Dated	Assigned by			%		
		V	P	Total	V	P	Total
<i>Skånske kirkelov</i>	1174	6/6	25/25	<b>31/31</b>	100	100	<b>100</b>
<i>Skånske lov</i>	1200	14/14	57/57	<b>71/71</b>	100	100	<b>100</b>
<i>Eriks sjæl. lov</i>	1250	3/3	5/7	<b>8/10</b>	100	71	<b>80</b>
<i>Valdemars lov</i>	ca. 1250	1/2	0/4	<b>1/6</b>	50	0	<b>17</b>

In two texts, *Skånske kirkelov* and *Skånske lov*, there are no examples of use of accusative instead of dative. The same can be said about the three cases in *Eriks sjællandske lov* where a verb assigns dative, all of which are passive. In *Eriks sjællandske lov* prepositions assign dative to a plural DP at a rate of 80%. In *Valdemars lov*, there was only one example of dative plural assigned by a verb. In this example, the dative noun is the indirect object of the verb *bøte* 'pay someone a penalty'. In all the cases where a preposition would have assigned dative in this manuscript, accusative is used.

(35) Dative singular marking in four Old Danish texts:

Text	Dated	Assigned by			%		
		V	P	Total	V	P	Total
<i>Skånske kirkelov</i>	1174	10/10	41/46	<b>51/56</b>	100	89	<b>91</b>
<i>Skånske lov</i>	1200	57/57	141/183	<b>198/240</b>	100	77	<b>83</b>
<i>Eriks sjæl. lov</i>	1250	34/40	54/132	<b>88/172</b>	85	41	<b>51</b>
<i>Valdemars lov</i>	ca. 1250	4/10	10/31	<b>14/41</b>	40	32	<b>34</b>

In two texts, *Skånske kirkelov* and *Skånske lov*, there are no instances where a verb assigns accusative instead of dative. There are, however, cases where accusative is used with prepositions instead of dative. In *Skånske kirkelov* dative is used with prepositions in 89% of the cases, whereas in *Skånske lov* dative is used with prepositions at a rate of 77%. In *Eriks sjællandske lov*, dative is used with verbs in 85% of the cases, but only in 41% of the cases where dative

would have been used with a preposition. In *Valdemars lov*, there were four examples of dative singular assigned by a verb. Two examples show preservation of oblique case in the passive and two examples have the word *bondenum* 'the farmer-DAT' where dative is assigned by the verb *forgøre* 'bewitch'. The other six cases where dative would have been used, include the verb *bøte* 'pay someone a penalty'. Of the ten cases where dative is used with a preposition in this text, eight have the word *thingi* 'parliament-DAT' and the preposition *a* 'in/on'.

If the two tables in (35) and (34) are compared, it seems that dative plural marking has survived longer than marking of dative singular in Old Danish. From the table in (35), we might conclude that dative singular marking was gradually lost, and that marking of dative singular had already started to disappear before the turn of the 13th century. From the table in (34), we might however conclude that marking of dative plural was not lost gradually since in *Skånske kirkelov* and *Skånske lov*, marking of dative plural is stable. Marking of dative is also relatively stable in *Eriks sjællandske lov*, whereas it is very unstable in *Valdemars lov*. The reason why dative plural might have survived longer than dative singular might lie in the complexity of the dative plural suffix (-um). Dative singular was only marked with a vowel (-æ) which could only be disambiguated on words that ended on a consonant in nominative/accusative. The situation might also have been the same as in modern Icelandic. In the second class of the strong declension of masculine nouns, dative singular does not have to be marked, e.g. *bekk* 'bench-ACC/DAT'. Furthermore, dative singular is optionally marked on some masculine nouns in the first class of the strong declension, e.g. *hópi* 'group-DAT' vs. *hóp* 'group-ACC/DAT' (cf. e.g. Guðfinnsson 1957 (summarized in Hrafnbjargarson 2003), Kress 1982 and Müller 2003: 5-6).

## 2.2 Case and agreement in the history of Scandinavian and English

As I have mentioned, English and MSc do not mark case on full DPs. In these languages, the only difference in case can be found in the pronominal system (cf. table (23), page 42), where a difference is made between nominative and non-nominative (or oblique), (36)/(37), whereas, in ISc, nouns and pronouns are marked for four different cases, (38)/(39):

(36) En. she – her – hers

(37) Da. hun – hende – hendes ('she')

(38) Ic. a. bát**ur** – bát – bát**i** – bát**s** ('boat')

b. hún – hana – henni – hennar ('she')

(39) Fa. a. bát**ur** – bát – bát**i** – (bát**s**) ('boat')

b. hon – hana – henni – hennara ('she')

During or after the loss of a differentiated case system, constructions which had dative subjects and nominative objects were reanalyzed as constructions with nominative subjects and non-nominative objects. The reanalysis can be described in three stages. At the first stage, subjects can be dative and objects can be nominative. At the second stage, subjects can still be dative but objects that were nominative at stage one have been replaced by accusative objects. At stage three, subjects that were dative at stages one and two have been replaced by nominative subjects and objects are accusative as at stage two.

(40) *DAT-NOM* → *DAT-ACC* → *NOM-ACC*

STAGE	SUBJECT	OBJECT
1. DATIVE – NOMINATIVE	<i>dative</i>	<i>nominative</i>
2. DATIVE – ACCUSATIVE	<i>dative</i>	<i>accusative</i>
3. NOMINATIVE – ACCUSATIVE	<i>nominative</i>	<i>accusative</i>

In the next sections, I will describe the three stages of the process in detail.

## 2.2.1 The DATIVE-NOMINATIVE stage

Icelandic, Old Icelandic (i.e. Icelandic before 1550), Old English (i.e. English before 1100) and the older MSc languages (i.e. Danish before 1200 and Swedish before 1300) are at the DATIVE-NOMINATIVE (DAT-NOM) stage. These languages have DAT-NOM constructions, i.e. constructions where the subject can be dative and the object can be nominative. Falk (1997: 25-43) compares what seems to be oblique subjects in Old Swedish with modern Icelandic oblique subjects. Her conclusion is that none of the subject-hood tests that are used for Icelandic are conclusive subject-hood tests for Old Swedish. Falk (1997: 37) does, however, say that the position of the nominative element in Old Swedish DAT-NOM constructions is more like the position of an object rather than of a subject. Barðdal (2000: 37-38, 41-45) on the other hand shows that *raising* and *control* are conclusive subject-hood tests for Old Swedish and she comes to the conclusion that Old Swedish had oblique subjects.<sup>7</sup>

- (41) OE. *ðam*      *wife*      *þa*      *word*      *wel*      *licodon*  
*The.DAT woman.DAT the.PL.NOM words.NOM well liked.3PL*  
 'The woman liked the words well' (cobeowul 639.538)

- (42) OI. *likaðe*      *yör*      *vel*      *fínn*      *finnskattrin*  
*liked.3SG you.DAT.PL well fine.NOM.SG finntax.NOM.SG*  
 'Did you like the fine tribute paid by the Finns?'  
 (1300, *Egils saga*, van Weenen 1988: 105)

- (43) OS. *æn*      *sidhan*      *hæne*      *kom*      *innan*      *hug*      *förbudit*,      *tha*      ...  
*but since her.DAT came in mind ban-the.NOM then ...*  
 'but since she remembered the ban then ...' (1200-1300, Falk 1997: 37, (36c))

- (44) Ic. *Mér*      *líka*      *þessir*      *bátar*  
*Me.DAT like.3PL those.NOM.PL boats.NOM.PL*  
 'I like those boats'

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<sup>7</sup>Cecilia Falk (personal communication) found no examples of the word order **complementizer** – **NP<sub>NOM</sub>** – **verb<sub>fin</sub>** – **NP<sub>DAT</sub>** – **verb<sub>main</sub>** with verbs that seem to assign dative to the subject in Old Swedish:

- (i) \*om det havde dig syntes  
*if it had you thought*

In section 2.3.1.1, I will show that such examples are relevant when determining which of the two arguments is the subject.

In DAT-NOM constructions, the verb can only show agreement with third person nominative objects. In corresponding constructions in German, the verb shows agreement with the nominative NP in both person and number:

- (45) Ge. *Ihr*                      *gefällt* *mir*  
*You.NOM.PL like.2PL me.DAT*  
 'I like you'

The fact that the verb cannot show person agreement with all nominative NPs in Icelandic, Old MSc and Old English shows that the nominative NP in these languages has to have another structural position than in German, where the verb always shows agreement with nominative NPs. In (46a), the object is first person singular and in (46b), it is second person singular. In both examples, the verb is third person singular:

- (46) OI. a. *ef þer*                      *þiker*                      *ek*                      *ofmiog*                      *vapnaðr* *moti*  
*if you.DAT.SG think.3SG I.NOM too.much armed against*  
*þer*  
*you.DAT.SG*  
 'if you think I am too much armed against you'  
 (1300, *Finnboga saga*, van Weenen 1988: 177)
- b. *þætti*                      *mer*                      *þu*                      *vel* *mega* *ifr* *lata*  
*thought.3SG me.DAT you.NOM.SG well may over let*  
 'I think you should be pleased' (1300, *Egils saga*, van Weenen 1988: 147)

Another observation is that at this point in time, all the languages were OV languages like modern German. It is only in German that first and second person nominative pronouns have to stand to the left of the verb, i.e. move into the specifier of IP. The unmarked order is the order in (45) whereas in the Icelandic, the unmarked order is the order in (46a), where the dative pronoun precedes the verb.

In a German non-V2 context, the dative NP can precede the nominative element but in specific contexts, the unmarked order is the reverse order. Normally the dative NP is the NP which is marked for animacy, while the nominative NP usually is non-animate. If the two are reversed the unmarked order clearly becomes the NOM-DAT order (Gereon Müller, personal communication, and Müller 2000: 280, fn. 20, (i-a), given in (47)):

- (47) Ge. dass der neue Intendant dem ganzen Ensemble  
*that the.NOM.SG new manager the.DAT.SG whole ensemble*  
 gefallen hat  
*liked.PP had.3SG*  
 'that the new manager had pleased the whole ensemble'

Finally, the examples in (48) strongly suggest that the NOM-DAT order is the base-generated order in German.

- (48) Ge. a. \*dass dem Intendanten sich gut gefällt  
*that the.DAT.SG manager self.NOM good likes.3SG*  
 b. dass der Intendant sich gut gefällt  
*that the.NOM.SG manager self.DAT good likes.3SG*  
 'that the manager likes himself' (Müller, 2000: 280, fn. 20, (i-b))

If (48a) was the base-generated structure, i.e. without scrambling, it should be grammatical because the dative NP would bind the reflexive, whereas if the nominative NP in (48b) was scrambled, it should be ungrammatical because the reflexive pronoun would c-command the trace of the scrambled NP (Gereon Müller, personal communication).

The claim is that the dative NP in Old MSc and Old English really is the subject of the clause, as has been claimed for modern Icelandic (cf. e.g. Andrews 1976, Sigurðsson 1989) whereas this is not the case in German.<sup>8</sup>

Because the nominative NP in Old English, Old MSc and Icelandic is not in the specifier of IP, i.e. it is not in a Spec-Head relationship with the finite verb, the verb cannot show agreement with it in person. In German, the nominative NP is in the specifier of IP, i.e. it is in a Spec-Head relationship with the finite verb, which makes it possible for the verb to show agreement with it in person.

The conclusion that can be drawn from these facts is that person agreement in the Germanic languages is strictly local (i.e. person agreement is strictly Spec-Head related). The verb can only show agreement with nominative NPs, and furthermore, verbs can only show person agreement with nominative NPs if they are positioned in the specifier of IP.

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<sup>8</sup>Based on similar subject-hood tests as were used to prove the existence of dative subjects in Icelandic (Andrews 1976, Sigurðsson 1989 among others), Eythórsson & Barðdal (2003) argue that German in fact does have dative subjects.



### 2.2.2 The DATIVE-ACCUSATIVE stage

The languages at this stage still have dative subjects but the nominative objects found at the DAT-NOM stage have been replaced by accusative objects. Examples of languages of this type are Faroese, Old Danish, Middle Swedish, and Middle English.

- (49) ME. þonne soðlice Gode licað ure drohtnunge  
*then truly God.DAT.SG likes.3SG our living.ACC*  
'Then truly, God likes our way of life' (Allen, 1995: 77, (57))
- (50) MS. Honom thykte sik wara j enom lystelikom  
*Him.DAT.SG thought.3SG self.ACC be in a.DAT sweet.DAT*  
*stadh*  
*place*  
'He thought he was in a sweet place' (Falk, 1997: 78, (60b))
- (51) MD. Honum thøkte sek vara i en lysteligen stath  
*Him.OBL thought SELF.OBL be in a wonderful town*  
'He thought he was in a wonderful town' (1425, *SJTR*)
- (52) Fa. Mær dāmar væl hasa bókina  
*Me.DAT likes.3SG well this.ACC book.ACC*  
'I really like the book over there' (Barnes, 1986: 33, (89a))

At this stage, the verb does not show agreement. Instead it has the default form third person singular. Allen (1995: 76-79) argues that *drohtnunge* 'living' in (50) is not accusative. Her claim is that the sentence in (50) is an instance of the DAT-NOM construction, only without the verb showing agreement with the nominative object. The reason why Allen does not think that *drohtnunge* is accusative is that it is actually ambiguous whether *drohtnunge* is marked for accusative or nominative. In the declension of feminine nouns, the accusative ending *-e* had spread to the nominative form and according to Allen (1995: 77), the only examples of this type (i.e. where it is ambiguous whether the NP is marked for nominative or accusative) found in Old and Middle English involve feminine third person objects.

However, there is one argument against Allen's claim, namely *Occam's razor* which tells us to assume the existence of as few entities as possible. According to *Occam's razor*, it is preferable to take *drohtnunge* in (50) to be marked for accusative exactly like *sik* in (51) and *hasa bókina* in (52) when there is no clear evidence that Old English is different from Middle Swedish, Middle Danish, and Faroese in this respect. The advantage of assuming that *drohtnunge* is accusative

in (50) is that we can assume that the change from DAT-NOM to NOM-ACC happened in the same way in English as the same change did in the Scandinavian languages. Otherwise, we would have to come up with two independent and completely different explanations for what may be seen as one and the same development.

Apart from this, examples can be found where verbs that used to be DAT-NOM verbs in Old English have become DAT-ACC verbs in Middle English. The Old English verb *(of)hreowan* 'pity' occurs nineteen times in the YCOE with an oblique subject, either with a *that*-clause complement or a DP object. Thirteen times, *(of)hreowan* either occurs with a nominative, accusative or genitive object. As can be seen in the table in (53), *(of)hreowan* most often occurs with a nominative object. In the two last examples (DAT-?), it is ambiguous which case the object is marked for, it could either be nominative or it could be accusative:

(53) Old English *(of)hreowan* in the YCOE:

Type of construction	Number	%
DAT-NOM	5/13	39
DAT-ACC	3/13	23
DAT-GEN	3/13	23
DAT-?	2/13	15

In the PPCME2, there are three examples of the same verb (*areowe*). There are two examples of *areowe* with an oblique subject, the third example is an imperative. The example in (54) is the only example where both arguments are pronouns. Both are oblique:

(54) ME. him areowe ou  
him.OBL pitied you.OBL  
'he pitied you' (CMANCRIW II.55.528)

I will come back to the change from DAT-NOM to NOM-ACC in English in section 2.4 where I will try to argue further for the hypothesis that I have presented here.

When there is a third person plural accusative object, as in (55), the verb does not show agreement with it in number, as it did at the previous stage, (44) where the object was nominative. At the same time, MSc and English verbs gradually lost their inflectional morphemes. However, Faroese still has singular and plural markers.

- (55) Fa. Mær **dámar** / \*dáma væl hesar bátarnar  
*Me.DAT likes.3SG / like.3PL well these.ACC boats.ACC*  
 'I really like the boats over there'

The main reason for the verb not being able to show agreement here is the lack of a nominative NP in the clause.

### 2.2.3 The NOMINATIVE-ACCUSATIVE stage

Modern MSc and modern English only have nominative subjects and non-nominative (i.e. accusative) objects. Late 20th century Faroese does not have dative subjects anymore, but objects can be marked for all four morphological cases. The interesting fact about Faroese is that it seems to be in the process of moving from the DATIVE-ACCUSATIVE stage, as in (54) and (55) to the NOMINATIVE-ACCUSATIVE stage as in (56). According to Barnes (1986), the sentence in (56) is only accepted by speakers of Faroese born after 1960.<sup>9</sup>

- (56) Fa. Eg **dámi** væl hasa bókina  
*I.NOM like.1SG well this book*  
 'I really like the book over there' (Barnes, 1986: 33, (89b))

The difference between the DAT-NOM stage and the NOM-ACC stage is that at the NOM-ACC stage, the verb shows person and number agreement with the nominative NP. As already mentioned, verbs only show agreement with third person nominative NPs in the corresponding (DAT-NOM) constructions in Icelandic.

When compared to Icelandic, which still has dative subjects, I take the reason for Faroese not having dative subjects, to be the fact that Faroese does not have inherent case anymore. This has previously been proposed by Holmberg & Platzack (1995: 172-176) in another context.

In Icelandic, the verb *hjálpa* 'help' assigns dative to the object, (57a). In the passive in (57c), the dative is preserved on the subject:

- (57) Ic. a. Hún hjálpaði honum  
*She.NOM helped.3SG him.DAT*  
 'She helped him'

<sup>9</sup>Eythórrsson & Jónsson (2003: 219-225) show that there is considerable variation among speakers of Faroese born in 1988-1991 with respect to which case is used on the subject, nominative or dative, with verbs that originally had a dative subject.

- b. \*Hann var hjálpaður  
He.NOM was.3SG helped.NOM.SG.MASC
- c. Honum var hjálpað  
Him.DAT was.3SG helped.SUP  
'He was helped'

In Faroese, the verb *hjálpa* also assigns dative to the object, (58a), but unlike Icelandic, the dative is not preserved in the passive, (58b) vs. (58c).

- (58) Fa. a. Hon hjálpti honum  
She.NOM helped.3SG him.DAT  
'She helped him'
- b. Hann varð hjálptur  
He.NOM became.3SG helped.NOM.SG.MASC  
'He was helped'
  - c. \*Honum varð hjálpt  
Him.DAT became.3SG helped.SUP

Yet another difference between Icelandic and Faroese, also pointed out by Holmberg & Platzack (1995: 173), can be found in ECM constructions. If the verb in the embedded clause assigns nominative, the subject receives case from the matrix verb in both the languages, (59) and (60).

- (59) Ic. Hún hélt mig hafa séð  
She.NOM believed.3SG me.ACC have seen.SUP  
jólaköttinn  
Christmas cat-the.ACC  
'She believed me to have seen the Christmas cat'
- (60) Fa. Hon helt meg hava sæð  
She.NOM believed.3SG me.ACC have seen.SUP  
jólakettuna  
Christmas cat-the.ACC  
'She believed me to have seen the Christmas cat'

One of the subject-hood tests that were used to argue for the existence of oblique subjects in Icelandic was ECM constructions. If for example the verb *líka* 'like' is embedded under ECM verb, the subject in the embedded clause will surface marked for dative, not for accusative, i.e. the case assignment of the embedded verb overrides the case assignment of the ECM verb, (61a):

- (61) Ic. a. Hún hélt **mér** hafa líkað  
*She.NOM believed.3SG me.DAT have liked.SUP*  
gjöfin  
*present-the.NOM*  
'She believed me to have liked the present'
- b. \*Hún hélt **mig** hafa líkað  
*She.NOM believed.3SG me.ACC have liked.SUP*  
gjöfin  
*present-the.NOM*

This does not happen in Faroese. If for example the verb *dáma* 'like' is embedded under an ECM verb, the subject in the embedded clause will not surface marked for dative, but for accusative, i.e. the case assignment of the embedded verb is overridden by the case assignment of the ECM verb, (62a) vs. (62b), just as if the verb in the embedded clause had assigned nominative to its subject.

- (62) Fa. a. \*Hon helt **mær** hava dámað  
*She.NOM believed.3SG me.DAT have liked.SUP*  
gávuna  
*present-the.ACC*
- b. Hon helt **meg** hava dámað  
*She.NOM believed.3SG me.ACC have liked.SUP*  
gávuna  
*present-the.ACC*  
'She thought I had liked the present'

Based on similar examples, Holmberg & Platzack (1995: 174) conclude that “m-case [i.e. morphological case] is weaker in Faroese as compared with Icelandic” and that “its categorial status is different from that of Icelandic”. What the example in (56) shows is that morphological (or lexical) case has become even weaker in late 20th century Faroese than in Faroese spoken by Faroese speakers born before 1960. The fact that dative is still preserved in the passive of some verbs should not be surprising. The same happened in Old and Middle Danish. As I mentioned in section 2.1.3, examples of oblique case preservation can be found in the passive in the manuscript *Valdimars lov* even though dative assignment is not active in this text (cf. table (35) page 47).

In the Germanic languages, the prerequisite for the verb to show agreement with something is that this something is nominative. Therefore, if the subject is not nominative, the verb cannot

show local agreement, i.e. Subject-Verb agreement with it. It has to find something else to show agreement with. In Icelandic there is the possibility of showing agreement with nominative objects, but this possibility is restricted to third person because person agreement in the Germanic languages is strictly local. At the DATIVE-ACCUSATIVE stage there is no nominative to show agreement with. However, when dative subjects have been replaced by nominative subjects as in late 20th century Faroese, (61), there is a nominative NP in IP-Spec which makes person agreement possible.

## 2.3 Non-nominative subjects in Old and Middle Danish

As already mentioned, the ISc languages both have preserved a morphological case system, that still differentiates between four cases, namely nominative, accusative, dative, and genitive. The standard MSc languages have not lost all differentiated cases; in the pronominal system, there still is a difference between nominative and non-nominative, i.e. accusative or dative, henceforth oblique or OBL, (see also Jørgensen 2000*b*).

Another difference between the two language groups is that the two ISc languages have oblique subjects, whereas the MSc languages have nominative subjects exclusively. Various subject-hood tests show that the subject in Icelandic sentences such as (63) is not *þessir strákar* 'these boys', even though it is marked for nominative, but *henni* 'her', even though it is marked for dative. Likewise, the subject in the Faroese sentence in (64) is not *hesar drongirnar* 'these boys', that is marked for accusative, but *henni* 'her', even though it is marked for dative:

- (63) Ic. ... að **henni** líka þessir strákar  
 ... that her.DAT like.3PL these.NOM boys.NOM  
 '... that she likes these boys'
- (64) Fa. ... at **henni** dāmar hesar drongirnar  
 ... that her.DAT likes.3SG these.ACC boys-the.ACC  
 '... that she likes these boys'

Even though the MSc languages only have nominative subjects, this has presumably not always been so. An example such as (65) shows that the verb *drømme* 'dream' has not always assigned nominative case to its subject in Danish:

- (65) OD. Drømde **mik** en drøm i nat ...  
 Dreamt me.OBL a dream in night ...  
 'I dreamt a dream tonight ...' (1300, *RUNEV*, Brøndum-Nielsen 1932: 14)

To show that Old Danish (OD) and Middle Danish (MD) did have oblique subjects, I will make use of the subjecthood tests that have been used to argue for the existence of oblique subjects in Icelandic and Faroese (cf. Andrews 1976, Thráinsson 1979, and Sigurðsson 1989), on data I have collected at the Old Danish Dictionary. The examples I have collected include the verbs *behage* 'please' *drømme* 'dream', *dughe* 'be fit' *gaghne* 'be useful' *græmje* 'grieve', *like* 'like', *lithe* 'suffer', *sjune* 'seem' and *thykje* 'think / seem'.

I collected 139 examples from the period 1200-1515 where either the subject, or the object, or both the subject and the object are pronouns. Not all of the subject-hood tests can be used for Danish but the tests that can be used, e.g. subject position and reflexivization show that the majority of the examples (107 of 139, 77%) have oblique subjects.

Around the year 1450, the probability of finding sentences (with the nine verbs mentioned above) with oblique subjects becomes less than the probability of finding sentences with a nominative subject and an accusative object.

### 2.3.1 Subject-hood tests

There are various ways of testing subject-hood. Subjects have special positions in embedded clauses, reflexive pronouns can only be bound by subjects and subjects have a special position in ECM constructions. An infinitive cannot check case on its subject, instead, the matrix verb checks oblique case on the subject in the embedded clause (for example: *She saw [me read the book]*). There are eight subject-hood tests (for a more detailed discussion and a slightly different division of the tests, see Thráinsson 1979, Sigurðsson 1989: 204-209, Rögnvaldsson 1996, and Barðdal 2000):

- |                          |                        |                  |
|--------------------------|------------------------|------------------|
| 1. Position              | 4. ECM                 | 7. Control       |
| 2. Reflexivization       | 5. Raising             | 8. Cliticization |
| 3. Conjunction Reduction | 6. Heavy Subject Shift |                  |

Some of the eight tests are rather difficult to carry out, as for instance *ECM construction*, because it is rare to have a verb that assigns oblique case to its subject embedded under verbs like *se* 'see', *høre* 'hear', *føle* 'feel', *bede* 'ask', and *lade* 'let'. A test like *Heavy Subject Shift* is also hard to carry out because differences in case can only be found within the pronominal system and pronouns are not "heavy" enough to undergo this type of movement.

For the Germanic languages, *control*, *conjunction reduction* and *reflexivization* are considered to be the main subject properties (Eythórsson & Barðdal 2003: 147 and references there).



### 2.3.1.1 Position

Subjects have a specific position in the clause. In the unmarked case, where a subject has been topicalized, it is positioned immediately before the finite verb, i.e. in CP-Spec:<sup>10</sup>

- (66) MD. **Meg** synes ej blomster lystelig  
*Me.OBL seems.SG not flowers beautiful*  
'I do not think that flowers are beautiful' (1509, *FLOR.1321*)

- (67) Da. **Jeg** har måske læst bogen  
*I.NOM have maybe read book-the*  
'I have maybe read the book'

If the subject is not topicalized, its usual position is the position immediately after the finite verb, i.e. IP-Spec. In (68a) and (69a), an adverbial has been topicalized, (68b) and (69b) are examples of inversion in a yes/no question and (68c) is a V1-declarative:<sup>11</sup>

- (68) MD. a. *thij synes meg thet ynkelicke*  
*therefore thought.SG me.OBL it miserable*  
'Therefore, I thought it was miserable' (1509, *FLOR.v1404*)

- b. *synes thek ey so at være?*  
*thinks.SG you.OBL not such to be*  
'Do you not think that it is such?' (1500, *SUSO*)

- c. *syntis honum som the komo til et stort*  
*thought.SG him.OBL as they.NOM came.3PL to a big*  
*vatn*  
*lake*  
'He thought that they had come to a big lake' (1425, *SJTR*)

- (69) Da. a. *Derfor har jeg læst bogen*  
*Therefore have I.NOM read book-the*  
'Therefore, I have read the book'

- b. *Har du ikke læst bogen?*  
*Have you.NOM not read book-the*  
'Haven't you read the book?'

In embedded clauses, the subject immediately follows the complementizer:

<sup>10</sup>Like modern Danish, Old and Middle Danish were V2 languages.

<sup>11</sup>V1-declaratives are not possible in modern Danish.

(70) OD. um **them** thickir swa  
*if they.OBL thinks.3SG such*  
 'if they think such' (1200, SKLOV)

(71) MD. tho at **thek** synes annær ledhes  
*though that you.OBL think.SG other wise*  
 'Though you think it is otherwise' (1450, SØNDEV)

(72) Da. a. ... hvis **de** ikke har læst bogen  
*... if they.NOM not have read book-the*  
 '... if they have not read the book'  
 b. ... selvom **du** aldrig har læst bogen  
*... though you.NOM never have read book-the*  
 '... though you have never read the book'

I found no examples of topicalization of objects in embedded clauses with verbs that assign oblique case to their subjects, i.e. the word order **complementizer – object – verb<sub>fin</sub> – subject – verb<sub>main</sub>**:

(73) a. \*om det havde dig syntes  
*if it had you thought*  
 b. \*... selvom bogen havde du læst  
*... though book-the had you read*

Examples such as (70) are relevant because if *them* 'them' in (70) were an object following a complementizer, then examples such as (73a) should also exist.

### 2.3.1.2 Reflexivization

In modern Scandinavian (MSc and ISc), reflexive pronouns can only be bound by subjects:

(74) Da. a. **Hun<sub>i</sub>** fortalte ham<sub>j</sub> en historie om **sig**  
*She.NOM told him.OBL a story about SELF*  
**selv<sub>i/\*j</sub>**  
*SELF*  
 'She told him a story about herself'  
 b. **Han<sub>i</sub>** gik **sig<sub>i</sub>** en tur på stranden  
*He.NOM walked SELF a tour on beach-the*  
 'He took himself a stroll on the beach'

According to Mikkelsen (1911: 258-267), this also holds for the older stages of Danish. Therefore, *honum* 'him' in (75) must be the subject:

- (75) MD. **Honum** thøkte [ **sek** vara i en lysteligen stath ]  
*Him.DAT thought SELF be in a wonderful town*  
 'He thought that he was in a wonderful town' (1425, *SJTR*)

### 2.3.1.3 Conjunction Reduction

In modern Scandinavian (MSc and ISc), the subject in the last of two conjoined clauses can be omitted, (76a). In such a context, the object cannot be omitted, (76b):

- (76) Da. a. I dag læste jeg en bog og [e] skrev et brev  
*Today read I.NOM a book and wrote a letter*  
 'Today, I read a book and wrote a letter'
- b. \*Denne bog fandt jeg og [e] købte jeg  
*This book found I.NOM and bought I.NOM*  
 med det samme  
*immediately*

As Lollesgaard (1920: 43) observes, the oblique *hænnæ* 'her' in the first of the two conjoined clauses in (77) is the omitted subject in the second one. To be exact, it is *hænnæ* that allows the omission of the nominative subject in the second conjunct. Lollesgaard (1920: 43) actually claims that the first part of (77) (*tha thottæ hænnæ ...*) has no subject and that *hænnæ* is the subject of an ECM clause: *hænnæ storlikæ illæ wære*.

- (77) MD. *tha thottæ hænnæ storlikæ illæ wære ok [e] wissæ æki*  
*then thought her.OBL very bad be and knew not*  
*gørlæ, hwat hun skuldæ til takæ*  
*exactly what she should to take*  
 'then, she was very displeased and she didn't know what to do'
- (1300, *En legende*, Brandt 1857: 56)

If *hænnæ* 'her' in (77) were not the subject of the first conjoined clause it could not have allowed for the omission of the subject in the second conjoined clause.

### 2.3.1.4 ECM constructions

In ECM constructions, the subject position is the first position of the embedded clause. The verb in the embedded clause is an infinitive and it cannot check case on the subject of the clause. Therefore, the matrix verb (usually a perception verb such as *se* 'see', *høre* 'hear', *bede* 'ask', *føle* 'feel' or *lade* 'let') checks case on the subject. I found no examples of oblique case assigning verbs in ECM constructions but such examples can be found:<sup>12</sup>

- (78) MD. ... och lodh sigh mōghit tycke atwære cloogh vdi loghen  
 ... and let SELF much think to be clever about law-the  
 '... and let himself make the impression as if he knew much about the law'  
 (1450-1500, *DUNSTAN*)

This test might however not be suitable for Danish as one of the ECM verbs, the verb *lade* 'let', allows the object to be topicalized:

- (79) MD. oc lada **honum** cristna af pafvan sælfom  
 and let him.OBL Christianize of pope self  
 'and let him be Christianized by the pope himself' (1425, *SJTR*)

This is however only possible if the verb that is embedded under *lade* 'let' is intransitive. If in modern Danish, a transitive verb is embedded under *lade*, the only possible word order is ***lade* - subject - verb<sub>inf</sub> - object**:

- (80) Da. a. Han lod mig skrive brevet  
 He let me write letter-the  
 'He let me write the letter'  
 b. \*Han lod brevet (mig) skrive (mig)  
 He let letter-the me write me

The same holds for Old and Middle Danish:

- (81) MD. hwij lader thu tha berøffue titt eghet folck?  
 why let you them plunder your own people  
 'why do you let them plunder your own people' (1534, *KFL*)

Nevertheless, I have found no examples (similar to (81)) where the verb that is embedded under *lade* 'let' is a verb that assigns oblique case to its subject.

<sup>12</sup>Example (78) is cited in Barðdal (2000: 35, (16)), who cites Diderichsen (1931-1937: 170). Here, it is in my translation.

### 2.3.1.5 Raising

In raising, the subject of the embedded clause raises to the subject position of the matrix clause. Usually, the subject is assigned nominative case by the matrix verb but inherent oblique case (potentially assigned by the infinitive) overrides nominative case assignment and the inherent case surfaces in the matrix clause.

I found no cases of raising with oblique case assigning verbs in the Old Danish Dictionary but cases of raising have been cited in the literature (Barðdal 2000: 37). Barðdal's (2000: 37) three examples from Middle Danish all include modal verbs (rather than “real” raising verbs like *seem*). She cites two examples with the modal *kunne* ‘can’, and one with the modal *må* ‘may’, shown in (82), Barðdal (2000: 37, (24)):

- (82) MD. **them<sub>i</sub>**      motthæ [ **t<sub>i</sub>** ther foræ grwæ      ]  
         *them.OBL might                      that for disgust*  
         ‘They should be disgusted by that’      (1450, *RIMKR*, Nielsen 1895-1911: 71)

In the Old Danish Dictionary, I found three such examples, one with the modal *skulle* ‘shall’ and two with the modal *må* ‘may’.

This depends on the assumption that modals are raising verbs (which has been pointed out by among others Denison 1993 and van Kemenade 1992). It would, however, have been less controversial if the example had had the verb *forekomme* ‘seem’ instead of a modal. As I have already mentioned, I found no such examples.

### 2.3.1.6 Heavy Subject Shift

In modern Danish, heavy pronominals that behave like full DPs can be found, for example *du og jeg* ‘you and I’ or *ham med den grimme Volvo* ‘him with the ugly Volvo’ but they do not necessarily have to undergo *Heavy Subject Shift* (Jørgensen 2000b: 72-76, and Mikkelsen 1911: 593-596).<sup>13</sup>

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<sup>13</sup>Accordingly *Heavy Subject Shift* is very marked if not ungrammatical in modern Danish. A clause without *Heavy Subject Shift* will always be chosen over a clause with *Heavy Subject Shift* (Ken Ramshøj Christensen, personal communication).

- (83) Da. Da kørte (**ham med den grimme Volvo**) lige ind i  
 Then drove (him.OBL with the ugly Volvo) right in in  
 tankstationen (\*?**ham med den grimme Volvo**)  
 petrol station-the ( him with the ugly Volvo)  
 'Then, the one with the ugly Volvo crashed right into the petrol-station'

Because I only collected examples with pronominals, I found no examples with oblique case assigning verbs that show *Heavy Subject Shift* in the Old Danish Dictionary. I have not found examples of *Heavy Subject Shift* in the corpus *Dansk Sprog- og Stilhistorisk Database* (Ruus 2001) either.

Furthermore, the status of *Heavy Subject Shift* as a subject-hood test for Danish is not clear, cf. that e.g. Vikner (1995a: 206) considers *Heavy Subject Shift* to be ungrammatical in Danish, even with heavy NP subjects.

### 2.3.1.7 Control

Control infinitives are embedded infinitival clauses where the subject has been omitted. They are called control infinitives because the subject or the object of the matrix clause controls, and allows for the omission of the subject in the embedded clause. In the modern Danish sentence in (84), the subject *han* 'he' controls the subject gap in the embedded clause. The subject gap is filled with **PRO**. **PRO** can either be controlled by a subject or an object, and **PRO** is always coreferent with the controller in the matrix clause:

- (84) Da. **Han**<sub>i</sub> håber [ at **PRO**<sub>i</sub> behage sin svigermor ]  
 He.NOM hopes to please POSS mother-in-law  
 'He hopes to please his mother-in-law'

Sigurðsson (1989: 207) shows that **PRO** is case marked in Icelandic. **PRO** can show up with both verbs that assign nominative to their subject as well as verbs that assign dative and accusative to their subjects. I found no examples of control infinitives in the Old Danish Dictionary, but I have found examples in the corpus *Dansk Sprog- og Stilhistorisk Database* (Ruus 2001). The verb *bør* 'ought', which embeds a control infinitive, used to assign an oblique case to its subject. In (85a), **PRO** is controlled by the oblique *thek* 'you' and in (85b), **PRO** is controlled by the oblique *teg* 'you'. Both *holde* 'keep' and *gøre* 'do' assign nominative case to their subject:

- (85) MD. a. thæn edhin bør **thek<sub>i</sub>** ingelund [ at **PRO<sub>i</sub>** halda ]  
*that oath ought you.OBL in no way to NOM keep*  
 'You ought not keep this oath in any way' (1425, *SJTR*)
- b. men tenck thu huad **teg<sub>i</sub>** bør [ att **PRO<sub>i</sub>** gøre ]  
*but think you what you.OBL ought to NOM do*  
 'But think what you ought to do' (1534, *KFL*)

Likewise, **PRO** could show up in control infinitives with oblique case assigning verbs. The verbs *undre* 'be surprised' and *lide* 'like' had oblique subjects in Old and Middle Danish. Note that in (86b), *Christum* 'Christ' is marked for dative:

- (86) MD. a. Men [ **een god furste** ]<sub>i</sub> bør icke att **PRO<sub>i</sub>** wndre  
*But a good prince ought not to OBL surprise*  
*paa the thing*  
*over those things*  
 'But a good prince ought not to be surprised over those things' (1534, *KFL*)
- b. Burde det ikke **Christum<sub>i</sub>** [ at **PRO<sub>i</sub>** lide det ] ...  
*Ought it not Christ.DAT to OBL like it ...*  
 'Ought Christ not like it ...' (1638, *BROCHSAM*)

It does not matter whether the controller in the matrix clause is the subject or the object. What matters is that the subject of the embedded clause has been omitted. In (86), the oblique argument has been omitted, i.e. the oblique argument is the subject.

### 2.3.1.8 Cliticization

According to Brøndum-Nielsen (1965: 48), clitics are "especially common in accusative and show up in texts that are affected by the spoken language" (my translation). In Old Danish, *han* 'him.ACC' had the clitic form *-an/-æn*, or *-n* and *hana* 'she.ACC' had the clitic form *-ana/- (æ)na*. I found no examples of cliticization. The reason might be that the clitics have been replaced by full pronouns in later versions of the same text (Brøndum-Nielsen, 1965: 48).

### 2.3.2 Summary

In Icelandic, oblique subjects pass all the eight subject-hood tests. In Old and Middle Danish, oblique subjects pass subject-hood tests like *position*, *reflexivization*, *conjunction reduction*,

*raising*, and *control*. In Old and Middle Danish, oblique subjects show up in the same positions as nominative subjects in matrix clauses, embedded clauses and in sentences where something else than the subject has been topicalized.

With respect to reflexivization and conjunction reduction, oblique subjects behave in the same way as nominative subjects in Old and Middle Danish. Reflexive pronouns could be bound by oblique subjects and it was possible to omit an oblique subject in the last of two conjoined clauses.

Examples of *raising* can also be found in Old and Middle Danish. In all examples the matrix verb is a modal verb and in all cases the subject preserves the oblique case assigned to it by the infinitive in the embedded clause. Control infinitives with oblique subjects also existed in Old and Middle Danish. As I hope to have shown, **PRO** could show up in control infinitives with oblique case assigning verbs.

I have not found any examples of cliticization of oblique subjects in Old and Middle Danish. Like in modern Danish, only pronouns were marked for morphological case in Old and Middle Danish. I have therefore not found examples of *Heavy Subject Shift* in Old and Middle Danish but this test might not be suitable as a subject-hood test for Danish.

Another test, *ECM construction*, might also not be suitable for Danish. At least one of the ECM verbs, *lade* 'let', allows for topicalization of the object.

### 2.3.3 Conclusion

I hope to have shown that Old and Middle Danish had oblique subjects. This conclusion is drawn from the fact that oblique subjects in Old and Middle Danish pass five of the eight subject-hood tests, *position*, *reflexivization*, *conjunction reduction*, *raising*, and *control*. Three of the tests that oblique subjects in Old and Middle Danish pass are the tests that are considered to be the main properties of subjects in the Germanic languages, namely *reflexivization*, *conjunction reduction*, and *control*.



## 2.4 Dative subjects in Old and Middle English

In section 2.2.1, I claimed that Old and Middle English have dative subjects like Icelandic. A fair amount of literature has been devoted to this topic (cf. e.g. Allen 1995, Denison 1993, Fischer & van der Leek 1983, and most recently Sinar 2002) but there is no consensus yet among linguists as to whether Old English had oblique subjects or not. In this section, I would like to argue that Old and Middle English had oblique subjects and nominative objects and that these were reanalyzed as nominative subjects and oblique objects in the three steps I described in section 2.2.

The Old English verbs that are typically found in the DAT-NOM constructions described in section 2.2 belong to one class of experiencer verbs that have been called *class I verbs* (Allen 1995: 69, Elmer 1981, Fischer & van der Leek 1983: 347). Verbs in this class assign dative to the experiencer and nominative to the theme:

(87) *Old English class I verb:*

& cwædon, þæt him eallum þa wel  
and said that them.DAT all.DAT the.NOM.PL well  
**licodon**  
liked.3PL  
'and said that they liked them well' (cobede 32.2811)

In the second class (usually called *class N verbs*), either dative or accusative is the case of the experiencer and genitive is the case of the theme:

(88) *Old English class N verb:*

oððæt him **wlatode** þære gewilnunge  
until that him.DAT nauseated the.GEN desire.GEN  
'Until he was sick of the desire' (coaelhom 89.3130)

In the third class (usually called *class II verbs*), nominative is the case of the experiencer and genitive is the case of the theme:

(89) *Old English class II verb:*

þonne ge min **behofiað**, þonne ic helpe eow  
when you.NOM mine.GEN need.PL then I.NOM help you.DAT  
'when you need me, I help you' (coaelive 375.704)

In section 2.2, the hypothesis was that DAT-NOM constructions were reanalysed as NOM-ACC constructions in three steps.

(90) *DAT-NOM*  $\longrightarrow$  *DAT-ACC*  $\longrightarrow$  *NOM-ACC*

At the first stage, subjects can be dative and objects nominative. At the second stage, the nominative objects found at the first stage have been replaced by accusative (or oblique) objects and at the third stage, subjects can only be nominative. Such a reanalysis is possible only if the dative argument of verbs like *lician* 'like' is taken to be the subject. Jespersen (1927: 209) explicitly says that the nominative argument of *lician* is the subject and Jespersen (1894: 216) says that changes in word order were the major contributor to the change from DAT-NOM to NOM-ACC in English. The reason why the dative usually precedes the verb in such constructions is according to Jespersen (1894: 217) that "this position was undoubtedly the greater interest felt for the person, which caused the word indicating him to take a prominent place in the sentence as well as in the consciousness of the speaker. And so this "psychological subject," [...] eventually became the grammatical subject as well."

Since dative subjects pass all subject-hood tests in Icelandic except two, being nominative and triggering Subject-Verb agreement, there is overwhelming evidence that the dative argument in Icelandic DAT-NOM constructions is in fact the subject. Likewise, nominative objects show all the behavior of normal objects in Icelandic except that they can trigger number agreement on the verb. For example, nominative objects undergo object shift to the same extent as accusative and dative objects.<sup>14</sup> Allen (1995: 50-59, 112-117) shows that Old English dative arguments in DAT-NOM constructions pass one of the subject-hood tests for the Germanic languages, namely *Coordinate Subject Deletion* (the same test as *Conjunction Reduction* from section 2.3).

The dative argument also seems to pass other subject-hood tests. If something else than the

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<sup>14</sup>The only difference between nominative and accusative/dative objects in Icelandic that I am aware of is that nominative negative objects cannot undergo NEG-Shift which is otherwise obligatory. Compare (ia) and (ib):

- (i) Ic. a. Hann hefur [ engri konu ] bjargað \*[ engri konu ]  
           He has no.DAT woman.DAT saved no.DAT woman.DAT  
           'He has saved no woman'  
       b. Honum hefur \*[ engin bók ] líkað \*[ engin bók ]  
           Him.DAT has no.NOM book.NOM liked no.NOM book.NOM

This difference might, however, not be due to the object being nominative but rather the selectional properties of the verb.

subject has moved to CP-Spec (as for example if an adverb has been topicalized), the subject usually immediately follows the verb (Old English had V2 if the subject was not a pronoun). In the example in (91), the temporal adverb *ðā* 'then' has been moved to CP-Spec. The verb moves to C° and the dative argument immediately follows (i.e. the dative argument is in IP-Spec):

- (91) OE. *Ða gelicode þam gedwolum þæs bisceopes*  
*Then liked.3SG the.DAT heretics.DAT the.GEN bishop.GEN*  
*dom*  
*judgment.NOM*  
 'Then the heretics liked the bishop's judgment' (coaelive 338.675)

In embedded questions, the subject usually immediately follows the complementizer.

- (92) OE. a. *gif þam biscope oððe þam ealdre [...]*  
*if the.DAT bishop.DAT or the.DAT elder.DAT [...]*  
*licað*  
*likes.3SG*  
 'if the bishop or the elder [...] is pleased' (cochdrul 1.223)
- b. *swiðe wundrigende hwi him swa gelumpe*  
*very much astonishing why him.DAT such befell*  
 'very astonished why it befell him such' (coaelive 376.6205)

This is however not a very convincing test for Old English. Like German, Old English had scrambling (cf. e.g. van Kemenade 1987, Pintzuk & Kroch 1989). Although German is usually not assumed to have dative subjects, the word order in a corresponding construction is the same:

- (93) Ge. *Erst dann gefiel dem Intendanten das Ensemble*  
*First then pleased the.DAT manager the.NOM ensemble*  
 'First then, the manager liked the ensemble'
- (94) Ge. *ob dem Intendanten das Ensemble gefallen hat*  
*whether the.DAT manager the.NOM ensemble liked had*  
 'whether the manager had liked the ensemble'

These tests are therefore not appropriate subject-hood tests for Old English. Nevertheless, the assumption is that Old English and Middle English had DAT-NOM constructions similar to those found in Icelandic. In the example in (95), the dative *þam wífe* 'the woman' is the subject and the nominative *þa word* 'the words' is the object:

- (95) OE. *ðam* wife *þa* word wel *licodon*  
*The.DAT woman.DAT the.PL.NOM words.NOM well liked.3PL*  
 'The woman liked the words well' (*cobeowul* 639.538)

If the dative argument is not taken to be the subject, e.g. because we assume that subjects can only be nominative, we might assume that the nominative argument in sentences such as (87) is the subject and the dative argument is some kind of a topicalized object (I will call this option the *structural reanalysis* option). However, we might also assume that nominative case is not a test for subject-hood in Old English (i.e. that Old English behaved like Icelandic and Old and Middle Danish) and that the nominative argument in (87) is the object and the dative argument is the subject (I will call this option the *case reanalysis* option).

If we take the *structural reanalysis* option we run into some problems. First, we would have to say that the verbs in class N (where both arguments are non-nominative) have no subject, i.e. that unlike the sentences in (87) and (89), there would be no subject in the sentence in (88). Second, we would have to explain how verbs such as *ofhreowan* 'feel pity' could have a nominative subject in some Old English texts but no subject in others.

- (96) OE. *Ac* him ne *ofhreow* na *þas* *deofles* *hryre*  
*But him.DAT not pitied never the.GEN devil.GEN fall.NOM*  
 'But he never pitied the fall of the devil' (*cocathom1* 14.2358)

- (97) OE. him *ofhreow* *þæt* *astepede* *wif*  
*him.DAT pitied the.ACC deprived.ACC woman.ACC*  
 'he pitied the deprived woman' (*cogregdH* 9.142)

If we just take the verb *lician* as an example, there have actually been no changes in the assignment of theta-roles from Old English to Modern English. In Modern English, the nominative *she* in (98) is the EXPERIENCER and the oblique *them* is the THEME just as the dative *ðam wife* 'the woman' in (99) is the EXPERIENCER and the nominative *þa word* 'the words' is the THEME.

- (98) En. She liked them

- (99) OE. *ðam* wife *þa* word wel *licodon*  
*the.DAT woman.DAT the.NOM.PL words.NOM well liked.3PL*  
 'the woman liked the words well' (*cobeowul* 639.538)

If the semantics of a sentence are linked to the syntactic structure of a sentence, we would expect that changes in word order would affect the semantics of a given sentence. The semantics of the sentences in (98) and (99) are the same, even though the case marking is different. This should therefore support the hypothesis that there has been no change in word order and that the only change that has happened is that verbs have lost their ability to assign dative case to the subject and nominative case to the object.

As mentioned on page 54, there is one example in the PPCME with the verb *areowe* 'to pity' (which is the same verb as Old English *ofhreowan*) where both arguments are pronouns. In this example both arguments are oblique:

- (100) ME. him            areowe ou  
           *him.OBL pitied you.OBL*  
           'he pitied you' (CMANCRIW II.55.528)

The *structural reanalysis* option would in other words predict that on some stages of Old and Middle English, verbs lost their subjects and that at later stages of English, the same verbs suddenly “acquired” subjects when the dative argument had been reanalyzed as being marked for nominative.

The *case reanalysis* option makes no such predictions. Instead, it predicts that there will be some stages where the object of verbs like *lician* or *ofhreowan* is marked for accusative or oblique case. Later, the dative subject will be replaced by a nominative subject.

## 2.5 Conclusion

In this chapter, I have tried to show the differences in the noun and verbal morphology of the Scandinavian languages. The five languages are divided into two groups, Mainland Scandinavian, i.e. Danish, Norwegian and Swedish, and Insular Scandinavian, i.e. Faroese and Icelandic. What characterizes the Mainland Scandinavian languages is that the three languages have lost much of the case morphology found in the older stages of Scandinavian, whereas the Insular Scandinavian languages have preserved most of the case morphology found in the older stages of Scandinavian. Faroese seems to be moving in the direction of Mainland Scandinavian; in Faroese, genitive is no longer used with nouns and dative is in most cases absorbed in the passive.

What also characterizes the Mainland Scandinavian languages is that only tense is marked on verbs, whereas Icelandic has preserved the rich verbal morphology of Old Norse. With respect to verbal morphology Faroese seems to be much closer to Mainland Scandinavian than Insular Scandinavian as in most Faroese dialects only first person singular is distinctively marked. This is reflected in the syntax of Faroese; unlike Icelandic, Faroese does not have  $V^{\circ}$ -to- $I^{\circ}$  movement.

Danish seems to have lost case marking by the end of the 13th century. Only in three manuscripts in the ACOD (*Eriks sjællandske lov*, *Skånske lov* and *Skånske kirkelov*) do verbs actively assign dative to their objects. These are the three oldest texts in the ACOD, dated at the end of the 11th century and the first half of the 12th century.

Yet another difference between the Mainland Scandinavian languages and the Insular Scandinavian languages can be found in dative and accusative subjects. In Mainland Scandinavian, subjects are nominative exclusively, whereas in the Insular Scandinavian languages, subjects can be either nominative, accusative or dative (and genitive in Icelandic). I have tried to show, with the help of various subjecthood tests, that oblique subjects existed at the older stages of Danish. The difference between Icelandic on the one hand and Faroese and Old/Middle Danish on the other hand is that in Icelandic, objects are marked for nominative in constructions with dative subjects, whereas in Faroese and Old/Middle Danish not only the subject is oblique but also the object. Faroese gives evidence for the last step of the change from DAT-NOM constructions to NOM-ACC constructions as speakers of Faroese born after 1960 only allow nominative subjects.

I have also tried to show that Old English and Middle English had dative subjects and nominative objects and that the change from DAT-NOM to NOM-ACC in English followed the same principles as the same change in the Scandinavian languages. I have argued that the change cannot have been due to a structural reanalysis because there have been no changes in the semantics from Old English to Modern English. Rather there has been a reanalysis in the case assignment of verbs in DAT-NOM constructions. To begin with, these verbs lost their ability to assign nominative to the object and later, the same verbs lost the ability to assign dative to the subject.





## Chapter 3

### Agreement in DAT-NOM constructions

In this chapter I will present two different analyses of agreement in DAT-NOM constructions in Icelandic. First, I will modify and elaborate Samek-Lodovici's (1996, 2002) analysis on agreement impoverishment in such a way that it can be used to account for the agreement patterns found in Icelandic. Second, I will give a new and a less complex analysis where IDENT constraints from Correspondence Theory (McCarthy & Prince, 1995) regulate the relationship between the verb and a nominative DP in the clause.

#### 3.1 How number agreement is dependent on person agreement

In Icelandic, verbs in DAT-NOM constructions show a much poorer agreement pattern than verbs that take nominative subjects. Verbs that have nominative subjects, e.g. the verb *lesa* 'read', inflect for all persons singular and plural in both past tense and present tense, whereas verbs that take subjects in other cases than nominative only inflect for third person. As the examples in (1) demonstrate, the verb shows agreement in person and number with the nominative subject:

- (1) Ic. a. Við lesum bókina  
We.NOM read.1PL book-the.ACC  
'We read the book'
- b. Þú lest bókina  
You.SG.NOM read.2SG book-the.ACC  
'You (SG) read the book'

Two major observations can be made on the DAT-NOM constructions. The first one is that in DAT-NOM constructions **third person** verbal form is obligatory. It is impossible to agree with a nominative object in either first or second person. It is not always the case that first or second person pronouns are excluded as the nominative object, it is merely impossible to agree with

them.<sup>1</sup>

- (2) Ic. a. Þér þótti ég / við fyndin  
You.DAT thought.3SG me.NOM / we.NOM amusing  
'You found me/us amusing'
- b. Okkur þótti þú / þið fyndin  
Us.DAT thought.3SG you.SG.NOM / you.PL.NOM amusing  
'We found you (SG) / you (PL) amusing'
- c. Okkur þótti hann fyndinn  
Us.DAT thought.3SG he.NOM amusing  
'We found him amusing'

In (2a) and (2b) the person features of the verb do not match with the person features of the nominative object. The examples contain either a singular or a plural nominative object and in the case of the plural objects, the number features of the verb do not match with the number features of the nominative plural object. The verb shows up in a default form, which is third person singular. In (2c) however, both the person and number features of the verb match with the person and number features of the third person singular nominative object.

The second observation is that the speakers of Icelandic fall into two different groups. In the first group (henceforth the *singular group*) third person singular is always obligatory. This is shown in (3a). For the speakers of the second group (henceforth *plural group*) third person is obligatory, i.e. the speakers of this variety have full verb agreement with third person singular and third person plural nominative objects as shown in (3b). No one is really sure where to draw the line between the two different varieties. My feeling is that at this point, it is not possible to say more than if you are a speaker of Icelandic you either allow the verb to agree with third person plural nominative objects or you do not. It is e.g. not dependent on where the speaker comes from, and age is not relevant either, although Sigurðsson (2000) says that "[a]greement is out for some (younger?) speakers".

- (3) Ic. a. Okkur þótti þau fyndin  
Us.DAT thought.3SG they.NOM amusing

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<sup>1</sup>Although all the cases in this chapter involve an embedded small clause where the nominative element is the subject of the small clause, I will refer to this as the nominative object. I choose to focus on verbs that embed small clauses here as these are the only cases where a first or second person pronoun may act as the object of a verb that has a dative subject. I will come to cases where a first or a second person pronoun may not act as the object of a verb with a dative subject in section 4.17.

- b. Okkur þóttu þau fyndin  
*Us.DAT thought.3PL they.NOM amusing*  
 ‘We thought they were amusing’

The examples in (4) are meant to demonstrate that the verb can never agree with a nominative object in first or second person. The first observation is that the verb can only be third person. What I have done is to take the counterpart of the verb *þykja* that has a nominative subject (also *þykja*). The result is ungrammatical as can be seen in (4) (cf. (2a) and (2b) for the grammatical counterparts of these examples).

- (4) Ic. a. \*Þér þóttum við fyndin  
*You-DAT thought.1PL we.NOM amusing*  
 b. \*Okkur þóttir þú fyndin  
*Us.DAT thought.2SG you.SG.NOM amusing*  
 c. \*Okkur þóttuð þið fyndin  
*Us.DAT thought.2PL you.PL.NOM amusing*

The examples I find most interesting and the examples which pose the largest problem to the analysis presented in this chapter are the examples in (5). One might wonder why it is only possible to agree in number with third person nominative objects but not with a plural pronoun in the first or second person. In my opinion, the examples crucially demonstrate that number agreement in Icelandic is dependent on person agreement. In example (3b) above the verb could only agree in number with the third person nominative object because the person features of the verb matched with the person features of the nominative object. In (5a), the nominative object is first person plural and in (5b), it is second person plural but the verb can never agree with it in number because its person features do not and can not match with the person features of the nominative object.

- (5) Ic. a. \*Ykkur þóttu við fyndin  
*You.DAT thought.3PL we.NOM amusing*  
 b. \*Okkur þóttu þið fyndin  
*Us.DAT thought.3PL you.PL.NOM amusing*

### 3.1.1 Summary

To sum up so far, we have seen that verbs in DAT-NOM constructions can only show up in third person. We have noticed that some speakers of Icelandic allow the verb to agree with nominative

objects in third person, whereas others do not. We also noticed that the verb can not agree in number with nominative objects of first or second person. From that I would like to draw the conclusion that number agreement in Icelandic is dependent on person agreement.

The verb always shows up in third person. There are two possible explanations:

A: There is no agreement at all. The verb always shows up in a default form which happens to have the same form as third person singular. This is a possible solution only for the grammar of the speakers of the singular group and not the plural group.

B: There is agreement in some cases but not in other cases.

- (i) In the case of the speakers of the singular group there is full agreement with third person singular nominative objects but only agreement in person with third person plural nominative objects.
- (ii) In the case of the speakers of the plural group there is always full agreement with third person nominative objects.

For speakers of both groups the verb shows up in a default form for nominative objects of other persons.

### 3.1.2 The constraints

The constraints<sup>2</sup> I use are modified versions of the constraints Samek-Lodovici introduces in his study on agreement impoverishment (Samek-Lodovici, 2002). In my modification of his constraints, I choose to mention what it is that agrees with what but as Samek-Lodovici (2002: 61) explicitly mentions “[d]etermining what may agree with what is an orthogonal problem” and in fact he does not need to tackle this problem because the data he analyzes do not require it. Further differences between the two analyses will be discussed later.

- (6) AGREEMENT[x] (AGR[x]):<sup>3</sup>

A nominative DP in the specifier of IP and a verb in I° have identical feature values with respect to a feature x.

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<sup>2</sup>I would like to thank Jane Grimshaw, Gereon Müller and Sten Vikner for helping me formulating the constraints in this chapter.

<sup>3</sup>The value [x] can stand for any of the three feature types, person, number and gender. It is possible that it can also stand for case features.

This constraint is violated if there is a nominative DP in the specifier of IP and its feature values and the feature values of the finite verb do not match, i.e. when a verb does not show agreement with a nominative subject. It is vacuously satisfied when the specifier of IP is filled with a non-nominative DP. Candidates as e.g. *I read the book*, where the verb shows agreement with the nominative subject satisfy the constraint in (6), whereas candidates as e.g. *I reads the book*, where the verb does not show agreement with the nominative subject violate it.

(7) EXTENDED AGREEMENT[x] (EXT-AGR[x]):

A nominative DP in the extended projection of the finite verb (i.e. somewhere within the IP) and a verb in I° have identical feature values with respect to a feature x.

This constraint is violated whenever there is a nominative DP somewhere in the clause and its feature values and the feature values of the finite verb do not match, i.e. the verb does not show agreement with the nominative DP. It is vacuously satisfied in a clause where there is no nominative DP at all. A candidate where the number features of a verb and a nominative object match, as in (3a) does not violate the constraint in (7) with respect to the feature number, whereas a candidate where the number features of the verb and the nominative object do not match, as in (3a), do.

EXT-AGR[x] is fulfilled when there is agreement in the extended projection of the finite verb and is therefore also satisfied when AGR[x] is satisfied. This does not necessarily work the other way around. The verb can agree in its extended projection without having Spec-Head agreement (cf. Samek-Lodovici 2002: 61).

Formulating the constraints in (6) and (7) this way suggests that agreement in fact is nothing else than correspondence of features. The agreement features (i.e. the person, number and gender features) of the nominative DP and the agreement features of the finite verb should correspond to each other or in other words match with one another.

If the constraints in (6) and (7) were given a free hand, both of these constraints would have the result that linguistic expressions would contain a maximal amount of agreement information, i.e. that linguistic expressions would be very complex. Because we know that there are languages which do not have very much agreement, there must be a constraint that goes in the opposite direction of the constraints in (6) and (7), e.g. a constraint that favors linguistic expressions which show as little agreement as possible. I choose to use Samek-Lodovici's NOFEATS

constraint (Samek-Lodovici 1996, 2002: 59-60, (19)), which I relativize to agreement features:

(8) NO FEATURE[x] (NOFEAT[x]):

The verb should not have any value for the feature x.

This constraint is a markedness constraint which is only satisfied when the verb has no specification value for x, i.e. when the verb has a default value for person, number and gender. It may differ from language to language which form is the default form. The present analysis assumes that in Icelandic, the default value for person is third person, singular for number and neuter for gender. This is not derived by the constraints used here (cf. section 3.6).

Moreover, it is crucial for this analysis that the relevant features are not specified in the default form, i.e. third person is not specified for person and singular is not specified for number. A third person singular verb will therefore not violate NOFEAT<sub>pers</sub> and NOFEAT<sub>num</sub> because in third person singular the specifications for person and number are absent. A first person plural verb will violate both NOFEAT<sub>pers</sub> and NOFEAT<sub>num</sub> because first person plural is specified for person and number, namely first person and plural.

### 3.1.3 Ranking possibilities

There are six logically possible ways to rank the constraints (cf. Samek-Lodovici 1996, 2002: 61-65).

(9) AGR[x]  $\gg$  EXT-AGR[x]  $\gg$  NOFEAT[x]

(10) EXT-AGR[x]  $\gg$  AGR[x]  $\gg$  NOFEAT[x]

(11) EXT-AGR[x]  $\gg$  NOFEAT[x]  $\gg$  AGR[x]

In languages where EXT-AGR[x] is ranked above NOFEAT[x], the verb will always show agreement (with respect to feature x) with both nominative DPs in the specifier of IP and nominative DPs elsewhere in the extended projection of the finite verb.

(12) NOFEAT[x]  $\gg$  AGR[x]  $\gg$  EXT-AGR[x]

(13) NOFEAT[x]  $\gg$  EXT-AGR[x]  $\gg$  AGR[x]

In a language where a markedness constraint dominates all the constraints it conflicts with, marked features will not surface. Languages which have NOFEAT[x] above both AGR[x] and EXT-AGR[x] will not show any morphological agreement (with respect to feature x) at all.

(14) AGR[x]  $\gg$  NOFEAT[x]  $\gg$  EXT-AGR[x]

If the markedness constraint is ranked between the two constraints it conflicts with, markedness will show up in constructions which satisfy the constraint which is ranked above the markedness constraint but not necessarily in constructions which satisfy the constraint that is ranked below the markedness constraint. The ranking in (14) gives a language where the verb only shows agreement (with respect to feature x) with a nominative DP in the specifier of IP. Note that a candidate where the verb shows agreement with a nominative DP in the specifier of IP will satisfy both AGR and EXT-AGR.

The rankings in (9)-(14) allow for three types of languages (cf. Samek-Lodovici 1996, 2002: 61-65 for a more detailed discussion). These are the types of languages described in (15a), (15b) and (15d) below, whereas it predicts the absence of a language like (15c):

- (15) a. There can be a language where the verb agrees with a nominative DP irrespective of whether it is in the specifier of IP or in the object position.
- b. There can also be a language where the verb shows agreement with a nominative DP only if it is in the specifier of IP.
- c. There can be a language where the verb shows agreement with a nominative DP only if it is in the object position.
- d. The fourth and last possibility is a language that does not show morphological agreement with any nominative DPs.

Whether the subject is nominative or dative is determined by other constraints, the constraint in (6) only says that if the subject is nominative, the agreement should be perfect. Limiting the constraints to nominative is a way of phrasing the generalization that verbs agree with nominative DPs but there might be a more profound solution to this problem.

## 3.2 Subject agreement in Icelandic

In normal cases of subject-verb agreement in Icelandic where the subject is marked for nominative the verb shows agreement in person and number.

- (16)
- a. Ég las bókina  
*I.NOM read.past.1SG book-the.ACC*  
'I read the book'
  - b. Við lásum bókina  
*We.NOM read.past.1pl book-the.ACC*  
'We read the book'
  - c. Hann las bókina  
*He.NOM read.past.3SG book-the.ACC*  
'He read the book'
  - d. Þeir lásu bókina  
*They.NOM read.past.3PL book-the.ACC*  
'They read the book'

It is crucial here that both the relevant AGR constraints are ranked above the relevant NOFEAT constraints.  $AGR_{pers}$  has to be ranked above  $NOFEAT_{pers}$ , as otherwise the verb would not agree in person with the nominative subject. Likewise,  $AGR_{num}$  has to be ranked above  $NOFEAT_{num}$  for the verb to agree in number with the nominative subject. The ranking of  $AGR[x]$  and  $EXT-AGR[x]$  is not relevant yet because  $EXT-AGR$  is satisfied when  $AGR$  is satisfied.

In the tableaux, I choose indicate the cases where the specification for person, number and gender is absent by striking the respective abbreviation out. ~~3~~ indicates that the verb has no specification for person, ~~SG~~ indicates that the verb has no specification for number and ~~N~~ indicates that the verb has no specification for gender.

- (17)  $\{AGR_{pers} \gg NOFEAT_{pers}\}, \{AGR_{num} \gg NOFEAT_{num}\}$

Tableau 1: Subject-verb agreement. First person singular nominative subject

Target:	1 <del>SG</del>	$AGR_{pers}$	$NOFEAT_{pers}$	$AGR_{num}$	$NOFEAT_{num}$
☞ (a)	1 <del>SG</del> = (16a)		*		
(b)	1 PL		*	*!	*
(c)	<del>3</del> <del>SG</del>	*!			
(d)	<del>3</del> PL	*!		*	*



As expected, candidate (a) in tableau 1 (the candidate where the person and number features of the verb match with the person and number features of the nominative subject) comes out as the optimal candidate with only one violation of  $\text{NOFEAT}_{\text{pers}}$ . Candidate (b) also violates this constraint but in addition it fatally violates  $\text{AGR}_{\text{num}}$  because the number feature of the verb does not match with the number feature of nominative subject, and it also violates  $\text{NOFEAT}_{\text{num}}$  for having a plural marker. Both candidates (d) and (c) fatally violate the constraint  $\text{AGR}_{\text{pers}}$  which demands that the person feature of the verb matches with the person feature of the nominative subject.

In tableau 2, the optimal candidate is candidate (b) where both number and person features match with the number and person feature of the nominative subject. This candidate violates both  $\text{NOFEAT}_{\text{pers}}$  and  $\text{NOFEAT}_{\text{num}}$  because the verb has both a person and a plural marker. Nevertheless, candidate (a) which does better on  $\text{NOFEAT}_{\text{num}}$  than candidate (b), fatally violates the higher ranked constraint  $\text{AGR}_{\text{num}}$ .

Tableau 2: Subject-verb agreement. First person plural nominative subject

Target: 1 PL	$\text{AGR}_{\text{pers}}$	$\text{NOFEAT}_{\text{pers}}$	$\text{AGR}_{\text{num}}$	$\text{NOFEAT}_{\text{num}}$
(a) 1 <del>SG</del>		*	*!	
☞ (b) 1 PL = (16b)		*		*
(c) <del>3 SG</del>	*!		*	
(d) <del>3 PL</del>	*!			*

As in tableau 1, the remaining two candidates fatally violate the constraint  $\text{AGR}_{\text{pers}}$  for not having the person feature that the nominative subject has.

Tableau 3: Subject-verb agreement. Third person singular nominative subject

Target: <del>3 SG</del>	$\text{AGR}_{\text{pers}}$	$\text{NOFEAT}_{\text{pers}}$	$\text{AGR}_{\text{num}}$	$\text{NOFEAT}_{\text{num}}$
(a) 1 <del>SG</del>	*!	*		
(b) 1 PL	*!	*	*	*
☞ (c) <del>3 SG</del> = (16c)				
(d) <del>3 PL</del>			*!	*

The winning candidate in tableau 3 will always come out as the optimal candidate, no matter which way the constraints are ranked. It is the only candidate with no constraint violations. It

violates neither one of the NOFEAT constraints because third person singular is the default, nor does it violate the AGR constraints because the verb fully agrees with the nominative subject. Candidate (d) fatally violates AGR<sub>num</sub> because the verb fails to have the same number feature as the nominative subject and candidates (a) and (b) both fatally violate AGR<sub>pers</sub> because the verb has a person specification that are not identical to the person specification of the nominative subject.

Tableau 4: Subject-verb agreement. Third person plural nominative subject

Target: <del>3</del> PL	AGR <sub>pers</sub>	NOFEAT <sub>pers</sub>	AGR <sub>num</sub>	NOFEAT <sub>num</sub>
(a) 1 <del>SG</del>	*!	*	*	
(b) 1 PL	*!	*		*
(c) <del>3 SG</del>			*!	
☞ (d) <del>3</del> PL = (16d)				*

Candidate (d) in tableau 4 is the optimal candidate in tableau 4, with one violation of the constraint NOFEAT<sub>num</sub>. It violates this constraint because it is marked for plural. This violation is, however, not fatal because candidate (c) fatally violates the higher ranked constraint AGR<sub>num</sub> because the verb does not have the same feature value for number as the nominative subject and because candidates (a) and (b) where the verb does not have agreement in person with the nominative subject, fatally violate the constraint AGR<sub>pers</sub>.

To sum up so far, ranking the constraint AGR<sub>pers</sub> above the constraint NOFEAT<sub>pers</sub> gives the type of a language where the verb shows morphological agreement with a nominative subject in the specifier of IP. The same applies if the constraint AGR<sub>num</sub> is ranked above the constraint NOFEAT<sub>num</sub>. This will give a language where the verb shows morphological agreement with a nominative subject in the specifier of IP. From the basic facts of subject-verb agreement in Icelandic we know that the AGR[x] constraints have to dominate the markedness constraints NOFEAT[x] for person and number at least.

### 3.3 Agreement in DAT-NOM constructions

In this section I will give an analysis of the data discussed in the previous sections. The section is structured as follows: To begin with, I present the analysis that works for Icelandic. In the analysis it is crucial that the features person and number are combined in one constraint, namely EXT-AGR[x]. This is necessary because an analysis with two constraints relativized to each feature separately cannot account for Icelandic, as I briefly discuss in section 3.3.2. In section 3.3.2.1, I show that the constraint EXT-AGR<sub>pers&num</sub> which might at first sight look like a local constraint conjunction (cf. Smolensky 1995, 1997, Legendre et al. 1998, Kager 1999: 393, and Vikner 2001: 154) of the two constraints EXT-AGR<sub>pers</sub> and EXT-AGR<sub>num</sub>, in fact cannot be such a constraint.

#### 3.3.1 Person and number as separate feature types

My analysis of agreement in DAT-NOM constructions depends on the constraint EXT-AGR<sub>pers&num</sub>.<sup>4</sup> This constraint is a *local conjunction tie* (cf. Heck 2001, Legendre et al. 1995, Legendre et al. 1998, Müller 1997, 2000: 212, and Tesar 1998: 428-429) of the constraints EXT-AGR<sub>pers</sub> and EXT-AGR<sub>num</sub>. Unlike usual constraint ties where constraints are disjoined the constraints in this tie are truly conjoined as shown in (20):

- (18) EXTENDED-AGREEMENT<sub>pers</sub> (EXT-AGR<sub>pers</sub>):  
A nominative DP in the extended projection of the finite verb and a verb in I° have identical feature values with respect to the feature **person**.
- (19) EXTENDED-AGREEMENT<sub>num</sub> (EXT-AGR<sub>num</sub>):  
A nominative DP in the extended projection of the finite verb and a verb in I° have identical feature values with respect to a feature **number**.
- (20) EXTENDED-AGREEMENT<sub>pers&num</sub> (EXT-AGR<sub>pers&num</sub>):  
A nominative DP in the extended projection of the finite verb and a verb in I° have identical feature values with respect to a feature **person** AND a nominative DP in the extended projection of the finite verb and a verb in I° have identical feature values with respect to a feature **number**.

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<sup>4</sup>Strictly speaking this constraint is a constraint conjunction in the sense of Crowhurst & Hewitt (1997).

The difference between the constraint tie  $\text{EXT-AGR}_{\text{pers}\&\text{num}}$  and the local constraint conjunction discussed later is that all candidates that do not show agreement in person or number with the nominative object will violate it, i.e. the constraint is not only violated when both  $\text{EXT-AGR}_{\text{pers}}$  and  $\text{EXT-AGR}_{\text{num}}$  are violated but also when only one of the constraints is violated. It is also crucial that this constraint is not a gradient constraint, i.e. a candidate which violates  $\text{EXT-AGR}_{\text{pers}}$  and  $\text{EXT-AGR}_{\text{num}}$  will only have one violation of  $\text{EXT-AGR}_{\text{pers}\&\text{num}}$  instead of two.

In a language where the markedness constraint on person  $\text{NOFEAT}_{\text{pers}}$  dominates the constraint  $\text{EXT-AGR}_{\text{pers}}$  the prediction is that person agreement will be local, i.e. that the verb will only show agreement in person with a nominative DP in the specifier of IP, given that the constraint  $\text{AGR}_{\text{pers}}$  dominates  $\text{NOFEAT}_{\text{pers}}$ . This is exactly the correct prediction for Icelandic. In Icelandic the verb agrees in person with a nominative DP in the specifier of IP but it does not agree in person with a nominative object.

In a language where  $\text{EXT-AGR}_{\text{pers}\&\text{num}}$  dominates  $\text{NOFEAT}_{\text{num}}$  the verb will only show agreement in number when both person and number features of the verb match with the person and number features of the nominative object. If  $\text{NOFEAT}_{\text{pers}}$  dominates  $\text{EXT-AGR}_{\text{pers}\&\text{num}}$  in the same language the verb will only show agreement in number with nominative objects that are not marked for person. This is also the correct prediction for Icelandic where verbs only show agreement in number with third person nominative objects. However, it is also crucial for Icelandic that  $\text{NOFEAT}_{\text{num}}$  dominates  $\text{EXT-AGR}_{\text{num}}$ . If  $\text{EXT-AGR}_{\text{num}}$  dominates  $\text{NOFEAT}_{\text{num}}$  the verb will also show agreement in number with first person plural nominative objects which is not the case in Icelandic.

- (21) Ic. þér                      þótti                      við                      fyndin  
       *You.DAT.SG thought.3SG we.NOM amusing*  
       ‘You found us amusing’

In tableau 5, it is clear that the constraint  $\text{NOFEAT}_{\text{num}}$  has to be ranked above the constraint  $\text{EXT-AGR}_{\text{num}}$ . If  $\text{NOFEAT}_{\text{num}}$  were ranked below  $\text{EXT-AGR}_{\text{num}}$ , the decision would not be made by  $\text{NOFEAT}_{\text{num}}$  anymore, but rather  $\text{EXT-AGR}_{\text{num}}$  and candidate (d) would incorrectly be the optimal candidate. Further, the ranking of  $\text{EXT-AGR}_{\text{pers}}$  and  $\text{EXT-AGR}_{\text{num}}$  would also become relevant, as candidates (c) and (d) compete on  $\text{EXT-AGR}_{\text{num}}$ . For candidate (d) to become

the optimal candidate in tableau 5, EXT-AGR<sub>num</sub> would have to be ranked above EXT-AGR<sub>pers</sub>.

Candidates (c) and (d) in tableau 5 have the same number of constraint violations on the two higher ranked constraints EXT-AGR<sub>pers&num</sub> and EXT-AGR<sub>pers</sub>. Candidate (b) is the only candidate that does not violate EXT-AGR<sub>pers&num</sub> but this does not matter since the candidate has already been thrown out of the competition by the higher ranked constraint NOFEAT<sub>pers</sub>.

(22) NOFEAT<sub>pers</sub> >> {EXT-AGR<sub>pers&num</sub>, EXT-AGR<sub>pers</sub>} >> NOFEAT<sub>num</sub> >> EXT-AGR<sub>num</sub>

Tableau 5: First person plural nominative object

Target: 1 PL	NOFEAT person	EXT-AGR person&number	EXT-AGR person	NOFEAT number	EXT-AGR number
(a) 1 <del>SG</del>	*!	*			*
(b) 1 PL	*!			*	
☞ (c) <del>3 SG</del> = (21)		*	*		*
(d) <del>3 PL</del>		*	*	*!	

Since candidates that show agreement with first or second person objects are always eliminated from the competition because of the high ranking of NOFEAT<sub>pers</sub>, I will not consider those candidates in the following tableaux.

(23) Ic. Mér þóttu þau fyndin  
*Me.DAT thought.3PL they.NOM amusing*  
 ‘I found them amusing’

In tableau 6, candidate (d) is the optimal candidate with one violation of NOFEAT<sub>num</sub>. It is also the only candidate that does best on both the two highest ranked constraints (candidates where the verb is marked for first or second person would fatally violate NOFEAT<sub>pers</sub>).

Tableau 6: Third person plural nominative object

Target: <del>3 PL</del>	NOFEAT person	EXT-AGR person&number	EXT-AGR person	NOFEAT number	EXT-AGR number
(c) <del>3 SG</del>		*!			*
☞ (d) <del>3 PL</del> = (23)				*	

In tableau 6, candidate (c) fatally violates the second highest ranked constraint EXT-AGR<sub>pers&num</sub> because the number feature of the verb is not identical to the number feature of the third person nominative object. It also violates EXT-AGR<sub>num</sub> because the number feature of the verb is not identical to the number feature of the nominative object.

- (24) Ic . Ykkur þótti ég fyndinn  
*You.DAT.PL thought.3SG I.NOM amusing*  
 ‘You found me amusing’

Both candidates in tableau 7 violate EXT-AGR<sub>pers&num</sub> and EXT-AGR<sub>pers</sub> because both of them show disagreement between the verb and the nominative object, either in person or number. These violations are not fatal since both candidates violate the constraints. The constraint that does the job is the constraint NOFEAT<sub>num</sub>.

Tableau 7: First person singular nominative object

Target: 1 <del>SG</del>	NOFEAT person	EXT-AGR person&number	EXT-AGR person	NOFEAT number	EXT-AGR number
☞ (c) <del>3SG</del> = (24)		*	*		
(d) <del>3</del> PL		*	*	*!	*

Notice that it is not crucial how the constraints NOFEAT<sub>num</sub> and EXT-AGR<sub>num</sub> are ranked with respect to each other, because the winning candidate, candidate (c) does better than candidate (d) on both of the constraints.

- (25) Ic . Ykkur þótti hann fyndinn  
*You.DAT.PL thought.3SG he.NOM amusing*  
 ‘You found him amusing’

In tableau 8, candidate (c) is as expected the optimal candidate with no constraint violations. Candidate (d) fatally violates EXT-AGR<sub>pers&num</sub> and EXT-AGR<sub>num</sub> because it fails to have number features that are identical to the number features of the nominative object.

Tableau 8: Third person singular nominative object

Target: <del>3-SG</del>	NOFEAT person	EXT-AGR person&number	EXT-AGR person	NOFEAT number	EXT-AGR number
☞ (c) <del>3-SG</del> = (25)					
(d) <del>3</del> PL		*!		*	*

To sum up, it is crucial that the constraint  $\text{NOFEAT}_{\text{num}}$  is ranked above  $\text{EXT-AGR}_{\text{num}}$  and it is necessary to have a constraint like  $\text{EXT-AGR}_{\text{pers\&num}}$  for there to be number agreement with third person plural nominative objects. It is also crucial that the constraint  $\text{NOFEAT}_{\text{num}}$  is ranked below  $\text{EXT-AGR}_{\text{pers\&num}}$ , as otherwise candidate (c) in tableau 6 would incorrectly be the optimal candidate, i.e. there would be no number agreement at all.

### 3.3.2 Keeping person and number separate

In this section I will show that two constraints relativized to the features person and number separately cannot account for agreement in Icelandic. In section 3.1 I showed that there is inconsistency in the preservation of number agreement in DAT-NOM constructions while person agreement is consistently eliminated in these constructions. The verb only agrees in number with a third person plural nominative object. Otherwise the default third person singular shows up.

If the two constraints  $\text{EXT-AGR}_{\text{pers}}$  and  $\text{EXT-AGR}_{\text{num}}$  are ranked with respect to  $\text{NOFEAT}_{\text{pers}}$  and  $\text{NOFEAT}_{\text{num}}$ , an agreement system of this type cannot exist. If the markedness constraints dominate the agreement constraints features will never be specified on the verb. If the agreement constraints dominate the markedness constraints features can be specified on the verb. Verbs do show agreement with third person plural nominative objects, therefore  $\text{EXT-AGR}_{\text{num}}$  has to dominate  $\text{NOFEAT}_{\text{num}}$ . This ranking also incorrectly predicts that verbs show agreement in number with first person plural nominative objects.

Here I will only consider the cases that would be problematic for this kind of analysis, i.e. constructions where the nominative object is either first, or second, or third person plural.

- (26) Ic. a. Þér              þótti              við              fyndin  
           You.DAT.SG thought.3SG we.NOM amusing  
           ‘You found us amusing’

- b. \*Þér þóttu við fyndin  
*You.DAT.SG thought.3PL we.NOM amusing*

The candidate that is marked ✖ in tableau 9, should come out as the optimal candidate but it fatally violates EXT-AGR<sub>num</sub>. Candidate (d) where the number feature of the verb matches with the number feature of nominative object is the incorrect optimal candidate with one violation of EXT-AGR<sub>pers</sub>, because it fails to have person features that match with the person features of the nominative object. It also violates NOFEAT<sub>num</sub> because the verb has a plural marker.

- (27) { NOFEAT<sub>pers</sub> >> EXT-AGR<sub>pers</sub> }, { EXT-AGR<sub>num</sub> >> NOFEAT<sub>num</sub> }

Tableau 9: First person plural nominative object

Target: 1 PL	NOFEAT <sub>pers</sub>	EXT-AGR <sub>pers</sub>	EXT-AGR <sub>num</sub>	NOFEAT <sub>num</sub>
✖ (c) 3-SG = (26a)		*	*!	
☞ (d) 3-PL = (26b)		*		*

As I mentioned, candidate (c) which is marked ✖ should be the optimal candidate but it fatally violates EXT-AGR<sub>num</sub> because the number feature of the verb does not match with the number feature of the nominative object. The reason is that the constraint EXT-AGR<sub>num</sub> is ranked above NOFEAT<sub>num</sub>. If the constraints are reranked, (c) will come out as the optimal candidate.

But this is not unproblematic either as I show in tableau 10 below. If NOFEAT<sub>num</sub> is ranked above EXT-AGR<sub>num</sub> verbs will not show agreement in number with first or second person plural nominative objects. Moreover they will also not show agreement in number with third person nominative objects. In other words there will be no agreement in number at all in DAT-NOM constructions and that is not the result I am looking for. Note that this could possibly be the correct ranking for the speakers of the singular group I described above, whose speakers have no agreement with third person nominative objects.

- (28) Ic. a. Þér þóttu þau fyndin  
*You.DAT.SG thought.3PL they.NOM amusing*  
‘You found them amusing’ (✓plural group / \*singular group)
- b. Þér þótti þau fyndin  
*You.DAT.SG thought.3SG we.NOM amusing*  
‘You found them amusing’ (\*plural group / ✓singular group)



$$(29) \quad \{ \text{NOFEAT}_{\text{pers}} \gg \text{EXT-AGR}_{\text{pers}} \} , \{ \text{NOFEAT}_{\text{num}} \gg \text{EXT-AGR}_{\text{num}} \}$$

Tableau 10: Third person plural nominative object, reranked

Target:	$\bar{3}$ -PL	NOFEAT <sub>pers</sub>	EXT-AGR <sub>pers</sub>	NOFEAT <sub>num</sub>	EXT-AGR <sub>num</sub>
☞ (c)	$\bar{3}$ -SG = (28b)				*
☞ (d)	$\bar{3}$ -PL = (28a)			*!	

Candidate (d) which is marked ☞ in tableau 10, should be the winning candidate in this tableau but it fatally violates the constraint NOFEAT<sub>num</sub>. The only reason for candidate (c) being the incorrect optimal candidate is that the constraint EXT-AGR<sub>num</sub> is ranked lower than NOFEAT<sub>num</sub>.

If it is assumed that the constraint EXT-AGR[x] can only refer to one single feature, it is impossible to account for the agreement pattern that is attested in the Icelandic DAT-NOM constructions where the verb only shows agreement in number with third person plural nominative objects but not any plural object. This analysis can only predict two types of languages: A language where the verb always shows agreement with a nominative object and a language where the verb never shows agreement with a nominative object.

### 3.3.2.1 EXT-AGR<sub>pers&num</sub> as a local constraint conjunction

As stated above, the constraint EXT-AGR<sub>pers&num</sub> might at first sight look like a local constraint conjunction of EXT-AGR<sub>pers</sub> and EXT-AGR<sub>num</sub>. In this section it will become clear that EXT-AGR<sub>pers&num</sub> cannot be replaced by a local constraint conjunction. Legendre et al. (1998: 262) define local constraint conjunction in the following way: “Given two constraints  $C_1$  and  $C_2$ , their *Local Conjunction* (w.r.t. a domain type  $D$ ),  $C_1 \& C_2$ , is a new constraint which is violated when two distinct violations of  $C_1$  and  $C_2$  occur *within a single domain of type D*”.

If two constraints are conjoined in a local constraint conjunction, the conjoined constraint is by definition universally ranked above the constraints it is composed of (cf. Legendre et al. 1998: 262). If the local conjunction did not rank above the constraints it is composed of the effect of the local conjunction would be neutralized.

$$(30) \quad C_1 \& C_2 \gg C_1 \gg C_2$$

Tableau 11: Local Conjunction

	$C_1 \& C_2$	$C_1$	$C_2$
☞ (a) $X_1$		**	
(b) $X_2$	*!	*	*

The local conjunction of  $\text{EXT-AGR}_{\text{pers}}$  and  $\text{EXT-AGR}_{\text{num}}$  ( $\text{EXT-AGR}_{\text{pers}} \& \text{EXT-AGR}_{\text{num}}$ ) is only violated when both  $\text{EXT-AGR}_{\text{pers}}$  and  $\text{EXT-AGR}_{\text{num}}$  are violated. The three cases that are problematic for this kind of analysis are constructions with first, second or third person plural nominative objects.

Constructions with first or second person plural nominative objects are problematic because the candidate where the number feature of the verb matches with the number feature of the nominative object does not violate  $\text{EXT-AGR}_{\text{num}}$  and does therefore not violate the local constraint conjunction as shown in tableau 12.

- (31) Ic. a. þér þótti við fyndin  
*You.DAT.SG thought.3SG we.NOM amusing*  
 ‘You found us amusing’

- b. \*þér þóttu við fyndin  
*You.DAT.SG thought.3PL we.NOM amusing*

- (32)  $\text{NOFEAT}_{\text{pers}}, \text{EXT-AGR}_{\text{pers}} \& \text{EXT-AGR}_{\text{num}} \gg \{\text{EXT-AGR}_{\text{pers}}, \text{NOFEAT}_{\text{num}}, \text{EXT-AGR}_{\text{num}}\}$

Tableau 12: First person plural nominative object

Target: 1 PL	$\text{NOFEAT}_{\text{pers}}$	$\text{EXT-AGR}_{\text{pers}} \& \text{EXT-AGR}_{\text{num}}$	$\text{EXT-AGR}_{\text{pers}}$	$\text{NOFEAT}_{\text{num}}$	$\text{EXT-AGR}_{\text{num}}$
☞ (c) $\neg \text{SG} = (31a)$		*!	*		*
☞ (d) $\neg \text{PL} = (31b)$			*	*	

This tableau shows that having a local constraint conjunction like  $\text{EXT-AGR}_{\text{pers}} \& \text{EXT-AGR}_{\text{num}}$  is not the right solution. Candidate (c) which is marked with ☞ should be the winning candidate, but instead candidate (d) where the verb agrees in number with the first person plural nominative object comes out as the incorrect optimal candidate. Candidate (c) violates both  $\text{EXT-AGR}_{\text{pers}}$  and  $\text{EXT-AGR}_{\text{num}}$  because there is no agreement at all with the nominative object and therefore it also violates  $\text{EXT-AGR}_{\text{pers}} \& \text{EXT-AGR}_{\text{num}}$  by definition. This violation is fatal since candidate (d) does not violate  $\text{EXT-AGR}_{\text{num}}$  and therefore it does not violate

EXT-AGR<sub>pers</sub> & EXT-AGR<sub>num</sub>.

- (33) Ic. a. Þér þóttu þau fyndin  
*You.DAT.SG thought.3PL they.NOM amusing*  
 ‘You found them amusing’ (✓plural group / \*singular group)
- b. Þér þótti þau fyndin  
*You.DAT.SG thought.3SG we.NOM amusing*  
 ‘You found them amusing’ (\*plural group / ✓singular group)

Tableau 13: Third person plural nominative object

Target:	<del>3</del> PL	NOFEAT pers	EXT-AGR <sub>pers</sub> & EXT-AGR <sub>num</sub>	EXT-AGR pers	NOFEAT num	EXT-AGR num
☞ (c)	<del>3 SG</del> = (33b)					*
☞ (d)	<del>3</del> PL = (33a)				*!	

Constructions where the nominative object is third person plural are problematic for this type of analysis because the candidate that does not show agreement in number with the third person plural nominative object wins over the candidate that does show agreement in number with the third person plural nominative object given that NOFEAT<sub>num</sub> dominates EXT-AGR<sub>num</sub> as in tableau 13.

The two candidates in tableau 13 compete on the two lowest ranked constraints and candidate (c) does better on the higher one and is optimal. If the constraints EXT-AGR<sub>num</sub> and NOFEAT<sub>num</sub> are reranked again (cf. tableau 9 above) candidate (d) in tableau 13 will be the right winning candidate as shown in tableau 13a:

- (34) NOFEAT<sub>pers</sub>, EXT-AGR<sub>pers</sub> & EXT-AGR<sub>num</sub> >> {EXT-AGR<sub>pers</sub>, EXT-AGR<sub>num</sub>, NOFEAT<sub>num</sub>}

Tableau 13a: Third person plural nominative object

Target:	<del>3</del> PL	NOFEAT pers	EXT-AGR <sub>pers</sub> & EXT-AGR <sub>num</sub>	EXT-AGR pers	EXT-AGR num	NOFEAT num
(c)	<del>3 SG</del> = (34b)				*!	
☞ (d)	<del>3</del> PL = (34a)					*

The real problem is, however, that ranking EXT-AGR<sub>num</sub> above NOFEAT<sub>num</sub> as in tableaux

9 and 13a is not the correct solution because it will not change anything in tableau 12 as shown in tableau 12a. Here candidate (d) is still the incorrect optimal candidate:

Tableau 12a: First person plural nominative object

Target: 1 PL	NOFEAT pers	EXT-AGR <sub>pers</sub> & EXT-AGR <sub>num</sub>	EXT-AGR pers	EXT-AGR num	NOFEAT num
☞ (c) 3-SG = (33a)		*!	*	*	
☞ (d) 3-PL = (33b)			*		*

Here again we see that EXT-AGR<sub>pers&num</sub> cannot be a local constraint conjunction because here it cannot prevent candidate (d) in tableaux 13 and 13a from being the optimal candidate.

The conclusion remains that locally conjoining the constraints EXT-AGR<sub>pers</sub> and EXT-AGR<sub>num</sub> cannot be the correct solution.

### 3.3.2.2 Evidence for NOFEAT<sub>num</sub> against NOFEAT<sub>pers&num</sub>

In the Indo-Aryan language Bengali the verb inflects for person, not number.<sup>5</sup> The pronouns in (35) have different forms for singular and plural but the verb never agrees in number:

- (35) Be. a. ami boiṭa      **poṛchi**  
           I    book.CLASS read.PROG.1.PRES  
           ‘I am reading the book’
- b. amra boiṭa      **poṛchi**  
           We    book.CLASS read.PROG.1.PRES  
           ‘We are reading the book’
- c. ṣe      boiṭa      **poṛche**  
           He/she book.CLASS read.PROG.3.PRES  
           ‘He/she is reading the book’
- d. tara boiṭa      **poṛche**  
           They book.CLASS read.PROG.3.PRES  
           ‘They are reading the book’

In tableau 1 above, AGR<sub>pers</sub> had to dominate NOFEAT<sub>pers</sub> and AGR<sub>num</sub> had to dominate NOFEAT<sub>num</sub> in order to get both number and person agreement with the subject in Icelandic.

<sup>5</sup>There are three different forms for 2nd person, a familiar form, an ordinary form and a honorific one. Third person has two different forms, ordinary and honorific (cf. Lahiri (2000: 73-75)). The examples from Bengali in (35) are from Josef Bayer (personal communication). The ending *-ṭa* is a classifier and may be translated as the definite article.

Bengali has person distinctions. Therefore,  $\text{AGR}_{\text{pers}}$  dominates  $\text{NOFEAT}_{\text{pers}}$  in tableau 14, as it did in tableau 1.

(36)  $\text{AGR}_{\text{pers}} \gg \text{NOFEAT}_{\text{pers}}, \text{NOFEAT}_{\text{num}}, \text{AGR}_{\text{num}}$

Tableau 14: Agreement in Bengali, first person singular subject

Target:	1 <del>SG</del>	$\text{AGR}_{\text{pers}}$	$\text{NOFEAT}_{\text{pers}}$	$\text{NOFEAT}_{\text{num}}$	$\text{AGR}_{\text{num}}$
☞ (a)	1 <del>SG</del> = (35a)		*		
(b)	1PL		*	*!	*
(c)	<del>3 SG</del>	*!			
(d)	<del>3</del> PL	*!		*	*

Candidate (a) in tableau 14 is the optimal candidate with one violation of  $\text{NOFEAT}_{\text{pers}}$ . Candidate (b) violates this constraint as well but it will never be the optimal candidate because it does worse than candidate (a) on both  $\text{NOFEAT}_{\text{num}}$  and  $\text{AGR}_{\text{num}}$ . Here the ranking of  $\text{AGR}_{\text{pers}}$  and  $\text{NOFEAT}_{\text{pers}}$  is crucial because there would never be agreement in person with a nominative subject in Bengali if  $\text{NOFEAT}_{\text{pers}}$  was higher ranked than  $\text{AGR}_{\text{pers}}$ .  $\text{NOFEAT}_{\text{num}}$  also crucially dominates  $\text{AGR}_{\text{num}}$  since Bengali does not have number agreement.

(37)  $\{ \text{AGR}_{\text{pers}} \gg \text{NOFEAT}_{\text{pers}} \}, \{ \text{NOFEAT}_{\text{num}} \gg \text{AGR}_{\text{num}} \}$

Tableau 15: Agreement in Bengali, first person plural subject

Target:	1 PL	$\text{AGR}_{\text{pers}}$	$\text{NOFEAT}_{\text{pers}}$	$\text{NOFEAT}_{\text{num}}$	$\text{AGR}_{\text{num}}$
☞ (a)	1 <del>SG</del> = (35b)		*		*
(b)	1PL		*	*!	
(c)	<del>3 SG</del>	*!			*
(d)	<del>3</del> pl	*!		*	

Tableau 15 shows that the ranking of  $\text{NOFEAT}_{\text{num}}$  and  $\text{AGR}_{\text{num}}$  is crucial. If  $\text{AGR}_{\text{num}}$  was ranked above  $\text{NOFEAT}_{\text{num}}$  candidate (b) would come out as the (incorrect) winning candidate. This tableau also shows that the ranking of  $\text{AGR}_{\text{pers}}$  and  $\text{NOFEAT}_{\text{pers}}$  is crucial. If they would rank  $\text{NOFEAT}_{\text{pers}} \gg \text{AGR}_{\text{pers}}$ , there would not be person agreement in Bengali.

Tableau 16: Agreement in Bengali, third person singular subject

Target:	<del>৩</del> SG	AGR <sub>pers</sub>	NOFEAT <sub>pers</sub>	NOFEAT <sub>num</sub>	AGR <sub>num</sub>
(a)	1 <del>SG</del>	*!	*		
(b)	1PL	*!	*	*	*
☞ (c)	<del>৩</del> SG = (35c)				
(d)	<del>৩</del> PL			*!	*

In tableau 16 candidate (c) is the optimal candidate with no constraint violations. Candidates (a) and (b) fatally violate AGR<sub>pers</sub> and candidate (d) fatally violates NOFEAT<sub>num</sub>.

Tableau 17: Agreement in Bengali, third person plural subject

Target:	<del>৩</del> PL	AGR <sub>pers</sub>	NOFEAT <sub>pers</sub>	NOFEAT <sub>num</sub>	AGR <sub>num</sub>
(a)	1 <del>SG</del>	*!	*		*
(b)	1PL	*!	*	*	
☞ (c)	<del>৩</del> SG = (35d)				*
(d)	<del>৩</del> PL			*!	

In tableau 17, candidate (d) which shows agreement in both person and number with the third person plural nominative subject is not the optimal candidate because that candidate does worse than candidate (c) on the constraint NOFEAT<sub>num</sub> which is higher ranked than the constraint AGR<sub>num</sub>. Candidate (c) is therefore optimal with one violation of AGR<sub>num</sub>.

### 3.3.2.3 Evidence for relativized EXT-AGR

Languages that have number agreement but no gender agreement like Icelandic show that it is not enough to relativize the constraint EXT-AGR for person on the one hand and number on the other. In Icelandic only the participle agrees in gender. It also agrees in gender with first and second person plural pronouns if the entities that are referred to in the discourse are all or both of the same gender.

- (38) Ic. a. Þið voruð gagnrýndir  
*You.PL.NOM were.3PL criticized.NOM.PL.MASC*  
 ‘You (two boys) were criticized’
- b. Þið voruð gagnrýndar  
*You.PL.NOM were.3PL criticized.NOM.PL.FEM*  
 ‘You (two girls) were criticized’

- c. Þið voruð gagnrýnd  
*You.PL.NOM were.3PL criticized.NOM.PL.NEUT*  
 ‘You (two children) were criticized’
- d. Þeir voru gagnrýndir  
*They.NOM.MASC were.3PL criticized.NOM.PL.MASC*  
 ‘They (boys) were criticized’
- e. Þær voru gagnrýndar  
*They.NOM.FEM were.3PL criticized.NOM.PL.FEM*  
 ‘They (girls) were criticized’
- f. Þau voru gagnrýnd  
*They.NOM.NEUT were.3PL criticized.NOM.PL.NEUT*  
 ‘They (boy and girl) were criticized’

If two boys are being criticized the participle shows masculine as in (38a). If both a boy and a girl are being criticized at the same moment, as in (38f), the participle like the pronoun itself displays the default neuter.

The finite verb, however, never agrees with the nominative DP in gender, as the data I have discussed so far show. The relevant examples are the sentences in (39) and (40). The object of the verb *þykja* ‘think’ in (39) is the second person plural pronoun *þið*, in (40) it is the third person plural feminine pronoun *þær*. The verb always has the same form which I will refer to as third person plural and **neuter**. If we imagine that the two individuals in (39a) are two women (as the agreeing adjective indicates), any attempt to agree in gender, as in (39c), will result in an ungrammatical sentence. The sentences in (39b) and (40b) are a part of the candidate set generated by GEN, it is just impossible to know what exactly the verbal forms look like because the finite verb never shows agreement in gender.<sup>6</sup>

- (39) Ic. a. Mér þótti þið fyndnar  
*Me.DAT thought.3SG.NEUT you.NOM amusing.NOM.PL.FEM*  
 ‘I thought you (two girls) were amusing’
- b. \*Mér þótt-X þið fyndnar  
*Me.DAT thought.3SG.FEM you.NOM amusing.NOM.PL.FEM*

The same applies to third person plural nominative objects. The verb in (40) agrees in number with the nominative object but there is no gender agreement. Here too, any attempt to show

<sup>6</sup>In (39b), -X stands for third person singular feminine. It is necessary that the verb is singular as there is no number agreement with second person nominative objects.

agreement in gender will result in an ungrammatical sentence.<sup>7</sup>

- (40) Ic. a. Mér þóttu þær fyndnar  
*Me.DAT thought.3PL.NEUT they.FEM.NOM*  
*amusing.NOM.PL.FEM*  
 ‘I thought they were amusing’
- b. \*Mér þótt-X þær fyndnar  
*Me.DAT thought.3PL.FEM they.FEM.NOM amusing.NOM.PL.FEM*

These examples are relevant in the discussion whether it is necessary to relativize the constraints to particular features. It might e.g. seem that this is not necessary in tableau 7. There all EXT-AGR constraints could be substituted with one non-relativized constraint because in tableau 7 all candidates that violate EXT-AGR<sub>pers&num</sub> also violate EXT-AGR<sub>pers</sub> and EXT-AGR<sub>num</sub> but candidates that do not violate EXT-AGR<sub>pers</sub> and EXT-AGR<sub>num</sub> do not violate EXT-AGR<sub>pers&num</sub>. Nevertheless, EXT-AGR has to be relativized as to which features are concerned, as tableau 19 below where candidate (b) comes out as the (incorrect) winner demonstrates. A non-relativized EXT-AGR constraint would be violated whenever the candidate does not have agreement with the nominative object in all of the three features: person, number and gender.

In tableau 18, all the candidates have a second person plural masculine nominative object. I do not consider the candidates where the verb agrees in person with the second person nominative object as they will all be ruled out by the constraint NOFEAT<sub>pers</sub> which would rank above EXT-AGR.

- (41) NOFEAT<sub>gen</sub> >> EXT-AGR >> NOFEAT<sub>num</sub>

Tableau 18: Number agreement but no gender agreement

Target: 2 PL M	NOFEAT <sub>gen</sub>	EXT-AGR	NOFEAT <sub>num</sub>
(a) <del>3 SG</del> M	*!	*	
☞ (b) <del>3 SG N</del> = (39a)		*	
(c) <del>3 PL</del> M	*!	*	*
(d) <del>3 PL N</del>		*	*!

<sup>7</sup>In (40b), -X stands for third person plural feminine.



In tableau 18 all candidates violate EXT-AGR so the decision has to be made by either one of the two constraints left. Candidate (b) which is the only candidate that does not violate the other constraints is as expected the winning candidate. Candidates (a) and (c) both fatally violate the highest ranked constraint NOFEAT<sub>gen</sub> and candidate (d) fatally violates NOFEAT<sub>num</sub>.

Tableau 19: Number agreement but no gender agreement

Target: <del>3</del> PL M	NOFEAT <sub>gen</sub>	EXT-AGR	NOFEAT <sub>num</sub>
(a) <del>3</del> SG M	*!	*	
☞ (b) <del>3</del> SG N		*	
(c) <del>3</del> PL M	*!		*
☞ (d) <del>3</del> PL <del>N</del> = (40a)		*	*!

When the nominative object is third person plural masculine things start to get problematic again. All candidates in tableau 19 except for candidate (c) violate EXT-AGR because the verb either does not agree in number or gender. Candidates (a) and (c) fatally violate NOFEAT<sub>gen</sub> and of the two candidates left, candidate (d) which is marked with ☞ should be the optimal candidate. It however does worse than candidate (b) on the constraint NOFEAT<sub>num</sub> so candidate (b) is the (incorrect) optimal candidate with only one violation of EXT-AGR.

If the constraint EXT-AGR is relativized, the picture looks very different. Though it is not enough to relativize the constraint to person and number separately because that would give the same result as in tableau 19.

(42) EXT-AGR<sub>pers&num</sub> >> NOFEAT<sub>num</sub> >> EXT-AGR<sub>num</sub>

Tableau 20: Number agreement but no gender agreement

Target: 2 PL M	EXT-AGR person&number	EXT-AGR person	NOFEAT number	EXT-AGR number	NOFEAT gender
(a) <del>3</del> SG M	*	*		*	*!
☞ (b) <del>3</del> SG N = (39a)	*	*		*	
(c) <del>3</del> PL M	*	*	*!		*
(d) <del>3</del> PL <del>N</del>	*	*	*!		

In tableau 20 everything is the same as in tableau 18 except that all the violations of EXT-AGR in tableau 18 now divide on the three constraints EXT-AGR<sub>pers&num</sub>, EXT-AGR<sub>pers</sub> and EXT-AGR<sub>num</sub>. In tableau 20, candidate (b) is the optimal candidate with one violation of each of the

three EXT-AGR constraints.

Tableau 21: Number agreement but no gender agreement

Target: <del>3</del> PL M	EXT-AGR person&number	EXT-AGR person	NOFEAT number	EXT-AGR number	NOFEAT gender
(a) <del>3 SG</del> M	*!			*	*
(b) <del>3 SG N</del>	*!			*	
(c) <del>3</del> PL M			*		*!
☞ (d) <del>3</del> PL <del>N</del> = (40a)			*		

In tableau 21 candidate (d) now is the correct optimal candidate with one violation of NOFEAT<sub>num</sub>. This violation is immaterial since candidate (c) which also violates this constraint has an additional fatal violation of NOFEAT<sub>gen</sub>. The conclusion is that the constraint EXT-AGR has to be relativized to separate features, and furthermore, that it has to be relativized to the features person and number in one and the same constraint.

It is not clear whether AGR<sub>num</sub>, AGR<sub>gen</sub>, EXT-AGR<sub>num</sub> and EXT-AGR<sub>gen</sub> have to be relativized further for I and V respectively in order to derive participial agreement as participles in Icelandic do agree in gender and number but not in person (cf. also the examples in (38) above).

- (43) Ic. a. Ráðherrann var gagnrýndur  
*Ministers-the.NOM was.3SG criticized.NOM.SG.MASC*  
 ‘The minister was criticized’
- b. Ráðherrarnir voru gagnrýndir  
*Ministers-the.NOM were.3PL criticized.NOM.PL.MASC*  
 ‘The ministers were criticized’
- c. Ríkisstjórnin var gagnrýnd  
*Government-the.NOM was.3SG criticized.NOM.SG.FEM*  
 ‘The government was criticized’
- d. Ríkisstjórnirnar voru gagnrýndar  
*Governments-the.NOM were.3PL criticized.NOM.PL.FEM*  
 ‘The governments were criticized’
- e. Frumvarpið var gagnrýnt  
*Draft-the.NOM was.3SG criticized.NOM.SG.NEUT*  
 ‘The draft was criticized’
- f. Frumvörpin voru gagnrýnd  
*Drafts-the.NOM were.3PL criticized.NOM.PL.NEUT*  
 ‘The drafts were criticized’

### 3.4 Languages with no morphological agreement

Danish and the other MSc languages do not show any morphological Subject-Verb agreement. These languages do not have any number distinctions nor do they have any person distinctions. The Danish verb *læse* ‘to read’ has one form *læser* for all person and number combinations in the present tense and another form *læste* throughout the past tense.

- (44) Da. a. Jeg læste bogen  
*I read.PAST book-the*  
 ‘I read the book’  
 b. Vi læste bogen  
*We read.PAST book-the*  
 ‘We read the book’  
 c. De læste bogen  
*They read.PAST book-the*  
 ‘They read the book’

Instead of ranking both  $\text{AGR}_{\text{pers}}$  and  $\text{AGR}_{\text{num}}$  above  $\text{NOFEAT}_{\text{pers}}$  and  $\text{NOFEAT}_{\text{num}}$  as in tableau 1  $\text{AGR}_{\text{pers}}$  now has to rank below  $\text{NOFEAT}_{\text{pers}}$  and  $\text{NOFEAT}_{\text{num}}$  above  $\text{AGR}_{\text{num}}$ . This gives exactly the same result as having a very highly ranked non-relativized  $\text{NOFEAT}$  constraint as in Samek-Lodovici (2002: 59, (19)).

- (45)  $\text{NOFEAT}_{\text{pers}} \gg \text{AGR}_{\text{pers}}, \text{NOFEAT}_{\text{num}} \gg \text{AGR}_{\text{num}}$

Tableau 22: No agreement, first person singular nominative subject

	Subject	Verb	$\text{NOFEAT}_{\text{pers}}$	$\text{AGR}_{\text{pers}}$	$\text{NOFEAT}_{\text{num}}$	$\text{AGR}_{\text{num}}$
	(a) 1 <del>SG</del>	1 <del>SG</del>	*!			
☞	(c) 1 <del>SG</del>	<del>3 SG</del> = (44a)		*		

In tableau 22 candidate (c) violates  $\text{AGR}_{\text{pers}}$  once. This violation is not fatal since candidate (a) fatally violates the higher ranked constraint  $\text{NOFEAT}_{\text{pers}}$ .

Tableau 23: No agreement, first person plural nominative subject

	Subject	Verb	$\text{NOFEAT}_{\text{pers}}$	$\text{AGR}_{\text{pers}}$	$\text{NOFEAT}_{\text{num}}$	$\text{AGR}_{\text{num}}$
	(a) 1 PL	1 <del>SG</del>	*!			*
	(b) 1 PL	1 PL	*!		*	
☞	(c) 1PL	<del>3 SG</del> = (44b)		*		*
	(d) 1PL	<del>3 PL</del>		*	*!	

Here again the decision is made by  $\text{NOFEAT}_{\text{pers}}$  because in tableau 23, both candidates (a) and (b) which have agreement in person with the subject fatally violate this constraint. Here the ranking of  $\text{NOFEAT}_{\text{num}}$  and  $\text{AGR}_{\text{num}}$  also becomes clear. Candidate (d) fatally violates the higher ranked  $\text{NOFEAT}_{\text{num}}$  and candidate (c) is the optimal candidate with one violation of each of the AGR constraints.

Tableau 24: No agreement, third person plural nominative subject

	Subject	Verb	$\text{NOFEAT}_{\text{pers}}$	$\text{AGR}_{\text{pers}}$	$\text{NOFEAT}_{\text{num}}$	$\text{AGR}_{\text{num}}$
☞	(c)	$\bar{3}$ -PL $\bar{3}$ -SG = (44c)				*
	(d)	$\bar{3}$ -PL $\bar{3}$ -PL			*!	

Again the ranking of  $\text{NOFEAT}_{\text{num}}$  and  $\text{AGR}_{\text{num}}$  is crucial. Candidate (d) which has agreement in number with the plural subject fatally violates  $\text{NOFEAT}_{\text{num}}$  and candidate (c) which has no number marker is the optimal candidate with one violation of  $\text{AGR}_{\text{num}}$ .

What is relevant in the last three tableaux is that both the  $\text{NOFEAT}$  constraints have to be ranked above the AGR constraints.  $\text{NOFEAT}_{\text{num}}$  has to rank above  $\text{AGR}_{\text{num}}$  and  $\text{NOFEAT}_{\text{pers}}$  has to rank above  $\text{AGR}_{\text{pers}}$ . It is irrelevant how  $\text{NOFEAT}_{\text{num}}$  is ranked with respect to  $\text{AGR}_{\text{pers}}$ . It is also irrelevant how  $\text{NOFEAT}_{\text{pers}}$  is ranked with respect to  $\text{AGR}_{\text{num}}$  given that  $\text{NOFEAT}_{\text{num}}$  dominates  $\text{AGR}_{\text{num}}$ .

### 3.5 Conclusion

Icelandic gives evidence for the local constraint tie  $\text{EXT-AGR}_{\text{pers\&num}}$ , because an analysis where  $\text{EXT-AGR}[x]$  is relativized to number and person separately will not account for the Icelandic data. The constraint  $\text{EXT-AGR}_{\text{pers\&num}}$  cannot be a local constraint conjunction. There are, however, also arguments against  $\text{EXT-AGR}_{\text{pers\&num}}$  as a local constraint tie. Evidence for relativized  $\text{NOFEAT}$  can be found in languages like Icelandic and also Bengali where the verb inflects for person but not for number (cf. Lahiri 2000: 73-75).

It is important to integrate the notion of nominative into the constraints. If this is not done, the candidate that has subject-verb agreement with a dative subject will always do better than the candidate that has impoverished agreement with the nominative object.

Different agreement patterns can only be accounted for with constraints on agreement and morphology like  $\text{AGR}[x]$ ,  $\text{EXT-AGR}[x]$  and  $\text{NOFEAT}[x]$  if these are relativized to different features i.e. person, number and gender. It is unclear whether they also have to be relativized for I and V in order to capture the difference between finite verb agreement and participial agreement.

### 3.6 The differences between the present analysis and Samek-Lodovici (2002)

Samek-Lodovici's constraints are formulated with strict notion of structure, the agreement head ( $I^{\circ}$ ) and a DP "must" agree within a given structure. The DP that e.g. occupies the subject position has to agree with the agreement head within the local projection of the head, cf. Samek-Lodovici (2002: 60, (21)).

The consequence of formulating the constraints this way is that the constraints could be used to force something of a specific type i.e. a nominative DP to move into the specifier of IP in order to get Spec-Head agreement. The candidate that has Spec-Head agreement will always do better than the candidate that does not have Spec-Head agreement. I formulate the constraints in a less strict way, all my constraints say is that **if** there is a nominative DP in the clause, the verb should show agreement with it.

Another consequence is that in DAT-NOM constructions, the candidate showing Spec-Head agreement with the dative subject will in Samek-Lodovici's system always do better than the candidate that has agreement with the nominative object, if the constraint on Spec-Head agreement is ranked above the constraint on agreement in the extended projection of the finite verb. To avoid this and to get a less complex system I choose to integrate the notion of nominative into the constraints. This also eliminates the need for theoretically possible constraints like AGR-NOM which would penalize all candidates not agreeing with a nominative DP in the clause.

### 3.7 The default values

*Third person* is the default value for *person* in Icelandic. It is often referred to as no person as e.g. in Rohrbacher (1999: 115): “The systematic absence of overt morphology from the third person (singular) then suggests that universally, third person is the unmarked value for the feature ‘person’. This view is standardly translated into the assumption that ‘person’ falls into two features, [1ST] and [2ND], whose positive values are marked and whose negative values are unmarked ... Third person corresponds to the unmarked feature combination [-1ST, -2ND]. In fact it should not be viewed as an independent ‘third’ person, but rather as the absence of person.”.

The default value for *number* in Icelandic as in many other languages is *singular*. Corbett (2000: 185) says: “In English, as in language after language, the default number value is the singular. We might expect this to be universal.”

In Icelandic *neuter* is the default value for *gender*. In the nominal system of Icelandic there are three genders: masculine, feminine and neuter. However in the verbal system gender is only marked on the participle. Corbett (1991: 206) says that the “use of the neuter for the neutral agreement [i.e. default agreement] could be understood as the selection of the gender which is most appropriate in semantic terms (thereby avoiding the semantic clash of neutral with human, which would arise with the other genders)”. As soon as there is a clash in gender as in (46), where the sentence contains both a masculine noun and a feminine noun, the participle does not show agreement but shows up in the default form **neuter** (cf. also the examples in (38) and (43)):

- (46) Ic. Tölvan og prentarinn voru  
*Computer-the.NOM.FEM and printer-the.NOM.MASC were.3PL*  
 ónýtt  
*broken.NOM.PL.NEUT*  
 ‘The computer and the printer were broken’

### 3.8 The crucial constraint rankings

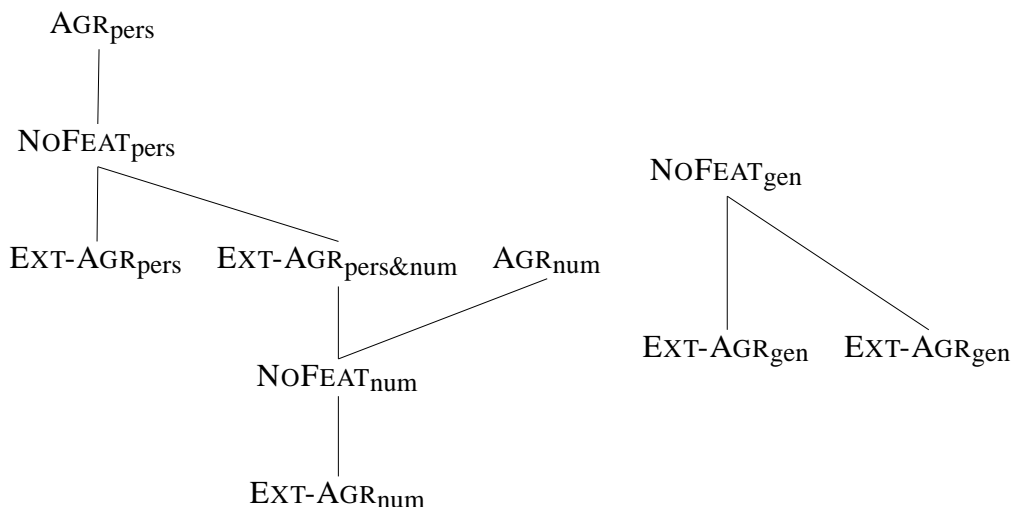


Figure 1. The ranking diagram of Icelandic

The crucial rankings can be summarized in the following points:

The constraints  $AGR_{pers}$  and  $AGR_{num}$  have to be ranked above  $NOFEAT_{pers}$  and  $NOFEAT_{num}$  for the verb to have agreement in person and number with the nominative subject.  $AGR_{gen}$  has to rank below  $NOFEAT_{gen}$  because the verb does not agree in gender with the nominative subject. Languages like Danish that do not show morphological agreement rank all  $NOFEAT$  constraints above all  $AGR$  constraints. Languages with person agreement only, like Bengali, have the same ranking as Icelandic except that there  $NOFEAT_{num}$  is ranked above  $AGR_{num}$ . Likewise in a language which only has number agreement like e.g the Norwegian dialect of Hallingdalen,  $AGR_{pers}$  is ranked below  $NOFEAT_{pers}$ .

It is not enough to relativize the constraint  $EXT-AGR[x]$  to the features person and number separately for this would give the wrong result in the case of Icelandic which has number agreement but no gender agreement. The constraint has to be relativized to both features in one constraint as demonstrated in tableau 20. The constraint  $EXT-AGR_{pers\&num}$  can not be a local constraint conjunction. In Icelandic this constraint is crucially ranked above both  $NOFEAT_{num}$  and  $EXT-AGR_{num}$ .

The constraint  $NOFEAT_{pers}$  is crucially ranked above the constraints  $EXT-AGR_{pers}$  and  $EXT-AGR_{pers\&num}$  otherwise the verb would agree in person with the NOM object.

$EXT-AGR_{pers}$  and  $EXT-AGR_{pers\&num}$  are not crucially ranked in Icelandic.



### 3.9 Reduced agreement in Icelandic and English

As was shown in (20), page 87 (repeated here as (47)), EXT-AGR<sub>pers&num</sub> is a local constraint tie where two constraints are truly conjoined, unlike usual constraint ties where constraints are disjoined:

(47) EXTENDED-AGREEMENT<sub>pers&num</sub> (EXT-AGR<sub>pers&num</sub>):

A nominative DP in the extended projection of the finite verb and a verb in I° have identical feature values with respect to a feature **person** AND a nominative DP in the extended projection of the finite verb and a verb in I° have identical feature values with respect to a feature **number**.

The problem is that this constraint is not only violated when both parts of the tie are violated but also when only one part of the tie is violated. A second drawback of this constraint tie is, as I have tried to show, that it cannot be gradient, i.e. when both parts of the tie are violated, the tie is only violated once.

In this section, I would like to show that the same result can be obtained as in section 3.3 only with a system that is much less complex and without the use of local conjunction ties as the one in (47). The basic idea of this alternative analysis is that agreement is correspondence between the features of two different elements, a verb and a nominative DP. In its features, a verb should correspond to the features of a nominative DP. Correspondence of this type may be accounted for by assuming the constraint IDENT<sub>[F]</sub> (Correspondence Theory, McCarthy & Prince 1995), which requires feature identity between the verb and a nominative DP.

#### 3.9.1 Icelandic

The verb *þykja* 'think' can either have a nominative subject or a dative subject and a nominative object. If the subject is nominative, the verb shows agreement with it in both person and number:

- (48) Ic. a. Ég **þyki** góður í fótbolta  
I.NOM think.1SG good in football  
'People think I am good at football'
- b. Við **þykjum** góð í fótbolta  
We.NOM think.1PL good in football  
'People think we are good at football'

If the subject is dative, i.e. it is in a DAT-NOM construction, the verb does not show agreement with it. Instead the verb shows agreement with the nominative object:

- (49) Ic. a. Mér **þykir** hann góður í fótbolta  
*Me.DAT thinks.3SG he.NOM good in football*  
 'I think he is good at football'
- b. Mér **þykja** þau góð í fótbolta  
*Me.DAT think.3PL they.NOM good in football*  
 'I think they are good at football'

However, object agreement is restricted to third person. The verb does not show agreement with first and second person nominative objects:

- (50) Ic. a. Ykkur **þykir** / \*þyki ég góður í  
*You.DAT.PL thinks.3SG / think.1SG I.NOM good in*  
*fótbolta*  
*football*  
 'You think I am good at football'
- b. Ykkur **þykir** / \*þykjum / \*þykja við  
*You.DAT.PL thinks.3SG / think.1PL / think.3PL we.NOM*  
*góð í fótbolta*  
*good in football*  
 'You think we are good at football'

### 3.9.2 Old English

In Old English DAT-NOM constructions, the verb behaves like the verb in Modern Icelandic DAT-NOM constructions. In (51a), the verb *lician* 'like, please' has a *that*-clause complement and in (51b) it has a PP complement. In (51a) the subject is dative *me* 'me' and in (51b) it is the dative *him eallum* 'them all'. In both examples the verb does not show agreement with the dative subject:

- (51) OE. a. þa [...] gelicode me þæt ic ...  
*then [...] liked.3SG me.DAT that I.NOM ...*  
 'then [...] I liked that I ...' (cohad 107.482)
- b. þa gelicode him eallum mid heora  
*then liked.3SG them.DAT all.DAT with their.DAT*  
*cyninge*  
*king.DAT*  
 'then their king pleased them all' (cobede 12.453)

As in Icelandic, the verb in Old English DAT-NOM constructions does not show agreement with first or second person nominative objects. In (52), the verb does not show agreement with nominative *þu* 'you (sg)'. Instead the verb has the default form third person singular:

- (52) OE. *þeah þu nu hwæm fæger ðince*  
*though you.NOM.SG now whom.DAT.SG fair thinks.3SG.SUBJ*  
 'Although you now will seem beautiful to someone' (coboeth 73.6)

If the nominative object is third person, the verb shows agreement with it in person and number. This can be seen when the nominative object is third person plural as in (53a-c):

- (53) OE. a. *swa me þincað þine spell*  
*such as me.DAT think.3PL your news.NOM*  
 'such as your news seem to me' (coboeth 4.2407)
- b. *hu him þa tida gelicoden*  
*how them.DAT the.NOM.PL tides.NOM liked.3PL.SUBJ*  
 'how they would have liked the canonical services' (coorosiu 20.2368)
- c. *and him ealle þincg gelumpon swa swa*  
*but him.DAT all.NOM.PL things.NOM befell so that*  
*him sylfum gelicode*  
*himself.DAT liked.3SG*  
 'but all things befell him such that he himself was pleased' (coaelive 100.2756)

### 3.9.3 "Early" Old Icelandic and Early Old English

I have found two examples that indicate that it was possible for the verb to show agreement in person with first and second person pronouns in Old Icelandic and Early Old English in DAT-NOM constructions. In *Möðruvallabók* 'Book of Möðruvellir', there is one example where the verb shows agreement in person and number with a first person singular nominative object:

- (54) OI. *þráinn þótta ek mikils virða mágsemd við yör*  
*Thráinn thought.1SG I.NOM highly rate affinity with you*  
 'To Thráinn, I seemed to highly rate my affinity with you' (Njáls saga 33va17)

In the YCOE, there is also one example of a DAT-NOM construction where the verb shows agreement in person and number with a second person singular nominative object:

- (55) OE. þu                    mannum            gelicodest þurh    þin    sigefæst  
          you.NOM.SG men.DAT.PL liked.2SG through your victorious  
          gefeoht  
          battle  
          'you pleased men through your victorious battle' (coeust 121.128)

It seems that Old Icelandic and Early Old English behave like German in this respect:

- (56) Ge. Ihr                    gefällt        mir  
          You.NOM.PL please.2PL me.DAT  
          'You please me'

In section 2.2.1, I claimed that the difference between German on the one hand and Icelandic on the other was that in German, the nominative element occupies IP-Spec, whereas in Icelandic, the dative element occupies IP-Spec. Therefore, the verb shows agreement in person and number with the nominative element in German but not in Icelandic. From the examples in (56) and (55), we can not conclude whether the nominative element is in IP-Spec or not. The difference between Early Old English and Old English and “Early” Old Icelandic and Old Icelandic might just as well be that agreement in person was not local in these languages, i.e. not strictly Spec-Head related.

In the example in (56), the verb shows agreement in both person and number with the nominative argument. The difference between Icelandic and German is that such constructions, i.e. mono-clausal DAT-NOM constructions, are impossible in Icelandic if the nominative object is first or second person (cf. section 4.17), whereas in German the first or second person nominative element has to raise to the subject position.

### 3.9.4 Summary

In DAT-NOM constructions at the older stages of Icelandic and Early Old English, the verb apparently showed agreement in person and number with the nominative object. At later stages of Icelandic and Old English the verb could only show agreement in number with third person nominative objects.

(57) *Agreement in “Early” Old Icelandic, Early Old English and German DAT-NOM*

VERB		OBJECT	VERB		OBJECT
1SG	→	1SG	1PL	→	1PL
2SG	→	2SG	2PL	→	2PL
3SG	→	3SG	3PL	→	3PL

For Icelandic and Old English, the observation is that if the verb cannot fully agree with the nominative DP it cannot agree with it at all:

(58) *Agreement in Icelandic and Old English DAT-NOM*

DEFAULT		AGREEMENT	
OBJECT	VERB	OBJECT	VERB
1SG/1PL	3SG	3SG	→ 3SG
2SG/2PL		3PL	→ 3PL

In DAT-NOM constructions, the verb cannot show agreement in person with first or second person nominative objects, therefore it cannot show agreement in number with these objects either. Since the verb always is third person, it always shows agreement in person with third person nominative objects. Therefore, it can always show agreement in number with third person nominative objects. It does not matter whether third person is taken to be absence of person or not. If third person is absence of person, the verb shows agreement in person with third person nominative objects because its features will also show absence of person.

### 3.10 The analysis

The basic idea of this analysis is that agreement is correspondence between the features of two different elements, the verb and the nominative DP. In its features, the verb should correspond to the features of the nominative DP. Correspondence of this type may be accounted for by assuming the constraint IDENT<sub>[F]</sub> (Correspondence Theory, McCarthy & Prince 1995), which requires feature identity between the verb and the nominative DP.

IDENT can either be relativized to separate agreement features such as person, number and gender or it constrains every feature at the same time. Furthermore, the constraint has to be relativized to different structural positions, as there is a difference between local and non-local agreement (cf. Samek-Lodovici 1996, 2002).

(59) IDENT<sub>[F]</sub>:

In its feature values, the finite verb is identical to the feature value of every feature [F] of a nominative DP.

(60) IDENT<sub>[IP-Spec]</sub>:

In its feature values, the finite verb is identical to the feature value of every feature [F] of a nominative DP in the specifier of IP.

The constraints in (59) and (60) are non-gradient constraints, i.e. a candidate where there is a first person plural nominative DP and a third person singular verb will only violate the constraints once. In other words, the constraints choose between perfect and imperfect candidates. They do not choose between imperfect candidates themselves.

The interaction of IDENT<sub>[F]</sub> and the markedness hierarchy with respect to number (cf. e.g. Aissen 1999, 2001, 2003 and Grimshaw 2001) and the markedness hierarchy with respect to person (cf. e.g. Aissen 1999, 2001, 2003) will predict that verbs show agreement in some cases and default agreement in other cases, i.e. the verb always shows 3SG. When IDENT<sub>[F]</sub> is decisive, the optimal candidate will be the one where the verb shows agreement with the nominative DP, and when IDENT<sub>[F]</sub> is not decisive, the markedness hierarchies will choose the least marked candidate as the optimal candidate.

(61) *Markedness Hierarchies:*

- a. Local (1./2. person) > Non-Local (3. person)
- b. PL > SG

First and second person are local persons while third person is non-local. The hierarchy in (61a) tells us that third person is less marked than first and second person, whereas first and second person are equally marked. From the markedness hierarchy in (61b), it follows that singular is less marked than plural. The hierarchies in (61) are universal.

(62) *Markedness Constraints:*

- a. \*LOCAL
- b. \*PL

It is an open question, whether a constraint such as \*SG (or \*NON-LOCAL) exists. If it exists, it does not play any role because it is always outranked by its counterpart (i.e. \*PL/\*LOCAL).

### 3.10.1 How to get default agreement

If IDENT<sub>[F]</sub> is dominated by \*LOCAL, verbs will not show agreement in person with first and second person nominative DPs. If the nominative object is first person, IDENT<sub>[F]</sub> cannot decide which candidate is optimal, so the decision has to be left to the markedness constraints.

- (63) Ic. Honum **þykir** við / þið góð í fótbolta  
*Him.DAT thinks.3SG we.NOM / you.NOM.PL good in football*  
 'He thinks we / you are good at football'

Tableau 25: No feature correspondence. First/second person plural

NOM DP: 1/2 PL	IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
(a) Verb: 1/2 SG		*!	*	
(b) Verb: 1/2 PL		*!		*
☞ (c) Verb: 3 SG = (63)			*	
(d) Verb: 3 PL			*	*!

Candidates (a) and (b) where the verb is specified for first person fatally violate \*LOCAL. Candidates (c) and (d) tie on IDENT<sub>[F]</sub>, leaving \*PL to decide which candidate wins. Candidate (d) fatally violates \*PL and candidate (c) is the optimal candidate.

In tableau 25 it becomes clear why IDENT<sub>[F]</sub> is a non-gradient constraint. If IDENT<sub>[F]</sub> was gradient, candidate (c) would violate it twice because it corresponds to the nominative DP neither in person nor in number.

- (64) Ic. Þeim þykir ég / þú góður í fótbolta  
*Them.DAT thinks.3SG I.NOM / you.NOM.SG good in football*  
 'They think I am / you are good at football'

Tableau 26: No feature correspondence. First/second person singular

NOM DP: 1/2 SG	IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
(a) Verb: 1/2 SG		*!		
(b) Verb: 1/2 PL		*!	*	*
☞ (c) Verb: 3 SG = (64)			*	
(d) Verb: 3 PL			*	*!

Here again candidates (a) and (b) fatally violate \*LOCAL. Candidates (c) and (d) also tie on IDENT<sub>[F]</sub> and the decision has to be made by \*PL. Candidate (c) does not violate \*PL but candidate (d) does so fatally.

### 3.10.2 How to get agreement

If the object is third person, IDENT<sub>[F]</sub> will be able to choose which candidate is the optimal candidate because the candidates where the verb is third person will not tie on IDENT<sub>[F]</sub> anymore. There will always be one **third person** candidate that does better on IDENT<sub>[F]</sub> than the other candidates.

- (65) Ic. Mér þykja þau góð í fótbolta  
*Me.DAT think.3PL they.NOM good in football*  
 'I think they are good at football'

Tableau 27: Full feature correspondence. Third person plural

NOM DP: 3 PL	IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
(a) Verb: 1/2 SG		*!		
(b) Verb: 1/2 PL		*!	*	*
(c) Verb: 3 SG			*!	
☞ (d) Verb: 3 PL = (65)				*



In tableau 27, candidates (c) and (d) do not tie on IDENT<sub>[F]</sub>. The optimal candidate, candidate (d) does not violate IDENT<sub>[F]</sub> because the person and number features of the verb correspond to the person and number features of the nominative object. Candidate (c) however fatally violates IDENT<sub>[F]</sub> because it does not correspond to the nominative DP with respect to the feature number. In tableau 27, IDENT<sub>[F]</sub> crucially dominates \*PL.

- (66) Ic. Mé<sup>r</sup>      þykir      hann      góður í fótbolta  
*Me.DAT thinks.3SG he.NOM good in football*  
 'I think he is good at football'

Tableau 28: Full feature correspondence. Third person singular

NOM DP: 3 SG	IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
(a) Verb: 1/2 SG		*!	*	
(b) Verb: 1/2 PL		*!	*	*
☞ (c) Verb: 3 SG = (66)				
(d) Verb: 3 PL			*!	*

In tableau 28, candidate (c) is the optimal candidate. It does not violate IDENT<sub>[F]</sub> because the verb corresponds to the nominative DP. Candidate (d), however, fatally violates IDENT<sub>[F]</sub> because the number feature of the verb does not correspond to the number feature of the nominative object.

### 3.10.3 Subject-Verb agreement

If the subject is nominative, the verb shows agreement in both person and number:

- (67) Ic. a. Ég      þyki      góður í fótbolta  
*I.NOM think.1SG good in football*  
 'I seem to be good at football'
- b. Við      þykjum      góð í fótbolta  
*We.NOM think.1PL good in football*  
 'We seem to be good at football'

This difference in local and non-local agreement calls for another IDENT<sub>[F]</sub> constraint which is relativized to structural positions (cf. Samek-Lodovici (1996), 2002). This constraint is the constraint IDENT<sub>[IP-Spec]</sub> given in (60), repeated here as (68):

(68) IDENT<sub>[IP-Spec]</sub>:

In its feature values, the finite verb is identical to the feature value of every feature [F] of a nominative DP in the specifier of IP.

This constraint is violated if there is a nominative subject and the verb does not show agreement with it. For example, if the subject is first person plural and the verb is third person singular the constraint in (68) is violated once. In Icelandic, verbs show agreement in both person and number with nominative subjects, so the relativized constraint must dominate the markedness constraints.

Tableau 29: Subject-Verb agreement. First person singular

NOM DP: 1/2 SG	IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
☞ (a) Verb: 1/2 SG = (67a)		*		
(b) Verb: 1/2 PL	*!	*	*	*
(c) Verb: 3 SG	*!		*	
(d) Verb: 3 PL	*!		*	*

In tableau 29, candidate (a) is the optimal candidate because all the other candidates tie on IDENT<sub>[IP-Spec]</sub>. In tableau 30, IDENT<sub>[IP-Spec]</sub> also decides which candidate is the winning candidate.

Tableau 30: Subject-Verb agreement. First person plural

NOM DP: 1/2 PL	IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
(a) Verb: 1/2 SG	*!	*	*	
☞ (b) Verb: 1/2 PL = (67b)		*		*
(c) Verb: 3 SG	*!		*	
(d) Verb: 3 PL	*!		*	*

In tableau 30, candidates (a), (c) and (d) tie on IDENT<sub>[IP-Spec]</sub>. These violations are fatal since there is a candidate that does better on IDENT<sub>[IP-Spec]</sub>, namely the optimal candidate (b).

Likewise, if the nominative subject is third person, the verb shows agreement with it:

(69) Ic. a. Hann **þykir** góður í fótbolta  
*He.NOM thinks.3SG good in football*  
 ‘He seems to be good at football’

- b. Þau þykja góð í fótbolta  
*They.NOM think.3PL good in football*  
 ‘They seem to be good at football’

Tableau 31: Subject-Verb agreement. Third person singular

NOM DP: 3 SG	IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
(a) Verb: 1/2 SG	*!	*	*	
(b) Verb: 1/2 PL	*!	*	*	*
☞ (c) Verb: 3 SG = (69a)				
(d) Verb: 3 PL	*!		*	*

In tableau 31, candidate (c) is the optimal candidate with no constraint violation. All the other candidates tie on IDENT<sub>[IP-Spec]</sub> and IDENT<sub>[F]</sub>.

Tableau 32: Subject-Verb agreement. Third person plural

NOM DP: 3 PL	IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
(a) Verb: 1/2 SG	*!	*	*	
(b) Verb: 1/2 PL	*!	*	*	*
(c) Verb: 3 SG	*!		*	
☞ (d) Verb: 3 PL = (69b)				*

In tableau 32, candidate (d) is the optimal candidate with one violation of \*PL. Candidates (a), (b) and (c) tie on IDENT<sub>[IP-Spec]</sub> and IDENT<sub>[F]</sub>. The IDENT<sub>[IP-Spec]</sub> violations are fatal because candidate (d) does better on this constraint than the other candidates.

### 3.10.4 “Early” Old Icelandic and Early Old English

In modern Icelandic, when the nominative object is first or second person, the verb does not show agreement with the object because \*LOCAL dominates IDENT<sub>[F]</sub>, cf. section 3.10.1. As the examples in (54) and (55), repeated as (70) and (71), show, the verb could show agreement in person and number with first and second person nominative objects at earlier stages of Old Icelandic and Old English.

- (70) OI. þráinn þóttu ek mikils virða mágsemd við  
*Thráinn.DAT thought.1SG I.NOM highly rate affinity with*  
 yður  
 you  
 ‘To Thráinn, I seemed to highly rate my affinity with you’ (Njáls saga 33va17)

- (71) OE. þu                mannum            gelicodest þurh        þin    sigefæst  
          you.NOM.SG men.DAT.PL liked.2SG through your victorious  
          gefeoht  
          battle  
          'you pleased men through your victorious battle' (coeust 121.128)

If both the IDENT constraints, IDENT<sub>[IP-Spec]</sub> and IDENT<sub>[F]</sub>, dominate \*LOCAL this is exactly what is to be expected:

Tableau 33: Subject-Verb agreement. First/second person singular

NOM DP: 1/2 SG	IDENT <sub>[IP-Spec]</sub>	IDENT <sub>[F]</sub>	*LOCAL	*PL
☞ (a) Verb: 1/2 SG = (70) & (71)			*	
(b) Verb: 1/2 PL		*!	*	*
(c) Verb: 3 SG		*!		
(d) Verb: 3 PL		*!		*

In tableau 33, candidates (b), (c) and (d) all fatally violate IDENT<sub>[F]</sub>. The only candidate left is candidate (a) where the person and number features of the verb correspond to the person and number features of the nominative object. If IDENT<sub>[F]</sub> were dominated by \*LOCAL it would give the same result as in table 26, i.e. that the verb would have the default form third person singular instead of showing agreement with the first or second person nominative object.

### 3.10.5 Conclusion

In a language where IDENT<sub>[F]</sub> is decisive, the optimal candidate is the candidate where the verb shows agreement with the nominative DP. In the cases where IDENT<sub>[F]</sub> is not decisive, markedness constraints such as \*LOCAL and \*PL will choose the least marked candidate, i.e. the candidate where the verb shows default agreement, as the optimal candidate.

- (72) Constraint ranking for Icelandic and Old English:

IDENT<sub>[IP-Spec]</sub> » \*LOCAL » IDENT<sub>[F]</sub> » \*PL

By relativizing IDENT<sub>[F]</sub> to structural positions, it is possible to account for the difference between clauses with nominative subjects (where the verb shows agreement in person and number) and clauses with dative subjects and nominative objects (where the verb only shows agreement with third person elements). Here, the constraint IDENT<sub>[IP-Spec]</sub> is relativized to IP-Spec which

means that whenever there is a nominative element in IP-Spec, the verb should correspond to this element in its features. If there is a dative element in IP-Spec, IDENT<sub>[IP-Spec]</sub> is vacuously satisfied. If the non-relativized IDENT<sub>[F]</sub> cannot decide which candidate is the optimal candidate, the markedness constraints will choose the least marked candidate.

At the earliest stages of Old Icelandic and Old English, both IDENT<sub>[F]</sub> and IDENT<sub>[IP-Spec]</sub> dominated \*LOCAL and \*PL.

(73) Constraint ranking for “Early” Old Icelandic and Early Old English:

IDENT<sub>[IP-Spec]</sub>, IDENT<sub>[F]</sub> » \*LOCAL, \*PL

Therefore, IDENT<sub>[F]</sub> and IDENT<sub>[IP-Spec]</sub> are always decisive at this stage of Old Icelandic and Old English and the verb will always show agreement in person and number with the nominative object in DAT-NOM constructions.

### 3.11 Conclusion

In this chapter, I have given two different analyses of agreement in DAT-NOM constructions in Icelandic and Old English. In the first analysis which is based on Samek-Lodovici (1996, 2002), I have modified Samek-Lodovici's constraints in such a way that they explicitly mention that the verb should show agreement with nominative elements. Furthermore, to account for the difference found in Icelandic in clauses with a nominative subject on the one hand and clauses with dative subjects and nominative objects on the other, it is necessary to assume the existence of the local constraint tie  $\text{EXT-AGR}_{\text{pers\&num}}$ . As I have tried to show, this constraint must be relativized to separate features, and to the features person and number in the same constraint. Furthermore,  $\text{EXT-AGR}_{\text{pers\&num}}$  cannot be a local constraint conjunction.

In the second analysis, I have tried to show that the same result may be obtained as in section 3.3 in an analysis where agreement is correspondence between two elements. The idea is that in its features, the verb should correspond to the features of the nominative DP. To account for this type of correspondence, I have used constraints such as  $\text{IDENT}_{[\text{F}]}$  and  $\text{IDENT}_{[\text{IP-Spec}]}$  (Correspondence Theory, McCarthy & Prince 1995). The advantage of this alternative analysis is that it is less complex than the previous analysis and that in this analysis, we no longer have to assume the existence of local constraint conjunctions or local constraint ties such as  $\text{EXT-AGR}_{\text{pers\&num}}$  to account for the agreement patterns found in Icelandic. A further advantage is that it is no longer necessary to relativize the respective constraints to specific features such as person or number, it is only necessary to relativize the constraints to specific structural positions such as IP-Spec (or VP to capture participial agreement).

## Chapter 4

### Getting rid of the worst

This chapter is structured as follows: In the first section, I will explain the semantic and the syntactic differences that the two Icelandic verbs *þykja* and *vanta* show. These verbs have very similar meaning (close to that of the English verbs *need* and *lack*) but the two verbs behave very differently when it comes to syntax. I also try to clarify the difference between verbs that take a nominative subject on the one hand and an accusative/dative subject on the other. As I would like to show, there is not much difference between verbs that assign accusative case to their subject and verbs that assign dative case to their subject. Nevertheless, I will assume that accusative is *idiosyncratic* case and that dative is *semantic* case.

In my analysis, I will use constraints that are derived by the harmonic alignment of various markedness hierarchies. For example, one of the ideas behind the analysis is that it is more marked for subjects to be dative or accusative than it is for subjects to be nominative, but it is even more marked for the same subjects to be inanimate than animate.

The constraints can also be used to account for the definiteness effect in Icelandic transitive expletive constructions as I will show in section 4.12.

In section 4.17, I would like to stretch this analysis further to account for the person restriction in Icelandic DAT-NOM constructions. In DAT-NOM constructions, the nominative object is usually excluded from being first or second person. This will be reflected in an analysis where it is marked to be a nominative object, but even more marked to be a first or second person nominative object.

#### 4.1 Inanimate accusative subjects

Silverstein (1976) was one of the first to point out the connection between semantic roles and animacy (see also Aissen 1999 from whom I have adopted the hierarchies in (1a,b)):

- (1) a. Local person > Pronoun 3rd > Proper Noun 3rd > Human 3rd > Animate 3rd > Inanimate 3rd

b. Agent > Patient

The hierarchies in (1) are both prominence scales. The prominence scale in (1a) states that it is more prominent to be a local person (i.e. first or second person) than it is to be a third person pronoun and that it is more prominent to be a third person pronoun than it is to be a third person proper noun and so on. The prominence scale in (1b) states that it is more prominent to be an AGENT than it is to be a PATIENT. According to Silverstein (1976), the connection between the two prominence scales in (1) is expressed in such a way that the unmarked situation has been reached when the leftmost elements on the hierarchy in (1a) are AGENTS and the rightmost elements on the hierarchy in (1a) are PATIENTS. It is more marked for PATIENTS to be local persons and for AGENTS to be inanimate third persons.

Similar to the hierarchies in (1), there are hierarchies that state the relationship between case and syntactic relation:

- (2) a. Nominative > Accusative > Dative  
b. Subject > Object

If the relationship between the hierarchies in (2) should be explained in the same way as Silverstein (1976) did with the hierarchies in (1), it is possible to say that the unmarked situation is when the subject is nominative and the object dative. The marked situation is when the subject is dative and the object is nominative. It is also possible to explain the relationship between the scale in (1a) and (2b): The unmarked case is when the subject is a local person and the object is an inanimate 3rd person (see also Aissen 1999 and 2001), the marked case is when the object is animate and the subject is inanimate (see also Aissen 2003).

In Icelandic, inanimate subjects are perfectly fine as shown in (3a) and as is well known, Icelandic has non-nominative subjects (cf. Andrews 1976, Thráinsson 1979, Sigurðsson 1989, Jónsson 1996, 2003), (3b).

- (3) Ic. a. Raðmyndin datt á gólfið  
Puzzle-the.NOM fell on floor-the.ACC  
'The puzzle fell on the floor'  
b. Mig vantaði hnífinn  
Me.ACC needed knife-the.NOM  
'I needed the knife'



Verbs like *vanta* and *þurfa*, which at first sight seem to have the same meaning, that of the English verb *need*, can both have an animate subject. The verb *vanta* has an accusative subject, (4b), whereas *þurfa* has a nominative subject, (4a):

- (4) Ic. a. Ég þarf bílinn  
           I.NOM need car-the.ACC  
           b. Mig vantar bílinn  
               Me.ACC needs car-the.ACC  
               'I need the car'

Jónsson (2003: 138-139) argues that *þurfa* denotes a stronger need than *vanta*. According to him, a sentence like (4a) has the meaning 'I generally need the car (but not necessarily right now)', whereas a sentence like (4b) has the meaning 'I need the car right now'.<sup>1</sup> As I will show in the next section, *þurfa* and *vanta* do not have the same meaning. Although *þurfa* and *vanta* do not map directly onto the English pair *need* and *lack*, I choose to gloss the Icelandic verb *þurfa* with the English verb *need* and the Icelandic verb *vanta* with the English verb *lack*. Note however that English *lack* in some cases corresponds to Icelandic *þurfa* and that Icelandic *vanta* in some cases is closer to English *be missing*.

These two verbs behave differently if the subject is inanimate. As shown in (5a), *þurfa* can have an inanimate subject, but *vanta*, (5b), cannot:

- (5) Ic. a. Bílinn þarf ekki bensín  
           Car-the.NOM needs not petrol.ACC  
           'The car does not need petrol'  
           b. \*Bílinn vantar ekki bensín  
               Car-the.ACC lacks not petrol.ACC

There is no semantic reason why the sentence in (5b) should be ill-formed, cf. the English example *This car is missing two screws*. Furthermore, there is no syntactic reason why the sentence in (5b) should be ill-formed, cf. that the sentence in (5b) has the same syntactic structure as the grammatical sentence in (4b). Therefore, we have to say that it has something to do with inanimate accusative subjects being more marked than inanimate nominative subjects.

<sup>1</sup>According to Jónsson (2003: 139), "there is a clear tendency for psych-verbs with oblique subjects to denote temporary feelings [...]".

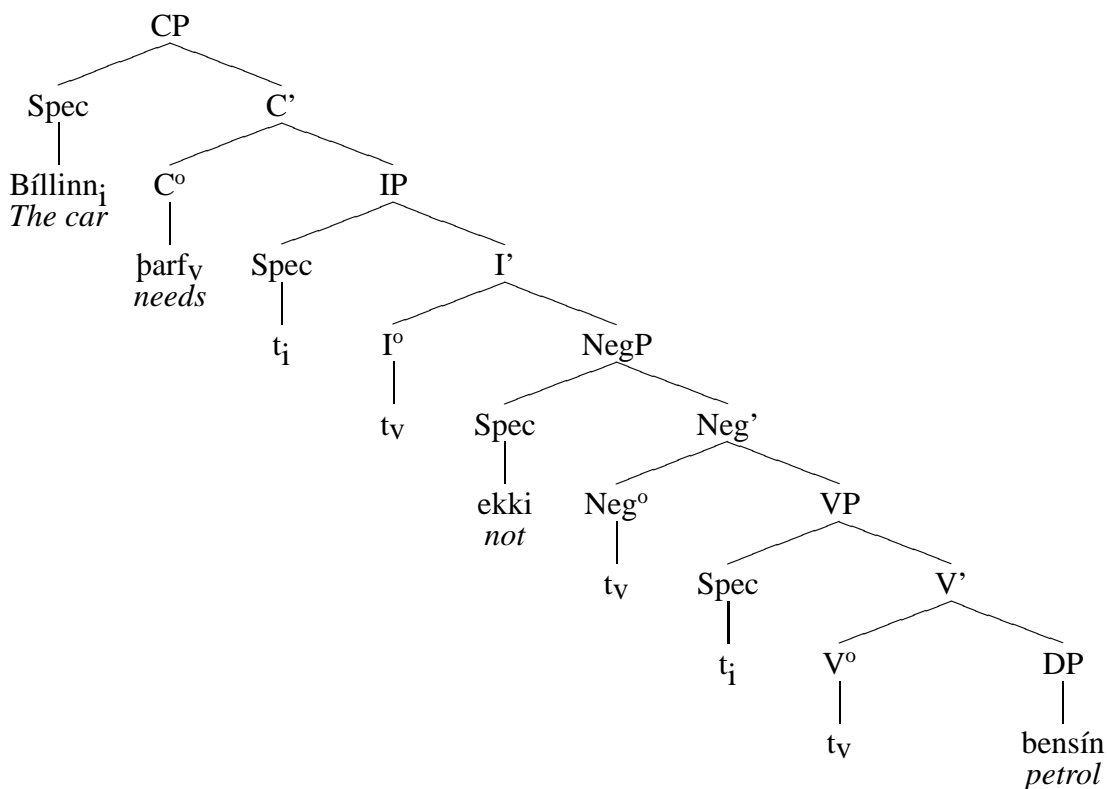
## 4.2 Keeping *þurfa* and *vanta* apart

If *þurfa* and *vanta* are looked at more closely, it becomes clear that the two verbs do not have the same meaning. As I have mentioned, *þurfa* loosely corresponds to English *need* and *vanta* loosely corresponds to English *lack*.

- (6) Ic. *þurfa*  $\approx$  En. *need*  
Ic. *vanta*  $\approx$  En. *lack*

The first obvious difference can be seen if the two sentences in (5) are changed into intransitive expletive constructions (ITECs). The structure of the transitive construction in (5a) is shown in (7):

- (7) *Transitive construction*



Intransitive expletive constructions do not have a subject but to fulfill the EPP requirement, an expletive has been inserted into IP-Spec.<sup>2</sup> Since Icelandic is a V2 language, the expletive

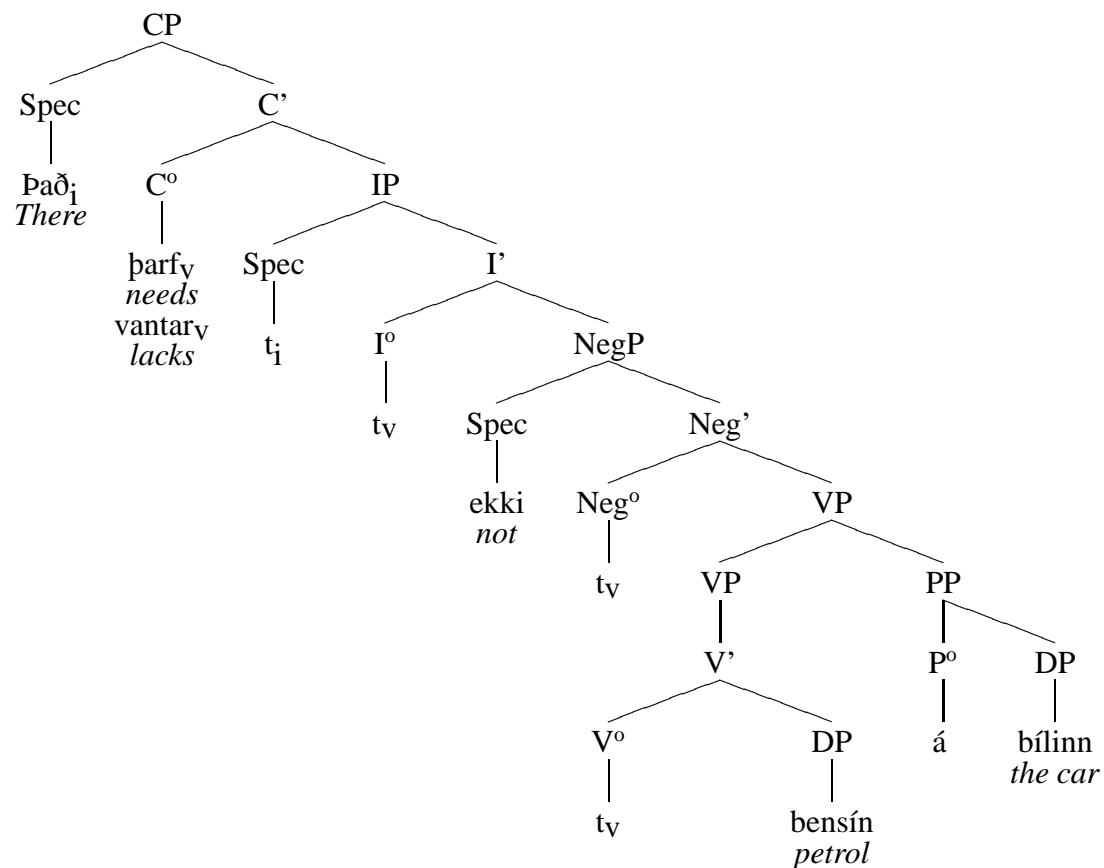
<sup>2</sup>Vangsnes 2000: 196, following Platzack 1983, Koch Christensen 1991, and Falk 1993, claims that the Icelandic expletive is an empty topic that does not carry case.

moves into CP-Spec. The DP that corresponds to the subject of the transitive verb occurs in a prepositional phrase in the intransitive expletive construction, adjoined to the VP. The object of the transitive verb is still the object of the intransitive verb:

- (8) Ic. a. Það þarf ekki bensín á bílinn  
*EXPL needs not petrol.ACC on car-the.ACC*  
 'The car does not need petrol'
- b. Það vantar ekki bensín á bílinn  
*EXPL lacks not petrol.ACC on car-the.ACC*  
 'The car is not low on petrol'

The sentence in (8a) is only a general description of the world. The car does not need petrol. The sentence in (8b) cannot have this meaning. It can only mean that the car is not low on petrol or that its tank is not empty. The structure of the sentences in (8) is given in (9):

- (9) *Intransitive expletive construction:*



Both *þurfa* and *vanta* make a reference to the *ideal state*, but they do it in a different way. *Þurfa* asserts something about the ideal state, whereas *vanta* asserts that we fall short of some-

thing in the ideal state.

- (10) Ic. a. Kórarnir þurfa peninga til ferðarinnar  
*Choirs-the.NOM need money.ACC for trip-the.GEN*  
'The choirs need money for the trip'
- b. Kórana vantar peninga til ferðarinnar  
*Choirs-the.ACC lacks money.ACC for trip-the.GEN*  
'The choirs lack money for the trip'

The sentence in (10a) asserts that money is needed for the trip. It says nothing about whether the choirs have any money. The sentence in (10b) asserts that the choirs do not have enough money. The same can be said about the sentences in (11a,b):

- (11) Ic. a. Við þurfum tvo bíla  
*We.NOM need two.ACC cars.ACC*  
'We need two cars (to get to San Francisco)'
- b. Okkur vantar tvo bíla  
*Us.ACC lacks two.ACC cars.ACC*  
'We're two cars short (to be able to get to San Francisco)'

Imagine the following scenario. There is a group of seven people going to San Francisco. To be able to get to San Francisco, we need two cars as we cannot fit into one car and three cars are one to many. In this situation it is appropriate to say (11a), not (11b). (11a) asserts that two cars are needed to get to San Francisco. It says nothing about whether we have some cars or not.

Now imagine the following scenario. There is a group of seven people going to San Francisco. We have a car, but it only seats two persons. We are therefore two cars short for being able to get to San Francisco. In this situation it is only appropriate to say (11b), not (11a). In other words, the sentence in (11b) asserts that we are two cars short for being able to get to San Francisco and it presupposes that at least two cars are needed to get there.

### 4.3 Inanimate subjects and the ITEC

*Purfa* and *vanta* behave differently with respect to inanimate subjects. If the subject is inanimate and the object animate, as in (12), *vanta* is marked. In some contexts, *purfa* is ungrammatical with an inanimate subject but in (12a) it is fine:

- (12) Ic. a. Bíllinn þarf ekki tvo bílstjóra  
*Car-the.NOM needs not two drivers.ACC*  
 'The car doesn't need two drivers'
- b. \*Bíllinn vantar ekki tvo bílstjóra  
*Car-the.ACC lacks not two drivers.ACC*

As I have mentioned, there is neither a semantic reason nor a syntactic reason why an example such as (12b) should be ill-formed.

The situation does not change much if both the subject and the object are inanimate. Here, *purfa* is slightly marked, but *vanta* is very marked if not ungrammatical:

- (13) Ic. a. ?Raðmyndin þarf ekki fleiri bita  
*Puzzle-the.NOM needs not more.ACC pieces.ACC*  
 'The puzzle does not need any more pieces'
- b. \*Raðmyndina vantar ekki fleiri bita  
*Puzzle-the.ACC lacks not more.ACC pieces.ACC*

Generally, expletive constructions are more marked than normal transitive constructions in Icelandic. For example, in transitive expletive constructions in Icelandic, the associate has to be indefinite. In the same way, intransitive expletive constructions are more marked than transitive constructions. If, for example, the subject of transitive *purfa* and *vanta* is animate (as in (10), repeated here as (14)), *purfa* and *vanta* can not show up in an intransitive expletive construction, (15):

- (14) Ic. a. Kórarnir þurfa peninga til ferðarinnar  
*Choirs-the.NOM need money.ACC for trip-the.GEN*  
 'The choirs need money for the trip'
- b. Kórana vantar peninga til ferðarinnar  
*Choirs-the.ACC lacks money.ACC for trip-the.GEN*  
 'The choirs lack money for the trip'
- (15) Ic. a. \*Það þarf peninga af kórunum  
*EXPL needs money.ACC of choirs-the.DAT*

- b. \*Það vantar peninga af kórunum  
*EXPL lacks money.ACC of choirs-the.DAT*

As already mentioned, the situation is somewhat different if the subject of transitive *þurfa* and *vanta* is inanimate. What the two verbs have in common is that it is more natural to have an intransitive expletive construction.<sup>3</sup>

If transitive *þurfa* has an inanimate subject, it is either possible to have a transitive construction such as the one in (16a) or an intransitive expletive construction such as the one in (16b):

- (16) Ic. a. ?Bíllinn þurfti ekki spegil  
*Car-the.NOM needed not mirror.ACC*  
 'The car did not need a mirror'
- b. Það þurfti ekki spegil í bílinn  
*EXPL needed not mirror.ACC in car-the.ACC*  
 'The car did not need a mirror'
- c. \*Það þurfti spegil ekki í bílinn  
*EXPL needed mirror.ACC not in car-the.ACC*

The example in (16c) shows that *spegilinn* which is the object of transitive *þurfa* still is the object of intransitive *þurfa* as it cannot precede the sentence negation *ekki* 'not' which marks the left edge of the VP in all the Scandinavian languages.

Instead of inserting an expletive, a definite object can be topicalized as in (17):

- (17) Ic. Spegilinn þurfti ekki í bílinn  
*Mirror-the.ACC needed not in car-the.ACC*  
 'The mirror was not needed in the car'

If transitive *vanta* has an inanimate subject, it is only possible to have an intransitive expletive construction such as the one in (18b). The transitive construction in (18a) is ungrammatical:

- (18) Ic. a. \*Bílinn vantaði ekki spegil  
*Car-the.ACC lacked not mirror.ACC*
- b. Það vantaði ekki spegil í bílinn  
*EXPL lacked not mirror.ACC in car-the.ACC*  
 'A mirror was not missing from the car'

<sup>3</sup>The fact that transitive expletive constructions are preferred over transitive constructions if the subject is indefinite is related to the cases discussed here, i.e. that intransitive expletive constructions are preferred over transitive constructions if the subject of the transitive verb is inanimate. Nevertheless, I choose only to discuss definite subjects as these cannot occur in transitive expletive constructions (cf. section 4.12 for a more elaborate discussion on this topic).

c. \*Það vantaði spegil ekki í bílinn  
*EXPL lacked mirror.ACC not in car-the.ACC*

As with the example in (16c), the example in (18c) shows that *spegilinn* which is the object of transitive *vanta* still is the object of intransitive *vanta* as it cannot precede the sentence negation.

Instead of inserting an expletive, a definite object can be topicalized as in (19):

(19) Ic. Spegilinn vantaði ekki í bílinn  
*Mirror-the.ACC lacked not in car-the.ACC*  
 'The mirror was not missing from the car'

Two generalizations can be drawn from the facts shown here. First, inanimate accusative subjects must be more marked than intransitive expletive constructions. This is based on the fact that *vanta* cannot occur in transitive constructions with an inanimate subject, (18a)/(18b). Second, inanimate nominative subjects must be just as marked as intransitive expletive constructions since *þurfa* may optionally occur in transitive constructions and intransitive constructions if transitive *þurfa* has an inanimate subject, (16a)/(16b).

## 4.4 Summary

If transitive *purfa* and *vanta* have a definite animate subject, it is only possible to have transitive constructions such as (10). Although accusative subjects are marked, it would seem that intransitive expletive constructions are more marked than accusative subjects. Since the subject is definite, a transitive expletive construction is not possible here.

(20) *purfa* and *vanta* with a definite animate subject:

<i>purfa</i>	<i>vanta</i>
✓ Transitive construction = (14a)	✓ Transitive construction = (14b)
*Transitive expletive construction	*Transitive expletive construction
*Intransitive expletive construction	*Intransitive expletive construction

Transitive *purfa* and *vanta* only differ when the subject is inanimate. *Purfa* can show up in both transitive constructions and intransitive expletive constructions, whereas *vanta* can only show up in intransitive expletive constructions.

(21) *purfa* and *vanta* with a definite inanimate subject:

<i>purfa</i>	<i>vanta</i>
✓ Transitive construction = (16a)	*Transitive construction
*Transitive expletive construction	*Transitive expletive construction
✓ Intransitive expletive construction = (16b)	✓ Intransitive expletive construction = (18a)

If transitive *purfa* has a definite inanimate subject, it is possible either to have a transitive construction such as (16a) or an intransitive expletive construction such as (16b). It would seem that having inanimate nominative subjects is just as marked as having intransitive expletive constructions. If transitive *vanta* has a definite inanimate subject, it is only possible to have intransitive expletive constructions such as (18b). Having transitive constructions such as (18a) is ungrammatical. The generalization is that having inanimate accusative subjects is more marked than having intransitive expletive constructions. As before, transitive expletive constructions are not possible here because the subject is definite.



## 4.5 Idiosyncratic and semantic case

Since the assumption is that oblique case is lexically selected for, i.e. that verbs that assigns accusative case to its subject are listed as such in the lexicon and that dative assignment to subjects is determined by a general rule (cf. section 4.6), the aim is not to divide verbs into three different groups (nominative, accusative and dative assigning verbs) according to their semantics. Rather, in order to support the hypothesis that oblique case is specified in the lexicon, the aim is to find out what distinguishes verbs with oblique subjects from verbs with nominative subjects.

### 4.5.1 Verbs with an accusative subject

According to Jónsson (2003: 157-159), there are four classes of verbs that assign accusative case to their subject:<sup>4</sup>

(22) Verbs with an accusative subject (adapted from Jónsson 2003: 157-159):

- a. **Experiencer verbs:** \**dreyma* 'dream', \**fýsa* 'want', \**gruna* 'suspect', \**hrylla við* 'be horrified', \**hungra* 'hunger', \**kitla* 'be ticklish', \**klæja* 'itch', \**langa* 'want', \**lysta* 'want', \**minna* 'remember vaguely', \**ráma í* 'have recollection', *saka* 'be hurt', \**skorta* 'lack', *svengja* 'hunger', \**svima* 'feel dizzy', \**svíða* 'feel sharp pain', *syfja* 'get sleepy', \**vanta* 'lack', \**verkja* 'feel pain', *þyrsta* 'be thirsty'.
- b. **Motion verbs:** †*drífa að* 'come flocking', †*reka* 'drift'.
- c. **Change-of-state verbs:** †*daga uppi* 'be caught by daylight (and die)'.

Interestingly, the verb *hungra* 'hunger' can have a dative subject, whereas I have found no examples where the verbs *svengja* 'hunger' and *þyrsta* 'be thirsty' have a dative subject. In fact those three verbs and the verb *syfja* 'get sleepy' are gradually being replaced by predicative copular constructions such as the one in (23):

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<sup>4</sup>Jónsson (2003: 157-159) gives an extensive list of 162 verbs with an accusative subject in Icelandic. Jónsson's list also includes verbs that are not used in modern Icelandic. In the list in (22), I have only included the verbs from Jónsson's list that I know and use. This means that there are only three classes of verbs that assign accusative to their subject. Many verbs that take an accusative subject in standard modern Icelandic can also be used with a dative subject. I have marked those with an asterisk. Some verbs that take an accusative subject can occur with a nominative subject. I have marked those with a dagger.

- (23) Ic. Ég er hungraður / svangur / þyrstur / syfjaður  
 I.NOM am hungry / hungry / thirsty / sleepy  
 'I am hungry / hungry / thirsty / sleepy'

The three verbs in (22b,c), *drífa að* 'come flocking', *reka* 'drift', and *daga uppi* 'be caught by daylight (and die)' can be used with a nominative subject. It is possible to analyze all of them as unaccusatives. *Reka* 'drift' certainly is an unaccusative. There is dialectal variation, as some Icelanders prefer (24c) where *báturinn* 'the boat' is marked for nominative over (24b) where *bátinn* 'the boat' is marked for accusative:

- (24) Ic. a. Vindurinn rak bátinn að landi  
*Wind-the.NOM drove boat-the.ACC to shore*  
 'The wind drove the boat to shore'
- b. %Bátinn rak að landi  
*Boat-the.ACC drifted to shore*
- c. %Báturinn rak að landi  
*Boat-the.NOM drifted to shore*  
 'The boat drifted to shore'

*Daga uppi* 'be caught by daylight' is possibly an unaccusative too, although (25a) is ungrammatical:<sup>5</sup>

- (25) Ic. a. \*Sólin dagaði tröllin uppi  
*Sun-the.NOM dayed trolls.the-ACC up*
- b. Tröllin dagaði uppi  
*Trolls-the.ACC dayed up*  
 'The trolls were caught by daylight (and they died)'

*Daga uppi* 'be caught by daylight' and *drífa að* 'come flocking' can occur with what would seem to be a nominative subject as well:<sup>6</sup>

- (26) Ic. a. þessi skipan dagaði uppi  
*this.NOM order.NOM dayed up*  
 'This order got stuck (somewhere in the system)'
- b. Nú dreif að hópur fólks  
*Now came flocking to group.NOM people.GEN*  
 'Now, a group of people came flocking'

<sup>5</sup>Note that *tröllin* in (25) is ambiguous between nominative and accusative.

<sup>6</sup>Example (26a) is taken from <http://www.obbyggd.stjr.is/vesturskaft5.pdf>, example (26b) is taken from <http://www.skarisig.blogspot.com/>.

There is evidence that *bátinn* 'the boat' in (24b), *tröllin* 'the trolls' in (25b) and *hópur fólks* 'group of people' in (26b) are not subjects but rather topicalized objects. Recall that in intransitive expletive constructions with *þurfa* and *vanta*, the object of the intransitive verb could not precede the sentence negation. The same applies if the sentences in (24b), (25b) and (26b) are made into expletive constructions:

- (27) Ic. a. Það rak ekki bát að landi  
*EXPL drifted not boat.ACC to shore*  
 'It was not a boat that drifted to shore'
- b. \*Það rak bát ekki að landi  
*EXPL drifted boat.ACC not to shore*
- (28) Ic. a. Það dagaði ekki tröll uppi  
*EXPL dayed not trolls.ACC up*  
 'It were not trolls that got caught by daylight'
- b. \*Það dagaði tröll ekki uppi  
*EXPL dayed trolls.ACC not up*
- (29) Ic. a. Það dreif ekki að hóp fólks  
*EXPL came flocking not to group.ACC people.GEN*  
 'It was not a group of people that came flocking'
- b. \*Það dreif hóp fólks ekki að  
*EXPL came flocking group.ACC people.GEN not to*

Furthermore, these verbs (as unaccusatives in Icelandic in general) are less sensitive to the definiteness effect than other verbs. In a transitive expletive construction with verbs like *lesa* 'read', the associate cannot be definite, (30a), but sentences with unaccusatives such as *koma* 'come' and *reka* 'drift', (30b,c), where the DP that seems to be the associate is definite are significantly better. In neither (30b) nor (30c) can the definite DP precede the negation.

- (30) Ic. a. \*Það las konan ekki bókina  
*EXPL read woman-the.NOM not book-the.ACC*
- b. ?Það kom ekki þessi maður gangandi  
*EXPL came not this.NOM man.NOM walking*  
 'It was not this man that came walking'
- c. ?Það rak ekki bátinn að landi  
*EXPL drifted not boat-the.ACC to shore*  
 'It was not the boat that drifted to shore'

## 4.5.2 Summary

There is only one group of verbs with accusative subjects in Icelandic, namely the EXPERIENCER verbs in (22a). Most of these verbs can occur with a dative subject. Most of the verbs that cannot occur with a dative subject, are being replaced by predicative adjectives as shown in 2. I have given data that shows that the arguments of the verbs in (22b) and (22c) behave more like objects than the arguments of the verbs in (22a) do. Therefore, these verbs should not be considered as verbs with accusative subjects.

## 4.5.3 Verbs with a dative subject

Jónsson (2003: 159-161) gives seven classes of verbs that assign dative case to their subject:<sup>7</sup>

(31) Verbs with a dative subject (adapted from Jónsson 2003: 159-161):

- a. **Experiencer verbs:** *batna* 'get better', *bera* 'have an obligation', *bera saman um* 'agree', *bjóða við* 'be disgusted', *blæða* 'bleed', *blöskra* 'be outraged', *bregða* 'be startled', *falla* 'like', *finnast* 'find', *förlast* 'grow weak', *geðjast að* 'like', *gremjast* 'be angry', *heilsast* 'be in good/bad health', *heyrast* 'hear, gather', *hitna* 'get warmer', *hlýna* 'get warmer', *hugkvæmast* 'get an idea', *kólna* 'get cold', *koma saman um* 'agree', *koma við* 'concern', *leiðast* 'be bored', *létta* 'be relieved', *liggja á* 'be in a hurry', *líða* 'feel', *líka* 'like', *lítast á* 'like', *óá við* 'dread', *sárna* 'be offended', *skána* 'get better', *skiljast* 'understand', *slá niður* 'have a relapse', *sóma* 'befit', *standa* 'have an erection', *svíða* 'be hurt', *sýnast* 'seem', *veita af* 'do good', *versna* 'get worse', *virðast* 'seem', *þóknast* 'like', *þykja* 'think'.
- b. **Verbs of convenience:** *duga* 'be enough', *endast* 'last', *fara vel* 'suit', *henta* 'suit', *hæfa* 'fit', *nýtast* 'be of use', *nægja* 'suffice', *passa* 'suit', *reynast* 'turn out', *sæma* 'befit'.
- c. **Verbs of success and failure:** *auðnast* 'succeed', *bjóðast* 'be invited', *fara fram/ aftur* 'progress/get worse', *farast* 'be hypocritical', *farnast* 'do well/badly', *fipast* 'lose track', *ganga* 'do well/badly', *haldast á* 'be able to keep', *hefnast* 'suffer revenge', *heppnast* 'succeed', *hlekkjast á* 'have an accident', *lánast* 'succeed', *lynda*

<sup>7</sup>Jónsson (2003: 159-161) lists 225 verbs with a dative subject. Many of those are not used in modern Icelandic. As before, I only include the verbs from Jónsson's list that I know and use in the list in (31).

*við* 'get along with', *misheppnast* 'fail', *mistakast* 'fail', *semja* 'get along', *sinnast* 'have a disagreement', *sjást yfir* 'overlook', *skeika* 'err', *skjáttlast* 'be wrong', *svelgjast á* 'swallow the wrong way', *sækjast* 'go well/badly', *takast* 'manage', *vegna* 'fare, do', *veitast* 'find easy/difficult'.

- d. **Verbs of acquisition:** *áskotnast* 'acquire', *berast* 'get', *fæðast* 'be born', *gefa* 'be given', *hlotnast* 'receive', *leggjast til* 'get', *leyfast* 'be allowed', *opnast* 'be opened'.
- e. **Motion verbs:** *fleygja fram* 'progress rapidly', *fleyta* 'float', *hvolfa* 'capsize', *kyn-gja niður* 'fall thick', *lenda saman* 'clash', *ljósta saman* 'collide', *miða* 'progress', *sáldra niður* 'disperse', *skjóta upp* 'shoot up', *rigna* 'rain'.
- f. **Change-of-state verbs:** *ffölga* 'get more', *fækka* 'get fewer', *hnigna* 'decline', *hraka* 'get worse', *létta* 'subside', *linna* 'stop', *ljúka* 'finish', *seinka* 'be delayed'.
- g. **Other verbs:** *hætta til* 'have a tendency to', *svipa til* 'resemble'.

Jónsson (2003: 146) notes that AGENTIVE subjects, EXPERIENCER subjects of psych-verbs that denote strong positive feelings, EXPERIENCER subjects of (psych)-verbs which canonically take animate objects, subjects of strictly intransitive verbs of motion, and subjects of verbs of entity-specific change of state cannot be assigned oblique case in Icelandic. As Jónsson (2003: 146) says, "this is not a random set as all of these verb classes have an agent-like subject".

Jónsson (2003: 152) offers a relatively clear distinction between the cases where the subject can be marked for dative and the cases where the subject can be marked for accusative. Apparently there are two kinds of lexical subject case:<sup>8</sup>

(32) Lexical subject case in Icelandic (adapted from Jónsson 2003: 152):

- a. *Semantic case:* **Dative** case on GOALS and EXPERIENCERS.
- b. *Idiosyncratic case:* **Accusative** case and **dative** case on THEMES.

Here, the obvious problem is to distinguish the verbs that assign accusative idiosyncratic case to their subject THEMES from the verbs that assign dative idiosyncratic case to their subject THEMES.

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<sup>8</sup>In (32), THEME, EXPERIENCER and GOAL are used in the sense of Jónsson (2003).

According to Jónsson (2003: 148-149), the verbs that assign dative to a subject THEME either denote success or failure. Almost all of them have the suffixes *-st* or *-na* which is as Jónsson (2003: 148) notes incompatible with accusative subjects. Jónsson (2003: 160) lists forty-eight verbs which assign dative to their THEME subject. Of those, twenty-four are still used actively:

(33) Verbs that assign dative to a subject THEME (adapted from Jónsson 2003: 160):

*auðnast* 'succeed', *bjóðast* 'be invited', *fara fram/aftur* 'progress/get worse', *farnast* 'do well or badly', *fipast* 'lose track', *ganga* 'do well or badly', *haldast á* 'be able to keep', *hefnast* 'suffer revenge', *heppnast* 'succeed', *hlekkjast á* 'have an accident', *lánast* 'succeed', *lynda við* 'get along with', *misheppnast* 'fail', *mistakast* 'fail', *semja* 'get along', *sinnast* 'have a disagreement', *sjást yfir* 'overlook', *skeika* 'err', *skjátlast* 'be wrong', *svelgjast á* 'swallow the wrong way', *sækjast* 'go well/badly for sb', *takast* 'manage', *vegna* 'fare, do', *veitast* 'find sth easy/difficult'.

Only five of the verbs in (33) do not have the *-st/-na* suffix: *Fara fram/aftur* 'progress/get worse', *ganga* 'do well or badly', *lynda við* 'get along with', *semja* 'get along', and *skeika* 'err' and if looked at more closely, these verbs seem to belong to other verb classes. In particular I would like to suggest that they belong to the EXPERIENCER class in (31a).

*Semja* 'get along' can optionally have the *-st* suffix and it is not clear to me that either *semja* 'get along' or *lynda við* 'get along with' should fall into this group of verbs. In my view these verbs should rather be grouped with verbs like *líka (við)* 'like (with)' or *leiðast* 'be bored' which clearly are EXPERIENCER verbs. *Ganga* 'do well or badly' can only have a dative subject if it is followed by an adverbial, either *vel* 'well' or *illa* 'badly', but even then, *ganga* can have a nominative subject (which is in fact obligatory if the subject is inanimate):

- (34) Ic. a. Okkur gekk vel í prófinu  
           *Us.DAT went well in exam-the*  
           'We did well in the exam'
- b. \*Prófinu / Prófið gekk vel  
           *Exam-the.DAT / Exam-the.NOM went well*  
           'The exam went well'

Apart from the fact that a dative subject of *ganga* has to be sentient (or animate), *ganga* seems to fit into a definition of being an EXPERIENCER verb as the subject can be said to be out of

control and (psychologically or physically) affected. The same can be said about *fara fram/aftur* 'progress/get worse'. With this meaning, *fara fram/aftur* can only have a sentient subject which is marked for dative. *Fara fram* can have an inanimate (as well as an animate) subject marked for nominative, only with a different meaning 'be put forward/run for an election':

- (35) Ic. a. Okkur fór fram  
*Us.DAT progressed*  
 'We progressed'
- b. \*Málinu fór fram  
*Case-the.DAT progressed*
- c. Málið fór fram  
*Case-the.NOM was put forward*  
 'The case was put forward'
- d. Við fórum fram  
*We.NOM ran for an election*  
 'We ran for an election'

Only *skeika* seems not to fit into the definition of being an EXPERIENCER verb. *Skeika* can have an inanimate subject marked for dative, *klukkunni* 'the clock' in (36a), as well as an animate subject marked for dative, *mér* 'me' in (36b):

- (36) Ic. a. Klukkunni skeikaði um fjóra tíma  
*Clock-the.DAT erred about four hours*  
 'The clock was about four hours late/fast'
- b. Mér skeikaði um fjóra tíma  
*Me.DAT erred about four hours*  
 'I was about four hours late/early'

It is possible to imagine the clock as a biological organism (it moves!) which is out of control and affected by something from the inside in such a way that it is four hours late. This should enable us to classify *skeika* 'err' as a (NON-AGENTIVE) EXPERIENCER verb.

If this is correct, we should now be able to make a clearer distinction between semantic and idiosyncratic case than Jónsson's (2003) distinction that was given in (32), repeated in (37). Jónsson distinguishes between semantic case, which is dative case on GOALS and EXPERIENCERS, and idiosyncratic case, which is accusative case and dative case on THEMES.

(37) Lexical subject case in Icelandic (adapted from Jónsson 2003: 152):

- a. *Semantic case*: **Dative** case on GOALS and EXPERIENCERS.
- b. *Idiosyncratic case*: **Accusative** case and **dative** case on THEMES.

If the verbs in (33) that do not have the *-st/-na* suffix are truly NON-AGENTIVE EXPERIENCER verbs we can establish a system where dative case on subject EXPERIENCER/GOAL is semantic and where accusative case on subjects is always idiosyncratic.

(38) Lexical subject case in Icelandic (revised):

- a. *Semantic case*: **Dative** case on subject GOALS and EXPERIENCERS.
- b. *Idiosyncratic case*: **Accusative** case on subjects.

Dative is semantic case because it is assigned to specific  $\theta$ -roles, NON-AGENTIVE EXPERIENCERS and GOALS. Only NON-AGENTIVE EXPERIENCERS qualify for semantic case. If the subject EXPERIENCER is in some way AGENTIVE, as in the case of the English verb *see*, it will be marked for nominative. Accusative is idiosyncratic case because it is not connected with specific  $\theta$ -roles, and the assumption is that verbs that assign idiosyncratic case are listed as such in the lexicon. When a verb is not listed as such in the lexicon anymore, it can either start to assign dative or nominative to its subject, depending on which  $\theta$ -role the subject is assigned. If the  $\theta$ -role is NON-AGENTIVE EXPERIENCER, the subject will be assigned dative, if the  $\theta$ -role is THEME or AGENTIVE EXPERIENCER, the subject will be assigned nominative.

#### 4.5.4 Summary

The verbs that have been taken to assign dative idiosyncratic case to their subjects, can be grouped with verbs that assign dative semantic case to their arguments.

Verbs that assign accusative and dative to their subjects have in common that they assign the  $\theta$ -role EXPERIENCER to their external argument. What they do not have in common is what kind of case they assign to their external argument. In Icelandic, accusative subjects are assigned idiosyncratic case, whereas dative subjects are assigned semantic case. As both are lexical, I assume that each verb that assigns accusative to its subject is listed as such in the lexicon, whereas dative assignment to subjects is determined by a general rule.



## 4.6 Constraints on oblique subjects

The assumption is that oblique case is lexically selected for on subjects in Icelandic. Furthermore, it is assumed that accusative case is idiosyncratic case and that dative case is semantic case.

For idiosyncratic case to surface on the subject, I propose that there is a constraint that enforces accusative (idiosyncratic) case on the external argument of the verb. Such a constraint would look like the constraint in (39):

$$(39) \quad \text{IDIOSYNCRATIC CASE (IDIOCASE): } [\text{IP } [\text{Spec } \underline{\quad} ] \text{ V}_{\text{ID}} ]$$

$\downarrow$   
 ACC

In (39),  $\text{V}_{\text{ID}}$  stands for a verb that is listed in the lexicon as a verb that assigns idiosyncratic case to its subject. This constraint is only active when such a verb is in the input.

In addition to this constraint, I assume the existence of a constraint that penalizes the occurrence of accusative case:

$$(40) \quad *_{\text{ACCUSATIVE}} (*_{\text{ACC}}): \text{ Do not mark accusative.}$$

Likewise, for semantic case to surface on the subject, I propose that there is a constraint that enforces dative semantic case on the external argument of the verb. Such a constraint would look like the constraint in (41):

$$(41) \quad \text{SEMANTIC CASE: } [\text{IP } [\text{Spec } \text{EXP} ] \text{ V } ]$$

$\downarrow$   
 DAT

As with accusative case, I assume that there exists a constraint that penalizes the occurrence of dative case:

$$(42) \quad *_{\text{DATIVE}}: \text{ Do not mark dative.}$$

## 4.7 Harmonic alignment

Since Aissen (1999), effects such as those described above, i.e. that some subjects (or objects) are more marked than other subjects (or objects) have been taken to be derived from *harmonic alignment* of universal markedness hierarchies (cf. also Aissen 2001 and Aissen 2003). When harmonically aligned, two hierarchies form a fixed constraint ranking. Harmonic alignment is defined as follows:

(43) *Harmonic Alignment* (Prince & Smolensky, 1993: 149, (212)):

Suppose given a binary dimension  $D_1$  with a scale  $X > Y$  on its elements  $\{X, Y\}$ , and another dimension  $D_2$  with a scale  $a > b > \dots > z$  on its elements  $\{a, b, \dots, z\}$ . The *harmonic alignment* of  $D_1$  and  $D_2$  is the pair of harmony scales  $H_X, H_Y$ :

- a.  $H_X: X/a \succ X/b \succ \dots \succ X/z$
- b.  $H_Y: Y/z \succ \dots \succ Y/b \succ Y/a$

The *constraint alignment* is the pair of constraint hierarchies  $C_X, C_Y$ :

- i.  $C_X: *X/z \gg \dots \gg *X/b \gg *X/a$
- ii.  $C_Y: *Y/a \gg *Y/b \gg \dots \gg *Y/z$

Harmonic alignment results in two harmony scales. The first harmony scale is derived by combining the first member of the first hierarchy with the members of the second hierarchy from left to right. The second harmony scale is derived by combining the second member of the first hierarchy with the members of the second hierarchy from right to left. The harmony scale  $H_X$  says that it is most harmonic for  $X$  to be  $a$ , and least harmonic for  $X$  to be  $z$ .  $H_Y$  says that it is best for  $Y$  to be  $z$  and that it is worst for  $Y$  to be  $a$ . The constraint hierarchies  $C_X$  and  $C_Y$  which are fixed rankings, are derived by reversing the respective harmony scales.

## 4.8 Getting rid of inanimate accusative subjects

The examples in (5), repeated here as (44), show that it is better for inanimate subjects to be marked for nominative than for inanimate subjects to be marked for accusative:

- (44) Ic. a. Bíllinn þarf ekki bensín  
Car-the.NOM needs not petrol.ACC  
'The car does not need petrol'  
b. \*Bíllinn vantar ekki bensín  
Car-the.ACC lacks not petrol.ACC

A possible solution to this is to align the *Relational Scale* in (45) with the *Animacy Scale* in (46a) and the *Case Scale* in (46b).<sup>9</sup>

- (45) *Relational Scale*: Subject > Object  
(46) a. *Animacy Scale*: Animate > Inanimate  
b. *Case Scale*: Nominative > Oblique

The harmonic alignment of the *Relational Scale* and the *Animacy Scale* will predict that inanimate subjects are more marked than animate subjects, and that inanimate objects are less marked than animate objects. The harmonic alignment of the *Relational Scale* and the *Case Scale* will predict that oblique subjects are more marked than nominative subjects, and that oblique objects are less marked than nominative objects. To start with, the harmonic alignment of the *Relational Scale* and the *Animacy Scale*:

- (47) a. *Relational Scale*: Subject > Object  
b. *Animacy Scale*: Animate > Inanimate

Per definition, the harmonic alignment of the scales in (47a) and (47b) yields the harmony scales in (48). H<sub>S</sub> states that it is more harmonic for subjects to be animate than it is for subjects to be inanimate:

- (48) *Harmonic Alignment of the relational scale and the animacy scale*

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<sup>9</sup>Since it does not seem to matter whether the subject is accusative or dative, I choose to use the notion *oblique* instead of making a distinction between the two cases. Furthermore, I will not be concerned with passive sentences here as no verb with an oblique subject can passivize.

- a.  $H_S: \text{Su/Ani} \succ \text{Su/Ina}$
- b.  $H_O: \text{Ob/Ina} \succ \text{Ob/Ani}$

The harmony scales in (48) can now be used to form two constraint hierarchies with a fixed order, (49). The constraint ranking  $C_S$  in (49a) tells us that the constraint that penalizes candidates where the subject is inanimate dominates the constraint that penalizes candidates where the subject is animate, i.e. that it is more marked to be an inanimate subject than to be an animate subject.

(49) *Constraint Alignment*

- a.  $C_S: *SU/INA \gg *SU/ANI$
- b.  $C_O: *OB/ANI \gg *OB/INA$

As mentioned, the harmonic alignment of the *Relational Scale* and the *Case Scale* will predict that oblique subjects are more marked than nominative subjects and that oblique objects are less marked than nominative objects.

- (50)
- a. *Relational Scale*: Subject > Object
  - b. *Case Scale*: Nominative > Oblique

The harmonic alignment of the two hierarchies in (50) gives the two harmony scales in (51).  $H_S$  shows that it is more harmonic for subjects to be nominative than it is for subjects to be oblique:

(51) *Harmonic Alignment of the relational scale and the case scale*

- a.  $H_S: \text{Su/Nom} \succ \text{Su/Obl}$
- b.  $H_O: \text{Ob/Obl} \succ \text{Ob/Nom}$

The harmony scales in (51) give the two fixed constraint rankings in (52). The constraint ranking  $C_S$  in (52a) tells us that the constraint that penalizes oblique subjects dominates the constraint that penalizes nominative subjects, i.e. that oblique subjects are more marked than nominative subjects.

(52) *Constraint Alignment*

- a.  $C_S: *SU/OBL \gg *SU/NOM$
- b.  $C_O: *OB/NOM \gg *OB/OBL$

Now, we have two fixed constraint rankings on subjects shown in (53):

- (53) a.  $C_1: *SU/INA \gg *SU/ANI$  (= (49a))  
 b.  $C_2: *SU/OBL \gg *SU/NOM$  (= (52a))

The first constraint ranking,  $C_1$  in (53a), consists of two constraints:  $*SU/INA$  and  $*SU/ANI$ .  $*SU/INA$  penalizes all subjects that are inanimate and  $*SU/ANI$  penalizes all subjects that are animate. The constraint ranking is fixed, i.e.  $*SU/INA$  universally dominates  $*SU/ANI$ . This predicts that inanimate subjects are universally more marked than animate subjects.

The second constraint ranking,  $C_2$  in (53b), also consists of two constraints:  $*SU/OBL$  and  $*SU/NOM$ .  $*SU/OBL$  penalizes all oblique subjects and  $*SU/NOM$  penalizes all nominative subjects. The constraint ranking is fixed.  $*SU/OBL$  universally dominates  $*SU/NOM$ . This (correctly) predicts that oblique subjects are more marked than nominative subjects.

Again, the examples in (5), repeated here as (54), show that it is worse to be an inanimate accusative subject than it is to be an inanimate nominative subject:

- (54) Ic. a. Bíllinn þarf ekki bensín  
*Car-the.NOM needs not petrol.ACC*  
 'The car does not need petrol'  
 b. Bíllinn vantar ekki bensín  
*Car-the.ACC lacks not petrol.ACC*  
 'The car is not low on petrol'

(54b) violates two of the higher ranked constraints in (53),  $*SU/INA$  and  $*SU/OBL$ . (54a) also violates two of the constraints in (53), the higher ranked constraint in (53a),  $*SU/INA$ , and the lower ranked constraint in (53b),  $*SU/NOM$ . Since animate subjects can be oblique, it is necessary to consider  $*SU/OBL$  and  $*SU/INA$  to be locally conjoined.

- (55) *Local Conjunction* (Legendre et al., 1998: 262):  
 Given two constraints  $C_1$  and  $C_2$ , their *Local Conjunction* (w.r.t. a domain type  $D$ ),  $C_1$  &  $C_2$ , is a new constraint which is violated when two distinct violations of  $C_1$  and  $C_2$  occur within a single domain of type  $D$ .

The local conjunction of  $*SU/OBL$  and  $*SU/INA$  is the new constraint  $*SU/OBL$  &  $*SU/INA$  in (56).  $*SU/OBL$  &  $*SU/INA$  dominates  $*SU/OBL$  and therefore  $*SU/OBL$  &  $*SU/INA$  nec-

essarily also dominates \*SU/OBL. \*SU/OBL & \*SU/INA dominates \*SU/INA and therefore, it necessarily also dominates \*SU/ANI.

- (56) a. \*SU/OBL & \*SU/INA  $\gg$  \*SU/OBL  $\gg$  \*SU/NOM  
 b. \*SU/OBL & \*SU/INA  $\gg$  \*SU/INA  $\gg$  \*SU/ANI

This does however raise a question about the restrictiveness (or the lack of restrictiveness) of local constraint conjunction. If it is assumed that \*SU/OBL and \*SU/INA are locally conjoined as in (56), nothing should forbid the local conjunction of \*SU/NOM and \*SU/INA. The question is how the two local conjunctions rank with respect to each other, i.e. whether it is possible for \*SU/NOM & \*SU/INA to dominate \*SU/OBL & \*SU/INA. This would mean that the markedness effect of inanimate oblique subjects being more marked than nominative inanimate subjects would be neutralized. With the possibility of local conjunction, the logical possibilities in how the constraints rank with respect to each other increase dramatically, and the consequences are that more language variation should be attested than actually is the case. The problem is how to restrict these possibilities. I will follow Aissen (2003) in assuming that conjoined constraints made of constraint members in subhierarchies respect the ranking of the subhierarchies. Aissen (2003: 447-448) says: “If we assume that local conjunction [...] with the constraint subhierarchies [...] preserves the ranking of those subhierarchies, then this operation yields new subhierarchies [...]”. This means that the local conjunction \*SU/OBL & \*SU/INA will never be dominated by the local conjunction \*SU/NOM & \*SU/INA just as the constraint \*SU/OBL is never dominated by the constraint \*SU/NOM. This is also reflected in the fact that inanimate subjects that are marked for nominative are less marked than inanimate subjects that are marked for accusative or dative universally.

(57) Constraint ranking of local conjunctions

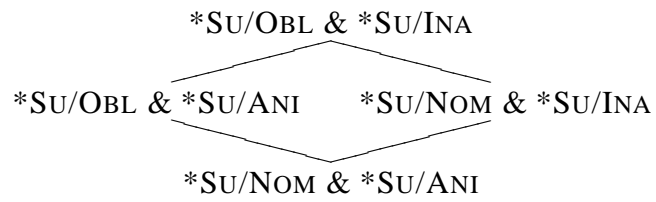



Tableau 1: Inanimate subject

Input: verb (x,y), x=[-ani]	*SU/OBL & *SU/INA	*SU/NOM & *SU/INA
(a) x <sub>[-ani, acc]</sub> verb y	*!	
 (b) x <sub>[-ani, nom]</sub> verb y		*

In tableau 1, candidate (a) fatally violates \*SU/OBL & \*SU/INA because the subject is inanimate and marked for accusative. Candidate (b) where the inanimate subject is marked for nominative is the optimal candidate with one violation of \*SU/NOM & \*SU/INA.

## 4.9 Allowing inanimate subjects in ITECs

The constraint ranking in (57) incorrectly predicts that inanimate subjects of the verb *vanta* will be marked for nominative, (58a). In Optimality Theory an ungrammatical sentence must lose to some competitor. I take the intransitive expletive construction in (58b) to be this competitor:

- (58) Ic. a. \*Bíllinn        vantar bensín  
           *Car-the.NOM lacks petrol.ACC*
- b. Það vantar bensín        á bílinn  
           *EXPL lacks petrol.ACC on car-the.ACC*  
           'The car is low on petrol'

If the constraints that I introduced in (39) and (40), page 141, repeated here as (59a,b), are ranked with respect to the constraints in (57), the correct result can be predicted. In addition to these constraints, two constraints are needed to regulate late insertion of either the expletive (in all expletive constructions) or a preposition (in intransitive expletive constructions):

- (59) a. IDIOSYNCRATIC CASE (IDIOCASE):
- [IP [Spec        ] *vanta* ]

|

ACC
- b. \*ACCUSATIVE (\*ACC): Do not mark accusative.
- c. \*EXPLETIVE (\*EXPL): Do not insert an expletive.
- d. \*INSERT (\*INS): Do not insert.

The constraint \*INSERT is an instance of a general DEP constraint in Correspondence Theory (McCarthy & Prince 1995, cf. Kager 1999: 68, (32) and Christensen 2003c who uses \*INS for similar purposes). It is violated whenever something in the output does not have a correspondent in the input. Here, it is violated whenever an expletive is inserted and in intransitive expletive constructions where a preposition has been inserted. The constraint \*EXPLETIVE is a more specific instance of a DEP constraint. It is only violated when an expletive has been inserted (cf. Mikkelsen 2002b for similar use of \*EXPL).<sup>10</sup>

<sup>10</sup>In an attempt to dispense with the input in optimality theory syntax, Heck et al. (2002: 363, (30b)) claim that \*EXPLETIVE can be formulated as a markedness constraint. Since the assumption here is that there is an input (roughly in the sense of Grimshaw 1997b), it is not relevant whether \*EXPLETIVE is a faithfulness constraint or a markedness constraint.



#### 4.9.1 Allowing inanimate nominative subjects

If transitive *þurfa* has an inanimate subject, *þurfa* can either occur in a transitive construction, (60a), or an intransitive expletive construction, (60b):

- (60) Ic. a. Raðmyndin þarf ekki fleiri bita  
*Puzzle-the.NOM needs not more.ACC pieces.ACC*  
 'The puzzle does not need any more pieces'
- b. Það þarf ekki fleiri bita í raðmyndina  
*EXPL needs not more.ACC pieces.ACC in puzzle-the.ACC*  
 'There are not more pieces needed for the puzzle'

The fact that *þurfa* can either occur in a transitive construction or an intransitive expletive construction if the subject of transitive *þurfa* is inanimate, is captured by not ranking \*EXPLETIVE and \*SU/NOM & \*SU/INA with respect to each other. In some competitions, \*EXPLETIVE will dominate \*SU/NOM & \*SU/INA and in other competitions, \*SU/NOM & \*SU/INA will dominate \*EXPLETIVE.

- (61) \*SU/OBL & \*SU/INA ≫ IDIOCASE ≫ \*EXPL, \*SU/NOM & \*SU/INA ≫ \*INS ≫ \*ACC

Tableau 2: Inanimate subject

(*þurfa* 'need')

Input: <i>þurfa</i> (x,y), x=[-ani]	*SU/OBL &*SU/INA	IDIO CASE	*EXPL	*SU/NOM &*SU/INA	*INS	*ACC
(a) x <sub>[-ani, acc]</sub> <i>þurfa</i> y	*!					*
☞ (b) x <sub>[-ani, nom]</sub> <i>þurfa</i> y				*(!)		
☞ (c) EXPL <i>þurfa</i> y [pp P [DP x]]			*(!)		**	*

Candidate (a) in tableau 2 fatally violates \*SU/OBL & \*SU/INA for having an inanimate subject marked for accusative. Candidate (b) does not violate this constraint because the subject is marked for nominative and candidate (c) vacuously satisfies \*SU/OBL & \*SU/INA because there is no subject.

In a competition where \*EXPLETIVE dominates \*SU/NOM & \*SU/INA, candidate (b) is the optimal candidate because candidate (c) where an expletive has been inserted does worse on \*EXPLETIVE than candidate (b). In a competition where \*SU/NOM & \*SU/INA dominates \*EXPLETIVE, candidate (c) is the optimal candidate because candidate (b) where there is a subject marked for nominative does worse on \*SU/NOM & \*SU/INA than candidate (c) where

there is no subject.

In the case of *purfa*, the constraint IDIOSYNCRATIC CASE is not activated because *purfa* is not listed in the lexicon as a verb with an accusative subject.

#### 4.9.2 Getting rid of inanimate accusative subjects

If the subject of transitive *vanta* is inanimate, *vanta* can only occur in an intransitive expletive construction, (62c). Transitive constructions such as (62a) where the subject is marked for accusative are ungrammatical and (62b) shows that it is not possible to have *vanta* with a nominative inanimate subject:

- (62) Ic. a. Bílinn vantar bensín  
*Car-the.ACC lacks petrol.ACC*
- b. \*Bílinn vantar bensín  
*Car-the.NOM lacks petrol.ACC*
- c. Það vantar bensín á bílinn  
*EXPL lacks petrol.ACC on car-the.ACC*  
 'The car is low on petrol'

Tableau 3: Inanimate subject

(*vanta* 'lack')

Input: <i>vanta</i> (x,y), x=[-ani]	*SU/OBL & *SU/INA	IDIO CASE	*EXPL	*SU/NOM & *SU/INA	*INS	*ACC
(a) x[-ani, acc] <i>vanta</i> y	*!					*
(b) x[-ani, nom] <i>vanta</i> y		*!		*		
☞ (c) EXPL <i>vanta</i> y [pp P [DP x]]			*		**	*

Candidate (a) in tableau 3 fatally violates \*SU/OBL & \*SU/INA for having an inanimate subject marked for accusative. Candidate (b) does not violate this constraint because the subject is marked for nominative and candidate (c) vacuously satisfies \*SU/OBL & \*SU/INA because there is no subject.

Because *vanta* is listed in the lexicon as a verb with an accusative subject, the constraint IDIOSYNCRATIC CASE is activated. Candidate (b) where the subject is not marked for accusative fatally violates this constraint. Candidate (c) vacuously satisfies IDIOSYNCRATIC CASE because there is no subject in the clause. The intransitive expletive construction (candidate (c)) is therefore the correct optimal candidate.

### 4.9.3 Summary

If transitive *purfa* has an inanimate subject, it can either occur in a transitive construction or an intransitive expletive construction. The generalization that inanimate nominative subjects are just as marked as intransitive expletive constructions is captured by not ranking the constraints \*SU/NOM & \*SU/INA and \*EXPLETIVE with respect to each other.

In some competitions \*SU/NOM & \*SU/INA will decide that the intransitive expletive construction is optimal, in other competitions, \*EXPLETIVE will decide that the transitive construction is optimal.

If transitive *vanta* has an inanimate subject, it can only occur in an intransitive expletive construction. The generalization that inanimate accusative subjects are more marked than intransitive expletive constructions is captured by ranking the constraints \*SU/OBL & \*SU/INA and IDIOSYNCRATIC CASE above the constraint \*EXPLETIVE.

## 4.10 Allowing animate subjects

### 4.10.1 Allowing animate nominative subjects

The example in (10a), repeated here as (63), shows that *þurfa* can occur in a transitive construction if the subject of transitive *þurfa* is animate. Unlike the situation where transitive *þurfa* has an inanimate subject, *þurfa* cannot occur in an intransitive expletive construction if the subject of transitive *þurfa* is animate:

- (63) Ic. a. Kórarinnir þurfa peninga til ferðarinnar  
*Choirs-the.NOM need money.ACC for trip-the.GEN*  
 'The choirs need money for the trip'
- b. \*Það þarf peninga af kórnum  
*EXPL needs money.ACC of choirs-the.DAT*

Since both \*SU/NOM & \*SU/INA and \*SU/OBL & \*SU/INA are vacuously satisfied both when the subject is animate and in an intransitive expletive constructions where there is no subject, I will leave these constraints out in the next tableau. The constraint IDIOSYNCRATIC CASE is not relevant here either because *þurfa* is not listed in the lexicon as a verb with an accusative subject.

Tableau 4: Animate subject

(*þurfa* 'need')

Input: <i>þurfa</i> (x,y), x=[ani]	*EXPLETIVE	*INSERT	*ACCUSATIVE
(a) x <sub>[ani, acc]</sub> <i>þurfa</i> y			*!
☞ (b) x <sub>[ani, nom]</sub> <i>þurfa</i> y			
(c) EXPL <i>þurfa</i> y [pp P [DP x]]	*!	**	

Candidate (b) is the optimal candidate because the other two candidates do worse than candidate (b) on all the (relevant) constraints. Candidate (a) where the subject is marked for accusative, fatally violates \*ACCUSATIVE and candidate (c) fatally violates \*EXPLETIVE because of the late insertion of the expletive. Candidate (c) also violates \*INSERT twice, once for the insertion of the expletive and once for the insertion of the preposition.

### 4.10.2 Allowing animate accusative subjects

The example in (10b), repeated here as (64a), shows that *vanta* can occur in a transitive construction if the subject is animate. As with transitive *þurfa*, transitive *vanta* cannot occur in an

intransitive expletive construction if the subject of transitive *vanta* is animate, (64b):

- (64) Ic. a. Kórana vantar peninga til ferðarinnar  
*Choirs-the.ACC lacks money.ACC for trip-the.GEN*  
 'The choirs lack money for the trip'
- b. \*Það vantar peninga af kórunum  
*EXPL lacks money.ACC of choirs-the.DAT*

Since both \*SU/NOM & \*SU/INA and \*SU/OBL & \*SU/INA are vacuously satisfied when the subject is animate, I will leave these constraints out in the next tableau. Here, IDIOSYNCRATIC CASE is activated because *vanta* is listed in the lexicon as a verb with an accusative subject.

Tableau 5: Animate subject

(*vanta* 'lack')

Input: <i>vanta</i> (x,y), x=[ani]	IDIOCASE	*EXPLETIVE	*INSERT	*ACCUSATIVE
☞ (a) x <sub>[ani, acc]</sub> <i>vanta</i> y				*
(b) x <sub>[ani, nom]</sub> <i>vanta</i> y	*!			
(c) EXPL <i>vanta</i> y [pp P [DP x]]		*!	**	

In tableau 5, candidate (a) where the subject is marked for accusative is the optimal candidate with one violation of \*ACCUSATIVE. This violation is not fatal since the other two candidates do worse on higher ranked constraints. Candidate (b) fatally violates IDIOSYNCRATIC CASE because the subject is not marked for accusative and candidate (c) fatally violates \*EXPLETIVE for having inserted an expletive. Candidate (c) also violates the lower ranked constraint \*INSERT twice, once for having inserted an expletive and once for having inserted a preposition.

## 4.11 Conclusion

I hope to have shown that the verbs *purfa* and *vanta* do not have the same meaning. *Purfa* asserts something about what is needed in the ideal state, whereas *vanta* asserts that we fall short of in the ideal state. I have also shown that the effects discussed here, i.e. that inanimate accusative subjects are more marked than inanimate nominative subjects, can be derived from harmonic alignment of markedness hierarchies. Furthermore, I have shown that inanimate accusative subjects are more marked than intransitive expletive constructions, and that inanimate nominative subjects are equally marked as intransitive expletive constructions. The analysis correctly predicts that if transitive *vanta* has an inanimate subject an intransitive expletive construction will be chosen over a transitive construction. It also correctly predicts that if transitive *purfa* has an inanimate subject, it can optionally occur in a transitive construction or an intransitive expletive construction. Furthermore, it follows from the analysis that if *purfa* and *vanta* have an animate subject, they can only occur in transitive constructions.

## 4.12 Further issues: Indefinite subjects

The constraints that were used in the previous sections can also be used to account for the definiteness effect in Icelandic transitive expletive constructions. In addition to the constraints that were derived by harmonic alignment of the *relational scale*, the *animacy scale*, and the *case scale* in section 4.8, constraints derived by the harmonic alignment of the *definiteness scale* and the *topicality scale* conflict with the constraints \*INSERT and \*EXPLETIVE. The prediction is that an inanimate associate in a transitive expletive construction cannot be marked for accusative or dative.

## 4.13 Indefinite nominative subjects in TECs

In Icelandic, transitive expletive constructions (TECs) are only possible if the subject is indefinite. If the subject is definite, the subject has to raise to IP-Spec. As Icelandic is a V2 language, the subject also raises to CP-Spec, (65a). The attempt to have a definite subject in a transitive expletive construction as in (65b) is ungrammatical:

- (65) Ic. a. Konan hefur lesið bókina  
           *Woman-the.NOM has read book-the.ACC*  
           'The woman has read the book'
- b. \*Það hefur konan lesið bókina  
           *EXPL has woman-the.NOM read book-the.ACC*

If the subject is indefinite, a transitive expletive construction such as (66b) is preferred over transitive constructions such as (66a).<sup>11</sup> In transitive expletive constructions, the indefinite subject can either be in IP-Spec, in some intermediate position, or in VP-Spec. The expletive is inserted into CP-Spec.

- (66) Ic. a. ??Kona hefur lesið bókina  
           *Woman.NOM has read book-the.ACC*  
           'A woman has read the book'
- b. Það hefur kona lesið bókina  
           *EXPL has woman.NOM read book-the.ACC*  
           'A woman has read the book'

<sup>11</sup>Icelandic does not have indefinite articles, indefiniteness is indicated by having the bare noun as in (66a).

Indefinites are generally poor topics and this fact may be captured by ranking the constraints that were used in the previous sections with respect to a constraint that penalizes indefinites as topics (\*TOPIC/INDEFINITE or \*TOP/INDEF). This constraint is derived from harmonic alignment of the two markedness hierarchies in (67) in the same way as for example \*SU/NOM and \*SU/OBL were in the previous sections.

- (67) a. *Definiteness Scale* (adapted from Aissen 2003: 444, (13)):<sup>12</sup>  
           Definite > Indefinite Specific > NonSpecific  
       b. *Topicality Scale*: Topic > NonTopic

The harmonic alignment of the *definite scale* in (67) and the *topicality scale* in (66b) yields the harmony scales in (68).  $H_t$  shows that it is more harmonic for topics to be definite than it is for topics to be indefinite:

- (68) *Harmonic Alignment of the definiteness scale and the topicality scale*  
       a.  $H_t$ : Top/Def  $\succ$  Top/Indef  $\succ$  Top/NonSpec  
       b.  $H_n$ : NonTop/NonSpec  $\succ$  NonTop/Indef  $\succ$  NonTop/Def

The harmony scales in (68) give the two universally fixed constraint rankings. The constraint ranking  $C_t$  in (69a) tells us that the constraint that penalizes topics for being indefinite dominates the constraint that penalizes topics for being definite.

- (69) *Constraint Rankings*  
       a.  $C_t$ : \*TOP/NONSPEC  $\gg$  \*TOP/INDEF  $\gg$  \*TOP/DEF  
       b.  $C_n$ : \*NONTOP/DEF  $\gg$  \*NONTOP/INDEF  $\gg$  \*NONTOP/NONSPEC

As topics occur in CP-Spec, the constraint \*TOP/INDEF is violated whenever CP-Spec is filled with something indefinite.

The examples in (66), repeated here as (70), show that it is more marked for indefinite subjects to occur in CP-Spec than it is for indefinite subjects to occur in a transitive expletive construction:

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<sup>12</sup>Aissen (2003: 444, (13)) provides a definiteness scale that is more fine-grained than the one in (67) (Pronoun > Name > Definite > Indefinite Specific > NonSpecific). I have reduced Aissen's scale to the scale in (67) because no distinction is made between pronouns, names and definites in Icelandic.



- (70) Ic. a. ??Kona hefur lesið bókina  
*Woman.NOM has read book-the.ACC*  
 'A woman has read the book'
- b. Það hefur kona lesið bókina  
*EXPL has woman.NOM read book-the.ACC*  
 'A woman has read the book'

Tableau 6: Indefinite subject

(lesa 'read')

Input: <i>lesa</i> (x,y), x=[-def]	*TOPIC/INDEFINITE	*EXPLETIVE	*INSERT
(a) x <sub>[-def]</sub> <i>lesa</i> y	*!		
☞ (b) EXPL <i>lesa</i> x <sub>[-def]</sub> y		*	*

In tableau 6, candidate (a) fatally violates \*TOPIC/INDEFINITE because the indefinite subject has been raised to CP-Spec. The transitive expletive construction (candidate (b)) is the correct optimal candidate with one violation of \*EXPLETIVE and one violation of \*INSERT, both violations are due to the late insertion of the expletive.

If the subject is definite, it cannot occur in a transitive expletive construction as shown in (71b):

- (71) Ic. a. Konan hefur lesið bókina  
*Woman-the.NOM has read book-the.ACC*  
 'The woman has read the book'
- b. \*Það hefur konan lesið bókina  
*EXPL has woman-the.NOM read book-the.ACC*

Tableau 7: Definite subject

(lesa 'read')

Input: <i>lesa</i> (x,y), x=[def]	*TOPIC/INDEFINITE	*EXPLETIVE	*INSERT
☞ (a) x <sub>[def]</sub> <i>lesa</i> y			
(b) EXPL <i>lesa</i> x <sub>[def]</sub> y		*!	*

When the subject is definite, \*TOPIC/INDEFINITE is vacuously satisfied and the constraint \*EXPLETIVE rules out the transitive expletive construction. Candidate (a) is the correct optimal candidate with no constraint violation.

## 4.14 Indefinite oblique subjects in TECs

Verbs that assign oblique case to their subject can also show up in transitive expletive constructions as pointed out by Sigurðsson (1989: 288) and Vangsnes (2000: 195), (72a).<sup>13</sup> *Vanta* can also occur in a transitive expletive construction, (72b):

- (72) Ic. a. Það líkaði einhverjum (konum) bíllinn  
*EXPL liked some.DAT (women.DAT) car-the.NOM*  
 'Someone/(Some women) liked the car'
- b. Það hafði einhverja (konu) vantað bílinn  
*EXPL had some.ACC (woman.ACC) lacked car-the.ACC*  
 'Someone/(Some woman) had lacked the car'

Crucially, \*INSERT dominates \*ACCUSATIVE.

Tableau 8: Indefinite subject

(*vanta* 'lack')

Input: <i>vanta</i> (x,y), x=[-def]	IDIOCASE	*TOP/INDEF	*EXPL	*INS	*ACC
(a) x <sub>[-def, acc]</sub> <i>vanta</i> y		*!			*
(b) x <sub>[-def, nom]</sub> <i>vanta</i> y	*!	*			
(c) EXPL <i>vanta</i> y [pp P [DP x]]			*	**!	
☞ (d) EXPL <i>vanta</i> x <sub>[-def, acc]</sub> y			*	*	*

In tableau 8, the optimal candidate is candidate (d). Candidate (b) fatally violates IDIOSYNCRATIC CASE for having a subject not marked for accusative. Candidates (a) and (b) violate \*TOPIC/INDEFINITE because an indefinite subject has been raised to CP-Spec. For candidate (a), this is a fatal violation. Candidates (c) and (d) have one violation of \*EXPLETIVE each for the inserted expletive, and for the same insertion both candidates have one violation of \*INSERT. But in addition to the inserted expletive, there has also been inserted a preposition in candidate (c). Therefore the second violation of \*INSERT is fatal. If \*ACCUSATIVE dominated \*INSERT, candidate (c) would be the winning candidate.

<sup>13</sup>Verbs that assign oblique case to their subjects seem to be more sensitive with respect to the definiteness effect than verbs that assign nominative case to their subjects:

- (i) Ic. \*Það líkaði konum bíllinn  
*EXPL liked women.DAT car-the.NOM*

The example in (i) shows that it is not enough for an oblique associate to be indefinite. The example in (72) shows that an oblique associate in a transitive expletive construction either has to be an indefinite pronoun or quantified in some way.

## 4.15 Indefinite inanimate subjects in TECs

So far I have only mentioned definite inanimate subjects with transitive *þurfa* or *vanta*. Recall that if the subject of transitive *þurfa* is inanimate, *þurfa* optionally occurs in a transitive construction, (73a), or in an intransitive expletive construction, (73b). If the subject of transitive *vanta* is inanimate, *vanta* can only occur in an intransitive expletive construction, (74b):

- (73) Ic. a. Bíllinn þarf ekki bensín  
*Car-the.NOM needs not petrol.ACC*  
 'The car does not need petrol'
- b. Það þarf ekki bensín á bílinn  
*EXPL needs not petrol.ACC on car-the.ACC*  
 'The car does not need petrol'
- (74) Ic. a. Bílinn vantar ekki bensín  
*Car-the.ACC lacks not petrol.ACC*
- b. Það vantar ekki bensín á bílinn  
*EXPL lacks not petrol.ACC on car-the.ACC*  
 'The car is not low on petrol'

What happens if the inanimate subject of transitive *þurfa* or *vanta* is indefinite? The data in sections 4.13 and 4.14 show, that if an animate subject of transitive *þurfa* or *vanta* is indefinite, it is only possible to have a transitive expletive construction. This might indicate that if an inanimate subject of transitive *þurfa* or *vanta* is indefinite, the two verbs could show up in a transitive expletive construction. As the examples in (75a) (for *þurfa*) and (76a) (for *vanta*) show, this does not happen:

- (75) Ic. a. \*Það þarf bíll spegil [TEC]  
*EXPL needs car.NOM mirror.ACC*
- b. Það þarf spegil í bíl [ITEC]  
*EXPL needs mirror.ACC in car.ACC*  
 'A mirror is needed in a car'

In transitive expletive constructions, the associate occupies one of several possible subject positions (either IP-Spec, some intermediate position or VP-Spec). This means that a candidate where an inanimate subject is marked for accusative violates the constraint \*SU/OBL & \*SU/INA and a candidate where an inanimate subject is marked for nominative violates the

constraint \*SU/NOM & \*SU/INA.

In tableau 9, I do not include the constraint \*SU/OBL & \*SU/INA nor candidates where the inanimate subject is marked for accusative as these candidates will be ruled out by the constraint \*SU/OBL & \*SU/INA. Neither do I include the constraints IDIOSYNCRATIC CASE (which is not relevant because *purfa* is not listed in the lexicon as a verb with an accusative subject) nor \*ACCUSATIVE because it is not decisive in this case.

Tableau 9: Inanimate indefinite subject

(*purfa* 'need')

Input: <i>purfa</i> (x,y), x=[-ani,-def]	*TOPIC/ INDEF	*EXPLETIVE	*SU/NOM & *SU/INA	*INSERT
(b) x <sub>[-ani, nom, -def]</sub> <i>purfa</i> y	*!		*	
(c) EXPL <i>purfa</i> y [PP P [DP x]]		*		**
(d) EXPL <i>purfa</i> x <sub>[-ani, nom, -def]</sub> y		*	*!	*

In tableau 9, candidate (b) fatally violates the constraint \*TOPIC/INDEFINITE because the indefinite subject has been raised to CP-Spec. The two expletive constructions, the intransitive expletive construction (candidate (c)) and the transitive expletive construction (candidate (d)) tie on \*EXPLETIVE because an expletive has been inserted in both of the candidates but candidate (d) does worse on \*SU/NOM & \*SU/INA than candidate (c) does. \*EXPLETIVE and \*SU/NOM & \*SU/INA do not rank with respect to each other, but because of the extra violation of \*SU/NOM & \*SU/INA on candidate (d), candidate (c) will always be the optimal candidate. The analysis correctly predicts that the intransitive expletive construction in (75b) will be chosen over the transitive expletive construction in (75a) if an inanimate subject of transitive *purfa* is indefinite.

As with *purfa*, *vanta* cannot have an inanimate indefinite subject in a transitive expletive construction:

- (76) Ic. a. \**Pað vantar bíl spegil* [TEC]  
EXPL lacks car.ACC mirror.ACC
- b. *Pað vantar spegil í bíl* [ITEC]  
EXPL lacks mirror.ACC in car.ACC  
'A mirror is missing in a car'

Because the associate in a transitive expletive construction occupies one of the subject positions, a transitive expletive construction with an inanimate accusative subject will violate the constraint \*SU/OBL & \*SU/INA. The constraint IDIOSYNCRATIC CASE is activated here because *vanta* is listed in the lexicon as a verb with an accusative subject.

In tableau 10, page 162, candidates (a) and (d) fatally violate \*SU/OBL & \*SU/INA for having an inanimate subject marked for accusative. Candidate (b) fatally violates IDIOSYNCRATIC CASE for having a subject not marked for accusative. The constraints IDIOSYNCRATIC CASE and \*TOPIC/INDEFINITE are not crucially ranked, but if \*TOPIC/INDEFINITE would dominate IDIOSYNCRATIC CASE candidate (b) would also be out. The only candidate left is the intransitive expletive construction candidate, candidate (c). The analysis correctly predicts that if an inanimate subject of transitive *vanta* is indefinite, the intransitive expletive construction in (76b) will be chosen over the transitive expletive construction in (76a).

## 4.16 Summary

If an animate subject of transitive *purfa* is indefinite, *purfa* can only occur in a transitive expletive construction. If an animate subject of transitive *purfa* is definite, it can only occur in a transitive construction.

(77) *purfa* with an animate subject:

INDEFINITE	DEFINITE
*Transitive construction	✓Transitive construction
✓Transitive expletive construction	*Transitive expletive construction
*Intransitive expletive construction	*Intransitive expletive construction

If an animate subject of transitive *vanta* is indefinite, *vanta* can only occur in a transitive expletive construction. If an animate subject of transitive *vanta* is definite, it can only occur in a transitive construction.

Tableau 10: Inanimate indefinite subject

(vanta 'lack')

Input: <i>vanta</i> (x,y), x=[-ani,-def]	*SU/OBL & *SU/INA	IDIO CASE	TOP / INDEF	*EXPL	*SU/NOM & *SU/INA	*INSERT	*ACC
(a) x <sub>[-ani, acc, -def]</sub> <i>vanta</i> y	*!		*				*
(b) x <sub>[-ani, nom, -def]</sub> <i>vanta</i> y		*!	*		*		
☞ (c) EXPL <i>vanta</i> y [pp P [DP x]]				*		**	*
(d) EXPL <i>vanta</i> x <sub>[-ani, acc, -def]</sub> y	*!			*		*	*

(78) *vanta* with an animate subject:

INDEFINITE	DEFINITE
*Transitive construction	✓Transitive construction
✓Transitive expletive construction	*Transitive expletive construction
*Intransitive expletive construction	*Intransitive expletive construction

If an inanimate subject of transitive *purfa* is indefinite, *purfa* can only occur in a intransitive expletive construction. If an inanimate subject of transitive *purfa* is definite, it can either occur in a transitive construction or an intransitive expletive construction.

(79) *purfa* with an inanimate subject:

INDEFINITE	DEFINITE
*Transitive construction	✓Transitive construction
*Transitive expletive construction	*Transitive expletive construction
✓Intransitive expletive construction	✓Intransitive expletive construction

It does not matter whether an inanimate subject of transitive *vanta* is indefinite or definite, in both cases, *vanta* can only occur in an intransitive expletive construction.

(80) *vanta* with an inanimate subject:

INDEFINITE	DEFINITE
*Transitive construction	*Transitive construction
*Transitive expletive construction	*Transitive expletive construction
✓Intransitive expletive construction	✓Intransitive expletive construction

## 4.17 The person restriction as a result of harmonic alignment

As was shown in chapter 3, verbs with dative subjects can occur with first or second person nominative objects, if the object serves as a subject of an embedded small clause. The verb can only show agreement with a third person nominative object, (81d), not first or second person nominative object, (81a)/(81b):

- (81) Ic. a. Þér þótti ég / við fyndin  
*You.DAT thought.3SG I.NOM / we.NOM amusing*  
'You found me/us amusing'
- b. Okkur þótti þú / þið fyndin  
*Us.DAT thought.3SG you.SG.NOM / you.PL.NOM amusing*  
'We found you (SG) / you (PL) amusing'
- c. Okkur þótti hann fyndinn  
*Us.DAT thought.3SG he.NOM amusing*  
'We found him amusing'
- d. Okkur þóttu þau fyndin  
*Us.DAT thought.3PL they.NOM amusing*  
'We found them amusing'

Sigurðsson (1990-1991a, 1991b, 1996 and 2000) observe that in monoclausal constructions, nominative objects cannot be first or second person:

- (82) Ic. a. \*Þér líkaði við  
*You.SG.DAT liked.3SG us.NOM*
- b. \*Mér líkaði þið  
*Me.DAT liked.3SG you.PL.NOM*

- (83) Ic. a. \*Þér leiddist við  
*You.SG.DAT bored.3SG us.NOM*
- b. \*Mér leiddist þið  
*Me.DAT bored.3SG you.PL.NOM*

The examples in (84) and (85) show that the verb cannot show agreement with the nominative object, neither in person nor in number:

- (84) Ic. a. \*Þér líkuðum / líkuðu við  
*You.SG.DAT liked.1PL / liked.3PL us.NOM*



b. \*Mér líkuðuð / líkuðu þið  
 Me.DAT liked.2PL / liked.3PL you.PL.NOM

(85) Ic. a. \*Þér leiddumst / leiddust við  
 You.SG.DAT bored.1PL / bored.3PL us.NOM

b. \*Mér leiddust þið  
 Me.DAT bored.2/3PL you.PL.NOM

Anagnostopoulou (2003: 255-280) relates this to a constraint first put forward in Perlmutter (1971) (known as the *\*me/loi / I-II Constraint*) and later in Bonet (1991) and Bonet (1994) as the *Person-Case Constraint*. Originally the Person-Case Constraint was a constraint on clitics in double object constructions in Romance languages. The observation is that if a direct and an indirect object co-occur, the direct object has to be 3<sup>rd</sup> person. Bonet's (1994: 36) formulation of the constraint is given in (86):

(86) **Person-Case Constraint**

In the presence of dative agreement on a verbal form/dative clitic, accusative agreement with that verb/accusative clitic is confined to 3<sup>rd</sup> person.

Based on Bonet's observations, Grimshaw (1997a, 2001) shows how the person-case restriction can be accounted for in OT. Grimshaw shows that Bonet's *person-case constraint* can be reflected in the interaction of faithfulness constraints with markedness constraints and alignment constraints.

From the *person-case constraint*, Anagnostopoulou (2003: 255) derives the *person restriction on nominative objects* which is shown in (87). According to Anagnostopoulou (2003: 255), this constraint is language-specific as it is found in Icelandic only.

(87) **The Person Restriction on Nominative Objects (PRN-Constraint)**

In the presence of a dative subject, the (agreeing) nominative object has to be 3<sup>rd</sup> person.

In di-clausal constructions such as (81), the PRN-Constraint prohibits agreement between the verb and a first or second person nominative argument in the small clause. The example with a first person plural nominative argument in (81) is repeated here as (88a) and the ungrammatical sentence where the verb shows agreement with the nominative argument is given in (88b):

- (88) Ic. a. Þér þótti við fyndin  
*You.DAT thought.3SG we.NOM amusing*  
 'You found us amusing'
- b. \*Þér þóttum við fyndin  
*You.DAT thought.1PL we.NOM amusing*

In mono-clausal constructions such as (82) and (84), the PRN-Constraint prohibits the occurrence of first and second person nominative objects altogether. Here, example (82), where the verb does not show agreement with a first person plural nominative object, is repeated as (89a), and example (84), where the verb shows agreement, is repeated as (89b). Both examples are ungrammatical:

- (89) Ic. a. \*Þér líkaði við  
*You.SG.DAT liked.3SG us.NOM*
- b. \*Þér líkuðum við  
*You.SG.DAT liked.1PL us.NOM*

The person restriction only holds for nominative objects. In constructions where both the subject and the object are accusative, first and second person objects are fine. Unlike in DAT-NOM constructions, the verb cannot show agreement with third person objects in ACC-ACC constructions, (90c):

- (90) Ic. a. Ykkur dreymdi mig  
*You.PL.ACC dreamt.3SG me.ACC*  
 'You dreamt me'
- b. Okkur dreymdi þig  
*Us.ACC dreamt.3SG you.SG.ACC*  
 'We dreamt you'
- c. Þig dreymdi / \*dreyndu þau  
*You.SG.ACC dreamt.3SG / dreamt.3PL them.ACC*  
 'You dreamt them'

In the following section, I will try to show that the person restriction in DAT-NOM constructions can be derived from harmonic alignment of three prominence scales. Generally, nominative objects are marked, and likewise, first and second person objects are more marked than third person objects. The observation is that the combination of the two, i.e. being a first or second person nominative object must be even more marked than being a third person nominative object.

#### 4.17.1 Harmonic alignment

What I would like to propose is that this effect, i.e. that first or second person nominative objects are more marked than third person nominative objects, may be derived from the harmonic alignment of the *relational scale* in (91) with the *locality scale* in (92a) and the *case scale* in (92b):

(91) *Relational Scale*: Subject > Object

- (92) a. *Locality Scale*: Local person > Non-local person  
b. *Case Scale*: Nominative > Oblique

Following Aissen (1999: 673-674), I choose to group first and second person as local person. The definition of local is roughly that of being local in the discourse, whereas third person is not local in the discourse. I choose to use this definition because first and second person seem to be equally marked in Icelandic with respect to nominative objects.<sup>14</sup>

First, the harmonic alignment of the *relational scale* and the *locality scale*:

- (93) *Harmonic alignment of the relational scale and the locality scale*  
a.  $H_S: \text{Su/Loc} \succ \text{Su/Non-Loc}$   
b.  $H_O: \text{Ob/Non-Loc} \succ \text{Ob/Loc}$

The harmony scales in (93) tell us that it is more harmonic for a subject to be a local person than it is for a subject to be non-local. For objects, it is more harmonic to be non-local than it is for objects to be local. The harmony scales in (93) give us the fixed constraint rankings in (94):

- (94) *Constraint Alignment*  
a.  $C_S: *SU/NON-LOC \gg *SU/LOC$   
b.  $C_O: *OB/LOC \gg *OB/NON-LOC$

The constraint ranking in (94a) tells us that non-local subjects are more marked than local subjects, i.e. that first and second person subjects are preferred over third person subjects. The constraint ranking in (94b) tells us that local objects are more marked than non-local objects, i.e. that third person objects are preferred over first and second person objects.

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<sup>14</sup>Note, however, that the same result could be achieved if first and second person were separated.

The harmonic alignment of the *relational scale* and the *case scale* that was shown in (51), page 144, gave the constraint rankings in (52), repeated here as (95):

(95) *Constraint Rankings*

- a.  $C_S: *SU/OBL \gg *SU/NOM$
- b.  $C_O: *OB/NOM \gg *OB/OBL$

The constraint ranking  $C_S$  in (95a) tells us that the constraint that penalizes oblique subjects dominates the constraint that penalizes nominative subjects, i.e. that oblique subjects are more marked than nominative subjects.

Now, we have two fixed constraint rankings on objects, as shown in (96):

- (96) a.  $C_1: *OB/LOC \gg *OB/NON-LOC$  = (93b)
- b.  $C_2: *OB/NOM \gg *OB/OBL$  = (95b)

First and second person nominative objects violate the two higher ranked constraints in (96), whereas third person nominative objects violate the lower ranked constraint in (96a) and the higher ranked constraint in (96b). If the two constraints in (96a) are locally conjoined with  $*OB/NOM$  in (96b), we get the two local conjunctions in (97). The local conjunctions respect the constraint ranking of the subhierarchies they are made of so the constraint ranking in (97) is universally fixed.

- (97)  $*OB/LOC \ \& \ *OB/NOM \gg *OB/NON-LOC \ \& \ *OB/NOM$

The constraint ranking in (97) tells us that it is more marked to be a local nominative object than to be a non-local nominative object, i.e. third person nominative objects are preferred over first/second person nominative objects.

#### 4.17.2 The evasive form

In (97), the constraint that penalizes the occurrence local nominative objects,  $*OB/LOC \ \& \ *OB/NOM$ , dominates the constraint that penalizes the occurrence of non-local nominative objects. This constraint ranking predicts that it is more marked to be a local nominative object than it is to be a non-local nominative object. As shown in the examples in (98), this is the correct prediction for Icelandic; nominative objects cannot be first or second person, (98a) and (98b),

but they can be third person, (98c):

- (98) Ic. a. \*Þér líkaði við  
*You.SG.DAT liked.3SG us.NOM*  
 b. \*Mér líkaði þið  
*Me.DAT liked.3SG you.PL.NOM*  
 c. Mér líkuðu þau  
*Me.DAT liked.3PL they.NOM*  
 'I liked them'

The two verbs *líka* 'like' and *leiðast* 'be bored' have two different "repair strategies" for constructions with local nominative objects. With *líka* 'like' it is possible to put the nominative object into a prepositional phrase, (99b):

- (99) Ic. a. \*Ykkur líkar ég  
*You.PL.DAT likes.3SG me.NOM*  
 b. Ykkur líkar við mig  
*You.PL.DAT likes.3SG with me.ACC*  
 'You like me'

And with *leiðast* 'be bored', it is possible to use a paraphrase with the predicative adjective *leiður* 'bored', (101b):

- (100) Ic. a. \*Ykkur leiðist ég  
*You.PL.DAT bore.3SG me.NOM*  
 b. Þið eruð leið á mér  
*You.PL.NOM are.2PL bored on me.DAT*  
 'You are bored with me'

A paraphrase such as (100b) cannot be used instead of *líka* because a corresponding predicative adjective does not exist for this verb. A construction that corresponds to (99b) does not exist for *leiðast*.

The fact that both are possible with third person nominative objects seems to indicate that (99b) and (100b) are not repair strategies. Following Müller (2001: 107-108), I will call these forms *evasive forms*, i.e. forms that differ in structure but not necessarily in meaning.<sup>15</sup>

<sup>15</sup>*Evasive form* is a translation of German *Ausweichform*, which is the term used by Müller (2001).

- (101) Ic. a. Ykkur líkar hún  
*You.PL.DAT likes.3SG she.NOM*  
 'You like her'
- b. Ykkur líkar við hana  
*You.PL.DAT likes.3SG with her.ACC*  
 'You like her'
- (102) Ic. a. Ykkur leiðist hún  
*You.PL.DAT bore.3SG she.NOM*  
 'She bores you'
- b. Þið eruð leið á henni  
*You.PL.NOM are.2PL bored on her.DAT*  
 'You are bored with her'

Because candidates such as (99b)/(100b) are so different from candidates such as (99a)/(100b) there might be a reason to object the claim that the two compete with one another in the same competition. There are more possibilities to choose from in such a situation. The first possibility is to assume that GEN can generate a very heterogenic set of candidates where the candidates that compete have almost nothing in common. In this case, an extremely unfaithful candidate (99b) can win over the candidate that is faithful to the input, (99a). Second, it is possible to assume that instead of having the two candidates competing with each other, a *null parse* candidate, marked by  $\odot$ , competes with either one of them separately. In this case, the null parse candidate wins over a candidates such as (99a), but it will lose to candidates such as (99b) or (102a). A third possibility is to assume that the derivation crashes in a serial or derivational OT-framework.

Here, I choose to combine the first and the second possibility. The null parse is the candidate that is the most unfaithful to the input of all candidates. Nevertheless, if we assume that (99a)/(100a) and (99b)/(100b) compete in the same competition, the null parse candidate will always win over the evasive form if the nominative object of *líka* and *leiðast* is local.

If (99b) and (100b) are evasive forms instead of repair strategies, it must be assumed that there are two competitions with two different inputs for (99)/(100)/(101)/(102).<sup>16</sup>

On the one hand there is an input where the two verbs *líka* and *leiðast* have two arguments, a dative subject and a nominative object.

<sup>16</sup>If there truly are two different inputs, this would be one of the few arguments against Heck et al. (2002) who make an attempt to dispense with the input in OT-syntax.

- (103) *Input*<sub>1</sub>:  
*líka / leiðast* (x,y), y = [ $\alpha$ local]

On the other hand there are two different inputs for (99)/(101) and (100)/(102). Here, *líka* selects for a dative subject and a PP complement and the input for (100)/(102) is an input with the predicative adjective *leiður* 'bored'.

- (104) *Input*<sub>2a</sub>:  
*líka*<sub>V</sub> (x,y), y = [PP P [DP *z*<sub>[ $\alpha$ local]</sub>]]

- (105) *Input*<sub>2b</sub>:  
*leiður*<sub>Adj</sub> (x,y), y = [PP P [DP *z*<sub>[ $\alpha$ local]</sub>]]

If we assume that there exist constraints that regulate the relationship between the input and the output, these constraints can be ranked between the harmonic alignment constraints in (97). These constraints could be the constraints DEP-IO and MAX-IO.

- (106) DEP-IO and MAX-IO (McCarthy & Prince, 1995: 16):

- a. DEP-IO: Every segment of the output has a correspondent in the input.
- b. MAX-IO: Every segment of the input has a correspondent in the output.

#### 4.17.3 Getting rid of local nominative objects

If *líka* has a local nominative object, the null parse wins over both the unfaithful evasive form in (107b) and the faithful form in (107a).

- (107) Ic. a. \*Ykkur            líkar            ég  
               *You.PL.DAT likes.3SG me.NOM*  
       b. \*Ykkur            líkar            við mig  
               *You.PL.DAT likes.3SG with me.ACC*

- (108) \*OB/LOC & \*OB/NOM  $\gg$  DEP-IO  $\gg$  MAX-IO  $\gg$  \*OB/NON-LOC & \*OB/NOM

Tableau 11: Local nominative object

(líka 'like')

Input: <i>líka</i> (x,y), y=[+local]	*OB/LOC & *OB/NOM	DEP-IO	MAX-IO	*OB/NON-LOC & *OB/NOM
(a) x <i>líka</i> y <sub>[+local, nom]</sub>	*!			
(b) x <i>líka</i> [PP P [DP y <sub>[+local]</sub> ]]		*!		
☞ (c) ∅			***	

Although the null parse candidate is more unfaithful to the input than the evasive form, it is the optimal candidate. Candidate (a) does worse on the higher ranked constraint \*OB/LOC & \*OB/NOM and the evasive candidate does worse on the higher ranked DEP-IO.

If *líka* selects for a prepositional phrase in the input, and the complement of the preposition is local, the faithful form in (109b) is chosen over the unfaithful form in (109a) and the null parse.

- (109) Ic. a. \*Ykkur líkar ég  
*You.PL.DAT likes.3SG me.NOM*  
 b. Ykkur líkar við mig  
*You.PL.DAT likes.3SG with me.ACC*  
 'You like me'

Tableau 12: Local PP complement

(líka 'like')

Input: <i>líka</i> (x,y), y=[PP P [DP z <sub>[+local]</sub> ]]	*OB/LOC & *OB/NOM	DEP-IO	MAX-IO	*OB/NON-LOC & *OB/NOM
(a) x <i>líka</i> z <sub>[+local, nom]</sub>	*!		*	
☞ (b) x <i>líka</i> [PP P [DP z <sub>[+local]</sub> ]]				
(c) ∅			*!***	

Candidate (b) is the optimal candidate with no constraint violation. Candidate (a) fatally violates \*OB/LOC & \*OB/NOM for having a local nominative object and it also violates MAX-IO because the preposition is missing in the output. The null parse fatally violates MAX-IO.

#### 4.17.4 Allowing non-local nominative objects

If *líka* has a non-local object in the input, (110a) wins over (110b) and the null parse:

- (110) Ic. a. Ykkur líka þau  
*You.PL.DAT likes.3PL they.NOM*  
 'You like them'



- b. \*Ykkur líkar við þau  
*You.PL.DAT likes.3SG with them.ACC*

Tableau 13: Non-Local nominative object (*líka* 'like')

Input: <i>líka</i> (x,y), y=[-local]	*OB/LOC & *OB/NOM	DEP-IO	MAX-IO	*OB/NON-LOC & *OB/NOM
☞ (a) x <i>líka</i> y[-local, nom]				*
(b) x <i>líka</i> [PP P [DP Y[-local]]]		*!		
(c) ⊙			*!***	

In tableau 13, candidate (a) is the optimal candidate with one violation of \*OB/NON-LOC & \*OB/NOM for having a non-local nominative object. This violation is not fatal since candidate (b) does worse on the higher ranked constraint DEP-IO and the null parse on MAX-IO.

If *líka* selects for a prepositional phrase in the input and the complement of the preposition is non-local, the faithful (111b) wins over the unfaithful (111a) and the null parse:

- (111) Ic. a. \*Ykkur líka þau  
*You.PL.DAT likes.3PL they.NOM*  
 b. Ykkur líkar við þau  
*You.PL.DAT likes.3SG with them.ACC*  
 'You like them'

Tableau 14: Non-local PP complement (*líka* 'like')

Input: <i>líka</i> (x,y), y=[PP P [DP Z[-local]]]	*OB/LOC & *OB/NOM	DEP-IO	MAX-IO	*OB/NON-LOC & *OB/NOM
(a) x <i>líka</i> z[-local, nom]			*!	*
☞ (b) x <i>líka</i> [PP P [DP Z[-local]]]				
(c) ⊙			*!***	

In tableau 14, candidate (a) and the null parse fatally violate MAX-IO. Candidate (a) also violates \*OB/NON-LOC & \*OB/NOM for having a non-local nominative object. Candidate (b) is the faithful winning candidate with no constraint violation.

If *leiðast* has a local object, the null parse is chosen over both the unfaithful evasive form in (112b) and the faithful form in (112a).

- (112) Ic. a. \*Ykkur leiðist ég  
*You.PL.DAT bore.3SG me.NOM*

- b. \*Þið eruð leið á mér  
*You.PL.NOM are.2PL bored on me.DAT*

Tableau 15: Local nominative object

(*leiðast* 'be bored')

Input: <i>leiðast</i> (x,y), y=[+local]	*OB/LOC & *OB/NOM	DEP- IO	MAX- IO	*OB/NON-LOC & *OB/NOM
(a) x <i>leiðast</i> y[+local, nom]	*!			
(b) x <i>er leiður</i> [pp P [DP y[+local]]]		*!*		
☞ (c) ∅			***	

Although the null parse in tableau 15 is more unfaithful to the input than the evasive candidate (b), the null parse comes out as the winning candidate. Candidate (a) does worse on the higher ranked \*OB/LOC & \*OB/NOM for having a local nominative object. Candidate (b) violates DEP-IO twice, once for having inserted the copular verb and once for having inserted the preposition.

If the predicative adjective *leiður* 'bored' is in the input with a local complement, the faithful candidate in (113b) is chosen over the unfaithful candidate in (113a) and the null parse.

- (113) Ic. a. \*Ykkur leiðist ég  
*You.PL.DAT bore.3SG me.NOM*  
 'You find me boring'
- b. Þið eruð leið á mér  
*You.PL.NOM are.2PL bored on me.DAT*  
 'You are bored with me'

Tableau 16: Predicative adjective - Local

(*leiður* 'bored')

Input: <i>er leiður</i> (x,y), y=[pp P [DP z[+local]]]	*OB/LOC & *OB/NOM	DEP- IO	MAX- IO	*OB/NON-LOC & *OB/NOM
(a) x <i>leiðast</i> z[+local, nom]	*!		**	
☞ (b) x <i>er leiður</i> [pp P [DP z[+local]]]				
(c) ∅			*!*	

In tableau 16, candidate (b) is the winning candidate with no constraint violation. Candidate (a) fatally violates \*OB/LOC & \*OB/NOM for having a local nominative object. Candidate (a) violates MAX-IO twice, once for deleting the preposition and once for deleting the copular verb. The null parse fatally violates MAX-IO.

If *leiðast* has a non-local object in the input, the faithful candidate in (114a) wins over the evasive form in (114b) and the null parse:

- (114) Ic. a. Ykkur leiðast þau  
*You.PL.DAT bore.3PL they.NOM*  
 'You find them boring'
- b. \*Þið eruð leið á þeim  
*You.PL.NOM are.2PL bored on them.DAT*

Tableau 17: Non-Local nominative object (*leiðast* 'be bored')

Input: <i>leiðast</i> (x,y), y=[-local]	*OB/LOC & *OB/NOM	DEP- IO	MAX- IO	*OB/NON-LOC & *OB/NOM
☞ (a) x <i>leiðast</i> y <sub>[-local, nom]</sub>				*
(b) x <i>er leiður</i> [PP P [DP y <sub>[-local]</sub> ]]		*!*		
(c) ∅			*!*	

In tableau 17, candidate (a) is the optimal candidate with one violation of \*OB/NON-LOC & \*OB/NOM for having a non-local nominative object. Candidate (a) fatally violates the higher ranked DEP-IO and the null parse fatally violates the higher ranked MAX-IO.

If the predicative adjective *leiður* 'bored' is in the input with a non-local complement, the faithful candidate in (115b) is chosen over the unfaithful candidate in (115a) and the null parse.

- (115) Ic. a. \*Ykkur leiðist hún  
*You.PL.DAT bore.3SG she.NOM*
- b. Þið eruð leið á henni  
*You.PL.NOM are.2PL bored on her.DAT*  
 'You are bored with her'

Tableau 18: Predicative adjective - Non-Local (*leiður* 'bored')

Input: <i>er leiður</i> (x,y), y=[PP P [DP z <sub>[-local]</sub> ]]	*OB/LOC & *OB/NOM	DEP- IO	MAX- IO	*OB/NON-LOC & *OB/NOM
(a) x <i>leiðast</i> z <sub>[-local, nom]</sub>			*!*	*
☞ (b) x <i>er leiður</i> [PP P [DP z <sub>[-local]</sub> ]]				
(c) ∅			*!*	

In tableau 18, candidate (b) is the optimal candidate with no constraint violation. Candidate (a) violates \*OB/NON-LOC & \*OB/NOM for having a non-local nominative object and it violates

MAX-IO twice, once for having deleted the copular verb, once for having deleted the preposition. These violations are fatal since candidate (b) does not have any constraint violations. The null parse also fatally violates MAX-IO.

#### 4.17.5 Summary

I have tried to show that the person restriction on nominative objects in Icelandic can be accounted for by means of the harmonic alignment of three prominence scales, the *relational scale*, the *locality scale* and the *case scale*. The harmonic alignment of the *relational scale* and the *locality scale* predicts that local objects (i.e. first and second person objects) are more marked than non-local objects (i.e. third person objects). The harmonic alignment of the *relational scale* and the *case scale* predicts that nominative objects are more marked than oblique objects. If the constraints that are derived from these two different harmonic alignments are conjoined in local constraint conjunctions, the prediction is that local nominative objects are more marked than non-local nominative objects. This is exactly what we see in Icelandic DAT-NOM constructions because in these constructions nominative objects can be third person but not first or second person.

As I have tried to show, the paraphrases of DAT-NOM constructions with local nominative objects cannot be repair strategies, but rather so-called *evasive forms*, i.e. forms that differ in structure but not necessarily in meaning. This means that the paraphrase has to have another input than the DAT-NOM construction and that a DAT-NOM construction with a local nominative object in the input has to lose to a null parse candidate, i.e. a candidate which is structurally, semantically and phonetically empty. As I have shown, even if the paraphrase candidate competes with the DAT-NOM construction candidate and the null parse candidate, the null parse candidate will always win in a competition where there is a first or second person nominative object even though it is less faithful to the input than the paraphrase. In a competition where the paraphrase is in the input, the null parse candidate will lose to the paraphrase, because the paraphrase is more faithful to the input than the null parse.

## 4.18 Conclusion

In the first section of this chapter, I tried to show that the verbs *þurfa* 'need' and *vanta* 'lack' do not have the same meaning. *Þurfa* asserts something about what is needed in the ideal state, whereas *vanta* asserts that we fall short of in the ideal state.

The local conjunctions of constraints derived by harmonic alignment of the *relational scale*, the *case scale* and the *animacy scale* and the interaction of these constraints with faithfulness constraints predicts that inanimate accusative subjects are more marked than inanimate nominative subjects in Icelandic.

The analysis correctly predicts that if transitive *vanta* has an inanimate subject an intransitive expletive construction will be chosen over a transitive construction. It also correctly predicts that if transitive *þurfa* has an inanimate subject, it can optionally occur in a transitive construction or an intransitive expletive construction. Furthermore, it follows from the analysis that if *þurfa* and *vanta* have an animate subject, they can only occur in transitive constructions.

In the second section of this chapter, I tried to show how the same constraints (in addition to one constraint, namely \*TOPIC/INDEFINITE) can be used to account for the definiteness effect in Icelandic transitive expletive constructions. Even though \*EXPL and \*SU/NOM & \*SU/INA do not rank with respect to each other, *þurfa* can only occur in a intransitive expletive construction if an inanimate subject of transitive *þurfa* is indefinite. It does, however, not matter whether an inanimate subject of transitive *vanta* is indefinite or definite, as in both cases, *vanta* can only occur in an intransitive expletive construction.

In the last section, I tried to show that the person restriction on nominative objects in Icelandic can be accounted for by means of the harmonic alignment of three prominence scales, the *relational scale*, the *locality scale* and the *case scale*.

If the paraphrases of DAT-NOM constructions with local nominative objects are not taken to be repair strategies, but rather *evasive forms*, there have to be two different inputs for the DAT-NOM construction and the paraphrase. As I hope to have shown, the null parse candidate will always win in a competition where there is a first or second person nominative object even though it is less faithful to the input than the paraphrase and the DAT-NOM construction candidate. In a competition where the paraphrase is in the input, the null parse candidate will lose to the paraphrase, because the paraphrase is more faithful to the input than the null parse.



## **Part II**

### **Stylistic fronting**





## Chapter 5

### Stylistic fronting

This chapter is divided into seven sections. In section 5.1, I will briefly explain what stylistic fronting is and how stylistic fronting has been related to the loss of  $V^\circ$ -to- $I^\circ$  movement in the Mainland Scandinavian languages. Section 5.2 is focused on the restrictions on stylistic fronting, i.e. the subject gap restriction and the accessibility hierarchy. In section 5.3, I provide data that show that stylistic fronting has semantic effects. In this section, I will also discuss the technical details of the analysis I would like to propose and how stylistic fronting can be accounted for with such an analysis. In section 5.4, I show that Old Danish and Middle Danish had stylistic fronting to the same extent as Icelandic. Based on evidence from Icelandic, I also show that  $V^\circ$ -to- $I^\circ$  movement might not be obligatory in embedded clauses that do not have an overt subject. In section 5.5, I discuss Platzack's (1988) analysis of stylistic fronting in subordinate clauses with a weak subject pronoun in Old Swedish. In this section I provide further evidence for the present analysis as I will show that there is a difference in Icelandic with respect to stylistic fronting of XPs versus heads in subordinate clauses in the presence of a weak subject pronoun. In section 5.6, I will give a detailed analysis of stylistic fronting in Icelandic. Section 5.7 concludes the chapter.

#### 5.1 What is stylistic fronting?

Stylistic fronting (cf. Falk 1993, Holmberg 2000, Jónsson 1991, 1996, Maling 1980, 1990, Platzack 1988, Sells 2002 among others), also known from Swedish linguistics as *kile-konstruktionen* 'the wedge construction', is a leftwards movement of e.g. an adverb, or a participle, or a verb particle, etc.) into a position that precedes the finite verb. Stylistic fronting is found in the Insular Scandinavian languages (ISc), i.e. in Icelandic and in Faroese, even if Faroese has stylistic fronting to a slightly smaller extent than Icelandic (Petersen et al., 1998: 217). Stylistic fronting is not found in the modern Mainland Scandinavian languages (MSc), i.e. Danish, Norwegian and Swedish.

- *Stylistic fronting of a verb particle*

(1) Ic. Svo leit hann á þá sem **inn**<sub>i</sub> höfðu komið t<sub>i</sub>  
*Then looked he at those that in had come*  
 'Then he looked at those that had come in'

(2) Da. \*Da kiggede han på dem som **ind**<sub>i</sub> var kommet t<sub>i</sub>  
*Then looked he at those that in was come*

- *Stylistic fronting of an adverb*

(3) Fa. Konan sum **heim**<sub>i</sub> fór t<sub>i</sub> var systir hansara  
*Woman-the that home went was sister his*  
 'The woman that went home was his sister' (Petersen et al., 1998: 217,  
 (139c))

(4) Da. \*Kvinden som **hjem**<sub>i</sub> gik t<sub>i</sub> var hans søster  
*Woman-the that home went was his sister*

Stylistic fronting did, however, exist in the older MSc languages as the Old Danish (1100-1325) and Middle Danish (1325-1550) examples in (5) and (6) show. Both Old Danish and Middle Danish had V°-to-I° movement (cf. section 5.4.2):

(5) OD. vatn hvært, ær **æi**<sub>i</sub> ær t<sub>i</sub> mæp damme fæst  
*water every which not is with dam closed*  
 'every water that is not closed off with a dam'

(1200, *Skånske lov*, Falk & Torp 1900: 296)

(6) MD. som **sagd**<sub>i</sub> er t<sub>i</sub> ved Propheten  
*as said is with prophet-the*  
 'as is told by the prophet' (1550, *The Bible*, Falk & Torp 1900: 296)

### 5.1.1 Stylistic fronting and the loss of V°-to-I° movement

Platzack (1988: 226) and Vikner (1995a: 161) note that in the MSc languages, sentences with stylistic fronting could be reanalyzed by language acquirers as sentences with neither stylistic fronting nor V°-to-I° movement. Because of stylistic fronting, it is not always visible that Icelandic and Old Danish have V°-to-I° movement. In fact only stylistic fronting of participles, particles, adjectives, etc. is visible, not stylistic fronting of adverbs and the negation as stylistic fronting of these elements would be string vacuous.

The modern MSc languages and Faroese do not have V°-to-I° movement, whereas Icelandic does. In these languages, word order in embedded clauses is usually not ambiguous with respect to V°-to-I° movement; in Icelandic, the finite verb precedes the negation or the sentence adverb, in modern MSc and Faroese, the finite verb follows the negation or the sentence adverb:

- (7) Ic. hvort [IP Danirnir<sub>i</sub> **hafi**<sub>v</sub> [NegP ekki t<sub>v</sub> [VP t<sub>i</sub> t<sub>v</sub> drukkið bjór  
*whether Danes-the have not drunk beer*  
 ]]]

'whether the Danes did not drink beer'

- (8) Da. om [IP danskerne<sub>i</sub> [NegP ikke [VP t<sub>i</sub> **har** drukket øl ]]]  
*whether Danes-the not have drunk beer*  
 'whether the Danes did not drink beer'

V°-to-I° movement is not always visible in clauses where stylistic fronting is possible. Although Icelandic does have V°-to-I° movement and MSc does not, Danish and Icelandic can have the same word order if in Icelandic, the negation or an adverb undergoes stylistic fronting:

- (9) Ic. Fólk sem aldrei<sub>i</sub> **hefur**<sub>v</sub> [AdvP t<sub>i</sub> t<sub>v</sub> [VP t<sub>v</sub> drukkið bjór]]  
*People that never has drunk beer*  
 ...  
 ...  
 'People that have never tasted beer ...'

- (10) Da. De mennesker som [AdvP aldrig [VP **har** drukket øl ]]] ...  
*The people that never has drunk beer ...*  
 'The people that have never tasted beer ...'

The difference is that in Icelandic, both V°-to-I° movement and stylistic fronting take place, whereas in Danish, neither of the two movements take place. Nevertheless, the Icelandic sentence has the same word order as the word order seen in Danish embedded clauses. This is the crucial point of the observation that sentences with stylistic fronting could be reanalyzed as sentences with neither stylistic fronting nor V°-to-I° movement. When the language still had V°-to-I° movement, V°-to-I° movement changed the base-generated word order, **adverb** - **verb**<sub>fin</sub>, to the surface word order, **verb**<sub>fin</sub> - **adverb**. At the same time, stylistic fronting made it possible to reestablish the base-generated word order by fronting of the adverb. This word order could then be reanalyzed as the base-generated word order, i.e. word order without V°-to-I°

movement and stylistic fronting.

Falk (1993: 184) observes that in Old Swedish, the loss of  $V^{\circ}$ -to- $I^{\circ}$  movement and the loss of stylistic fronting took place simultaneously, i.e. that examples such as (6) where a participle has undergone stylistic fronting were not found anymore but examples such as (5) where a negation seems to have undergone stylistic fronting continued to exist.

### **5.1.2 The landing site of stylistic fronting**

In the literature, there are two different main theories about the landing site of the element that undergoes stylistic fronting. First, Holmberg (2000), Maling (1980, 1990), Platzack (1987, 1988), Rögnvaldsson & Thráinsson (1990), and Sells (2002), assume that the landing site of stylistically fronted elements is IP-Spec. Second, Holmberg & Platzack (1995), Jónsson (1991, 1996), and Poole (1996), assume that stylistic fronting is adjunction to  $I^{\circ}$ . Here, I will only consider the former theory, namely movement into IP-Spec. For a discussion of the differences between the two theories and the drawbacks of the latter, see Holmberg (2000: 453-455). In addition, Fischer (to appear) has argued for an analysis where the landing site of the element that undergoes stylistic fronting is a position between the IP and the CP domain. In fact, the analysis argued for in what follows is very similar to her analysis.

## 5.2 Restrictions on stylistic fronting

### 5.2.1 The subject gap

Maling (1980: 181, 1990: 77) shows that stylistic fronting is only possible if there is a **subject gap** in the clause, i.e. if there is no overt subject in the normal subject position. Subject gaps are found in embedded subject questions, (11a), and in subject relative clauses, (11b). Subject gaps are also found in impersonal passives, (12):

- (11) Ic. a. Hann spurði hver **sullað**<sub>i</sub> hefði<sub>v</sub> [<sub>VP</sub> t<sub>v</sub> t<sub>i</sub> bjórnum ]  
*He asked who spilt had beer-the*  
 'He asked who had spilt the beer'
- b. Hann henti út öllum sem **stolið**<sub>i</sub> höfðu<sub>v</sub> [<sub>VP</sub> t<sub>v</sub> t<sub>i</sub> smjöri ]  
*He threw out all that stolen had butter*  
 'He threw out everyone that had stolen butter'
- (12) Ic. Allir vissu að **stolið**<sub>i</sub> hafði<sub>v</sub> [<sub>VP</sub> t<sub>v</sub> verið t<sub>i</sub> smjöri ]  
*All knew that stolen had been butter*  
 'Everyone knew that butter had been stolen'

In Icelandic, indefinite subjects can be left within the VP (cf. Rögnvaldsson 1982, 1983, 1984a, 1984b, Thráinsson 1986, 1999, Sigurðsson 1989, Sigurðsson 1991b, Vikner 1995a and Bobaljik & Jonas 1997). This affects the possibility of stylistic fronting. If the indefinite subject does not raise to IP-Spec, there is a subject gap in IP-Spec and stylistic fronting is possible:<sup>1</sup>

- (13) Ic. hvort **drukkið**<sub>i</sub> hafi<sub>v</sub> [<sub>VP</sub> **einhverjir Danir** t<sub>v</sub> t<sub>i</sub> bjór ]  
*if drunk have some Danes beer*  
 'if some Danes have drunk beer'

Instead of having stylistic fronting in sentences such as (13), some Icelanders prefer to insert an expletive subject into the subject gap:<sup>2</sup>

- (14) Ic. a. hvort [<sub>IP</sub> **það** hafi<sub>v</sub> [<sub>VP</sub> **einhverjir Danir** t<sub>v</sub> drukkið  
*if there have some Danes drunk*  
 bjór ]]  
*beer*  
 'if any Danes have drunk beer'

<sup>1</sup>Note that the example in (13) is a counterexample to the prediction made in Holmberg (2000: 465) that a stylistically fronted element cannot move across the subject.

<sup>2</sup>The example in (14b) was found at [http://www.mfb.is/byggidn/Januar2003/greinar\\_2003\\_11.htm](http://www.mfb.is/byggidn/Januar2003/greinar_2003_11.htm).

- b. sem [<sub>IP</sub> **það** kom<sub>v</sub> [<sub>VP</sub> fyrst [<sub>VP</sub> t<sub>v</sub> til tals ]]] að  
 that it came first to speech that  
 slíkt húsnæði þyrfti  
 such housing was.needed  
 'that it was first mentioned that such housing was needed'

## 5.2.2 The accessibility hierarchy

The subject gap is not the only restriction on stylistic fronting. Maling (1980: 185, 1990: 81) pointed out the existence of the so-called *accessibility hierarchy*:

- (15) The accessibility hierarchy (adapted from Maling 1980: 185, 1990: 81)

$$\left\{ \begin{array}{l} \text{Negation } \textit{ekki} \\ \text{Sentence adverb} \end{array} \right\} > \left\{ \begin{array}{l} \text{Past participle} \\ \text{Verb particle} \end{array} \right\} > \text{Predicative adjective}$$

If there is more than one potential candidate for stylistic fronting in the clause, for example a negation and a participle, only the leftmost one in the hierarchy can be fronted:

- (16) Ic. a. Hérna er bjórinn sem **ekki**<sub>i</sub> hefur t<sub>i</sub> verið drukinn enn  
 Here is beer-the that not has been drunk yet  
 'Here is the beer that has not been drunk yet'
- b. \*Hérna er bjórinn sem **drukinn**<sub>i</sub> hefur ekki verið t<sub>i</sub>  
 Here is beer-the that drunk has not been  
 enn  
 yet

If there is a participle and a verb particle in the clause, both can undergo stylistic fronting because verb particles and participles are equally prominent in the hierarchy:

- (17) Ic. a. Hann sýndi mér flöskurnar sem **inn**<sub>i</sub> hafði verið  
 He showed me bottles-the that in had been  
 smyglað t<sub>i</sub>  
 smuggled  
 'He showed me the bottles that had been smuggled in'
- b. Hann sýndi mér flöskurnar sem **smyglað**<sub>i</sub> hafði verið  
 He showed me bottles-the that smuggled had been  
 t<sub>i</sub> inn  
 in  
 'He showed me the bottles that had been smuggled in'

Likewise, if there is a negation and an adverb in the clause, both can undergo stylistic fronting:

- (18) Ic. a. Hann henti öllu sem **ekki**<sub>i</sub> hafði áreiðanlega t<sub>i</sub>  
*He threw away all that not had undoubtedly*  
*verið tæmt*  
*been emptied*  
 'He threw away everything that had not undoubtedly been emptied'
- b. Hann henti öllu sem **áreiðanlega**<sub>i</sub> hafði t<sub>i</sub> ekki  
*He threw away all that undoubtedly had not*  
*verið tæmt*  
*been emptied*  
 'He threw away everything that undoubtedly had not been emptied'

## 5.3 Stylistic fronting on the left periphery

### 5.3.1 The semantic effects of stylistic fronting

The two sentences in (18) have, as the English translations show, two different interpretations. What I would like to claim is that stylistic fronting is not an optional movement operation. Instead, stylistic fronting is a way to focus a specific element in the clause (this has previously been suggested by Sigurðsson 1997 which was rejected by Holmberg 2000: 450). The two sentences in (17), repeated here as (19b) and (19c), also have two different meanings, depending on which of the two, a verb particle or a participle have been stylistically fronted. In (19b), there is a focus on the verb particle *inn* 'in' which undergone stylistic fronting, and in (19c), there is a focus on the past participle *smyglað* 'smuggled' which has been stylistically fronted (the focus is indicated in the English translation by small capitals):

- (19) Ic. a. Hann sýndi mér flöskurnar sem hafði<sub>v</sub> [<sub>VP</sub> t<sub>v</sub> verið  
He showed me bottles-the that had been  
smyglað inn ]  
smuggled in  
'He showed me the bottles that had been smuggled in'
- b. Hann sýndi mér flöskurnar sem **inn**<sub>i</sub> hafði<sub>v</sub> [<sub>VP</sub> t<sub>v</sub> verið  
He showed me bottles-the that in had been  
smyglað t<sub>i</sub> ]  
smuggled  
'He showed me the bottles that had been smuggled IN'
- c. Hann sýndi mér flöskurnar sem **smyglað**<sub>i</sub> hafði<sub>v</sub> [<sub>VP</sub> t<sub>v</sub>  
He showed me bottles-the that smuggled had  
verið t<sub>i</sub> inn ]  
been in  
'He showed me the bottles that had been SMUGGLED in'

The sentence in (19b) is ambiguous. It can have the same contrastive focus reading as if the particle had been stressed inside the VP, i.e. there were some bottles that were smuggled in but also some bottles that were smuggled out. The bottles that were shown were the bottles that were smuggled in, not those that were smuggled out. In addition to the contrastive focus reading, the sentence in (19b) can have a so-called *verum* focus (Höhle, 1992). If there is a *verum* focus on the particle, the sentence has the interpretation that there is a number of bottles, some of which the smugglers managed to smuggle in, other which the smugglers did not manage to smuggle



in. The bottles that were shown were the bottles that were smuggled in, not those that the smugglers did not manage to smuggle in. The sentence in (19a) cannot have a contrastive focus reading (unless the particle is stressed) nor can it tell us anything about whether the smugglers did not manage to smuggle some bottles in. The sentence in (19c), where the participle has been stylistically fronted, is also ambiguous. It can have a contrastive focus as if the participle had been stressed inside the VP, i.e. there were some bottles that were smuggled in but also some that were thrown in etc. The sentence in (19c) also has verum focus. The interpretation is that there is a number of bottles, some of which were smuggled in, other which were not smuggled in. The bottles that were shown were the smuggled bottles, not those not smuggled. The sentence in (19a) cannot have a contrastive focus reading (unless the participle is stressed) nor can it tell us anything about bottles not being smuggled.

In main clauses, stylistic fronting has a semantic effect:

- (20) Ic. a. Bækur hafa verið lesnar  
*Books have been read*  
 'Books have been read'
- b. **Lesnar**<sub>i</sub> hafa verið t<sub>i</sub> bækur  
*Read have been books*  
 'Books have been READ'

(20a) is only a statement about books being read, whereas the sentence in (20b) has a verum focus where a situation where books have been read is contrasted with a situation where books have not been read. Finally, stylistic fronting of a negation also has semantic effects:

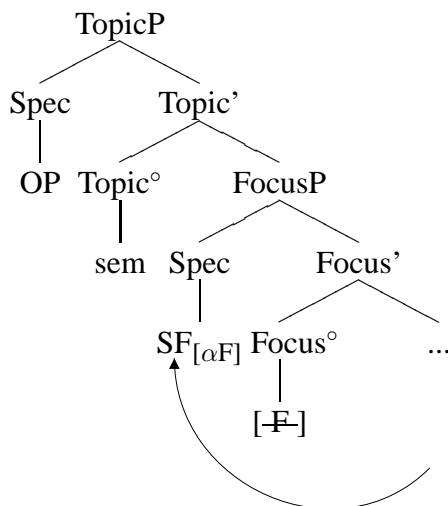
- (21) Ic. a. Allir sem höfðu ekki fengið lýsi veiktust  
*All that had not received cod liver oil sick.PASS*  
 'Everyone that had not received cod liver oil became sick'
- b. Allir sem **ekki**<sub>i</sub> höfðu t<sub>i</sub> fengið lýsi  
*All that not had received cod liver oil*  
*veiktust*  
*sick.PASS*  
 'Everyone that had NOT received cod liver oil became sick'

The sentence in (21b) contrasts those that did not receive any cod liver oil with those that did receive some. It implies that those that received cod liver oil did not become sick. From the sentence in (21a) we cannot make predictions about those that received cod liver oil.

### 5.3.2 Stylistic fronting as feature-driven movement

As I have mentioned, the claim is that stylistic fronting has semantic effects and that it therefore cannot be optional. This could be reflected in an analysis where stylistic fronting is a feature-driven movement operation into an articulated CP-domain:<sup>3</sup>

(22) *Stylistic fronting as feature-driven movement*



If this is the correct analysis, Focus° has an uninterpretable focus feature which is checked and deleted when something with an interpretable focus feature moves into FocusP-Spec or Focus°. <sup>4</sup> In the tree in (22), an element with an interpretable focus feature has undergone stylistic fronting into FocusP-Spec and the uninterpretable focus feature on Focus° has been checked and deleted. In section 5.6, it will become clear that it is crucial that there are two different positions for stylistic fronting; a specifier position and a head position. XPs undergo stylistic fronting into FocusP-Spec and heads undergo stylistic fronting into Focus°.

If stylistic fronting is a movement into FocusP-Spec/Focus° driven by focus features on Focus°, Holmberg (2000) would be mistaken that stylistic fronting is only movement of phonological features. According to Chomsky (2001: 15), “displacement interspersed in the phonological component should have little semantic effect”. Because stylistic fronting does have a semantic effect, it must be assumed that stylistic fronting takes place in narrow syntax.

<sup>3</sup>Sells (2002) argues that an analysis where stylistic fronting targets a position so high up in the structure, cannot account for the restrictions on stylistic fronting. I think that the focus nature of stylistic fronting shows that the target position must lie within the CP-domain.

<sup>4</sup>The “focus” feature that I am assuming here is not a focus feature in the normal understanding of focus, e.g. focus vs. topic. I only use the term focus for this formal feature because I am assuming that stylistic fronting is movement into FocusP. It could also be an instance of an EPP feature or some other formal feature  $\alpha$ .

This again affects Holmberg's (2000) claim that since only phonological features are being moved, both heads and XPs can undergo stylistic fronting into a Spec-position already filled by a trace. As I will show, this is incompatible with the fact that there exist two types of stylistic fronting in Icelandic, stylistic fronting of heads and stylistic fronting of XPs. Stylistic fronting of heads is possible when there is no overt subject as well as in the presence of a weak subject pronoun, whereas stylistic fronting of XPs is only possible when there is no overt subject, not in the presence of an overt weak subject pronoun. An analysis where stylistic fronting is movement of phonological features will not be able to distinguish between the two.

The analysis I would like to propose makes two crucial predictions. First, it is predicted that two elements can undergo stylistic fronting at the same time and that the two elements cannot both be XPs or both be heads. If it is assumed that stylistic fronting is movement of phonological features, this cannot be accounted for as PF-movement is indifferent to what is being moved, a head or an XP. Second, it is predicted that if FocusP-Spec is filled, only heads can undergo stylistic fronting. Such a prediction cannot be accounted for if stylistic fronting is movement of phonological features for the same reason as before; PF-movement is indifferent to what is being moved. As I will show in sections 5.5 and 5.6, the present analysis can account for these observations.

The latter prediction is not always borne out. If there is a full DP subject or a full subject pronoun in FocusP-Spec, it would be expected (contrary to what is attested) that stylistic fronting of a head were possible. This can be accounted for in the following way. If it is assumed that full DP subjects and full subject pronouns have an inherent focus feature, as opposed to weak subject pronouns and indefinite subjects, a full DP subject or a full subject pronoun that moves into FocusP-Spec will check the focus feature on Focus<sup>o</sup>. If the focus feature has been deleted, stylistic fronting cannot take place.

(23) *Distribution of definiteness and focus features*

	Definiteness	Focus	SF
Full pronoun / DP subject	+	+	–
Weak subject pronoun	+	–	+
Indefinite DP subject	–	–	+
Expletive	–	+	–

Such a distribution of features would predict that stylistic fronting can occur if there is a weak subject pronoun or an indefinite DP subject in the clause. Full DP subjects and full subject pronouns check the focus feature on Focus<sup>o</sup> and stylistic fronting is not possible, weak subject pronouns do not have an inherent focus feature, so something else has to check the focus feature on Focus<sup>o</sup>, hence, stylistic fronting of heads is possible in the presence of a weak subject pronoun. The assumption is that if the language makes a distinction between full and weak subject pronouns, it will do so by means of differences in focus features.

This would also account for the fact that XPs can undergo stylistic fronting in the presence of an indefinite DP subject. Indefinite DP subjects are the only subjects that do not have to move to the CP domain, thus leaving FocusP-Spec open for either an expletive or a stylistically fronted XP. In accordance with this, I will assume that the expletive is a semantically empty focus element that is inserted into FocusP-Spec to check the focus feature on F<sup>o</sup>.<sup>5</sup>

### 5.3.3 A preview of the analysis

Before I turn to stylistic fronting in Old and Middle Danish, I would like to show how the sentences in section 5.3.1 can be analyzed as instances of stylistic fronting into FocusP. A more detailed discussion of the analysis will be given in section 5.6. The examples in (19), repeated here as (24), show stylistic fronting of a verb particle, (24a), and a main verb participle, (24b):

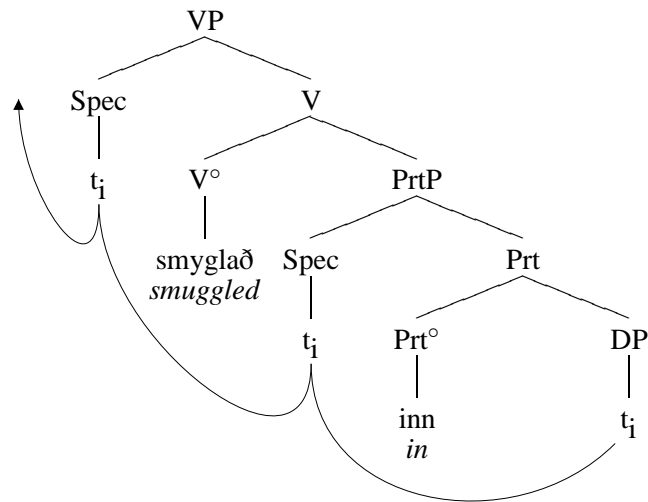
- (24) Ic. a. Hann sýndi mér flöskurnar sem **inn**<sub>i</sub> hafði<sub>v</sub> [<sub>VP</sub> t<sub>v</sub> verið  
He showed me bottles-the that in had been  
smyglað t<sub>i</sub> ]  
smuggled  
‘He showed me the bottles that had been smuggled IN’
- b. Hann sýndi mér flöskurnar sem **smyglað**<sub>i</sub> hafði<sub>v</sub> [<sub>VP</sub> t<sub>v</sub>  
He showed me bottles-the that smuggled had  
verið t<sub>i</sub> inn ]  
been in  
‘He showed me the bottles that had been SMUGGLED in’

Under the assumption that participles and particles are minimal projections, and not maximal projections at the same time, these should undergo stylistic fronting as heads, not as XPs:<sup>6</sup>

<sup>5</sup>Following Platzack (1983), Koch Christensen (1991) and Falk (1993) Vangsnes (2000: 198) proposes that the expletive is an empty topic element.

<sup>6</sup>The traces in (25) are the traces of a null operator that moves to TopicP-Spec in relative clauses.

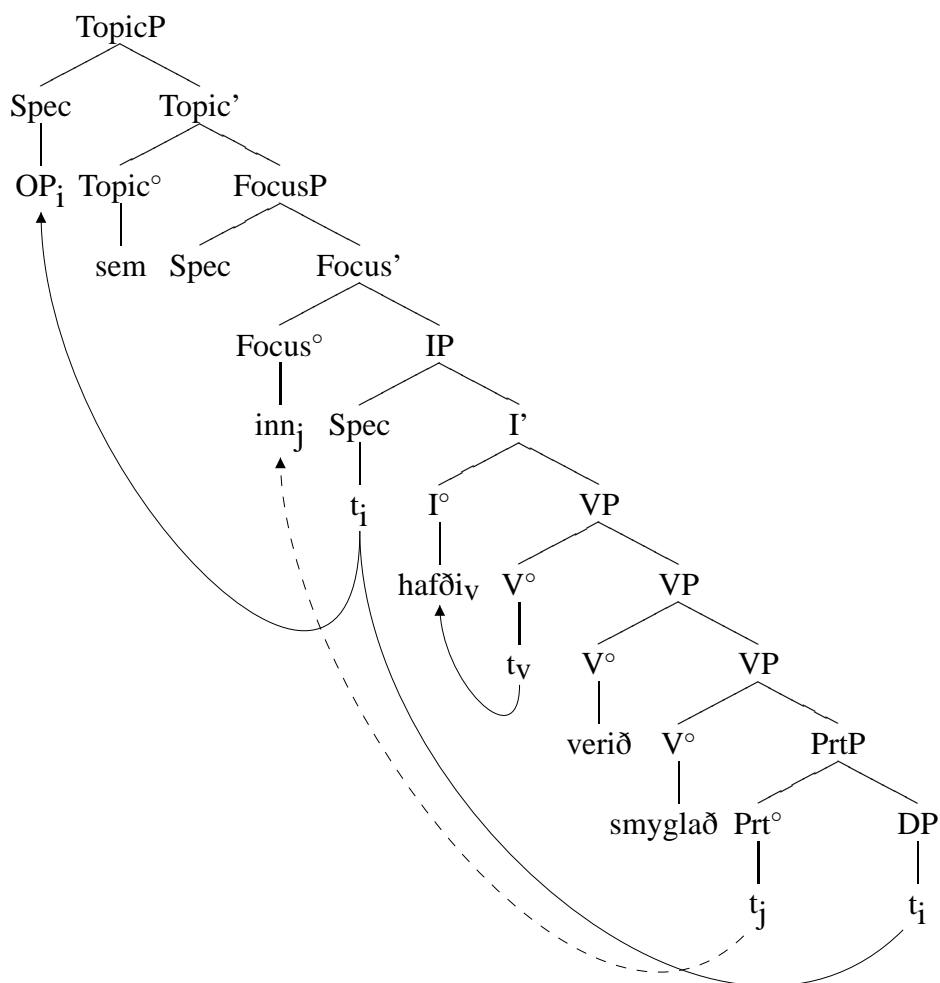
(25) *Participles and particles as heads*



If stylistic fronting is feature-driven movement into FocusP, the verb particle in (24a), repeated here as (26), will undergo stylistic fronting into Focus°:

- (26) Ic. Hann sýndi mér flöskurnar sem **inn**<sub>i</sub> hafði<sub>i</sub> [VP t<sub>v</sub> verið  
 He showed me bottles-the that in had been  
 smyglað t<sub>i</sub> ]  
 smuggled  
 'He showed me the bottles that had been smuggled IN'

(27) *Stylistic fronting of a particle into Focus°*

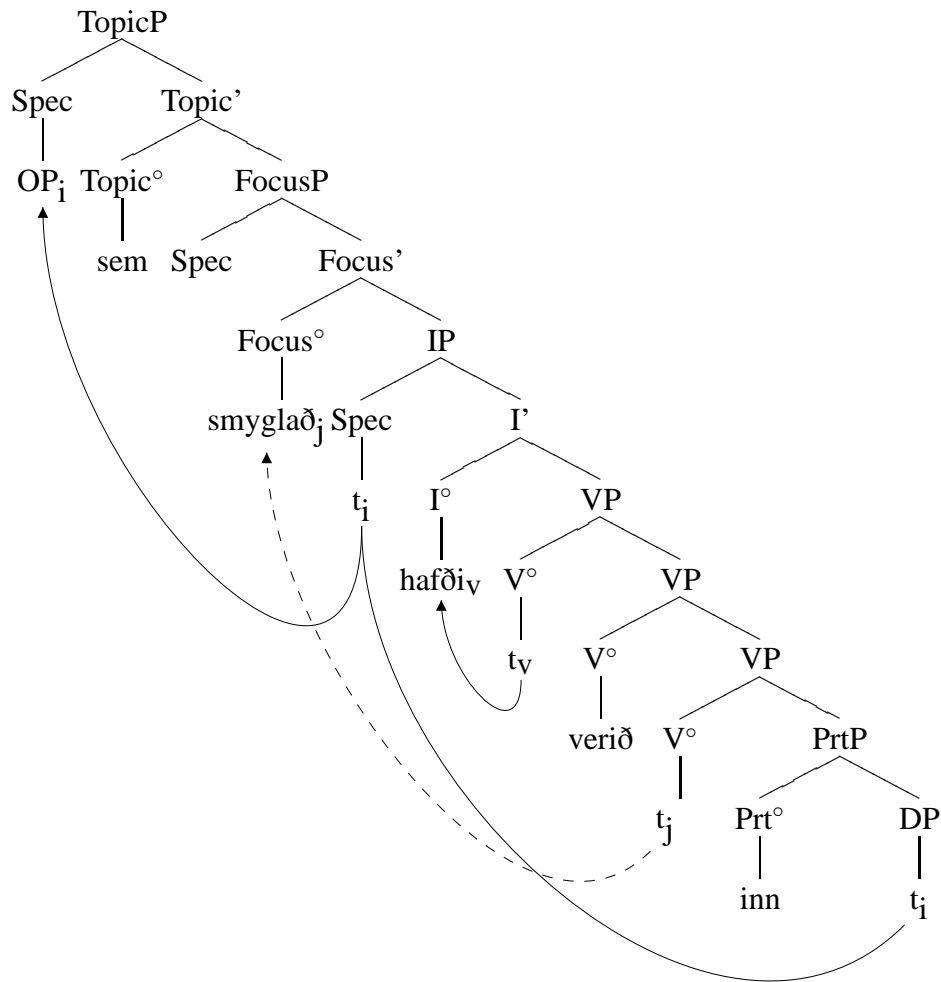


In the tree in (27), the particle has an interpretable focus feature and is stylistically fronted into Focus°. The uninterpretable focus feature on Focus° is thereby checked and deleted.

Likewise, the participle in (24b), repeated here as (28), will undergo stylistic fronting into Focus°:

- (28) Ic. Hann sýndi mér flöskurnar sem **smyglaði**<sub>i</sub> hafði<sub>v</sub> [VP t<sub>v</sub> verið  
*He showed me bottles-the that smuggled had been*  
t<sub>i</sub> inn ]  
*in*  
‘He showed me the bottles that had been SMUGGLED in’

(29) *Stylistic fronting of a participle into Focus°*

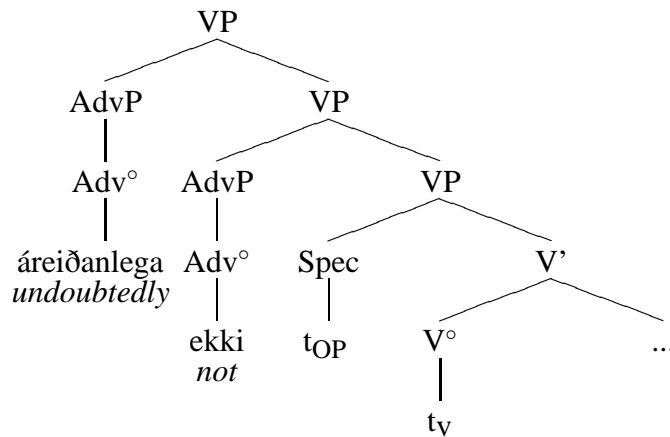


In the tree in (29), the participle has an interpretable focus feature and is stylistically fronted into Focus°. The uninterpretable focus feature on Focus° is thereby checked and deleted.

If the negation and other sentence medial adverbs are minimal and maximal projections at the same time, it is at this point impossible to say whether the negation and adverbs undergo stylistic fronting as XPs or as heads. I will assume that the negation and sentence adverbs are adjoined to the left edge of the VP.<sup>7</sup>

<sup>7</sup>It is also possible to analyze the negation and the sentence adverbs more along the lines of Cinque (1999) where the negation is a AdvP in NegP-Spec and the sentence adverbs are AdvPs in the specifier of some functional projection, i.e. ModP, AspP, PolP, etc.

(30) *Sentence negation and adverbs as maximal and minimal projections*



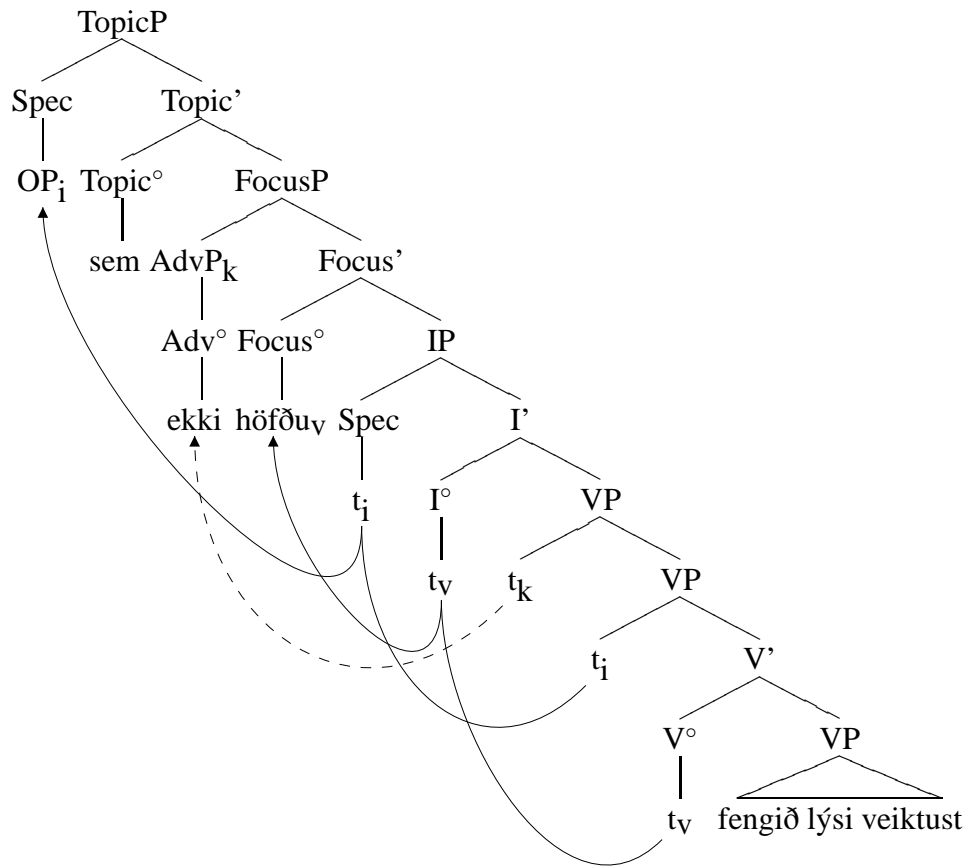
The example in (21), repeated here as (31), shows stylistic fronting of a negation:

- (31) Ic. Allir sem **ekki**<sub>i</sub> höfðu t<sub>i</sub> fengið lýsi veiktust  
*All that not had received cod liver oil sick.PASS*  
 'Everyone that had NOT received cod liver oil became sick'

There are two possibilities. Either, the negation has undergone stylistic fronting as an XP into FocusP-Spec, or it has undergone stylistic fronting as a head into Focus°. For the time being, I will only show stylistic fronting of the negation as an XP:



(32) *Stylistic fronting of a negation into FocusP-Spec*



In the tree in (32), a negation with an interpretable focus feature has undergone stylistic fronting into FocusP-Spec. The uninterpretable focus feature on Focus° is checked and deleted. The same would apply if the negation had undergone stylistic fronting as a head. An element with an interpretable focus feature that is stylistically fronted into Focus° will check and delete the uninterpretable focus feature on Focus°.

In section 5.6, it will become clear that the negation and other sentence adverbs can undergo stylistic fronting both as XPs and as heads.

## 5.4 What can undergo stylistic fronting?

### 5.4.1 An overview

In the literature, many claims have been made about what can undergo stylistic fronting. In her original article Maling (1980: 185, 1990: 81) notes that the negation and sentence adverbs, predicative adjectives, verb particles and past participles can be fronted. In addition to these elements, Holmberg (2000: 448) claims that DPs and PPs can undergo stylistic fronting as well. Jónsson (1996: 95-96) follows Maling (1980, 1990), although he mentions that also negative objects can undergo stylistic fronting.

In the following sections, I will show which elements could undergo stylistic fronting in the Middle Danish manuscript *Sjælens Trøst* 'Consolation of the Soul' and various Old Danish texts. I will discuss stylistic fronting of negative objects, negation and medial adverbs as well as stylistic fronting of DPs and PPs separately.

### 5.4.2 A short note on V°-to-I° movement in *Sjælens Trøst*

The two versions of the Middle Danish manuscript *Sjælens Trøst* (Cod.Ups. C 529 and Cod.Holm. A 109) are the oldest texts in the corpus *Dansk Sprog- og Stilhistorisk Database* (Ruus, 2001), both dated ca. 1425. In these two texts, there are seventy-four embedded clauses which are introduced by the complementizers *at* 'that', *vm* 'if' or *(for) thy at* 'because' and which contain a sentence medial adverb or a negative object or a universal quantifier. If we furthermore discount the clauses which do not have an overt subject and the clauses which are embedded under a bridge verb (which allow for embedded V2), we are left with fifty-one embedded clauses:

(33) V°-to-I° movement in *Sjælens Trøst*

Unambiguous V°-to-I° movement	40	78%
Unambiguously no V°-to-I° movement	1	2%
Ambiguous w.r.t V°-to-I° movement	10	20%

Forty of the fifty-one clauses (78%) unambiguously show V°-to-I° movement. One sentence shows unambiguously no V°-to-I° movement. In the remaining ten sentences, the subject is a pronoun. These ten sentences could either be analyzed as having both V°-to-I° movement and stylistic fronting of a sentence adverb or neither V°-to-I° movement nor stylistic fronting.

### 5.4.3 Stylistic fronting in Old and Middle Danish

In *Sjælens Trøst*, there are 729 relative clauses introduced by the relative particle *som* 'that'. 671 of the examples are subject relative clauses or relative clauses with a subject pronoun. 231 (34%) of the 671 examples show stylistic fronting. Stylistic fronting is found in twenty-two relative clauses with an overt pronoun. Fifteen relative clauses with an overt pronoun show unambiguous V°-to-I° movement.<sup>8</sup>

(34) Stylistic fronting in relative clauses in *Sjælens Trøst*

Stylistic fronting with no overt subject	209	(90%)
Stylistic fronting with overt subject pronoun	22	(10%)
<b>Total</b>	<b>231</b>	<b>(34% of 671)</b>

In the relative clauses that did not have an overt subject, stylistic fronting of adjectives, adverbs, full or pronominal DPs, prepositional phrases, infinitives, participles, the negation and verb particles can be found. Interestingly, there were only seven sentences with stylistic fronting of a negation (which is by far the most common case of stylistic fronting in Icelandic), whereas in ninety-six sentences a full DP or a pronominal DP was fronted (which is rather rare in Ice-

<sup>8</sup>In the three versions of the Middle Danish manuscript *Karl Magnus' Krønike* 'Karl Magnus' Chronicle', which are the second oldest texts in Ruus (2001), dated 1480, 1509 and 1534 respectively, there are eighty-three clauses introduced by *som* 'that/as'. Only three of those could be analyzed as having stylistic fronting. In all three cases it is the adverb *før* 'earlier' in combination with *er sagt* 'is told' that seems to have undergone stylistic fronting:

- (i) MD. *som før er sagt*  
*as earlier is told*  
 'as is told earlier' (1534, KMK)

In younger texts in the corpus, stylistic fronting of participles and predicative adjectives can be found. The most frequent constructions are *som sagt er* 'as is told' (the youngest from 1642 in *Christian IV's breve* 'Letters of Christian IV') and *som skrevet staaer* 'as stands written' (the youngest example is from 1638 in Jesper Brochmand's *Huus-Postill* 'Book of sermons'). All of the examples could be analyzed as instances of OV word order. They might also be lexicalized as they only contain the verbs *er/var/bliffuer* 'is/was/becomes' or *staaer* 'stands'.

landic). There are three examples where more than two elements seem to undergo stylistic fronting at the same time.

(35) Stylistic fronting in subject relative clauses (no overt subject)

Element that undergoes SF	Number	%
<i>Adjective</i>	18	8,6
<i>Adverb</i>	36	17,2
<i>DP (full / pronoun )</i>	96	45,9
<i>Infinitives</i>	4	1,9
<i>Negation</i>	6	2,9
<i>PP</i>	38	18,2
<i>Participle</i>	7	3,3
<i>Verb particle</i>	1	0,5
<i>DP + Adverb</i>	1	0,5
<i>Adverb + Participle</i>	1	0,5
<i>Adjective + Negation</i>	1	0,5
<b>Total</b>	<b>209</b>	<b>100</b>

Just as in Icelandic, the Old Danish sentential negation *æi*, (36), and the Middle Danish sentence negation *ey*, (37), could undergo stylistic fronting:

(36) OD. hwre boskap skiftes ther **æi**<sub>i</sub> er t<sub>i</sub> barn til  
*how marriage is divided where not is child to*  
 'How to separate a childless marriage' (1241, *JLOV.81.22*)

(37) MD. som **ey**<sub>i</sub> combir honum t<sub>i</sub> til skatha  
*which not becomes him to harm*  
 'which does not harm him' (1425, *SJTR*)

Likewise, the Old Danish sentence adverb *førre* 'previously', (38), and the Middle Danish sentence adverb *altidh* 'always', (39), could undergo stylistic fronting:

(38) OD. swo sum **førre**<sub>i</sub> er t<sub>i</sub> melt  
*such as previously is said*  
 'such as previously has been said' (1241, *JLOV.87.21*)

(39) MD. jomfru maria som **altidh**<sub>i</sub> hiælpir t<sub>i</sub> sina venir  
*Virgin Mary who always helps POSS friends*  
 'Virgin Mary who always helps her friends' (1425, *SJTR*)

Not only the sentence negation and sentence adverbs could undergo stylistic fronting in Old and Middle Danish; the examples in (40) and (41) show stylistic fronting of a predicative adjective:

(40) OD. løk thær **hwitæ**<sub>i</sub> æræ t<sub>i</sub> innen  
*onions that white are inside*  
 'onions that are white inside' (1300, *HHARPE.216.3*)

(41) MD. oc samansanka thæt som **sant**<sub>i</sub> ær, t<sub>i</sub> oc faghort  
*and collect that which true is and beautiful*  
 'and collect those things that are true and beautiful' (1425, *SJTR*)

In Old and Middle Danish, verb particles could also undergo stylistic fronting. In (42), Old Danish *ut* 'out' and in (43), Middle Danish *til* 'to' have been stylistically fronted:

(42) OD. oc thæt thær **ut**<sub>i</sub> ær cummæt t<sub>i</sub>  
*and that which out is come*  
 'and that which has come out' (ca. 1300, *HHARPE.220.3*)

(43) MD. æn thæn ene pelegrimmen som **til**<sub>i</sub> com t<sub>i</sub>  
*but the one pilgrim that to came*  
 'but the pilgrim that arrived' (1425, *SJTR*)

In Old and Middle Danish, main verb infinitives could undergo stylistic fronting. In (44), Old Danish *swæria* 'swear' has been fronted, and in (45), Middle Danish *kryba* 'crawl' has been fronted:

(44) OD. hwær thæn ær **swæria**<sub>i</sub> scal t<sub>i</sub> j them tolf mannum  
*which one that swear shall in the twelve men*  
 'which one that shall swear in the twelve-man-oath' (1200, *SKLOV.25.14*)

(45) MD. alt thæt som **kryba**<sub>i</sub> can t<sub>i</sub> vpa jordhene  
*all that that crawl can upon earth-the*  
 'everything that can crawl upon the earth' (1425, *SJTR*)

Like in Icelandic, main verb participles could undergo stylistic fronting in Old and Middle Danish. In (46), Old Danish *dræpæt* 'killed', and in (47), Middle Danish *skrifvit* 'written' have undergone stylistic fronting:

- (46) OD. oc alt thet hin hørær til ær **dræpæt**<sub>i</sub> hauær t<sub>i</sub>  
*and all that the one belongs to who killed has*  
 'and all the things belonging to the one who has killed' (1300, *ELOV.61.22*)

- (47) MD. Tha mintis honum thæt som **skrifvit**<sub>i</sub> staar t<sub>i</sub>  
*Then remembered him that which written stands*  
 'Then he remembered what is written' (1425, *SJTR*)

In *Sjælens Trøst*, three relative clauses show stylistic fronting of two elements at the same time. In the example in (48), both the DP *sina venir* 'his friends' and the adverb *altidh* 'always' have undergone stylistic fronting:<sup>9</sup>

- (48) MD. æn velsighnathir vare gudh som [**sina venir**]<sub>i</sub> **altidh**<sub>k</sub>  
*but blessed be god that POSS friends always*  
*hiælpir*<sub>v</sub> t<sub>k</sub> t<sub>v</sub> t<sub>i</sub>  
*helps*  
 'but blessed be God that always helps his friends' (1425, *SJTR*)

In this section, I hope to have shown that Old and Middle Danish had stylistic fronting just as Icelandic. In the three languages, relative clauses where the sentence negation or a sentence medial adverb seem to have undergone stylistic fronting are ambiguous with respect to both V°-to-I° movement and stylistic fronting. In these languages, relative clauses where a predicative adjective, verb particle or a main verb participle have undergone stylistic fronting are not ambiguous with respect to stylistic fronting but they are ambiguous with respect to V°-to-I° movement.

<sup>9</sup> An alternative analysis would be that (48) is simply an example of OV word order as found very frequently in Danish in the 16th century, (Falk & Torp, 1900: 295), and especially after 1648, (Skautrup, 1944-68: II.303). However, Henrik Jørgensen (personal communication) has pointed out to me that *Sjælens Trøst* was written too early for this. Nevertheless, the example in (48) opens the question whether stylistic fronting might have played a role in the reanalysis of VO word order as OV word order in Scandinavian. As shown in the table in (35), stylistic fronting of DPs (which yields OV surface word order) was very common in Middle Danish. Together with language contact with German, stylistic fronting might have made the reanalysis easier.

#### 5.4.4 Absence of V°-to-I° movement in Icelandic

Jónsson (1996), following Maling (1980, 1990), argues that only heads undergo stylistic fronting. However, he also mentions that negative objects can be fronted. The claim is that the movement of the negative object in (49b) is parallel to the stylistic fronting of the participle in (49c) (Jónsson, 1996: 69, (151) and (152)):<sup>10</sup>

- (49) Ic. Þeir sem ...  
*Those that ...*
- a. ... hafa<sub>v</sub> [<sub>NegP</sub> [**engan mat**] [<sub>VP</sub> t<sub>v</sub> borðað]] ...  
 ... have no food eaten ...
- b. ... [**engan mat**]<sub>i</sub> hafa<sub>v</sub> [<sub>NegP</sub> t<sub>i</sub> [<sub>VP</sub> t<sub>v</sub> borðað]] ...  
 ... no food have eaten ...
- c. ... **borðað**<sub>i</sub> hafa<sub>v</sub> [<sub>NegP</sub> [engan mat] [<sub>VP</sub> t<sub>v</sub> t<sub>i</sub>]] ...  
 ... eaten have no food ...
- ... eru í hættu  
 ... are in danger  
 'Those that have eaten no food are in danger'

This does, of course, question Jónsson's (1991, 1996) analysis that stylistic fronting is strictly movement of heads. There is no difference in the grammaticality of the example in (49b), where a negative object, i.e. an XP, has undergone stylistic fronting, and the example in (21b), where a negation (which is also an XP under Jónsson's 1996: 95-100 analysis) has undergone stylistic fronting. Similar examples can be found in Middle Danish:<sup>11</sup>

- (50) MD. en pelegrim gangande i veyin som [**inkte companskap**]<sub>i</sub>  
*a pilgrim walking on road-the that no acquaintance*  
 hafðhe mæth thøm lafva t<sub>i</sub>  
*had with them made*  
 'a pilgrim walking along the road that had made no acquaintance with them'
- (1425, *SJTR*)

<sup>10</sup>I assume that the negative object has been moved from its base-generated position into NegP-Spec. For a discussion on the movement of the negative object (called NEG-shift) in the Scandinavian languages see Koch Christensen (1991), Christensen (2003a), Christensen (2003b) and references there.

<sup>11</sup>An alternative analysis would be that *inkte* in (50) is the sentence negation 'not' (cf. example (77)) and (50) is an example of OV word order. See fn. 9, page 202.

In the same way that sentences where a sentence negation or a sentence medial adverb seems to have undergone stylistic fronting are ambiguous with respect to  $V^\circ$ -to- $I^\circ$  movement and stylistic fronting, the example in (49b) is also ambiguous with respect to  $V^\circ$ -to- $I^\circ$  movement and stylistic fronting. It is thus possible to say that the negative object is in NegP-Spec and that the verb has not moved from  $V^\circ$  to  $I^\circ$ , cf. that the same order is possible in modern Mainland Scandinavian:

- (51) Da. At Peter ingen penge har fået kom som en  
*That Peter no money has received came as a*  
*overraskelse*  
*surprise*  
 'That Peter received no money, came as a surprise'

If it is assumed that negative objects can undergo stylistic fronting, the sentence in (49c) becomes problematic because it violates the locality condition of stylistic fronting. According to the accessibility hierarchy, the negative object which occupies the same position as the sentence negation in Icelandic, should block stylistic fronting of the participle. This is clearly not the case as the example in (49c) shows. To avoid this problem, I shall try to analyze (49b) as a sentence without stylistic fronting. There is evidence that the finite verb can be left in situ in sentences with negative objects as shown in example (52b).<sup>12</sup>

- (52) Ic. Hún hélt því virkilega fram að ...  
*She claimed it really PRT that ...*
- a. [<sub>IP</sub> maðurinn<sub>i</sub> hafi<sub>v</sub> [<sub>NegP</sub> **engan mat** [<sub>VP</sub> t<sub>i</sub> t<sub>v</sub> borðað]]]  
*man-the had no food eaten*  
 'She really claimed that the man had eaten no food'
- b. ??[<sub>IP</sub> maðurinn<sub>i</sub> [<sub>NegP</sub> **ENGAN MAT** [<sub>VP</sub> t<sub>i</sub> hafi borðað!!!]]]  
*man-the NO FOOD had eaten*  
 'She really claimed that the man truly had eaten NO FOOD!!!'

The example in (53) shows that it is not possible for the participle to undergo stylistic fronting in the same sentence. This is because of the overt definite subject; it cannot be because of blocking by the negative object as mentioned above.

<sup>12</sup>There is no consensus among speakers of Icelandic whether (52b) is marked or ungrammatical. I think it is marked but I think it is possible in some very restricted contexts (for example when expressing surprise).



- (53) Ic. \*... maðurinn<sub>k</sub> **borðað**<sub>i</sub> hafi<sub>v</sub> [<sub>NegP</sub> engan  
 ... *man-the eaten has no*  
 mat [<sub>VP</sub> t<sub>k</sub> t<sub>v</sub> t<sub>i</sub>]]  
*food*

Note however, that what at first sight looks like stylistic fronting of a sentence negation in (54a) and a sentence adverb in (54b) (if the subject is in FocusP-Spec and the negation/adverb is stylistically fronted into Focus<sup>o</sup>) is less marked than the stylistic fronting of a participle in (53):<sup>13</sup>

- (54) Ic. a. ?... maðurinn **ekki**<sub>i</sub> hafi<sub>v</sub> [<sub>NegP</sub> t<sub>i</sub> t<sub>v</sub> [<sub>VP</sub> t<sub>v</sub> borðað neinn  
 ... *man-the not has eaten any*  
 mat ]]  
*food*  
 '... the man has not eaten any food'
- b. ?... maðurinn **örugglega**<sub>i</sub> hafi<sub>v</sub> [<sub>AdvP</sub> t<sub>i</sub> t<sub>v</sub> [<sub>VP</sub> t<sub>v</sub> borðað  
 ... *man-the surely has eaten*  
 eitthvað ]]  
*something*  
 '... the man surely has eaten has eaten something'

With respect to stylistic fronting, the examples in (53) and (54) should be equally ungrammatical. A plausible explanation of the acceptability of examples like (49b) and (54) might be that instead of showing stylistic fronting of the negative object, the negation or the sentence adverb, the examples show lack of V<sup>o</sup>-to-I<sup>o</sup> movement. In (53), the verb precedes the negative object which indicates that it has moved from V<sup>o</sup> to I<sup>o</sup>. In the examples in (52b) and (54), the verb cannot have moved from V<sup>o</sup> to I<sup>o</sup> for the following reason: Stylistic fronting is impossible in clauses with an overt subject. This means that the negative object in (52b), the negation in (54a) and the adverb in (54b) have to be in their base-generated positions, adjoined to the left edge of the VP, and this again means that the finite verb must still be inside the VP in (52b), (54a) and (54b). The fact that these examples are not completely unacceptable further supports an analysis different from stylistic fronting, e.g. that the finite verb has not moved from V<sup>o</sup> to I<sup>o</sup>. If these examples had had stylistic fronting, they should be as ungrammatical as the sentence in (53).

<sup>13</sup>Jóhanna Barðdal (personal communication) tells me that she finds (54b) more marked than (54a). I do not think there is a difference.

The reason why example (49b) is more acceptable than examples (52b) and (54) might have something to do with the absence of the subject, i.e. when there is no subject in the clause the verb does not necessarily have to move to I°. According to this, the sentences in (49b) and (54) could be analyzed as shown in (55) and (56):

- (55) Ic. Þeir sem [<sub>NegP</sub> engan mat [<sub>VP</sub> hafa borðað eru í hættu ]]  
*Those that no food have eaten are in danger*  
 'Those who have eaten no food are in danger'
- (56) Ic. a. ?... maðurinn [<sub>NegP</sub> ekki [<sub>VP</sub> hafi borðað neinn mat ]]  
 ... *man-the not has eaten any food*  
 '... the man has eaten no food'
- b. ?... maðurinn [<sub>AdvP</sub> örugglega [<sub>VP</sub> hafi borðað eitthvað ]]  
 ... *man-the surely has eaten anything*  
 '... the man surely has eaten anything'

The fact that what might at first glance seem like stylistic fronting in sentences with full subjects only involves (alleged) stylistic fronting of negative objects, (49b), (52b) and (55), of negation, (54a)/(56a), and of sentence adverbials, (54b)/(56b), and not of participles (53) or of verb particles makes the analysis of these cases not as stylistic fronting but as absence of V°-to-I° movement even more plausible. Any clause with stylistic fronting of a negation or an adverb is ambiguous with respect to both V°-to-I° movement and stylistic fronting: The order **negation** - **verb**<sub>fin</sub> or the order **adverbial** - **verb**<sub>fin</sub> could either be due to V°-to-I° movement and stylistic fronting taking place (as in Icelandic) or neither (as in modern Mainland Scandinavian) taking place.

Clauses in which a participle has undergone stylistic fronting are not ambiguous with respect to stylistic fronting: The order **participle** - **verb**<sub>fin</sub> is a clear indication that stylistic fronting has taken place. However, such clauses are still ambiguous with respect to V°-to-I° movement, because the presence or absence of V°-to-I° movement is only discernible when the finite verb precedes/follows a medial adverbial, but as the presence of a medial adverbial would block stylistic fronting of a participle, sentences with stylistic fronting of a participle necessarily do not contain any medial adverbials, and are therefore ambiguous with respect to V°-to-I° movement.

In this section, I have argued that although it might seem that negated objects can undergo stylistic fronting, such examples should instead be analyzed as not having V°-to-I° movement. This has the advantage of explaining why it is possible to have stylistic fronting of a participle across such a negated object, as in (49c).

#### 5.4.5 PPs and DPs

Based on examples such as (57) and (58), Holmberg (2000: 448-449) claims that also DPs and PPs can undergo stylistic fronting in Icelandic.

- (57) Ic. *Flestir sem [ í Ósló ]<sub>i</sub> hafa verið t<sub>i</sub> hafa gengið eftir*  
*Most that in Oslo have been have walked along*  
*Karl Johan*  
*Karl Johan*  
 'Most of those that have been in Oslo have walked along Karl Johan Street'

- (58) Ic. *Þeir sem [ þá erfiðu ákvörðun ]<sub>i</sub> verða að taka t<sub>i</sub>*  
*Those that that hard decision have to take*  
 'Those who have to take that hard decision'

Parallel examples can also be found in Old and Middle Danish:

- (59) OD. *þe ær [ af grimmi natura ]<sub>i</sub> ære t<sub>i</sub>*  
*those that of evil nature are*  
 'those that are of evil nature' (1241, *Skånske lov*, Falk & Torp 1900: 142)

- (60) MD. *folkit som [ i husit ]<sub>i</sub> voro t<sub>i</sub> the hørdho*  
*people-the that in house-the were they heard*  
*røstena hennas*  
*voice hers*  
 'the people that were in the house heard her voice' (1425, *SJTR*)

- (61) OD. *ær [ the børn ]<sub>i</sub> hauær t<sub>i</sub> with thæn kunæ ær døth*  
*that the children has with the woman that dead*  
*ær*  
*is*  
 'that has the children with the woman that is dead' (1216-50, *VLOV2.47.24*)

- (62) MD. *alla the som [ thæna bok ]<sub>i</sub> læsa t<sub>i</sub> ælla hōra t<sub>i</sub>*  
*all those that this book read or hear*  
 'all those that read or hear this book' (1425, *SJTR*)

Stylistic fronting of pronouns is marked but stylistic fronting of weak pronouns and clitic pronouns is less marked than stylistic fronting of full pronouns.<sup>14</sup>

- (63) Ic. Allir sem **'ana<sub>i</sub>** sáu t<sub>i</sub> voru hrifnir  
*All that her.WEAK saw were impressed*  
 'Everyone that saw her was impressed'

Nouns can also undergo stylistic fronting, but like stylistic fronting of pronouns, it is slightly marked. If the noun has the definite article suffix, as in (64), the sentence is rather marked:<sup>15</sup>

- (64) Ic. ??Allir sem **myndina<sub>i</sub>** sáu t<sub>i</sub> voru hrifnir  
*All that painting-the saw were impressed*  
 'Everyone that saw the painting was impressed'

It is less marked if the noun is less specific and as Halldór Ármann Sigurðsson (personal communication) points out, it is more acceptable if the full DP is not unique but picked out of a set:

- (65) Ic. ?Allir sem **heimabruggað brennivín<sub>i</sub>** hafa drukkið t<sub>i</sub> vita  
*All that homebrew aquavit have drunk know*  
*þetta*  
*this*  
 'Everyone that has drunk homebrew aquavit knows this'

PPs can also be fronted if the complement of the preposition is a pronoun but it is less marked if the pronoun is cliticized onto the preposition. The preposition can neither be fronted on its own nor is it possible to strand the preposition:<sup>16</sup>

- (66) Ic. a. Allir sem [ **úr 'enni** ]<sub>i</sub> drukku t<sub>i</sub> veiktust  
*All that from her.CL drank sick.PASS*  
 'Everyone that drunk out of it (the bottle) became sick'
- b. ??Allir sem [ **úr henni** ]<sub>i</sub> drukku t<sub>i</sub> veiktust  
*All that from her drank sick.PASS*
- c. \*Allir sem **úr<sub>i</sub>** drukku t<sub>i</sub> henni / 'enni veiktust  
*All that from drank her / her.WEAK sick.PASS*

<sup>14</sup>My seven informants do not agree on the grammaticality of the sentence in (63). I (as well as some of my informants) find it is fully acceptable.

<sup>15</sup>As before, my informants do not agree on the grammaticality of the sentence in (64). I find it is rather marked.

<sup>16</sup>My informants do not agree on the acceptability of (66a) and (66b). Some find them grammatical, others not. I think (66a) is fine, whereas (66b) is rather marked.

d. \*Allir sem **henni**<sub>i</sub> / '**enni**<sub>i</sub> drukku úr t<sub>i</sub> veiktust  
*All that her / her.WEAK drank from sick.PASS*

In Middle Danish pronouns could undergo stylistic fronting too:

- (67) MD. mangom storkom som **honum**<sub>i</sub> skulde hiælpa t<sub>i</sub> at draba hans  
*many storks that him should help to kill his*  
*maga*  
*seagulls*  
 'many storks that should help him to kill his seagulls' (1425, *SJTR*)

Stylistic fronting of nouns was also possible, both with and without the definite article suffix:

- (68) OD. then ær **hór**<sub>i</sub> hauær gjort t<sub>i</sub> with bondæns  
*the one that adultery has committed with farmer-the's*  
*kunæ*  
*wife*  
 'the one that has committed adultery with the farmer's wife' (1250, *ELOV.61.4*)

- (69) MD. kalla fram budhit som **brefvit**<sub>i</sub> hafdhe ført  
*call forth messenger-the that letter-the had brought*  
*t<sub>i</sub>*  
 'call forth the messenger that had brought the letter' (1425, *SJTR*)

The examples in (59) and (61) show that PPs and full DPs could undergo stylistic fronting in Old Danish and Middle Danish. Parallel to Icelandic, PPs with pronominal complements could undergo stylistic fronting in Old and Middle Danish:

- (70) OD. han for later thet ær [ **with hanum** ]<sub>i</sub> warthær giort t<sub>i</sub>  
*he forgives that which with him becomes done*  
 'he forgives what will be done with him' (1250, *ELOV.62.1*)

- (71) MD. oc hwat som [ **mæth hænne** ]<sub>i</sub> var giort t<sub>i</sub>  
*and what that with her was done*  
 'and what was done with her' (1425, *SJTR*)

The difference is that it is difficult to tell whether the pronouns in the Old and Middle Danish examples in (71) are as weak as they are in the Icelandic examples in (66) above.

## 5.5 Pronouns and the Subject Gap

### 5.5.1 Platzack (1988) and Old Swedish

As mentioned above, Maling (1980, 1990) points out that stylistic fronting is only possible if there is no overt subject in the clause. Platzack (1988: 227-228), however, points out that in Old Swedish, stylistic fronting was also possible in clauses with a pronominal subject.

- (72) OS. æn han **eigh<sub>i</sub>** bannaþe t<sub>i</sub> ihesus namne  
           *if he not cursed Jesus' name*  
           'if he did not curse the name of Jesus' (1350, Falk 1993: 165, (15a))

As Platzack (1988: 228, (22a) and (22b)) mentions, it is possible to analyze the example in (72) in two different ways. Either the pronoun *han* 'he' is cliticized onto the complementizer or it is in the subject position (IP-Spec). If the pronoun is cliticized onto the complementizer, it leaves a subject gap (in IP-Spec) and the negation can be fronted. If the pronoun is in IP-Spec, the example in (72) illustrates the embedded clause word order of the modern MSc languages, i.e. **subject - negation - verb<sub>fin</sub> - object**:

- (73) a. [CP[C<sup>o</sup> æn han ] [IP eigh<sub>i</sub> bannaþe<sub>v</sub> [NegP t<sub>i</sub> [VP t<sub>v</sub> ...]]]]  
       b. [CP[C<sup>o</sup> æn ] [IP han [NegP eigh [VP bannaþe...]]]]

In Old Swedish, stylistic fronting of some elements that typically front, namely adjectives, infinitives, pronominal objects, etc. was extremely rare. Almost all of the examples that have subject pronouns and that seem to involve stylistic fronting in Old Swedish either contain a sentence negation or an adverb (Cecilia Falk, personal communication). Because of this, Falk (1993: 191) concludes that these examples did not show stylistic fronting, but lack of V<sup>o</sup>-to-I<sup>o</sup> movement.

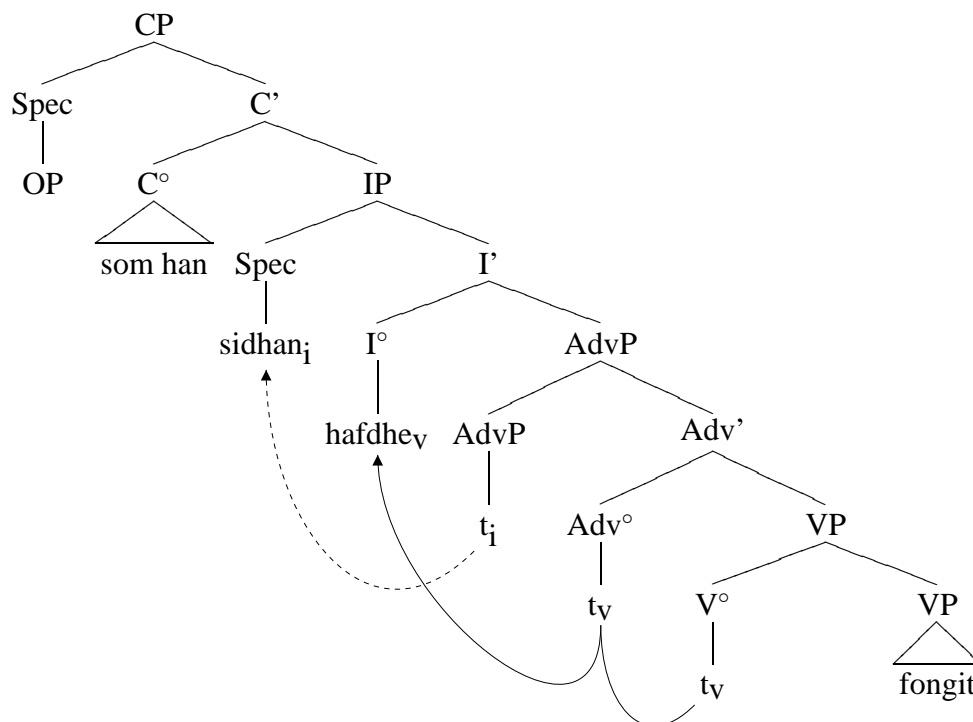
### 5.5.2 Middle Danish

Similar examples can be found in Middle Danish. In the two manuscripts of *Sjælens Trøst* there are fourteen relative clauses with an overt subject pronoun where stylistic fronting also seems to occur. In all the clauses, the fronted element is either a negation or an adverb. Here, it is also difficult to tell whether the pronoun is cliticized onto the complementizer:

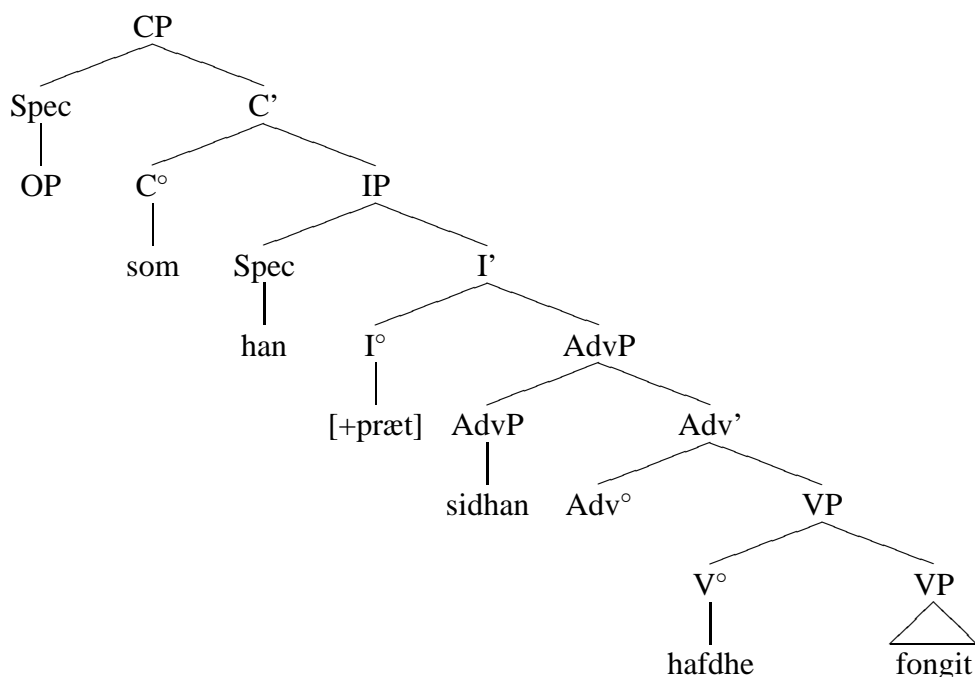
- (74) MD. *som han **sidhan**<sub>i</sub> hafdhe t<sub>i</sub> fongit*  
*that he then had received*  
 'that he then had received' (1425, *SJTR*)

This example, like the Old Swedish example in (72), is ambiguous with respect to stylistic fronting and V°-to-I° movement. It can be analyzed in two different ways, namely as showing both V°-to-I° movement and stylistic fronting, as in (75), and as showing neither V°-to-I° movement nor stylistic fronting, as in (76). If there is V°-to-I° movement, the pronoun is cliticized onto the complementizer, thereby leaving a subject gap in IP-Spec and the sentence adverb is fronted. If the other option is taken, (76), where the pronoun is in IP-Spec, and no stylistic fronting takes place, we would have to assume that Middle Danish did not have obligatory V°-to-I° movement:

- (75) *V°-to-I° movement option (clitic version)*



(76) No  $V^\circ$ -to- $I^\circ$  movement option



Examples such as (77), from the same source, do however show that Middle Danish had  $V^\circ$ -to- $I^\circ$  movement:

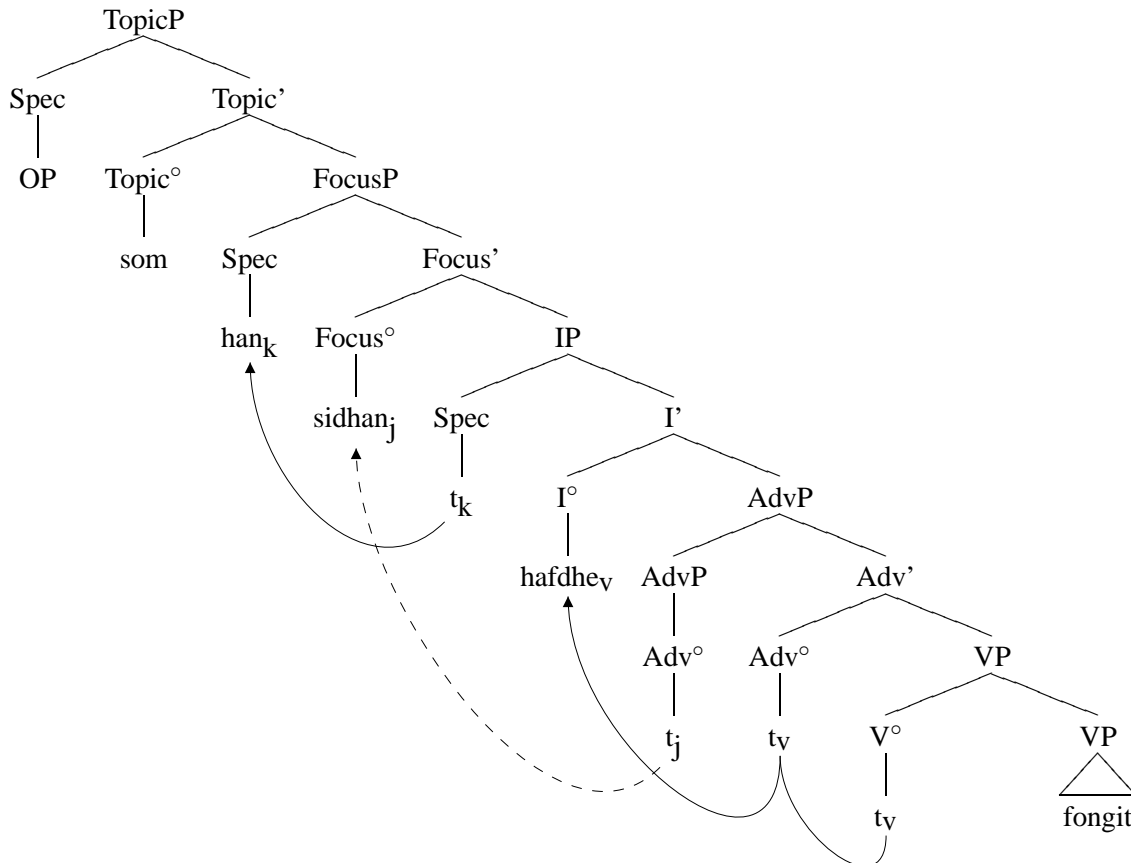
- (77) MD.  $vm$  [ $IP$  [ $min$   $man$ ]<sub>i</sub>  $hafvir_v$  [ $NegP$   $inkte$   $t_v$  [ $VP$   $t_i$   $t_v$    
*if my man has not*  
 $ræt$  $fongit$   $gooz$ ]]]  
*rightly received goods*  
 'if my husband has not rightly received goods' (1425, *SJTR*)

This does not exclude the fact that the example in (74) could be an instance of the same lack of  $V^\circ$ -to- $I^\circ$  movement that Falk (1993: 191) claims for Old Swedish. Middle Danish seems to behave exactly like Old Swedish. As I have mentioned, the only examples of stylistic fronting that can be found in relative clauses with an overt subject pronoun either seem to involve stylistic fronting of a negation or stylistic fronting of an adverb. The same can be said about the ten embedded sentences that do not seem to have  $V^\circ$ -to- $I^\circ$  movement discussed in section 5.4.2. All of these sentences have a subject pronoun and they could all be analyzed as having  $V^\circ$ -to- $I^\circ$  movement and stylistic fronting of a negation or an adverb. I choose to follow Falk (1993: 191) in concluding that the Middle Danish example in (74) does not show stylistic fronting of a sentence adverb but only lack of  $V^\circ$ -to- $I^\circ$  movement.



Apart from this, there is a third possible analysis of (74), namely as a sentence that has both  $V^\circ$ -to- $I^\circ$  movement and stylistic fronting:

(78)  $V^\circ$ -to- $I^\circ$  movement (articulated CP option)



A sentence analyzed as a sentence with  $V^\circ$ -to- $I^\circ$  movement and stylistic fronting into an articulated CP-domain can be reanalyzed as a sentence with no articulated CP-domain, where neither  $V^\circ$ -to- $I^\circ$  movement nor stylistic fronting take place. I will discuss this alternative analysis in detail in section 5.6.

The problem with Platzack's (1988) analysis is the assumption that the subject pronoun cliticizes onto the complementizer in  $C^\circ$ . If it is assumed that the subject pronoun moves out of its specifier position, there should not be any difference with respect to which elements may be stylistically fronted in relative clauses with an overt subject pronoun, i.e. we should find stylistic fronting not only of the sentence negation and sentence adverbs (which is attested), but also stylistic fronting of participles, verb particles, DPs and PPs (which is not found). As I will show in the next section, this difference is attested in Icelandic in a slightly different way.

### 5.5.3 Icelandic

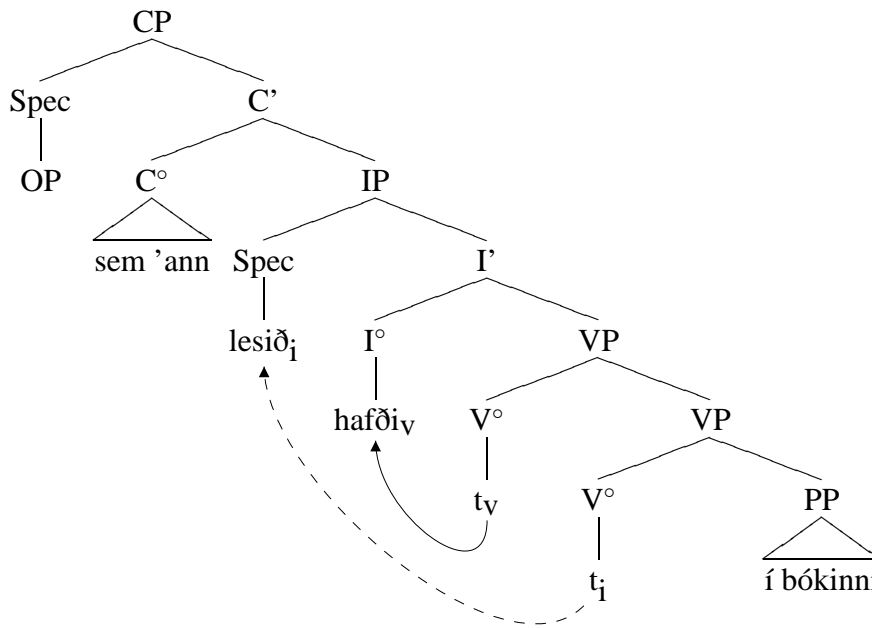
Although it is marked, it is possible to have stylistic fronting in Icelandic in contexts of the same type as in the previous sections, i.e. in subordinate clauses where the subject is a pronoun. The crucial difference between Icelandic on the one hand and Old Swedish and Middle Danish on the other is that not only is stylistic fronting of adverbs possible in Icelandic in the presence of a subject pronoun but also stylistic fronting of participles, predicative adjectives and verb particles. As has been claimed for Swedish, it is better if the subject pronoun is at least phonologically cliticized onto the complementizer.<sup>17</sup>

- (79) Ic. a. Allt sem **'ann** hafði **lesið** í bókinni var satt  
*All that he.WEAK had read in book-the was true*
- b. ?Allt sem **'ann** **lesið**<sub>i</sub> hafði t<sub>i</sub> í bókinni var satt  
*All that he.WEAK read had in book-the was true*
- c. \*?Allt sem **hann** **lesið**<sub>i</sub> hafði t<sub>i</sub> í bókinni var satt  
*All that he read had in book-the was true*  
 'Everything that he had read in the book was true'

If the clitic analysis in (73a)/(75) is the correct analysis, the Icelandic sentence in (79b) has the structure in (80). The difficult question here is which position it is that the fronted element has moved into. The assumption made in the previous section was that the element that undergoes stylistic fronting moves into IP-Spec, i.e. into the subject gap. This is however clearly problematic because in subordinate clauses with an overt subject pronoun, IP-Spec must be assumed to contain the trace of the subject pronoun. If stylistic fronting is, as I have tried to show, something else than movement of phonological features, this trace should block movement into this position.

<sup>17</sup>My informants do not agree on the grammaticality of the sentences in (79). Many of my informants agree with me that (79b) is significantly less marked than (79c). One of my informants finds both (79b) and (79c) ungrammatical, another finds (79b) as well as (79c) grammatical.

(80)  $V^\circ$ -to- $I^\circ$  movement option (clitic version)  $\approx$  (75)



The movement of the participle into IP-Spec in (80) is also problematic as it is improper movement if participles are assumed to be heads. This also raises the question about the analysis of subject relative clauses, i.e. whether the null operator occupies IP-Spec at some point in the derivation. I will follow Mikkelsen (2002a: 80-81) who assumes that the operator is base-generated in a thematic position (i.e. within the VP). To be assigned case, the null operator moves through IP-Spec on its way to Topic-Spec. The trace in IP-Spec will block stylistic fronting into this position (i.e. if stylistic fronting is something else than PF-movement).<sup>18</sup>

Furthermore, examples such as (81b) show that the clitic analysis in (80) cannot be the correct analysis as it is impossible to front XPs if there is an overt subject pronoun in the clause, whereas stylistic fronting of XPs is much better when there is no subject at all, as in (82b). If the clitic analysis in (80) was the correct analysis, exactly the opposite predictions would be made. Under such an analysis, we would expect that stylistic fronting of XPs was equally good as stylistic fronting of heads, if not better because IP-Spec is normally occupied by XPs not heads.

<sup>18</sup>Mikkelsen (2002a: 80-81) gives an analysis of Danish relative clauses where the null operator does not have to move through IP-Spec on its way to the CP-domain. Instead, an expletive subject *der* may be inserted into IP-Spec. Note that in Icelandic subject relative clauses, expletive *það* cannot be inserted into IP-Spec. I take this to indicate that the null operator has indeed moved through IP-Spec to be assigned case.

- (81) Ic. a. Allt sem **'ann** hafði lesið **í bókinni** var satt  
*All that he.WEAK had read in book-the was true*  
 'Everything that he had read in the book was true'
- b. \*Allt sem **'ann** [**í bókinni**]<sub>i</sub> hafði lesið t<sub>i</sub> var satt  
*All that he.WEAK in book-the had read was true*
- (82) Ic. a. Allir sem höfðu lesið **í bókinni** voru hrifnir  
*All that had read in book-the were impressed*  
 'Everyone that had read in the book was impressed'
- b. Allir sem [**í bókinni**]<sub>i</sub> höfðu lesið t<sub>i</sub> voru hrifnir  
*All that in book-the had read were impressed*  
 'Everyone that had read in the book was impressed'

As mentioned above, there should be no difference with respect to which elements may front if it is assumed that the subject pronoun has cliticized onto the complementizer or if it is assumed that stylistic fronting is movement of phonological features. At first sight, it seems that the conclusion to be drawn from these facts is that there must be two different positions for stylistically fronted elements, one for heads and another for XPs, since one of those (heads) is available both in stylistic fronting with an overt subject pronoun and with no overt subject, whereas the other (XPs) is only available in stylistic fronting with no overt subject, not in stylistic fronting with an overt subject pronoun. This also shows that the subject pronoun could not have cliticized onto C°, since this would not result in a difference between stylistic fronting in clauses with a weak subject pronoun and stylistic fronting in clauses with no overt subject. Instead, the weak subject pronoun must occupy a separate position adjacent to the complementizer. This position is available for stylistic fronting in sentences with no overt subject, not in sentences with overt subjects.

#### 5.5.4 Summary

There are at least two problems with the previous analyses of stylistic fronting: First, the Icelandic examples involving subject pronouns show that not all elements can be fronted if there is an overt subject in the clause. If it is assumed that the subject pronoun has cliticized onto the complementizer or that stylistic fronting is movement of phonological features, the prediction is that the same elements can be fronted as in embedded clauses with no overt subject. The data presented here contradicts this prediction. Second, the most prominent hypothesis about

stylistic fronting has until now been that stylistic fronting is movement into IP-Spec, i.e. into the subject gap. This is however clearly a problematic solution as the position must already contain a trace of the moved subject pronoun or a null operator (in subject relative clauses and embedded subject questions). Therefore, we have to find an analysis that can account for the difference between stylistic fronting in clauses with no overt subject and stylistic fronting in clauses with an overt subject pronoun.

## 5.6 Stylistic fronting into the CP-domain

In the literature, *CP-recursion* has been suggested as an explanation for V2 in embedded clauses in the Germanic languages (cf. Holmberg 1986, Platzack 1986, Iatridou & Kroch 1992 and Vikner 1995a). Although topicalization is very limited in embedded clauses in Icelandic, it can be found with bridge verbs like *segja* 'say', (85b). Topicalization can also be found in subordinate clauses that are complements of non-bridge verbs like *viðurkenna* 'admit', (83), but in embedded questions like (84) it is not allowed.

- (83) Ic. Ken viðurkenndi að [þessa mynd]<sub>i</sub> hafði hann ekki  
*Ken admitted that this film had he not*  
*séð t<sub>i</sub>*  
*seen*  
 'Ken admitted that he had not seen this film'
- (84) Ic. \*Ég vildi vita hvort [þessa mynd]<sub>i</sub> hafi hann séð t<sub>i</sub>  
*I wanted know if this film has he seen*
- (85) Ic. a. Ken sagði að hann hefði oft séð þessa mynd  
*He said that he had often seen this film*  
 'Ken said that he had often seen this film'
- b. Ken sagði að [þessa mynd]<sub>i</sub> hefði hann oft séð t<sub>i</sub>  
*He said that this film had he often seen*  
 'He said that he had often seen this film'

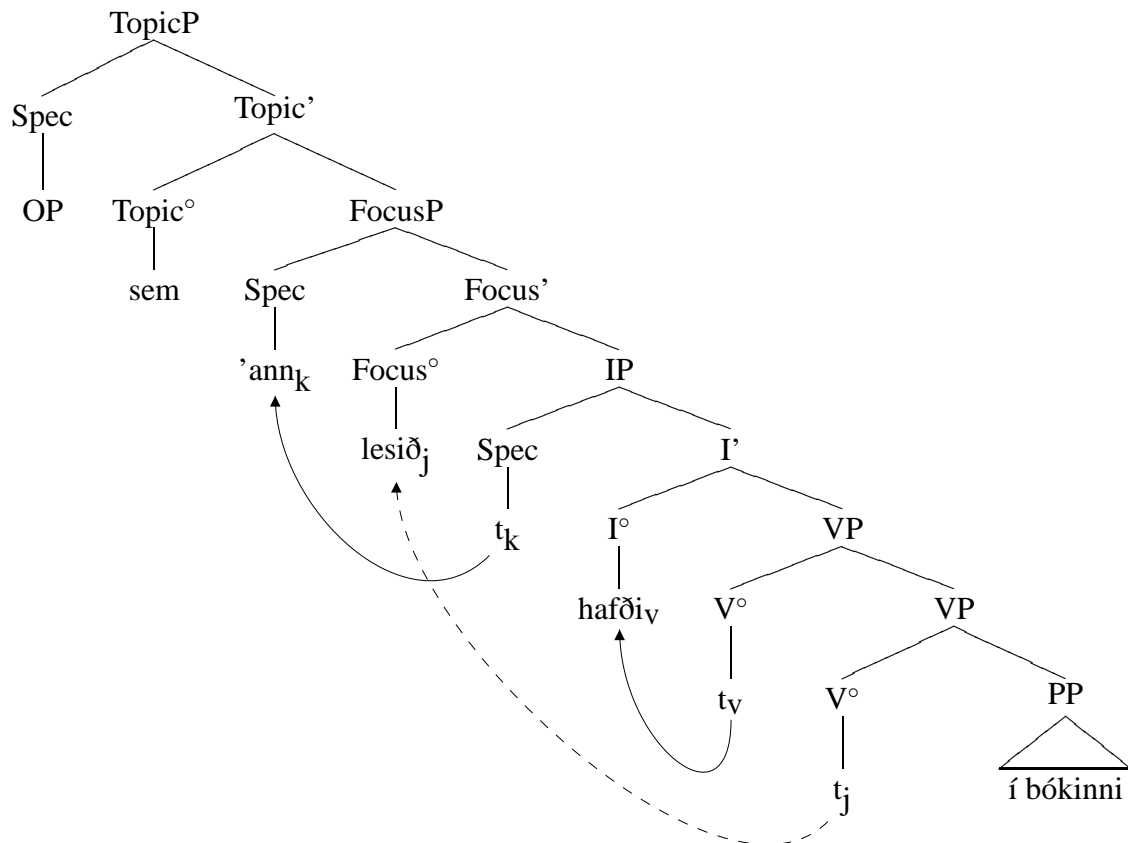
Based on the data presented in the last sections, I have suggested that stylistic fronting should be analyzed as CP-recursion as well. More specifically, the assumption is that the recursive CP is FocusP in an articulated CP-domain in the sense of Rizzi (1997: 287ff). As I have mentioned, I assume that stylistic fronting is a feature-driven movement into FocusP. An analysis where the element that undergoes stylistic fronting moves into IP-Spec cannot account for the differences found in subordinate clauses with an overt subject pronoun. As shown in examples (79b) and (81b), repeated here as (86a) and (86b), stylistic fronting of heads is much better than stylistic fronting of XPs in relative clauses with an overt subject pronoun:

- (86) Ic. a. ?Allt sem 'ann lesið<sub>i</sub> hafði t<sub>i</sub> í bókinni var satt  
*All that he.WEAK read had in book-the was true*  
 'Everything that he had read in the book was true'

- b. \*Allt sem 'ann [í bókinni]<sub>i</sub> hafði lesið t<sub>i</sub> var satt  
 All that he.WEAK in book-the had read was true

This difference would follow if stylistic fronting was analyzed as feature driven movement into Focus<sup>o</sup> as suggested in section 5.3.2:

(87) *Stylistic fronting into Focus<sup>o</sup>*



The weak pronoun that occupies FocusP-Spec blocks stylistic fronting of the PP *í bókinni* 'in the book' into this position. Only stylistic fronting of heads is possible and the participle *lesið* 'read' is fronted into Focus<sup>o</sup>.

Further evidence from Icelandic supports this hypothesis as two different elements can undergo stylistic fronting simultaneously in relative clauses with no overt subject:

- (88) Ic. Hann henti öllu sem small ...  
 He threw away all that ...  
 'He threw away everything that ...'

- a. ... hafði [áreiðanlega] [ekki] verið tæmt  
 ... had undoubtedly not been emptied  
 '... had undoubtedly not been emptied'

- b. ... [**áreiðanlega**]<sub>i</sub> hafði t<sub>i</sub> ekki verið tæmt  
 ... undoubtedly had not been emptied  
 '... UNDOUBTEDLY had not been emptied'
- c. ... [**áreiðanlega**]<sub>i</sub> [**ekki**]<sub>k</sub> hafði t<sub>i</sub> t<sub>k</sub> verið tæmt  
 ... undoubtedly not had been emptied  
 '... that had UNDOUBTEDLY NOT been emptied'

The example in (88c) shows that two adverbs can undergo stylistic fronting at the same time. This must indicate that adverbs are structurally ambiguous between being a head and an XP. The example in (88b) shows that if the sentential adverb is base-generated above the negation, the adverb can undergo stylistic fronting. Note that the example in (88b) shows V<sup>0</sup>-to-I<sup>0</sup> movement.

In (88c), where both the adverb and the negation had undergone stylistic fronting, the adverb preceded the negation. The example in (89c) shows that if the adverb is base-generated below the negation, the negation precedes the adverb when both are stylistically fronted.

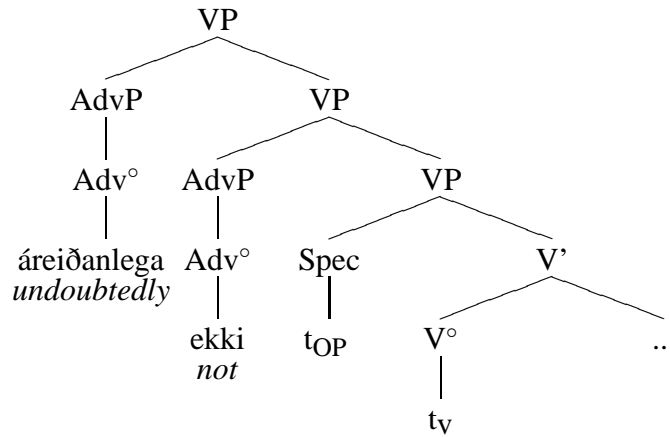
- (89) Ic. Hann henti öllu sem ...  
 He threw away all that ...  
 'He threw away everything that ...'
- a. ... hafði [**ekki**] [**áreiðanlega**] verið tæmt  
 ... had not undoubtedly been emptied  
 '... had not undoubtedly been emptied'
- b. ... [**ekki**]<sub>i</sub> hafði t<sub>i</sub> áreiðanlega verið tæmt  
 ... not had undoubtedly been emptied  
 '... had NOT undoubtedly been emptied'
- c. ... [**ekki**]<sub>k</sub> [**áreiðanlega**]<sub>i</sub> hafði t<sub>k</sub> t<sub>i</sub> verið tæmt  
 ... not undoubtedly had been emptied  
 '... had NOT UNDOUBTEDLY had been emptied'

The example in (89b) shows that the negation can undergo stylistic fronting without the adverb also being stylistically fronted. Note that the example in (89b) shows V<sup>0</sup>-to-I<sup>0</sup> movement.

It is standardly assumed that the negation in Icelandic is an AdvP in the specifier position of NegP (cf. Jónsson 1996: 95-100). As was shown in (30), page 196, the assumption here is that the negation and sentence adverbs are adjoined to the left edge of VP and that these are minimal and maximal projections at the same time:



(90) *Sentence negation and adverbs as maximal and minimal projections:*



Under this assumption, i.e. that the negation and other adverbs are maximal and minimal projections at the same time, we would expect nothing else than that two adverbs can be fronted at the same time. In some cases, the negation is fronted as a head, (89c), in other cases, it is fronted as an XP, (88b) and (89b). In the cases where the negation is fronted as a head, some other adverb can be fronted as an XP, in the cases where the negation is fronted as an XP, some other adverb can be fronted as a head.

The fact that adverbs are either stylistically fronted as heads or as XPs is furthermore supported by that fact that the adverb that is stylistically fronted as an XP can be modified by another adverb, whereas the adverb that is stylistically fronted as a head cannot.

(91) Ic. Hann henti öllu sem ...  
He threw away all that ...

a. \*... [**ekki**]<sub>k</sub> [**alveg áreiðanlega**]<sub>i</sub> hafði t<sub>k</sub> t<sub>i</sub> verið  
... not most undoubtedly had been  
tæmt  
emptied

b. ... [**alveg áreiðanlega**]<sub>i</sub> [**ekki**]<sub>k</sub> hafði t<sub>i</sub> t<sub>k</sub> verið  
... most undoubtedly not had been  
tæmt  
emptied

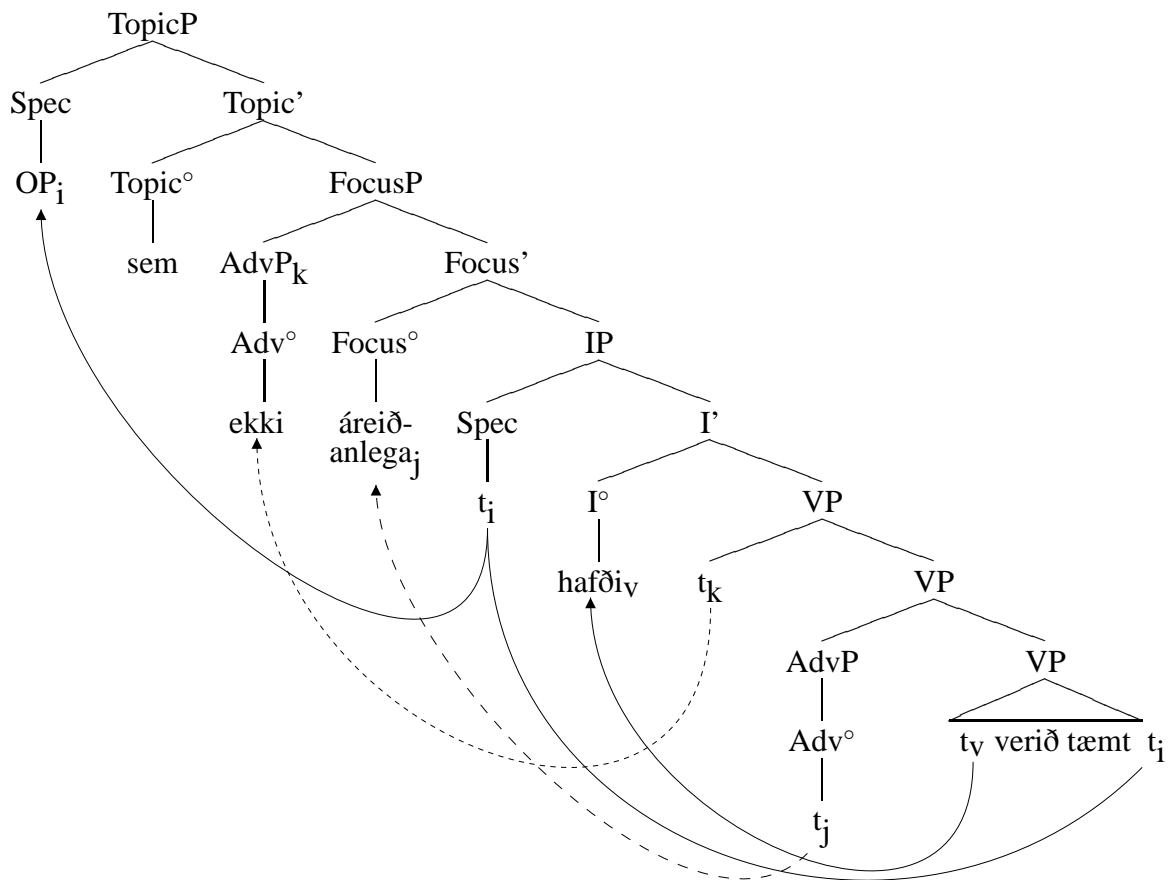
'He threw away everything that had most undoubtedly not been emptied'

This, as well as the fact that only heads can undergo stylistic fronting in relative clauses with overt subject pronouns, would follow if stylistic fronting were analyzed as movement into FocusP. An example such as (89c), repeated here as (92), where a negation undergoes stylistic

fronting into FocusP-Spec and an adverb into Focus° could be analyzed as in (93):

- (92) Ic. Hann henti öllu sem [**ekki**]<sub>k</sub> [**áreiðanlega**]<sub>i</sub>  
 He threw away all that not undoubtedly  
 hafði t<sub>k</sub> t<sub>i</sub> verið tæmt  
 had been emptied  
 'He threw away everything that had UNDOUBTEDLY NOT had been emptied'

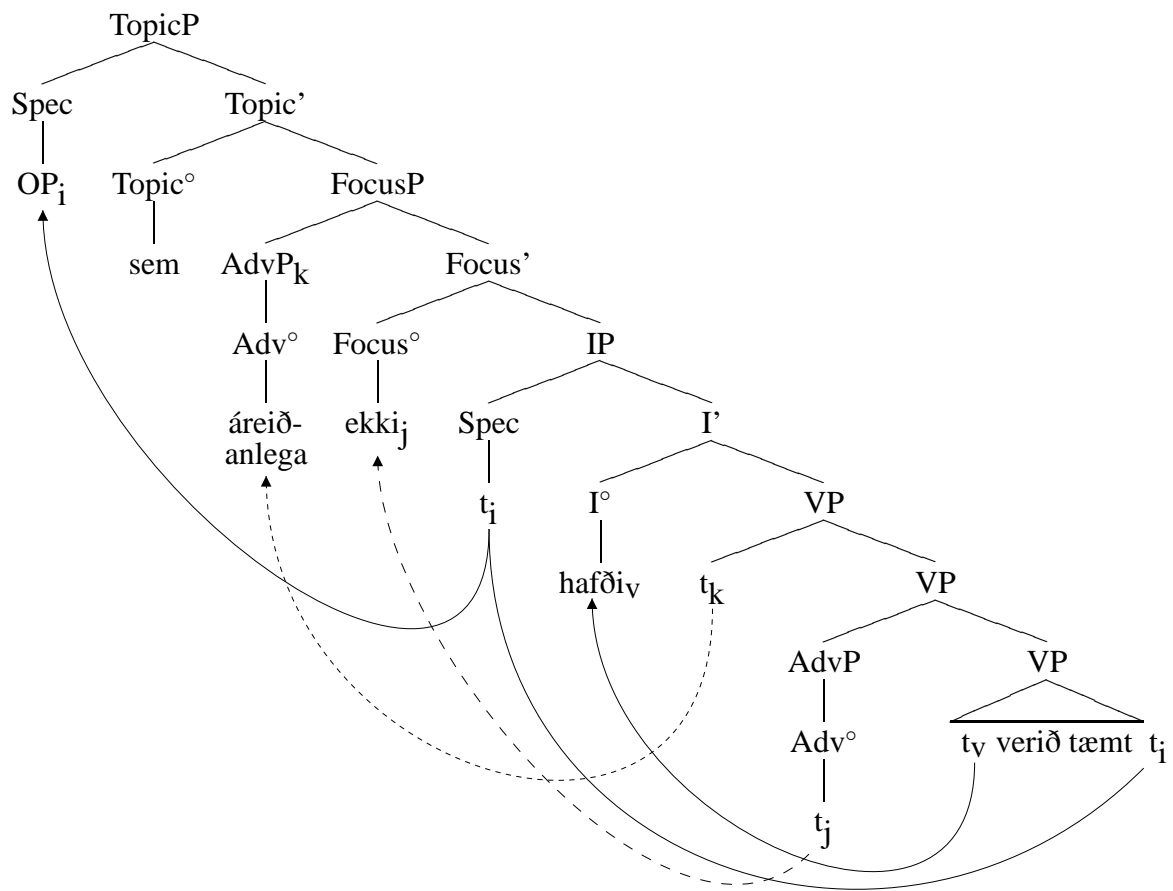
- (93) *Stylistic fronting into FocusP-Spec and Focus°*



An example such as (88c), repeated here as (94), where an adverb undergoes stylistic fronting into FocusP-Spec and a negation into Focus° could be analyzed as in (95):

- (94) Ic. Hann henti öllu sem [**áreiðanlega**]<sub>i</sub> [**ekki**]<sub>k</sub>  
 He threw away all that undoubtedly not  
 hafði t<sub>i</sub> t<sub>k</sub> verið tæmt  
 had been emptied  
 'He threw away everything that had UNDOUBTEDLY NOT been emptied'

(95) *Stylistic fronting into FocusP-Spec and Focus°*



As already mentioned, only heads can be stylistically fronted in relative clauses with an overt subject pronoun. The weak pronoun occupies the position XP elements can front into (i.e. FocusP-Spec) and only Focus° is available for stylistic fronting. The prediction is that DPs and PPs will never undergo stylistic fronting in clauses of this type, cf. (87).

The subject gap restriction can be accounted for in the following way. If it is assumed that full DP subjects have an inherent focus feature, the uninterpretable focus feature on Focus° will be checked and deleted whenever there is a full DP subject in the clause. To fulfill the requirement on verb second, the finite verb moves to Focus°.

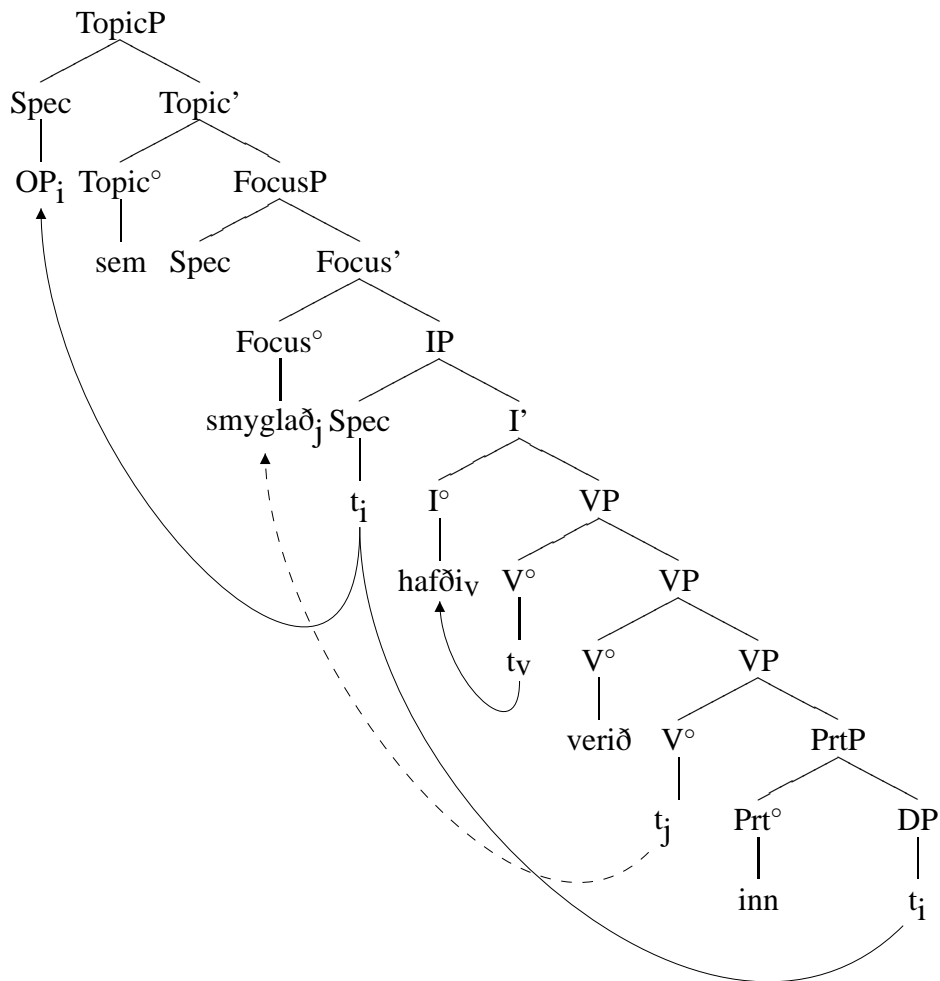
Under the assumption that weak subject pronouns do not have an inherent focus feature, the focus feature on Focus° will not be deleted when there is a weak subject pronoun in the clause. Therefore, a head with a focus feature may move into Focus° to check and delete the uninterpretable focus feature.

In clauses with no overt subject, FocusP-Spec and Focus<sup>°</sup> are both available for stylistic fronting. In this situation, there are three possibilities. First, as has been mentioned, an XP is stylistically fronted into FocusP-Spec and a head is stylistically fronted into Focus<sup>°</sup> simultaneously, as in (95) and (93).

As was shown in (29), page 195, a participle in a sentence such as (96) undergoes stylistic fronting into Focus<sup>°</sup>, the analysis in (29) is repeated in (97):

- (96) Ic. Hann sýndi mér flöskurnar sem **smyglað**<sub>i</sub> hafði<sub>v</sub> [vp t<sub>v</sub>  
 He showed me bottles-the that smuggled had  
 verið t<sub>i</sub> inn]  
 been in  
 'He showed me the bottles that had been SMUGGLED in'

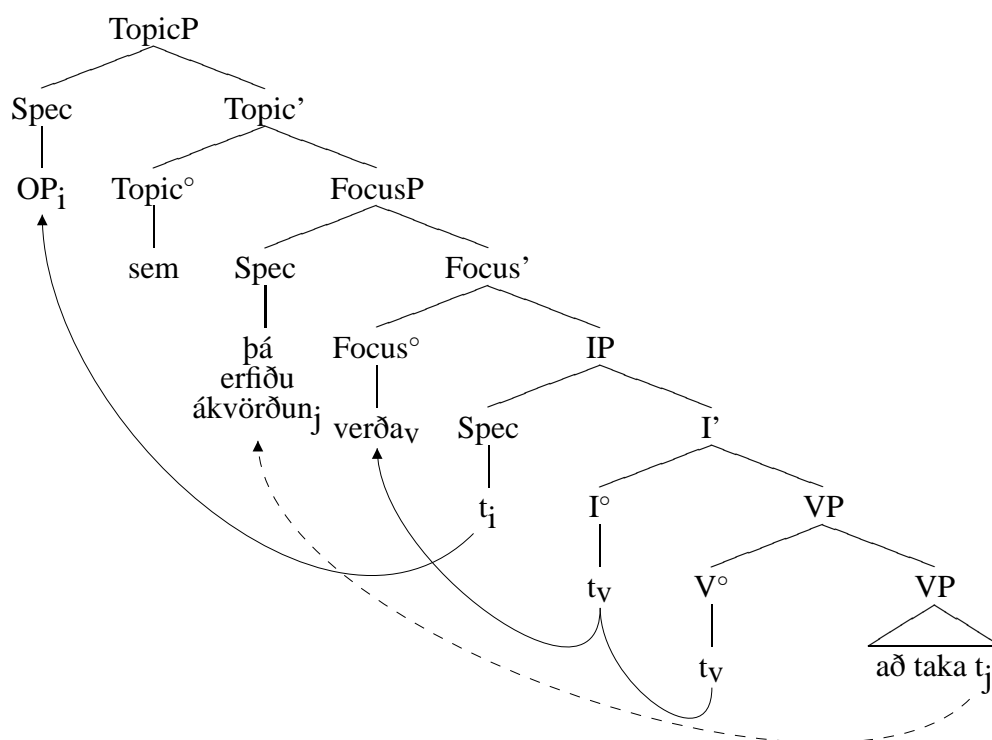
- (97) *Stylistic fronting of a participle into Focus<sup>°</sup>*



(58), repeated here as (98), shows that stylistic fronting of full DPs is possible in Icelandic. In the tree in (99), the DP *þá erfiðu ákvörðun* 'that hard decision' is stylistically fronted into FocusP-Spec and the focus feature on Focus° is checked and deleted. In case nothing else is stylistically fronted, the finite verb moves to Focus° to fulfill the requirement on verb second.

- (98) Ic. Þeir sem [*þá erfiðu ákvörðun*]<sub>i</sub> verða að taka *t<sub>i</sub>*  
*Those that that hard decision have to take*  
 'Those who have to take that hard decision'

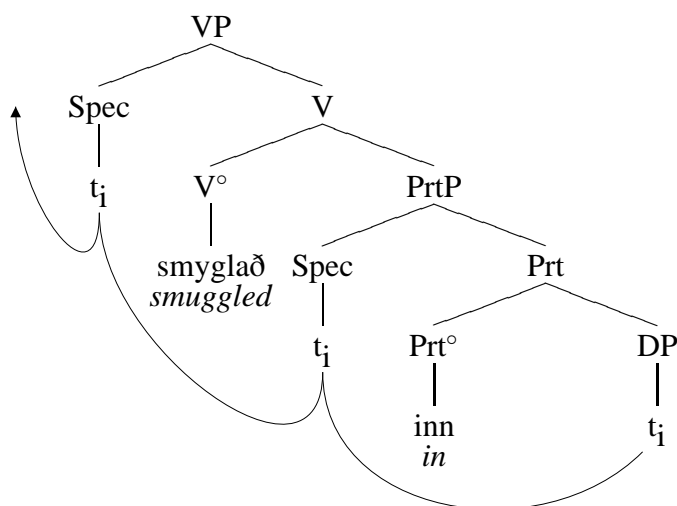
- (99) *Stylistic fronting into FocusP-Spec*



In all the cases I have discussed here (except (88b) and (89b)), V°-to-I° movement is string-vacuous. In fact it is possible to say that V°-to-I° movement is optional or absent in subordinate clauses in Icelandic if there is no overt subject or a weak subject pronoun in the clause. This is in accordance with the claim that has previously been made about the relationship between the possibility of stylistic fronting and the loss of V°-to-I° movement (cf. Platzack 1988: 226 and Vikner 1995a: 161). Stylistic fronting reestablishes the base-generated word order and a sentence with stylistic fronting and V°-to-I° movement is reanalyzed as a sentence with neither stylistic fronting nor V°-to-I° movement.

Under the assumption that participles and verb particles can only be minimal projections, we would expect that these could not undergo stylistic fronting at the same time:

(100) *Participles and particles as heads*



As the examples in (101) show, this prediction is correct, a participle and a verb particle cannot undergo stylistic fronting at the same time:

- (101) Ic. a. \*Hún brenndi allt sem **hent<sub>i</sub>** **út<sub>k</sub>** hafði verið t<sub>i</sub> t<sub>k</sub>  
*She burnt all that thrown out had been*
- b. \*Hún brenndi allt sem **út<sub>k</sub>** **hent<sub>i</sub>** hafði verið t<sub>i</sub> t<sub>k</sub>  
*She burnt all that out thrown had been*

Nor can three categories undergo stylistic fronting simultaneously:

- (102) Ic. \*Hann henti öllu sem [**áreiðanlega**]<sub>i</sub> [**ekki**]<sub>1</sub>  
*He threw away all that undoubtedly not*  
 [**tæmt**]<sub>k</sub> hafði<sub>v</sub> t<sub>i</sub> t<sub>1</sub> t<sub>v</sub> verið t<sub>k</sub>  
*emptied had been*

Not only two adverbs can undergo stylistic fronting in the same clause. Examples such as (103a) where an adverb has undergone stylistic fronting as an XP and a participle as a head are attested,<sup>19</sup> but examples such as (103b) where the order of the adverb and the participle is reversed, are ungrammatical:

<sup>19</sup>The example in (103) was found at <http://umsk.hvanneyri.is/umskolann.htm>

- (103) Ic. a. Nemendur sem **áður**<sub>i</sub> **lokið**<sub>k</sub> hafa<sub>v</sub> t<sub>i</sub> t<sub>v</sub> t<sub>k</sub>  
*Students that before finished have*  
 sambærilegum námsáföngum  
*similar courses*  
 'Students that have finished similar courses before'
- b. \*Nemendur sem **lokið**<sub>k</sub> **áður**<sub>i</sub> hafa<sub>v</sub> t<sub>i</sub> t<sub>v</sub> t<sub>k</sub>  
*Students that finished before have*  
 sambærilegum námsáföngum  
*similar courses*

The consequence of an analysis such as the one I have proposed here is that all embedded clauses in Icelandic have to be analyzed as having an articulated CP-domain. This means that all embedded clauses in Icelandic are potential V2 clauses, and hence topicalization should in principle always be possible. This is in accordance with what has been claimed for Icelandic (cf. Rögnvaldsson & Thráinsson 1990, Johnson & Vikner 1994, and Vikner 1995a).

So why does a language lose stylistic fronting? Falk (1993: 184) observes that the loss of V°-to-I° movement and the loss of stylistic fronting took place simultaneously in Old Swedish, i.e. that examples where a participle, or a verb particle, or a pronoun has undergone stylistic fronting were not found anymore but examples such where a sentential adverb or a negation seems to have undergone stylistic fronting continued to exist. The answer to this question may lie in the analysis I have presented here. If we rephrase the question to “why does a language have stylistic fronting?”, it is possible to argue that it is the movement of the verb from V° to I° that licenses CP-recursion or an articulated CP-domain. This possibility exists in Icelandic. In Icelandic, the movement of the verb from V° to I° licenses the kind of articulated CP-domain I have tried to argue for here. Therefore, Icelandic has stylistic fronting in clauses with no overt subjects and in embedded clauses with weak subject pronouns, and therefore, Icelandic has general embedded V2. In the Mainland Scandinavian languages, the verb only moves to I° in main clauses on its way to C°. Otherwise, the verb never moves into I°. Therefore, I° cannot license an articulated CP-domain in the Mainland Scandinavian languages, and therefore we do not find stylistic fronting or general embedded V2 in the Mainland Scandinavian languages.

Support for the hypothesis that the movement of the verb into I° licenses the articulated CP-domain comes from Icelandic ECM constructions. As the example in (104) shows, stylistic fronting is allowed in impersonal passives:

- (104) Ic. a. Hann sagði að einhverjum bókum hefði verið hent  
*He said that some books had been*  
*thrown away*  
 'He said that some books had been thrown away'
- b. Hann sagði að **hent**<sub>i</sub> hefði verið t<sub>i</sub> einhverjum  
*He said that thrown away had been some*  
*bókum*  
*books*  
 'He said that some books had been THROWN AWAY'

As the examples in (105) show, the verb does not move from V° to I° in Icelandic ECM constructions:

- (105) Ic. a. Ég taldi hann ekki **hafa** hent einhverjum  
*I believed him not have thrown away some*  
*bókum*  
*books*  
 'I believed him not to have thrown away some books'
- b. \*Ég taldi hann **hafa**<sub>v</sub> ekki t<sub>v</sub> hent einhverjum  
*I believed him have not thrown away some*  
*bókum*  
*books*

In (105b), the verb cannot precede the sentential negation. This shows that the verb could not have moved from V° to I° and as the example in (106b) shows, stylistic fronting is impossible in ECM constructions, even if the clause that is embedded under the ECM verb is an impersonal passive.

- (106) Ic. a. Ég taldi einhverjum bókum hafa verið hent  
*I believed some books have been thrown away*  
 'I believed some books to have been thrown away'
- b. \*Ég taldi **hent**<sub>i</sub> hafa verið t<sub>i</sub> einhverjum bókum  
*I believed thrown away have been some books*

The example in (106b) crucially shows that stylistic fronting is impossible unless the verb has moved from V° to I°. I take this to indicate that stylistic fronting depends on V°-to-I° movement. The movement of the verb into I° licenses the articulated CP-domain into which elements are stylistically fronted. If there is no V°-to-I° movement, the articulated CP-domain is not licensed and stylistic fronting cannot take place.



## 5.7 Conclusion

In this chapter, I have tried to show that stylistic fronting in Icelandic has a semantic effect and that it therefore cannot be analyzed as movement of phonological features. Instead, stylistic fronting should be analyzed as a movement into an articulated CP-domain driven by focus features on  $\text{Focus}^\circ$ . If full DP subjects and full subject pronouns are assumed to have an inherent focus feature, as opposed to indefinite DP subjects and weak subject pronouns, it is possible to account for the fact that stylistic fronting is only found in clauses with no overt subject, or in the presence of weak subject pronouns and indefinite DP subjects. The uninterpretable focus feature on  $\text{Focus}^\circ$  attracts the full DP subject or the full subject pronoun. The focus feature is thereby checked and deleted and stylistic fronting cannot take place. If it is assumed that weak subject pronouns are definite, just as full DP subjects and full subject pronouns, these also move to  $\text{FocusP-Spec}$  but since weak subject pronouns do not have an inherent focus feature, it is possible to stylistically front into  $\text{Focus}^\circ$  to check and delete the uninterpretable focus feature.

This accounts for the difference that can be found in subordinate clauses with no overt subject, and subordinate clauses with an overt weak subject pronoun. In subordinate clauses with an overt weak subject pronoun, only stylistic fronting of heads is possible, i.e. stylistic fronting into  $\text{Focus}^\circ$ , not stylistic fronting of XPs because the overt subject pronoun occupies the position into which XPs normally are stylistically fronted.

It was argued that stylistic fronting depends on  $\text{V}^\circ$ -to- $\text{I}^\circ$  movement. The movement of the verb into  $\text{I}^\circ$  licenses the articulated CP-domain into which elements are stylistically fronted. If there is no  $\text{V}^\circ$ -to- $\text{I}^\circ$  movement, the articulated CP-domain is not licensed and stylistic fronting cannot take place. A support for this hypothesis comes from Icelandic ECM constructions. In ECM constructions,  $\text{V}^\circ$ -to- $\text{I}^\circ$  movement does not take place and furthermore, stylistic fronting is impossible in clauses embedded under an ECM verb. If there is  $\text{V}^\circ$ -to- $\text{I}^\circ$  movement the articulated CP-domain is licensed and stylistic fronting can take place.

The Mainland Scandinavian languages lost  $\text{V}^\circ$ -to- $\text{I}^\circ$  movement and stylistic fronting at the same time. This is in accordance with the hypothesis that the movement of the verb from  $\text{V}^\circ$  to  $\text{I}^\circ$  licenses an articulated CP-domain. When the language loses  $\text{V}^\circ$ -to- $\text{I}^\circ$  movement, the articulated CP-domain cannot be licensed anymore and as a consequence of this, the language loses stylistic fronting.



## Chapter 6

### Conclusion

#### 6.1 Summary

The first chapter of this thesis is an introduction to the two theoretical frameworks used in my study, Optimality Theory and the Minimalist Program. Here, I also discussed the differences between doing a diachronic study of the older stages of Danish and English.

The first part of the thesis, *Case and agreement*, consists of three chapters: Chapter 2, *Case and inflectional morphology*, chapter 3, *Agreement in DAT-NOM constructions*, and chapter 4, *Getting rid of the worst*.

In chapter 2, the differences between the morphological systems of Mainland Scandinavian and Insular Scandinavian were discussed, i.e. that the Mainland Scandinavian languages have lost almost all of the case and agreement morphology that can be found in the common Scandinavian language, Ancient Nordic (A.D. 200-800), whereas the two Insular Scandinavian languages have preserved most of the case and agreement morphology found in Ancient Nordic and Old Norse. In this chapter, I tried to show, focusing on Danish, how case markers were lost in the Mainland Scandinavian languages. I also presented a hypothesis on how constructions with dative subjects and nominative objects were reanalysed as constructions with nominative subjects and accusative (or oblique) objects in Mainland Scandinavian, Faroese and English. With the help of the subjecthood tests that were used to prove the existence of oblique subjects in Icelandic and Faroese, I tried to show that non-nominative subjects were also found at the older stages of Danish. Finally, it was argued that Old English had DAT-NOM constructions and that the change from DAT-NOM to NOM-ACC could not have been a structural reanalysis but rather a reanalysis in case assignment, i.e. that the reanalysis in English went through the same three steps as the reanalysis in Mainland Scandinavian and Faroese.

In chapter 3, two different analysis of agreement in Icelandic DAT-NOM constructions were presented. The first analysis is based on Samek-Lodovici's (2002) work on impoverished agreement in Italian. In this chapter, I show that Samek-Lodovici's system has to be elaborated and

modified for it to be able to account for the Icelandic data. In particular, Samek-Lodovici's NOFEAT constraint has to be relativized to separate features, and more importantly, the constraint EXT-AGR has to be relativized to the features person and number in one and the same constraint. As I tried to show, this constraint cannot be a local constraint conjunction, instead, it has to be a tie of two constraints EXT-AGR<sub>pers</sub> and EXT-AGR<sub>num</sub>. What distinguishes this tie from other ties (where constraints are usually disjoined) is that the constraints in this tie are truly conjoined. In the second analysis, I tried to show that the same result can be obtained with a less technical mechanism, if agreement is assumed to be correspondence in features between the verb and a nominative DP. The analysis reflects the generalization that number agreement is dependent on person agreement in Icelandic. If the verb cannot show agreement in all its features, it cannot show agreement in any of its features. The advantage of this alternative analysis is that we do not have to assume the existence of local constraint ties such as EXT-AGR<sub>pers&num</sub>, and that in the new system, constraints do not have to be relativized to separate features and structural positions at the same time but only structural positions.

In chapter 4, harmonic alignment of markedness hierarchies was used to account for the fact that oblique subjects cannot be inanimate in Icelandic and that objects in DAT-NOM constructions cannot be local (i.e. first or second person). The same constraints that ban inanimate oblique subjects can be used to account for the definiteness effect in Icelandic transitive expletive constructions.

The second part of this thesis, *Stylistic fronting*, consists of one chapter where I present a minimalist analysis of stylistic fronting in Icelandic. If stylistic fronting is analysed as a feature-driven movement into an articulated CP-domain, in particular FocusP in the sense of Rizzi (1997), it is possible to account for two facts about stylistic fronting that so far have received little attention, namely that stylistic fronting has semantic effects and that there are differences in stylistic fronting in subordinate clauses with no overt subject and subordinate clauses with a weak subject pronoun. In this chapter, I proposed that there are two types of stylistic fronting, stylistic fronting of XPs into FocusP-Spec and stylistic fronting of heads into Focus°. Stylistic fronting of XPs can only be found in clauses with no overt subject, whereas stylistic fronting of heads can be found both in clauses with no overt subject and in clauses with a weak subject pronoun. I have also tried to show that Old and Middle Danish had stylistic fronting to the same

extent as Icelandic and that the possibility of stylistic fronting made it possible for children to reanalyse sentences with stylistic fronting and  $V^\circ$ -to- $I^\circ$  movement as sentences without both stylistic fronting and  $V^\circ$ -to- $I^\circ$  movement.

## 6.2 Last words

This study had two goals, a theoretical one as well as an empirical one. The theoretical goal was to find out whether Optimality Theory could be used in a comparative study of languages and whether this hypothesis could be stretched further to find out whether OT can be used to account for language change. This is the main topic of chapter 3, *Agreement in DAT-NOM constructions*. Although the focus in this chapter lies on Icelandic DAT-NOM constructions, I have also tried to show that the constraints can be used to account for the fact that we find no morphological agreement in the Mainland Scandinavian languages, and that verbs only show agreement in person in languages such as Bengali.

One of the four central ideas to Optimality Theory is that constraints are ordered in a hierarchy. If the hypothesis that constraint hierarchies differ from language to language is true, we would expect that language change is reranking of constraint hierarchies, i.e. whenever a child orders its constraints in a different way than its parents, a new language is born; a language that is slightly different from the language of the previous generations. In section 3.10, it was shown that the same constraints can be used to account for differences in agreement at different stages of English and Icelandic.

As for the empirical goal of my study, I took a starting point in Icelandic and tried to find out whether DAT-NOM constructions or constructions with stylistic fronting existed at the older stages of Danish and English. For this, I have on the one hand used published versions of Old and Middle Danish manuscripts and on the other hand parsed corpora of Old and Middle English. I then compared the relevant constructions and tried to find out how the change has happened.

Because Icelandic has changed so relatively little during the past 1000 years, compared to the changes we find in Mainland Scandinavian and English, I think this method is a good method to find out how languages change. If we only compare the Scandinavian languages, Icelandic most of the time shows the most conservative stage, i.e. the stage that has undergone fewest changes,

whereas Mainland Scandinavian shows the most progressive stage, i.e. the stage that has undergone most changes. Usually, Faroese lies right between Icelandic and Mainland Scandinavian, i.e. sometimes, Faroese will behave like Icelandic, other times, Faroese will behave like Mainland Scandinavian. Faroese can therefore give us information about the course of the change, i.e. when the change happens and why. The advantage of comparing such closely related languages is that we can observe all the minor details in the change; by looking at Icelandic we know what the previous stage looked like and by looking at Mainland Scandinavian we know what the next stage will look like. By looking at Faroese, we can find out what has changed from the previous stage (by comparing with Icelandic) and what has yet to change to reach the next stage (by comparing with Mainland Scandinavian). What I hope to have shown is that language change is not always accidental or unpredictable. On the contrary, I hope to have shown that language change is highly systematic and in some cases even predictable.

# Appendix A

## Texts used

This appendix lists the Old Danish, Middle Danish, Old English, and Middle English texts used in this study, and explains the abbreviations used in the examples. I have divided the Danish texts into different periods according to the traditional division of the Danish language. Thus the term *Old Danish* covers texts written in the period 1200-1325, the term *Middle Danish* covers texts written in the period 1325-1550, and the term *Early Modern Danish* covers texts written in the period 1500-1700. For additional information on the Old and Middle Danish texts, go to the Old Danish Dictionary web pages under [http://www.dsl.dk/go\\_kildeliste.html](http://www.dsl.dk/go_kildeliste.html).

The Old Icelandic examples in section 2.2.1 are taken from van Weenen (1988).

The Old and Middle English examples I have taken from the three corpora in the *English Parsed Corpora Series* (<http://www.ling.upenn.edu/mideng/ppcme2dir/YCOE/doc/annotation/parsed-corpora-series.htm>) that are based on the diachronic part of the Helsinki corpus, the York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE), the York-Helsinki Parsed Corpus of Old English Poetry (The York Poetry Corpus), and the Penn-Helsinki Parsed Corpus of Middle English (PPCME2).

### A.1 Old Danish 1200-1325

Unless otherwise indicated, all Old Danish examples, are taken from Uldaler & Wellejus (1968).

*ELOV* = **Eriks sjællandske lov**. Manuscript: AM 455,12°. Manuscript dated ca. 1300. Text dated ca. 1250. Source: Uldaler & Wellejus (1968: 57-72). *ELOV.61.22* refers to page 61, line 22 in the published version.

*HHARPE* = **Henrik Harpestreng**. Manuscripts: Cod.Holm. K 48 and Ny kgl. Saml. 66,8°. Manuscripts dated ca. 1300. Text dated 1200-1300. Source: Uldaler & Wellejus (1968: 212-233). *HHARPE.216.3* refers to page 216, line 3 in the published version.

*MARIAK* = **Mariaklagen**. Manuscripts: Cod.Holm. A 120. Runic manuscript dated ca. 1325. Text dated 1325. Source: Uldaler & Wellejus (1968: 266-269).

*JLOV* = **Jyske lov**. Manuscripts: AM 455,12°, Cod.Holm. C 39,4°, AM 4,4°, Ny kgl. Saml. 295,8°, and Cod.Holm. C 63. Manuscripts dated ca. 1300-1430. Text dated 1216-ca. 1250. Source: Uldaler & Wellejus (1968: 73-98). *JLOV.83.12* refers to page 87, line 12 in the published version.

*RUNEV* = **Runevers i Codex Runicus**. Manuscript: AM 28,8 (Codex Runicus). Manuscript dated ca. 1300. Text dated 1300. Source: Brøndum-Nielsen (1932: 13).

*SJKIRLOV* = **Sjællandske kirkelov**. Manuscripts: Cod.Holm C69. Manuscript dated ca. 1400. Text dated 1170. Source: Uldaler & Wellejus (1968: 10-19).

*SKKIRLOV* = **Skånske kirkelov**. Manuscripts: Cod.Holm B74 and AM 37,4°. Manuscripts dated ca. 1250. Text dated 1174. Source: Uldaler & Wellejus (1968: 10-19).

*SKLOV* = **Skånske lov**. Manuscripts: Cod.Holm B69 and Cod.Holm B 74. Manuscripts dated ca. 1250. Text dated ca. 1200. Source: Uldaler & Wellejus (1968: 19-38). *SKLOV.21.11* refers to page 21, line 11 in the published version.

*VLOV1* = **Valdemars lov, younger edition**. Manuscript: AM 455,12°. Manuscript dated ca. 1300. Text dated 1216-ca. 1250. Source: Uldaler & Wellejus (1968: 50-56). *VLOV1.55.22* refers to page 55, line 22 in the published version.

*VLOV2* = **Valdemars lov, older edition**. Manuscripts: AM 24,4° and Cod.Holm. C 69,4°. Manuscripts dated 1450 - 1500 (AM 24,4), and ca. 1400 (Cod.Holm. C 69). Text dated 1216-ca. 1250. Source: Uldaler & Wellejus (1968: 46-51). *VLOV2.46.13* refers to page 46, line 13 in the published version.

## A.2 Middle Danish 1325-1550 and Early Modern Danish 1550-1700

Unless otherwise indicated in the examples, all Middle Danish examples are taken from Ruus (2001).

*DUNSTAN* = **Mirakel om Biskop Dunstanus**. Manuscript: AM 28,4. Manuscript dated 1500-1515. Text dated 1450-1500. Source: Diderichsen (1931-1937).



*FLOR* = **Flores og Blanseflor**. Manuscript: Ghemen-tryk. Manuscript dated 1509.

*KFL* = **En kristen Fyrstis Lære**. From Ruus (2001). Text dated 1534.

*KMK* = **Karl Magnus' Krønike**. From Ruus (2001). Texts dated 1480, 1509 and 1534.

*RIMKR* = **Den danske Rimkrønike i Ghemen-trykket**. Manuscript: Ghemen-tryk. Manuscript dated 1495. Text dated ca. 1450.

*SJTR* = **Sjælens Trøst**. From Ruus (2001). Manuscripts dated ca. 1425. Text dated ca. 1425.

*SUSO* = **Henrik Susos Gudelig Visdoms Bog**. Manuscript: AM 783,4 (Grinderslevhåndskriftet). Manuscript dated ca. 1500. Text dated ca. 1500.

*SØNDEV* = **Tillæg til Søndags-Evangelier**. Manuscript: GkS 1390,4. Manuscript dated ca. 1450. Text dated ca. 1450.

*SØNDEV* = **Tillæg til Søndags-Evangelier**. GkS 1390,4. Manuscript dated ca. 1450. Text dated ca. 1450.

*CHRIVSAM* = **Christian IV's breve**. From Ruus (2001). Texts dated 1615-1642.

### A.3 Old English

Unless otherwise cited in the examples, Old English examples are taken from the York Poetry Corpus and the York Corpus of Old English. The brief citations used for the texts refer to their file name in the respective corpora. Thus, *cobeowul* refers to file that contains the parsed version of *Beowulf* in the York Poetry Corpus and *coalive* to the file that contains the parsed version of *Ælfric's Lives of Saints* in the YCOE. Citations to the two Old English corpora are indicated by lower case letters. The references to the texts are taken from the York Poetry Corpus / YCOE manuals (for information on texts in the York Poetry Corpus, go to <http://www-users.york.ac.uk/~lang18/ptext-list.html>, for information on the texts in the YCOE, go to <http://www-users.york.ac.uk/~lang22/YCOE/info/YcoeText.htm>). EETS = Early English Text Society.

*cobeowul* = **Beowulf**. From the York Poetry Corpus. Source: *Beowulf and Judith*. The Anglo-Saxon Poetic Records, IV. Ed. E. V. K. Dobbie. New York: Columbia University Press, (1953). PP. 3.1 - 98.3182.

*coalive* = **Ælfric's Lives of Saints**. From the YCOE. Source: Skeat, Walter William. 1966 (1881-1900). *Ælfric's Lives of Saints*. EETS 76, 82, 94, 114. London: OUP.

*coboeth* = **Boethius, Consolation of Philosophy**. From the YCOE. Source: Sedgfield, Walter John. 1899. *King Alfred's Old English Version of Boethius de Consolatione Philosophiae*. Oxford: Clarendon Press. Reprinted Darmstadt 1968.

*coaelhom* = **Ælfric's Homilies Supplemental**. From the YCOE. Source: Pope, J.C. 1968. *Homilies of Ælfric, A supplementary Collection*. EETS, 260. London: OUP.

*cobede* = **Bede's History of the English Church**. From the YCOE. Source: Miller, Thomas. 1959-1963 (1890-1898). *The Old English Version of "Bede's Ecclesiastical History of the English People"*. EETS 95, 96, 110, 111. London: OUP.

*coinspolD* = **Institutes of Polity**. From the YCOE. Source: Jost, K. 1959. "Die 'Institutes of Polity, Civil and Ecclesiastical.'" *Swiss Studies in English* 47. Bern.

*cochdrul* = **Chrodegang of Metz**. From the YCOE. Source: Napier, Arthur S. 1971 (1916). *The Old English Version, with the Latin Original, of the Enlarged Rule of Chrodegang together with the Latin Original*. EETS 150. London: Kegan Paul, Trench, Trübner Co., Ltd. and OUP.

*cocathomI* = **Ælfric's Catholic Homilies I**. From the YCOE. Source: Clemoes, P. 1997. *Ælfric's Catholic Homilies: The First Series*. EETS s.s. 17. Oxford: OUP.

*cogregdH* = **Gregory's Dialogues**. From the YCOE. Source: Hecht, Hans. 1965 (1900-1907). *Bischof Wærferth von Worcester Übersetzung der Dialoge Gregors des Grossen*. Bibliothek der Angelsaechsischen Prosa, V. Darmstadt: Wissenschaftliche Buchgesellschaft.

*cochad* = **Other Saints' Lives, The Life of Saint Chad**. From the YCOE. Source: Vleeskruyer, Rudolf. 1953. *The Life of Saint Chad: An Old English Homily*. Amsterdam: North-Holland.

*coorosiu* = **Orosius**. From the YCOE. Source: Bately, Janet. 1980. *The Old English Orosius*. EETS s.s. 6. London: OUP.

*coeust* = **Saint Eustace and his Companions**. From the YCOE. Source: Skeat, Walter William. 1966 (1881-1900). *Ælfric's Lives of Saints*. EETS 76, 82, 94, 114: 190-218. London: OUP.

## A.4 Middle English

Unless otherwise cited in the examples, Middle English examples are taken from the PPCME2. The reference to the text is taken from the PPCME2 manual. For information on the texts in the PPCME2 corpus, go to <http://www.ling.upenn.edu/~ataylor/txt-info.htm>. Citations to the Middle English corpus are indicated by upper case letters.

*CMANCRW* = **Ancrene Riwe**. From the PPCME2. Manuscript: Cotton Cleopatra C vi., British Library, London. Date: no MED date (Laing: C13a2 (1225-1230 for hand A)). Dialect: West Midlands (eastern periphery of AB area, perhaps Worcester (Dobson)). Genre: Religious treatise. Wordcount: 50,926. Source: **Part I**: *Ancrene Riwe*, Introduction and Part I, Medieval and Renaissance Texts and Studies, Vol. 31. Robert W. Ackerman and Roger Dahood (eds.), Birmingham, 1972. **Part II**: *The English Text of the Ancrene Riwe*. E.J. Dobson (ed.), EETS OS 267, London, 1972.



## Appendix B

### Dansk resumé

#### B.1 Indledning

De centrale træk i den morfosyntaktiske udvikling af de skandinaviske sprog og engelsk der omtales i denne afhandling er tabet af morfologisk kasus, V<sup>o</sup>-til-I<sup>o</sup> flytning og stilistisk fremflytning (eng. *stylistic fronting*). Med andre ord vil jeg fokusere på hvilken rolle IP-Spec spiller i konstruktioner med ikke-nominative subjekter og konstruktioner med stilistisk fremflytning.

Afhandlingen er både synkron og diakron. Den er synkron fordi der fokuseres på analysen af såkaldte DAT-NOM-konstruktioner (fx kongruensforhold, og hvordan man kan forklare at ikke-nominative subjekter ikke kan være ikke-levende, og at nominativobjekter ikke kan være første eller anden person), og på analysen af stilistisk fremflytning i moderne islandsk. Den er diakron fordi der fokuseres på at vise at de ældre fastlandsskandinaviske sprog og engelsk havde ikke-nominative subjekter, og at gammeldansk og middeldansk havde stilistisk fremflytning. Et yderligere mål er at vise at tabet af DAT-NOM-konstruktioner fulgte en systematisk proces i disse sprog.

De to grammatikteorier der er brugt i denne afhandling, er optimalitetsteorien (OT, Prince & Smolensky 1993) og det minimalistiske program (Chomsky, 1995).

Optimalitetsteorien er en teori hvor regler kan være i konflikt med hinanden. Reglerne er ordnet i et hierarki der bestemmer hvilken version af en sætning ud af en mængde forskellige versioner der er den optimale, dvs. den grammatiske. De fire centrale idéer bag OT er vist i (1), (fra Grimshaw 1997b: 373)

- (1) a. **Regler kan overtrædes**
- b. **Regler er ordnet i et hierarki**
- c. **Regler er universelle**
- d. **Kun den optimale kandidat er grammatisk**

Grammatikken består af to komponenter. Generatoren (GEN) der genererer en mængde kandidater der er sammensat af alle logisk mulige versioner af en sætning, og regelkomponenten (CON) der indeholder alle de regler der kan overtrædes. Baseret på sprogets regelhierarki (dvs. CON) determinerer funktionen H-EVAL (eng. *Harmony Evaluation*) hvilken kandidat der er den optimale kandidat.

Ligesom optimalitetsteorien voksede minimalistprogrammet ud af den formelle syntaktiske teori der hedder *Government and Binding Theory/Principles and Parameters* (Chomsky 1981, 1986). Basisgrundlaget for minimalismen er *økonomi*, dvs. at sprog skal indeholde så få og så enkle operationer som muligt. Dette er grunden til at sproget er så effektivt som det er. Økonomi-

betingelser er fx *Last Resort* (“sidste udvej”) og *Full Interpretation* (“fuld fortolkning”). *Last resort* siger at man ikke skal tilføje sætningen noget medmindre alt andet går galt, mens *full interpretation* siger at man ikke skal inkludere noget i en sætning der ikke bidrager til denne sætnings betydning.

To forskellige operationer bruges til at bygge fraser, *Merge* (“forbind”) og *Move* (“flyt”). *Merge* bygger større strukturer af mindre strukturer hvor den mindste enhed er den leksikalske enhed i inputtet, mens *Move* flytter allerede forbundne enheder ind i positioner der ligger højere oppe i strukturen.

For de ældre stadier af dansk og engelsk har jeg brugt forskellige elektroniske korpora. For gammeldansk findes ingen elektroniske korpora. Derfor har Ken Ramshøj Christensen og jeg skannet publicerede versioner af ti tekster (ca. 35000 ord) og lavet et korpus af rå tekstfiler der kan bruges til at generere konkordanser. For middeldansk har jeg brugt *Dansk Sprog- og Stil-historisk Database* (Ruus, 2001). Situationen er lidt anderledes hvad angår de ældre stadier af engelsk fordi der findes en del (morfo-) syntaktisk annoterede korpora. Fra *English Parsed Corpora Series* har jeg brugt York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE), Penn-Helsinki Parsed Corpus of Middle English (PPCME2) og York-Helsinki Parsed Corpus of Old English Poetry (The York Poetry Corpus). Disse tre korpora er baseret på den diakrone del af Helsinki korpuset.

## B.2 Kasus og bøjningsmorfologi

De fem skandinaviske sprog kan opdeles i to grupper efter deres syntaktiske og morfologiske egenskaber, nemlig fastlandsskandinavisk (dansk, norsk og svensk) og øskandinavisk (færøsk og islandsk, selvom færøsk syntaks er tættere på syntaksen i de fastlandsskandinaviske sprog end i islandsk). De øskandinaviske sprog har det til fælles at de har bevaret det meste af den bøjningsmorfologi der fandtes i det fællesskandinaviske sprog urnordisk (AD. 200-800), kendt fra runeindskrifterne (se fx Krause 1971), mens de fastlandsskandinaviske sprog har tabt det meste af denne bøjningsmorfologi. Urnordisk havde fire kasus: nominativ, akkusativ, dativ og genitiv, og to tal: singularis og pluralis (såvel som dualis i pronominalsystemet). I øskandinavisk er dette kasussystem bevaret næsten i sin helhed. Både færøsk og islandsk markerer nominativ, akkusativ og dativ på substantiver, og begge sprog har en morfologisk genitiv. De tre fastlandsskandinaviske sprog markerer kun numerus på substantiver. I pronominalsystemet markerer islandsk og færøsk nominativ, akkusativ, dativ og genitiv, i to tal og tre genera. De fastlandsskandinaviske sprog gør kun forskel på subjektkasus og ikke-subjektkasus, i tre genera i singularis, én i pluralis.

De samme betragtninger kan gøres omkring den verbale bøjning. Urnordisk og dets efterkommer oldnordisk havde en meget rig verbalbøjning som stort set er bevaret i moderne islandsk. I islandsk bøjes verber i tre personer, i to tal: præsens og præteritum. Islandsk er det eneste skandinaviske sprog der har to modi: indikativ og konjunktiv (optativ). I færøsk markeres person kun i præsens singularis. Ellers bøjes verber stadigvæk for numerus i færøsk. De fastlandsskan-

dinaviske sprog har tabt det meste af den verbale morfologi der fandtes i oldnordisk, idet de tre sprog kun markerer tempora morfologisk.

Tabet af morfologisk kasus begyndte tidligt i gammeldansk. Fx var der ingen forskel på nominativ og akkusativ i begyndelsen af 1200-tallet. Det ser ud som om dativ pluralis blev bevaret længere i dansk end dativ singularis. Jeg har undersøgt fire tekster fra perioden ca. 1174-1250 hvor dativ stadig er markeret. I min søgning inkluderede jeg alle kontekster hvor dativ enten er eller kunne være markeret.

(2) Markering af dativ pluralis i fire gammeldanske tekster:

Tekst	Dateret	Tilskrevet af			%		
		V	P	I alt	V	P	I alt
<i>Skånske kirkelov</i>	1174	6/6	25/25	<b>31/31</b>	100	100	<b>100</b>
<i>Skånske lov</i>	1200	14/14	57/57	<b>71/71</b>	100	100	<b>100</b>
<i>Eriks sjæl. lov</i>	1250	3/3	5/7	<b>8/10</b>	100	71	<b>80</b>
<i>Valdemars lov</i>	ca. 1250	1/2	0/4	<b>1/6</b>	50	0	<b>17</b>

I *Eriks sjællandske lov* bruges dativ pluralis i 80% af tilfældene og akkusativ pluralis i 20% af tilfældene. I *Valdemars lov* bruges akkusativ pluralis overalt hvor en præposition kunne have tilskrevet dativ til en DP i pluralis.

(3) Dativ singularis markering i fire gammeldanske håndskrifter:

Tekst	Dateret	Tilskrevet af			%		
		V	P	I alt	V	P	I alt
<i>Skånske kirkelov</i>	1174	10/10	41/46	<b>51/56</b>	100	89	<b>91</b>
<i>Skånske lov</i>	1200	57/57	141/183	<b>198/240</b>	100	77	<b>83</b>
<i>Eriks sjæl. lov</i>	1250	34/40	54/132	<b>88/172</b>	85	41	<b>51</b>
<i>Valdemars lov</i>	ca. 1250	4/10	10/31	<b>14/41</b>	40	32	<b>34</b>

I *Eriks sjællandske lov* bruges dativ singularis med verber i 85% af tilfældene, men kun i 41% af tilfældene hvor dativ singularis var blevet brugt med en præposition. I *Valdemars lov* er dativ singularis ved at forsvinde. I 40% af tilfældene har et verbum tilskrevet dativ til en DP i singularis, og i 32% af tilfældene har en præposition tilskrevet dativ til en DP i singularis.

Samtidig med eller efter tabet af et differentieret kasussystem blev konstruktioner med ikke-nominative subjekter og nominativobjekter reanalyseret som konstruktioner med nominativsubjekter og ikke-nominative objekter. Jeg foreslår at denne reanalyse foregår i tre trin:

(4) *DAT-NOM* → *DAT-AKK* → *NOM-AKK*

Islandsk, oldislandsk (dvs. islandsk før 1550), oldengelsk (dvs. engelsk før 1100) og de ældre fastlandsskandinaviske sprog (dvs. dansk før 1200 og svensk før 1300) befinder sig på DAT-NOM-trinet. Disse sprog har DAT-NOM-konstruktioner, dvs. konstruktioner hvor subjektet kan være dativ og objektet kan være nominativ.

De sprog der befinder sig på det næste trin, DAT-AKK-trinet, kan stadigvæk have dativsubjekter, men nominativobjekterne er blevet erstattet med akkusativobjekter. Sådanne sprog er fx færøsk, gammeldansk, middelsvensk og middelengelsk.

De moderne fastlandsskandinaviske sprog og engelsk har kun nominativsubjekter og ikke-nominative objekter. Nyere moderne færøsk har ikke dativsubjekter længere, men objekter kan være markeret for alle fire morfologiske kasus. Det interessante ved færøsk er at det således ser ud til at være i færd med at gå fra DAT-AKK-trinet til NOM-AKK-trinet.

For at vise at gammeldansk og middeldansk havde ikke-nominative subjekter bruges de subjektstests der blev brugt til at påvise at islandsk og færøsk har ikke-nominative subjekter (se Andrews 1976, Thráinsson 1979 og Sigurðsson 1989) på data der er blevet indsamlet ved Gammeldansk Ordbog.

Jeg bruger otte subjektstests: *position*, *refleksivering*, *konjunktionsreducering*, *ECM-konstruktioner*, *løftning*, “*Heavy Subject Shift*”, *kontrol* og *klitisering*. Man har hævdet at *kontrol*, *konjunktionsreducering* og *refleksivering* er hovedegenskaberne for subjekter i de germanske sprog (se fx Eythórsson & Barðdal 2003: 147). I islandsk består ikke-nominative subjekter alle otte subjektstests. I gammeldansk og middeldansk består ikke-nominative subjekter tests som *position*, *refleksivering*, *konjunktionsreducering*, *løftning*, og *kontrol*.

Selvom det er blevet hævdet at oldengelsk havde DAT-NOM-konstruktioner der er magen til de islandske (fx Allen 1995), er der ikke enighed om hvorvidt oldengelsk og middelengelsk havde ikke-nominative subjekter. For eksempel prøver Jespersen (1894, 1927) at vise, under den antagelse at nominativleddet var subjektet, at ændringen fra DAT-NOM til NOM-AKK var drevet af en ændring i den engelske ordstilling. Jeg følger Allen og prøver at vise at oldengelsk og middelengelsk havde ikke-nominative subjekter, og at ændringen fra DAT-NOM til NOM-AKK i engelsk ikke kan have været en strukturel ændring som Jespersen foreslår. I stedet prøver jeg at vise at ændringen var en reanalyse af kasustilskrivningen, dvs. at ændringen skete i de tre trin i (4).

### B.3 Kongruensforhold i DAT-NOM-konstruktioner

I dette kapitel præsenterer jeg to forskellige analyser af kongruens i DAT-NOM-konstruktioner. To generelle observationer kan gøres om DAT-NOM-konstruktioner:

- (5) a. **Tredje person** verbalform er obligatorisk.
- b. Islandsktalende deles i to forskellige grupper:
  - (i) GRUPPE I: Tredje person singularis er obligatorisk.
  - (ii) GRUPPE II: Tredje person er obligatorisk (kongruens med 3PL).

Verbet kan ikke kongruere med et nominativobjekt i hverken første eller anden person. Generaliseringen er at numeruskongruens i islandsk er afhængig af personkongruens.

I den første analyse modificerer og elaborerer jeg Samek-Lodovicis (1996, 2002) analyse af kongruenssvækkelse i italiensk og arabisk. De regler der bruges i analysen, vises i (6)-(8):



- (6) AGREEMENT[x] (AGR[x]): En nominativ DP i IP-Spec og et verbum i I° har den samme værdi for træk x.
- (7) EXTENDED AGREEMENT[x] (EXT-AGR[x]): En nominativ DP i det finitte verbs udvidede projektion (eng. *extended projection*) (dvs. et sted indenfor IPen) og et verbum i I° har den samme værdi for træk x.
- (8) NO FEATURE[x] (NOFEAT[x]): Verbet skal ikke have en værdi for træk x.

Alle disse regler kan relativiseres til trækkene [person], [numer] og [genus]. Min analyse er yderligere afhængig af den antagelse at trækkene [person] og [numer] er kombineret i reglen EXT-AGR[x]. Dette er nødvendigt fordi en analyse med to regler relativiseret til hver sit separate træk ikke kan redegøre for islandsk. Det vises også at denne regel ikke kan være en såkaldt *local constraint conjunction* (dvs. regel C = regel A & regel B).

Denne regel er i konflikt med reglerne AGR<sub>pers</sub>/AGR<sub>num</sub>, EXT-AGR<sub>pers</sub>/EXT-AGR<sub>num</sub> og NOFEAT<sub>pers</sub>/NOFEAT<sub>num</sub>. Reglerne EXT-AGR<sub>pers&num</sub> og NOFEAT<sub>pers</sub> er ikke prioriteret i forhold til hinanden, men det er vigtigt at NOFEAT<sub>pers</sub> er højere prioriteret end EXT-AGR<sub>pers&num</sub> for at forhindre verber i at vise personkongruens med nominativobjekter i første eller anden person. Ligeledes er reglen NOFEAT<sub>num</sub> højere prioriteret end EXT-AGR<sub>num</sub> til at forhindre verber i at vise numeruskongruens med nominativobjekter i første eller anden person.

I tableauene betyder ∅ at verbet ikke har nogen specifikation for trækket [person], og SG at verbet ikke har nogen specifikation for trækket [numer].

- (9) NOFEAT<sub>pers</sub> >> {EXT-AGR<sub>pers&num</sub>, EXT-AGR<sub>pers</sub>} >> NOFEAT<sub>num</sub> >> EXT-AGR<sub>num</sub>

Tableau 1: Nominativobjekt i første person pluralis

Mål: 1 PL	NOFEAT person	EXT-AGR person&number	EXT-AGR person	NOFEAT number	EXT-AGR number
(a) 1 <del>SG</del>	*!	*			*
(b) 1 PL	*!			*	
(c) <del>3 SG</del>		*	*		*
(d) <del>3 PL</del>		*	*	*!	

Kandidaterne hvor verbet kongruerer i person med førstepersonspronomet, kan ikke vinde fordi de overtræder reglen NOFEAT<sub>pers</sub> (en såkaldt faltal overtrædelse). Reglen NOFEAT<sub>num</sub> vælger den kandidat der er mindst markeret for trækket [numer], dvs. kandidat (c).

Hvis nominativobjektet er i tredje person pluralis, vælger EXT-AGR<sub>pers&num</sub> den kandidat hvor verbet kongruerer i person såvel som numerus med nominativobjektet.

Tableau 2: Nominativobjekt i tredje person pluralis

Mål: 3 PL	NOFEAT person	EXT-AGR person&number	EXT-AGR person	NOFEAT number	EXT-AGR number
(c) <del>3 SG</del>		*!			*
(d) <del>3 PL</del>				*	

Kandidat (c) overtræder EXT-AGR<sub>pers&num</sub> fatalt, og kandidat (d) er den korrekte optimale kandidat.

Reglen EXT-AGR<sub>pers&num</sub> er en kobling (eng. *constraint tie*) som betyder at de to regler, EXT-AGR<sub>pers</sub> og EXT-AGR<sub>num</sub>, ikke er prioritetet i forhold til hinanden. Men EXT-AGR<sub>pers&num</sub> er en usædvanlig kobling. Normalt når regler er koblede, er de disjungeret, men reglerne i denne kobling er konjungeret. Reglen er ikke kun overtrådt hvis begge dele af koblingen er overtrådt, men også når kun en del af koblingen er overtrådt. I den alternative analyse prøver jeg derfor at undgå teoretiske forudsætninger af den type som er nødvendig med reglen EXT-AGR<sub>pers&num</sub>. Grundidéen til den alternative analyse er at kongruens er korrespondance mellem to elementers træk, verbets og den nominative DPs. I sine træk skal verbet korrespondere med den nominative DPs træk. Korrespondance af denne type kan redegøres for med reglen IDENT (fra *Correspondence Theory*, McCarthy & Prince 1995), som kræver at verbets og det nominative DPs træk er identiske.

IDENT kan enten relativiseres til separate kongruenstræk som [person], [numerus] og [genus] eller gælde for alle træk på en gang. Derudover må reglen relativiseres til strukturelle positioner fordi der er en forskel i lokal og ikke-lokal kongruens (cf. Samek-Lodovici 1996, 2002). Disse regler er i konflikt med markerethedsreglerne i (11):

- (10) IDENT<sub>[F]</sub>: Det finitte verbum har identiske værdier for hvert træk [F] som findes hos en nominativ DP.
- (11) IDENT<sub>[IP-Spec]</sub>: Det finitte verbum har identiske værdier for hvert træk [F] som findes hos en nominativ DP i IP-Spec.
- (12) *Markerethedsregler*:
  - a. \*LOCAL (dvs. må ikke være første eller anden person)
  - b. \*PL (dvs. må ikke være pluralis)

Interaktionen mellem IDENT<sub>[F]</sub> og markerethedsreglerne afspejler den generalisering at numeruskongruens er afhængig af personkongruens i islandsk. Reglen \*LOCAL er nødvendigvis højere prioriteret end IDENT<sub>[F]</sub> for at forhindre verber i at vise kongruens i person med nominativobjekter i første eller anden person. Hvis nominativobjektet er første person, må markerethedsreglerne bestemme hvad for en kandidat der er den optimale kandidat fordi IDENT<sub>[F]</sub> ikke kan gøre det.

Tableau 3: Ingen kongruens. Første/anden person pluralis

	NOM DP: 1/2 PL	IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
(a) Verbum:	1/2 SG		*!	*	
(b) Verbum:	1/2 PL		*!		*
☞ (c) Verbum:	3 SG			*	
(d) Verbum:	3 PL			*	*!

Kandidaterne (a) og (b), hvor verbet er specificeret for første/anden person, overtræder reglen \*LOCAL fatalt. Kandidaterne (c) og (d) overtræder begge to reglen IDENT<sub>[F]</sub>, og reglen \*PL må

derfor afgøre hvilken kandidat vinder. Denne regel vælger den mindst markerede kandidat som den optimale kandidat.

Hvis objektet er tredje person, vælger IDENT<sub>[F]</sub> den optimale kandidat fordi ikke alle kandidater hvor objektet er tredje person vil overtræde reglen IDENT<sub>[F]</sub>.

Tableau 4: Fuld kongruens. Tredje person pluralis

NOM DP: 3 PL		IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
(a)	Verbum: 1/2 SG		*!		
(b)	Verbum: 1/2 PL		*!	*	*
(c)	Verbum: 3 SG			*!	
☞ (d)	Verbum: 3 PL				*

Da kun en af kandidaterne (c) og (d) overtræder reglen IDENT<sub>[F]</sub>, vil denne regel vælge den kandidat hvor verbet kongruerer i person og numerus med nominativobjektet som den optimale kandidat.

## B.4 At udelukke det værste

Dette kapitel fokuserer på to egenskaber i islandske konstruktioner med ikke-nominative subjekter og nominativobjekter, nemlig at ikke-nominative subjekter ikke kan være ikke-levende, og at nominativobjekter ikke kan være første eller anden person. Siden Aissen (1999, 2001, 2003) har man brugt *harmonic alignment* af markerethedshierarkier til at forklare hvorfor et bestemt element er mere markeret i en sætningsposition end et andet element. *Harmonic alignment* af tre markerethedshierarkier, *relationskalaen*, *animacy-skalaen*, og *kasusskalaen* forudsiger at ikke-levende ikke-nominative subjekter er mere markerede end ikke-levende nominativsubjekter. Interaktionen mellem de regler der er afledt af *harmonic alignment* og troskabsregler (eng. *faifulness constraints*), der bl.a. forbyder indsættelse af ekspletiver, forudsiger at intransitive eksistentielle konstruktioner er at foretrække fremfor transitive konstruktioner hvis et transitivt verbs ikke-nominative subjekt er ikke-levende. Regler afledt af *harmonic alignment* af disse tre markerethedshierarkier kan også bruges til at forklare bestemtthedseffekten i islandske transitive eksistentielle konstruktioner sammen med regler afledt af *harmonic alignment* af *topikalitetsskalaen* og *bestemtthedsskalaen*.

Personrestriktionen i DAT-NOM-konstruktioner kan også forklares med *harmonic alignment* af markerethedshierarkier. Regler afledt af *harmonic alignment* af *relationskalaen*, *lokalitetsskalaen* og *kasusskalaen* forudsiger at lokale nominativobjekter (dvs. nominativobjekter i første/anden person) er mere markerede end nominativobjekter i tredje person. Interaktionen mellem disse regler og trohedsregler forudsiger at DAT-NOM-konstruktioner med første eller anden persons nominativobjekter ikke findes.

## B.5 Stilistisk fremflytning

I dette kapitel prøver jeg at vise at stilistisk fremflytning har en semantisk effekt i islandsk, og at den derfor ikke kan analyseres som flytning udelukkende af fonologiske træk ind i IP-Spec. I stedet skal stilistisk fremflytning analyseres som flytning ind i et udvidet CP-domæne (eng. *articulated CP-domain* Rizzi 1997) drevet af fokustræk på Focus°. Dette gør det nemmere at forklare hvorfor der er en forskel mellem sideordnede sætninger uden et fonologisk realiseret subjekt og sideordnede sætninger med et ubetonet subjektpronomen. I sideordnede sætninger med et ubetonet subjektpronomen er kun stilistisk fremflytning af kerner mulig, dvs. stilistisk fremflytning ind i Focus°, ikke stilistisk fremflytning af XPer fordi det ubetonede subjektpronomen befinder sig i den position som XPer normalt flytter ind i under stilistisk fremflytning.

Der bliver argumenteret for at stilistisk fremflytning er afhængig af V°-til-I° flytning. Flytningen af verbet ind i I° licenserer det udvidede CP-domæne. Hvis ikke V°-til-I° flytning finder sted, er et udvidet CP-domæne ikke licenseret, og stilistisk fremflytning kan ikke finde sted. Denne hypotese understøttes af data fra islandske ECM-konstruktioner. I ECM-konstruktioner finder V°-til-I° flytning ikke sted, og desuden er stilistisk fremflytning umulig i disse konstruktioner. De fastlandsskandinaviske sprog tabte V°-til-I° flytning og stilistisk fremflytning samtidig. Dette er i overensstemmelse med den hypotese at flytningen af verbet fra V° til I° licenserer et udvidet CP-domæne. Når et sprog taber V°-til-I° flytning, kan det udvidede CP-domæne ikke licenseres mere, og som en følge af det, taber sproget stilistisk fremflytning.

## B.6 Konklusion

Denne afhandling fokuserer på to morfosyntaktiske ændringer i engelsk og de skandinaviske sprogs historie, nemlig tabet af konstruktioner med ikke-nominative subjekter og stilistisk fremflytning. Hypotesen er at DAT-NOM-konstruktioner bliver tabt i tre trin. Oldengelsk og islandsk repræsenterer de sprog der befinder sig på det første trin, dvs. det trin hvor sproget ikke har ændret sig. Gammeldansk, middeldansk, middelengelsk og færøsk repræsenterer sprog på det andet trin, hvor nominativobjekter er blevet erstattet med akkusativobjekter. De moderne fastlandsskandinaviske sprog, engelsk og nyere moderne færøsk repræsenterer sprog på det tredje trin i ændringen, hvor dativsubjekter er blevet erstattet med nominativsubjekter. Evidens for overgangen fra det første trin til det andet trin kommer fra historiske kilder skrevet på old- og middelengelsk, mens evidens for overgangen fra det andet trin til det tredje trin kommer fra moderne færøsk som netop befinder sig i denne overgang.

Hvis stilistisk fremflytning er analyseret som flytning ind i et udvidet CP-domæne drevet af et abstrakt fokustræk, er det muligt at redegøre for to fakta om stilistisk fremflytning, nemlig at stilistisk fremflytning har semantisk effekt, og at der er forskel på stilistisk fremflytning i sideordnede sætninger uden et fonologisk realiseret subjekt og sideordnede sætninger med et ubetonet subjektpronomen. Hvis licenseringen af et udvidet CP-domæne er afhængig af V°-til-I° flytning, er det muligt at relatere tabet af stilistisk fremflytning til tabet af V°-til-I° flytning.

## Appendix C

### English summary

#### C.1 Introduction

The central issues in the morphosyntactic development of Danish, Faroese, Icelandic, Norwegian, Swedish, and English that are discussed in this study are the loss of morphological case and the loss of  $V^{\circ}$ -to- $I^{\circ}$  movement and stylistic fronting, with a focus on the role of IP-Spec.

The study is a synchronic study to the extent that there is a focus on the analysis of DAT-NOM constructions (i.e. agreement relations and how to account for the fact that oblique subjects cannot be inanimate and that nominative objects cannot be first or second person), and on the analysis of stylistic fronting in present-day Icelandic. It is diachronic to the extent that there is a focus on showing that the older Scandinavian languages and English had dative subjects and that stylistic fronting existed in Old and Middle Danish. Furthermore, the aim is to show that the loss of DAT-NOM constructions in these languages followed a systematic process.

The two theoretical frameworks used in the thesis are Optimality Theory (OT, Prince & Smolensky 1993) and the Minimalist Program (Chomsky, 1995).

Optimality Theory is a theory of constraint interaction, where constraints that are ordered in a hierarchy decide which sentence out of a set of sentences is the optimal sentence, i.e. the grammatical sentence. The four central ideas of OT are listed in (1) (cited here from Grimshaw 1997b: 373):

- (1) a. **Constraints may be violated**
- b. **Constraints are ordered in a hierarchy**
- c. **Constraints are universal**
- d. **Only the optimal candidate is grammatical**

The grammar consists of two parts, the constraint component (CON) that contains all the violable constraints in the grammar, and the generator (GEN) which is the part of the grammar that contains inviolable and unranked constraints. GEN takes an input and generates a candidate set that is composed of all the logically possible structures of an input. Then, the candidate set is evaluated by the function H-EVAL (Harmony Evaluation). H-EVAL determines which candidate is the optimal candidate, based on the constraint hierarchy (i.e. CON) of the language.

Like Optimality Theory, the Minimalist Program grew out of the formal syntactic theory called Government and Binding Theory/Principles and Parameters (Chomsky 1981, 1986). The basic notion of minimalism is *Economy*, i.e. we should put as little effort into language as possible. This is why language is as efficient as it is. Economy conditions are for example *Last Resort* and *Full Interpretation*. *Last resort* tells us not to insert anything into a sentence unless everything else fails. A good example is English *do*-insertion. *Full interpretation* tells us not to include anything in an utterance which does not contribute to the interpretation of this utterance.

The hypothesis is that language is a “perfect system” that is best represented as a computational system; a language faculty in the brain that interacts with other systems in the brain. Chomsky (1995: 2) assumes that the language faculty contains two components: a cognitive system and performance systems. The cognitive system stores information, whereas the performance systems access this information and use it. The two interact with linguistic representations.

Two different operations are used to build phrases, *merge* and *move*. Merge builds bigger structures from smaller structures, the smallest element being the lexical item in the input, whereas move moves already merged items into positions higher up in the structure.

For the older stages of Danish and English, I have used various electronic corpora. For Old Danish, there exists no electronic corpora, so Ken Ramshøj Christensen and I have scanned published versions of ten manuscripts (approx. 35000 words) and made a corpus of raw text files which can be used to generate concordances. For Middle Danish, I have used the corpus *Dansk Sprog- og Stilhistorisk Database* (Ruus, 2001). The situation is somewhat different for the older stages of English as there exist excellent (morpho-) syntactically annotated corpora. From the *English Parsed Corpora Series*, I have used the York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE), the Penn-Helsinki Parsed Corpus of Middle English (PPCME2), and the York-Helsinki Parsed Corpus of Old English Poetry (The York Poetry Corpus). The three corpora are based on the diachronic part of the Helsinki Corpus.

## C.2 Case and inflectional morphology

The five Scandinavian languages are often divided into two groups according to their syntactic and morphological properties, Mainland Scandinavian (Danish, Norwegian, and Swedish), and Insular Scandinavian (Faroese and Icelandic, although Faroese is syntactically closer to MSc than to Icelandic). The ISc languages have in common that they have preserved most of the inflectional morphology that can be found in the common Scandinavian language, Ancient Nordic (AD. 200-800), found in the rune inscriptions (cf. e.g. Krause 1971), whereas the MSc languages have lost most of the inflectional morphology.

Ancient Nordic differentiated between four cases: nominative, accusative, dative, and genitive, and two numbers: singular and plural (as well as dual in the pronominal system). This case system is preserved in the ISc languages to a large extent. Both Faroese and Icelandic mark nominative, accusative and dative on nouns. Both languages have a morphological genitive but unlike Icelandic, genitive is only used with pronouns in Faroese. The MSc languages only mark number on nouns. In the pronominal system, Icelandic and Faroese mark nominative, accusative, dative and genitive, in two numbers and three genders. The MSc languages only mark subject case vs. non-subject case, in three genders in the singular, one gender in the plural.

The same observations can be made for the verbal inflection. Ancient Nordic and its descendant, Old Norse, had very rich verbal morphology, which is mostly preserved in modern

Icelandic. In Icelandic, verbs are inflected for three persons in two numbers, in both present tense and past tense. Icelandic is the only Scandinavian language that has two moods, indicative and subjunctive. In Faroese, only present tense singular is marked for person. Otherwise, Faroese still inflects verbs for number. The MSc languages have lost almost all of the rich verbal morphology found in Old Norse, in the tree languages, only tense is morphologically marked,

The loss of morphological case started from early on in Old Danish. For example there was no difference between nominative and accusative in the early 13th century. Dative plural seems to have survived longer in Danish manuscripts than dative singular. I looked at four manuscripts from the period ca. 1147-1250 in which dative is still marked. In the search, I included all environments where dative is marked or would have been marked.

(2) Dative plural marking in four Old Danish manuscripts:

Text	Dated	Assigned by			%		
		V	P	Total	V	P	Total
<i>Skånske kirkelov</i>	1174	6/6	25/25	<b>31/31</b>	100	100	<b>100</b>
<i>Skånske lov</i>	1200	14/14	57/57	<b>71/71</b>	100	100	<b>100</b>
<i>Eriks sjæl. lov</i>	1250	3/3	5/7	<b>8/10</b>	100	71	<b>80</b>
<i>Valdemars lov</i>	ca. 1250	1/2	0/4	<b>1/6</b>	50	0	<b>17</b>

In *Eriks sjællandske lov* dative plural is used at a rate of 80%. In *Valdemars lov*, accusative plural is used in all the cases where a preposition would have assigned dative plural to a DP.

(3) Dative singular marking in four Old Danish manuscripts:

Text	Dated	Assigned by			%		
		V	P	Total	V	P	Total
<i>Skånske kirkelov</i>	1174	10/10	41/46	<b>51/56</b>	100	89	<b>91</b>
<i>Skånske lov</i>	1200	57/57	141/183	<b>198/240</b>	100	77	<b>83</b>
<i>Eriks sjæl. lov</i>	1250	34/40	54/132	<b>88/172</b>	85	41	<b>51</b>
<i>Valdemars lov</i>	ca. 1250	4/10	10/31	<b>14/41</b>	40	32	<b>34</b>

In *Eriks sjællandske lov*, dative singular is used with verbs in 85% of the cases, but only in 41% of the cases where dative singular would have been used with a preposition. In *Valdemars lov*, dative singular is on the decline. In 40% of the cases a verb has assigned dative to a singular DP and in 32% of the cases, a preposition has assigned dative to a singular DP.

During or after the loss of a differentiated case system, constructions which had dative subjects and nominative objects were reanalyzed as constructions with nominative subjects and non-nominative objects. The hypothesis that I have suggested is that the reanalysis can be described in three stages:

(4) *DAT-NOM* → *DAT-ACC* → *NOM-ACC*

Icelandic, Old Icelandic (i.e. Icelandic before 1550), Old English (i.e. English before 1100) and the older MSc languages (i.e. Danish before 1200 and Swedish before 1300) are at the

DAT-NOM stage. These languages have DAT-NOM constructions, i.e. constructions where the subject can be dative and the object can be nominative.

The languages at the next stage, the DAT-ACC stage, still have dative subjects but the nominative objects found at the DAT-NOM stage have been replaced by accusative objects. Examples of languages of this type are Faroese, Old Danish, Middle Swedish, and Middle English.

Modern MSc and modern English only have nominative subjects and non-nominative (i.e. accusative) objects. Late 20th century Faroese does not have dative subjects anymore, but objects can be marked for all four morphological cases. The interesting fact about Faroese is that it seems to be in the process of moving from the DAT-ACC stage to the NOM-ACC.

To show that Old Danish and Middle Danish had oblique subjects, the subjecthood tests that were used to argue for the existence of oblique subjects in Icelandic and Faroese (cf. Andrews 1976, Thráinsson 1979, and Sigurðsson 1989) are used on data that was collected at the Old Danish Dictionary.

I make use of eight subjecthood tests, *position*, *reflexivization*, *conjunction reduction*, *ECM constructions*, *raising*, *Heavy Subject Shift*, *control*, and *cliticization*. For the Germanic languages, *control*, *conjunction reduction* and *reflexivization* are considered to be the main subject properties (Eythórsson & Barðdal 2003: 147 and references there). In Icelandic, oblique subjects pass all the eight subjecthood tests. In Old and Middle Danish, oblique subjects pass subjecthood tests like *position*, *reflexivization*, *conjunction reduction*, *raising*, and *control*.

Although it has been argued that Old English had DAT-NOM constructions that correspond to the DAT-NOM constructions in Icelandic Allen (1995), there is no consensus among linguists as to whether Old English and Middle English had oblique subjects. For example, Jespersen (1894, 1927) argues on the basis that the nominative argument was the subject that changes in word order were the major contributor to the change from DAT-NOM to NOM-ACC in English. I follow Allen and argue that Old and Middle English indeed had dative subjects and that the change from DAT-NOM to NOM-ACC in English could not have been a structural reanalysis as proposed by Jespersen. Instead, I try to argue that the change was a reanalysis in case assignment, i.e. that the change went through the three steps described in (4).

### C.3 Agreement in DAT-NOM constructions

In this chapter, I present two different analyses of agreement in DAT-NOM constructions. Two major observations can be made on the DAT-NOM constructions:

- (5) a. **Third person** verbal form is obligatory.
- b. Speakers of Icelandic fall into two different groups.
  - (i) GROUP I: Third person singular is always obligatory.
  - (ii) GROUP II: Third person is obligatory (agreement with 3PL)

The verb cannot show agreement with a nominative object in either first or second person. The generalization is that number agreement in Icelandic is dependent on person agreement.



In the first analysis, I modify and elaborate Samek-Lodovici's (1996, 2002) analysis of agreement impoverishment in Italian and Arabic. The constraints that are used are given in (6)-(8):

- (6) AGREEMENT[x] (AGR[x]): A nominative DP in the specifier of IP and a verb in I° have identical feature values with respect to a feature x.
- (7) EXTENDED AGREEMENT[x] (EXT-AGR[x]): A nominative DP in the extended projection of the finite verb (i.e. somewhere within the IP) and a verb in I° have identical feature values with respect to a feature x.
- (8) NO FEATURE[x] (NOFEAT[x]): The verb should not have any value for the feature x.

Each of these constraints can be relativized to the features person, number and gender. Furthermore, my analysis depends on the assumption that the features person and number are combined in the constraint EXT-AGR[x]. This is necessary because an analysis with two constraints relativized to each feature separately cannot account for Icelandic. It is shown that it is not enough for this constraint to be relativized to separate features and more crucially it is shown that this constraint cannot be a local constraint conjunction.

This constraint conflicts with the constraints  $AGR_{pers}/AGR_{num}$ ,  $EXT-AGR_{pers}/EXT-AGR_{num}$  and  $NOFEAT_{pers}/NOFEAT_{num}$ . The constraint  $EXT-AGR_{pers\&num}$  is not ranked with respect to the constraint  $EXT-AGR_{pers}$  but it is crucially dominated by the constraint  $NOFEAT_{pers}$  to prevent verbs from showing agreement in person with first and second person nominative objects. The constraint  $NOFEAT_{num}$  crucially dominates the constraint  $EXT-AGR_{num}$  to prevent verbs from showing agreement in number with first and second person nominative objects.

- (9)  $NOFEAT_{pers} \gg \{EXT-AGR_{pers\&num}, EXT-AGR_{pers}\} \gg NOFEAT_{num} \gg EXT-AGR_{num}$

Tableau 1: First person plural nominative object

Target: 1 PL	NOFEAT person	EXT-AGR person&number	EXT-AGR person	NOFEAT number	EXT-AGR number
(a) 1 <del>SG</del>	*!	*			*
(b) 1 PL	*!			*	
(c) 3 <del>SG</del>		*	*		*
(d) 3 PL		*	*	*!	

The candidates where the verb shows agreement in person with the first person nominative object fatally violates the constraint  $NOFEAT_{pers}$ . The constraint  $NOFEAT_{num}$  will choose the candidate that is the least marked one for the feature number, i.e. candidate (c).

In the case of third person nominative objects,  $EXT-AGR_{pers\&num}$  will choose the candidate where the verb shows agreement in both person and number with the nominative object.

Tableau 2: Third person plural nominative object

Target:	<del>3</del> PL	NOFEAT person	EXT-AGR person&number	EXT-AGR person	NOFEAT number	EXT-AGR number
(c)	<del>3 SG</del>		*!			*
(d)	<del>3</del> PL				*	

Candidate (c) fatally violates  $\text{EXT-AGR}_{\text{pers\&num}}$  and candidate (d) is the correct winning candidate.

The problem with the constraint  $\text{EXT-AGR}_{\text{pers\&num}}$  is that it is an unusual kind of constraint tie. When constraints are tied, they are usually disjoined but the constraints in this tie are truly conjoined. This constraint is not only violated whenever both of the constraints in the tie are violated, but also whenever only one of the constraints are. In the second analysis, I therefore try to avoid theoretical assumptions such as the one made with the constraint  $\text{EXT-AGR}_{\text{pers\&num}}$ . The basic idea of the alternative analysis is that agreement is correspondence between the features of two different elements, the verb and the nominative DP. In its features, the verb should correspond to the features of the nominative DP. Correspondence of this type may be accounted for by assuming the constraint IDENT (Correspondence Theory, McCarthy & Prince 1995), which requires feature identity between the verb and the nominative DP.

IDENT may either be relativized to separate agreement features such as person, number and gender or it may constrain every feature at the same time. Furthermore, the constraint has to be relativized to different structural positions, as there is a difference between local and non-local agreement (cf. Samek-Lodovici 1996, 2002). These constraints conflict with the markedness constraints in (11):

- (10) IDENT<sub>[F]</sub>: In its feature values, the finite verb is identical to the feature value of every feature [F] of a nominative DP.
- (11) IDENT<sub>[IP-Spec]</sub>: In its feature values, the finite verb is identical to the feature value of every feature [F] of a nominative DP in the specifier of IP.
- (12) *Markedness Constraints*:
  - a. \*LOCAL (i.e. don't be first or second person)
  - b. \*PL (i.e. don't be plural)

The interaction of IDENT<sub>[F]</sub> and the markedness constraints reflects the generalization that number agreement is dependent on person agreement in Icelandic. The constraint \*LOCAL crucially dominates IDENT<sub>[F]</sub> to prevent verbs from showing agreement in person with first and second person nominative DPs. If the nominative object is first person, IDENT<sub>[F]</sub> cannot decide which candidate is optimal, so the decision has to be left to the markedness constraints.

Tableau 3: No feature correspondence. First/second person plural

NOM DP: 1/2 PL	IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
(a) Verb: 1/2 SG		*!	*	
(b) Verb: 1/2 PL		*!		*
☞ (c) Verb: 3 SG			*	
(d) Verb: 3 PL			*	*!

Candidates (a) and (b), where the verb is specified for first person, fatally violate \*LOCAL. Candidates (c) and (d) tie on IDENT<sub>[F]</sub>, leaving \*PL to decide which candidate wins. This constraint selects the least marked candidate as the optimal candidate.

If the object is third person, IDENT<sub>[F]</sub> determines which candidate is the optimal candidate because the candidates where the nominative object is third person will not tie on IDENT<sub>[F]</sub> anymore.

Tableau 4: Full feature correspondence. Third person plural

NOM DP: 3 PL	IDENT <sub>[IP-Spec]</sub>	*LOCAL	IDENT <sub>[F]</sub>	*PL
(a) Verb: 1/2 SG		*!		
(b) Verb: 1/2 PL		*!	*	*
(c) Verb: 3 SG			*!	
☞ (d) Verb: 3 PL				*

Since candidates (c) and (d) do not tie on IDENT<sub>[F]</sub>, this constraint selects the candidate where the verb shows agreement in person and number with the nominative object as the optimal candidate.

## C.4 Getting rid of the worst

This chapter focuses on two characteristics of Icelandic constructions with oblique subjects and nominative objects, namely that oblique subjects cannot be animate and that nominative objects cannot be first or second person. Since Aissen (1999, 2001, 2003), harmonic alignment of markedness hierarchies has been used to account for such facts, i.e. that in some positions of the sentence, one kind of elements may be more marked than other kind of elements. The harmonic alignment of three markedness hierarchies, the *relational scale*, the *animacy scale*, and the *case scale* predicts that inanimate oblique subjects are more marked than inanimate nominative subjects and the interaction of the constraints derived by harmonic alignment with faithfulness constraints against late insertion correctly predicts that intransitive expletive constructions are chosen over transitive constructions if the oblique subject of transitive verbs is inanimate. The constraints derived by harmonic alignment of these three markedness hierarchies can also be used to account for the definiteness effect in Icelandic transitive expletive constructions in addition to constraints derived by the harmonic alignment of the *topicality scale* and the *definiteness scale*.

The person restriction in DAT-NOM constructions can also be accounted for by means of harmonic alignment of markedness hierarchies. Constraints derived by the harmonic alignment

of the *relational scale*, the *locality scale*, and the *case scale* predict that local (first/second) person nominative objects are more marked than third person nominative objects. The interaction of these constraints and faithfulness constraints predicts that DAT-NOM constructions with first or second person nominative objects do not exist.

## C.5 Stylistic fronting

In this chapter, I try to show that stylistic fronting in Icelandic has a semantic effect and that it therefore cannot be analyzed as movement of phonological features into IP-Spec. Instead, stylistic fronting should be analyzed as a movement into an articulated CP-domain driven by focus features on Focus°. This makes it easier to account for the difference that can be found in subordinate clauses with no overt subject, and subordinate clauses with an overt weak subject pronoun. In subordinate clauses with an overt weak subject pronoun, only stylistic fronting of heads is possible, i.e. stylistic fronting into Focus°, not stylistic fronting of XPs because the overt subject pronoun occupies the position into which XPs normally are stylistically fronted.

It is argued that stylistic fronting depends on V°-to-I° movement. The movement of the verb into I° licenses the articulated CP-domain into which elements are stylistically fronted. If there is no V°-to-I° movement, the articulated CP-domain is not licensed and stylistic fronting cannot take place. Support for this hypothesis comes from Icelandic ECM constructions. In ECM constructions, V°-to-I° movement does not take place and furthermore, stylistic fronting is impossible in clauses embedded under an ECM verb. The Mainland Scandinavian languages lost V°-to-I° movement and stylistic fronting at the same time. This is in accordance with the hypothesis that the movement of the verb from V° to I° licenses an articulated CP-domain. When the language loses V°-to-I° movement, the articulated CP-domain cannot be licensed anymore and as a consequence of this, the language loses stylistic fronting.

## C.6 Conclusion

This thesis focuses on two morphosyntactic developments in the history of the Scandinavian languages and English, namely the loss of constructions with dative subjects and stylistic fronting. It suggests the hypothesis that DAT-NOM constructions are lost in three stages. Old English and Icelandic represent languages that are at the first stage, i.e. the stage where the language has not undergone any changes. Old and Middle Danish, Middle English and Faroese represent languages at the second stage, where nominative objects have been replaced by accusative objects. The modern Mainland Scandinavian languages, modern English and late 20th century Faroese represent languages at the third stage of the development where dative subjects have been replaced by nominative subjects. Support for the change from the first stage to the second stage comes from historical sources of Old and Middle English, whereas support for the last development comes from modern Faroese that is in the transition from the second stage to the third stage.

If stylistic fronting is analyzed as a feature-driven movement into an articulated CP-domain, it is possible to account for two facts about stylistic fronting, namely that stylistic fronting has semantic effects and that there are differences in stylistic fronting in subordinate clauses with no overt subject and subordinate clauses with a weak subject pronoun. If the licensing of an articulated CP-domain is dependent on  $V^{\circ}$ -to- $I^{\circ}$  movement, it is possible to relate the loss of stylistic fronting to the loss of  $V^{\circ}$ -to- $I^{\circ}$  movement.



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