Odd Einar Haugen & Fartein Th. Øverland

Guidelines for Morphological and Syntactic Annotation of Old Norwegian Texts

English translation by Eiríkur Kristjánsson

Project Menotec

BeLLS Vol. 4 No. 2







Guidelines for Morphological and Syntactic Annotation of Old Norwegian Texts

Typesetting: Odd Einar Haugen
Tree diagrams: Fartein Th. Øverland
Font: Andron Mega Corpus and Gill Sans (titles)

Bergen Language and Linguistic Studies (BeLLS), Vol. 4, No. 2 (2014)

ISSN 1892-2449 ISBN 978-82-998587-6-2

This series also contains a Norwegian version of the guidelines, Vol. 4, No. 1. The present English version is a translation of the Norwegian text and follows this page by page, example by example. It is intended to be fully equivalent with the Norwegian version. Some deviations and changes are unavoidable in a translation, but we believe that for the great majority of readers, the two versions will be fully compatible.

Preface

These guidelines for morphological and syntactic annotation of Old Norwegian were developed for use by the Menotec project (2010–2012). While they were written for the annotators of the project, we hope that they will be helpful also for those who will be working with the texts in the Menotec corpus as well as for anyone with a general interest in morphological and syntactic annotation. The questions discussed in these guidelines are likely to be familiar to anyone studying the Old Norwegian language (which together with Old Icelandic constitute Old Norse, in the Scandinavian languages often referred to as *norrønt*). We have chosen dependency analysis as our model for syntactic annotation, and in our experience, this model has given us a surprisingly simple way of manual annotation. It also works very well with a language of relatively free word order. Recently, dependency analysis has been used for several other projects, and a number of older languages are now available in this formalism, including Ancient Greek, Latin, Classical Armenian, Gothic, Church Slavonic, Old English, Old French, Old Spanish and Old Portuguese (see e.g. the INESS treebank portal, http://iness.uib.no).

The Menotec project, led by Christian-Emil Ore at the University of Oslo, was a large infrastructure project, funded by the Research Council of Norway (Norges Forskningsråd) in the years 2010–2012. It is now being continued on a smaller scale within other contexts. The Menotec project was a collaboration between the universities of Oslo and Bergen and aimed to expand the Medieval Nordic Text Archive (Menota) with a number of Old Norwegian texts, especially law texts and diplomas. Some of these were transcribed and added to the archive without annotation, some were annotated morphologically, and some were annotated both morphologically and syntactically. Texts already in the archive, mostly from the Old Norwegian Dictionary (*Gammelnorsk Ordboksverk*), already complied with the new standard, so that they could be supplemented with syntactic annotation. The goal of Menotec has been to create a large, uniform and balanced corpus of Old Norwegian texts, to be used for research in philology, linguistics and lexicography and other fields. The annotation was developed in collaboration with the PROIEL project, led by Dag. T. Haug, who was one of the participants in the Menotec project.

The morphological guidelines are based on work done at the Old Norwegian Dictionary, where a number of Old Norwegian texts have been tagged with morphological information, in addition to the guidelines in *The Menota Handbook*, ch. 8 (Haugen 2008). The syntactic guidelines follow those of the PROIEL project, where older Indo-European

4 Preface

languages (Greek, Latin, Armenian, Old Church Slavonic and Gothic) have been annotated morphologically and syntactically. PROIEL has its own guidelines, but it soon became clear to us that it would be helpful to write new guidelines appropriate to Old Norwegian, using Old Norwegian examples. Our goal has been to develop a method of annotation in compliance with PROIEL, but since the languages are somewhat different, the same rules of annotation can not always be made to fit both.

Since the syntactic annotation is based on morphological annotation, we have had to change, and in some cases correct, the morphological annotation carried out at the Old Norwegian Dictionary, as discussed in *The Menota Handbook*, ch. 8. For example, subjunctions must be annotated as such (not as conjunctions), so that they can introduce subordinate clauses in the syntactic annotation. Not many changes have been made, however, and these only involve moving words from one class to another. Nevertheless, we have found it useful to discuss this problem in these guidelines.

The actual syntactic and morphological annotation has been made in compliance with the PROIEL scheme, which has been customised for the Menotec project. For texts that are only to be annotated morphologically, only the first part of these guidelines is relevant. Texts that are also to be annotated syntactically must first be analysed morphologically, in which case all of the guidelines will be useful.

The present guidelines are the result of a process that was carried out over the three-year period of the Menotec project. During this process we have had help from many colleagues, especially Dag T. Haug and Hanne M. Eckhoff in the PROIEL project. In addition, we have found much support and inspiration in the annotators' mailing list as well as in meetings held in Oslo or on Skype with people from the Menotec and Iswoc projects. In alphabetical order (Icelanders listed by their last names), these are: Kristin Bech, Haraldur Bernharðsson, Kristine G. Eide, Þórhallur Eyþórsson, Jens Haugan, Karl G. Johansson, Kari Kinn, Eiríkur Kristjánsson and Signe Laake. Special thanks go to Hanne M. Eckhoff, who read through the guidelines in January 2013 and gave us a number of helpful comments, and to Robert K. Paulsen, Bergen, who made a careful reading of the guidelines in August 2013, and who joined us — together with Hanne M. Eckhoff — in a final discussion of our text in September 2013. We would also like to thank Dag T. Haug and Espen S. Ore who in October 2013 helped us in specifying the encoding schemes in Menotec and PROIEL, as subsequently detailed in the new ch. 4.

Bergen, 1 October 2014

Odd Einar Haugen

Fartein Th. Øverland

P	reface	3
C	Contents	5
1	Background for the Morphological Annotation	13
	1.1 Word Classes and Morphological Terms	
	1.2 Word Classes in Modern Norwegian	
	1.3 Maximising Homonymy	
	1.4 One or More Words? Splitting and Merging Words	17
	1.5 Syncretism	17
	1.6 Interpolation of Latin and Other Non-Scandinavian Languages	20
	1.7 Orthography for Lemmas	20
2	Word Classes	23
_	2.1 Nouns	
	2.1.1 Common Nouns	
	2.1.2 Proper Nouns	
	2.2 Adjectives	
	2.3 Pronouns	
	2.3.1 Personal Pronouns	
	2.3.2 Reflexive Pronouns	
	2.3.3 Interrogative Pronouns	26
	2.3.4 Indefinite Pronouns	
	2.4 Determiners	28
	2.4.1 Demonstratives	28
	2.4.2 Quantifiers	29
	2.4.3 Possessives	32
	2.5 Verbs	33
	2.5.1 Finite Verbs	33
	2.5.2 Infinite Verbs	33
	2.6 Adverbs	33
	2.6.1 Adverbs (general)	34
	2.6.2 Interrogative Adverbs	34
	2.7 Prepositions	35
	2.8 Conjunctions	37
	2.9 Subjunctions	37

	2.10 The Infinitive Marker	39
	2.11 Interjections	39
	2.12 Numerals	39
2	Homonymy	/11
J	3.1 Homonyms from Different Word Classes	
	3.2 Homonyms of the Same Word Class or Same Gender	
	•	
4	Menotec and PROIEL encoding	
	4.1 Background	
	4.2 The Lemma	
	4.3 The Word Class	
	4.4 The Morphosyntactic categories	
	4.5 Examples of morphosyntactic encoding	
	4.5.1 Nouns	
	4.5.2 Adjectives	
	4.5.3 Pronouns	
	4.5.4 Determiners	
	4.5.5 Verbs	
	4.5.6 Adverbs	
	4.5.7 Prepositions	
	4.5.8 Conjunctions	
	4.5.9 Subjunctions	
	4.5.10 Infinitive Marker	
	4.5.11 Interjections	
	4.5.12 Unassigned words	
	4.5.13 Foreign words	58
5	Background for the Syntactic Annotation	61
6	Word and Sentence Boundaries	65
•	6.1 Sentence Division	
	6.1.1 Prose	
	6.1.2 Poetry	
	6.1.3 Whole and Partial Replies	
	6.2 Word Boundaries	
	6.2.1 Words Written Together or Separately	
	6.2.2 Enclitics	
	6.3 Chapter Headings	
_		
/	Functions	
	7.1 Root Functions	
	7.1.1 PRED	
	7.1.2 PARPRED	82

	7.1.3 VOC	83
	7.2 Auxiliary Functions	84
	7.2.1 AUX	84
	7.3 Arguments	86
	7.3.1 SUB	86
	7.3.2 OBJ	87
	7.3.3 OBL	88
	7.3.4 XOBJ	92
	7.3.5 COMP	96
	7.3.6 NARG	98
	7.3.7 AG	100
	7.4 Adjuncts	101
	7.4.1 ADV	101
	7.4.2 XADV	103
	7.4.3 ATR	106
	7.4.4 APOS	107
	7.4.5 PART	109
	7.5 Superfunctions	109
	7.5.1 ARG	109
	7.5.2 PER	109
	7.5.3 NONSUB	109
	7.5.4 ADNOM	110
	7.5.5 REL	110
	7.6 Secondary Functions.	110
	7.6.1 XSUB	110
	7.6.2 PID	110
8	Phrases	113
_	8.1 Noun Phrases	113
	8.2 Verb Phrases	
	8.3 Adjective Phrases	
	8.4 Adverbial Phrases	
	8.5 Pronominal Phrases	
	8.6 Preposition Phrases	
	8.6.1 Preposition + Preposition (including vestigial nouns)	
	8.6.2 Preposition + Adverb	
9	Slashing and Coordination	121
	9.1 Slashing	121
	9.2 Sentence oordination	123
	9.3 Phrase coordination	127
	9.4 Asyndetic coordination	130

10 Subordinate Clauses and Clause-like Constructions	133
10.1 Nominal Clauses	133
10.2 Relative Clauses	135
10.2.1 Restrictive Relative Clauses	137
10.2.2 Non-Restrictive Relative Clauses	138
10.3 Adverbial Clauses	140
10.4 Infinitive Constructions	147
10.4.1 Accusative with Infinitive	148
10.4.2 Nominative with Infinitive	150
10.5 Dative and Accusative Absolute	152
10.6 Comparative Constructions	153
10.7 Sentences with <i>þat</i> and an Extraposed Subordinate Clause	161
11 Verbs and Verbal Particles	163
11.1 Auxiliary Verbs	163
11.1.1 Auxiliary Verb + Infinitive	164
11.1.2 Auxiliary Verb + Supine	165
11.2 Infinitives	167
11.2.1 XOBJ	167
11.2.2 COMP	169
11.2.3 XADV	172
11.2.4 ATR	172
11.2.5 APOS	173
11.2.6 NARG	174
11.3 Verbal Particles	174
11.3.1 Verbal Particles without Objects	174
11.3.2 Verbal Particles with Objects	177
12 Topicalisation and Dislocation	179
12.1 Topicalisation (Fronting)	179
12.2 Dislocation	180
13 Ellipsis, Agreement, Discontinuity and Anacoluthon	185
13.1 Ellipsis	185
13.2 Agreement	186
13.3 Discontinuity	187
13.4 Anacoluthon and Textual Correction	188
14 Ambiguous Functions	191
14.1 OBJ vs. OBL	
14.2 ADV vs. OBL	191
14.3 ATR vs. APOS	193
14.4 ATR vs. OBL	193

14.5 The verb <i>vera</i>	
15 List of Functions	199
16 Examples	203
17 Special Word Lists	211
17.1 Homonyms of the Same Word Class or the Same Gender	
17.2 Non-Inflecting Adjectives	222
17.3 Non-Inflecting Adverbs	
18 Sources and Literature	227
18.1 Primary Sources	227
18.1.1 Main Norwegian text corpus	227
18.1.2 All texts with abbreviations and editions used	
18.1.3 Editions	228
18.2 Old Norse Dictionaries	228
18.3 Secondary Literature	229

Part One

Morphological Annotation

I Background for the Morphological Annotation

1.1 Word Classes and Morphological Terms

A morphological analysis specifying word class and grammatical form is a prerequisite for a syntactic analysis, so we shall open these guidelines with a discussion of the rules for the former. As a consequence of the syntactic annotation initiated in the Menotec project, we have made some changes to the rules for morphological annotation used in earlier projects (especially at the *Old Norwegian Dictionary*). These changes primarily refer to the definition of word classes and will be explained here.

In the XML encoding used for the texts that constitute our corpus, every words is tagged with its word class, e.g. 'xAJ' for *adjectives* or 'xAP' for *prepositions*. Inflected word classes have longer tags, as they are marked for grammatical categories such as *gender, number* and *case*. Some classes have no inflection, in which case word class is the only tag needed. See Haugen (2008) for an introduction to this encoding style.

The word class tags always begin with a lowercase 'x', followed by two uppercase letters, e.g. 'xAJ' for adjectives. After these follow markers for various morphological categories and their respective terms. Here, the category is written in lowercase, e.g. 'n' for *number* and the features in uppercase, e.g. 'S' for *singular* and 'P' for *plural*.

In the user interface, both the internal one used for tagging text as well as the external one for users of the database, this encoding is translated into longer, but more easily understood terms, abbreviations or actual words. A complete list of abbreviations follows:

A. Word Classes

xNC	noun, common	xVB	verb
xNP	noun, proper	xAV	adverb, general
xAJ	adjective	xAQ	adverb, interrogative
xPE	pronoun, personal	xAP	preposition
xPR	pronoun, reflexive	xCC	conjunction
xPQ	pronoun, interrogative	xCS	subjunction
xPI	pronoun, indefinite	xIM	infinitive marker
xDD	determiner, demonstrative	xIT	interjection
xDQ	determiner, quantifier	xUA	unassigned
xDP	determiner, possessive	xFW	foreign word

B. Morphological Terms

p1	person: 1. person	gM	gender: masculine
p2	person: 2. person	gF	gender: feminine
p3	person: 3. person	gN	gender: neuter
рU	person: unspecified	gMF	gender: masculine or
			feminine
nS	number: singular	gMN	gender: masculine or neuter
nP	number: plural	gFN	gender: feminine or neuter
nU	number: unspecified	gMFN	gender: masculine, feminine
			or neuter
tPS	tense: present	gU	gender: unspecified
tPT	tense: preterite		
tU	tense: unspecified	cN	case: nominative
		cG	case: genitive
mIN	mood: indicative	cD	case: dative
mSU	mood: subjunctive	cA	case: accusative
mIP	mood: imperative	cAD	case: accusative or dative
mINSU	mood: indicative or	cGD	case: genitive or dative
	subjunctive	cAN	case: accusative or nominative
mINIM	mood: indicative or	cO	case: oblique
	imperative	cU	case: unspecified
mSUIM	mood: subjunctive or		
	imperative	rP	degree: positive
mU	mood: unspecified	rC	degree: comparative
		rS	degree: superlative
fF	finiteness: finite	rU	degree: unspecified
fI	finiteness: infinitive		
fP	finiteness: participle	sI	definiteness: indefinite
fU	finiteness: unspecified	sD	definiteness: definite
		sU	definiteness: unspecified
vA	voice: active		
vR	voice: reflexive	inY	inflection: yes
vU	voice: unspecified	inN	inflection: no

In ch. 4 below, the morphological annotation schemes in Menotec and PROIEL are compared. For all practical purposes, they are compatible (although using different abbreviations). We believe that it is possible to convert between the two schemes without loss of information.

1.2 Word Classes in Modern Norwegian

Following Norsk referansegrammatikk ['Norwegian Reference Grammar'] (Faarlund, Lie and Vannebo 1997), the Language Council of Norway has established a list of recommended word classes for Modern Norwegian. It may serve as a starting point, also for Old Norwegian and Old Norse in general. This list has ten word classes:

Traditional term	New term	Change
Noun	Noun	None
Verb	Verb	None
Adjective	Adjective	Includes ordinals
Pronoun	Pronoun	Change: Some subgroups of pronouns become <i>determiners</i> , and <i>som</i> becomes a <i>subjunction</i> or <i>preposition</i> .
Article	Determiner	New word class. Includes articles, some pronouns, and cardinals.
Numeral	_	Numerals no longer a special class. Cardinals become <i>determiners</i> , ordinals become <i>adjectives</i> .
Preposition	Preposition	Includes <i>som</i> and <i>enn</i> introducing noun phrases and pronominal phrases.
Adverb	Adverb	None
Interjection	Interjection	None
Conjunction	Conjunction	Change: Subordinating conjunctions become subjunctions.
Infinitive marker	Subjunction	New word class: Includes the infinitive marker and subordinating conjunctions.

This classification may almost without exception be used for Old Norwegian, but we have chosen to differentiate between infinitive markers and subjunctions. In the syntactic analysis, we consider the infinitive marker as an auxiliary word (AUX, in these guidelines) for the infinitive, while a subjunction introduces a dependent clause and has a quite different function. It is therefore problematic to include the infinitive marker among subjunctions.

We do not count *sem* and *en* as prepositions, since they do not govern cases. They are therefore taken to be subjunctions.

1.3 Maximising Homonymy

There is a small number of fairly common words which belong to more than one class of words, notably *at*, which can be a preposition, subjunction, infinitive marker, an adverb,

or even a noun, as in *peir komu at landi* 'they reached land', *hann sá at þeir komu at landi* 'he saw that they reached land', *hann átlaði at fara* 'he intended to leave', *at meir* 'the more' and *Yggs at* 'Odin's fight'. As we will see in ch. 3.1, there are many more words like this.

A certain amount of homonymy is unavoidable in the morphological analysis, but we recommend that, if possible, words are assigned to only one word class. This is the principle of maximising homonymy. For example, we do not wish to differentiate morphologically between adjectives used as adjectives or as adverbs, e.g. *langr vegr* 'a long way' vs. *hann gekk langt* 'he walked far [a long way]'. In the first example, *langr* is an attribute of *vegr*, in the second example it is an adverbial with *gekk*. In both cases we regard *langr* as belonging to the word class adjectives. It will be left to the syntactic annotation to describe the difference between the two types of usage.

Furthermore, we will not differentiate between $s\acute{a}$ as a personal pronoun, (1), and as a demonstrative, (2). We take $p\acute{a}$ (masc. plur. acc of $s\acute{a}$) as a demonstrative in both cases. In the syntactic analysis, $p\acute{a}$ will be an object of a preposition in (1), and a determiner in a noun phrase in (2):

- (1) Ek vil tala við þá.'I wish to speak to them.'
- (2) Um þá daga var þar jafnan úfriðr ok bardagar.'In those days, there were constant hostilities and fighting.'

As we do not give numerals and articles their own class, but mark both as determiners, there is no need to distinguish between *einn* as a numeral, article or quantifier. This is a syntactic distinction, and will be shown in the syntactic analysis. But we will still make a distinction between *einn* as a determiner and as a quantifier (cf. ch. 2.3.4 comment 3).

There are good arguments to be made for distinguishing between pronouns and determiners with respect to some words, e.g. engi, in examples like par var engi 'no one was there' and par var engi maðr 'no man was there'. In the first instance, one can say that engi functions as a noun, in the other as an adjective, and that in the first instance it should be tagged as a pronoun, but as a determiner in the second. Such a distinction is purely syntactic, and can therefore be deduced from this analysis. In the morphological analysis, the distinction will require an extra effort; if it could be done is such a clear manner that each and every annotator would agree on the analysis, a mechanical solution could probably be formulated, e.g. that if engi depends on a noun (here: maðr), it is a determiner, or else a pronoun. Such a solution would not yield much new information, which could in any case be gleaned from the syntactic analysis. We therefore think that it is defensible to take words like engi, hverr, hvárr as belonging to one and only one word class, and we have chosen the determiner class, since these words most often are used like adjectives (unlike pronouns, which never function as adjectives).

The example *bar var engi* has a parallel in the substantival use of adjectives, e.g.:

(3) **Ríkir** báðu hennar.

'Powerful [men] wooed her.'

Here, the adjective *ríkir* has an implicit head (*menn*). Morphologically, we analyse *ríkir* in both *ríkir báðu hennar* and *ríkir menn báðu hennar* identically, namely as an adjective in the masculine plural nominative of the indefinite form, xAJ gM nP cN sI.

1.4 One or More Words? Splitting and Merging Words

The question of word boundaries is an important one both in old and new Norwegian. In Old Norwegian, there is a stronger tendency to split words, if the primary sources are anything to go by. In his edition of the *Old Norwegian Homily Book* in AM 619 4°, Gustav Indrebø (1931) chose to use a hyphen to show split words in the manuscript which he believed should be written as one word. A quick glance at his edition shows how often Indrebø wanted to join words, e.g. *aldre-en* for *eldrinn* 'the fire', *and-lát* for *andlát* 'death', *drotens-degi* for *dróttinsdegi* 'Sunday' etc.

In the texts from the Old Norwegian Dictionary (Gammalnorsk ordboksverk), split words usually have been put in a single word element, e.g. <w lemma="dróttinsdagr"> drotens degi </w>, which means that the annotator does not need to merge many words. Ideally, the decision whether to write words as compound or split should be taken before the text is being annotated.

Complex prepositions are a special problem, e.g. *i móti, á millum*, as well as complex subjunctions, e.g. *þó at, því at, fyrir því at*. Our solution is to give each word its own tag. For the syntactic analysis of each of these, see ch. 8.6 below.

1.5 Syncretism

In Old Norwegian, there is a great deal of syncretism in many word classes, especially in the weak inflections. Take these four nouns for example; the first two are strong, the next two weak:

Nom.	fjǫrðr	land	granni	herra
Acc.	fjǫrð	land	granna	herra
Dat.	firði	landi	granna	herra
Gen.	fjarðar	lands	granna	herra

These nouns have four, three, two and no distinct forms, respectively. There is no doubt that the four different forms of $fj \rho r \delta r$ should each be analysed differently, but what about

the others? Should *land* be tagged as nominative/accusative, or *granna* as accusative/dative/genitive (oblique case)?

When syncretic forms like *granna* and *herra* occur, only the context and our grammatical sensibilities can help us. Does the word agree with another word, perhaps? Does the verb follow a subjunction requiring a specific mood? Does the noun follow a verb (or a preposition) which governs a specific case? In most instances, a fairly plausible analysis is possible and should be used. In other cases, one has to accept that a word form is truly syncretic and that is is not advisable to make a specific analysis.

There are three major categories in which there are examples of syncretism: (1) mood, (2) gender and (3) case. It is not uncommon that a finite form of a verb can be analysed as either indicative or subjunctive, that a noun (and, consequently, an attributive adjective or determiner) may have more than one gender, and that a noun (and attributive words) may be analysed as having more than one case.

The morphological terms in ch. 1.1, can be used to encode these examples of syncretism:

mINSU mood: indicative or subjunctive mINIM mood: indicative or imperative mSUIM mood: subjunctive or imperative

gMF gender: masculine or feminine gMN gender: masculine or neuter gFN gender: feminine or neuter

gMFN gender: masculine, feminine or neuter

cAD case: accusative or dative cGD case: genitive or dative

cAN case: accusative or nominative

cO case: oblique (i.e. accusative, dative or genitive)

The list of syncretic form could in theory have been much longer, but since it is based on the state of Old Norwegian in the classical period in the 13th century, it is relatively short. Even if the list is short, we believe that it cover almost any possible problem of syncretism which one does not want, or is not able, to solve.

In many cases, the syncretistic tags still restrict the number of possible analyses of a word form. With prepositions like \acute{a} and \acute{i} , the genitive form of weak noun like *granni* may be eliminated, even though it is not always certain whether the word is in the accusative or dative. The encoding would thus be cAD rather than cO.

Finally, there are certain cases where no specific term applies for the word in question. Then, one of the following may be used:

pU person: unspecified nU number: unspecified tense: unspecified tU mood: unspecified mU fU finiteness: unspecified voice: unspecified vU gU gender: unspecified cU case: unspecified degree: unspecified rU sUdefiniteness: unspecified

The only category for which there is no unspecified option is *inflection*. A word is either inflected or not inflected, i.e. it is either tagged as **inY** (*inflection*: yes) or **inN** (*inflection*: no). In practice, this category is coupled to the word classes, so that all words in a word class are regarded as being either inflected or not inflected:

Inflected Word Classes

Non-inflected Word Classes

xNC	noun, common	xAP	preposition
xNP	noun, proper	xCC	conjunction
xAJ	adjective	xCS	subjunction
xPE	pronoun, personal	xIM	infinitive marker
xPR	pronoun, reflexive	xIT	interjection
xPQ	pronoun, interrogative		
xPI	pronoun, indefinite		
xDD	determiner, demonstrative		
xDQ	determiner, quantifier		
xDP	determiner, possessive		
xVB	verb		
xAV	adverb, general		
xAQ	adverb, interrogative		

Note that one can use a term to describe a word even when its inflection is defective. For example, it is quite possible to say the proper noun *Óláfr* is singular (nS), even though the word has no plural inflection, or that *dyrr* 'door' is plural (nP), even though is has no singular forms. In both cases, the word should be tagged using the number feature.

The sausage maker had this advice for his son: Never eat sausages. And here is some advice from the annotator: Experience has shown that in almost every single case it is possible to give a specific analysis of Old Norwegian morphology. But there is one syncretism which must simply be suffered in silence: Adjectives and determiners in genitive and dative plural do not need a specified gender. It is true that in *ollum monnum*,

it is clear that *ollum* is a masculine dative plural, but there are so many other instances where adjectives and determiners are not attributes, and the annotator must spend an inordinately long time deciding on the gender, which, by the way, is not shown in the inflection. Leave it be.

1.6 Interpolation of Latin and Other Non-Scandinavian Languages

These guidelines deal with Old Norwegian and are written with Old Norwegian texts in mind, but they might also be of some use for the annotation of Old Icelandic and other Scandinavian or even Germanic languages. The range of word classes and syntactic functions is restricted to what occurs in Old Norwegian and the other Scandinavian languages. For the annotation of classical languages, e.g. Greek and Latin, we refer to the guidelines for the PROIEL project.

When Latin and other non-Scandinavian words occur in the Old Norwegian texts, we think that morphologically, these words should be tagged with the word class *foreign word* (xFW) and their native lemma, but otherwise with no morphological annotation. On the level of syntax, we distinguish between instances where the Latin interpolation is integrated into an Old Norwegian sentence, and where they constitute one or more independent sentences. In the case of integration, the foreign words should be tagged with the syntactic function they have within the sentence. An example of this is (75) in ch. 7.1.2, where the Latin participle *egressus* (from *egredior*) functions as a verb in the sentence, which otherwise is kept in Old Norwegian.

If it is difficult to decide what function non-Scandinavian words have, they may be tagged as VOC. This is because VOC is one of the few functions that are placed directly under a sentence's root, cf. ch. 7.1.3 below. When the foreign interpolation is independent, in one or more sentences, the syntactic annotation should be skipped.

The xml file which the annotation is based on usually has a language tag to mark non-Scandinavian interpolations. In the header (i.e. <teiHeader>) in such files, the languages which occur in the file should be indicated by the element <langUsage> in in

1.7 Orthography for Lemmas

The morphological as well as the syntactic annotation requires that each word is assigned to a lemma in normalised orthography. There is some variation in the orthography of Old Norse (Norwegian and Icelandic), so it is important to make a decision as to the rules for normalisation.

In the Gammalnorsk Ordboksverk (GNO), a normalised orthography for Old Norwegian was developed in the second half of the previous century, documented in a report from 1982, Regler for ekserpering og tekstgjengivelse, normalisering av oppslagsord, klassifisering og ordning av seddelmaterialet. This differs in a few specifics from the rules presently used for Old Norse (i.e. Old Icelandic and Old Norwegian) by Ordbog over det norrøne prosasprog (ONP) in Copenhagen.

In the Menotec project, the goal is that each texts is supplemented with ONP lemmas in addition to the GNO lemmas. Fartein Th. Øverland has prepared a parallel list for lemmas in GNO, in Fritzner's dictionary, and ONP, and this list will be used to supply lemmas with ONP forms. This list contains 48,500 words (including some variant forms of the same lexeme).

For now, the Menotec project will use the GNO orthography for lemmas. This differs from the ONP orthography in four main ways:

- 1. Consonantal i is spelled i, e.g. siá, kveðia (not sjá, kveðja)
- 2. No distinction is made between o and o, e.g. diofull and koma (not diofull vs. koma)
- 3. The diphthong *ey* is spelled *øy*, e.g. *høyra* (not *heyra*)
- 4. The *h* is not written before *l*, *n* or *r*, e.g. *lutr*, *nakki* and *ringr* (not *hlutr*, *hnakki*, *hringr*)

The effect of rules 1, 3 and 4 are illustrated by a single word, úhljóðanseyra n. 'an ear unwilling to hear', which according to GNO-orthography becomes úlióðansøyra.

Finally, note that there is no vowel harmony in the GNO orthography, and that possible final vowels are i, a, u.

2 Word Classes

2.1 Nouns

Nouns are divided into two classes, common nouns and proper nouns. Both types have an inherent *gender*. Proper nouns also have an inherent *number*.

2.1.1 Common Nouns

Common nouns are marked for their word class, xNC (noun common). In addition to this, they should be tagged for gender (gM, gF, gN, gU), which is inherent, number (nS, nP, nU), case (cN, cG, cD, cA, cU), definiteness (sI, sD, sU) and, finally, for the fact that they are inflected (inY). The category definiteness is used to distinguish between definite nouns (sD), e.g. konan er spok 'the woman is wise', and indefinite nouns (sI), e.g. kona bjó þar '(a) woman lived there'. In the dictionaries, common nouns are usually not capitalised.

- This word class is open.
- (4) En dróttningin hverfr í brott reið mjok. 'And the queen turns away very angry.'

COMMENT 1: We count demonyms among common nouns, e.g. *danir* m. pl. 'Danes', *englar* m. pl. 'Englishmen', *svíar* m. pl. 'Swedes'. We use the plural form as the lemma.

COMMENT 2: The words tigr m. 'a ten', hundrað n. 'a (great) hundred' (i.e. 100 or 120) and þúsund f. 'a (great) thousand' (i.e. 1000 or 1200) are nouns. For other numerals, see ch. 2.12 below.

2.1.2 Proper Nouns

Proper nouns are tagged for their **word class**, xNP (*noun proper*). Furthermore, they should be tagged for **gender** (gM, gF, gN, gU), which is inherent, **number** (nS, nP, nU), **case** (cN, cG, cD, cA, cU), **definiteness** (sI, sD, sU) and, finally, for the fact that they are **inflected** (inY). For many proper nouns, some categories are unspecified, and these categories will be tagged 'U' (for unspecified). Proper nouns are usually capitalised in dictionaries.

- (5) Jarnskeggi átti konu þá er **Guðrún** er nefnd. 'Iron-beard had a wife named Gudrun.'
- (6) Nú var enn í Danmorku greifi nokkurr illr ok ofundfullr.
 'There was now in Denmark a certain count, evil and envious.'

2.2 Adjectives

Adjectives are tagged for their word class, xAJ. Furthermore, they should be tagged for degree (rP, rC, rS, rU), gender (gM, gF, gN, gU), number (nS, nP, nU), case (cN, cG, cD, cA, cU), definiteness (sI, sD, sU) and, finally, for the fact that they are inflected (inY). The category definiteness serves to distinguish between an adjective's definite form (sD), e.g. *inn gamli maðr* 'the old man', and its indefinite form (sI), e.g. *gamall maðr* '(an) old man'. Adjectives may functions as attributes or predicatives: *langr vegr* '(a) long way' vs. *vegrinn er langr* 'the way is long'. In either case, the adjective is inflected in agreement with the noun.

- (7) Hann er ríkr maðr, ǫflugr ok ættgóðr.'He is a powerful man, strong and of a good family.'
- (8) Ert þú skyldr at sverja honum hinn sterkasta eið. 'You are obliged to swear a very powerful oath to him.'

COMMENT 1: Adjectives in neuter singular can also be used adverbially: *hann gekk langt* 'he walked far'. In forms like *langt*, there is a syncretism between neuter singular nominative and accusative. We analyse the form *langt* as an adjective in accusative and annotate is as xAJ gN nS cA. Adverbial use of adjectives will be evident from the syntactic analysis.

COMMENT 2: Adverbial adjectives also appear in other cases or genders, e.g. dative plural (9) or masculine accusative singular (10):

- (9) Hann gekk fyrir of daginn ok steig heldr stórum [stigum]. 'He walked during the day and took rather great [strides].'
- (10) Þótt róa kynni krǫfturligan.'Although [he] could row mightily.'

COMMENT 3: Traditionally, numerals have had their own word class, divided into cardinals and ordinals. Based on the fact that cardinals have the same syntactic function as

determiners, we count them as such, e.g. *tveir* 'two' in (11). See also the syntactic analysis of this sentence in ch. 10.3 below.

(11) Meðan þessir **tveir** viðir búa báðir saman, þá lifa ok bera lauf sitt. 'While these two trees are together, [then] they survive and bloom.'

The word *einn* 'one' will be classified as a determiner on par with *tveir*, *þrír*, *fjórir*, etc. However, in some cases it functions as an adjective in the meaning 'alone', and we then classify it as an adjective:

(12) Hví ertu **einn** kominn í Jǫtunheima? 'Why have you come alone to Jotunheim?'

Ordinals in general are classified as adjectives, in line with the classification in ch. 1.2 above. However, due to their syntactic and semantic properties, the words *fyrstr/fyrsti* and *annarr* are analysed as determiners; cf. the examples in ch. 2.4.2 below. In other words, only ordinals from *þriði* 'third' and upwards are counted as adjectives.

COMMENT 4: Where adjectives are compared irregularly, e.g. $g\delta dr - betri - beztr$, we follow $Ordbog\ over\ det\ norrøne\ prosasprog\ in\ treating\ g\delta dr\ as\ one\ lemma\ and\ betri\ as\ another one (with beztr\ as\ its\ superlative).$ This applies for the following:

Lemma 1 (positive)	Lemma 2 (comparative and superlative)		
gamall	ellri	(elztr)	
góðr	betri	(beztr)	
illr	verri	(verstr)	
lítill	minni	(minnstr)	
margr	fleiri	(flestr)	
mikill	meiri	(mestr)	

COMMENT 5: Some adjectives are non-inflecting, ending in either -a or -i in all forms. Even so, they should be tagged for degree, gender, number, case, definiteness and also inflection. The feature 'U' for *unspecified* should be used wherever necessary, apart from in the category inflection, since adjectives in general are inflected and thus should be tagged 'inY' for the category inflection (cf. p. 19 above). Ch. 17 below has an exhaustive list of non-inflecting adjectives in *Ordbog over det norrøne prosasprog*.

2.3 Pronouns

Pronouns are words that replace or are equivalent to noun phrases, i.e. they function *pro nomen*. They are characterised in Old Norwegian by a special inflection, unlike other word classes. In older grammars, the class of pronouns is larger than we define it here, since it also includes determiners.

2.3.1 Personal Pronouns

Personal pronouns are tagged for their **word class**, xPE. Furthermore, they should be tagged for **case** (cN, cG, cD, cA, cU) and for the fact that they are **inflected** (inY). We do not think that it is necessary to mark them for **person** (p1, p2, p3, pU), **gender** (gM, gF, gN, gU) and **number** (nS, nP, nU). The pronoun $b\acute{u}$ is not 2. person of ek, and $b\acute{e}r$ is not the plural of $b\acute{u}$. A personal pronoun has only four forms, namely the case forms, e.g. ek, $m\acute{n}$, $m\acute{e}r$, mik.

- This word class is closed and includes *ek*, *vit*, *vér*, *þú*, *þit*, *þér*, *hann* and *hon*.
- (13) Unnasti, kvað **hon**, **ek** veit at vísu at ei getr **þú** borit **mik**. 'Lover, she said, I know for sure that you cannot carry me.'
- (14) **Vit** kváðum nei við djǫflinum ok við ǫllum hans verkum. 'We said no to the devil and all his works.'
- (15) **Hann** var mjǫk ástbundinn af **henni**, ok **hon** af **honum**. 'He was very much in love with her, and she with him.'

COMMENT 1: The determiners *þat, þeir, þár, þau* (from *sá*) may function as personal pronouns in 3. person singular and plural, but as argued in ch. 1.3 above, we will classify them as determiners in all cases; cf. ch. 2.4.1 below.

2.3.2 Reflexive Pronouns

Reflexive pronouns are tagged for their **word class**, xPR. Furthermore, they should be tagged for **case** (cN, cG, cD, cA, cU) and for the fact that they are **inflected** (inY).

- This word class is closed and only includes *sik* (no nominative form).
- (16) En margir létu illa yfir því er hann gerði hana sér svá kæra.'But many expressed disapproval when he made her so dear to himself.'

Whether Old Norwegian has a separate reciprocal pronoun, or whether the phrase *hvárr* – *annarr* should simply be considered a pair of determiners is up for debate. We have gone for the second option, cf. ch. 2.4.2.

2.3.3 Interrogative Pronouns

Interrogative pronouns are tagged for their **word class**, xPQ. Furthermore, they should be tagged for **gender** (gM, gF, gN, gU), **number** (nS, nP, nU), **case** (cN, cG, cD, cA, cU) and for the fact that they are **inflected** (inY).

This word class is closed and includes *hvat*, *hveim* and *hvílíkr*.

(17) **Hvat** skal ek nú gera? 'What shall I do now?'

COMMENT 1: We take the word *hví* (actually a neuter singular dative of *hvat*) as an interrogative adverb (cf. ch. 2.6.2):

(18) Hví er frú mín svá árla upp staðin? 'Why has my wife gotten up so early?'

COMMENT 2: While the word *hveim* is actually a masculine singular dative of *hvat*, it may be considered to be a lexicalised interrogative pronoun. Consequently, *hvat* and *hveim* each has its respective lemma.

COMMENT 3: We include the words *hvárr* and *hverr* among determiners, even if they sometimes function like pronouns. Cf. ch. 2.4.2 comment 8.

COMMENT 4: The word *hvílíkr* could have been tagged as a determiner in some cases:

(19) Ok sagði henni **hvílíkan** harm riddarinn hafði af ást hennar. 'And told her how much sorrow the knight suffered because of her love.'

We have nevertheless chosen to always analyse it as an interrogative pronoun.

2.3.4 Indefinite Pronouns

Indefinite pronouns are tagged for their **word class**, xPI. Furthermore, they should be tagged for **gender** (gM, gF, gN, gU), **number** (nS, nP, nU), **case** (cN, cG, cD, cA, cU) and for the fact that they are **inflected** (inY).

- This class is closed and includes báðir, hvatki, hvatvetna/hvetvetna and manngi.
- (20) Ek ann Yðr, frú, yfir hvatvitna.'I love you, lady, more than anything.'

Comment 1: The word $b\acute{a}\emph{d}ir$ occurs most often as a pronoun, i.e. it is not an attribute, nor is there an implicit parent word above it. An example of this would be:

(21) Um síðir luku þau bæði lífi sínu. 'Eventually they both lost their lives.'

Less commonly, *báðir* functions as an attribute, as in:

(22) Þá lagði hann báða fétr í kné konungsins. 'Then, he put both feet in the king's lap.' Here, it should be taken as a determiner. For these reasons, we think that $b\acute{a}$ $\eth ir$ may be tagged as either a pronoun or determiner, depending on its function.

COMMENT 2: In our Old Norwegian corpus, there are examples of *hvatvetna/hvetvetna*, but so far we have not come across an example of *manngi*.

COMMENT 3: The word *einn* will be classified as a determiner (quantifier), whether it is in the singular, (23) or plural, (24):

- (23) Því næst hljóp fram kottr **einn** grár. 'Next, a grey cat sprang forth.'
- (24) Þessa leið fara þeir einir er kunnigstir eru um Fljótsdalsheiði.'Only those who know their way around Fljótsdalr-heath, go this way.'

In the latter example above, we posit an implicit head, *einir menn*. For an example of *einn* classified as an adjective, see ch. 2.2 comment 3 above.

2.4 Determiners

Determiners are usually words that serve as attributes, and in Old Norwegian they are characterised by inflecting like adjectives. Older grammars classify them as pronouns, but they differ from pronouns both morphologically and syntactically. Determiners can also occur without a parent, e.g. (25), where the word *menn* is implicit:

(25) Einir trúðu at hamingjan myndi fagnað ok fremd veita.'Some believed that happiness would give joy and honour.'

2.4.1 Demonstratives

Demonstratives are tagged for their **word class**, xDD. Furthermore, they should be tagged for **gender** (gM, gF, gN, gU), **number** (nS, nP, nU), **case** (cN, cG, cD, cA, cU) and for the fact that they are **inflected** (inY).

- This word class is closed and includes hinn/inn/enn, sá and sjá/þessi.
- (26) Þá bera þeir, sem hinn vildasti viðr, lauf ok blóm.'Then they bear, as the best of trees, leaves and flowers.'
- (27) Var **þetta** dýr hverjum manni kært er í hirð konungsins var. 'This animal was dear to every man at the king's court.'

COMMENT 1: The determiners *þat, þeir, þár, þau* (from *sá*) may occur both as personal pronouns, (1), and as demonstratives, (2):

- (1) Ek vil tala við þá.'I wish to speak to them.'
- (2) Um þá daga var þar jafnan úfriðr ok bardagar.'In those days, there constantly were hostilities and fighting.'

As argued in ch. 1.3 above, we have chosen to classify these words as demonstratives in all cases, to avoid having to divide them into two classes by their use. See also ch. 2.3.1 above.

COMMENT 2: The form *hinn* may be used as a lemma for *hinn*, *inn* and *enn*, so that *inn* may be reserved for the adverb *inn* 'in' and *enn* for the adverb *enn* 'still'. This has been done at the Old Norwegian Dictionary (*Gammalnorsk Ordboksverk*).

COMMENT 3: The words slíkr and bvílíkr will be classified as adjectives.

2.4.2 Quantifiers

Quantifiers are tagged for their word class, xDQ. Furthermore, they should be tagged for gender (gM, gF, gN, gU), number (nS, nP, nU), case (cN, cG, cD, cA, cU) and for the fact that they are inflected (inY).

This word class is closed and includes allr, annarr, annarrtveggi, annarrtveggia, báðir, einn, einnhverr, engi, fyrstr/fyrsti, hvárgi, hvárr, hvárrtveggi, hvárrtveggia, hvergi, hverr, nokkurr, samr and sumr.

It also includes the cardinals: einn, tveir, þrír, fjórir, fimm, sex, sjau, átta, níu, tíu, etc.

(28) Ok rann hjarta hans allt ór honum.'And his heart left him completely.'

COMMENT 1: As mentioned in ch. 2.2, it has been customary to give numerals their own word class, divided into cardinals and ordinals. Based on the fact that cardinals have the same syntactic function as other quantifiers, we have included them in that group. Ordinals are included with adjectives, also based on their syntactic properties. Actually, this only applies to pridi 'third' and higher numbers, since we analyse *fyrstr* and *annarr* as determiners.

COMMENT 2: The word *fyrstr* is in most cases a typical determiner, e.g.:

(29) Ek réð þér þat hitt fyrsta ráð. 'I gave you that first piece of advice.'

In the Old Norwegian texts, it occurs almost without exception in definite form (inflected weakly), as in this example. In some instances, it occurs as a free predicative and in the indefinite form, e.g.:

(30) Óláfr konungr lagði undir sik **fyrstr** konunga Noreg allan. 'King Olaf conquered the whole of Norway first of all kings.'

In these cases, too, we will analyse *fyrstr* it as a determiner.

COMMENT 3: The word *annarr* has often been classified as both pronoun and determiner. In (31) it functions as a determiner and the meaning is 'other':

(31) Horpum, gígjum, simphanum, organum, timpanum, salterium ok korum ok allskonar **oðrum** strengleikum.

'Harps, fiddles, hurdy-gurdies, lyres, dulcimers, psalteries and rotes and all kinds

In (32) the first *oðrum* is a determiner, while the latter looks like a pronoun:

(32) Allskonar **oðrum** strengleikum er menn gera sér ok **oðrum** til skemtanar. 'All kinds of other lays which men perform for their own amusement as well as that of others.'

Here, it makes sense to posit an implicit parent word, $q \partial rum$ [monnum], so that this $o \partial rum$, too, is a determiner.

In the preceding examples, *annarr* has the meaning 'other', not 'second'. However, in some instances it clearly has numeric content:

(33) Mælti hon **ǫðru** sinni til hans. 'She spoke to him a second time.'

of other stringed instruments.'

Note especially the use of *annarr* in the phrase 'one – the other':

(34) Þá sá hann mýss tvær, **aðra** hvíta en **aðra** svarta. 'Then he saw two mice, one white and the other black.'

For our purposes, the important feature of *annarr* is that it functions as a determiner, and since we prefer to maximise homonymy (cf. ch. 1.3 above), it makes sense to classify *annarr* as a determiner in all cases.

COMMENT 4: The word *allr* is in most dictionaries classified as an adjective, but we will analyse it as a quantifier, in line with the analysis of *einn*, *nokkurr* and *sumr*, e.g.:

(35) Síðan skildisk hann við konung ok **allt** hirðlið hans. 'Then, he left the king and all of the king's troops.'

Here and elsewhere, *allr* expresses scope and functions as an attribute like other determiners.

COMMENT 5: As mentioned before, the word $b\acute{a}\emph{\partial}ir$ may either be tagged as a pronoun or a determiner (see example in ch. 2.3.4 comment 1).

COMMENT 6: The word *einn* is a typical determiner, e.g.:

(36) Í hǫfninni sá hann eitt skip.'In the harbour he saw a ship.'

It will sometimes be understood as an article, e.g.:

(23) Því næst hljóp fram kottr **einn** grár. 'Next, a grey cat sprang forth.'

Since we do not have a separate class for articles, we consider it a quantifier also in such cases. As noted in ch. 2.2 comment 3, *einn* is considered an adjective when it means 'alone'.

COMMENT 7: The word *einnhverr* has, like *annarr*, been taken as either a pronoun or determiner, but in the Old Norwegian texts, it seems like the latter usage is more common. A typical example would be:

(37) **Einnhvern** dag var þat er Óláfr var á land genginn með liði sínu. 'It happened one day, that Olaf had gone ashore with his men.'

There is no doubt that *einhvern* is subordinate, i.e. a determiner, under *dag*. In (38), *einhverr* functions like a pronoun, but in line with the analysis of *annarr*, for example, we suppose there to be an implicit parent word ($ma\delta r$) here:

(38) Pá leggi **einnhverr** họnd sína í munn mér at veði at þetta sé falslaust gert. 'Let someone then lay his hand in my mouth as a surety that this be done without fraud.'

Therefore, einnhverr will always be tagged as a determiner.

COMMENT 8: The words *engi*, *hvárr*, *hverr*, *nǫkkurr* and *sumr* will also be classified as determiners, as for example in:

(27) Var þetta dýr **hverjum** manni kært er í hirð konungsins var. 'This animal was dear to every man at the king's court.'

There are also examples of these words occurring in the same places as pronouns, e.g.:

(39) Kaus **hverr** sér félaga. 'Each one chose a companion.'

Here, it makes sense to posit an implicit parent word, *hverr* [*maðr*]. We have chosen to gather all instances of *engi*, *hvárr*, *hverr*, *nǫkkurr* and *sumr* together in the same word

class, i.e. as determiners. However, *ekki*, the neuter form of *engi* will sometimes be classified as an adverb, like *eigi* (cf. ch. 2.6.1 comment 1).

COMMENT 9: We understand the word *tváru* to be a compound of the preposition *at* and the determiner *hvárr*, in the dative singular neuter form *hváru*, governed by the preposition.

(40) Minnti hann **at hváru** á með orðum ok mælti svá. 'He reminded both with words and spoke thus.'

In the manuscript of the *Old Norwegian Homily Book*, it is spelled as one word, *atvaro*. We have split this form into *at* and *varo*, and tagged the two as the words *at* and *hvárr*, respectively.

COMMENT 10: The word *hvergi* may some cases be a determiner, e.g. *hvergi* góðr maðr 'every good man', but most often it is an adverb:

(41) Þá var hann hvergi sénn þar í fylkinu.'Then he was nowhere to be seen in the district.'

This is one of the words that have to be disambiguated.

COMMENT 11: The words *margr* and *jafnmargr* will be classified as adjectives, even though there are good reasons to see them as quantifiers. But it may be stressed that *margr* does in fact compare (albeit irregularly), *margr* – *fleiri* – *flestr*, like an adjective.

COMMENT 12: The word *samr* is sometimes used as a quantifer, but most frequently as an adjective. An example of the latter would be *verða samir á* 'reach agreement about'.

2.4.3 Possessives

Possessives are tagged for their **word class**, xDP. Furthermore, they should be tagged for **gender** (gM, gF, gN, gU), **number** (nS, nP, nU), **case** (cN, cG, cD, cA, cU) and for the fact that they are **inflected** (inY).

- This word class is closed and includes *minn*, *þinn*, *sinn*, *okkarr*, *ykkarr*, *yðvarr* and *várr*.
- (42) Hann hugðisk þá at reyna afl sitt.'He then wanted to test his strength.'

2.5 Verbs

Verbs have either a finite or an infinite form. In Old Norwegian, a finite verb is the only obligatory part of a sentence, viz. *rignir* 'it rains'. Infinite verbs either complement finite verbs or function in the same way as adjectives (as predicatives or attributes).

2.5.1 Finite Verbs

Finite verbs are tagged for their word class, xVB. In addition to this, they should be tagged for finiteness (fF), tense (tPS, tPT, tU), mood (mIN, mSU, mIP, mU), person (p1, p2, p3, pU), number (nS, nP, nU), voice (vA, vR, vU) and, finally, for the fact that they are inflected (inY). It is also possible to tag them for inflectional class (iST, iWK, iRD, iPP, iU), but this is not done in the PROIEL scheme and we recommend that it is only being done for disambiguation (cf. ch. 3.2 below).

- This word class is open.
- (43) Þessir er sá dagr er guð gerði.'This is the day that God made.'

2.5.2 Infinite Verbs

Infinite verbs are tagged for their word class, xVB. This group comprises infinitives and participles (present or preterite [= perfect]). *Infinitives* should be tagged for finiteness (fI), tense (tPS, tPT, tU), voice (vA, vR, vU) and for the fact that they are inflected (inY). *Participles* should be tagged for finiteness (fP), tense (tPS, tPT, tU), voice (vA, vR, vU), gender (gM, gF, gN, gU), number (nS, nP, nU), case (cN, cG, cD, cA, cU), and for the fact that they are inflected (inY).

This word class, too, is open. In includes infinitives (e.g. *hann mun koma* 'he will come'), participles (e.g. *hann er kominn* 'he has come') and supines (e.g. *hann hefir komit* 'he has come').

Morphologically, supines are annotated as perfect participles in accusative, singular, neuter.

2.6 Adverbs

Adverbs may be divided into two groups with regard to syntax. The majority are internal to sentences and function as adverbials within a sentence, i.e. as qualifiers to verbs or as attributes to adjectives or other adverbs. A smaller group, the interrogative adverbs, stand out by making the sentence interrogative.

2.6.1 Adverbs (general)

General adverbs are tagged for their **word class**, xAV. Furthermore, they are tagged for **degree** (rP, rC, rS, rU) and for the fact that they may be **inflected** (inY). Some adverbs compare, e.g. oft 'often' (oftar, oftast), while others do not, e.g. ekki 'no(-thing)', eigi 'not', hér 'here', nú 'now', þaðan 'thence', þegar 'at once'. As with non-inflecting adjectives, all adverbs are tagged as inflecting, even if some do not compare (cf. ch. 2.2 comment 5). Ch. 17.3 below has a list of the most common non-comparing adverbs.

- This word class is open (new adverbs may be produced with the suffix -liga).
- (44) Hann svaf ok hraut **sterkliga**. 'He slept and snored loudly.'

In the case of irregular (suppletive) adverbs e.g. vel - betr - bezt, we follow $Ordbog\ over$ $det\ norrøne\ prosasprog\ in\ counting\ vel\ as\ one\ lemma\ and\ betr\ as\ another\ (with\ the\ superlative\ form\ bezt)$. This applies to the following:

Lemma 1 (positive)	Lemma 2 (comparative and superlative)		
gjarna	heldr	(helzt)	
illa	verr	(verst)	
lítt	minnr	(minnst)	
mjǫk	meirr	(mest)	
vel	betr	(bezt)	

COMMENT 1: We take *ei*, *eigi* and *ekki* as (negative) adverbs, e.g.

(13) Unnasti, kvað hon, ek veit at vísu at **ei** getr þú borit mik. 'Lover, she said, I know for sure that you cannot carry me.'

The word ei can also have the meaning 'always' (= \acute{a}). The word ekki, which is a neuter form of engi, can also be a pronoun: $s\acute{a}$ hann ekki til konungs 'he could see nothing of the king'. Cf. ch. 2.4.2 comment 8 above.

2.6.2 Interrogative Adverbs

Interrogative adverbs are tagged for their **word class** xAQ. Unlike general adverbs, they are not inflected for **degree**, and since they are not inflected for any other category, they will be tagged as non-inflecting, inN.

This word class is closed and include *hvar*, *hvárt*, *hvert*, *hvaðan*, *hversu*, *hvé/hve*, *hví* and *hvernig*.

Interrogative adverbs appear both in main clauses, (12), and in indirect questions (i.e. in subordinate caluses), (45):

- (12) Hví ertu einn kominn í Jotunheima? 'Why have you come alone to Jotunheim?'
- (45) Kynligt þykkir mér, kvað hann, hví þú leitar ei rannsaks um slíkt.
 'It seems strange to me, he said, why you do not seek an investigation into such things.'

2.7 Prepositions

Prepositions are tagged for their **word class**, xAP (adpositions), and for the fact that they have no **inflection**, inN. First of all, we have the simple prepositions.

- This word class is closed and includes á, af, austan, frá, handa, hjá, í, innan, jafngegnt, milli, millum, með, mót, móti, norðan, nár, of, ór, sunnan, til, um, umhverfis, umhverfum, undir, útan, vegna, vestan, við and yfir (we take meðr as a variant of með, and viðr as a variant of við).
- (46) Mjok **nær** fjallinu lét einn konungr gera mikla borg. 'Very close to the mountain, a king had a great city built.'

A number of these prepositions can also be adverbs: *norðan, austan, sunnan, vestan, innan, útan* and *jafngegnt*, as shown in ch. 3.1 below. *Norrøn ordbok* has *jafngengnt* only as an adverb, but (47) indicates that it may also be considered a preposition:

(47) Þá mælti konungrinn at hann skyldi yrkja um þat er skrifat var á tjaldinu **jafn- gengt** honum.

'Then the king said that he should write a poem about what was on the tapestry in front of him.'

In addition to the simple prepositions, there are two types of complex prepositions:

(a) Both elements are prepositions, e.g. i $hj\acute{a}$, or the first element is a preposition and the second a vestigial form of a noun, e.g. i $m\acute{o}ti$ from $m\acute{o}t$ n. 'a meeting'. Based on the syntactic analysis, we will annotate these nouns as prepositions also. This means that some inflectional forms of nouns are lexicalised as prepositions. The original nouns are $m\acute{o}t$ n. 'a meeting', bak n. 'back', hond f. 'hand' and sok f. 'sake'.

á bak	á móti	í meðal
á hendr	á samt	í milli
á họnd	af hendi	í millum
á meðal	at baki	í mót
á milli	í gegn	í móti
á millum	í gegnum	fyrir sakir
á mót	í hjá	til handa

(b) The first element is a preposition, the second an adverb. In this type, we consider the second element an adverb even if it is part of a complex preposition; cf. the syntactic analysis in (130) in ch. 8.6.2 below. This type includes a group of adverbs ending in -an and also fram:

fyrir austan fyrir innan um fram

fyrir norðan fyrir útan

fyrir sunnan fyrir vestan

The words ending in -an are usually adverbs, but they can also function as prepositions when standing alone, as in (48):

(48) Nú var Desiré tíu vetr **útan** lands, svá at hann fór ekki heim þess á millum. 'Now, Desiré was abroad for ten winters, so that he did not return in the meantime.'

Here, these words must be classified as prepositions; cf. the list of homonyms in ch. 3.1 below.

COMMENT 1: According to *The Menota Handbook* (v. 2.0) ch. 8.5.10, prepositions may be tagged as xVP when in absolute use or as a qualifier to the verb (i.e. when they function as verbal particles). This, however, is a syntactic analysis, and does not need to be a part of the morphological annotation. Therefore, we tag them as normal prepositions.

COMMENT 2: According to *The Menota Handbook* (v. 2.0) ch. 8.5.10, the expletive particles of and um (in Eddic poetry) may be tagged as xEX, but there is no real reason to mark this use specifically. Were one to do that, the annotator should simply tag all absolute prepositions (i.e. when they have no object) as xVP, but this would require a great deal of disambiguation. So, in the morphological annotation, the expletive particles are prepositions, but in the syntactic analysis, they will be tagged as AUX (cf. ch. 7.2.1 d below). Note that of and um are also regular prepositions.

COMMENT 3: In the phrases $um\ sid\$ and $um\ sidir\$ 'eventually', we mark $um\$ as a preposition, and $sid\ (ir)$ as inflectional forms of the noun $sid\$ f. 'later time'. Together, they form a preposition phrase similar to $i\ dag\$ 'today', $um\ morguninn\$ 'that morning', while combinations like $til\ handa\$ may, like prepositions, govern cases, as in $til\ handa\$ Knúti $konungi\$ (DG 8 II, ch. 22), and are consequently analysed as complex prepositions.

2.8 Conjunctions

Conjunctions are tagged for their **word class**, xCC, and for the fact that they have no **inflection**, inN. Conjunctions join words or phrases on the same syntactic level.

- This word class is closed and includes the simple conjunctions *eða*, *elligar*, *en*, *enda*, *heldr*, *né* and *ok* (note that some of these can also be members of other word classes, ch. 3.1 below).
- (44) Hann svaf ok hraut sterkliga. 'He slept and snored loudly.'

Furthermore, there is a number of conjunctions which occur in pairs: $b\acute{a}\acute{b}i - ok$, $hv\acute{a}rki - n\acute{e}$, $annathv\acute{a}rt - e\~{d}a$, $annathv\acute{a}rt - e\~{d}a$, $hv\acute{a}rki - e\~{d}a$, $hv\acute{a}rki - ok$ (the last two pairs are rare). Norrøn ordbok lists $annathv\acute{a}rt$ as one lemma, written as two words, i.e. $annarrhv\acute{a}rr$, probably because both elements inflect. But this is also true of words like einnhverr and $hv\acute{a}rrtveggi$, except they are written apart. We therefore propose that $annathv\acute{a}rt$ be the lemma.

In addition to the simple conjunctions, there are also some that may stand alone, or as members of pairs: *annathvárt*, *annattveggja*, *báði*, *hvárki* and *hvárt*.

COMMENT 1: The words $b\acute{a}\acute{b}i$ and $hv\acute{a}rt$ will be classified as conjunctions when paired with ok or $e\~{d}a$. They must therefore be distinguished from the determiners $b\acute{a}\~{d}ir$ and $hv\acute{a}rr$ and the adverb $hv\acute{a}rt$:

(49) Ok hverr sem einn várra manna hefir oftsamliga sét þat ok gengit nær því, **bæði** nætr **ok** daga.

'And each one of our men has often seen it [the animal] and approached it, both by night and day.'

The syntactic analysis of (49) is shown in ch. 9.3 below.

COMMENT 2: The word *né* can be either a conjunction or a subjunction. Here it is a conjunction:

(50) Aldri skalt þú fá svívirðing né hróp né hatr af henni.
'You shall never receive disgrace nor shouts nor hatred from her.'

2.9 Subjunctions

Subjunctions are tagged for their **word class**, xCS, and for the fact that they have no **inflection**, inN. Subjunctions introduce dependent clauses and function as their head words. The relative particle *er* (and *sem*) belongs here. Note that the infinitive marker *at*

has its own word class, since it has a different syntactic function than the subjunctions (cf. ch. 2.10 below).

- This word class is closed and includes the simple subjunctions at, áðr, ef, en, er, meðan, né, nema, ok, sem, síðan, svá, svát, þegar, þegars, þó, þótt, því, þvít and unz (note that most of these can also belong to other word classes, cf. ch. 3.1 below).
- (51) Hon sagði at Baldr hafði þar riðit.'She said that Balder had ridden there.'

Four of the above are actually complex subjunctions, written as a single word, namely $sv\acute{a}t = sv\acute{a}$ at, pegars = pegar er, $p\acute{o}tt = p\acute{o}$ at and $pv\acute{t}t = pv\acute{t}$ at. We treat them in the same way as the simple subjunctions.

Then, there are a number of complex subjunctions (although, as mentioned above, we only analyse the last element as a subjunction): fyrir því, fyrir því at, hvárt sem, sakir þess at, svá at, þá er, þá sem, þegar at, þegar er, þegar sem, þó at and því at.

Sometimes, the last element, at or er, is missing, in which case the preceding word must be analysed as a subjunction. In (52), this applies to svá, which may be interpreted as a reduced form of svá at. Since at is absent, svá becomes the subjunction.

(52) Svá hvárki viðr komi knífr né sox.'So that neither a knife or shears are used.'

This often happens with *þegar*, which is why it is listed as both an adverb and a subjunction in ch. 3.1 below, in the same way as $sv\acute{a}$.

COMMENT 1: According to *The Menota handbook* (v. 2.0) ch. 8.5.14, the relative particle may optionally be tagged as xRP, but there is no good reason to separate the relative particle from the other subjunctions. Latin (and a number of other languages) has a relative pronoun, *quis*, which inflects, but the Old Norwegian relative particle is non-inflecting, and should therefore not be considered a pronoun.

COMMENT 2: In Southern Norwegian manuscripts, *en* sometimes occurs as a subjunction (relative particle), and in a few cases, *er* is used in the same way as the conjunction *en* (Knudsen 1952: 15).

COMMENT 3: In AM 619 4° (the *Old Norwegian Homily Book*), an often occurs as a comparative subjunction, alongside *en* (Knudsen 1952: 17).

2.10 The Infinitive Marker

The **infinitive marker** *at* 'to' is tagged for its **word class**, xIT, and for the fact that it has no **inflection**, inN. As mentioned above, the infinitive marker has a different syntactic function from the subjunctions: It is an auxiliary word with the infinitive, while a subjunction is the head of a dependent clause. For this reason, we regard it as belonging to a word class of its own.

2.11 Interjections

Interjections are tagged for their **word class**, xIT, and for the fact that they have no **inflection**, inN.

This word class is closed and small. Examples: *óhó! vei!*

Among the interjections, we also include the affirmative and negative words *já* 'yes', *nei* 'no' and *jaur* 'yes', even though *Norrøn ordbok* considers them to be adverbs.

In some cases já and nei can function as non-inflecting nouns. For example:

(53) En sá kveðr **nei** við hann. 'But he says no to him.'

Norrøn ordbok seems to take $j\acute{a}$ and nei as adverbs in such cases, but we have chosen to interpret them as nouns.

2.12 Numerals

Many grammars have a special word class for numerals, divided into cardinals and ordinals. As mentioned in chs. 2.2 and 2.4 above, we include cardinals among determiners and ordinals among adjectives. In addition, there are a few numeral nouns, namely *tigr* m. 'a ten', *hundrað* n. 'a hundred' and *þúsund* f. 'a thousand', cf. ch. 2.1.1 above.

Note that numbers higher than 20 are complex and the separate parts will belong to different word classes. One example is the cardinal *fjórir tigir* 'forty', in which *fjórir* 'four' is a determiner and *tigir* is a noun (from *tigr* m. 'a ten'). Numerals like these may also be

modified, as in (54) below. In this example, the adjective *halfr* (in dative singular, *holfum*) indicates the half of the fourth decade, i.e. three tens + half of the fourth, or 30 + 5 = 35.

(54) En þá er þeir váru albúnir ór hǫfninni, þá fóru þeir norðan fyrir Þrjótshverfi hǫlfum fjórða tig skipa.

'But when they were ready to leave the harbour, they went north around Thrjotshverfi on thirty-five ships.'

When Roman numerals occur in the text, we use Arabic numerals as lemmas. Thus, "2" is the lemma for ".ij" in the text, "100" for ".c." (unless there is reason to assume that it is a "great hundred" = "120"). These numerals are annotated as belonging to an *unassigned word class*, xUA, and as being *non-inflecting*, inN.

We only use Old Norwegian lemmas when actual words are used in the texts. Thus, "tveir" is the lemma for "tvá" and "tveim" etc., "þrír" for "þrír" and "þrimr" etc. Inflecting numerals receive a complete morphological annotation.

3 Homonymy

When forms of two or more words are identical, it is called homonymy. It may take the form of homography, i.e. forms with identical written forms (*mála* 'say, speak' vs. *mála* 'measure'), or homophony, i.e. when forms sound alike (like *gått* vs. *godt* in many modern Norwegian dialects). The forms listed below are strictly speaking examples of homography, but we use the blanket term nevertheless.

We want to avoid homonymy whenever possible, but since in many cases it is difficult to draw the line, we have used *Norrøn ordbok* (5th ed. 2008) as a reference.

3.1 Homonyms from Different Word Classes

A number of words are homonyms, but can be disambiguated because they are of a different word class, or, in the case of nouns, have different genders. Here, the word class or gender is sufficient to tell them apart. In the table below, we use the following abbreviations for word classes: adj. = adjective, adv. = adverb, conj. = conjunction, prep. = preposition, pron. = pronoun and subj. = subjunction.

word	class 1	class 2	class 3	class 4	class 5
á	noun f. 'river'	prep. 'on'			
áðr	adv. 'before'	subj. 'before'			
ár	noun f. 'oar'	noun n. 'year' or 'beginning' cf. <i>ár</i> I and <i>ár</i> II	adv. 'early'		
armr	noun m. 'arm'	adj. 'wretched'			
at	prep. 'at'	subj. 'that'	adv. 'at' (e.g. in at eins)	infinitive marker	noun n. 'fight'
austan	adv. 'from the east'	prep. 'east of'			
austr	noun n. 'east'	noun m. 'baling'	adv. 'towards the east'		

báðir	demonstrative 'both'	indef. pron. 'both'	conj. in báði – ok		
bak	noun n. 'back'	prep. 'behind'	adv. 'behind'		
beit	noun f. 'pasture'	noun n. 'ship'			
beita	noun f. 'bait'	verb 'handle'			
brenna	noun f. 'pyre'	verb 'burn' cf. brenna I and brenna II			
dauðr	noun m. 'death'	adj. 'dead'			
ei	adv. 'always'	adv. 'not'			
einn	quantifier 'one'	adj. 'the only'			
eins	adv. 'only'	gen. sing. masc./neut. of einn			
ekki	adv. 'not'	pron. 'none, nothing'	quantifier (neut. sing. of <i>engi</i>)	noun m. 'sobbing'	
elligar	adv. 'else'	conj. 'or'			
en	conj. 'but'	subj. 'than'			
enda	verb 'end'	conj. 'since'			
engi	quantifier 'no one'	noun n. 'meadow'			
fasta	noun f. 'fast'	verb 'fast'	adv. 'im- movably'		
festa	verb 'fasten'	noun f. 'resolve'			
fjara	noun f. 'beach'	verb 'ebb'			
fóstra	verb 'foster'	noun f. 'foster mother'			
frýja	verb 'taunt'	noun f. 'reproach'			
fyrri	adj. 'first'	adv. 'before'	(see also fyrr adv.)		
ganga	verb 'go, walk'	noun f. 'walking, course'			

gegn	prep. 'against'	adj. 'honest, fit'		
gerr	adv. 'more fully'	adj. cf. gerr I 'ready' and gerr II 'willing'		
gígja	noun f. 'fiddle'	verb 'play the fiddle'		
gildra	noun f. 'trap'	verb 'set a trap'		
gramr	adj. 'angry'	noun m. 'king'		
hagr	adj. 'skilful'	noun m. 'state'		
hamla	noun 'thong' and <i>hamla</i> f. II 'stick, cane'	verb cf. hamla I 'pull backwards' and hamla II 'maim'		
hár	adj. 'high, tall'	noun n. 'hair'	noun m. 'thole'	
harpa	noun f. 'harp'	verb 'play the harp'		
háttr	noun m. 'manner'	adj. 'dangerous'		
heiðr	noun f. 'heath'	noun m. cf. heiðr m. I 'honour' and heiðr m. II 'shield name'	adj. 'clear [sky]'	
heill	adj. 'whole'	noun n. or f. 'luck'		
heilsa	verb 'greet'	noun f. 'health'		
heima	adv. 'at home'	noun n. 'home'	verb 'house'	
heldr	adv. 'rather'	conj. 'but rather'		

hertaka	verb 'capture'	noun f. 'captivity'		
hvárt	adv. 'whether'	conj. in annat hvárt – eða	subj. 'whether'	
hvergi	quantifier 'each'	adv. 'nowhere'		
hverr	quantifier 'each'	noun m. 'cauldron'		
hvíla	verb 'rest'	noun f. 'bed'		
hyggja	verb 'think'	noun f. 'thought'		
họnd	noun f. 'hand'	prep. in á họnd, á hendr, til handa		
innan	adv. 'from within'	prep. 'within'		
já	interjection 'yes'	noun 'yes'	verb 'say yes'	
jafngegnt	adv. 'opposite'	prep. 'opposite'		
kóróna	noun f. 'crown'	verb 'crown'		
kunnandi	noun f. 'knowledge'	adj. 'knowing'		
kveðja	verb 'summon'	noun f. 'greeting'		
leiga	verb 'rent'	noun f. 'rent'		
meðan	adv. 'mean- while'	subj. 'while'		
megin	noun n. 'might'	noun non-infl. 'side'		
minni	adj. 'smaller'	noun cf. minni n. I 'mouth' and minni n. II 'memory'		
missa	verb 'lose'	noun f. 'loss'		
mót	noun n. cf. <i>mót</i> n. I 'image' and <i>mót</i> II 'meeting'	prep. 'against'		

mærr	adj. 'famous'	noun m. 'mayor' (French maire)		
né	conj. 'nor'	subj. 'nor'	adv. 'not'	
nei	interjection 'no'	noun 'no'		
nema	subj. 'unless'	verb 'take'		
norðan	adv. 'from the north'	prep. 'north of'		
norrǿna	verb 'translate into Norse'	noun f. 'Norse'		
nær	adv. 'near'	prep. 'near'	subj. 'when'	
óðr	noun m. 'mind'	adj. 'frantic'		
of	prep. 'over'	adv. 'too'		
ok	conj. 'and'	subj. 'that'	adv. 'also'	
ól	noun f. 'thong'	noun n. 'ogress'		
púsa	verb 'marry'	noun f. 'wife'		
(h)reinn	adj. 'clean'	noun m. 'deer'		
renna	verb cf. renna I 'run' and renna II 'make run'	noun f. 'course'		
réttr	adj. 'correct'	noun m. 'right'		
rǿða	verb 'speak'	noun f. 'speech'		
rǿði	noun m. 'oarsman'	noun n. 'oar'		
sá	demonstrative 'that one'	verb 'sow'		
samr	quantifier 'same'	adjective 'same'		
sjá	demonstrative 'this one'	verb 'see'		
síð	adv. 'late'	noun f. only in <i>um síð</i> 'at last'		

síða	noun f. 'side'	verb 'work charms'		
síðr	adv. 'rather not, less'	adj. 'long'		
sinn	possessive 'one's'	noun n. 'instance'		
síðan	adv. 'since then'	subj. 'since'		
skemma	verb cf. skemma I 'shorten' and skemma II 'damage'	noun f. 'shed'		
skylda	verb 'oblige'	noun f. 'obligation'		
slíðr	noun n. pl. 'sheath'	adj. 'fearful'		
snara	noun f. 'snare'	verb 'twist'		
spá	verb 'prophesy'	noun f. 'prophecy'		
spúsa	verb 'marry'	noun f. 'wife'		
staðfesta	verb 'give a fixed abode'	noun f. 'fixed abode'		
staðfesta stefna	_			
	fixed abode' verb cf. stefna I 'head in a direction' and	abode' noun f.		
stefna	fixed abode' verb cf. stefna I 'head in a direction' and stefna II 'direct' noun m.	abode' noun f. 'direction'		
stefna styrkr	fixed abode' verb cf. stefna I 'head in a direction' and stefna II 'direct' noun m. 'strength' quantifier	abode' noun f. 'direction' adj. 'strong'		
stefna styrkr sumr	fixed abode' verb cf. stefna I 'head in a direction' and stefna II 'direct' noun m. 'strength' quantifier 'some' adv. 'from the	abode' noun f. 'direction' adj. 'strong' noun m. 'sea'		
stefna styrkr sumr	fixed abode' verb cf. stefna I 'head in a direction' and stefna II 'direct' noun m. 'strength' quantifier 'some' adv. 'from the south'	abode' noun f. 'direction' adj. 'strong' noun m. 'sea' prep. 'south of' conj. svá – ok		

tala	verb 'talk'	noun f. 'speech'		
þegar	adv. 'forthwith'	subj. 'as soon as'		
þó	adv. 'nevertheless'	subj. 'although'		
þoka	verb 'shift'	noun f. 'fog'		
því	adv. 'therefore'	subj. 'because'		
umhverfis	adv. 'around'	prep. 'around'		
undan	adv. 'from beneath'	prep. 'from [under]'		
útan	adv. 'from without'	prep. 'outside'	subj. 'except'	
van- kunnandi	noun f. 'ignorance'	adj. 'ignorant'		
vara	verb cf. <i>vara</i> I 'warn' and <i>vara</i> II 'expect'	noun f. 'wares'		
varða	verb 'warrant'	noun f. 'cairn'		
vegna	verb 'go [well/badly]'	noun non-infl. 'side'	prep. = fyrir sakir 'for the sake of'	
venja	verb 'accustom'	noun f. 'custom'		
vestan	adv. 'from the west'	prep. 'west of'		
við	prep. 'by'	noun f. 'withe'		
viða	verb cf. viða I 'pile up wood' and viða II 'furnish wood'	noun f. 'lumber, mast'		
víða	adv. 'widely'	verb 'widen'		
viðrtaka	verb 'receive'	noun f. 'reception'		
villa	verb 'lead astray'	noun f. 'error'		

vinda	verb cf. <i>vinda</i> I 'wring' and <i>vinda</i> II 'blow'	noun f. 'hank of yarn'		
vindr	noun cf. vindr I 'wind', vindr II 'winding stairs' and vindr III 'the Wends'	adj. 'awry'		
vísa	noun 'verse'	verb 'show'		
vit	personal pronoun 'we [two]'	noun n. 'intelligence'		
væta	verb 'make wet'	noun f. 'wet'		

3.2 Homonyms of the Same Word Class or Same Gender

In addition to the homonyms that can be disambiguated by word class, there are many words that may not, since they belong to the same class. Nouns can be disambiguated if they have different gender, e.g. $\acute{a}r$ f. 'oar' and $\acute{a}r$ n. 'year'. However, when they have the same gender, they need to be disambiguated in some other way. In *Norrøn ordbok*, homonyms of this type are disambiguated by a Roman numeral, e.g. " \acute{a} f. I" 'river' and " \acute{a} f. II" 'ewe'.

In the annotation application, words disambiguated by Roman numerals in *Norrøn ordbok*, are tagged with an extra *type* attribute displaying the number of the dictionary in Arabic numerals. The two homonyms "á f. I" and "á f. II" will thus be tagged like this:

```
<w lemma="á" type="1" me:msa="xNC nS gF cN sI inY">á</w> <w lemma="á" type="2" me:msa="xNC nS gF cN sI inY">á</w>
```

For some verbs, the disambiguation is done by way of inflectional class. One verb will typically have a weak inflection, "bera $(a\partial)$ ", another a strong inflection, "bera (bar)". These homonyms will be encoded with 'weak' and 'strong' as values of the *type* attribute:

```
<w lemma="bera" type="weak" me:msa="xVB tPS fI vA inY">bera</w>
<w lemma="bera" type="strong" me:msa="xVB tPS fI vA inY">bera</w>
```

In ch. 17.1 below, we give a list of homonyms of the same word class or the same gender, based on a perusal of *Norrøn ordbok* (5th. ed. 2008).

4 Menotec and PROIEL encoding

4.1 Background

In ch. 2, we have discussed the morphological schema developed in the Menotec project. It is based on the more general guidelines of *The Menota Hanbook* ch. 8, and has been adjusted on several point so as to be compatible with the morphological schema used by the PROIEL project. While the Menotec scheme is based on *name tokens* in the guidelines of the *Text Encoding Initiative* (TEI), the PROIEL scheme is closer to the EAGLES annotation scheme, in which the features of the morphosyntactic categories are specified in a single string of characters.

In this chapter we will give a comparison of the two schemes. Note that the PROIEL scheme has more categories and features than listed here, since it has been designed for the encoding of several other languages (Greek, Latin, Armenian, Church Slavonic and Gothic). In the following, only categories relevant for Old Norwegian (and Old Norse in general) will be listed.

4.2 The Lemma

In both schemes, the lemma is given as a separate attribute, in which the citation form of the lemma is the value of the attribute. For example, the subjunction *at* 'that' has this encoding (disregarding the morphosyntactic categories):

The orthography of the lemma is discussed in ch. 1.7 above, while the encoding of fully homonymous lemmata is discussed in ch. 3.2 above. Two (or more) fully homonymous lemmata are words which can not be distinguished by word class or by inflectional class. Ch. 17.1 below contains a list of such homonyms in Old Norse.

4.3 The Word Class

The number of and definition of word classes are for all practical purposes identical in the two projects. Below is a table comparing the two, set up in the same order as the table in ch. 1.1 and the enumeration in ch. 2.

Menotec Word Classes			EL Word Classes
xNC	noun, common	Nb	noun, common
xNP	noun, proper	Ne	noun, proper
xAJ	adjective	A-	adjective
xPE	pronoun, personal	Pр	pronoun, personal
xPR	pronoun, reflexive	Pk	pronoun, reflexive
xPQ	pronoun, interrogative	Pi	pronoun, interrogative
xPI	pronoun, indefinite	Px	pronoun, indefinite
xDD	determiner, demonstrative	Pd	determiner, demonstrative
xDQ	determiner, quantifier	Py	determiner, quantifier
xDP	determiner, possessive	Ps	determiner, possessive
xVB	verb	V-	verb
xAV	adverb, general	Df	adverb, general
xAQ	adverb, interrogative	Du	adverb, interrogative
xAP	preposition	R-	preposition
xCC	conjunction	C-	conjunction
xCS	subjunction	G-	subjunction
xIM	infinitive marker	N-	infinitive marker
xIT	interjection	I-	interjection
xUA	unassigned word class	X-	unassigned
xFW	foreign word	F-	foreign word

In the Menotec scheme, the word class is always the first name token in the msa (morphosyntactic annotation) attribute, as exemplified below for the subjunction *at*. The next token, **inN**, specifies that this particuar word class has no inflection (see ch. 1.1 for these abbreviations):

```
<w lemma="at" me:msa="xCS inN">at</w>
```

Since the attribute **msa** is specific for Menotec encoding (i.e. it is not a part of the standard TEI repertoire), it is prefigured with **me** to indicate that it belongs to the Menotec name space.

It would be a simple matter to change the Menotec encoding so that the word class was an attribute of its own, e.g. called **me:wc** or the like:

```
<w lemma="at" me:wc="xCS" me:msa="inN">at</w>
```

This encoding is basically the one defined in the XML export of the PROIEL project, in which these attributes are called *lemma*, *part-of-speech* and *morphology* respectively.

4.4 The Morphosyntactic categories

In the PROIEL scheme, morphosyntactic (or grammatical) categories are given in a specified sequence of ten categories for each word class. If a category is not relevant for a word class, it is represented by a hyphen. In comparison, the name token scheme of Menotec is less strict, but in order to make the two schemes fully compatible, the sequence of the PROIEL scheme has been adopted by Menotec.

No.	Scheme	Category	Featu	ıres						
(1)	Menotec	Person	p1	p2	р3	рU				
	PROIEL	Person	1	2	3	X				
(2)	Menotec	Number	nS	nP	nU					
	PROIEL	Number	S	p	X					
(3)	Menotec	Tense	tPS	tPT	tU					
	PROIEL	Tense	p	u	X					
(4)	Menotec	Mood	mIN	mSU	mIP	mU				
		Finiteness					fF	fI	fP	fU
	PROIEL	Mood	i	S	m	X	(#)	n	p	у
(5)	Menotec	Voice	vA	vR	vU					
	PROIEL	Voice	a	m	X					
(6)	Menotec	Gender	gM	gF	gN	gU				
	PROIEL	Gender	m	f	n	X				
(7)	Menotec	Case	cN	сG	cD	cA	cU			
	PROIEL	Case	n	g	d	a	X			
(8)	Menotec	Degree	rP	rC	rS	rU				
	PROIEL	Degree	p	c	S	X				
(9)	Menotec	Definiteness	sI	sD	sU					
	PROIEL	Strength	S	W	t					
(10)	Menotec	Inflection	inY	inN						
	PROIEL	Inflection	i	n						

(#) In the Menotec encoding, a verb is marked for *finiteness*, **fF**, if it is finite, i.e. inflected for *tense*, *mood*, *person*, *number* and *voice*. In the PROIEL encoding, there is no encoding for finiteness as such other than by way of the category *mood*. If a verb is encoded as having a mood other than infinitive or participle, it is by definition finite.

As discussed in ch. 1.5 above, there are several syncretic forms in Old Norwegian as in probably any other inflecting language. Among the most common forms of syncretism are (1) between all genders in genitive and dative plural of adjectives and determiners, (2) between accusative and dative of nouns (especially in the weak declensions) and (3) between indicative and subjunctive verb forms. As recommended in ch. 4.5.2 below, the first type of syncretism should be dealt with by using the *unspecified* feature, **gU** in the Menotec scheme and **x** in the PROIEL scheme. Almost all other types of syncretisms in Old Norwegian can be encoded with the following set of additional features (which are defined in the table on p. 14 above):

(4)	Menotec PROIEL	Mood Mood	mINSU e	mINIM f	mSUIM h	
(6)	Menotec	Gender	gMF	gMN	gFN	gMFN
	PROIEL	Gender	p	o	r	q
(7)	Menotec	Case	cAD	cGD	cAN	cO
	PROIEL	Case	e	c	b	o

4.5 Examples of morphosyntactic encoding

This chapter explains in practical details how words in various word classes are encoded in the Menotec scheme and the PROIEL scheme. The numbers 1–10 refer to the categories and features listed in the previous subchapter.

4.5.1 Nouns

Nouns are divided into common nouns (xNC) and proper nouns (xNP). All are encoded with the categories *number*, *gender*, *case*, *strength* (*definiteness*) and *inflection*, e.g. the form *mann* of *maðr* 'man':

	word	lemma	class	I	2	3	4	5	6	7	8	9	10
М	mann	maðr	xNC		nS				gM	cA		sI	inY
Р	mann	maðr	Nb	_	S	_	_	_	m	а	_	S	i

COMMENT: Nouns in indefinite form, e.g. $ma \delta r$ (a) man', is encoded as sI (definiteness: indefinite) in Menotec and as s (strength: strong) in PROIEL, while nouns in definite form, e.g. $ma \delta r inn$ 'the man', is encoded as sD (definiteness: definite) in Menotec and as w (strength: weak) in PROIEL.

COMMENT: For some proper names, certain categories will be unassigned. For example, place names like *Norðmandí* may not have a specific gender, and this category will then be encoded as **gU** in the Menotec scheme and **x** in the PROIEL scheme. Furthermore, it is debatable whether it makes sense to encode proper names for *number*, but we recommend doing so in order to make the encoding of nouns, common and proper, as unified as possible. Also for this category, it is possible to encode it as **gU** in the Menotec scheme and **x** in the PROIEL scheme.

4.5.2 Adjectives

Adjectives (xAJ) are encoded with the categories number, gender, case, degree, strength (definiteness) and inflection, e.g. the form spok of spakr 'wise':

	word	lemma	class	ı	2	3	4	5	6	7	8	9	10
М	spǫk	spakr	xAJ		nS				gF	cN	rP	sI	inY
Р	spok	spakr	A-	-	S	-	-	-	f	n	р	S	i

COMMENT: The word *spok* is an *indefinite* (*strong*) form af the adjective, since it occurs without any determiner, e.g. *spok kona* '(a) wise woman'. This category is encoded as **sI** (definiteness: indefinite) in Menotec and as **s** (strength: strong) in PROIEL. The definite (weak) form of the adjective, e.g. in *sú hin spaka kona* 'the wise woman', is encoded as **sD** (definiteness: definite) in Menotec and as **w** (strength: weak) in PROIEL.

COMMENT: In genitive and dative plural of adjectives (and also of determiners) it is not advisable to try and specify gender, since this distinction is never expressed in these cases in plural. As mentioned above, we therefore recommend encoding gender as unspecified, **gU** in the Menotec scheme and **x** in the PROIEL scheme.

4.5.3 Pronouns

Pronouns are subdivided into personal (xPE), reflexive (xPR), interrogative (xPQ) and indefinite (xPI). The number of categories varies between them, as shown below.

	word	lemma	class	I	2	3	4	5	6	7	8	9	10
М	oss	vér	xPE							cA			inY
Р	oss	vér	Pp	-	-	-	-	-	-	a	-	-	i
	word	lemma	class	I	2	3	4	5	6	7	8	9	10
Μ	sér	sik	xPR							cD			inY
Р	sér	sik	Pk	-	-	-	-	-	-	d	-	-	i
	word	lemma	class	I	2	3	4	5	6	7	8	9	10
Μ	hvat	hvat	xPQ		nS				gN	cA			inY
Р	hvat	hvat	Pi	-	S	-	-	-	n	a	-	-	i
	word	lemma	class	I	2	3	4	5	6	7	8	9	10
М	bæði	báðir	xPI		nP				gN	cN			inY
Р	bæði	báðir	Px	-	р	-	-	-	n	n	-	-	i

4.5.4 Determiners

Determiners are subdivided into demonstratives (xDD), quantifiers (xDQ), and possessives (xDP). They are encoded for *number*, *gender*, *case* and *inflection*.

M P	þeirri	lemma sá sá	xDD		2 nS s		4 -		6 gF f	7 cD d		9	IO inY i
M P	•	lemma annarr annarr	xDQ		2 nS s			5	O	7 cD d	8	9	I0 inY i
M P	yðarn	lemma yðvarr yðvarr	xDP	I -	2 nS s	3	4		6 gM m	7 cA a	8	9	I0 inY i

4.5.5 Verbs

Verbs have different encoding depending on whether they are finite or infinite. In the Menotec scheme, this distinction is made by a separate category, *finiteness*, while in the PROIEL scheme, the categories *finiteness* and *mood* have been merged (as explained above). In practice, the encoding in the two schemes are compatible, as exemplified below.

Firstly, finite verbs are encoded for person, number, tense, mood/finiteness, voice and inflection. In the example below, the fourth position in the Menotec scheme contains two name tokens, **fF** for definiteness: finite and **mIN** for mood: indicative. This information is represented by the single **i** for indicative in the PROIEL scheme; an indicative form is by definition finite.

Secondly, infinitives are encoded for tense, mood/finiteness, voice and inflection. In the Menotec scheme, the position for mood/finiteness contains the name token fI for definiteness: infinitive, while in the PROIEL scheme this information is conveyed by the single character n for infinitive. This is the encoding of the infinitive bita 'bite':

	word	lemma	class	I	2	3	4	5	6	7	8	9	10
М	bíta	bíta	хVВ			tPS	fI	vA					inY
Р	bíta	bíta	V-	-	-	р	n	a	-	-	-	-	i

COMMENT: There are in fact three verbs which have a preterite infinitive, *skulu*, *munu* and *vilja* (with the preterite infinitives *skyldu*, *mundu* and *vildu*), so it is necessary to encode the infinitives for tense.

Thirdly, participles are encoded for *number*, *tense*, *mood/finiteness*, *voice*, *gender*, *case*, *definiteness* and *inflection*. In the Menotec scheme, the position for *mood/finiteness* contains the name token **fP** for *form*: *participle*, while in the PROIEL scheme this information is conveyed by the single character **p** for *participle*.

	word len	nma	class	1	2	3	4	5	6	7	8	9	10
М	bítandi bít	a	xVB		nS	tPS	fP	vA	gM	cN			inY
Р	bítandi bít	a	V-	-	s	p	p	a	m	n	-	-	i

COMMENT: In the Old Norwegian sources, there are not many participles which are reflexive, i.e. the type *kallandisk* and *kallazk*, but since Old Norse grammars have this form, it seems advisable to include the category in the list.

The encoding for a perfect (past) participle is similar, only that the tense is different:

	word	lemma	class		2	3	4	5	6	7	8	9	10
М	bítinn	bíta	xVB		nS	tPT	fP	vA	gM	cN			inY
Ρ	bítinn	bíta	V-	_	s	i	b	a	m	n	-	_	i

4.5.6 Adverbs

Adverbs are subdivided into general adverbs (xAV), which are encoded for *degree* and *inflection*, and interrogative adverbs (xAQ), which can not be inflected for *degree* and for this reason will be encoded as having no *inflection*, inN. Examples:

	word	lemma	class	- 1	2	3	4	5	6	7	8	9	10
М	oftast	oft	xAV								rS		inY
Р	oftast	oft	Df	-	-	-	-	-	-	-	S	-	i
	word	lemma	class	I	2	3	4	5	6	7	8	9	10
М	eigi	eigi	xAV								rU		inY
Р	eigi	eigi	Df	-	-	-	-	-	-	-	X	-	i
	word	lemma	class	I	2	3	4	5	6	7	8	9	10
М	hví	hví	xAQ										inN
Р	hví	hví	Du	-	-	-	-	-	-	-	-	-	n

COMMENT: Of the general adverbs (xAV), some can be inflected for *degree*, e.g. *oft* 'often' (note that we use *-ft-* for *-pt-* in the normalised orthography), while others can not, e.g. *eigi* 'not'. However, since the category *inflection* can only have one value in each class, it has to be **inY** for all general adverbs, and non-inflecting adverbs like *eigi* have to be encoded as having an unspecified degree, in Menotec **rU** and in PROIEL **x**.

4.5.7 Prepositions

Prepositions (xAP) are never inflected, and are thus only encoded for the category of *inflection*, stating that they are non-inflecting, e.g. *frá* 'from':

	word	lemma	class	-	2	3	4	5	6	7	8	9	10
М	frá	frá	xAP										inN
Р	frá	frá	R-	_	_	_	_	_	-	-	-	_	n

4.5.8 Conjunctions

Conjunctions (xCC) are not inflected, e.g. eða 'or':

	word	lemma	class	I	2	3	4	5	6	7	8	9	10
М	eða	eða	xCC										inN
Р	eða	eða	C-	-	-	-	-	-	-	-	-	-	n

4.5.9 Subjunctions

Subjunctions (xCS) are not inflected, e.g. sem 'who, which, that':

	word	lemma	class	ı	2	3	4	5	6	7	8	9	10
М	er	er	xCS										inN
Ρ	er	er	G-	-	-	-	-	-	-	-	-	-	n

COMMENT: The relative particles *er* and *sem* are not inflected in Old Norwegian and are for that reason not classified as relative pronouns, as in e.g. Latin. They join the group of other subjunctions like *at* 'that' and *ef* 'if'.

4.5.10 Infinitive Marker

The infinitive marker at 'to' (xIM) is not inflected:

	word	lemma	class		2	3	4	5	6	7	8	9	10
Μ	at	at	xIM										inN
Р	at	at	N-	-	-	-	-	-	-	-	-	-	n

4.5.11 Interjections

Interjections (xIT) are not inflected, e.g. vei 'woe':

	word	lemma	class	ı	2	3	4	5	6	7	8	9	10
М	vei	vei	xIT										inN
Р	vei	vei	I-	_	_	_	_	_	_	-	_	_	n

4.5.12 Unassigned words

Some words can not be assigned to a specific word class. There may be several reasons for this, for example that a word is so corrupted that it is impossible to give a meaning to it, or that it is recognised as a word, but its meaning and word class are not known (this applies to some words in Old Norse poetry).

	word	lemma	class	I	2	3	4	5	6	7	8	9	10
М	he	he	хUА										
Р	he	he	X-	_	_	_	_	_	_	_	_	_	-

This is an example of how the corrupted word *he* can be encoded. See a discussion of this example in ch. 13.4 below.

4.5.13 Foreign words

Some words belong to another language. As discussed in ch. 1.6 above, these words will be tagged with the wordclass xFW and their native lemma, but with no additional morphological annotation. In the Old Norwegian material, Latin is the most frequent non-Nordic language. It is usually straight-forward to specify the lemma based on a Latin dictionary.

	word lemm	na class	I	2	3	4	5	6	7	8	9	10
М	patrem pater	xFW										
Ρ	patrem pater	F-	-	-	-	-	-	-	-	-	-	-

This is an example of how the Latin word *patrem* (accusative singular of *pater* m. 'father') can be annotated. Note that while we do not recommend to specify additional morphological categories than the word class, a foreign word which constitutes a part of an Old Norwegian sentence, should be annotated syntactically with its function in the sentence (ch. 1.6 above).

Part Two

Syntactic Annotation

5 Background for the Syntactic Annotation

These guidelines are based on a modified form of dependency analysis. This type of analysis has a long history, but in recent times, the foundation for modern dependency analysis was laid by Lucien Tesnière, in his Éléments de syntaxe structurale (1959). Dependency analysis has been used in Slavic studies more than other fields, and is discussed in Igor A. Mel'čuk's Dependency syntax: Theory and practice (1988), among others. Working from this basis, as well as relying on Guidelines for the Syntactic Annotation of Latin Treebanks (Bamman et al. 2007), the PROIEL project at the University of Oslo has developed its dependency method, published in PROIEL Guidelines for Annotation (Haug 2010). This is the model we apply to Old Norwegian in these guidelines.

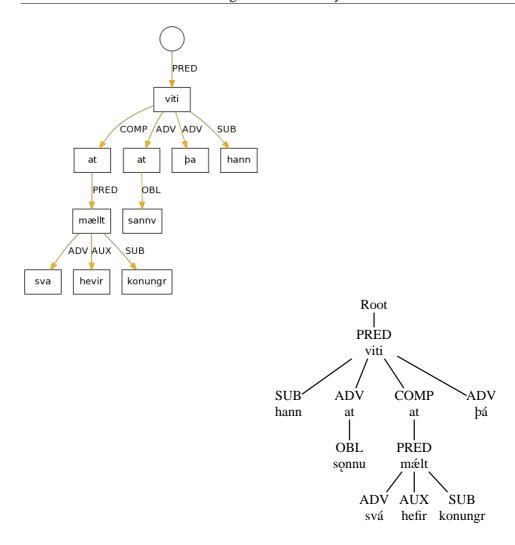
Although dependency grammar has not been used much outside the field of Slavic studies, it has received more attention in recent years. This may be because dependency analysis offers a good compromise between a complete syntactic description and practicality. Since dependency analysis operates on the level of words in a sentence, it can be put to good use in work on large corpora. It has also proved useful in dealing with languages with relatively free word order. Old Norwegian is one such language.

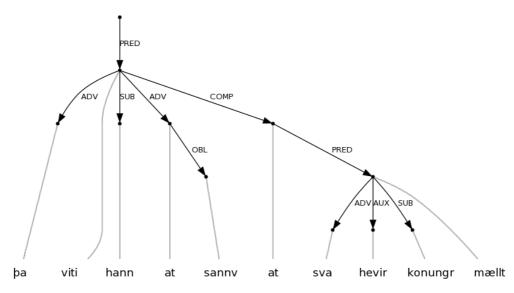
A dependency tree may at first glance seem abstract, since it does not show the word order as it is the text. The trees on the next page show three ways of displaying a dependency analysis of the following sentence:

(55) Þá viti hann at sonnu at svá hefir konungr mælt.'Then he shall surely know that the king has spoken thus.'

The nucleus (or head, as we will refer to it) is the verb *viti*, present subjunctive of *vita* 'know'. It has as its dependents the subject *hann* and the two adverbials *þá* and *at* (which in turn has the dependent *sǫnnu*), as well as the dependent clause *at svá hefir konungr mált*. There, the subjunction *at* is the head, with the main verb *mált* as a dependent. The verb *mált*, has as its dependents the subject *konungr*, the auxiliary verb *hefir* and the adverbial *svá*. The word order on each level is arbitrary; *þá* might just as well have been the first dependent under *viti*.

Free word order presents no problems for the dependency analysis, since it does not rely on the actual word order, i.e. the presentation is what is called "unsorted" in the application. But since words are indexed in the analysis, one can set up the dependency tree so as to follow the word order, "sorted by linearisation" (aka jellyfish diagram). The last arrangement in (55) is an example of this. In the application, both types can be used





(55) Three types of presentation. Top: unsorted from the annotation application. Middle: our unsorted arrangement with normalised text. Bottom: sorted from the application.

to display analysed sentences, but the dependency tree, topmost in (55), is the most commonly used. When dealing with complicated sentences, the branches will unavoidably get tangled up when displaying the correct word order. This is a known problem in all phrase structure analysis, and may be an argument for a method of analysis and display that does not rely on word order.

All examples in these guidelines are presented without regard for word order, as shown in the middle diagram in (55). We have not used the application to produce examples, but rather sketched them ourselves, so that there may be some differences between our examples and what may be found in the database itself. These differences should only be superficial, e.g. an AUX may be placed to the left of a SUB or vice versa. We have chosen to normalise the spelling in the examples and provide an English translation. All the examples are collected in ch. 16 below.

There are several variants of dependency analysis (see more on this topic in Nivre 2005: 1–3). The type we use in these guidelines deviates from classical dependency analysis in some respects. The following are the most important identifying features of the method we use:

- 1. A sentence is analysed as consisting of a head with dependents, where the main verb (PRED) is usually dependent on the sentence's root. In the analysis, this is shown with branches from the head to its dependents, the head always being placed above its dependents. In many models, the branches are shown as arrows pointing from head to dependent, as in the uppermost part of (55).
- 2. Between the head and a dependent, there is a syntactic relation, corresponding to syntactic functions like SUB (subject), OBJ (object), ADV (adverbial), ATR (attribute) etc. In the analysis, this is show with tags between the head and the dependent. The relations will be discussed in ch. 7 below and summarised in the table in ch. 15.
- 3. A head may have more than one dependent. For example, the main verb may have a SUB (subject), an OBJ (object), an ADV (adverbial) and an AUX (auxiliary).
- 4. In coordination, the conjunction is taken as the head, with each coordinated word or phrase dependent on it.
- 5. A dependent has only one parent in the sentence. The analysis does not include phrasal nodes like NP (noun phrase), PP (preposition phrase) and such. There are only two cases in which there may be empty nodes in the analysis: when a conjunction is missing (asyndetic coordination) or when a main verb is missing (ellipsis).
- 6. In addition to the primary dependencies, some words may have secondary dependencies. This applies to the relationship between a subject (SUB) and a predicative (XOBJ). This is shown with a dashed line (a *slash*) pointing from the secondary dependent to its head (typically the subject).

The first four points are common to most types of dependency analysis, while points 5 and 6 are special. Classical dependency analysis does not have empty nodes or secondary dependencies. With regard to these points, our analysis is more similar to methods like Lexical Functional Grammar (LFG), which makes it easier to convert from one to the other.

Since the dependency analysis does not reproduce word order, the annotator may proceed rather freely when analysing sentences. When the head verb has been identified, one can just as easily continue to the object as to the subject.

Some of the Old Norwegian (and many of the Old Icelandic) texts include a mixture of prose and poetry, first and foremost the Kings' sagas, but also some of the Sagas of the Icelanders. The poems are inserted into the prose, often in the form of skaldic *drótt-kvátt* stanzas. In the Menotec corpus, poetry occurs in the legendary *Óláfs saga ins helga* in DG 8 II, which includes over 60 stanzas of poetry. These stanzas can be rather complex, often having inserted and discontinuous phrases. In our experience, dependency analysis is particularly well suited for this type of construction.

6 Word and Sentence Boundaries

6.1 Sentence Division

6.1.1 Prose

In many Old Norwegian manuscripts, and perhaps especially in diplomas, dividing the text into suitable sentences can be difficult. Sentences are commonly coordinated with the conjunctions *ok* or *en*, and the annotator must then sometimes choose between analysing each sentence separately or annotating a relatively long string of sentences. In the former case, the sentences may become too short, and in the latter, they may become so long that the annotator loses oversight. The following is a fairly typical example. Dropped subjects are shown in square brackets and the highest level of sentence division is indicated by two vertical lines (with the verbs in bold), while the lower level divisions are shown with one vertical line:

(56) Hann **var** oft lengi í konungs hirð || ok [hann] **unni** mjok konungs dóttur || ok oftsamliga **róddi** [hann] við hana | at hon skyldi játta honum ástarþokka sinn | því at hann var vaskr maðr ok hinn kurteisasti || ok konungr **lofaði** hann mjok || ok **var** [hann] honum hinn kærasti.

'He was often a long time at the king's court || and [he] loved the king's daughter very much || and [he] often said to her | that she should give him her love | because he was a valiant man and most courteous, || and the king praised him highly || and [he, i.e. the young man] was most dear to him.'

As a rule of thumb, we suggest that coordinated sentences be split up if each has both a subject and a finite verb. Thus, we can split (56) into two strings of sentences:

- (56a) Hann **var** oft lengi í konungs hirð || ok [hann] **unni** mjok konungs dóttur || ok oftsamliga **róddi** [hann] við hana | at hon skyldi játta honum ástarþokka sinn | því at hann var vaskr maðr ok hinn kurteisasti.
- (56b) ok konungr **lofaði** hann mjok || ok **var** [hann] honum hinn kærasti.

The first sentence string will then be 33 words, which is a relatively high number, but manageable. (56a) is analysed in ch. 9.2 below.

When the coordinated sentences are short and closely connected, it is tempting to analyse them as a single sentence. An example of this are the two sentences in (57):

(57) Hann skal vera huggan hennar || ok skal hon kalla hann Jonet. 'He will be her comfort || and she shall call him Jonet.'

We nevertheless recommend that each sentence be analysed separately, even if they turn out to be relatively short. It has proven difficult to draw the line between adjacent sentences and more independent ones. Therefore, we have chosen to follow the fairly cut and dried rule that coordinated sentences should be analysed separately if each has its own subject and finite verb, as in (57) above. See also the discussion in ch. 7.3.4 below.

In exceptional cases, sentences are so closely connected, both semantically and stylistically, that it is fitting that they be analysed as one sentence. (58), the first sentence of "Geitarlauf", is such an example:

(58) Bretar kalla Gotulæf, || en vér kǫllum Geitarlauf. 'The British call [it] Gotulæf, but we call [it] Geitarlauf.'

We think that it would be unnatural to separate these sentences. But we nevertheless stress the main rule, namely that when a sentence contains both a subject and a finite verb, it should be regarded as a complete sentence. To be sure, a subject is not required in all sentences, since an important group of verbs do not take a subject. Thus, sentence (59) is a complete sentence, in which the verb *mislíka* takes the oblique subject *honum*, but no subject in the nominative. Oblique subjects are discussed in ch. 7.3.3 below.

(59) Ok mislíkaði honum mjok.'And he was very displeased.'

It is a feature of Old Norwegian that the subject can be dropped, not only when the verb (like *þykkja*, *sýnast*, *langa* etc.) does not require a nominative subject, or when it has been elided in coordination, but because it is not being emphasised in the sentence (as in *merkja skal dróttinsvikann* '[one] shall mark the traitor').

Many sentences have more than one conjunction. In the dependency analysis, these can not be on the same level. One of them has to be analysed as the primary conjunction, i.e. then one which marks the most important boundary in a series of sentences. This is discussed in more detail in ch. 9.2 below.

We can not give an upper limit for the length of a sentence. If the subject matter is diverse enough, it may be sensible to use discretion and split the sentence:

(60) Þá hǫfum vér skóa á fótum ef vér bjǫrgum oss í verkum með dømum liðinna feðra við freistni fjánda ok vándra manna svá sem skór hlífa fótum við þyrni ok við ormum. || Því at oss eru til þess sýnd dømi heilagra feðra ór heimi liðinna at vér megim batna af þeim í eftirlíkingu góðra verka þá er vér sjám hverja dýrð réttlátir menn hǫfðu fyrir erfiði sitt.

'Then we have shoes on our feet if we save ourselves by following the examples of our departed fathers to guard against the temptations of demons and evil men just as shoes guard our feet against thorns and words. || Because we are shown the examples of holy departed fathers so that we may improve ourselves by imitating good words when we see the glory that righteous men receive for their toil.'

The double lines mark the split. True enough, the second sentence opens with the subjunction *því at* and should under normal circumstances depend on a parent clause. But since the subject matter of the two sentences is only loosely connected, not much is gained by analysing them as one. The first sentence is about how shoes guard our feet, while the second is about how God has given us examples to follow.

From time to time we see very long sentences which simply can not be split. The following 113 word long collection of vices, with a preposition phrase for each one, is from the *Old Norwegian Homily Book*:

(61) Sjá við manndrápi ok við hórdómi, við stuldum, við skrǫkvitnum, við meineiðum, við ráni, við rǫngum dómi, við svikum, við ofmetnaði, við ofdrykkju, við ofprýði, við ofsínku, við fégirnd, við mútufé, við gulls leigu eða silfrs, við kvennsemi, við víkingu, við ofund, við hatri, við lygi, við lausung, við bakmælgi, við háðsemi, við rógi, við morði, við údáðum, við misjafnaði, við fordæðuskap, við goldrum, við gerningum, við mikillæti, við róggirni, við bolvan, við gauð, við hølni, við fjándskap, við úgrandveri, við frýgirni, við tortrygð, við ofgeytlan, við ofdeildum, við ofkappi, við ofþrá, við tunguskøði, við ofbræði, við ofsennu, við ofinndæli, við kvælni, við ofkæti, við ofhlátri, við ábersemi, við úhlýðni, við flærðum ollum.

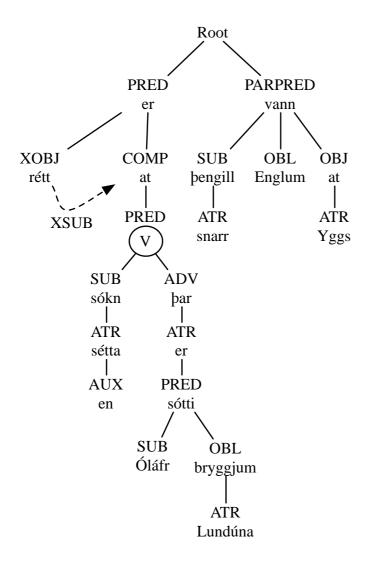
'Beware of man-slaughter, of adultery, of theft, of false witnesses, of perjury, of robbery, of wrong judgement, of fraud, of arrogance, of excessive drinking, of pride, of selfishness, of avarice, of bribery, of rent of gold or silver, of lasciviousness, of piracy, of envy, of hatred, of lying, of loose life, of backtalking, of mockery, of slander, of murder, of misdeeds, of inequality, of sorcery, of magic, of witchcraft, of arrogance, of slanderousness, of curses, of cowardice, of boasting, of animosity, of dishonesty, of taunting, of suspicion, of wastefulness, of quarrelling, of stubbornness, of lust, of defamation, of wrath, of bickering, of luxury, of cruelty, of delight, of immoderate laughter, of recrimination, of disobedience, of every deceit.'

To be sure, the syntactic structure is very simple: $sj\acute{a}$ is PRED, under which the conjunction ok ties together the 53 preposition phrases introduced by $vi\eth$. For obvious reasons we will not provide an illustration.

6.1.2 Poetry

Sentence division in prose texts need not be particularly difficult if our cut and dried rules are followed, whereas divisions in poetry are a bit of a challenge. In the Old Norwegian texts, this means skaldic verses (no Eddic material survives in Old Norwegian

sources), most of which are found in the legendary Óláfs saga ins helga (DG 8 II). It contains 63 stanzas, mostly in the intricate dróttkvátt meter.



(62) Rétt er at sókn en sétta (snarr þengill vann Englum at) þar er Óláfr sótti (Yggs) Lundúna bryggjum. 'It is true that the sixth attack (a swift king fought the English) [was] when Olaf made against London's bridges.'

Traditionally, the syntactic unit in skaldic verse is a half stanza. Since most halves contain more than one clause (often intertwined), but clauses never cross the middle of a stanza, we choose to take each half stanza as a sentence when annotating syntactically. An empty conjunction must often be added to connect sentences. Example (62) above is the first half of st. 6 of Sigvat Thordsson's *Vikingarvisur*, which survives in DG 8 II and a

number of other manuscripts. This first half contains two sentences, one inserted into the other (this is known as *stál*). In (62), the inserted clause is displayed in parentheses, as is often the case in printed editions. Furthermore, the inserted clauses is split into *snarr bengil vann Englum at* and *Yggs. Stál* is particularly problematic in the syntactic annotation, because it is unwise to split the half stanza into two (or more) sentences and analyse them separately. The topmost line of figure 6:1 shows the word order in the half stanza and the line below shows a more "normal" word order.

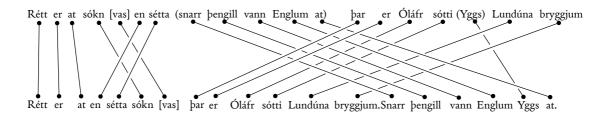


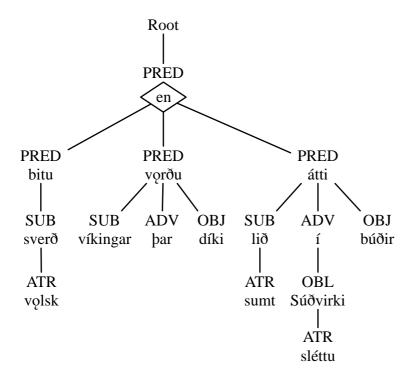
Figure 6:1. Poetic and prose word order in *Vikingarvisur*, st. 6, cf. example (62).

When dealing with *stál*, it is not always apparent which sentence is the primary one, but we consider the inserted *stál* to be secondary. The standard editions may be of help, as they usually print the *stál* in parentheses. In our first round of work on the corpus, we chose to append the *stál* to the main sentence using an empty conjunction. But now we recommend analysing the *stál* as PARPRED, as shown in the tree diagram on the previous page.

In exceptional cases, the sentences in the first half stanza are not intertwined, as in (63), the second half of st. 6 of *Vikingarvisur* (see teh diagram on the next page). We also analyse these sentences as one, to make the annotation of poetry consistent.

In this point, we ignore our own advice in ch. 6.1.1, where we say that each coordinated sentence should be analysed separately. The skaldic verses are, in our opinion, different enough a type of text to warrant analysing each half stanza as a syntactic unit. The rhyme scheme also shows that each half is a self-contained unit, as it pairs up the lines in the half stanza.

We emphasise that what we have said about analysing skaldic verse is only tentative. It is a genre of poetry which departs sharply from the Old Norwegian prose. Nevertheless, the dependency analysis is well fitted to annotate such complex structures.



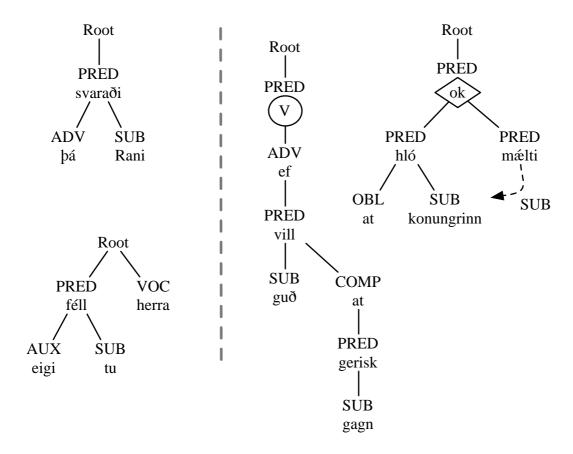
(63) Sverð bitu vǫlsk, en vǫrðu víkingar þar díki, átti sumt í sléttu Súðvirki lið búðir.

'French swords cut but Vikings defended a ditch; some of them were camped in the level fort Sudvirki.'

Note that this stanza has a number of variant readings in the manuscripts. We have followed the text in DG 8 II and normalised the spelling.

6.1.3 Whole and Partial Replies

Replies are often introduced by expressions like "hann sagði", "hann svaraði", "hann mælti", as in (64) below. If the reply is a whole clause, we analyse it separately, as illustrated on the next page. In some cases, like in (65) below, the reply may seem integral to the sentence, and is sometimes called a partial (or half) reply. However, we also recommend splitting the sentences here; in (65) after the verb mála. What is special about this example is that the reply ef guð vill at gerisk gagn 'if God wants it to be of use' is not a complete sentence; we must posit some underlying phrase like '[It may happen] if God wants it to be of use'. The second clause in (65) must then open with an empty verbal node.



- (64) Þá svaraði Rani. || Eigi félltu, herra.

 'Then Rani replied: || You did not fall, my lord.'
- (65) Konungrinn hló at ok mælti, || ef guð vill at gerisk gagn.'The king laughed at this and said, || if God wants this to be of use.'

In a normalised text, we would add quotation marks:

Konungrinn hló at ok mælti, "ef guð vill at gerisk gagn."

In a translation, we could even make the dependent clause independent:

The king laughed and said: "May God grant that this be of use."

6.2 Word Boundaries

6.2.1 Words Written Together or Separately

In the XML texts from Menota, each word is contained in a word element, <w>...</w>. This ordering is sometimes different from what we find in the manuscripts. Sometimes, two or more words are written as one, e.g. a preposition + object are combined, like "ilande" for "í landi". In the XML encoding, this is done in the following way:

<seg type="nb"><w lemma="i">i</w><w lemma="land">lande</w></seg>

Each word is wrapped in a <w>-element with the lemma form as an attribute. At the same time, they are included together in a <seg>-element with the type attribute *nb* 'no break', which tells us that they occur without a space between. This ensures that the word can be displayed correctly in a diplomatic rendering, i.e. as "ilande".

It also happens that complex words are split in the text, i.e. "veiði maðr" for "veiðimaðr"

```
<w lemma="veiðimaðr">veiði maðr</w></seg>
```

Since complex and separate words are handled in this way, the annotation should present no problem. In the case of "ilande", the two words will be annotated separately, while "veiði maðr" will appear as one word in the annotation.

During the annotation, one may also wish to combine or split up words. So far, this has not come up often in the texts imported from *Gammalnorsk Ordboksverk*, such as *Strengleikar* in DG 4–7, and the legendary *Óláfs saga ins helga* in DG 8 II. But in the texts transcribed from scratch, this may happen more often. We see examples of this in the legal texts in Holm perg 34 4°.

We use the following dictionaries as guides for splitting up and combining words: Norrøn ordbok by Simensen et al., Fritzner's Ordbog over det gamle norske Sprog and Ordbog over det norrøne prosasprog (ONP). In case of disagreement, we follow Norrøn ordbok.

6.2.2 Enclitics

There are three main types of enclitics in Old Norwegian:

- 1. Noun + definite article, $ma \delta r + inn \rightarrow ma \delta r inn$ 'the man'
- 2. Verb + reflexive pronoun, $kalla + sk \rightarrow kallask$ 'to be called'
- 3. Verb + personal pronoun, $munt \not p u \rightarrow muntu$ 'will you'

We consider the two first types to be inflectional forms of the noun or verb. Thus, there is no need to split the words as specified in ch. 6.2.1 above.

The third type has to be split, however, since the syntactic annotation requires that the verb and the subject are separate words. In addition to personal pronouns, this type also includes negative particles, i.e. erat = er at 'is not'. In rare cases, both subtypes are combined, i.e. vilkat = vil ek at 'I do not want'.

In the encoded texts, such words are typically gathered in one <w>-element, but for the purposes of the syntactic annotation, we must split them up into two <w>-elements (which in turn are gathered using the <seg>-element with the attribute *nb* (*no break*)). This may be done within the annotation application, or when preparing the texts for import. In either case, the encoding will have the following structure:

```
<seg type="nb"><w>vil</w><w>k</w></seg>
```

In this example, *vil* will be tagged as PRED and *(e)k* as SUB.

In some cases, the words can be split unproblematically, as in the case of erat = er at. But often, an assimilation has occurred between the stem and the pronoun, e.g. $munt \, b \, uu$ $> munt \, uu$ $> munt \, uu$. In such cases, we render the verb as complete as possible (unless an consonantal assimilation is involved), with the pronoun getting whatever is left:

```
mundak = munda k (i.e. munda ek)

megak = mega k (i.e. mega ek)

hafðak = hafða k (i.e. hafða ek)

emk = em k (i.e. em ek)

hykk = hyk k (i.e. hygg ek)

muntu = mun tu (i.e. munt þú)

láttu = lát tu (i.e. lát þú)

hjóttu = hjót tu (i.e. hjótt þú)

kenndu = kenn du (i.e. kenn þú)

farðu = far ðu (i.e. far þú)

gerðu = ger ðu (i.e. ger þû)
```

We do the same in the case of the negative particles -a, -at and -t:

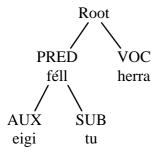
```
era = er \ a 'is not' skalat = skal \ at 'shall not' erat = er \ at 'is not' b\acute{a}rut = b\acute{a}ru \ t 'did not bear'
```

In some cases, the enclisis includes both pronoun and negation, as in *vilkat* = *vil k at*, i.e. *vil ek at* 'I do not want', or even *bjargigak* = *bjarg ig a k*, i.e. *bjarga ek a ek* 'I do not save' (*Hávamál* st. 152). Each of these words will then get its own <w-element and its own syntactic analysis, while they are all gathered together within one <seg>-element.

An enclitic will sometimes occur in combination with a full pronoun, e.g. *vilk ek* 'I [I] want'. We then take the enclitic pronoun as the primary word and the full pronoun as an apposition with it. In the example of *bjargigak*, the first pronoun, *ig*, becomes the primary pronoun, and is tagged as SUB, while the latter, *k*, is an apposition to *ig*.

The reason why we have chosen to split these types of enclitic words is that verb + subject on one hand and verb + negation on the other have such different syntactic functions that they must be split for us to be able to analyse them properly. Definite nouns, e.g. $ma \partial r + inn$, and reflexive verbs, e.g. kalla + sk = kallask, may also be considered a type of enclisis, but the syntactic analysis does not demand that they be split up.

When annotating an enclitic construction, one can split the verb and the enclitic pronoun in the annotation application (see ch. 6.2.1. above). This entails that in the morphological and syntactic analysis, one annotates two words, a verb and a pronoun, but the text itself will still show only one word. Thus, in (64), *félltu* is an enclitic form of the verb *falla* (2. pers. sing. pret.) and the pronoun $b\acute{u}$.



(64) (Þá svaraði Rani:) Eigi félltu, herra.'(Then Rani replied:) You did not fall, my lord.'

When normalising the enclitic pronoun, we use the standard lemma forms, in this case $b\acute{u}$ instead of tu.

6.3 Chapter Headings

Many manuscripts have titles for individual sections of the text. These often appear as rubrics that are placed in between sections, as shown below. This is an excerpt from The Older Gulathing Law, where the title is written in red: *Báðir máltu þetta um kirkjur* 'Both stated this about the churches'.

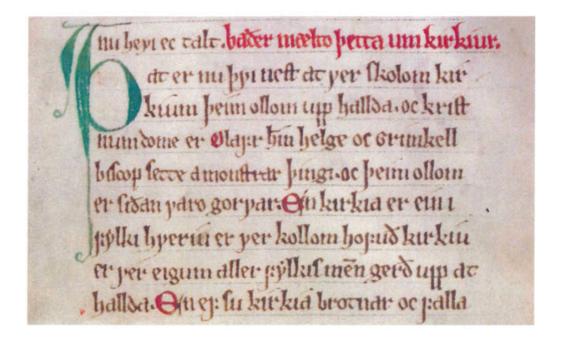
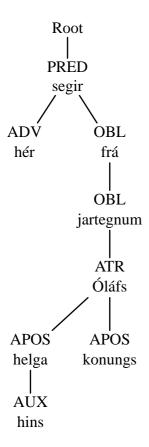


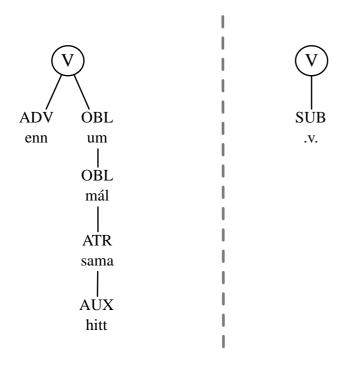
Figure 6:2. Copenhagen, The Royal Library, DonVar 137 4°, fol. 7r, l. 5–14. The line between a title and an introductory sentence is not sharply drawn, and may appear in different ways in the texts that are to be annotated.

Sometimes, the title (or introductory sentence) can stand alone, as for example in the introduction to the collection of miracle stories about Saint Olaf in the *Old Norwegian Homily Book*. It is therefore annotated like other complete sentences:



(66) Hér segir frá jartegnum hins helga Óláfs konungs. 'Here, the miracles of the holy king Olaf are related.'

In most cases the title is just a single phrase, often a noun phrase or a preposition phrase. We then assume an empty verbal node, on which to hang the phrase. We handle titles that are only a number in the same way. This type occurs often in the collection of miracles in the *Old Norwegian Homily Book* (see next page).



(67) Enn um hitt sama mál. (68) .v. 'More on the same topic.' '[Ch.] 5'

In (67), we assume that the empty verbal node has the function of a verb with a meaning like 'tell, say' (i.e. a *verbum dicendi*), and that the phrase *um hitt sama mál* thus should be analysed as an OBL. In (68) we have less to work on, so we assume that the number .v. is the subject, [Chapter] 5 [is here].

7 Functions

This chapter goes through all the functions used in our version of the dependency analysis, and which the annotators will find in the annotation application's menu. We will discuss all of them, even the ones which we for various reasons do not wish to use in the annotation of Old Norwegian. Most of the functions are familiar from traditional syntax and are used largely in accordance with it. Some, however, are different and must be studied carefully. More than others, this applies to auxiliary words (AUX), complements (COMP), external objects (XOBJ) and external adverbials (XADV).

In every full sentence, the predicate (PRED) is the central element on which other words depend. This perspective is known from valency grammar, for instance, and fits well with Old Norwegian (and many other languages), where the predicate is obligatory, but not the subject or other noun phrases. PRED is usually directly dependent on the root, which also applies to the parenthetic predicate (PARPRED) and vocative (VOC).

The function AUX stands apart, being for the most part defined negatively. It is an auxiliary word which belongs to its parent, be it a word or a whole sentence. Included in this category are auxiliary verbs, particles and negation adverbs, as well as introductory conjunctions.

The remaining functions fall into two groups: arguments and adjuncts.

Arguments are words that are joined with the predicate in fixed phrases or are dependent on it. In our analysis, subjects (SUB), objects (OBJ), obliques (OBL), complements (COMP), external objects (XOBJ) and nominal arguments (NARG) are considered arguments. Arguments may also depend on adjectives and prepositions. Thus, a preposition's object is usually an oblique (OBL).

Adjuncts are freer than arguments and can often be deleted without the sentence changing its basic meaning. We consider adverbials (ADV), attributes (ATR), appositions (APOS), external adverbials (XADV) and partitives (PART) to be adjuncts.

The difference between arguments and adjuncts may perhaps most clearly be seen in the case of adverbial phrases. When they take part in fixed constructions with the verb, e.g. when expressing a source or a target, we analyse them as obliques (OBL), but when they are used more freely, e.g. when expressing time, place or manner, we count them as adverbials (ADV). A similar distinction is made between direct accusative objects (OBJ) and indirect dative or genitive objects (OBL).

In addition to these, we have at our disposal a number of so-called superfunctions, to be used when the annotator is unable to decide which function should apply. For example, we try to distinguish restrictive relative clauses from non-restrictive ones (ATR and APOS, respectively). When in doubt, the annotator may use the superfunction REL, which covers both functions. However, we try to avoid using the superfunctions as much as possible. The five superfunctions are ARG, PER, NONSUB, ADNOM and REL.

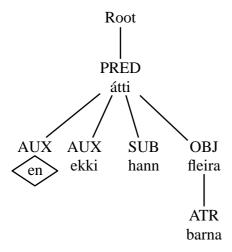
Finally, there are two secondary functions XSUB, and PID, that are automatically assigned by the annotation application.

7.1 Root Functions

Root functions are most commonly found directly under the root in the analysis. They may be said to assign roles to other phrases in the sentence, most importantly, to the arguments.

7.1.1 PRED

The predicate (PRED) is the primary function in each sentence. Most often, it is the head verb:

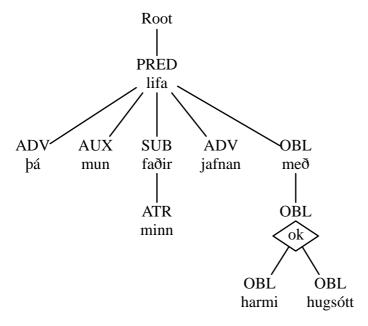


(69) En ekki **átti** hann fleira barna. 'But he had no other children.'

In the analysis of (69), we see that the introductory conjunction *en* is tagged as AUX (in accordance with ch. 7.2.1. f below), and so is the negative adverb *ekki* (ch. 7.2.1 e). As for the object (OBJ), the accusative *fleira* is the head word, not the attributive genitive *barna*. Note that the subject (SUB) and the object (OBJ) are on the same level in the annotation, as dependents on the predicate *átti*.

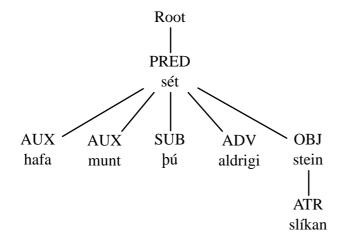
In the trees, conjunctions are placed within a rhombus to underline their special syntactic features (see more about this convention on p. 123 below).

Auxiliary verbs are tagged as AUX, whether they are of the type *hafa*, *geta*, $f\acute{a}$ + past participle or the type *munu*, *skulu*, *mega*, *vilja* + infinitive. Thus, *mun* is AUX and *lifa* is PRED, in (70):



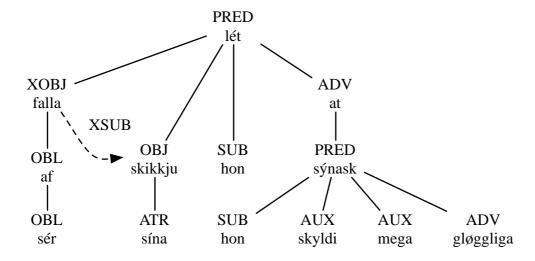
(70) Þá **mun** faðir minn jafnan **lifa** með harmi ok hugsótt. 'Then, my father will always live in grief and sorrow.'

A consequence of this analysis is that some sentences will have more than one AUX, as in (71):



(71) Aldrigi **munt** þú slíkan stein **sét hafa**. 'You will never have seen such a stone.'

The same applies in (72), where we have two modal auxiliaries, *skyldi* and *mega*. Both should be tagged as AUX:



(72) Hon lét af sér falla skikkju sína, at hon **skyldi mega** gløggliga **sýnask**. 'She took off her cloak, so that she could be seen clearly.'

Note that no other node may depend on an AUX. In some cases, one might want to make an ADV modify the auxiliary verb (root modal), but it must depend on the non-finite PRED. Accordingly, *gløggliga* could not depend on *skyldi* or *mega* in (72) above.

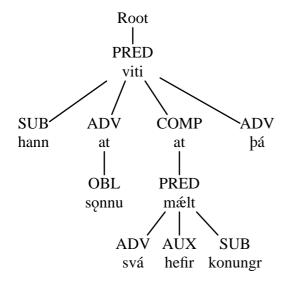
Dependent clauses introduced by the subjunction *at* will often be nominal clauses, in which case they are tagged as COMP, but in (72) the *at*-clause expresses purpose and is therefore and ADV. The analysis of sentences with the verb *láta* is discussed in detail in ch. 7.3.4 below, in examples (46) and (102).

In sentences with **coordinated head verbs**, the conjunction will be tagged as the highest level PRED, e.g. *ok* in (73):

(73) Rann drykkrinn ór **ok** dreifðisk víða um fjallit. 'The drink spilled out and spread all over the mountain.'

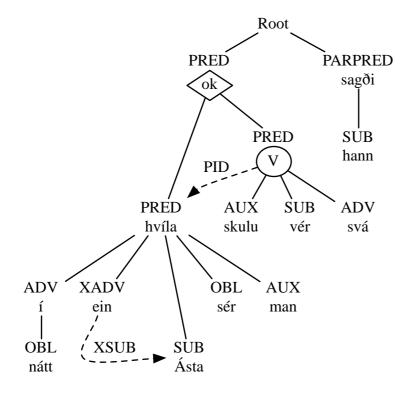
The coordinated verbs are also PRED, one level below the conjunction. The analysis is discussed in greater detail in ch. 9.2 below, pp. 123–124.

In **subordinate clauses**, the PRED is directly dependent on the subjunction, as the subjunction introduces and provides the dependent clause with a head. Thus, in (55), *m*élt is a PRED in the dependent clause at svá hefir konungr mélt:



(55) Þá viti hann at sonnu at svá hefir konungr mælt.'Then he shall surely know that the king has spoken thus.'

In sentences without a verb, one must provide an empty verb. This is discussed in ch. 13 below, as well in the context of comparative constructions in ch. 10.6. It should be stressed that we try to avoid introducing empty verbs. This should only be done in the case of copulas or a verb that can clearly be understood from the context, as in (74):



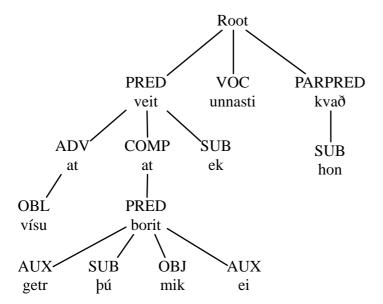
(74) Ein man Ásta hvíla sér í nátt, sagði hann, ok svá skulu vér [hvíla] [oss]. 'Asta will sleep alone tonight, he said, and so shall we [sleep].'

In (74), the second clause has an implicit PRED *hvíla*, and we therefore must slash from the empty verb to *hvíla* in the preceding clause. When one slashes from a null-verb to an explicit verb, the relation is automatically tagged as PID by the application (cf. ch. 7.6.2 below). The function PARPRED is discussed in the next chapter.

COMMENT: When writing these guidelines, we originally considered a different solution for modal auxiliaries, i.e. of the type *skulu*, *mega*, *vilja* + infinitive (possibly also *munu* + infinitive). Since some adverbs are more closely connected to the auxiliary verb (root modality) than the head verb, one might prefer an analysis where the auxiliary verb is a PRED, and the infinitive an XOBJ (not PRED), in which case one must slash from the XOBJ to the SUB. We have chosen the simpler of the two analyses, with all auxiliaries marked as AUX.

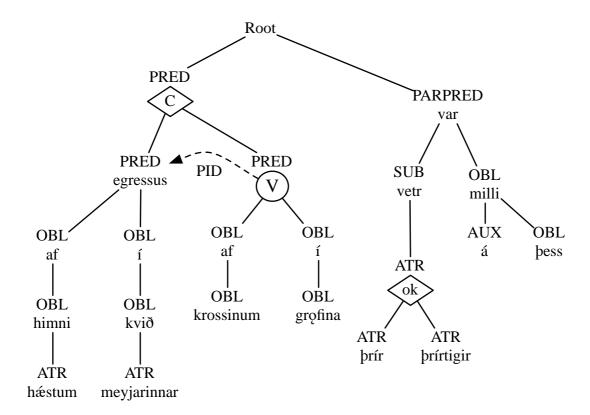
7.1.2 PARPRED

A parenthetical predicate (PARPRED) is a predicate in interpolated clauses of the type sagði hann 'said he'. They are common in Old Norwegian texts that have dialogue, e.g.:



(13) Unnasti, **kvað** hon, ek veit at vísu at ei getr þú borit mik. 'Lover, she said, I know for sure that you cannot carry me.'

Less common are independent interpolated clauses, as in (75) from the *Old Norwegian Homily Book*, analysed on the next page. Typically, we mark them with dashes (or parentheses) in the normalised text. It appears that this first occurred in learned style (note that the sentence opens with a Latin word).



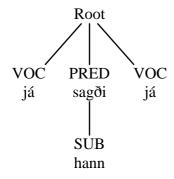
(75) Egressus af hæstum himni í kvið meyjarinnar – þess var á milli þrír ok þrírtigir vetr – af krossinum í grǫfina.
'Having stepped down from the highest heaven into the virgin's womb – between these [events] there were thirty-three winters – from the cross to the grave.'

7.1.3 VOC

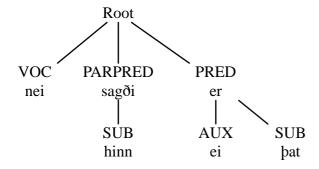
Vocatives (VOC) are addresses and interjections. Because they are syntactically unrelated to the predicate, they are placed directly under the root. For example:

- (13) **Unnasti**, kvað hon, ek veit at vísu at ei getr þú borit mik. 'Lover, she said, I know for sure that you cannot carry me.'
- (76) **Ohó**, hversu góðr Israels Guð er! 'Oh, how good is the God of Israel!'

We also analyse the interjections $j\acute{a}$ 'yes' and nei 'no' as vocatives, as in (77) and (78). The former example has two vocatives, which we must analyse as two separate dependents under the root. It is not necessary to join them with an empty coordination (on this topic, see ch. 9.4 below).



(77) Já, já, sagði hann. 'Yes, yes, he said.'



(78) Nei, sagði hinn, ei er þat. 'No, said the other one, it is not so.'

In these examples we do not use quotation marks, which one would do in a normalised text edition: "Já, já," sagði hann. "Nei," sagði hinn, "ei er þat." Here, we have followed modern Norwegian rules in placing the quotation marks, comma and period.

7.2 Auxiliary Functions

AUX is the only auxiliary function.

7.2.1 AUX

Auxiliary words form a unit with their head, i.e. they provide functional information about the head or the entire sentence, but do not have a proper syntactic function. Consequently, an AUX can not be a head for anything else (cf. the notes on example (72) in ch. 7.1 above). Sometimes, the AUX does not modify the head at all, as in the case of infinitive markers, conjunctions or parts of a subjunction. In other cases, the AUX modifies a specific word, such as an auxiliary verb or a negation. AUX words are of various types:

- a. **Auxiliary verbs** with past participles (supines). A typical example is *hafa*:
- (79) Sem hon hafði yfir sét bréfit.'When she had perused the letter.'

There are two other verbs which are constructed in a similar way, *geta* and *fá*:

- (80) Ef hann **getr** borit dóttur hans upp í fjallit. 'If he can carry his daughter up the mountain.'
- (81) Hversu má nokkurr maðr eftir skírnina **fá** haldit sik frá syndum ok úhreinundum? 'How may anyone, after baptism, keep away from sin and uncleanliness?'
- b. Modal Auxiliaries with infinitives, e.g. mega, skulu and vilja:
- (82) Ok svá er hann mér mjok kærr at aldri **vil** ek honum angr gera. 'And he is so dear to me that I wish to never do him harm.'

The verb *munu* is not as clearly modal as the verbs *mega*, *skulu* and *vilja*, but we also analyse it as AUX (cf. (70) in ch. 7.1.1 above):

(70) Þá mun faðir minn jafnan lifa með harmi ok hugsótt.
'Then, my father will always live in grief and sorrow.'

c. The **infinitive marker**, e.g.:

(83) Þá leituðu margir við **at** bera hana, er allsekki gátu at sýst. 'Then many, who could not do anything, sought to carry her.'

Here, the infinitive marker at is dependent on the XOBJ bera, which in turn is dependent on the PRED leituðu.

- d. The **expletive particles** of and *um*. These only occur in poetic language and have no clear semantic content. The Eddic poem *Prymskviða* opens with these lines:
- (84) Reiðr var þá Vingþórr | er hann vaknaði | ok síns hamars | **um** saknaði. 'Vingþórr was angry | as he awoke | and his hammer | found missing.'

The particle *um* stands with the verb *sakna*, perhaps to denote the perfect tense, but is usually not translated into modern languages. Other types of verbal particles are analysed as OBL, cf. ch. 7.3.3.

- e. Negation of the head verb, e.g.:
- (69) En ekki átti hann fleira barna.
 'But he had no more children.'

In other phrases, the negation is taken as an ADV, e.g.:

(85) Ormrinn er sløgari en **ekki** annat kvikvendi. 'The serpent is more cunning than any other creature.'

Here, *ekki* is dependent on *annat* in the XOBJ *annat kvikvendi*. The word is included among ambiguous words in the table in ch. 3.1 above.

f. **Introductory conjunction**, e.g. *en* or *enda* (cf. ch. 7.2.1 f above):

(69) **En** ekki átti hann fleira barna. 'But he had no more children.'

g. Introductory adverbs, e.g. nú:

(86) Nú vill maðr annan sókja um eitthvert mál.'Now, a man wishes to bring some charge against another man.'

This occurs almost exclusively in the legal texts and implies a condition, i.e. "if a man wishes...", but we interpret the sentence as it stands, and $n\hat{u}$ is taken as an introductory adverb.

h. The **interrogative particle** *hvárt*, e.g.:

(87) Enn er mér úkunnigt **hvárt** þessi frú líkar eða eigi at ek sjá unnasti hennar. 'I still do not know whether this lady likes or dislikes me being her lover.'

7.3 Arguments

Arguments are words or phrases connected with the head verb in a sentence. This is not to say that they are obligatory; in Old Norwegian, a sentence need not be more than one word, e.g. *Rignir* '[it] rains'. Rather, arguments are necessary to use a verb to its fullest extent. In the case of a verb like *hit*, there is someone doing the hitting, the subject, and one being hit, the object, both of which are arguments of the verb. Words expressing the circumstances of the event (time, place, manner, cause etc.) are not as necessary, and so we consider them adjuncts (on the term, see p. 77 above).

7.3.1 SUB

The subject (SUB) typically expresses the agent or the one being talked about. The subject is a dependent of the predicate (PRED) and is in most cases in the nominative case. It may be a noun:

(88) Konungr lofaði hann mjok.

'The king praised him highly.'

Or it may be a pronoun:

(89) Hon var í hjá honum bæði nætr ok daga. 'She was with him both night and day.'

It may also be an adjective used as a noun (nominal usage):

(3) **Ríkir** báðu hennar.

'Powerful [men] wooed her.'

The accusative subject in accusative-with-infinitive constructions is also analysed as SUB, since it constitutes a subject in an underlying finite sentence, e.g. (90), discussed in ch. 10.4.1 below:

(90) Ok hefir hann heyrt **fugla** syngja svá fagri roddu at hann lysti til at hlýða. 'And he has heard birds sing with such a beautiful voice, that he wished to listen.'

Here, one can say that the underlying sentence is **fuglar syngja** svá fagri rǫddu at hann lysti til at hlýða.

The so-called oblique subjects are analysed as OBL, whether they are accusatives, e.g. *mik dreymir* 'I dream', or datives, *mér þykkir* 'I think'. There is only a small, closed group of verbs that can take oblique subjects. See ch. 7.3.3 below.

7.3.2 OBJ

The object (OBJ) is an argument which typically denotes the person or thing at which the action is directed. The object is a dependent of the predicate (PRED), and is usually in the accusative case. It may be a noun:

(91) Af þessum tveim ungmennum gerðu bretar **strengleik** er þeir kalla Tveggja elskanda.

'About these two youths, the Britons composed a lay which they call The Lay of the Two Lovers.'

In other cases, it is a pronoun (88) or a determiner (69):

(88) Konungr lofaði **hann** mjok. (69) En ekki átti hann **fleira** barna 'The king praised him highly.' 'But he had no more children.'

In (69), barna is a genitive attribute with fleira. See the tree in ch. 7.1.1 above.

In most Old Norse grammars, the object can be in the accusative, dative, or genitive. In these guidelines, however, object-like words and phrases in the dative or genitive are taken as OBL. Thus, both indirect objects (always in the dative) and oblique subjects (accusative or dative), will be analysed as OBL, cf. the discussion in ch. 7.3.3 below.

Note also that nominal clauses (commonly introduced by the subjunction *at*) are not analysed as OBJ (or SUB), but as COMP. Cf. ch. 7.3.5 below.

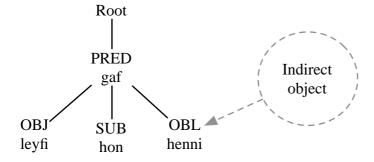
7.3.3 OBL

Oblique words (OBL, hence referred to as *obliques*) may occur on many levels within sentences. In most cases, they depend on the predicate, e.g. the genitive *hennar* in (3) or the dative *lifi* in (21):

- (3) Ríkir báðu hennar. 'Powerful [men] wooed her.'
- (21) Um síðir luku þau bæði **lífi** sínu. 'Eventually they both lost their lives.'

These words are traditionally taken as objects, but in the dependency analysis we treat them as OBL.

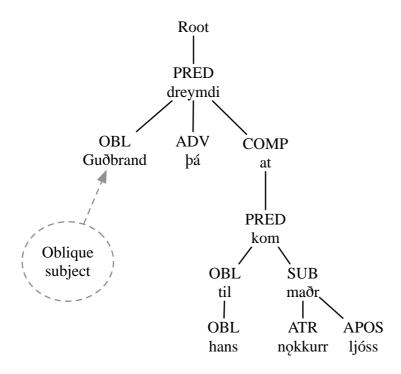
Indirect objects, which are always in the dative case, are typical cases of OBL:



(92) Hon gaf henni leyfi.'She gave her permission.'

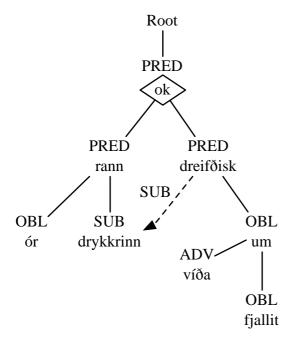
As mentioned above, so-called **oblique subjects** are also analysed as OBL, e.g. the dative *mér* in *mér þykkir* 'I think', and the accusative *mik* in *mik langar* 'I wish'. Cf. the analysis of *mér þykkir* in (45) in ch. 10.1 below.

The verb *dreyma* is among those that take an oblique subject, *mik dreymir* 'I dream', rather than a normal subject, **ek dreymir*. This construction is exemplified by the accusative *Guðbrand* in (93):



(93) Þá dreymdi **Guðbrand** [acc.] at maðr nǫkkurr kom til hans, ljóss. 'Then Guðbrandr dreamt that a fair man approached him.'

With **verbs of motion** (*ganga, hlaupa, fara*), we take the expressions of source or destination as OBL, since this type of verbs requires such an argument. For the same reason, ADV is not applicable here.



(73) Rann drykkrinn ór ok dreifðisk víða um fjallit.'The drink spilled out and spread all over the mountain.'

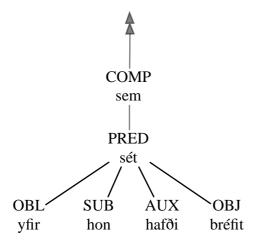
In (73), the preposition *ór* is without an object here, but we may infer the object *keral-dinu* 'the vessel' from the context. The analysis of the conjunction *ok* 'and' as PRED is explained in ch. 9.2 below.

Verbs of position (*vera, sitja, standa, liggja*) also take OBL, since such verbs require arguments to denote place. In (94), the verb *búa* (preterite *bjó* or *bjuggi*) can hardly stand on its own; one must specify *where* he lived:

(94) Faðir hennar bjuggi **á** Laukhamri. 'Her father lived at Laukhamar.'

Se also ch. 14.2 about the relationship between OBL and ADV.

Verbal particles. Particular to Old Norwegian and other Germanic languages is the widespread use of verbal particles, i.e. adverbs or prepositions that complete or alter the meaning of a verb, as in (79):



(79) Sem hon hafði **yfir** sét bréfit. 'When she had looked the letter over.'

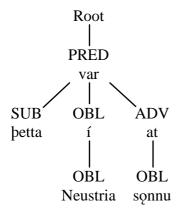
Here, the preposition *yfir* is connected to the verb *sjá* and is analysed as OBL. The noun *bréfit* is an object under the verb *sét*, but not an oblique under *yfir*. The noun is analysed in the same way in *hon hafði sét bréfit as in hon hafði yfir sét bréfit, and is therefore not dependent on yfir.

Another example is (83), where both $vi\delta$ and at are OBL under the verb and have no dependents of their own:

(83) Þá leituðu margir **við** at bera hana, er allsekki gátu **at** sýst. 'Many men, who could not at all do it at all, then tried to carry her.'

The **object of a preposition** is also OBL, e.g. in (94) and (95):

(94) Faðir hennar bjuggi á **Laukhamri**. 'Her father lived at Laukhamar.'



(95) At **sonnu** var þetta í **Neustria**. 'In truth, this was in Neustria.'

Some **adjectives** take an argument in the dative or genitive case. The argument in such cases is an OBL, e.g.:

(82) Ok svá er hann **mér** mjok kærr at aldri vil ek honum angr gera. 'And he is so very dear to me, that I never want to trouble him.'

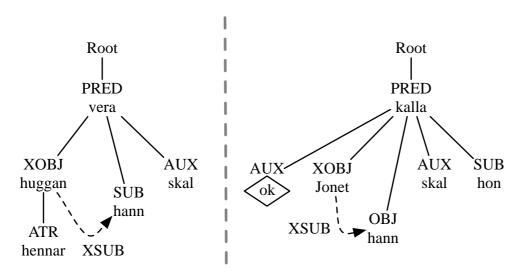
Comparable constructions are *mikill fyrir sér* 'great of size' and *ungr at aldri* 'young of age'. Here, the preposition *fyrir* is an oblique with the adjective *mikill*, and *at* with *ungr* (and one level down, *sér* is an oblique under *fyrir*, and *aldri* under *at*).

Datives with body parts, like hofuð mér 'my head', are discussed in ch. 7.4.3 below.

7.3.4 XOBJ

The external object (XOBJ) has no immediate counterpart in traditional syntax. It includes predicatives, infinitives and participles. External objects are in a dependency relationship with two words in a sentence, one primary (its parent verb) and one secondary. The secondary relationship is indicated with a slash arrow. See ch. 9.1 below for details on slash arrows.

Predicatives are in general XOBJ, whether they refer to the subject or to the object in the sentence. The trees in (57) below show both types: In the first sentence, there is an XOBJ to the object *hann* [acc.], while in the second, the XOBJ is to the subject *hann* [nom.]. Notice the slash from XOBJ to OBJ, i.e. from the object complement to the object, in the first sentence, and from XOBJ to SUB, i.e. from the subject complement to the subject, in the second one. The application automatically adds the tag XSUB when slashing to a subject.



(57) Hann skal vera **huggan** hennar || ok skal hon kalla hann **Jonet**. 'He will be her comfort || and she shall call him **J**onet.'

Another example of a predicative as XOBJ is (97), where the conjunction *ok* represents the whole phrase *hugsjúkr ok harmsfullr*. See the tree in ch. 9.3.

(97) Af því var hann hugsjúkr ok harmsfullr.
'Therefore, he was distressed and sorrowful.'

Infinitives may be XOBJ, too, as in (98):

(98) Fyrr en þú tókt at **unna** mér, þá vart þú lofsæll af hreysti þinni. 'Before you fell in love with me, you were praised for your prowess.'

Infinitives as XOBJ are sometimes dependent on verbs denoting the beginning, duration or end of an action (phase verbs). The verb *taka* may be used in this way, like in the example above, but it looks as if Old Norwegian has few examples of this usage. In the Menotec corpus, we found no good examples of *byrja* 'begin' or *lúka* 'finish' + infinitive.

Other verbs can also take infinitives as XOBJ, if there is an external subject, e.g. *fysa* 'want to' in (99):

(99) Ok fýsti hann ekki aftr at fara.'And he did not wish to go back.'

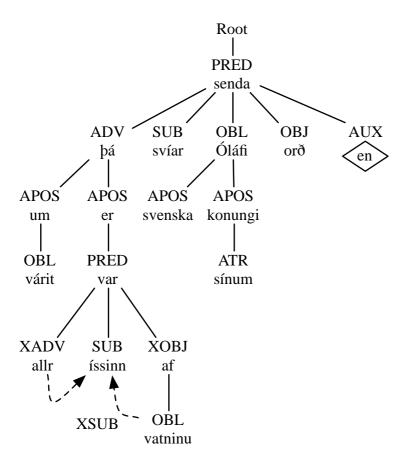
Infinitives denoting **purpose**, however, are adverbial and are tagged as XADV; cf. (118) and (119) in ch. 7.4.2 below.

Verb participles are often to be analysed as XOBJ, e.g.:

(100) Hér er **kominn** Óláfr konungr digri. 'Here Olaf the stout has come.'

In this sentence, one must slash from the external object *kominn* to the subject *Óláfr*. The construction in (100) is formally identical to subject + subject complement, as in:

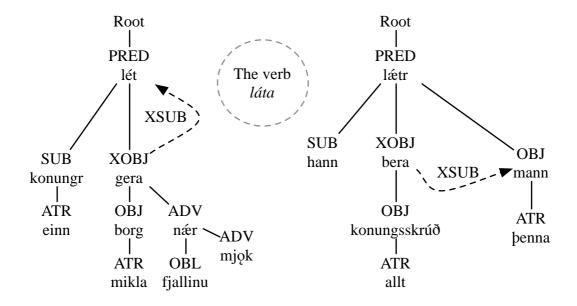
(97) Af því var hann **hugsjúkr ok harmsfullr**. 'Therefore, he was distressed and sorrowful.' **Preposition phrases** may also be XOBJ, as in (101) below. Here, *af vatninu* 'of the lake' is XOBJ to the subject *issinn* 'the ice'; the expression is similar to predicative constructions like 'the ice was gone' or 'the ice was away'. Note that *allr* is analysed as an XADV as in examples (149) and (155), meaning 'completely' rather than 'all'.



(101) En um várit er íssinn var allr **af vatninu**, þá senda svíar orð Óláfi svenska konungi sínum.

'And in the spring when the ice had all gone from the lake, the Swedes sent word to their king Olaf the Swedish (Skötkonung).'

Láta. The verb *láta* merits a special discussion. It often takes an external object, but the external object's subject is not the same as the subject of *láta*:

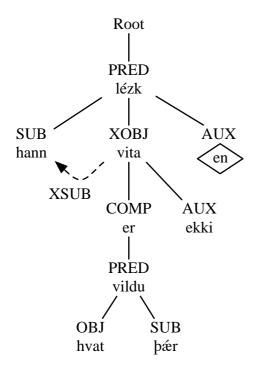


- (46) Mjok nær fjallinu **lét** einn konungr **gera** mikla borg. 'Very close to the mountain, a king had a great city built.'
- (102) Hann **létr** þenna **mann bera** konungsskrúð allt. 'He makes this man wear the king's whole apparel.'

In (46) it is not the king who builds the city, but another, unnamed person. We therefore slash directly from the XOBJ *gera* to the head verb *lét*, as shown in the left tree above. If we had slashed to the subject *konungr*, we would have implied that the king had built the city, which he did not. The king only initiated the process.

Sometimes the external subject appears as an object to *láta*, as in (102) above. Here, it is *þenna mann* who shall wear the king's apparel, and thus functions as subject for the infinitive *bera*. So we slash from the XOBJ *bera* to the OBJ *mann*, as shown in the right-hand tree above.

In the reflexive inflection of the verb, the head verb's subject and the external object's subject are identical, as in (103):



(103) En hann lézk ekki vita hvat er þær vildu.'But he acted as if he did not know what they wanted.'

In (103), it is the same person who acts, *lézk* 'let himself', and who knows, i.e. who is the subject for the external object *vita*. The analysis of the sentence *hvat er þár vildu* follows ch. 10.1 below.

7.3.5 COMP

The complement (COMP) is a function we use for arguments that are sentences or sentence-like. Instead of assigning these constructions functions like SUB or OBJ, we use COMP. This usage includes:

a. Nominal clauses (that-clauses):

(13) Unnasti, kvað hon, ek veit at vísu **at** ei getr þú borit mik. 'Lover, she said, I know for sure that you cannot carry me.'

The subjunction *at* functions as the COMP. See the analysis in ch. 7.1.2 above.

b. Indirect Questions (wh-clauses):

(104) Hon kom þar [...] ok spyrr, hverr maðr hann **er**. 'She arrived there [...] and asks who the man is.'

In these clauses, we take the finite verb as the head, and tag it as COMP.

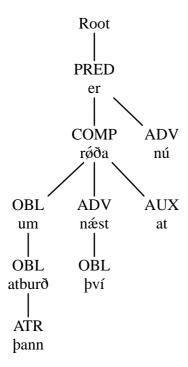
c. Accusative with Infinitive:

(90) Ok hefir hann heyrt fugla **syngja** svá fagri roddu at hann lysti til at hlýða. 'And he has heard birds sing with such a beautiful voice, that he wished to listen.'

Here, the infinitive *syngja* is the main verb in the sentence-like construction *fugla syngja* svá fagri rǫddu at hann lysti til at hlýða and is linked to the superordinate sentence as a COMP. See the tree in ch. 10.4.1 below.

d. Infinitives:

Infinitives that function as a subject or a predicative are also COMP:

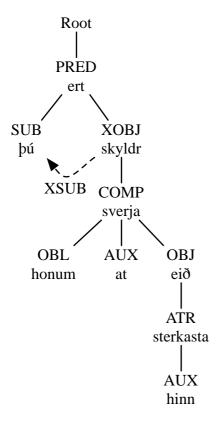


(105) Nú er um þann atburð því næst at røða.

'Now, one must talk about that event next.'

The infinitive marker is an AUX under the infinitive (cf. ch. 7.2.1 c). Note that in the adverbial phrase *því nást* 'next [to that]', we take *því* as an OBL under the ADV *nást*.

Infinitives (and infinitive constructions) may also be governed by adjectives like *skyldr* 'bound, obliged'. We understand them as arguments, and therefore COMP:



(8) Ert þú skyldr at sverja honum hinn sterkasta eið.'You are obliged to swear a very powerful oath to him.'

As mentioned above, we use COMP for arguments in the form of sentences, and infinitive clauses behave much like sentences, i.e. they can take their own object. Thus, in the infinitive clause at sverja honum hinn sterkasta $ei\delta$, we both have the oblique honum and the object $ei\delta$.

e. Comparative constructions:

In comparative constructions, we take the subjunction *en* 'than' as an COMP dependent on the comparative, e.g.:

(96) Hon hefir þar lengr verit en fimmtigi vetra.'She has been there for more than fifty winters.'

See the discussion in ch. 10.6 below.

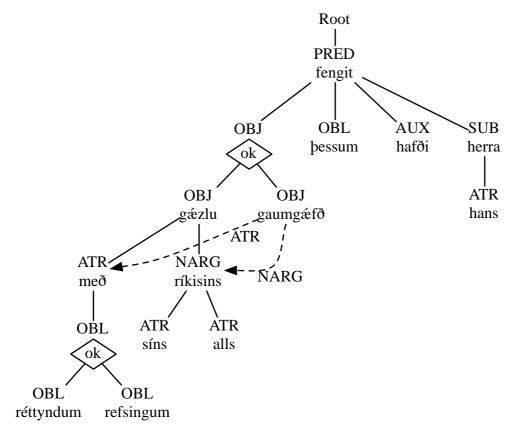
7.3.6 NARG

The nominal argument (NARG) is an argument of a noun, especially objective genitives. In Old Norwegian they have the form *stjórn landsins* 'the government of the land'. This type of genitive is so different from the attributive type *sonr Guðbrands* 'Gudbrand's son', that we think it sensible to use the function NARG. An example would be:

(106) Ok gaf þá hvárttveggja þeira ǫðru samband sitt með umskifti **fingrgulla** sinna. 'And then, they gave each other assurance by the trading of their gold rings.'

Here, *fingrgulla* is a nominal argument with *umskifti*, and *sinna* an attribute of *fingrgulla*. The objective genitive *fingrgulla* corresponds to the object in an underlying sentence *X* skiftir um fingrgull.

Note that a subjective genitive is analysed with the function ATR (ch. 14.6 below).



(107) Þessum hafði herra hans fengit gaumgæfð ok gæzlu alls **ríkisins** síns með réttyndum ok refsingum.

'To this man, his lord had entrusted the care and keeping of the entire kingdom, to dispense justice and punishments.'

In (107), rikisins is a genitive (with the attributes *alls* and sins) under $g\acute{a}zlu$, and should be analysed as an objective genitive. We must also link the coordinated words $gaumg\acute{a}f\emph{d}$ and $g\acute{a}zlu$ in some way. This is done by joining them with the conjunction ok, and then we slash from one of the coordinated elements to the genitive rikisins, as shown in the tree above.

Furthermore, a NARG may be a preposition governed by a noun derived from a verb ("deverbal nouns"), e.g. *rannsak* n. 'investigation', which is derived from the verb *rannsaka* 'investigate'. In the phrase *rannsaks um slíkt*, we consider *um slíkt* to be a NARG under *rannsaks* (cf. the tree in ch. 10.1 below):

(45) Kynligt þykkir mér, kvað hann, hví þú leitar ei rannsaks **um** slíkt. 'It seems strange to me, he said, why you do not seek an investigation into such things.'

7.3.7 AG

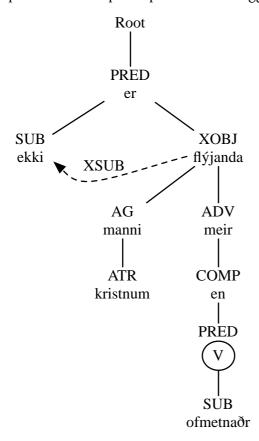
The agent (AG) is the logical subject in passive (and reflexive) constructions, usually a preposition phrase introduced by *af*, e.g.:

(108) Hér dømask oft góðir af illum.

'Here, good people are often judged by bad people.'

The preposition phrase *af illum* expresses the agent; *af* is the head on which *illum* depends (OBL). The agent is not commonly expressed in Old Norwegian in this way, but from a syntactic point of view, it is nevertheless interesting, since these cases may be interpreted as true passives. It is probably only the preposition *af* which is used to denote the agent. We believe that in the cases where we have indicated the agent, it is influenced by Latin, directly or indirectly.

A special case is the use of the present participle as a gerund, where the dative dependent on the participle should be tagged as an AG:



(109) Ekki er kristnum manni meir flýjanda en ofmetnaðr.'Nothing should be avoided by a Christian man more than pride.'

This construction, too, is influenced by Latin. The example above is taken from a part of the Old Norwegian Homily Book translated from Alcuin's *De virtutibus et vitiis*.

7.4 Adjuncts

Adjuncts are words or phrases which express the circumstances surrounding the verb's action, and they can usually be removed without compromising the sentence's structure. The prototypical adjunct is the adverbial.

7.4.1 ADV

The adverbial (ADV) is a function which typically expresses *time*, *place*, *manner*, *instrument* or *circumstance*. The function ADV is most commonly dependent on a verb when it denotes:

a. Time:

(110) **Forðum** í Norðmandí gerðisk einn atburðr er **síðan** var víða freginn um tvau ungmenni er mjok elskuðusk.

'In former days in Normandy there was an occurrence which became widely known, about two youths who loved each other very much.'

See the tree in ch. 10.2 below.

b. Place:

(110) Forðum **í Norðmandí** gerðisk einn atburðr er síðan var **víða** freginn um tvau ungmenni er mjok elskuðusk.

In a preposition phrase, the preposition is the head and carries the syntactic function. In (110), i is the head, and strictly the only word that should be displayed in bold. In this example, as well as in all following examples, we render the entire preposition phrase in bold.

c. Manner:

(13) Unnasti, kvað hon, ek veit **at vísu** at ei getr þú borit mik. 'Lover, she said, I know for sure that you cannot carry me.'

d. Instrument (Instrumental Dative):

(111) Ok mælti [hann] þá at engi myndi þann fald aftr falda, nema **með knífi** skæri eða **með soxum** klippi.

'And [he] said that no one would fold that hem again, unless [this person] cut it with a knife or clipped it with scissors.'

(9) Hann gekk fyrir of daginn ok steig heldr **stórum** [stigum]. 'He walked during the day and took rather great [strides].'

e. Circumstance:

(95) **At sonnu** var þetta í Neustria. 'Truly this was in Neustria.'

This type also includes adverbs denoting *degree*:

(88) Konungr lofaði hann **mjǫk**. 'The king praised him highly.'

Adverbials may be simple adverbs, like forðum in (110) and mjǫk in (88). They may also be the heads of preposition phrases, like í Norðmandí in (110), at vísu in (13), með knífi and með soxum in (111), or nouns in oblique cases (112):

(112) Hann reið níu **nætr** døkkva **dala** ok djúpa. 'He rode nine nights through dark and deep valleys.'

In (112) the noun *nátr* (acc.) is the head of the adverbial *níu nátr* and the noun *dala* (acc.) is the head of the adverbial *døkkva dala ok djúpa*.

Adverbials can also be subordinate clauses, as in (113):

(113) En **ef** þér líkar, ek vil við hana róða. 'But if you like, I will speak to her.'

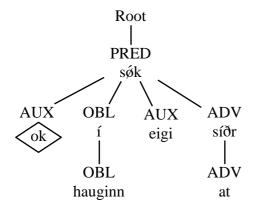
Here, the subjunction *ef* is the head in the clause *ef bér líkar*.

In addition to modifying verbs, adverbials may also modify other word classes, e.g. the preposition $n \acute{e}r$ 'close to' in (46), the adjective *haltr* 'lame' in (114) and the adjective $v \acute{a}gs korinn$ 'indented with bays' in (115):

- (46) **Mjǫk nǽr** fjallinu lét einn konungr gera mikla borg. 'Very close to the mountain, a king had a great city built.'
- (114) Var sá hafr **haltr** eftra **féti**.

 'That ram was lame on its back foot.'
- (115) Kringla heimsins, sú er mannfolkit byggir, er mjǫk vágskorin.
 'The circle of the world, which is inhabited by people, is quite indented with bays.'

A special type is that of comparatives preceded by the adverb *at*, e.g. *at meirr* 'the more', *at verri* 'the worse' and *at siðr* 'the less'.



(116) Ok søk í hauginn eigi at síðr.

'And head for the mound none the less.'

We always mark the negative adverb *eigi* as AUX. For this reason, we place $si\delta r$ as ADV under the predicate $s\delta k$ (imperative of $s\delta kja$), and at as a dependent of $si\delta r$.

The unassuming little *at* is probably the most ambiguous word in Old Norwegian (it can be a subjunction, preposition, adverb, infinitive marker and noun, cf. ch. 1.3 and the table in ch. 3.1 above). As mentioned in ch. 6.2.2, it may even be a negation particle, but only as an enclitic.

7.4.2 XADV

External adverbials (XADV) include participles, infinitives and adjectives with an external subject. There are a few types of XADV:

a. Present participles:

In (117), the phrase *vinir ok frándr* 'friends and relations' is the external subject of *eggjandi* 'encouraging':

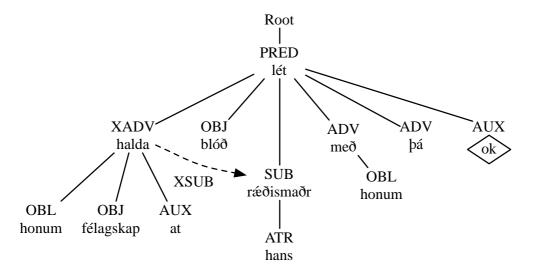
(117) Vinir ok frændr kvámu til hans með røðum ok ráðagerðum sínum, **eggjandi** hann at fá sér eignar púsu.

'Friends and relations came to him with advice and plans, encouraging him to take a wife.'

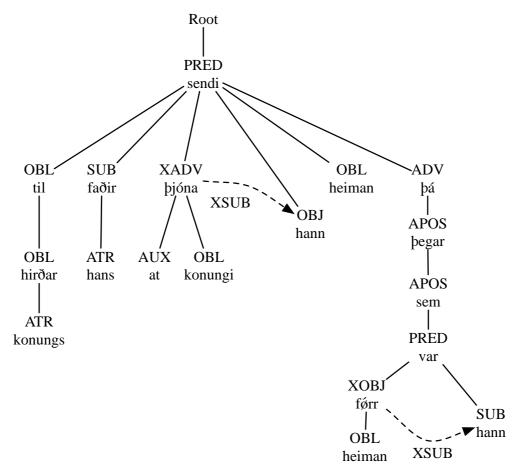
Construction like the one in (117) are most common in the works translated from Old French or Latin, often called the learned style.

b. Infinitives of purpose:

Sentences (118) and (119) contain examples of infinitives expressing purpose:



(118) Ok at **halda** honum félagskap þá lét blóð með honum ræðismaðr hans. 'And to keep him company, his steward underwent bloodletting with him.'



(119) Þegar sem hann var heiman fǿrr, þá sendi hann [acc.] faðir hans heiman til konungs hirðar at **þjóna** konungi.

'As soon as he was able to leave home, his father sent him to the king's court to serve the king.'

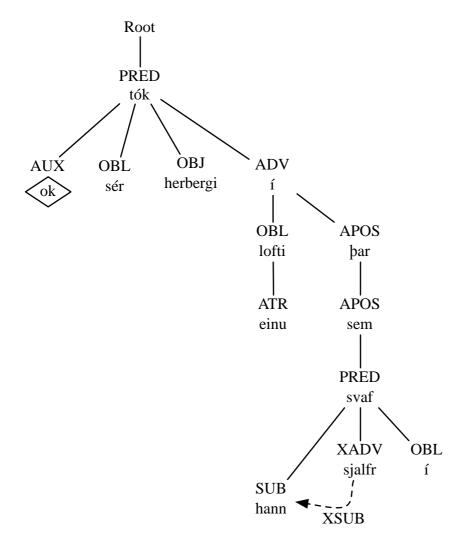
Infinitives depending on verbs meaning the beginning, duration or end of an action (phase verbs) are analysed as XOBJ, e.g. (98) in ch. 7.3.4.

c. Adjectives:

Also adjectives can be XADV, like *einn* in (12). Note that this word is usually analysed as a determiner, but here it clearly functions as an adjective, and should be classified as one:

(12) Hví ertu **einn** kominn í Jǫtunheima? 'Why have you come alone to Jotunheim?'

The enclitic -tu (for the pronoun $b\hat{u}$) in ertu is the external subject of einn. The word sjalfr in (120) is analysed in the same way:



(120) Ok tók sér herbergi í lofti einu þar sem hann svaf **sjalfr** í. 'And [he] took a room in a loft where he himself slept.'

7.4.3 ATR

Attributes (ATR) modify other words. For instance, adjective + noun:

(112) Hann reið níu nætr døkkva dala ok djúpa. 'He rode nine nights through dark and deep valleys.'

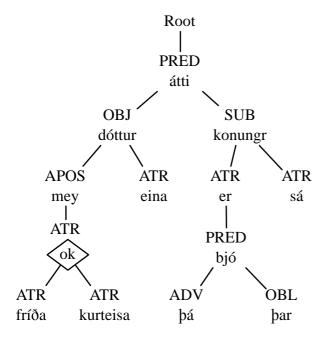
Determiner + noun:

(27) Var **þetta** dýr hverjum manni kært er í hirð konungsins var. 'This animal was dear to every man at the king's court.'

Possessive + noun:

(28) Ok rann hjarta **hans** allt ór honum. 'And his heart left him completely.'

Furthermore, we analyse **restrictive relative clauses** as ATR, e.g. *er þá bjó þar* 'who at the time lived there':



(121) Sá konungr **er** þá bjó þar, átti eina dóttur, fríða ok kurteisa mey. 'The king who at the time lived there had a daughter, a fair and courteous maiden.'

In (121), we also have an example of an ATR as a noun + determiner, sá konungr, and as a noun + adjective, fríða ok kurteisa mey. In the last instance, there is coordination, and so the conjunction, too, must be tagged with ATR (more on coordination in ch. 9.3 below). The relationship between restrictive and non-restrictive relative clauses is discussed in more detail in ch. 10.2 below.

Generally, ATR is a function which restricts a noun's reference; it does not only indicate subordination. In (112), *døkkva dala* refers to a smaller set than *dala* would alone.

In cases of a dative with body parts (dativus sympatheticus), e.g. hofuð mér 'head for me, i.e. my head', one might think that the dative should be an OBL. We believe that this use is so close to the possessives (cf. ch. 2.4.3), e.g. hofuð mitt 'my head', that both mér and mitt should be tagged as ATR.

7.4.4 APOS

Appositions (APOS) are subordinate words or phrases which do not restrict the meaning of their parent, e.g.:

(121) Sá konungr er þá bjó þar, átti eina dóttur, **fríða ok kurteisa mey**. 'The king who at the time lived there had a daughter, a fair and courteous maiden.'

In (121), *fríða ok kurteisa mey* (with *ok* as its head) is a dependent on *eina dóttur*, but does not restrict the object's reference; *dóttur* refers to the same set as *mey*.

Non-restrictive relative clauses are also analysed as APOS. Cf. the discussion in ch. 10.2.2 below. A non-restrictive relative clause can be seen in (91) below:

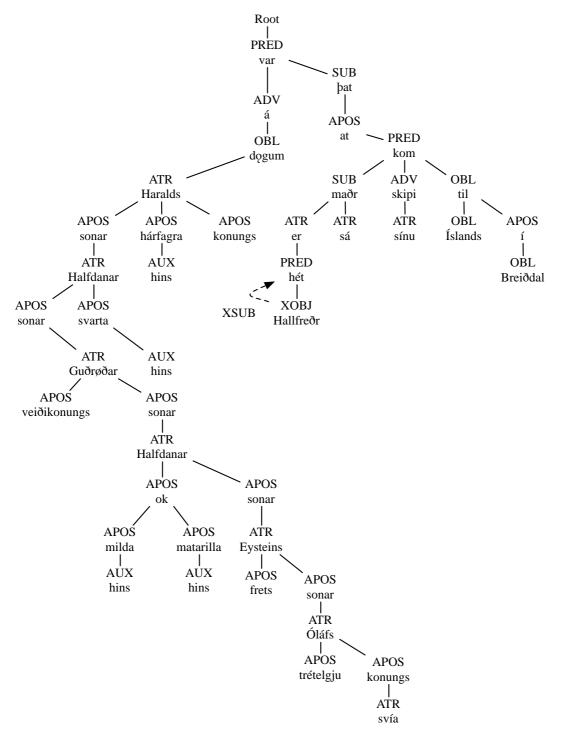
(91) Af þessum tveim ungmennum gerðu bretar strengleik **er** þeir kalla Tveggja elsk-

'About these two youths, the British composed a lay which the call The Lay of the Two Lovers.'

Patronyms (like Haraldsson and Eiríksdóttir) are analysed as an APOS under the name they modify. Thus, in Óláfr Haraldsson, Haraldsson is an APOS under Óláfr. If the patronym is written as two words, Óláfr Haralds son, the word son is an APOS under Óláfr and Haralds is an ATR under son. Titles, like konungr, herra and frú are also analysed as APOS under the name they appear with. In (122), konungr is an APOS under Marhás. Furthermore, fránda (with the attribute sínum) is an APOS under Tristram:

(122) Marhæs **konungr** var reiðr Tristram **frænda** sínum. 'King Marhes was angry with his kinsman Tristram.'

Sometimes we see very complicated constructions, as shown in the tree of example (123) below. Series like these are often found at the beginnings of Icelandic sagas. This is really a genealogy in the guise of a series of genitive constructions.



(123) Pat var á dogum Haralds konungs hins hárfagra, Halfdanar sonar hins svarta, Guðrøðar sonar veiðikonungs, Halfdanar sonar hins milda ok hins matarilla, Eysteins sonar frets, Óláfs sonar trételgju Svía konungs, at sá maðr kom skipi sínu til Íslands í Breiðdal, er Hallfreðr hét. 'It was in the days of King Harald the fair-haired, son of Halfdan the black, son of Gudrod the hunting king, son of Halfdan the mild and meal-grudging, son of Eysteinn fart, son of Olaf the wood-carver, king of Swedes, that a man named Hallfred sailed his ship to Iceland and landed in Breiddal.'

Those who study names often classify patronyms among other types of epithets denoting profession (bóndi), personal features (inn digri), residence (i Geitdal, ór Laxárdal), incidental nicknames (selsbani, i.e. the killer of Þórir selr), amd regular nicknames like smjǫrmagi 'butter-belly' (cf. Særheim 2013: 525–527). It is difficult to differentiate between all these types of epithets, but syntactically they all fall into the same category. We analyse all of them as APOS. The main word is always the given names, like Óláfr, Haraldr, Guðný, Ástríðr etc.

7.4.5 PART

The partitive (PART) function expresses the group to which a noun belongs. We do not think that it is useful to separate PART from ATR in genitive constructions in Old Norwegian; it is, in our opinion, a semantic not a syntactic term, and will only make the annotators' work more difficult.

7.5 Superfunctions

Superfunctions cover two or more functions and are used in cases where it is difficult to make a choice between them. The choice may be between two arguments, as is the case with ARG, or between an argument and an adjunct, as with PER, NONSUB and ADNOM, or between two adjuncts, REL. As mentioned above, we would like to restrict the use of superfunctions as much as possible.

7.5.1 ARG

A superfunction which can be used instead of selecting either OBL or OBJ.

7.5.2 PER

A superfunction which can be used when it is difficult to distinguish between an argument and an adjunct, e.g. OBL or ADV, cf. ch. 14.2.

7.5.3 NONSUB

A superfunction used instead of selecting either OBJ, OBL or ADV. This is infrequent, but it may be useful to analyse some anomalies as NONSUB. In ch. 13.4, we show that it can be used to tag one of the twin words in dittographies.

7.5.4 ADNOM

A superfunction which can be used instead of selecting either ATR, APOS, PART or NARG.

7.5.5 REL

A superfunction which can be used to tag a relative clause when the annotator is not sure whether it is restrictive (ATR) or non-restrictive (APOS).

7.6 Secondary Functions

The secondary functions express a relationship between nodes which have other, primary relationships, like between a subject and a predicative (XOBJ). Both are dependents under the sentence's PRED, but are also connected with one another, as indicated by the fact that the predicative agrees with the subject. This is expressed by a secondary relationship, as explained in ch. 9.1 below.

7.6.1 XSUB

An external subject, XSUB, is allotted to the function XOBJ, if it can be identified. This is done by slashing, and the application automatically adds the function XSUB, as in (124). Cf. the tree in ch. 13.2.

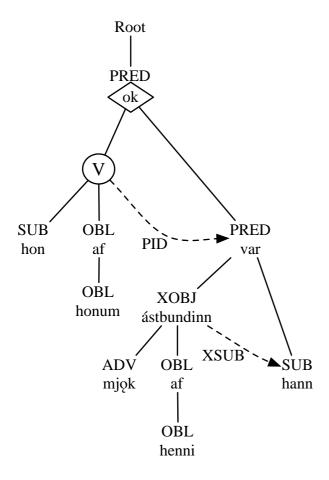
(124) Er **barnit** verðr **fótt**, skalt þú senda systur minni, er **gift er** í Norðmandí rík ok auðig, kurteis ok hyggin frú.

'When the child is born, you should send [it] to my sister, who is married in Normandy, a powerful and wealthy, courteous and wise lady.'

Here, *barnit* is an XSUB of *føtt*, cf. the discussion on XOBJ above. When an external subject can not be identified, XOBJ is instead connected to its parent verb, as in the relative clause *er gift er í Norðmandí*. Here, *gift* is an XSUB of the verb *er*.

7.6.2 PID

A verb is automatically assigned a PID (Predicate Identity) when it is in a secondary relationship with an empty verbal node. An example would be (15) on the next page, where *hon af honum* must be analysed by adding an empty verb, *hon* [var] af honum. Here, one must slash from the empty verbal node to the predicate var in the preceding sentence.



(15) Hann **var** mjǫk ástbundinn af henni, ok hon af honum. 'He was very much in love with her, and she with him.'

In this tree, the second sentence is shown to the left and not - as one might expect - to the right, but in dependency analysis, one does not depict word order. A tree represents the relations between words, not their sequence.

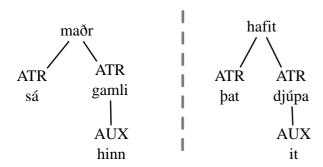
Another example of slashing from an empty verb to an explicit verb is (74) in ch. 7.1.1 above. See ch. 9 below for a broader discussion of slashing.

8 Phrases

Even though phrases are not a part of the dependency analysis, it is often useful to refer to them when discussing syntax. For our part, this is especially true of noun phrases and preposition phrases.

8.1 Noun Phrases

Noun phrases consist of a noun, primarily, and may additionally include adjective phrases, determiners, preposition phrases (as ATR), relative clauses (as ATR or APOS) and other noun phrases. Nouns may be modified by sá only, e.g. sá maðr, but *hinn maðr and *sá hinn maðr are ungrammatical. Adjectives may take sá, sá hinn or hinn, e.g. sá gamli maðr, sá hinn gamli maðr and hinn gamli maðr. But since sá hinn maðr can not occur without an adjective, we consider hinn to be dependent on the adjective:



(125) The noun phrases sá hinn gamli maðr 'the old man' and hafit þat it djúpa 'the deep ocean'

In the syntactic analysis, we do not differentiate between definite and indefinite nouns, so *haf þat it djúpa* and *hafit þat it djúpa* are analysed in the same way.

Even in very complex noun phrases, there is little subordination in the dependency analysis, other than that *hinn* is subordinated to the adjective, where they occur together. In the artificial example *allar þessar inar þrjár ofsaliga skemmtiligu bókr* 'all these (the) three immensely entertaining books', all the words are ATR on the same level under *bókr*, except for *inar*, which is an AUX under *skemmtiligu*, and *ofsaliga*, which is an ADV under *skemmtiligu*.

Adjective phrases and determiner phrases sometimes have the same function as noun phrases. One can think of them as noun phrases without the noun. In the examples below we have included hypothetical nouns in square brackets.

Adjectives move up to the place where the noun would have been, while any determiners with the adjectives become dependents. An example of this is (126), cf. the tree in ch. 10.6.

(126) Sú hin **fátókasta** [kona] í hennar þjónustu er fríðari en Þér, frú dróttning! 'The poorest [woman] in her service is fairer than you, my queen!'

Adjectives that stand alone can also be heads in a phrase. So it is in (3), where *ríkir* is the head, with the function SUB.

(3) **Ríkir** [menn] báðu hennar. 'Powerful [men] wooed her.'

Determiners can also be heads in phrases. An example of this is (43), where *bessir* is a SUB and *sá dagr* is an XOBJ.

(43) **Pessir** [dagr] er sá dagr er guð gerði. 'This [day] is the day that God made.'

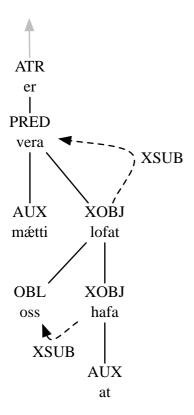
8.2 Verb Phrases

Verb phrases are generally simple in Old Norwegian. They may contain only a finite main verb, usually marked as PRED, or an auxiliary verb + main verb, where the auxiliary verb is dependent (AU) on the main verb (PRED). In exceptional cases, the phrases are more complex, like (71), from *Barlaams ok Josaphats saga* (translated from Latin into Old Norwegian):

(71) Aldrigi **munt** þú slíkan stein **sét hafa**. 'You will never have seen such a stone.'

Here, sét is the PRED, while both munt and hafa are AUX under sét (cf. the tree in ch. 7.1.1 above). In some cases, the main verb is not a PRED. In indirect questions, for example, the verb will be a COMP (cf. ch. 10.1 below).

Another example of a complex verb phrase is contained in the relative sentence (127) in the *Old Norwegian Homily Book*:



(127) [...] er oss mátti lofat vera at hafa.

'[...] which might have been promised to us to have.'

8.3 Adjective Phrases

Adjective phrases have an adjective as the head word, as in *hann var vaskr maðr* 'he was a valiant man' (56). The adjective is typically a dependent under a noun and has the function ATR. Sometimes, as in this case, the phrase consists of only one word.

The adjective can also have its own dependents, e.g. adverbs, *mjǫk vágskorin* 'quite indented with bays' in (115) in ch. 7.4.1 above (p. 102). The adverb then is tagged as an ADV. The same applies in examples like *góðr tiltaks* 'good to resort to', where the noun *tiltak* (in the genitive) serves as an ADV under the adjective.

Superlative adjectives can take genitive dependents, which are tagged as ATR, e.g. *allra manna fóthvatastr* 'the most swift-footed of all men'. This could also have been analysed as a partitive (PART), but since we do not want to distinguish between ATR and PART in genitive constructions in Old Norwegian, the function must be ATR (cf. ch. 7.4.5 above).

In phrases like *mikill fyrir sér* 'great of oneself, powerful', the adjective *mikill* is the head. We then take *fyrir* as an OBL under *mikill*, and *sér* as an OBL under *fyrir*. Cf. ch. 7.3.3 above (p. 91).

8.4 Adverbial Phrases

Adverbial phrases have an adverb for a head. Adverbs are typically dependents under other words and have the function ADV. The adverbs themselves may also have dependents. These will be ADV, too, e.g. *mjok oft* 'very often'.

8.5 Pronominal Phrases

Pronominal phrases have a pronoun as their head and are usually dependents under the predicate. Pronouns may also have their own dependents, e.g. relative clauses, *peir* er eigi vildu undir kristni ganga 'those who did not want to convert to Christianity'.

8.6 Preposition Phrases

Preposition phrases have a preposition as their head. They can occur without an object (in so-called absolute use), but most often they have a noun phrase as an object. That phrase is an OBL under the preposition.

(95) At sonnu var betta í Neustria.

'Truly this was in Neustria.'

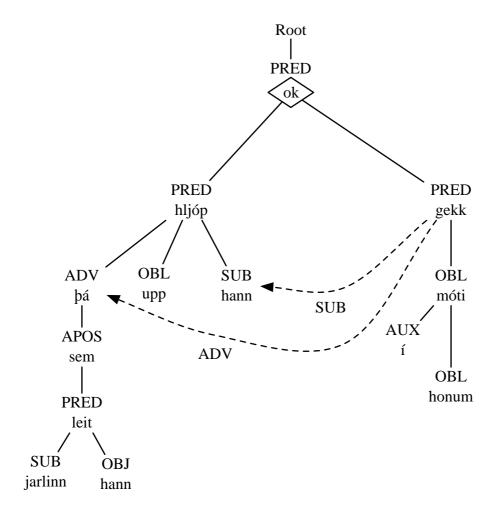
In (95), at and i are heads of their respective preposition phrases, at sonnu and i Neustria.

A preposition phrase may be modified by an adverb, e.g. síðla in síðla um kveldit 'late that evening'. This adverb is taken as a dependent under the phrase's head, i.e. the preposition um gets two dependents, the ADV síðla and the OBL kveldit.

Many Old Norwegian prepositions are complex. We distinguish between two types, which will be treated somewhat differently. The morphological analysis is given in ch. 2.7 above, the syntactic here.

8.6.1 Preposition + Preposition (including vestigial nouns)

In the complex prepositions á millum, í móti, í hjá, fyrir sakir etc., we regard the second element as having the function that the phrase has within the sentence, usually ADV or OBL, while the first node is an AUX. In (128), this applies to í móti:



(128) Sem jarlinn leit hann, þá hljóp hann upp ok gekk í **móti** honum. 'As the earl saw him, he jumped up and walked towards him.'

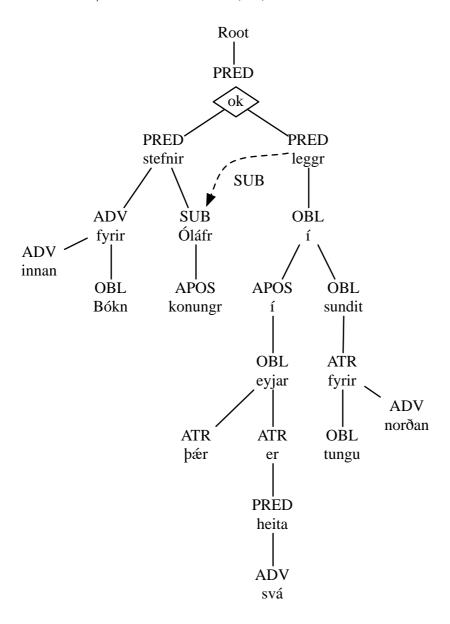
The second word in complex prepositions of this type will always be taken as another preposition. This is uncontroversial in \acute{a} millum and \acute{i} $hj\acute{a}$, where both are undoubtedly prepositions, which can occur together, \acute{a} millum and \acute{i} $hj\acute{a}$, or one member can occur on its own, millum and $hj\acute{a}$.

In this group, we also include complex prepositions of which one word is originally a noun, like i móti, a bak, til handa, etc. Here we observe that inflectional forms of the original nouns, mót n., bak n. and hond f., are on their way to becoming lexicalised as prepositions. Some of them, like mót(i) can also occur alone, while others can not. We nevertheless believe that it is defensible to classify them as prepositions, and in ch. 2.7 above we suggest than this be done. As a consequence, a small group of words must be disambiguated, namely bak, hond, mot and sok. See the table in ch. 3.1.

In example (128), both i and $m \acute{o}ti$ are classified as prepositions in the morphological analysis. In the syntactic analysis, i is an AUX under $m \acute{o}ti$, which takes honum as an OBL.

8.6.2 Preposition + Adverb

Another type of complex prepositions is preposition + adverb, e.g. fyrir norðan, fyrir útan and um fram, as illustrated in (129).

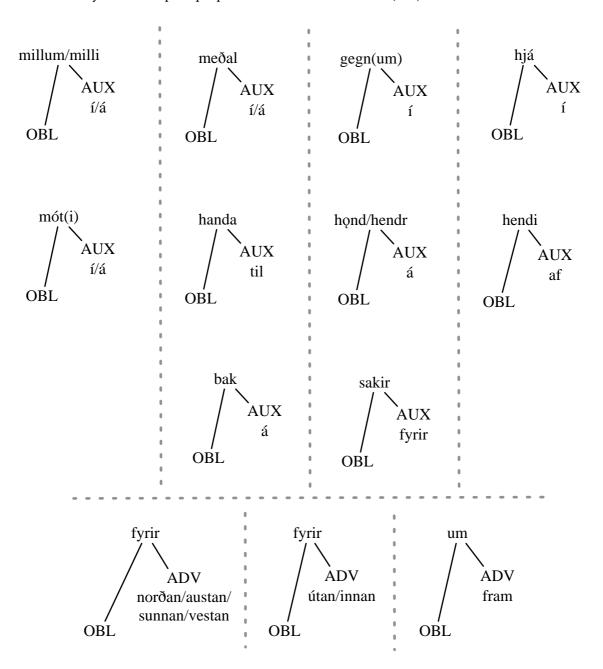


(129) Óláfr konungr stefnir **fyrir innan** Bókn ok leggr í sundit **fyrir norðan** tungu í eyjar þær er svá heita.

'King Olaf sails inside Bokn and heads into the channel north of the tongue toward the islands that bear this name.'

In complex prepositions of this type, the first element serves as the head and the second element is an ADV under it. The object is then an OBL under the preposition, as in other preposition phrases. Adverbs ending in -an (norðan, sunnan, austan, vestan, innan, útan) and fram function as adverbials under the preposition.

The analysis of complex prepositions is summarised in (130) below.



(130) Overview of the analysis of complex prepositions. The first main type (8.6.1) is shown above the dashed line, the second type (8.6.2) below.

The adverbs in -an can also stand alone as prepositions and must be morphologically annotated accordingly. As discussed in ch. 2.7 above, there is thus a small group of words that has to be disambiguated.

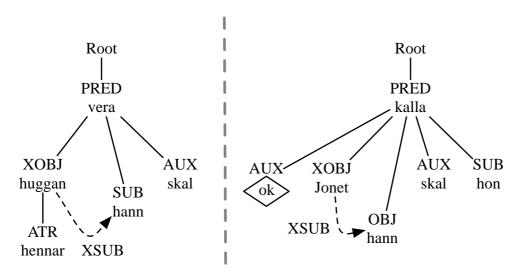
Note that prepositions of this type govern a different case depending on whether they stand alone or not. Thus, *fyrir norðan* governs the accusative, while *norðan* governs the genitive.

9 Slashing and Coordination

9.1 Slashing

Slashing is used in three different circumstances: (a) to show that a word has an external subject, (b) to show that an empty verb has the same head as an explicit verb ("predicate identity") and (c) to show that words are coordinated. In classical dependency grammar, slashing is not used but this functionality was added in the PROIEL project and we borrow it from there.

(a) Slashing to **external subjects** apply to the functions XOBJ and XADV, as shown in ch. 7.3.4 and 7.4.2 above. In the first sentence of (57) below, the slash arrow points from the XOBJ *huggan* to the SUB *hann* [nominative], in traditional terminology from the subject complement *huggan* to the subject *hann*. The idea is that the verb *vera* is the sentence's head, and *huggan* and *hann* are each dependents under the verb. But there is also a *secondary* dependence between *huggan* and *hann*: the subject *hann* is the external subject (XSUB) of the complement *Jonet*. This is the relationship that the slash serves to show. The arrow points towards the head of the secondary dependency.

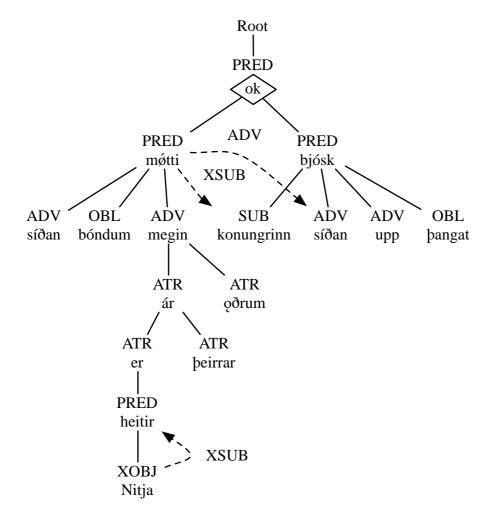


(57) Hann skal vera **huggan** hennar ok skal hon kalla hann **Jonet**. 'He will be her comfort and she shall call him Jonet.'

In the next sentence of (57), the slash arrow points from the XOBJ *Jonet* to the OBJ *hann* [accusative], in traditional terminology from the object complement *Jonet* to the

object *hann*. In addition, there is a secondary dependence between *Jonet* and *hann*: the object *hann* is the external subject (XSUB) of the complement *Jonet*.

Often, there is no subject in the sentence one can slash to. In such cases, one must slash to the PRED, which is the sentence's head word and is typically the subject's head, directly or indirectly. Examples are (110) in ch. 10.2 below, and (131) here:

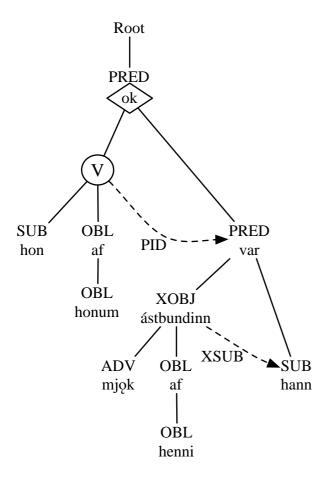


(131) Síðan bjósk konungrinn upp þangat ok mǿtti bóndum ǫðrum megin ár þeirrar er **Nitja** heitir.

'Then the king headed up there and met the farmers on one side of the river which is named Nitja.'

In this example, Nitja is actually the complement (XOBJ) of $\acute{a}r$ (genitive of \acute{a} 'river'), but since it is not allowed to slash outside the sentence, we must settle for slashing to its head, the verb *heitir*.

(b) In the case of **empty verbs**, we slash to an overt verb if there is a coordinated one. An example is (15):



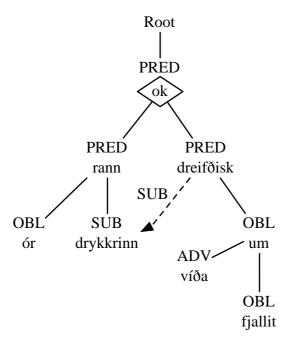
(15) Hann **var** mjǫk ástbundinn af henni || ok hon af honum. 'He was very much in love with her, || and she with him.'

In this example, we posit an empty verbal node in the second sentence, ok hon [var] af honum, and we slash from the empty verb in this sentence to the overt verb var in the first sentence (shown to the right in the tree). See also the comments in ch. 7.6.2 above.

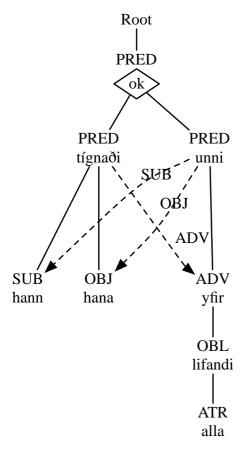
(c) In **coordinations**, slashing is used to show the relationship between the coordinated elements. The principle is that the conjunction is raised above the coordinated elements and is tagged with their function. This is done in the same way for coordinated sentences and coordinated phrases. Since the conjunction is an important node in the sentence tree, it is highlighted by appearing inside a rhombus (cf. the trees in this chapter).

9.2 Sentence oordination

When sentences are coordinated, the conjunction receives the PRED function and the main verbs in the coordinated sentences are subordinated to the conjunction, as in (73). In this sentence, we slash from the second verb *dreifðisk* to the subject *drykkrinn* which it shares with the first verb *rann*.



(73) Rann drykkrinn ór **ok** dreifðisk víða um fjallit. 'The drink spilled out and spread all over the mountain.'



(132) Hann tígnaði hana **ok** unni yfir alla lifandi. 'He revered her and loved above all other living people.' In (132), the verb share dependents: both *tígnaði* and *unni* have *hann* as their subject, *hana* as object, and *yfir alla lifandi* as adverbial. This is analysed by assigning the subject and object to the verb *tígnaði* as primary dependents, while the other verb, *unna*, has the same words as secondary dependents. We show this by slashing from *unna* to the dependents in question. Note that *unna* normally takes an oblique in dative, but in this case, the only option was to slash to the other predicate's accusative object *hana*. When it comes to the preposition phrase *yfir alla lifandi*, it is the other way around – the nearest verb is *unna*, under which the phrase becomes a primary dependent, with a slash from *tígna*.

To make the analysis consistent, we follow the simple rule that the nearest of the two (or more) coordinated words is the main word, i.e. the one which receives the primary dependents. Here, *hann* and *hana* are closest to *tígnaði*, and *yfir alla lifandi* is closest to *unni*.

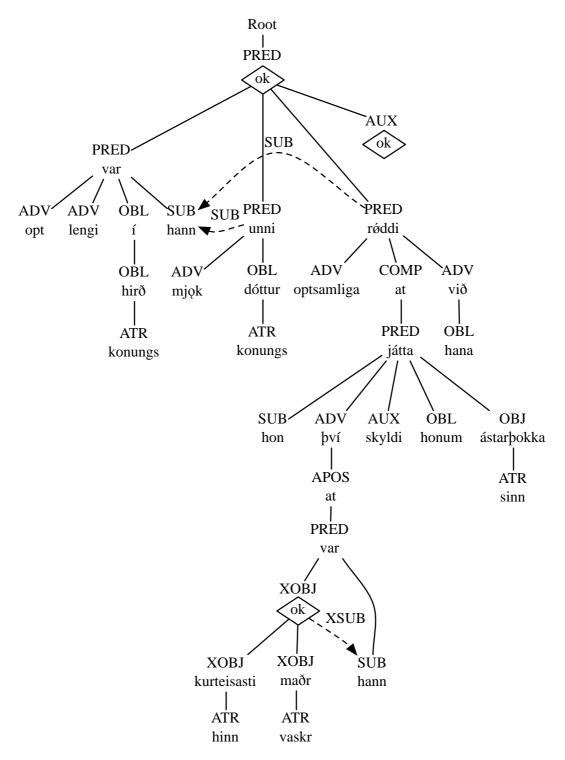
An alternative might have been to make the shared words or phrases, commonly ADV and AUX, dependents under the coordination itself. But since dependency analysis is focused on words rather than phrases, and because the main verb is so important, we will avoid this option. In (133), *hefir* happens to be an AUX to both *byrgt and l\(\delta st*, but we will analyse the sentence by hanging *hefir* on the first PRED *byrgt*, not the conjunction *ok*. Then we slash from *l\(\delta st*\) to *hefir*.

(133) Fyrir því **hefir** hann hér **byrgt** mik **ok læst** í þessum steingarði. 'Therefore he has covered me and imprisoned in this stone garden.'

Shared phrases should always be marked with slash arrows. Coordinated phrases may share many different kinds of phrases which may be easy to miss. Infinitives can, for example, share an infinitive marker, so the annotator must be vigilant! Examples of slashing to shared phrases can be found in (134), where the three PRED *frá* 'heard of', *bjó* 'prepared' and *kom* 'came', share the subject *Milun*. See the tree in ch. 9.4 below.

(134) Milun **frá** orðsending hennar, **bjó** ríkuliga ferð sína ok **kom** upp í Norðmandí. 'Milun heard of her message, prepared his journey amply, and came up to Normandy.'

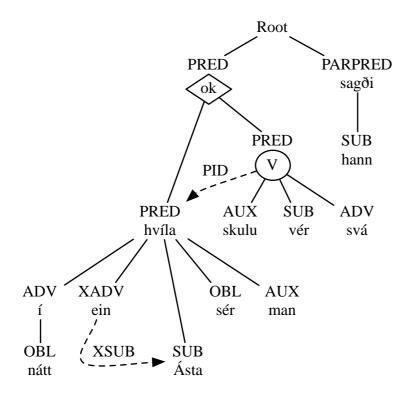
When a series of sentences is connected joined with more than one conjunction, the first one is placed directly under the sentence root, and every PRED in the sentence hangs from it, while the other conjunctions all become AUX under the first one. In (56a) (in ch. 6.1.1 above), we see that the first ok serves as the main connective word in the sentence. Based on this analysis, the result will be as shown on the next page. The tree shows that the first conjunction ok becomes PRED for the whole series, and the verbs are its dependents.



(56a) Hann var oft lengi í konungs hirð || **ok** [hann] unni mjǫk konungs dóttur || ok oftsamliga rǿddi [hann] við hana | at hon skyldi játta honum ástarþokka sinn | því at hann var vaskr maðr ok hinn kurteisasti.

'He was often a long time at the king's court and [he] loved the king's daughter very much and [he] often said to her that she should give him her love because he was a valiant man and most courteous.'

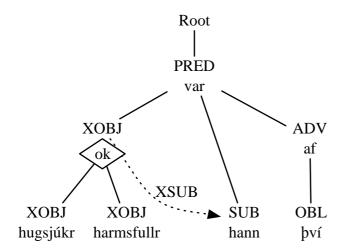
Finally, we note that in some sentences, there may be one explicit verb and another implicit, empty verb. An example of this kind of construction is (74), analysed in ch. 7.1.1 above (p. 81). Here, *hvíla* is explicit in *Ein man Ásta hvíla sér í nátt*, but implicit in *ok svá skulu vér* [*hvíla oss*]. We must slash from the empty verbal node to the explicit verb to indicate the predicate identity (PID).



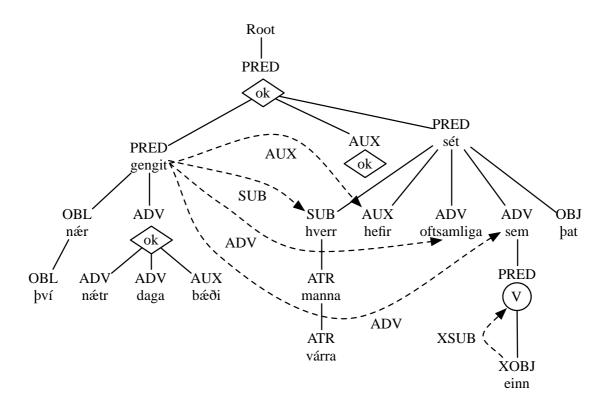
(74) Ein man Ásta hvíla sér í nátt, sagði hann, ok svá skulu vér [hvíla] [oss]. 'Asta will sleep alone tonight, said he, and so shall we [sleep].'

9.3 Phrase coordination

In the paragraphs above, we saw that when a conjunction coordinates two or more verbs, it is assigned the same function as the verbs and becomes their head. The same method is used for all other kinds of coordination, i.e. below the PRED level. In (97), the predicatives (XOBJ) *hugsjúkr* and *harmsfullr* are coordinated by the conjunction *ok*, and *ok* inherits their function:



(97) Af því var hann **hugsjúkr ok harmsfullr**. "Therefore, he was distressed and sorrowful."



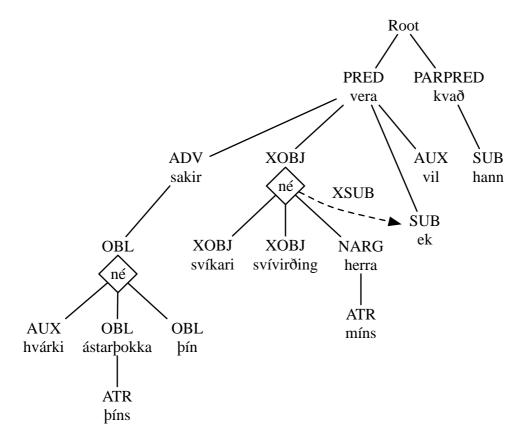
(49) Ok hverr sem einn várra manna hefir oftsamliga sét þat ok gengit nær því, bæði nætr ok daga.

'And each one of our men has often seen it and approached it, both at night and by day.'

The relation between the subject and the predicative in (97) is expressed by slashing from the conjunction ok 'and' to the subject instead of slashing from each one of the coordinated words. The application automatically assigns the tag XSUB to the relationship between the XOBJ ok and the SUB bann. As previously mentioned, slashing indicates a secondary dependency; the primary dependency is between the PRED var and the XOBJ ok (which represents bugsjúkr and barmsfullr), while the secondary dependency is between the latter and the SUB bann.

In the case of $b\acute{a}\acute{d}i - ok$ 'both - and', (annat) $hv\acute{a}rt - e\~{d}a$ 'either - or' and $hv\acute{a}rki - n\acute{e}$ 'neither - nor', both elements are to be classified as conjunctions, but we analyse the latter as the primary conjunction and the former as AUX under it, as in (49) on the previous page. See also the discussion of these conjunctions in ch. 2.8 above. This is similar to English, where one can say he wants meat and fish or he wants both meat and fish but not *he wants both meat fish.

The analysis of the comparative construction *hverr sem einn* is briefly discussed in ch. 10.6 below. As shown in the tree on the previous page, we use an empty verbal node.



(135) **Hvárki** sakir þín, kvað hann, **né** ástarþokka þíns vil ek vera svíkari **né** svívirðing herra míns

'Not for your sake, said he, nor for your love's do I wish to be a traitor or a disgrace to my lord.'

In (135), analysed on the previous page, we observe that *né* stands alone as a conjunction in *svíkari né svívirðing*, but together with *hvárki* in *hvárki sakir þín né ástarþokka þíns*. In the first coordination, we slash in order to show that the XOBJ have the subject *ek* as a secondary parent, and since the two words are coordinated, the slash goes from the conjunction *né* to the subject *ek*. This is comparable to example (97) above.

Then what about the attribute *herra mins*? It makes sense to hang it on the nearest word, *svivirðing*, and then slash from the coordinated *svikari* to *herra* in *herra mins*, since *herra mins* is an attribute of both words. But as it happens, the application assumes that a slash from an XOBJ or an XADV is to the external subject (either subject or object complements) and the relationship is then automatically marked as XSUB. Here, the relationship is ATR, which makes it impossible to slash from the coordinated *svikari* to the ATR *herra mins*.

We are therefore forced to break our rule from ch. 9.2 above, and hang *herra mins* as an ATR on the conjunction *né*. Since the conjunction inherits its function from *svíkari* and *svívirðing*, namely XOBJ, an ATR will have the same relationship with both coordinated words. This is a way of expressing what could have been expressed with slash notation.

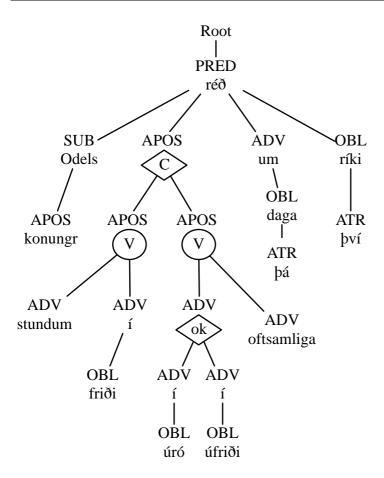
Coordination often occurs in discontinuous constructions, as in (136). In this sentence, the adverbial *með honum* only modifies *allt lið hans*, and we must assume that there is coordination of two verbs, only one of which is explicit.

(136) Ok varð Sóti handtekinn ok allt lið hans með honum. 'And Sóti was apprehended and all his men with him.'

See a more detailed analysis in ch. 13.3 below.

9.4 Asyndetic coordination

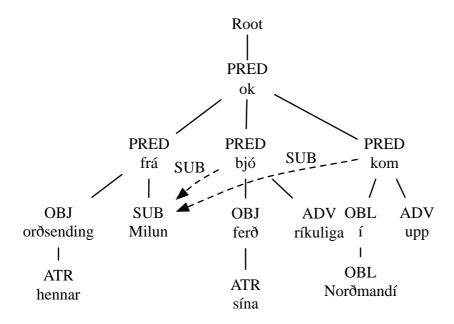
Coordination can also occur without a conjunction, as in (137) on the next page. Here, the phrase *i úró ok í úfriði* are linked with a conjunction, but the coordination of *stundum í friði* and *oftsamliga í úró ok í úfriði* is done without one. These are two verbal appositions to the main verb *réð*. In the syntactic analysis, one must add an "asyndetic conjunction" to tie the two together. In the sentence tree, this will appear as a 'C' inside a rhombus. Then, one must posit two empty verbal nodes in order to group the adverbs appropriately, since neither apposite verb is explicit. These are represented by a 'V' inside a circle.



(137) Um þá daga réð því ríki Odels konungr, stundum í friði, oftsamliga í úró ok í úfriði.

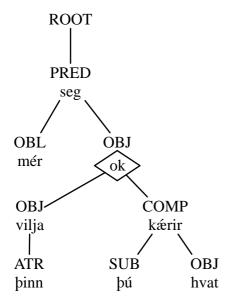
'In those days, king Odels ruled, sometimes peacefully, often with unrest and conflict.'

In modern written language, it is common to coordinate three or more words or phrases with commas and then a conjunction between the last two elements, as in "Curly, Moe and Larry". In Old Norwegian, as far as we know, each word or phrase is usually connected with a conjunction, i.e. "Curly and Moe and Larry". This is the case in (56) discussed in ch. 6.1.1 above. But we have also found examples of the former type, namely (134), shown on the next page. In this tree, there is no need to add an empty conjunction node between the first two clauses. Instead, the three verbs $fr\acute{a}$, $bj\acute{o}$ and kom all hang from the single conjunction ok.



(134) Milun frá orðsending hennar, bjó ríkuliga ferð sína ok kom upp í Norðmandí. 'Milun heard of her message, prepared his journey amply, and came up to Normandy.'

In exceptional cases, a conjunction connects two different elements, often COMP and OBJ, as in (138). We allow this because COMP is often an OBJ in the shape of a sentence; in (138) ok coordinates the OBJ vilja þinn 'your will' and a COMP, hvat þú kárir 'what you wish for'. We follow PROIEL's convention of assigning the function OBJ to the conjunction in such cases.



(138) Seg mér vilja þinn ok hvat þú kærir. 'Tell me what you want and what you wish for.'

10 Subordinate Clauses and Clause-like Constructions

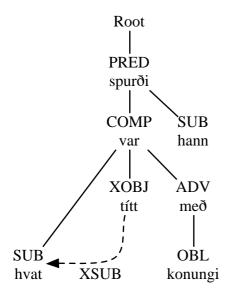
10.1 Nominal Clauses

The main type of nominal clause is the *at*-clause, like (55), analysed in ch. 7.1.1 above:

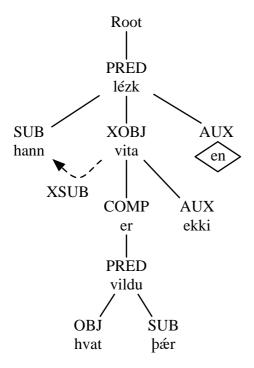
(55) Þá viti hann at sonnu at svá hefir konungr mælt.'Then he shall surely know that the king has spoken thus.'

A nominal clause is typically an object or a subject in the main sentence, but since clauses are not tagged with functions like SUB and OBJ, we use COMP instead; cf. (55) in ch. 7.1.1 above. The subjunction is always the head in a dependent clause, under which we get the clause's verb.

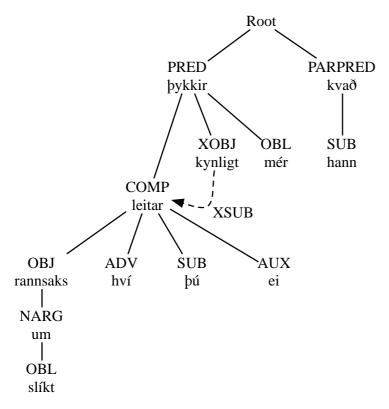
Indirect questions with *hvat* are also a type of nominal clauses, but these often have no introductory subjunction. Therefore, their verb has the function COMP.



(139) Hann spurði hvat títt **var** með konungi. 'He asked what was new with the king.'



(103) En hann lézk ekki vita hvat **er** þær vildu. 'But he acted as if he did not know what [that] they wanted.'

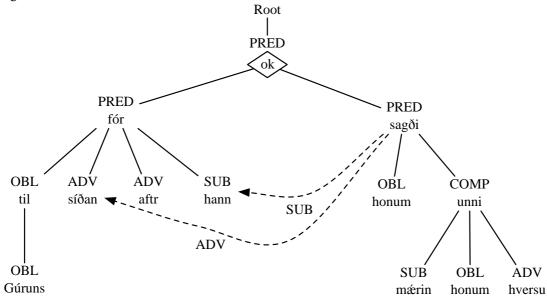


(45) Kynligt þykkir mér, kvað hann, **hví** þú leitar ei rannsaks um slíkt. 'It seems strange to me, he said, why you do not seek an investigation into such things.' If the indirect question has a subjunction, it has the function COMP and the verb is subordinated to it, as in (103) on the preceding page.

Indirect questions with the interrogative adverb hvi also belong here, like the one in (45), also on the preceding page. These clauses are not introduced by a subjunction either, so that in (45) the main verb *leitar* is assigned the function COMP, while hvi is taken as ADV within the interrogative clause.

Note that *um slíkt* is analysed as a NARG, meaning that it functions as an argument of the noun *rannsaks*. Cf. ch. 7.3.6 above.

Finally, there are many indirect questions with the interrogative adverb *hversu* 'how', as in (140). Here also, the main verb is a COMP, while *hversu* is an ADV in the interrogative clause.

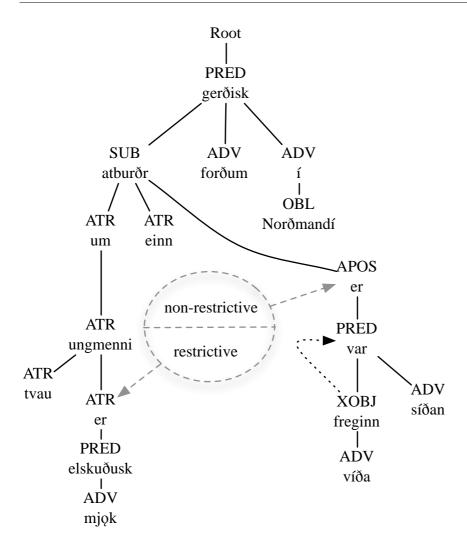


(140) Síðan fór hann aftr til Gúruns ok sagði honum **hversu** mærin unni honum. 'Then he returned to Gurun and told him how much the maiden loved him.'

10.2 Relative Clauses

We distinguish between restrictive and non-restrictive relative clauses, both because the distinction is incorporated into the syntax and because it is relevant to the study of a text's information structure. Restrictive clauses are tagged as ATR while non-restrictive clauses are tagged as APOS, as illustrated in (110) on the next page.

If the distinction between the two is not clear, the relative clause may be annotated as REL, but we recommend using this function with restraint (cf. ch. 7.5.5 above).



(110) Forðum í Norðmandí gerðisk einn atburðr **er** síðan var víða freginn um tvau ungmenni **er** mjok elskuðusk.

'In former days in Normandy there was an occurrence which became widely known, about two youths who loved each other very much.'

A relative clause always has an antecedent in the main clause, and the subjunction (or relative particle) *er* or *sem* is either an ATR or APOS under it. The antecedent can be a determiner, i.e. $s\acute{a}$ (in any form), or an adverb, i.e. par. (141) is an example of the former, where pat (acc. sing. neut. of $s\acute{a}$) is the antecedent:

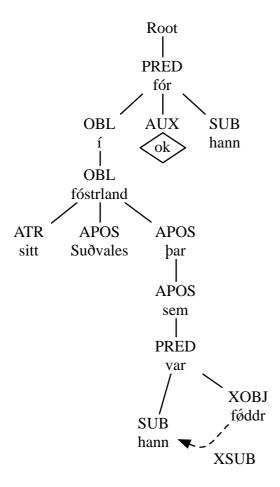
(141) Því at engi gat fullgort **þat** er við lá.

'Because no one could fulfil that which it entailed.'

Another example of a determiner is (83), where *margir* (nom. plur. masc. of *margr*) is the antecedent:

(83) Þá leituðu **margir** við at bera hana, er allsekki gátu at sýst. 'Then many, who could not do anything, sought to carry her.'

In (142) the antecedent is the adverb *bar*:



(142) Ok fór hann í fóstrland sitt Suðvales, **þar** sem hann var føddr. 'And he went to his native country Sudvales, where he was born.'

10.2.1 Restrictive Relative Clauses

Relative clauses are introduced by the subjunction (relative particle) *er* or *sem*. The antecedent can be a noun, i.e. *ungmenni* in (110) above. Here, we understand the second relative clause, *er mjǫk elskuðusk*, as necessary for the word *ungmenni*. The clause is thus restrictive and the subjunction is tagged as ATR.

The antecedent of relative clauses is often accompanied by a determiner, $s\acute{a}$ or $\acute{p}essi$. This word may stand alone, as in (141), or be part of the antecedent, as in (121):

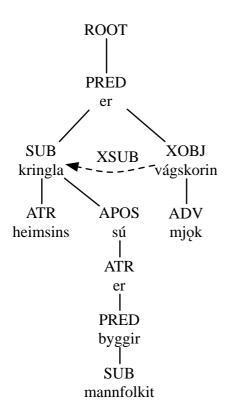
(141) Því at engi gat fullgort **þat** er við lá. 'Because no one could fulfil that which it entailed.'

(121) **Sá** konungr er þá bjó þar, átti eina dóttur, fríða ok kurteisa mey.

'The king who at the time lived there had a daughter, a fair and courteous maiden.'

In (121), sá is part of the antecedent sá konungr. It refers to a specific king, who lived there, so the relative clause is restrictive, i.e. necessary. The clause is therefore tagged as ATR (cf. the tree in ch. 7.4.3 above).

The antecedent also occurs in apposition to a word in the main clause, like $s\acute{u}$ (nom. sing. fem. of $s\acute{a}$ 'that') in (115). In the restrictive relative clause *er mannfolkit byggir*, the subjunction *er* 'which' is an attribute of $s\acute{u}$ 'that', which is an apposition of *kringla* f. 'circle' (cf. the analysis of $s\acute{a}$ *konungr* in example (121) in ch. 7.4.3 above).



(115) Kringla heimsins, **sú** er mannfolkit byggir, er mjok vágskorin.

"The circle of the world, which is inhabited by people, is quite indented with bays."

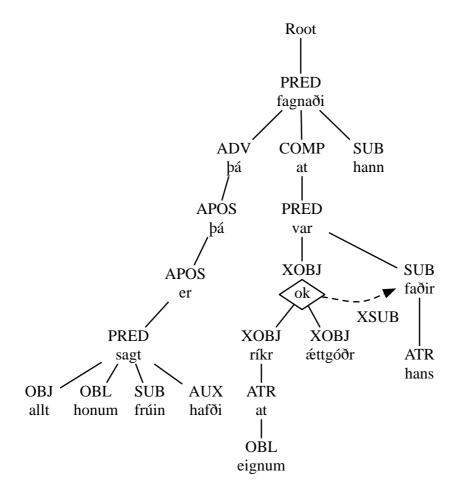
10.2.2 Non-Restrictive Relative Clauses

Non-restrictive relative clauses are also introduced by the subjunction *er* or *sem*, but usually without *sá* or *þat*. They are similar to appositions and are therefore marked as APOS. In (143) below, we understand the relative clause *er þá var í bondum með þeim* as non-restrictive. The fact that the old man was chained is not indispensible information; it is rather a type of additional information. If the antecedent had been definite, on the

other hand, sá hinn gamli maðr, we would interpret the relative sentence as restrictive and analyse it as an ATR.

(143) Þá mælti gamall maðr einn **er** þá var í bondum með þeim. 'Then spoke an old man who was chained with them.'

In (144) below, we have another example of a non-restrictive relative clause. Here, $\not p \acute{a}$ er fruin hafði allt sagt honum is an APOS under $\not p \acute{a}$ in the main clause (i.e. the $\not p \acute{a}$ right before fagnaði), and the subjunction er is an APOS (and thus analysed as non-restrictive) under the first $\not p \acute{a}$.

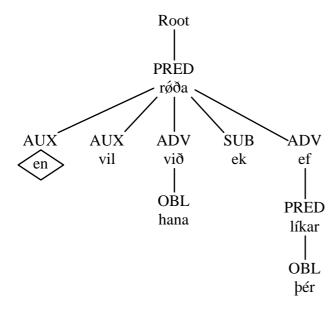


(144) Þá **er** frúin hafði allt sagt honum, þá fagnaði hann at faðir hans var ættgóðr ok ríkr at eignum.

'When the lady had told him everything, he rejoiced in the fact that his father was of noble stock and rich in possessions.'

10.3 Adverbial Clauses

Adverbial clauses are introduced by a subjunction, which can be either simple, i.e. *ef, meðan, síðan,* or complex, i.e. *fyrir því at* or *sakir þess at.* In (113), the subordinate clause is introduced by *ef* 'if'. Note that the word order is unchanged in the main clause (*ek vil,* not *vil ek* as might be expected, according to the word order in Modern Norwegian).

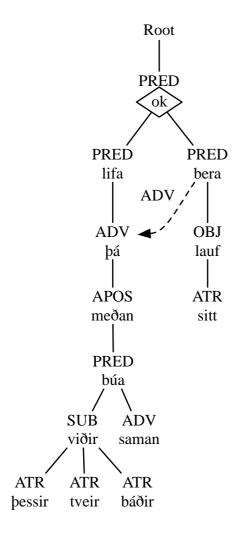


(113) En **ef þér líkar**, ek vil við hana róða. 'If you like, I will speak with her.'

Adverbial clauses are often the first phrase in the main clause, but can also occur elsewhere. In any case, we analyse the clause as ADV. In (113), the subjunction *ef* will therefore be ADV under the verb in the main clause. It is also common for the adverbial clause to occur late in the sentence, as in (145).

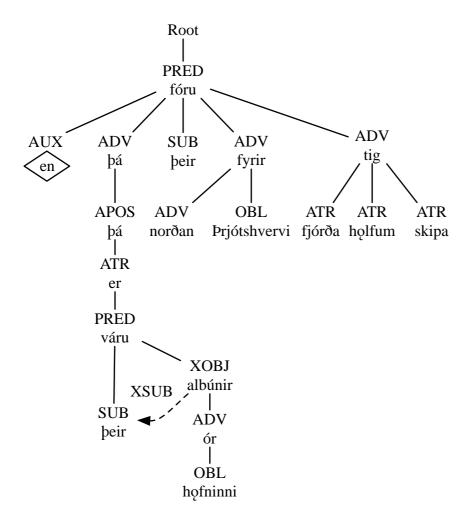
(145) [Hann] fyrirbauð honum ríki sitt, **sakir þess at** hann unni dróttningunni. '[He] kept him from his kingdom, because he loved the queen.'

In many cases, the adverbial clause has an antecedent in the word $b\acute{a}$ in the main clause, as in (11) on the next page. In accordance with the analysis in ch. 12.2 below, the subordinate clause is taken as an APOS under the adverb $b\acute{a}$. Note that we slash from the second verb bera to the adverb $b\acute{a}$ under the verb lifa, since the two verbs share this adverb.



(11) **Meðan** þessir tveir viðir búa báðir saman, **þá** lifa ok bera lauf sitt. 'While these two trees are together, [then] they survive and bloom.'

In (54) on the next page, we have a similar example, where the second $\dot{p}\dot{a}$ is an ADV in the main clause, and the first is in apposition to it. It is the head of a restrictive relative clause, of the same type as in (144) above (ch. 10.2.2).

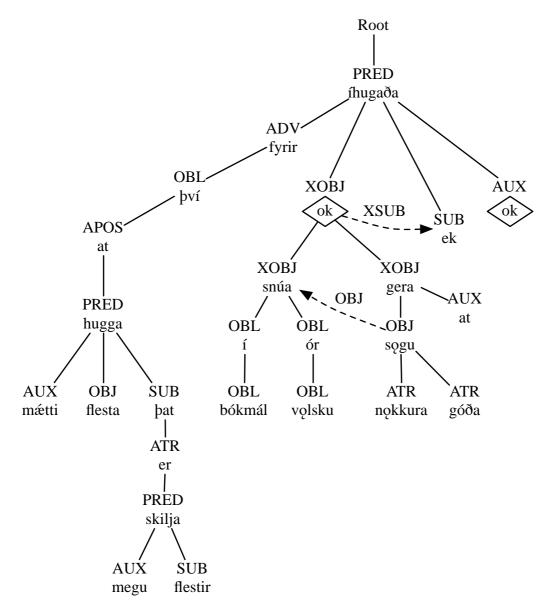


(54) En **þá** er þeir váru albúnir ór hǫfninni, **þá** fóru þeir norðan fyrir Þrjótshverfi hǫlfum fjórða tig skipa.

'But [then] when they were ready to leave the harbour, [then] they sailed north by Thrjotshverfi with 35 ships.'

A large group of complex subjunctions ends with at, i.e. bó at, slík at, því at, fyrir því at, sakir þess at. Since these subjunctions introduce an adverbial clause, the uppermost node will be an ADV, i.e. fyrir in fyrir því at and því in því at. In two-word subjunctions like því at, því will be an ADV in the main clause, at an APOS underneath it, and the subordinate clause a PRED under at, cf. (187) in ch. 11.3.2 below.

In three-word subjunctions like *fyrir því at, því* is taken as the dependent of *fyrir* and is tagged as OBL. The last word, *at*, is always tagged as an APOS and governs the PRED in the subordinate clause, as in (146) on the next page. In (146), we analyse *fyrir því at* as a complex subjunction, even though it is split (discontinuous). In the dependency analysis, this actually looks rather simple, because we can ignore the word order.

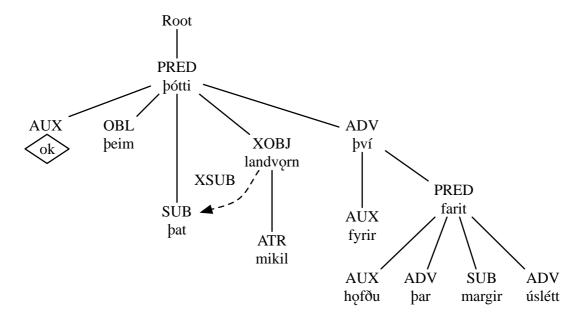


(146) Ok **fyrir því** íhugaða ek at gera nokkura góða sogu, ok ór volsku í bókmál snúa **at** þat mætti flesta hugga er flestir megu skilja.

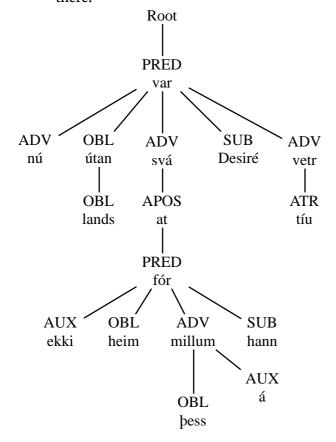
'And for that reason I considered putting together a good story, and translate it from French to Norse, that I might bring joy to more people if more could understand it.'

COMMENT: *Bókmál* usually means 'Latin', but in this example, which has been taken from the Norwegian part of the prologue to *Strengleikar*, the meaning must be 'Norse'.

Alongside the subjunction fyrir bvi at, we also have fyrir bvi, as in (147) below, or even just bvi. Then, bvi must be annotated morphologically as a subjunction, since it introduces the subordinate clause. In the syntactic annotation, bvi will be an ADV, while fyrir must be taken as AUX. If bvi occurs alone, there is of course no AUX.



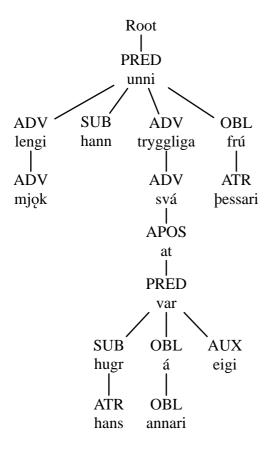
(147) Ok þótti þeim þat landvorn mikil, fyrir **því** hofðu þar margir úslétt farit. 'And they considered it a great defence of the land, because many had suffered there.'



(48) Nú var Desiré tíu vetr útan lands, **svá at** hann fór ekki heim þess á millum. 'Now, Desiré was abroad for ten winters, so that he did not return in the meantime.'

In (48) above, we see that the complex subjunction *svá at* can be analysed in the same way as *fyrir því at*, so that *svá* is assigned the function ADV, and *at* becomes an APOS under *svá*.

Sometimes an adverb is inserted into the complex subjunction, as in (148):



(148) Hann unni þessari frú mjok lengi, **svá tryggliga at** eigi var hugr hans á annarri. 'He loved this lady for a very long time, so devoutly that his mind strayed to no other.'

Here, the adverb *tryggiliga* has been analysed as the head of the adverb *svá*, since *svá* modifies *tryggiliga*, and *at* stands in apposition to *svá*, just as in other complex subjunctions. Cf. also the analysis of (90) in ch. 10.4.1 below.

Another, smaller group of complex subjunction ends in *sem*, i.e. *þegar sem* and $n\acute{u}$ *sem*, which are typically appositions to a $þ\acute{a}$ in the main clause. Here also, the uppermost word will be an ADV, i.e $þ\acute{a}$ in the main clause, while *þegar* and $n\acute{u}$ are APOS under $þ\acute{a}$. An example of this is in (119), analysed in ch. 7.4.2 above:

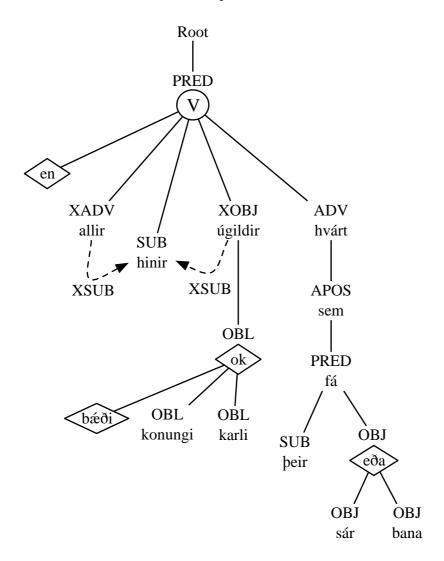
(119) **Þegar sem** hann var heiman fǿrr, **þá** sendi hann [acc.] faðir hans heiman til konungs hirðar at þjóna konungi.

'As soon as he was able to leave home, his father sent him to the king's court to serve the king.'

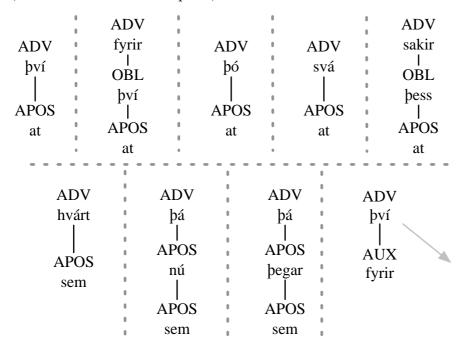
Here, the subordinate clause pegar sem hann var heiman periman is dislocated and stands in apposition to the adverb par in the main clause, so that pegar is an APOS under par, and sem is an APOS under par. Had there been no par in the main clause, the subordinate clause would have shifted up and pegar would have been the ADV, with sem still as its APOS. Relative clauses are usually either restrictive (ATR) or non-restrictive (APOS), but in this particular construction, we always analyse them as APOS. In this way, we get a single analysis covering all complex subjunctions.

It is worth noting that the complex subjunctions also occur as single words in the sources, bo at > bott, and sometimes bvi at > bvit and sva at > svat. When this happens, the words bott, bvit and svat are analysed as subjunctions with the function ADV.

Another and somewhat simpler construction is the one with *hvárt sem*, as in (149):



(149) En hinir [eru] allir úgildir **hvárt sem** þeir fá sár eða bana, bæði konungi ok karli. 'But the others [are] all useless, whether they are hurt or killed, to both king and to man.' Finally, we give in (150) below a summary of the complex subjunctions and the functions of individual words. As mentioned before, we usually assume the uppermost word to be an ADV, but when the subordinate clause is moved, the function becomes APOS (see also ch. 11.3.2 on this point).



(150) The syntactic analysis of complex subjunctions.

10.4 Infinitive Constructions

Infinitives often occur in clausal constructions, and may therefore have their own dependents, OBJ, OBL and ADV. In (146), *sogu* is an OBJ of the infinitive *gera* (see the analysis in ch. 10.3 above):

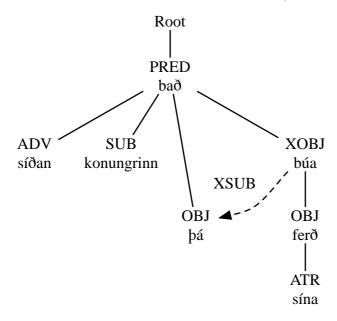
(146) Ok fyrir því íhugaða ek at **gera** nǫkkura góða **sǫgu** [...]. 'And for that reason I considered putting together a good story [...].'

With the verb *láta*, we get constructions in which the subject of the main clause can not be construed as the subject of the infinitive. In (46), *konungr* is the subject in the main clause, while the subject of *gera* is someone else, 'the king had [someone] build a city'. This is analysed in ch. 7.3.4 above, p. 95.

(46) Mjok nær fjallinu **lét** einn konungr gera mikla borg. 'Very close to the mountain, a king had a great city built.'

The verb *biðja* can govern an implicit clause, as in (151) below. Here, we understand *þá* búa ferð sína as the implicit clause, and we therefore analyse þá 'them' as an OBJ under

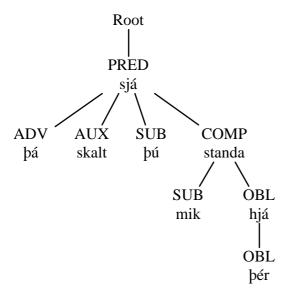
bað, the infinitive búa as an XOBJ, and ferð sína as an OBJ under búa. In accordance with the rules in ch. 9.1, we slash from the XOBJ to the OBJ.



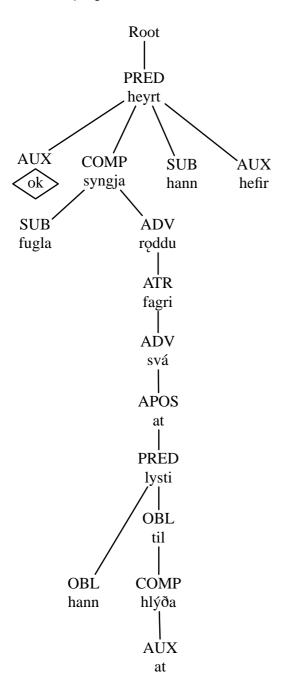
(151) Síðan bað konungrinn þá búa ferð sína.'Then, the king told them to prepare their travel.'

10.4.1 Accusative with Infinitive

The accusative with infinitive is typically governed by verbs of perception, like *heyra* and $sj\acute{a}$. The accusative often occurs right before the infinitive, but there is some variation in the word order, as illustrated in (152):



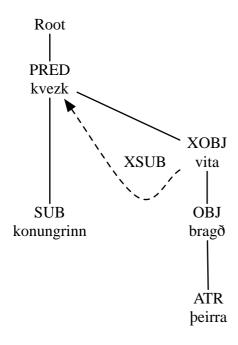
(152) Þá skalt þú **mik** sjá **standa** hjá þér. 'Then you shall see me standing by you.' We understand there to be an underlying clause *ek* [nom.] *stend* [present], which has then changed into *mik* [acc.] *standa* [infinitive]. The infinitive is connected to the main clause via the relation COMP, while the accusative is tagged as a SUB, reflecting its function in the underlying clause.



(90) Ok hefir hann heyrt **fugla syngja** svá fagri roddu at hann [acc.] lysti til at hlýða. 'And he has heard birds sing with such a beautiful voice, that he wished to listen.'

Example (90) on the preceding page has essentially the same structure as (152), in the sense that *heyrt fugla syngja* is parallel to *sjá mik standa*. However, (90) has a rather complex adverbial phrase. In this, the words *svá fagri roddu at* corresponds to *svá tryggiliga at* in (148), cf. ch. 10.3 above, p. 145. Also note that in (90), *lysta* has an oblique subject, *hann* [acc.], and it has a prepositional phrase as an oblique, cf. (177) in ch. 11.2.2 below.

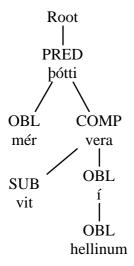
Sometimes, the accusative collapses into the main verb, which then becomes reflexive. In (153), vita is the infinitive, and -sk in kvezk is the accusative (it is an enclitic form of an original sik 'oneself'). Here, we could not use the function COMP without being able to separate the enclitic -sk from the verb. Instead, we analyse these constructions with the infinitive as an XOBJ. In this case, we slash from the infinitive vita to another verb form, kvezk, since the underlying subject is expressed by the ending sik > -sk (i.e. $kve\partial r + sk$ 'says himself' $> kve\partial rsk > kve\partial rsk = kvezk$).



(153) Konungrinn kvezk vita bragð þeira. 'The king says that he knows of their trick.'

10.4.2 Nominative with Infinitive

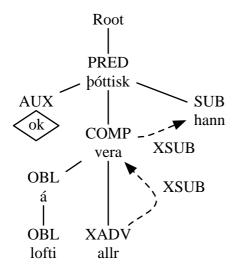
Nominative with infinitive occurs with verbs that govern an oblique subject, e.g. *þykkja* and *sýnask*. The construction comprises a nominative subject along with the infinitive *vera* with its dependents, if any, e.g. XOBJ or OBL, as in (154):



(154) Mér þótti vit vera í hellinum.

'I thought that we two were in the cave.'

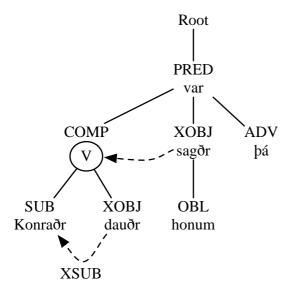
In (155), we also have a nominative with an infinitive, and here the subject *þóttisk* and the subject of the understood *vera* are the same. That is, the person thinking and the person hovering are one and the same. Therefore, we hang *hann* as a SUB under *þóttisk* and slash from *vera* to *hann*. This analysis is similar to that of sentences with the verb *látask* where the two subjects are also the same, as (103) in ch. 7.3.4 above, p. 96.



(155) Ok allr þóttisk hann á lofti vera.

'And he thought he was entirely in the air.'

Sometimes, the verb *vera* is elided, as in (156). Then we add an empty verbal node:



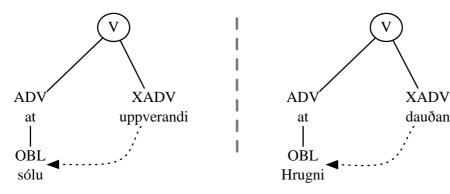
(156) Þá var honum **Konraðr** dauðr sagðr [**vera**]. 'Then he was told that Konrad [was] dead.'

In all three instances above, we assume there to be an underlying clause. In (154) it is *vit* [erum] *i* hellinum, in (155) hann [er] á lofti, and in (156) Konraðr [er] dauðr.

10.5 Dative and Accusative Absolute

In learned style, both in Old Norwegian and Old Icelandic, and in the Old Icelandic Eddic poems, we have examples of so-called dative (or accusative) absolute, which functions as an adverbial clause. There are analogous constructions in both Latin (ablative absolute) and Greek (genitive absolute). Here are two examples from the Eddic *Hárbarðsljóð* (Hrbl.), taken from Jón Helgason's 1971 edition:

- (157) Taka við víl ok erfiði at uppverandi sólu (st. 58) 'to take with hardship and toil while the sun is in the sky'
- (158) fanntaðu mann inn harðara at Hrugni dauðan (st. 14) 'then you found no man fiercer since Hrugnir died'



(157) Dative absolute (Hrbl. st. 58) (1

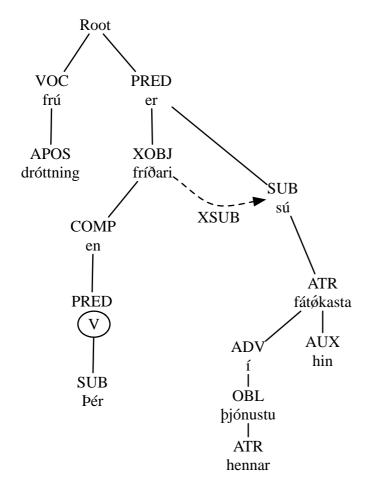
(158) Accusative absolute (Hrbl. st. 14)

In both of these cases, it makes sense to take at as a preposition in the phrases at Hrugni dauðan and at uppverandi sólu. We analyse the prepositional phrases as ADV, with sólu and Hrugni as OBL, and uppverandi and dauðan as XADV.

This construction is discussed by Nygaard (1905: 128, § 120) and others as an *absolute dative* and by Hanssen and others (1975: 129, § 15.45) as a *double dative*. The accusative use, as in (157), is not discussed in these grammars.

10.6 Comparative Constructions

In comparative constructions, the subjunction en 'than' is frequently used, as in (126), but sem and, more rarely (in Old Norwegian at least), ok also occur. We have chosen to analyse these constructions as containing an underlying clause with no verb. In example (126), it is sú er fridari en Pér [erud] 'she is more beautiful than you [are]'. Since we analyse the final en Pér as representing an underlying clause, the subjunction must be taken as a COMP. In the annotation application, we use the option "add empty verbal node" to add the empty verb.



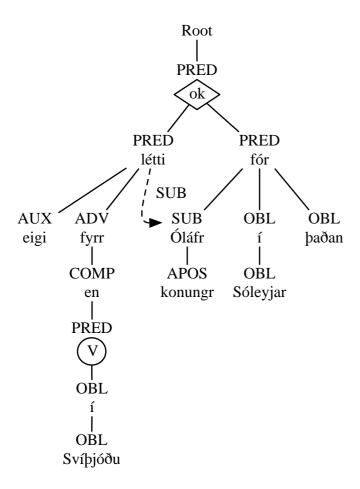
(126) Sú hin fátókasta í hennar þjónustu er fríðari **en** Þér, frú dróttning! 'The poorest one in her service is more beautiful than you, my queen!'

Another example would be (159):

(159) En hǫfðingi sá reið hesti þeim, er mǫrgum hlutum er gǫfgari **en** gervastir allir aðrir.

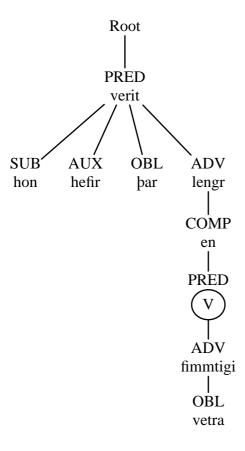
'But the chieftain rode a horse, which in many ways is more noble than the fore-most of men.'

In (126) and (159), a comparative word immediately precedes the subjunction *en*, which is the case in most comparative constructions. This also applies to *fyrr en* 'until' in (160).



(160) Þaðan fór Óláfr konungr í Soleyjar ok létti eigi fyrr en í Svíþjóðu.
'From there, king Olaf went to Solør [in the southern part of the present-day county of Hedmark] and did not stop until he came to Sweden.'

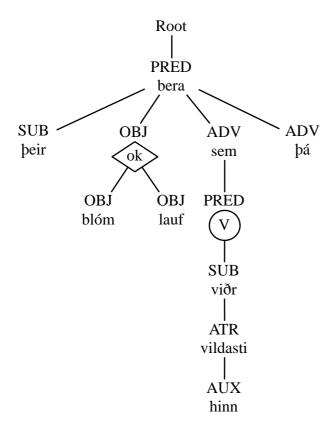
In the above examples, we have introduced an empty verbal node in the comparative construction, and it is rather straight-forward to suggest an underlying verb for this position. In some examples, however, like (96) on the next page, there is no obvious candidate for an underlying verb. Since we take this construction to be analogous with the previous ones, we will also analyse it with an empty verbal node:



(96) Hon hefir þar lengr verit en fimmtigi vetra.'She has been there for more than fifty winters.'

We take (96) to be a type of comparison referring to a measurement of the dimension (e.g. time, space, weight) that the adverb or adjective signifies.

Comparison is less commonly introduced by *sem* 'as', as in (26) on the next page. The analysis is the same as in the three preceding examples, where *en* has the function COMP. But in (26), the comparison is not necessary, making *sem* an ADV.



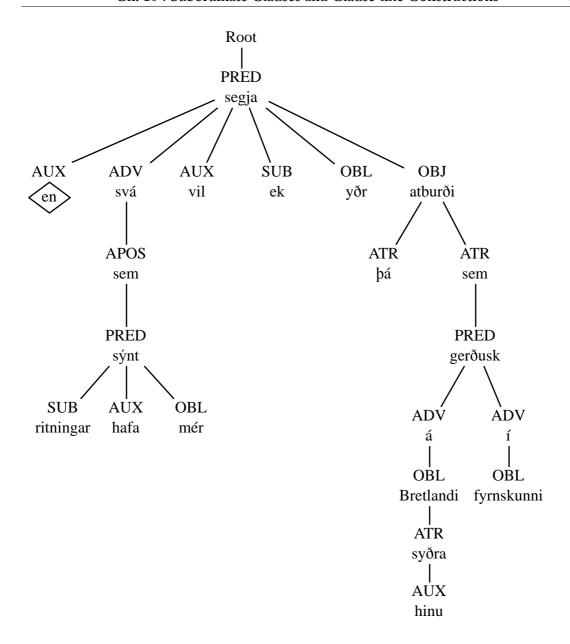
(26) Þá bera þeir, sem hinn vildasti viðr, lauf ok blóm.'Then they bear, as the best of trees, leaves and flowers.'

Another example is found in (49), where we must posit an implicit verb, i.e. that *hverr* sem einn represents the underlying clause sem [er] einn. Then analysis of this clause is shown in ch. 9.3 above.

(49) Ok hverr sem einn várra manna hefir oftsamliga sét þat ok gengit nær því, bæði nætr ok daga.

'And each and everyone of our men has often seen it and approached it, both at night and by day.'

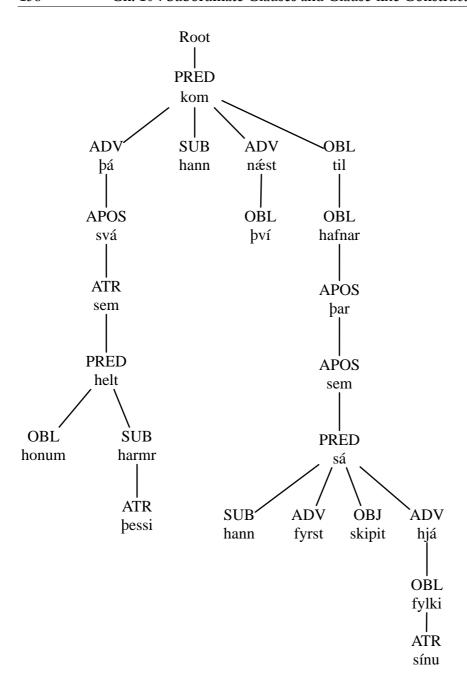
We often see comparative constructions with svá sem, where we take svá as ADV and sem as an APOS under svá, as in (161). In this example, we also have sem occurring as a regular relative particle, namely in atburði þá sem gerðusk á hinu syðra Bretlandi í fyrnskunni.



(161) En **svá sem** ritningar hafa sýnt mér vil ek segja yðr atburði þá sem gerðusk á hinu syðra Bretlandi í fyrnskunni.

'But as written texts have shown me, I want to tell you about the events that occurred in the south of Britain in the olden days.'

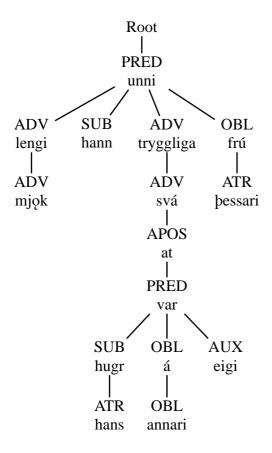
In (161), it is reasonable to take $sv\acute{a}$ as an ADV directly under the verb segia. But in (162), $sv\acute{a}$ is an APOS under $b\acute{a}$, which introduces the second comparative clause "as ... then":



(162) **Svá sem** honum helt þessi harmr, **þá** kom hann því næst til hafnar þar sem hann fyrst skipit sá hjá fylki sínu.

'As this sorrow gripped him, then he next went to the harbour where he first saw the ship in his district.'

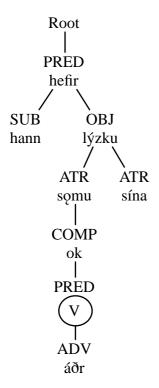
We analyse the construction $sv\acute{a}$ + adverb + at with $sv\acute{a}$ as an ADV under the adverb, and at as an APOS under $sv\acute{a}$, as exemplified in (148):



(148) Hann unni þessari frú mjok lengi, **svá tryggliga at** eigi var hugr hans á annarri. 'He loved this lady for a very long time, so devoutly that his mind strayed to no other.'

The construction $sv\acute{a}$ + adjective + at, as in $sv\acute{a}$ fagri $rollow{o}$ at 'a voice so fair that' in (90), is comparable. It has been analysed in ch. 10.4.1 above.

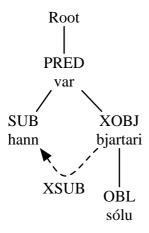
There are also examples of *ok* being used as a subjunction, with the word *samr* among others, as in (163), analysed on the next page. Here, *ok* should be morphologically tagged as a subjunction rather than a conjunction. In this comparative construction we posit an empty verbal node.



(163) Hann hefir somu lýzku sína ok áðr.

'He has the same manners as before.'

Finally, comparison can also be done without a subjunction. An example of this is (164) where *sólu* is an OBL under the XOBJ *bjartari*:



(164) Hann var sólu bjartari.

'He was brighter than the sun.'

10.7 Sentences with bat and an Extraposed Subordinate Clause

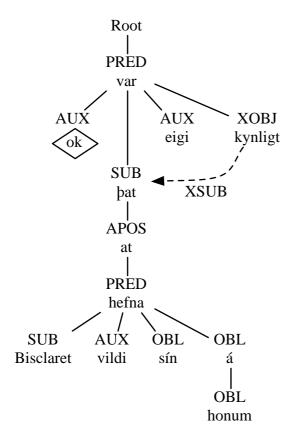
In Old Norwegian, *at*-clauses may be extraposed at the end of their main clause. They are sometimes accompanied by a *þat* before the finite verb, or after the verb, as in (165), where *þat* and the dependent clause are rendered in bold type:

(165) Pat er þar til merkis at Ásta, dóttir hans, er sjúk við barni.

"That indicates that Asta, his daughter, is with child."

The word *þat* is in both cases in a typical subject position. Sentences like (165) are akin to constructions in Modern Norwegian with *det* 'that' as a formal subject, i.e. a subject with no contents, followed by a clause functioning as a so-called potential subject. However, since Old Norwegian does not require a subject, it is reasonable to analyse *þat* as a pronoun that anticipates (and refers to the same thing as) the subordinate clause. In that sense, *þat* and the subordinate clause are in apposition, and we take *þat* as a SUB and the clause as an APOS under *þat*.

An alternative would be to analyse *þat* as a determiner with the subordinate clause, since *þat* and the clause form a discontinuous phrase, but we have nevertheless stuck to the APOS analysis, as shown in (166):



(166) Ok var þat eigi kynligt at Bisclaret vildi sín á honum hefna.

'And it was not strange that Bisclaret wanted to get his revenge on him.'

There are also sentences in which pat is not the SUB, but an OBJ or an OBL. The analysis will be the same as above: pat (or pvi or pess) is an OBJ/OBL with a subordinate clause as an APOS, as in (167):

(167) En **þess** vil ek biðja yðr **at þér blótið mik eigi.** 'But I want to ask you this, not to curse me.'

Sentences can of course have *þat* as a subject or an object without it having a subordinate clause in apposition, as in (146), shown in ch. 10.3 above, and in (78), shown in ch. 7.1.3, where it is a SUB, and in (49), shown in ch. 9.3, where it is an OBJ.

II Verbs and Verbal Particles

In ch. 7.1.1 PRED we discuss the analysis of main verbs, and in ch. 7.2.1 AUX we cover auxiliary verbs. In this chapter we will look at verb phrases in more detail. Firstly, we will try to draw a clear distinction between main verbs and auxiliary verbs. Secondly, we will look at infinitives, which have a great many functions, and are not always easy to analyse unequivocally. Thirdly, we will talk about the verbal particles, of which some are closely connected to the verb while others are not.

11.1 Auxiliary Verbs

The basic difference between main verbs and auxiliary verbs is that main verbs have a lexical meaning, while the auxiliaries have only grammatical meaning (cf. Faarlund, Lie and Vannebo 1997: 516–518). Grammatical meaning entails that the verb functions in a similar way to inflectional endings, i.e. they express grammatical relationships in sentences, like time, voice and modality. In (168), *kunna* is an auxiliary of this type, but in (169), it is a main verb (see the trees on the next page).

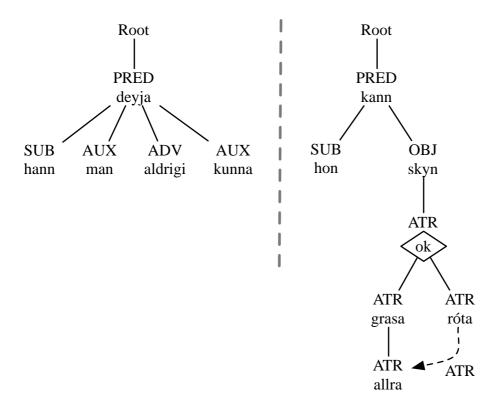
As mentioned in chs. 7.1.1 and 7.2.1, we analyse the main verb as PRED and the auxiliary verb as AUX. A number of verbs may occur as either of the two. These include at least the five verbs which govern an infinitive, *kunna*, *mega*, *vilja*, *þora* and *þykkja*, and up to six which govern a supine, primarily *hafa*, *geta* and *fá*, but probably also *eiga*, *ráða* and *vinna* (cf. Faarlund 2004: 130).

The verb *kunna* 'know, be able to' can occur as an auxiliary verb, as in (168) below. This sentence actually has two auxiliary verbs, *man* (from *munu*) and *kunna*. In accordance with ch. 7.1.1 above, we analyse both as AUX, cf. example (71). But *kunna* can also be a main verb, when it means 'to have knowledge of', as in (169) below. Here, we have analysed the noun phrase *allra grasa ok róta* 'of all herbs and roots' as a nominal argument, NARG, dependent on *skyn* 'knowledge', since it is an objective genitive, *skynja oll gros ok róta skyn*. Cf. ch. 7.3.6 above.

Similarly, *hafa*, can either be a main verb, PRED, with objects, and an auxiliary verb, AUX, under a supine verb. In (163), *hafa* has the object *somu lýzku* 'same manners', and is undoubtedly a main verb (cf. the tree in ch. 10.6 above):

(163) Hann hefir somu lýzku sína ok áðr.

'He has the same manners as before.'



(168) Hann man aldrigi **kunna deyja.** (169) Hon **kann** allra grasa ok róta skyn. 'He will never be able to die.' 'She has knowledge of all herbs and roots.'

In most cases, however, *hafa* occurs with a main verb in the supine form, and is taken as an auxiliary verb. An example of this is (55), analysed in ch. 7.1.1 above. Here, the supine form *mált* is the PRED:

(55) Þá viti hann at sonnu at svá hefir konungr mælt.'Then he shall surely know that the king has spoken thus.'

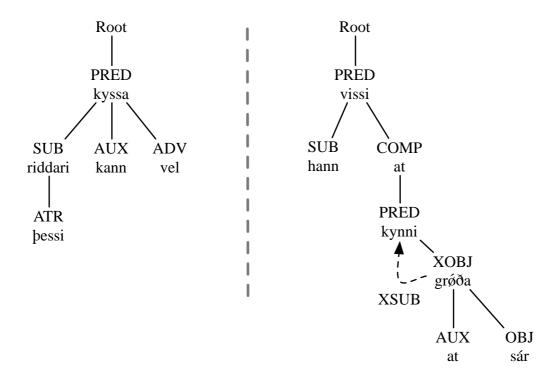
11.1.1 Auxiliary Verb + Infinitive

In previous chapters, we saw that *mega*, *kunna*, *vilja* and *bora* can occur both as main verbs and as auxiliary verbs. In addition to these, there are two verbs that are only auxiliaries, *munu* and *skulu*.

Some of these verbs can govern an infinitive with or without an infinitive marker, at least *kunna*, *bora* and *bykkja*. On the other hand, we have not found examples of *munu*, *mega*, *skulu* or *vilja* governing an infinitive with an infinitive marker. As a rule, when the verbs occur with an infinitive *without* an infinitive marker, we analyse them as auxiliary + main verb, i.e. AUX + PRED. When they occur with an infinitive *with* an infinitive marker, we analyse them as main verb + external object, i.e. PRED + XOBJ.

In (170), the infinitive kyssa 'kiss' has no infinitive marker, so we take it to be a main verb, PRED, while kann 'can' is an auxiliary verb, AUX. But in (171), we analyse kynni

'knew how to' as a main verb, PRED, and *gróða* 'heal' as an XOBJ, with the infinitive marker *at* as an AUX under it.



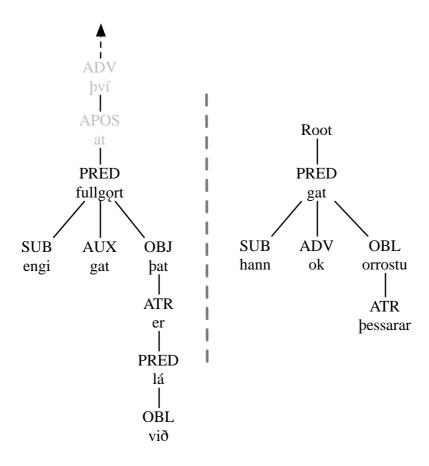
- (170) Þessi riddari **kann** vel **kyssa**. 'This knight can kiss well.'
- (171) Hann vissi at sár **kynni at gróða.**'He knew that the wound might heal.'

We have thus far not seen an example of the rare verb *knega 'be able to, be allowed to' in our corpus, but *Norrøn ordbok* lists it being used as an auxiliary verb. The infinitive form of this verb is marked with an asterisk, since it does not appear in the sources.

In ch. 11.2.1 below, we discuss verbs of duration, beginning and ending, e.g. *byrja at, taka at, nema at.* These are not considered auxiliaries, but rather as XOBJ.

11.1.2 Auxiliary Verb + Supine

The three verbs hafa, geta and fa can, as mentioned above, occur both as auxiliaries and as main verbs. To these we can add eiga, rada and vinna. As auxiliaries, they occur with the supine form of the main verb, and we analyse them as auxiliary + main verb, i.e. AUX + PRED. Sentence (55) above is one example we often have referred to of hafa + supine; sentence (141) on the next page is another, this time with geta as AUX.

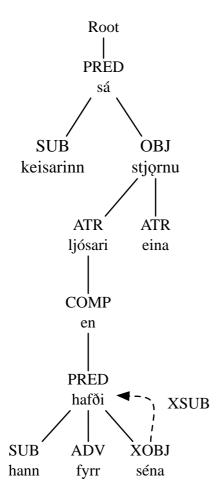


- (141) Því at engi **gat fullgort** þat er við lá. 'Because no one could fulfil that which it entailed.'
- (172) **Gat** hann ok orrostu þessarar. 'He also mentioned this battle.'

The verbs mentioned here also occur as main verbs, such as in (172).

In older language, we sometimes see another construction, namely hafa + object + object predicative, where the predicative agrees with the object. So it is in (173) on the next page, where the participle $s\acute{e}na$ (acc. sing. fem. of $sj\acute{a}$ 'see') agrees with stjornu (acc. sing.). See also Haugen (2001: 278–279).

In this analysis, *séna* is XOBJ dependent on the PRED *hafði*. In the younger construction, *hann hafði fyrr sét* 'he had seen before', *sét* would be analysed as PRED and *hafði* as AUX, as exemplified in (55) in ch. 7.1.1 above.



(173) Keisarinn sá stjórnu eina ljósari en hann hafði fyrr séna.
'The emperor saw a star, brighter than he had seen before.'

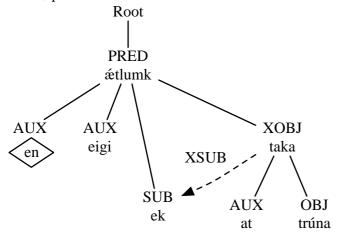
11.2 Infinitives

In ch. 7, we gave a series of examples of infinitives with different functions, especially in ch. 7.3.4 XOBJ and in ch. 7.3.5 COMP. What follows is a comprehensive discussion of infinitives and their various functions.

11.2.1 XOBJ

Infinitives are XOBJ with a number of phrasal verbs. These verbs may express the beginning, duration and end of an action. As mentioned in ch. 7.3.4, p. 93, this does not seem to have occurred often in Old Norwegian, but *taka at* 'begin to' is an example:

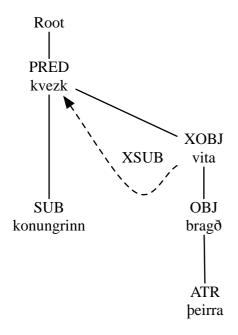
(98) Fyrr en þú tókt at **unna** mér, þá vart þú lofsæll af hreysti þinni. 'Before fell in love with me, you were praised for your valour.' Verbs expressing will and intention (purpose) are also analysed with XOBJ, e.g. *átla* 'intent, plan':



(174) En eigi pproxtlumk ek at taka trúna.

'And I do not intend to convert.'

In (174), the subject is expressed both with *ek* and the enclitic *-mk*. It is enough to tag *ek* as the SUB. If *ek* had not been present (which would still have been grammatical), the subject would have been represented with the enclitic *-mk*. In that case, the analysis would be as shown in (64) in ch. 6.2.2 above.

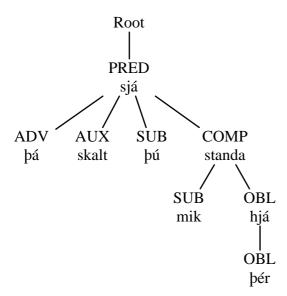


(153) Konungrinn kvezk vita bragð þeira. 'The king says that he knows of their trick.' The infinitive in accusative with infinitive constructions is analysed as COMP, apart from the instances where the governing verb is reflexive. An example is (153) above, where the accusative is joined with the verb as the enclitic -sk. Then, we analyse the infinitive as an XOBJ, as explained in ch. 10.4.1 above, p. 150. As for the form kvezk, we refer to the morphological analysis of the word in connection with sentence (153) in the same chapter.

The so-called infinitive of purpose is analysed as an XADV, cf. ch. 11.2.3 below.

11.2.2 COMP

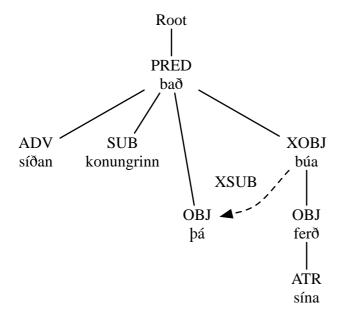
When the infinitive is the head in an accusative with infinitive construction, it is assigned the function COMP. To be tagged as COMP, it must have (or must be able to take) its own subject. This subjects receives its semantic role from the infinitive, not the verb governing the infinitive. An example of this is (152), discussed in ch. 10.4.1 above:



(152) Þá skalt þú mik sjá **standa** hjá þér. 'Then you shall see me standing by you.'

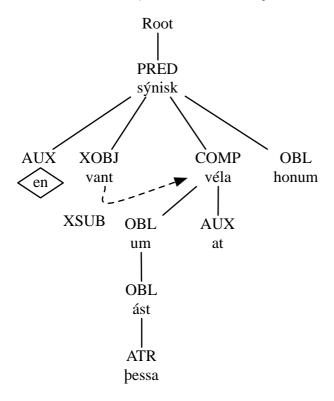
In (152), the accusative *mik* gets its semantic function from the infinitive *standa*, and is analysed as SUB. Verbs of perception, like *sjá* and *heyra*, also belong here.

The verb *biðja* governs a similar construction, but there we have chosen to analyse the infinitive as an XOBJ. In those cases, the semantic function is assigned by the superordinate PRED, as in (151), discussed in ch. 10.4 above.



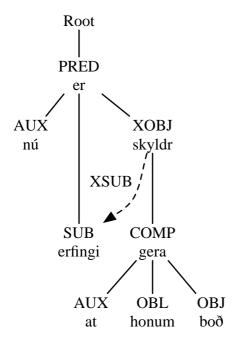
(151) Síðan bað konungrinn þá búa ferð sína.'Then, the king told them to prepare their travel.'

Infinitives can occur as subjects or objects of verbs, in which case we use the function COMP rather than SUB or OBJ. An example of this is (175), where the infinitive *véla* functions as the subject for the PRED *sýnisk*.

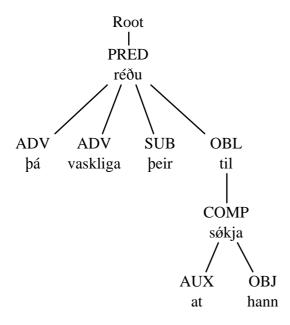


(175) En vant sýnisk honum um þessa ást at **véla**. 'But it seems difficult for him to pursue this love.'

An infinitive can be an argument of an adjective (176) or an object of a preposition (177). Also in such cases it should be tagged as COMP.



(176) Nú er erfingi skyldr at **gera** honum boð. 'Now an heir is obliged to summon him.'



(177) Þá réðu þeir vaskliga til at **sókja** hann [i.e. kastalann]. 'And they began attacking it [i.e. the castle] bravely.'

11.2.3 XADV

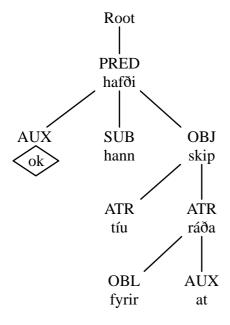
The infinitive of purpose is analysed as an XADV, as in (118):

(118) Ok at **halda** honum félagskap þá lét blóð með honum ræðismaðr hans. 'And to keep him company, his steward underwent bloodletting with him.'

See a syntax tree and a more detailed discussion in ch. 7.4.2 above.

11.2.4 ATR

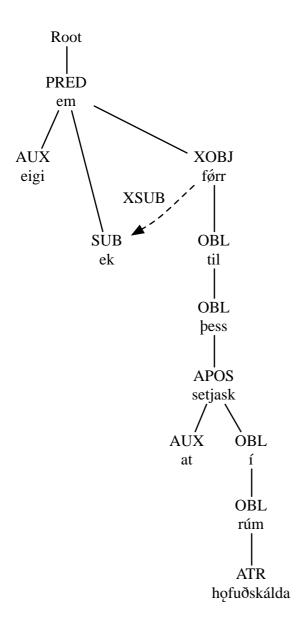
An infinitive can also be a dependent under a pronoun or a noun. In (178), the infinitive *ráða* modifies the noun *skip*.



(178) Ok hafði hann tíu skip fyrir at **ráða.** 'And he had ten ships at his disposal.'

11.2.5 APOS

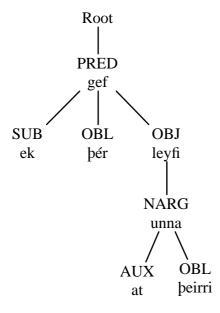
Sometimes, the infinitive functions as an APOS to other words, like *þat* and *hitt*. In (179), the infinitive *setjask* is an APOS to *þess*, expressing what he (Thormod Kolbrunarskald) was not able to do.



(179) Til þess em ek eigi fǿrr at **setjask** í rúm hǫfuðskálda. 'I am not so good as to be placed among great poets.'

11.2.6 NARG

Lastly, we analyse infinitives as NARG when they are dependents of deverbal nouns.



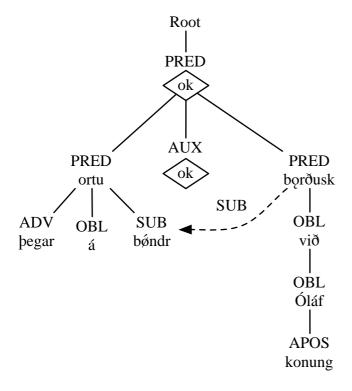
(180) Gef ek þér leyfi at unna þeirri [konu]. 'I permit you to love this [woman].'

11.3 Verbal Particles

In Old Norwegian (as well as in other Germanic languages), the verb is often complemented by a preposition or an adverb, e.g. *liggja við* 'be at stake' and *lúka upp* 'open, make known', which often changes the verb's meaning in such a way that is not always obvious or predictable. These words are traditionally known as verbal particles (cf. *Norsk referansegrammatikk*, pp. 446–449, there called *verbalpartikkel*). We analyse these particles as OBL under the verb, because they are necessary to express the idiomatic meaning. They can occur (a) with or (b) without an object. In either case the particle is an OBL, not an ADV or an AUX.

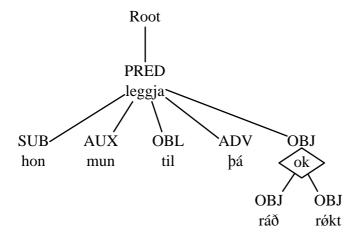
11.3.1 Verbal Particles without Objects

In sentence (181), the verb yrkja 'work, compose' (preterite plural ortu) occurs with the verbal particle (morphologically a preposition) \acute{a} 'on', which changes the verb's meaning to 'set about, attempt'. For this reason, the particle is analysed as an OBL. The particle takes no object, and it is not obvious what such an object would be, except maybe $\acute{O}l\acute{a}fr$ (which should then have been in the accusative).



(181) Ok ortu bøndr **á** þegar ok bǫrðusk við Óláf konung. 'And the farmers at once set upon [him] and fought king Olaf.'

In sentence (182), there is no object either, nor is it obvious what this would have been, if not the general 'situation'. Here, the particle precedes the verb, which is not uncommon in Old Norwegian.



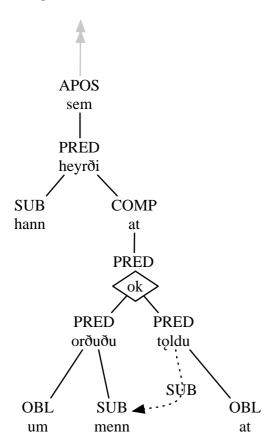
(182) Þá mun hon **til** leggja ráð ok røkt. 'Then she will provide advice and attention.' The phrase $r\acute{a}\emph{d}$ ok $r\acute{g}kt$ is not the particle's object, because til governs a genitive, but these words are in the accusative (as direct objects of the verb leggja).

In (183), *lík fuglsins* is the verb's object, while the adverb *upp* is an OBL. There is a difference between *taka* 'take' and *taka upp* 'pick up' (and, for that matter, *taka til* 'start, begin'). In that sense, (183) is similar to (182) above, the difference being that the verbal particle is an adverb not a preposition.

(183) Þá tók frúin upp lík fuglsins.

'Then the lady picked up the dead bird.'

Sentence (184) is another example of a verbal particle without an object, where we have two particles, um with the verb orda and at with the verb telja:



(184) Sem hann heyrði at menn **um** orðuðu ok **at** tǫldu [...]. 'As he heard that men talked about it and found fault [...].'

In (185), there is no object either, and we analyse *upp* as an OBL under the verb:

(185) Um morgininn árla stóð hann **upp** ok steig á hest sinn. 'Early that morning, he got up and mounted his horse.'

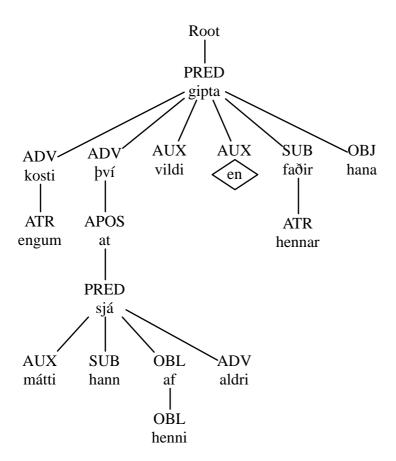
Here we see that the verb *standa* 'stand' does not denote movement (one can easily stand still). The verbal particle *upp* changes the meaning to a movement, 'stand up, rise'.

In (186), however, the verb *reisask* 'raise oneself' (the reflexive of *reisa* 'raise') denotes movement, so that if an *upp* is added, it functions more like an ADV:

(186) Ok reistisk hann þá **upp** ór rekkjunni. 'And he rose up from the bed.'

11.3.2 Verbal Particles with Objects

In sentence (187), shown below, the verbal particle *af* modifies the verb *sjá* and gives it a new meaning, and is therefore an OBL, not an ADV. The pronoun *henni* is the object of *af*, and is also an OBL.



(187) En faðir hennar vildi engum kosti gifta hana, því at hann mátti aldri **af** henni sjá. 'But her father would by no means marry her off, because he never wanted her out of his sight.'

As mentioned above (ch. 7.3.3), prepositions with verbs of motion, expressing the source or goal of the movement, are analysed as OBL:

(73) [Hon] kastaði þegar keraldinu **frá** sér, er drykkrinn var í, ok rann drykkrinn **ór** ok dreifðisk víða **um** fjallit.

'[She] threw down the vessel containing the drink, and it spilled out and spread all over the mountain.'

It may be difficult to distinguish between these prepositions and what we have called verbal particles, but since both are analysed as OBL, there is no need to. From a morphological point of view, both types are classified as preposistions.

It can also be difficult to draw the line between prepositions that syntactically are verbal particles (*liggja við*, *lúka upp*) and prepositions that are more loosely connected to the verb and should be analysed as adverbials. But the line must be drawn. It would have been possible to look at which prepositions *Norrøn ordbok* classifies as parts of fixed expressions with verbs, but this is not sufficient. If we look at (184) above, it turns out that *Norrøn ordbok* does not list the verbs *orða* and *telja* with the prepositions *um* and *at* as particles (i.e. as fixed expressions). Our definition entails that prepositions must be completely free if they are to be analysed as adverbs, but *um* and *at* modify *orða* and *telja* in a quite specific way. Therefore, we analyse these two particles as obliques, OBL, with an elliptical object, OBL. In other instances, the preposition is not closely enough connected to the verb for us to analyse it as a verbal particle. Instead, we tag it as an adverb, connected to the verb as an ADV. In (70), *með* is not necessary for the meaning of *lifa*, so we analyse *með harmi ok hugsótt* as an ADV.

(70) Þá mun faðir minn jafnan lifa með harmi ok hugsótt.'Then my father will always live with sorrow and anxiety.'

To sum up: The criterion is whether the phrase can occur with any type of verb or only with certain verbs. If the first is true, then it is an ADV, if not, it is an OBL.

12 Topicalisation and Dislocation

Topicalisation is the movement of a constituent phrase to the front of a clause, while dislocation is the movement of a constituent outside of the clause while leaving a placeholder, typically the adverb $b\acute{a}$ or a pronoun.

12.1 Topicalisation (Fronting)

The unmarked word order in Old Norwegian in subject - verb - object (SVO), but in narrative prose, the verb is often placed at the front of sentences:

(188) Þá lét Óláfr digri stefna þing, svá at eigi var fyrr munat jafnfjǫlmennt þing. En fyrir ástar sakir við hann sóttu menn þingit sem boðit var. **Var** nú kvatt hljóðs, ok **tekr** konungr til máls.

'Then, Olaf the stout had a meeting called, the most numerous one in memory. But because they loved him, the summoned men attended the meeting. Silence was now asked for, and the king speaks.'

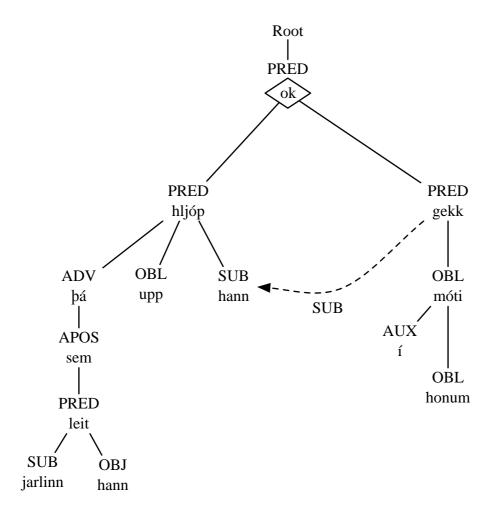
Other words, like adverbs, can also be fronted:

- (189) **Eigi** em ek vándr maðr; em ek, kvað hann, guðs skepna. 'I am not an evil man; I am, said he, God's creature.'
- (190) Gúrun er góðr maðr, en **of gjarna** vill hann heima sitja, **ørit** er hann mildr at gefa. 'Gurun is a good man, but too often he wants to stay at home, he is quite generous.'

In the last sentence, there is even a dislocated phrase, since the adverb *prit* 'quite' is an adverbial to the adjective *mildr*.

Topicalisation is very common in Old Norwegian; see examples in Haugen (2001: 251). In topological models such as the field theory (*feltanalyse*) of the Danish grammarian Paul Diderichsen, constituents are moved from the middle field (*midtfelt*) or final field (*sluttfelt*) to the so-called front field (*forfelt*). This is normal information structure of Scandinavian languages, and the same applies to Old Norwegian (and a number of other languages).

In dependency analysis, which does not follow word order, this kind of fronting is not expressed. So, for instance, *tekr konungr til máls* and *konungr tekr til máls* will be analysed in the same way. The only way to tell the two sentences apart is by indexing words (cf. ch. 5 above). This is both a strength and a weakness of the dependency analysis. In order to study word order in Old Norwegian, dependency analysis must be supplemented by indexing or the like. On the other hand, dependency analysis makes it easier to analyse a language with relatively free word order, both in prose and poetry.



(128) Sem jarlinn leit hann, **þá** hljóp hann upp ok gekk í móti honum. 'As the earl saw him, he jumped up and walked towards him.'

[See the following section for comments on this sentence.]

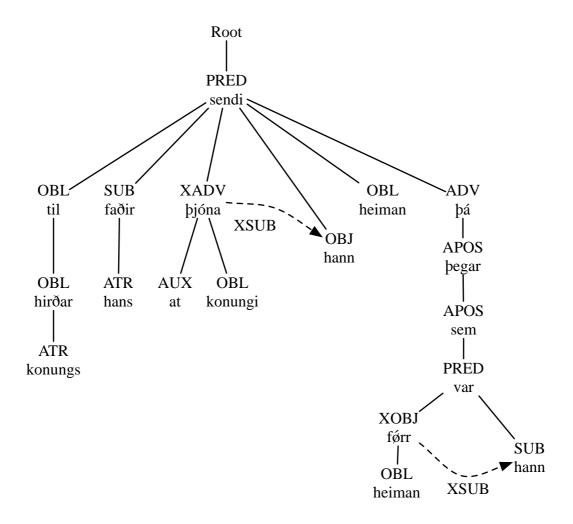
12.2 Dislocation

Dislocation is the moving of a constituent outside a clause and placing it at the very front, *left-dislocation*, or at the very back, *right-dislocation*. In the main clause, the constituent is represented by a placeholder, typically the adverb $b\acute{a}$ or a pronoun. In the

above-mentioned field theory of Paul Diderichsen, such constituents are said to be in extraposition. We analyse the placeholder as the governing word, i.e. we give the word within the main clause priority. We have found many examples of left-dislocation in Old Norwegian, but no right-dislocation yet (of the type: "It is common, this construction").

In (128) on the previous page, $b\acute{a}$ is an ADV in the main clause, and on to it we hang the dislocated phrase *sem jarlinn leit hann* as an APOS. Here, the dislocated phrase is a subordinate clause, introduced by the subjunction *sem*. Such subordinate clauses can also be introduced by *er* or *ef*.

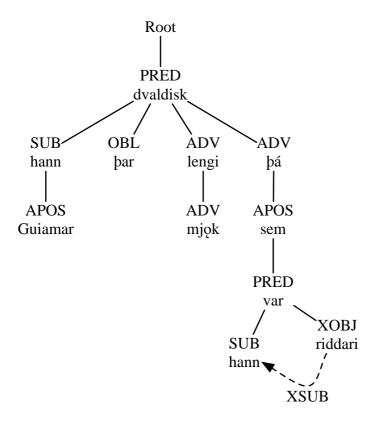
The introductory subjunctions can in turn be modified by adverbs, e.g. *þegar sem* 'as soon as' in (119):



(119) **Þegar sem** hann var heiman førr, **þá** sendi hann [acc.] faðir hans heiman til konungs hirðar at þjóna konungi.

'As soon as he was able to leave home, his father sent him to the king's court to serve the king.'

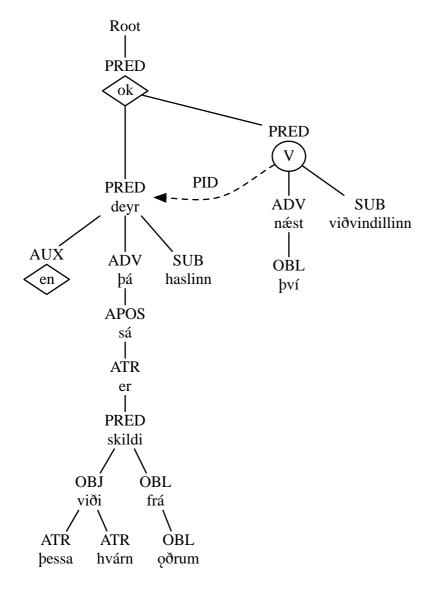
In (191) below, we analyse *Guiamar* as an APOS to the subject *hann* in the main clause $b\acute{a}$ dvaldisk hann $b\acute{a}r$ mjǫk lengi. In accordance with our analysis above, we tag the subjunction $s\acute{e}m$ in the adverbial clause $s\acute{e}m$ hann var riddari as an APOS under the adverb $b\acute{a}$ in the main clause.



(191) **Guiamar**, sem hann var riddari, þá dvaldisk **hann** þar mjǫk lengi. 'Guiamar, in that he was a knight, then he stayed there a long time.'

In (191), we could also have hung *sem hann var riddari* as an APOS on *Guiamar*, following the order of the constituents. But we interpret *sem hann var riddari* as a complement of the verb *dvaldisk* rather than of the subject *Guiamar*.

Sometimes, the relationship between constituents in such constructions is rather loose, so much that one may wonder if dislocation has occurred at all. In (192) on the next page, the phrase sá er þessa viði skildi hvárn frá ǫðrum, has no obvious function in the main clause; it should rather be understood as a condition, and the following sentence the result. We do not need to split the sentences apart, because this kind of topicalisation is quite common in Old Norwegian. Instead, we have chosen a solution involving an APOS for (192), in line with the preceding examples, so that sá er þessa viði skildi frá ǫðrum is an APOS under þá.



(192) En sá er þessa viði skildi hvárn frá ǫðrum, **þá** deyr haslinn ok því næst viðvindillinn.

'And the one which separated these trees from each other, then the hazel dies and then the honeysuckle.'

In this analysis, we have inserted an empty verb in *því nást [deyr] viðvindillinn* 'and then the honeysuckle [dies]', slashing from this verb to the overt *deyr* in the preceding sentence. Also note that the introductory conjunction *en* is analysed as being dependent on the first PRED, in this case *deyr*, rather than on the coordinating conjunction *ok*.

13 Ellipsis, Agreement, Discontinuity and Anacoluthon

13.1 Ellipsis

Sometimes a sentence is missing its predicate. In dependency analysis, the subject may be dropped (as is quite common in Old Norwegian), but not the predicate. Then, an empty verbal node must be introduced. An example is found in *Auðunar þáttr vestfirzka* ch. 1:

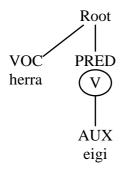
(193) Konungr mælti: "Villtu gefa mér [dýrit] þá?"

Hann svarar: "Eigi [vil ek gefa þér dýrit], herra."

"The king spoke: "Will you then give me [the animal]?"

He answers: "[I do] not [want to give it to you], lord."

The fact that the object *dýrit* is missing in the first line is unproblematic in the analysis. But in the reply, "Eigi, herra", one must supply an empty verb, as shown here:



(193) "Eigi [vil ek gefa þér dýrit], herra."

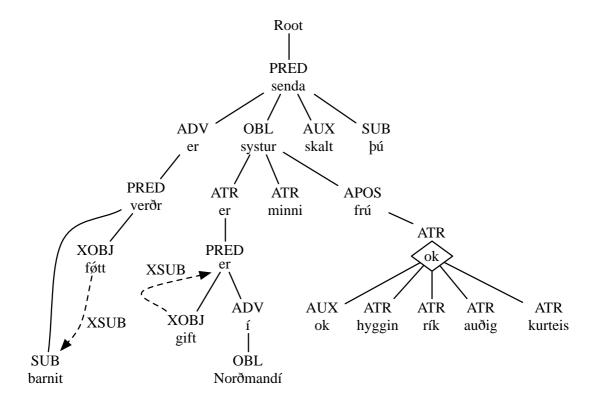
"[I do] not [want to give it to you], lord."

We shall nevertheless try to avoid adding empty verbs. The empty verb must either be a copula or a verb easily recovered from the context. Apart from that, we have chosen to analyse comparative constructions by inserting empty verbs; see the discussion in ch. 10.6 above.

Sentences may be so ungrammatical (anacoluthic) as to make an analysis impossible without making some corrections. As a rule, we do not analyse such sentences, nor do we analyse sentences in which the editor has added words wrapped in the element <supplied>, or has deleted words using the element <expunged> (or <suppressed>).

13.2 Agreement

Words do not always agree as expected in the Old Norwegian texts. Often, the verb is in the singular even though the subject is plural. Similar disagreement may occur between the subject and its predicative (XOBJ). Appositions also furnish examples, as in (124):



(124) Er barnit verðr føtt, skalt þú senda systur minni, er gift er í Norðmandí, rík ok auðig, kurteis ok hyggin frú.

'When the child is born, you should send [it] to my sister, who is married in Normandy, a powerful and wealthy, courteous and wise lady.'

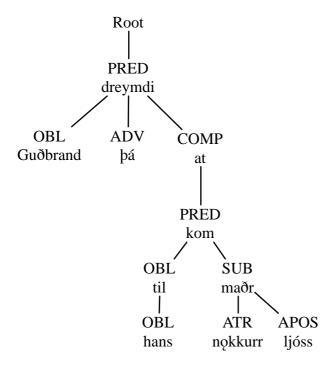
In (124), we have interpreted the phrase *rík ok auðig, kurteis ok hyggin frú* [nominative] as an apposition to *systur minni* [dative], although they are not in the same case. However, probably because of the distance between the two phrases, the apposition is put into the unmarked case, the nominative. The syntactic analysis remains the same, regardless of agreement. Another analysis would be to attach the phrase *rík ok auðig, kurteis ok hyggin*

frú as an XADV to the PRED er in the preceding relative clause. In this analysis, the case nominative is fully grammatical.

On the coordination within the apposition (i.e. the use of *ok*), we refer the reader to the discussion in ch. 9.2 and ch. 9.3 above.

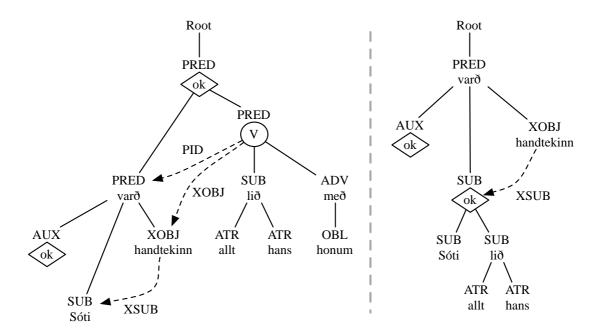
13.3 Discontinuity

Discontinuous constructions are fairly common in Old Norwegian. These are completely grammatical, and often easily handled by the dependency analysis, since word order is of no importance. In (93), *ljóss* can be placed, as an APOS, under *maðr*, regardless of the distance between the two in the sentence:



(93) Þá dreymdi Guðbrand at maðr nokkurr kom til hans, **ljóss**. 'Then Gudbrand dreamed that a man came to him, [a] fair [man].'

Another example of a discontinuous construction is (136) on the next page, which has a complex subject. Here, the analysis would be quite different if we were to delete the phrase *með honum*.



(136) Ok varð Sóti handtekinn ok allt lið hans með honum. 'And Sóti was apprehended and all his men with him.'

If we ignored the adverbial *með honum*, the sentence could be analysed as having the discontinuous subject *Sóti* ... ok allt lið hans, as shown on the right above. But the sentence does have the adverbial *með honum*, and that can not refer to *Sóti* – he can not be "with him" if the *honum* is himself. For this reason, we have to posit two coordinated sentences, one of which has an empty verb. This verb is the same as *varð* (PID), which is indicated by a slash arrow. Also, there has to be a slash to the XOBJ *handtekinn* from the empty verb, while for technical reasons it is not possible to slash from *handtekinn* to *lið*.

The skaldic poems have an even greater degree of discontinuity, as shown in example (62) in ch. 6.1.2 above.

As already mentioned, one advantage of dependency analysis is that it can treat discontinuity without branches in the sentence tree crossing, but it comes at a price; in this case, the discontinuity is not visible from looking at the tree. It can only be gleaned by indexing the words in the sentence.

13.4 Anacoluthon and Textual Correction

From time to time, ungrammatical constructions appear in the texts. If no sense can be made of a sentence, it should probably be skipped. But sometimes, one can come up with an acceptable annotation.

Superfluous words are easiest to deal with. In the morphological annotation, they can be tagged as "xUA" for "unassigned" (cf. ch. 4.5.12 above). In (194), the word "he" is most likely an unfinished dittography, which in fact is dotted by the scribe to indicate that the word should be ignored:

(194) Ok í því kómu meyjarnar til konungs ok stigu af hestum **he** sínum. 'And then the maidens came to the king and dismounted from their horses **ho**.'

In the syntactic analysis, however, every word has to have a function, even if it is superfluous. We solve this problem by tagging the word as NONSUB and hanging it to the nearest parent word (cf. ch. 7.5.3 above). In this instance, it is the noun *hestum*, but superfluous words may also be hanged on the sentence's PRED directly.

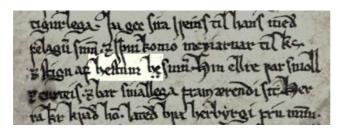


Figure 13:1. Uppsala University Library, DG 4–7, fol. 40rB, l. 29–33. In the light box, we first see the word *hestum* and then the beginning of the word *he*, which has been dotted.

In other cases, words may be **missing**, so that one would like to supply one or more words to make the sentence grammatical. The annotator should not do this, because it would have unwanted consequences for the indexing of the words in the text. However, the editor may have done it, and the added words typically appear in parentheses, (...), or angle brackets, (...). In such cases, we also analyse the bracketed words:

(195) Þá reiddisk dróttningin ok ⟨í⟩ reiði sinni mismælti.
'Then, the queen became angry and in misspoke in her anger.'

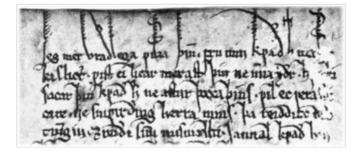


Figure 13:2. Uppsala University Library, DG 4–7, fol. 39vA, l. 1–5. In the bottom line, the preposition i is missing before the noun $rei\delta i$.

In (195), the preposition i is inserted by the editor (show with parentheses), which forces us to analyse the word syntactically. Here, it would be the head in the phrase i rei ∂i sinni.

The editor's additions are not always whole words. In (196), only the ending is added.

(196) Sigurðr ávitar hann ok svá hana at hon seldi honum, ok heim(tir) annat sinni ok biðr hann fá sér.

'Sigurd reproaches him [i.e. Olaf] and also her [i.e. Asta], that she should give him [the sword], and demands [it] a second time and asks him to hand it over.'

Here, the editor has added "tir" to "heim" to render the sentence intelligible — and probably closer to the original. This is handled in the morphological rather than the syntactic annotation. In the morphological annotation, it does not make much difference whether *heim* is analysed as the adverb *heim* 'home' or as a form of the verb *heimta* 'demand'. But the syntactic analysis will make more sense if there is a verb here.

Finally, there may be a **conflict** between words in a phrase, e.g. so that their cases do not agree as expected:

(197) Mik dreymdi draumr nokkurn.

'I dreamed a dream.'

In this example, *draumr* is unambiguously a nominative form and *nokkurn* equally unambiguously an accusative form. In the morphological annotation, we tag them as such, even if the phrase is ungrammatical from a syntactic point of view. As for the syntactic analysis, we tag *mik* as an OBL (cf. ch. 7.3.3 above) and *draumr nokkurn* as a SUB. Here, the nominative *draumr* is the head of *nokkurn*, and we take that as a sufficient reason for analysing it as a subject.

14 Ambiguous Functions

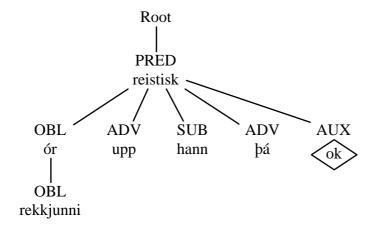
Certain borderline cases are bound to occur where the analysis is ambiguous. Here we list a few of them.

14.1 OBJ vs. OBL

Accusative objects are consequently tagged as OBJ, while dative and genitive objects are taken as OBL, e.g. (3) and (21) in ch. 7.3.3 above. The indirect object, which is always in the dative, is tagged as an OBL, e.g. (92) in the same chapter. The same applies to so-called oblique subjects in the dative or accusative, e.g. (93), also in ch. 7.3.3.

14.2 ADV vs. OBL

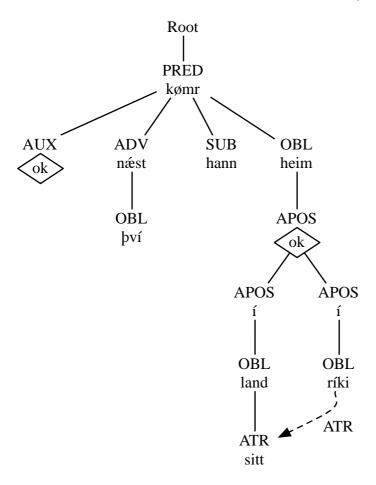
When words or phrases, usually prepositions or adverbs, occur under a PRED, it may be difficult to decide whether they are ADV or OBL. The phrase can only be an OBL if the verb requires it to function properly. This is true of verbs of motion and verbs of position, as well as of verbs that are complemented by verbal particles. Phrases that denote place should be analysed as ADV when they are loosely connected with the main verb, and could in theory accompany any verb in any context.



(186) Ok reistisk hann þá **upp ór** rekkjunni. 'And he rose up from the bed.'

In (186), we analyse *upp* as an ADV and *ór rekkjunni* as an OBL. The preposition phrase *ór rekkjunni* denotes a movement's origin, telling us from where he rose, and it is thus closely connected to the verb *reisa* 'rise [from one position to another position]'. The adverb *upp*, on the other hand, only tells us in what manner he rose, and could be deleted without compromising the sentence's meaning.

The situation is different with the adverb *heim* in (198):



(198) Ok því næst kømr hann **heim** í land sitt ok í ríki. 'And next he returns home to his land and kingdom.'

Here, the phrases *heim* and *i land sitt ok riki* refer to the same thing, but we understand *heim* to be the primary phrase. Therefore, we make *i land sitt ok i riki* as an APOS to *heim*. If *heim* were deleted, the apposition *i land sitt ok i riki* would become the OBL.

In many narrative texts, in descriptions of journeys, arguments denoting the source and the goal occur, as in (160), analysed in ch. 10.6 above:

(160) Þaðan fór Óláfr konungr í Soleyjar ok létti eigi fyrr en í Svíþjóðu.
'From there, king Olaf went to Solør and did not stop until he came to Sweden.'

Here, $ba\delta an$ 'thence' denotes the source and is therefore an OBL, while *i Soleyjar* 'to Solør' and *i Sviþjóðu* 'in Sweden' denote the goal, and are also OBL. The last phrase has a locative meaning, as we can see from the dative, but we think it functions as a goal here.

In Old Norwegian, there is a series of adverbs with the suffix -an, like þaðan, heiman, neðan, ofan, norðan, sunnan, vestan and austan. These can all be used to denote the source of movement.

COMMENT: The place name *Soleyjar* 'Solør' is probably a compund of *sol n. 'mud, mire' (cf. Old English sol in this meaning) and ey f. 'flat land along a river', in this case the river Glomma. The eastern dialects of Norway have seen monophthongisation $ey > \emptyset$.

14.3 ATR vs. APOS

This is especially relevant to the distinction between restrictive and non-restictive relative clauses, for which the function REL can be used in exceptional cases (cf. ch. 10.2).

14.4 ATR vs. OBL

This distinction applies to e.g. adnominal datives. There is a difference between *vin konungs* and *trúr konungi*, where the genitive *konungs* is an ATR and the dative *konungi* is an OBL. In the latter case, the adjective *trúr* requires a dative object, which is why we tag *konungi* as an OBL rather than an ATR.

14.5 The verb vera

The verb *vera* is used in a number of ways. The first two are formally identical, and slashing should be used in both.

a. vera + predicative

(97) Af því **var** hann hugsjúkr ok harmsfullr. 'Therefore, he was distressed and sorrowful.'

Here, *hann* is a SUB and *hugsjúkr ok harmsfullr* an XOBJ. There must be a slash from the XOBJ to the SUB, as shown in the tree in ch. 9.3 above.

b. *vera* + participle

(100) Hér **er** kominn Óláfr konungr digri. 'Here Olaf the stout has come.'

In this sentence, *Óláfr konungr digri* is the SUB (with *Óláfr* as the head) and *kominn* is the XOBJ. Here, too, there must be a slash from the XOBJ to the SUB.

No slash is needed, however, in the two following types, (c) and (d).

c. vera expressing time

When the verb *vera* is the PRED for an expression of time, the latter is analysed as an XOBJ (not SUB), like *hátíðardagr* (199), e.g.:

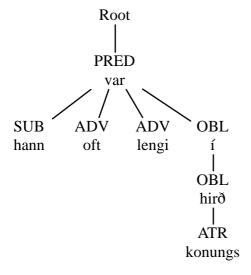
(199) Nú á næsta degi eftir þegar þá **var** hátíðardagr þess helga konungs um morgininn. 'Now, the next day after, when there was the holiday of the holy king in the morning.'

d. vera as a verb of existence and position

(95) At sonnu var þetta í Neustria. 'Truly this was in Neustria.'

It is difficult to distinguish between *vera* as a verb of existence and a verb of position – existence, after all, happens someplace. In accordance with the analysis of verbs of position in ch. 7.3.3 above, we will analyse preposition phrases of the type *i Neustria* in (95) as OBL.

Similarly, in (56), the preposition phrase *i konungs hirð* is also an OBL. It is not enough to say that he existed at a certain time, the place must also be expressed.



(56) Hann var oft lengi í konungs hirð [...].'He was often for a long time at the king's court [...].'

We can illustrate the distinction between two usages of the verb *vera* in the following artificial example: Hann **var** oft hugsjúkr ok harmsfullr í konungs hirð 'He was often anxious and sorrowful at the king's court'. This sentence can be interpreted in two ways. Either as type (a), where *hugsjúkr ok harmsfullr* is an XOBJ with *í konungs hirð* as a free

ADV, or as type (d), where *i konungs hirð* is an OBL and *hugsjúkr ok harmsfullr* is an XADV. The difference is subtle. The first interpretation could be translated as 'He was often anxious and sorrowful when he was at the king's court', the second as 'He was often at the king's court, anxious and sorrowful.'

14.6 Subjective and objective genitive

In ch. 7.3.6 we showed that an objective genitive, e.g. *landsins* in *stjórn landsins* 'the government of the land', should be analysed with the function NARG. A subjective genitive, however, should be analysed as an ordinary possessive genitive, using the function ATR. In (200), *Óláfs* is a subjective genitive:

(200) Eftir fall **Óláfs** konungs báru þeir líkit ór valinum um aftaninn ok þvógu. 'After the fall of king Olaf they carried the body from the slain in the evening and washed [it].'

This is an example of a subjective genitive in the sense that *fall Óláfs konungs* 'king Olaf's fall' can be derived from *Óláfr konungr fellr* 'king Olaf falls', in which the corresponding word *Óláfr* is subject. In our view, there is no strong syntactical arguments for making a distinction between subjective and ordinary possessive genitives.

Part Three

Appendix

15 List of Functions

This is a list of all the functions in the PROIEL scheme. In the Menotec project, we do not use AG, PART, ARG, PER or ADNOM, but we have included them here for the sake of completeness.

Abbreviation	Shortcut	Name	Explanation	
Root function	s			
PRED	p	predicate	 main verb in independent clauses conjunction coordinating main verbs main verb in dependent clauses (excluding indirect questions, see COMP) empty verb when verb is missing 	
PARPRED		parenthetic predicate	- interpolated sentence fragment, typically the main verb in direct speech	
VOC	v	vocative	word of addressinterjections	
Auxiliary Fun	ctions			
AUX	X	auxiliary word	 the auxiliary verbs hafa, geta, fá the auxiliary verbs munu, skulu, mega, vilja infinitive marker negation of main verb introductory conjunction the expletive particles of and um the interrogative particle hvárt 	
Arguments				
SUB	S	subject	the subject of a verb (excluding oblique subjects, see ch. 7.3.3)the accusative in accusative with infinitive constructions	

ОВЈ	o/j	object	- the object of a verb (excluding oblique subjects and noun phrases, see ch. 7.3.2)
OBL	1	oblique	 oblique words under PRED (dative and genitive objects) oblique subjects, in dative and accusative indirect objects (always dative) objects of prepositions objects of adjectives that govern genitive or dative expressions of source or goal with verbs of motion
XOBJ	O/J	external object	infinitives that have external subjectspredicatives, both to subjects and objects
COMP	С	complement	 the subjunction in nominal clauses the finite verb in indirect questions the infinitive in accusative with infinitive constructions infinitives as subjects or predicatives the subjunction <i>en</i> 'than' in comparison
NARG	n	adnominal argument	- noun arguments, objective genitive in particular
AG	g	agent	 the logical subject in passive (and reflexive) constructions, typically a preposition phrase introduced by af
Adjuncts			
ADV	a	adverbial	ADV is a function which can can modify: - finite verbs - prepositions - adjectives - other adverbs ADV can be: - adverbs - preposition phrases - nouns in oblique cases - subordinate clauses

XADV	A	external adverbial	- an adverbial that has an external subject
ATR	t	attribute	 adjectives under nouns possessives under nouns determiners under nouns restrictive relative clauses
APOS	-	apposition	words subordinated to nouns, but which have the same scopenon-restrictive relative clauses
PART		partitive	- words or phrases that tell us to which group or whole a noun belongs
Superfunction	s		
ARG		argument	-OBL/OBJ
PER		peripheral	- argument / adjunct
NONSUB		non-subject	- OBJ / OBL / ADV - anomalies
ADNOM		adnominal	- ATR / APOS / PART / NARG
REL		relative	- restrictive relative clause (ATR) / non- restictive relative clause (APOS)
Secondary fun	ctions		
XSUB		external subject	- the external subject of XOBJ
PID		predicate identity	 the secondary dependency between implicit and explicit verbs a verb that shares arguments with another verb

16 Examples

As far as possible, we have been using examples from the Old Norwegian texts in the Menotec corpus, i.e. the texts abbreviated as *Hom*, *ÓHLeg*, *Streng* and *Landsl* below. For a number of other examples, we have resorted to other texts, some of which are Icelandic. All abbreviated titles are explained in ch. 18.1.2 below.

- (1) Ek vil tala við þá. (Streng, Guiamar, ch. 5)
- (2) Um þá daga var þar jafnan úfriðr ok bardagar. (Streng, Guiamar, ch. 3)
- (3) Ríkir báðu hennar. (Streng, Tveggia elskanda lioð)
- (4) En dróttningin hverfr í brott reið mjok. (ÓHLeg, ch. 1)
- (5) Jarnskeggi átti konu þá er Guðrún er nefnd (ÓT, ch. 71)
- (6) Nú var enn í Danmorku greifi nokkurr illr ok ofundfullr. (*Hom*, ÓH miracle 4)
- (7) Hann er ríkr maðr, oflugr ok áttgóðr. (Streng, Guiamar, ch. 10)
- (8) Ert þú skyldr at sverja honum hinn sterkasta eið. (*Thom*, A, part 3, ch. 13)
- (9) Hann gekk fyrir of daginn ok steig heldr stórum. (*Gylf*, ch. 45)
- (10) Þótt róa kynni krofturligan. (*Hym*, st. 28)
- (11) Meðan þessir tveir viðir búa báðir saman, þá lifa ok bera lauf sitt. (*Streng*, Geitarlauf, ch. 1)
- (12) Hví ertu einn kominn í Jotunheima? (*Prk*, st. 7)
- (13) Unnasti, kvað hon, ek veit at vísu at ei getr þú borit mik. (*Streng*, Tveggia elskanda lioð)
- (14) Vit kváðum nei við djǫflinum ok við ǫllum hans verkum. (*Hom*, Visio sancti Pauli apostoli)
- (15) Hann var mjok ástbundinn af henni ok hon af honum. (*Streng*, Tveggja elskanda ljóð)
- (16) En margir létu illa yfir því er hann gerði hana sér svá kæra. (*Streng*, Tveggia elskanda lioð)
- (17) Hvat skal ek nú gera? (Streng, Eskia, ch. 2)
- (18) Hví er frú mín svá árla upp staðin? (Streng, Guiamar, ch. 13)
- (19) Ok sagði henni hvílíkan harm riddarinn hafði af ást hennar. (*Streng*, Guiamar, ch. 13)
- (20) Ek ann Yðr, frú, yfir hvatvitna. (Streng, Desiré, ch. 5)
- (21) Um síðir luku þau bæði lífi sínu. (Streng, Tveggia elskanda lioð)
- (22) Þá lagði hann báða fótr í kné konungsins. (Streng, Bisclaret, ch. 5)

- (23) Því næst hljóp fram kottr einn grár. (*Gylf*, ch. 46)
- (24) Þessa leið fara þeir einir er kunnigstir eru um Fljótsdalsheiði. (*Hrafnk*, ch. 2)
- (25) Einir trúðu at hamingjan myndi fagnað ok fremd veita. (Barl, ch. 30)
- (26) Þá bera þeir, sem hinn vildasti viðr, lauf ok blóm. (Streng, Prologue, ch. 1)
- (27) Var þetta dýr hverjum manni kært er í hirð konungsins var. (*Streng*, Bisclaret, ch. 6)
- (28) Ok rann hjarta hans allt ór honum. (Streng, Tveggia elskanda lioð)
- (29) Ek réð þér þat hitt fyrsta ráð. (*Barl*, ch. 45)
- (30) Óláfr konungr lagði undir sik fyrstr konunga Noreg allan. (ÓHLeg, ch. 46)
- (31) Horpum, gígjum, simphanum, organum, timpanum, salterium ok korum ok allskonar oðrum strengleikum. (*Streng*, Prologue, ch. 1)
- (32) Allskonar oðrum strengleikum er menn gera sér ok oðrum til skemtanar. (*Streng*, Prologue, ch. 1)
- (33) Mælti hon oðru sinni til hans. (Streng, Guiamar, ch. 13)
- (34) Þá sá hann mýss tvær, aðra hvíta en aðra svarta. (Barl, ch. 60)
- (35) Síðan skildisk hann við konung ok allt hirðlið hans. (Streng, Guiamar, ch. 3)
- (36) Í hofninni sá hann eitt skip. (*Streng*, Guiamar, ch. 5)
- (37) Einnhvern dag var þat er Óláfr var á land genginn með liði sínu. (ÓHLeg, ch. 13)
- (38) Pá leggi einnhverr họnd sína í munn mér at veði at þetta sé falslaust gert. (*Gylf*, ch. 34)
- (39) Kaus hverr sér félaga. (Streng, Chetovel)
- (40) Minnti hann at hváru á með orðum ok mælti svá. (*Hom*, ÓH miracle 9)
- (41) Þá var hann hvergi sénn þar í fylkinu. (Streng, Bisclaret, ch. 8)
- (42) Hann hugðisk þá at reyna afl sitt. (*Gylf*, ch. 48)
- (43) Pessir er sá dagr er guð gerði. (*Hom*, homily for Christmas I: De nativitate Domini sermo)
- (44) Hann svaf ok hraut sterkliga (Gylf, ch. 45)
- (45) Kynligt þykkir mér, kvað hann, hví þú leitar ei rannsaks um slíkt. (*Streng*, Gurun, ch. 1)
- (46) Mjok nær fjallinu lét einn konungr gera mikla borg. (*Streng*, Tveggja elskanda ljóð)
- (47) Þá mælti konungrinn at hann skyldi yrkja um þat er skrifat var á tjaldinu jafngengt honum. (ÓHLeg, ch. 58)
- (48) Nú var Desiré tíu vetr útan lands, svá at hann fór ekki heim þess á millum. (*Streng*, Desiré, ch. 2)
- (49) Ok hverr sem einn várra manna hefir oftsamliga sét þat ok gengit nær því, bæði nætr ok daga. (*Streng*, Bisclaret, ch. 8)
- (50) Aldri skalt þú fá svívirðing né hróp né hatr af henni. (*Streng*, Eskia, ch. 2)
- (51) Hon sagði at Baldr hafði þar riðit (Gylf, ch. 49)
- (52) Svá hvárki viðr komi knífr né sox. (Streng, Guiamar, ch. 18)
- (53) En sá kveðr nei við hann. (Landsl, Þjófabolkr, ch. 6)

- (54) En þá er þeir váru albúnir ór hǫfninni, þá fóru þeir norðan fyrir Þrjótshverfi hǫlfum fjórða tig skipa. (*ÓHLeg*, ch. 66)
- (55) Þá viti hann at sonnu at svá hefir konungr mælt. (Streng, Tveggia elskanda lioð)
- (56) Hann var oft lengi í konungs hirð ok unni mjok konungs dóttur, ok oftsamliga røddi við hana at hon skyldi játta honum ástarþokka sinn, því at hann var vaskr maðr ok hinn kurteisasti, | ok konungr lofaði hann mjok ok var honum hinn kærasti. (*Streng*, Tveggia elskanda lioð) In this example, (56) refers to the whole sequence, (56a) refers to the sequence until the vertical line, while (56b) refers to the sequence after the vertical line.
- (57) Hann skal vera huggan hennar ok skal hon kalla hann Jonet. (Streng, Jonet)
- (58) Bretar kalla Gotulæf, en vér kollum Geitarlauf. (Streng, Geitarlauf, ch. 1)
- (59) Ok mislíkaði honum mjok. (Streng, Tveggia elskanda lioð)
- (60) Þá hǫfum vér skóa á fótum ef vér bjǫrgum oss í verkum með dømum liðinna feðra við freistni fjánda ok vándra manna svá sem skór hlífa fótum við þyrni ok við ormum. || Því at oss eru til þess sýnd dømi heilagra feðra ór heimi liðinna at vér megim batna af þeim í eftirlíkingu góðra verka þá er vér sjám hverja dýrð réttlátir menn hǫfðu fyrir erfiði sitt. (*Hom*, homily for Easter Day: In die sancto pasce sermo ad populum)
- (61) Sjá við manndrápi ok við hórdómi, við stuldum, við skrǫkvitnum, við meineiðum, við ráni, við rǫngum dómi, við svikum, við ofmetnaði, við ofdrykkju, við ofprýði, við ofsínku, við fégirnd, við mútufé, við gulls leigu eða silfrs, við kvennsemi, við víkingu, við ǫfund, við hatri, við lygi, við lausung, við bakmælgi, við háðsemi, við rógi, við morði, við údáðum, við misjafnaði, við fordæðuskap, við gǫldrum, við gerningum, við mikillæti, við róggirni, við bǫlvan, við gauð, við hølni, við fjándskap, við úgrandveri, við frýgirni, við tortrygð, við ofgeytlan, við ofdeildum, við ofkappi, við ofþrá, við tunguskøði, við ofbræði, við ofsennu, við ofinndæli, við kvælni, við ofkæti, við ofhlátri, við ábersemi, við úhlýðni, við flærðum ǫllum. (Hom, moral homily IV: sermo necessaria)
- (62) Rétt er at sókn en sétta | (snarr þengill vann Englum | at) þar er Óláfr sótti | (Yggs) Lundúna bryggjum. (ÓHLeg, ch. 11)
- (63) Sverð bitu volsk, en vorðu | víkingar þar díki, | átti sumt í sléttu | Súðvirki lið búðir. (ÓHLeg, ch. 11)
- (64) Þá svaraði Rani. Eigi félltu, herra. (ÓHLeg, ch. 19)
- (65) Konungrinn hló at ok mælti, ef guð vill at gerisk gagn. (ÓHLeg, ch. 19)
- (66) Hér segir frá jartegnum hins helga Óláfs konungs. (*Hom*, ÓH introduction to miracles)
- (67) Enn um hitt sama mál. (*Hom*, Gemma animae 3)
- (68) .v. (*Hom*, ÓH miracle 5)
- (69) En ekki átti hann fleira barna. (Streng, Tveggia elskanda lioð)
- (70) Þá mun faðir minn jafnan lifa með harmi ok hugsótt. (*Streng*, Tveggja elskanda ljóð)

- (71) Aldrigi munt þú slíkan stein sét hafa. (Barl, ch. 20).
- (72) Hon lét af sér falla skikkju sína, at hon skyldi mega gløggliga sýnask. (*Streng*, Janual)
- (73) Kastaði þegar keraldinu frá sér, er drykkrinn var í, ok rann drykkrinn ór ok dreifðisk víða um fjallit. (*Streng*, Tveggia elskanda lioð)
- (74) Ein man Ásta hvíla sér í nátt, sagði hann, ok svá skulu vér. (ÓHLeg, ch. 1)
- (75) Egressus af hæstum himni í kvið meyjarinnar þess var á milli þrír ok þrírtigir vetr af krossinum í grǫfina. (*Hom*, homily on the ascension of Christ: In ascensione Domini nostri Iesu Cristi. Sermo ualde necessaria)
- (76) Ohó, hversu góðr Israels Guð er. (Barl, ch. 163)
- (77) Já, já, sagði hann. (ÓHLeg, ch. 19)
- (78) Nei, sagði hinn, ei er þat. (ÓHLeg, ch. 3)
- (79) Sem hon hafði yfir sét bréfit. (Streng, Tveggia elskanda lioð)
- (80) Ef hann getr borit dóttur hans upp í fjallit. (Streng, Tveggia elskanda lioð)
- (81) Hversu má nokkurr maðr eftir skírnina fá haldit sik frá syndum ok úhreinundum? (*Barl*, ch. 55)
- (82) Ok svá er hann mér mjok kærr at aldri vil ek honum angr gera. (*Streng*, Tveggia elskanda lioð)
- (83) Pá leituðu margir við at bera hana, er allsekki gátu at sýst. (*Streng*, Tveggia elskanda lioð)
- (84) Reiðr var þá Vingþórr | er hann vaknaði | ok síns hamars | um saknaði. (*Prk*, st. 1)
- (85) Ormrinn er sløgari en ekki annat kvikvendi. (*Barl*, ch. 28)
- (86) Nú vill maðr annan søkja um eitthvert mál. (Landsl, Kaupabolkr, ch. 8)
- (87) Enn er mér úkunnigt hvárt þessi frú líkar eða eigi at ek sjá unnasti hennar. (*Streng*, Equitan, ch. 4)
- (88) Konungr lofaði hann mjok. (Streng, Tveggia elskanda lioð)
- (89) Hon var í hjá honum bæði nætr ok daga. (Streng, Tveggia elskanda lioð)
- (90) Ok hefir hann heyrt fugla syngja svá fagri rǫddu at hann lysti til at hlýða. (*Streng*, Janual)
- (91) Af þessum tveim ungmennum gerðu bretar strengleik er þeir kalla Tveggja elskanda. (*Streng*, Tveggia elskanda lioð)
- (92) Hon gaf henni leyfi. (Streng, Guiamar, ch. 11)
- (93) Þá dreymdi Guðbrand at maðr nokkurr kom til hans, ljóss. (ÓHLeg, ch. 32)
- (94) Faðir hennar bjuggi á Laukhamri. (DN vol. 10, no. 21 [Bergen, 1327])
- (95) At sonnu var betta í Neustria. (Streng, Tveggia elskanda lioð)
- (96) Hon hefir þar lengr verit en fimmtigi vetra. (Streng, Tveggia elskanda lioð)
- (97) Af því var hann hugsjúkr ok harmsfullr. (Streng, Tveggia elskanda lioð)
- (98) Fyrr en þú tókt at unna mér, þá vart þú lofsæll af hreysti þinni. (*Streng*, Desiré, ch. 4)
- (99) Ok fýsti hann ekki aftr at fara. (*Streng*, Desiré, ch. 12)
- (100) Hér er kominn Óláfr konungr digri. (ÓHLeg, ch. 3)

- (101) En um várit er íssinn var allr af vatninu, þá senda svíar orð Óláfi svenska konungi sínum. (*ÓHLeg*, ch. 15)
- (102) Hann lætr þenna mann bera konungsskrúð allt. (Alex, 9th book, fol 32r.3)
- (103) En hann lézk ekki vita hvat er þær vildu. (Streng, Guiamar, ch. 3)
- (104) Hon kom þar [...] ok spyrr, hverr maðr hann er. (ÓT, ch. 32)
- (105) Nú er um þann atburð því næst at røða. (Streng, Bisclaret, ch. 7)
- (106) Ok gaf þá hvárttveggja þeira ǫðru samband sitt með umskifti fingrgulla sinna. (*Streng*, Equitan, ch. 6)
- (107) Þessum hafði herra hans fengit gaumgæfð ok gæzlu alls ríkisins síns með réttyndum ok refsingum. (*Streng*, Equitan, ch. 2)
- (108) Hér dømask oft góðir af illum. (Hom, Alcuin: Um lygvitni)
- (109) Ekki er kristnum manni meir flýjanda en ofmetnaðr. (*Hom*, Alcuin: Um ofmetnað)
- (110) Forðum í Norðmandí gerðisk einn atburðr er síðan var víða freginn um tvau ungmenni er mjok elskuðusk. (*Streng*, Tveggia elskanda lioð)
- (111) Ok mælti þá at engi myndi þann fald aftr falda, nema með knífi skæri eða með soxum klippi. (*Streng*, Guiamar, ch. 15)
- (112) Hann reið níu nætr døkkva dala ok djúpa. (Gylf, ch. 49)
- (113) En ef þér líkar, ek vil við hana róða. (Streng, Gurun, ch. 1)
- (114) Var sá hafr haltr eftra fóti. (Gylf, ch. 44)
- (115) Kringla heimsins, sú er mannfolkit byggir, er mjok vágskorin. (Yngl, ch. 1).
- (116) Ok søk í hauginn eigi at síðr. (ÓHLeg, ch. 5)
- (117) Vinir ok frændr kvámu til hans með róðum ok ráðagerðum sínum, eggjandi hann at fá sér eignar púsu. (*Streng*, Eskia, ch. 8)
- (118) Ok at halda honum félagskap þá lét blóð með honum ræðismaðr hans. (*Streng*, Equitan, ch. 10)
- (119) Þegar sem hann var heiman fǿrr, þá sendi hann faðir hans heiman til konungs hirðar at þjóna konungi. (*Streng*, Guiamar, ch. 3)
- (120) Ok tók sér herbergi í lofti einu þar sem hann svaf sjalfr í. (ÓHLeg, ch. 68)
- (121) Sá konungr er þá bjó þar, átti eina dóttur, fríða ok kurteisa mey. (*Streng*, Tveggia elskanda lioð)
- (122) Marhæs konungr var reiðr Tristram frænda sínum. (Streng, Geitarlauf, ch. 1)
- (123) Þat var á dogum Haralds konungs hins hárfagra, Halfdanar sonar hins svarta, Guðrøðar sonar veiðikonungs, Halfdanar sonar hins milda ok hins matarilla, Eysteins sonar frets, Óláfs sonar trételgju Svía konungs, at sá maðr kom skipi sínu til Íslands í Breiðdal, er Hallfreðr hét. (*Hrafnk*, ch. 1)
- (124) Er barnit verðr fǿtt, skalt þú senda systur minni, er gift er í Norðmandí, rík ok auðig, kurteis ok hyggin frú. (*Streng*, Milun, ch. 1)
- (125) Illustration: The noun phrases sá hinn gamli maðr (Hrafnk, ch. 4) and hafit þat it djúpa (Gylf, ch. 45)
- (126) Sú hin fátókasta í hennar þjónustu er fríðari en Þér, frú dróttning. (Streng, Janual)

- (127) [...] er oss mætti lofat vera at hafa. (*Hom*, homily on Ash Wednesday: In capite Ieiunii sermo)
- (128) Sem jarlinn leit hann, þá hljóp hann upp ok gekk í móti honum. (*Streng*, Gurun, ch. 1)
- (129) Óláfr konungr stefnir fyrir innan Bókn ok leggr í sundit fyrir norðan tungu í eyjar þær er svá heita. (ÓHLeg, ch. 63)
- (130) *Illustration*: Overview of the analysis of complex prepositions.
- (131) Síðan bjósk konungrinn upp þangat ok mǿtti bóndum ǫðrum megin ár þeirrar er Nitja heitir. (ÓHLeg, ch. 37)
- (132) Hann tígnaði hana ok unni yfir alla lifandi. (Streng, Tveggia elskanda lioð)
- (133) Fyrir því hefir hann hér byrgt mik ok læst í þessum steingarði. (*Streng*, Guiamar, ch. 10)
- (134) Milun frá orðsending hennar, bjó ríkuliga ferð sína ok kom upp í Norðmandí. (*Streng*, Milun, ch. 3)
- (135) Hvárki sakir þín, kvað hann, né ástarþokka þíns, vil ek vera svikari né svívirðing herra míns. (*Streng*, Janual)
- (136) Ok varð Sóti handtekinn ok allt lið hans með honum. (ÓHLeg, ch. 9)
- (137) Um þá daga réð því ríki Odels konungr, stundum í friði, oftsamliga í úró ok í úfriði. (*Streng*, Guiamar, ch. 2)
- (138) Seg mér vilja þinn ok hvat þú kærir. (Streng, Eskia, ch. 12)
- (139) Hann spurði hvat títt var með konungi. (Streng, Geitarlauf, ch. 1)
- (140) Síðan fór hann aftr til Gúruns ok sagði honum hversu mærin unni honum. (*Streng*, Gurun, ch. 4)
- (141) Því at engi gat fullgort þat er við lá. (Streng, Tveggia elskanda lioð)
- (142) Ok fór hann í fóstrland sitt Suðvales, þar sem hann var føddr. (Streng, Geitarlauf)
- (143) Þá mælti gamall maðr einn er þá var í bondum með þeim. (ÓHLeg, ch. 98)
- (144) Þá er frúin hafði allt sagt honum, þá fagnaði hann at faðir hans var ættgóðr ok ríkr at eignum. (*Streng*, Milun, ch. 3)
- (145) Fyrirbauð honum ríki sitt, sakir þess at hann unni dróttningunni. (*Streng*, Geitarlauf, ch. 1)
- (146) Ok fyrir því íhugaða ek at gera nokkura góða sogu, ok ór volsku í bókmál snúa at þat mætti flesta hugga er flestir megu skilja. (*Streng*, Prologue, ch. 1)
- (147) Ok þótti þeim þat landvorn mikil, fyrir því hofðu þar margir úslétt farit. (Ó*HLeg*, ch. 15)
- (148) Hann unni þessari frú mjok lengi, svá tryggliga at eigi var hugr hans á annarri. (*Streng*, Equitan, ch. 6)
- (149) En hinir allir úgildir hvárt sem þeir fá sár eða bana, bæði konungi ok karli. (*Landsl*, Mannhelgarbolkr, ch. 4)
- (150) *Illustration*: The syntactic analysis of complex subjunctions
- (151) Síðan bað konungrinn þá búa ferð sína (ÓHLeg, ch. 67)
- (152) Þá skalt þú mik sjá standa hjá þér. (Streng, Desiré, ch. 6)

- (153) Konungrinn kvezk vita bragð þeira. (ÓHLeg, ch. 50)
- (154) Mér þótti vit vera í hellinum. (Flateyjarbók, Nygaard 1905: 233)
- (155) Ok allr þóttisk hann á lofti vera. (Streng, Desiré, ch. 3)
- (156) Þá var honum Konraðr dauðr sagðr. (Fornsögur Suðrlanda, Nygaard 1905: 233)
- (157) Taka við víl ok erfiði at uppverandi sólu. (*Hrbl*, st. 58)
- (158) Fanntaðu mann inn harðara at Hrugni dauðan. (Hrbl, st. 14)
- (159) En hǫfðingi sá reið hesti þeim, er mǫrgum hlutum er gǫfgari en gervastir allir aðrir. (*Niðrst*, ch. 4)
- (160) Þaðan fór Óláfr konungr í Soleyjar ok létti eigi fyrr en í Svíþjóðu. (*ÓHLeg*, ch. 37)
- (161) En svá sem ritningar hafa sýnt mér vil ek segja yðr atburði þá sem gerðusk á hinu syðra Bretlandi í fyrnskunni. (*Streng*, Guiamar, ch. 2)
- (162) Svá sem honum helt þessi harmr, þá kom hann því næst til hafnar þar sem hann fyrst skipit sá hjá fylki sínu. (*Streng*, Guiamar, ch. 16)
- (163) Hann hefir somu lýzku sína ok áðr. (ÓHLeg, ch. 8)
- (164) Hann var sólu bjartari. (Niðrst, ch. 4)
- (165) Þat er þar til merkis at Ásta, dóttir hans, er sjúk við barni. (ÓHLeg, ch. 4)
- (166) Ok var þat eigi kynligt at Bisclaret vildi sín á honum hefna. (*Streng*, Bisclaret, ch. 7)
- (167) En þess vil ek biðja yðr at þér blótið mik eigi. (ÓHLeg, ch. 2)
- (168) Hann man aldrigi kunna deyja. (Streng, Jonet)
- (169) Hon kann allra grasa ok róta skyn. (Streng, Tveggia elskanda lioð)
- (170) Þessi riddari kann vel kyssa. (Streng, Gurun, ch. 2)
- (171) Hann vissi at sár kynni at gróða. (Streng, Guiamar, ch. 5)
- (172) Gat hann ok orrostu þessarar. (ÓHLeg, ch. 61)
- (173) Keisarinn sá stjornu eina ljósari en hann hafði fyrr séna. (*Hom*, homily on Christmas I: De nativitate Domini sermo)
- (174) En eigi ætlumk ek at taka trúna. (ÓHLeg, ch. 52)
- (175) En vant sýnisk honum um þessa ást at véla. (Streng, Eskia, ch. 6)
- (176) Nú er erfingi skyldr at gera honum boð. (*Landsl*, Þingfararbolkr, ch. 9)
- (177) Þá réðu þeir vaskliga til at søkja hann. (Streng, Guiamar, ch. 21)
- (178) Ok hafði hann tíu skip fyrir at ráða. (ÓHLeg, ch. 9)
- (179) Til þess em ek eigi førr at setjask í rúm hofuðskálda. (ÓHLeg, ch. 55)
- (180) Gef ek bér leyfi at unna beirri. (Streng, Guiamar, ch. 15)
- (181) Ok ortu bøndr á þegar ok borðusk við Óláf konung. (ÓHLeg, ch. 37)
- (182) Þá mun hon til leggja ráð ok rókt. (Streng, Tveggia elskanda lioð)
- (183) Þá tók frúin upp lík fuglsins. (Streng, Laustik, ch. 3)
- (184) Sem hann heyrði at menn um orðuðu ok at tǫldu [...]. (*Streng*, Tveggia elskanda lioð)
- (185) Um morgininn árla stóð hann upp ok steig á hest sinn. (*Streng*, Desiré, ch. 5)
- (186) Ok reistisk hann þá upp ór rekkjunni. (Streng, Guiamar, ch. 11)

- (187) En faðir hennar vildi engum kosti gifta hana, því at hann mátti aldri af henni sjá. (*Streng*, Tveggia elskanda lioð)
- (188) Þá lét Óláfr digri stefna þing, svá at eigi var fyrr munat jafnfjǫlmennt þing. En fyrir ástar sakir við hann sóttu menn þingit sem boðit var. Var nú kvatt hljóðs, ok tekr konungr til máls. (ÓHLeg, ch. 2)
- (189) Eigi em ek vándr maðr; em ek, kvað hann, guðs skepna. (*Streng*, Gurun, ch. 2)
- (190) Gúrun er góðr maðr, en of gjarna vill hann heima sitja, ǿrit er hann mildr at gefa. (*Streng*, Guiamar, ch. 2)
- (191) Guiamar, sem hann var riddari, þá dvaldisk hann þar mjok lengi. (*Streng*, Guiamar, ch. 3)
- (192) En sá er þessa viði skildi hvárn frá ǫðrum, þá deyr haslinn ok því næst viðvindillinn. (*Streng*, Geitarlauf, ch. 1)
- (193) Konungr mælti: "Villtu gefa mér þá?" Hann svarar: "Eigi, herra." (Auð, ch. 1)
- (194) Ok í því kómu meyjarnar til konungs ok stigu af hestum he sínum. (*Streng*, Janual)
- (195) Þá reiddisk dróttningin ok (í) reiði sinni mismælti. (Streng, Janual)
- (196) Sigurðr ávitar hann ok svá hana at hon seldi honum, ok heim(tir) annat sinni ok biðr hann fá sér. (ÓHLeg, ch. 8)
- (197) Mik dreymdi draumr nokkurn. (ÓHLeg, ch. 2)
- (198) Ok því næst kømr hann heim í land sitt ok í ríki. (ÓHLeg, ch. 1)
- (199) Nú á næsta degi eftir þegar þá var hátíðardagr þess helga konungs um morginninn. (*Hom*, ÓH miracle 13)
- (200) Eftir fall Óláfs konungs báru þeir líkit ór valinum um aftaninn ok þvógu. (ÓHLeg, ch. 87)

17 Special Word Lists

17.1 Homonyms of the Same Word Class or the Same Gender

The list below is based on *Norrøn ordbok* and contains homonyms which can not be differentiated by word class or other parameters within our annotation method. These words are distinguished with Roman numerals in the dictionary, like "á f. I" 'river' and "á f. II" 'ewe'. This list also includes some verbs which have the same lemma form but belong to different inflectional classes, like "bera (pret. beraði)" 'make bare' and "bera (pret. bar)" 'carry'. They, too, have received Roman numerals.

We have found 380 instances of this kind of homonymy. Many of them have two meanings, a fair number have three, and some even have four, like "rif n. I" 'rib', "rif n. II" 'a tearing asunder', "rif n. III" 'reef (in the sea)' and "rif n. IV" 'reef (in a sail)'. It is interesting to note that of the four words with four meanings, three are monosyllables beginning with "r".

The list does not include words that we can tell apart using our annotation parameters, notably gender in the nouns. This means that forms like "*ol* f." 'strap' and "*ol* n." 'ogress' are excluded from the list below. These homonyms are listed in ch. 3.1 above.

For the list, we use the orthography and setup from *Norrøn ordbok* (5th ed. 2008), but this may later be supplemented with the orthography of *Gammelnorsk Ordboksverk* (GNO). In the GNO orthography, there are additional homonyms, like "*land* n." 'urine' (listed as *hland* in *Norrøn ordbok*) and "*land* n." 'land'. These can be rather difficult to find. Large parts of the list are irrelevant for us, since many of the homonyms are rare words from skaldic poetry. But it does give us a clue as to how extensive this kind of homonymy is.

There are a number of grey areas regarding the use of Roman numerals for words in Norrøn ordbok. For example, the common noun "gymir m. I" (which is close to being a proper noun when it means 'Ægir') and the proper noun "Gymir m. II" are distinguished by a Roman numeral. Norrøn ordbok usually does not use Roman numerals in such instances, like "læ n." 'bane' and "Læ n." 'The Great (lake) Le'. Furthermore, there is a distinction between verbs separated with Roman numerals in the dictionary and others that are not. For this reason, "mæla (lt)" 'speak' is not taken with "mæla (ld) I" 'measure' and "mæla (lt) II" 'paint'. We could have gone into more details regarding this, but it is really only relevant within the context of the dictionary and not important for our annotation purposes.

á f. I	á f. II	
alfr m. I	alfr m. II	
áll m. I	áll m. II	áll m. III
an conj. I	an conj. II	an adv. III
angi m. I	angi m. II	
ár n. I	ár n. II	
árliga adv. I	árliga adv. II	
árligr a. I	árligr a. II	
árna, arna I	árna II	
áss m. I	áss m. II	áss m. III
áttungr m. I	áttungr m. II	
auðligr a. I	auðligr a. II	
auðna f. I	auðna f. II	
baðmr m. I	baðmr m. II	
bakki m. I	bakki m. II	
barki m. I	barki m. II	
beizla f. I	beizla f. II	
bekkr m. I	bekkr m. II	bekkr m. III
benda I	benda II	
bera [wk.vb. $=$ I]	bera [st.vb. = II]	
bergiligr a. I	bergiligr a. II	
berligr a. I	berligr a. II	
bjórr m. I	bjórr m. II	bjórr m. III
bjǫrg f. I	bjǫrg f. II	
blekkja I	blekkja II	
blíða f. I	blíða f. II	
blær m. I	blær m. II	
borði m. I	borði m. II	
bóti m. I	bóti m. II	
bráð f. I	bráð f. II	bráð f. III
breiða I	breiða II	
brenna [st.vb. = I]	brenna [wk.vb. = II]	
brigða [st.vb. = I]	brigða [wk.vb. = II]	
brísingr m. I	brísingr m. II	
brún f. I	brún f. II	
bræða I	bræða II	bræða III
bygging f. I	bygging f. II	
byggja I	byggja II	
byrja I	byrja II	byrja III
bœla I	bœla II	

dafna I deyfa I draugr m. I Draupnir m. I dreif f. I dúnn m. I dúsa I dust n. I dælskr I dof f. I	dafna II deyfa II draugr m. II Draupnir m. II dreif f. II dúnn m. II dúsa II dust n. II dœlskr II dof f. II	
eð conj. I eigin n. I elda I eldi n. I en conj. I	eð conj. II eigin n. II elda II eldi n. II en conj. II	en conj. III
fá [st.vb. = I] falda [st.vb. = I] fang n. I farri m. I feðma I ferma f. I ferma I fífla [(að) = I] flá f. I flóki m. I flæmingr m. I fóli m. I Frosta f. I	fá [wk.vb. = II] falda [wk.vb. = II] fang n. II farri m. II feðma II ferma f. II ffila [(ld) = II] flá f. II flóki m. II flæmingr m. II fóli m. II Frosta f. II	
gá [wk.vb. = I] gaddr m. I galdr m. I gammi m. I gelda I gerð f. I gerr a. I girði n. I gjorð f. I	gá (= ganga) [st.vb. = gaddr m. II galdr m. II gammi m. II gelda II gerð f. II gerr a. II girði n. II gjorð f. II	II] gerð f. III

gráði m. I gráði m. II gráði m. III
grand n. I grand n. II
grenna I grenna II
grennir m. I grennir m. II
gron f. I gron f. II
gwhir m. I Gymir m. II
gæla f. I gæla f. II

há f. I há f. II há I há II haf n. I haf n. II hafna II hafna I hall-land n. I hall-land n. II hallr m. I hallr m. II hamla f. I hamla f. II hamla II hamla I harmr m. I harmr m. II hásætr n. II hásætr n. I heiðr m. I heiðr m. II heimr m. I heimr m. II herming f. I herming f. II hirðligr a. I hirðligr a. II hjalmr m. I hjalmr m. II hjalpa [st.vb. = I] hjalpa [wk.vb. = II]

injurpu [ottoo I] injurpu [viitivo

hjassi m. I hjassi m. II

hlaða [st.vb. = I] hlaða [wk.vb. = II]

hnefi m. I hnefi m. II

hniga [st.vb. = I] hniga [wk.vb. = II]

hóf n. I hóf n. II
hópr m. I hópr m. II
horr m. I horr m. II
hót n. I hót n. II
hreina I hreina II
hrína I hrína II

hrinda [st.vb. = I] hrinda [wk.vb. = II]

hringja I hringja II
hrjóða I hrjóða II
hrjóta I hrjóta II
hrókr m. I hrókr m. II
hrøkkva hugr m. II

hugró f. I hugró f. II

hæll m. I hæll m. II hæll m. III

hæra f. I hæra f. II hætta I hætta II hætinn I hætinn II

holl f. I holl f. II holl f. III

inn adv. I inn adv. II

jafni m. I jafni m. II jaga I jaga II

kanna f. I kanna f. II karfi m. I karfi m. II ker n. I ker n. II kilja f. I kilja f. II kløkkva kløkkva kneppa I kneppa II kol n. I kol n. II kolla f. I kolla f. II korki m. I korki m. II kviðr m. I kviðr m. II kvitta I kvitta II kyn n. I kyn n. II kæra f. I kæra f. II

leiða I leiða II

leik-bróðir m. I leik-bróðir m. II leikligr a. I leikligr a. II leikmaðr m. II leikmaðr m. II leka [st.vb. = I] leka [wk.vb. = II] léna [(nd) = II]

lest f. I lest f. II letr n. I letr n. II

líða $[(a\delta) = I]$ líða [(ast) = II] líða [(dd) = III] líða [st.vb. = IV]

liðr m. I lík n. I lík n. II

líka II líka III

lína f. I lína f. II

nátt-verðr I

lind f. I	lind f. II	
ljóðr m. I	ljóðr m. II	
lof n. I	lof n. II	
lofa I	lofa II	
lofan f. I	lofan f. II	
lófi m. I	lófi m. II	
lofliga adv. I	lofliga adv. II	
lok n. I	lok n. II	
$loka [(a\delta) = I]$	loka[(kt) = II]	
lómr m. I	lómr m. II	
lukta I	lukta II	
lúta [st.vb. = I]	lúta [st.vb. = II]	
lykt I	lykt II	
lykta $[(a\delta) = I]$	lykta[(kt) = II]	
lǫð f. I	lǫð f. II	
mál n. I	mál n. II	
málamaðr m. I	málamaðr m. II	
máli m. I	máli m. II	
marr m. I	marr m. II	marr m. III
mát n. I	mát n. II	
mél n. I	mél n. II	
mella f. I	mella f. II	
mér pron. I	mér pron. II	
merki n. I	merki n. II	
(minna) [(nt) = I]	(minnast)[(ast) = II]	
minni n. I	minni n. II	
móða f. I	móða f. II	
mór m. I	mór m. II	
morð n. I	morð n. II	
morna I	morna II	
mót n. I	mót n. II	
motti m. I	motti m. II	
muna [st.vb. = I]	muna [wk.vb. = II]	
munaðr m. I	munaðr m. II	
mynda I	mynda II	
mæla I (ld)	mæla II (ld)	mæla[(lt) = III]
mœddr a. I	mœddr a. II	
mork f. I	mǫrk f. II	

nátt-verðr II

nesti n. I neyti n. I niðr m. I nis f. I nista I níta nótt f. I nykr m. I	nesti n. II neyti n. II Niðr m. II nis f. II nista II níta nótt f. II nykr m. II		
nýta I	nýta II		
óðr a. I ofra I ofran f. I op n. I óra [(rð) = I] óss m. I	*óðr a. II ofra II ofran f. II op n. II óra [(að) = II] óss m. II		
par n. I past n. I pati m. I pipra I prísa I	par n. II past n. II pati m. II pipra II prísa II		
rá f. I rak n. I rakna I rasan f. I raumr m. I rausn f. I refla I reiða I rekkja I reklingr I renna [st.vb. = I] repta I rétta I réttr m. I reyra I reyra I reyr m. I ríða I	rá f. II rak n. II rakna II rasan f. II raumr m. II raumr f. II refla II reiða II rekkja II reklingr II renna [wk.vb. = II] repta II rétta II réttr m. II reyra II reyra II reyra II reyra II	rá f. III	rá f. IV

rif n. I	rif n. II	rif n. III	rif n. IV
rifa I	rifa II		111 117 1
rím n. I	rím n. II		
ript f. I	ript f. II		
rist f. I	rist f. II		
ró f. I	ró f. II	ró f. III	ró f. IV
roð n. I	roð n. II	10 17 111	10 1, 1,
roða I	roða II		
rokkr m. I	rokkr m. II		
rot n. I	rot n. II		
rót n. I	rót n. II		
røkkva [st.vb. = I]	røkkva [wk.vb. = II]		
rost f. I	rost f. II	rost f. III	
- 2 - 2 - 2	- 7	- 7 - 0 - 0 - 0 - 0	
saðr a. I	saðr a. II		
sála f. I	sála f. II		
salr m. I	salr m. II		
Saxland n. I	Saxland n. II		
sefi m. I	sefi m. II		
seiðr m. I	seiðr m. II		
selja f. I	selja f. II		
seta f. I	seta f. II		
sía f. I	sía f. II		
síða [st.vb. = I]	síða [wk.vb. = II] (=s	eiða)	
sig n. I	sig n. II		
siga I	siga II		
signa I	signa II		
sina f. I	sina f. II		
skarfr m. I	skarfr m. II		
skelkinn a. I	skelkinn a. II		
skelkja I	skelkja II		
skelkr m. I	skelkr m. II		
skemma I	skemma II		
skipari m. I	skipari m. II		
skjalfa [st.vb. = I]	skjalfa [wk.vb. = II] (=	= skelfa)	
skjalla [st.vb. = I]	skjalla [wk.vb. = II]		
skolbrúnn a. I	skolbrúnn a. II		
skopa $[(pt) = I]$	skopa $[(a\delta) = II]$		
skozkr a. I	skozkr a. II		
skrámr m. I	skrámr m. II		
skript f. I	skript f. II		

```
skúli m. I
                          skúli m. II
skutill m. I
                          skutill m. II
                          skýfa II
skýfa I
skýra I
                          skýra II
slá[wk.vb. = I]
                          slá [st.vb. = II]
slangi m. I
                          slangi m. II
sleppa [wk.vb. = I]
                          sleppa [st.vb. = II]
snáldr m. I
                          snáldr m. II
sniða [st.vb. = I]
                          sniða [wk.vb. = II]
spán f. I
                          spán f. II
spenna I
                          spenna II
                                                    spenna III
sperna [st.vb. = I]
                          sperna [wk.vb. = II]
spjall n. I
                          spjall n. II
spretta [st.vb. = I]
                          spretta [wk.vb. = II]
spýta f. I
                          spýta f. II
spýta I
                          spýta II
sponn f. I
                          sponn f. II
                          sporr m. II
sporr m. I
staka f. I
                          staka f. II
stakkr m. I
                          stakkr m. II
                          stál n. II
stál n. I
steðja [(a\delta) = I]
                          steðja [(dd) = II]
stefna I
                          stefna II
stjóri m. I
                          stjóri m. II
stóli m. I
                          stóli m. II
                          stóll m. II
stóll m. I
                                                    stóll m. III
storð f. I
                          storð f. II
stulka f. I
                          stulka f. II
styrja f. I
                          styrja f. II
støkkva [st.vb. = I]
                          støkkva [wk.vb. = II]
sveipa [st.vb. = I]
                          sveipa [wk.vb. = II]
svella [st.vb. = I]
                          svella [wk.vb. = II]
svelta [st.vb. = I]
                          svelta[wk.vb. = II]
svíða [st.vb. = I]
                          sviða [wk.vb. = II]
svipa I
                          svipa II
synda I
                          synda II
syndugr a. I
                          syndugr a. II
sæta f. I
                          sæta f. II
søkkva [st.vb. = I]
                          søkkva [wk.vb. = II]
tá f. I
                          tá f.? II
```

tjá I	tjá II		
tolla[(ld) = I]	tolla $[(a\delta) = II]$		
trjóna f. I	trjóna f. II		
tæla I	tæla II		
þekkja [st.vb. = I]	þekkja [wk.vb. = II]		
þekta I	þekta II		
þerna f. I	þerna f. II		
þorn m. I	þorn m. II		
þrifa [wk.vb. = I]	þrifa [st.vb = II]		
þruma f. I	þruma f. II		
pruma [(md) = I]	$\text{pruma } [(a\eth) = II]$		
þverra [st.vb. = I]	þverra $[(r\delta) = II]$	þverra $[(a\delta) = II]$	
þýða I	þýða II		
þykt f. I	þykt f. II		
þyngja I	þyngja II		
þægja I	þægja II		
úfr m. I	úfr m. II	úfr m. III	úfr m. IV
upsi m. I	upsi m. II		
úr n. I	úr n. II		
ú-reiðr a. I	ú-reiðr a. II		
úrigr a. I	úrigr a. II		
usli m. I	usli m. II		
vá f. I	vá f. II		
vákr m. I	vákr m. II		
val n. I	val n. II		
valr m. I	valr m. II		
vandi m. I	vandi m. II		
vani m. I	vani m. II		
vanr a. I	vanr a. II		
$vara[(a\delta) = I]$	vara $[(r\delta) = II]$		
vari m. I	vari m. II		
vári m. I	vári m. II		
vé n. I	vé n. II	vé n. III	
vega I	vega II		
veggr m. I	veggr m. II		
vegr m. I	vegr m. II		
vekja I	vekja II		
véla I	véla II	véla [(a δ) = III]	

vélendi I vélendi II vella [st.vb. = I]vella[wk.vb. = II]velta [st.vb. = I]velta[wk.vb. = II]vengi n. I vengi n. II ver n. I ver n. II Veraldr m. I Veraldr m. II verða [st.vb. = II] $ver\delta a [wk.vb. = I]$ verja f. II verja f. I verja I verja II vernda I vernda II verr III verr I verr II verþjóð f. I verþjóð f. II vexa I vexa II viða I viða II víðir m. I víðir m. II viðra $[(a\delta) = I]$ viðra $[(r\delta) = II]$ víl n. I víl n. II vinda [st.vb. = I]vinda [wk.vb. = II]vindr m. I vindr m. II vindr [m. pl. = III]virði n. I virði n. II virkja I virkja II vísir m. I vísir m. II vægja I vægja II vor f. I vor f. II vor f. III ynglingr m. I ynglingr m. II

æðr f. II

æra I æra II æra III

ørendi n. I ør-endi n. II

ond f. II ond f. III

orleikr m. I orleikr m. II

17.2 Non-Inflecting Adjectives

This is a list of non-inflecting adjectives in Old Norse, extracted from *Ordbog over det norrøne prosasprog*. It includes 624 words. Each adjective is marked with its frequency.

(1) Adjectives in -a

aðilja 4	bakvana 2	eyða 2	fullveðja 13
afhuga 15	-bata	eymuna 3	fullvita 1
-afla	-beina	fáliða 6	galvita 1
aflima 3	-bjarga	-fanga	gamalóra 1
aflvana 5	blóðrisa 4	-fara	gamalǿra 1
afsiða 1	blǿsma 5	-feðra	-gangsa
afsinna 1	-bóndaliga	-ferla	gestfeðra 1
afskapa 1	-bóndliga	féskarða 1	-gjafta
afskipta 1	-borða	févana 2	gjafvaxta 5
aftrbata 5	bótþarfa 6	féþurfa 2	grátþarfa 1
aftrreka 33	bótþurfa 2	-fjá	greiðfara 2
afvelta 1	-brusta	flaumósa 2	-gróðra
áheyrsla 6	-brǿðra	fljótfanga 1	guðsifja 1
-ala	?búferla 1	-flota	-gæfta
albata 6	-burða	-flótta	-hafa
-alda	-byrja	-fluga	hafreka 1
aldauða 14	dagsanna 8	forflótta 15	halffara 1
aldeyða 1	-dauða	forkunna 1	halloka 2
-aldra	dauðvána 14	forveða 1	-hama
aldæla 2	-deyða	forveðja 5	hamstola 4
áleiksa 1	-dóma	forviða 9	handa 3
aleyða 4	dómrofa 1	forvitra 9	handhafa 2
algangsa 1	-drepa	fótlama 3	harmdauða 2
algjafta 1	dumba 12	fráskila 28	heilhjarta 2
algæfta 1	-dusta	frumvaxta 27	-heilla 15
alhuga 2	-dæla	fullafla 3	heilvita 9
alkunna 5	eðla 2	fullaldra 3	heitrofa 2
alkyrra 1	-efla	fullborða 3	heitsa 1
alltíða 1	eiðrofa 7	fullefla 1	heraðflótta 1
alsiða 8	-eiga	fullelda 2	hernuma 3
alsolla 1	eimuna 2	fullfjá 2	-heyrsla
alverkja 1	einbjarga 2	fullhuga 1	heyþrota 1
ámálsa 1	einhama 3	fullkaupa 1	hírsa 1
andorða 4	einmana 9	fullkosta 19	-hjarta
andvaka 2	einmuna 3	fullleiksa 1	hjartsára 1
andvana 7	einskipa 32	fullliða 7	-hlaupa
andvara 1	einsliða 1	fullnuma 2	-hljóða
annarrabrǿðra 4	einstaka 9	fullráða 1	-hluta
áskynja 20	einvala 39	fullskriða 3	-hlýra
áttlera 2	ekta 1	fullsvefta 2	holunda 2
ávíga 1	-elda	fulltíða 66	horfinalda 3
ávita 5	endrrjóða 1	fullvaxta 5	horfinheilla 4

hosa /vb. pret.	mannþurfa 1	samkaupa 3	-stola
part. 1	matþrjóta 1	samkjǫra 1	-stunda
hraðfara 7	matþrota 7	samkynja 2	sundrhljóða 2
hressliga 1	mergunda 2	samlaga 2	sundrorða 4
hríðdrepa 1	miðaldra 2	sammála 4	sundrskila 7
-huga	°miðjaaldra 1	sammǿðra 24	sundrskilja 1
húsbóndaliga 2	°mótglíka 1	samráða 7	sundrslita 4
hvimsa 1	munnvana 1	samsaga 2	svefnvana 1
iðglíka 3	-mǿðra	samskapa 1	-svefta
íelda 1	námuna 3	samskipa 7	sveita 1
íglíka 2	-nátta	samskóla 1	svídauða 3
ígróðra 2	nauðreka 1	samskulda 2	svidda 10
íhuga 1	nauðskilja 1	samskylda 1	synsaka 3
?ílétta 1	-numa	samstunda 1	sæhafa 9
?illvilja 1	nýfola /vb. pret.	samtaka 1	-taka
ínýta 2	part. 1	samtíða 3	-tíða
jafnaldra 5	nýtaka /vb.	samvista 1	tolfvetra 1
jafnkosta 2	pret. part. 27	samþinga 11	°trollriða 1
jafnliða	næstabrøðra 7	-sanna	tvísaga 2
játbeina 1	óbyrja 28	-sára	tvítala 1
jáza 9	óðfluga 13	sáttrofa 1	tvívetra 2
-kaupa	offara 6	-seta	-unda
-kola	ofleiksa 2	-siða	útlaga 41
-kosta	ofskynja 3	síðskota 1	-vaka
-kunna	ókveða 22	-sinna	-vala
-kveða	ómála 11	?sjaldkvæm-	-vana
	-orða	*.	-vána
-kynja	orkuvana 8	liga 1 sjalfala 11	vanafla 2
kynvana 1	-ósa	,	vanlana 2 vanburða 1
-kyrra	-osa óvita 5	sjalfbjarga 7	
-laga		sjalfkrafa 21	?vandlaga 1
lagtaka /vb. pret.	-ráða	sjalfráða 10	?vandvita 1
part. 1	ráðþarfa 1	sjalfræða 3	vanhluta 11
lama 11	reiðfara 29	sjalfvalda 1	vanlaga 2
landflótta 22	-reka	-skamma 100	vanmátta 2
landfrelsa /vb. pret.	-riða	-skapa	vanmega 1
part. 1	-risa	-skila	vanmegna 2
-leiksa	-rjóða	-skilja	vanmeta 3
-lera	-rofa	-skipa	vanvita 1
-létta	rokinbrusta 1	-skipta 595	vápnvana 1
-liða	rokindusta 1	-skóla 21	-vara
liðvana 2	ræða 1	-skota	varhluta 6
liðþrota 3	-saga	-skriða	-vasa
-lima	samdauna 1	skriftrofa 8	-vaxta
limhlaupa 3	samdóma 13	-skulda	-veðja
límsetja /vb. pret.	samfara 3	-skynja	veðrvana 1
part. 2	samfeðra 22	-slita	-velta
loglaga 1	samflota 6	-solla	-verkja
málþarfa 4	samhlaupa 1	sóttlera 2	vetra
málþurfa	samhljóða 7	spánósa 2	vetrseta 1
mannþrota 4	samhuga 21	-staka	-viða
•	~		

viðskila 1 ørkynja 3 -væna bróttvana 1 -víga bakvana 1 bunnskipa 1 ớrna 2 -vilja ?bessjafna 1 burfa 1 ørskamma 1 villiráða 4 -binga éttlera 9 ørtaka 1 villráða 1 þrekvana 1 ørvasa 11 -ǿra -vista þriðjabróðra 6 ørbjarga 1 ørvita 11 -þrifráða øreiga 8 vistabrota 1 ørvæna 7 ørbrifráða 1 -vita þrítugnátta 1 ørhjarta 2 øxna 6 -vitra -brota ørkola 1 brotráða 9 °ørkula 2 vitstola 4

(2) Adjectives in -i

-afli dumbi 11 frumvexti 1 hvimsi 1 aflvani 14 -dæli fullafli 1 -hofði aftrbati 3 eftirstazi 1 fullkaupi 1 ílandi 2 eiðfalli 1 fullnomsi 1 illráði 1 aftrreki 3 áheyrsi 1 eiðrofi 1 fullnumi 6 jafnaldri 3 áheyrsli 2 fullsófði 1 jafni -eigi aldauði 5 ?játi 1 eimuni 8 fulltíði 23 -aldri einhami 1 fulltingi 1 jázi 2 aldæli 1 einhugi 1 -fúsi -krafi áleiksi 1 einlagi 2 -færi -kunni alfari 8 einmani 3 -føti -kveði algangsi 2 einteiti 2 -gangsi -lagi gestfeðri 4 ?alkunni 2 eintómi 1 lami 5 alskyldi 1 einvali 2 -hafi landflótti 19 alvirki 1 eyði 3 -hagi -leiksi andvaki 2 ?halftki n. 1 -leri eymuni 3 andvani 12 -falli halloki 3 liðsþarfi 1 annarrabróðri 2 farflótti 1 halzi 2 liðsþurfi 4 ?áttleri 1 -fari -hami liðburfi 1 hamstoli 9 áviti 3 farlami 1 lítilmagni 4 handhafi 22 málóði 16 barhofði 1 farburfi 1 -feðri -bati handlami 3 mannbroti 1 beinaburfi 1 févani 11 harmdauði 49 mannburfi 1 -bergi féburfi 13 heilhugi 1 mergundi 2 bilsi 3 fjárburfi 2 heilundi 2 miðaldri 1 -bjargi flaumósi 1 heilviti 2 mishugi 1 blóðrisi 1 flótti 1 heitrofi 2 -muni brúnvolvi 4 forflótti 5 heitsi 1 námuni?3 -brøðri forveði 3 -heyrsi náttfari 8 dagfari 9 forvitri 29 -heyrsli -nomsi -dái fótlami 5 heybroti 1 -numi -dauði framandi 7 hlessi 1 næstabrøðri 6 dauðváni 8 fráskili 2 holundi 2 næstnærri 1 -dauni frí 3 óðflugi 3 -hugi draumstoli 2 frumvaxti 7 hugsi 11 óðfúsi 1

-óði óðvirki 1	sammáli 1 sammóðri 24	-sǿfði -teiti	-viti -vitri
offari 4	samráði 3	-tíði	vitstoli 3
offæri 2	samþingi 1	-tómi	-vǫlvi
ofgangsi 1	sjalfbergi 1	-trúi	-þarfi
ókveði 7	sjalfbjargi 5	tvenni 20	þjóðhagi 1
ómáli 18	sjalfkrafi 27	-undi	þriðjabrǿðri 1
-ósi	sjalfráði 24	útlagi 9	-þrifráði
ósjalfráði 1	sjalfræði 1	-vaki	-þrifsráði
óviti 5	sjalfvaldi 3	valdi 3	-þroti
óþarfi 1	skapdauði 2	vanafli 6	þrotráði 1
-ráði	skapvani 1	?vanefli 1	þurfi 16
reiðfari 4	skattfrí 1	vanhluti 5	þverafǿti
-reki	-skili	-vani	áttleri 2
rétthafi 1	skriftrofi 1	-vani	øreigi 23
-rofi	-skyldi	vápnvani 1	ørsauði 1
-ræði	-stazi	-vasi	ørvasi 20
salfalli 1	steinóði 3	-vaxti	ørviti 12
samdauni 1	-stoli	-veði	ørþrifráði 2
samfari 1	svídái 5	verkóði 2	ørþrifsráði 1
samfeðri 16	synsaki 2	vinþurfi 1	olteiti (
samfloti 4	sæhafi 6	-virki	

17.3 Non-Inflecting Adverbs

As mentioned in ch. 2.6.1 above, we regard suppletive forms as separate lemmas. Thus, *gjarna* will be one non-inflecting adverb, and *heldr* another, inflecting adverb which only has comparative and superlative forms. The same is true of *illa* (*verr*, *verst*), *lítt* (*minnr*, *minnst*), *mjok* (*meir*(*r*), *mest*) and *vel* (*betr*, *bezt*).

áðr	gjarna	mjǫk	vel
austan	heðan	norðan	vestan
ei	heim	nú	þá
eigi	heiman	síðan	þaðan
einkar	hér	stundum	þar
ekki	illa	súnnan	þegar
framan	inn	svá	æ
framleiðis	innan	sváleiðis	
gerla (gørla, gǫrla,	jafnan	út	
gjǫrla)	lítt	útan	

18 Sources and Literature

18.1 Primary Sources

18.1.1 Main Norwegian text corpus

AM 619 4°. *Old Norwegian Homily Book*. Ca. 1200–1225. Norwegian, some parts translated from Latin, other parts based on Latin or other sources.

DG 8 II. The legendary Óláfs saga ins helga. Ca. 1225–1250. Norwegian, Icelandic sources.

DG 4-7. Strengleikar. Ca. 1275. Norwegian, translated from Old French.

Holm perg 34 4°. Landslog by Magnús lagabótir. Ca. 1275–1300. Norwegian.

18.1.2 All texts with abbreviations and editions used

Alex = *Alexanders saga*. Ed. Finnur Jónsson (1925).

Auð = *Auðunar þáttr vestfirzka*. Eds. Björn K. Þórólfsson and Guðni Jónsson (1943: 359–368).

Barl = Barlaams ok Josaphats saga. Ed. Magnus Rindal (1981).

Gylf = Gylfaginning. Ed. Anthony Faulkes (1982: 7-55).

HákHerð = *Hákonar saga herðibreiðs* in *Heimskringla*. Ed. Bjarni Aðalbjarnarson (1941–1951, vol. 3: 347–372).

Hom = *Old Norwegian Homily Book*. Ed. Gustav Indrebø (1931).

Hrafnk = Hrafnkels saga. Ed. Jón Jóhannesson (1950: 95–133).

Hrbl = Hárbarðsljóð. Ed. Jón Helgason (1971: 31–39).

Hym = $Hymiskvi\partial a$. Ed. Jón Helgason (1971: 40–46).

Landsl = Landslog by Magnús lagabótir. Eds. Rudolf Keyser and Peter Andreas Munch (1848).

Niðrst = Niðrstigningar saga. Ed. Odd Einar Haugen (1993: 251–265).

ÓHLeg = The legendary Óláfs saga ins helga. Ed. Oscar Albert Johnsen (1922).

ÓT = Óláfs saga Tryggvasonar in Heimskringla. Ed. Bjarni Aðalbjarnarson (1941–1951, vol. 1: 223–272).

Streng = Strengleikar. Eds. Mattias Tveitane and Robert Cook (1979).

Thom = Thómass saga erkibiskups. Ed. Carl Richard Unger (1869).

Yngl = *Ynglinga saga* in *Heimskringla*. Ed. Bjarni Aðalbjarnarson (1941–51, vol. 1: 9–83).

Prk = Prymskviða. Ed. Jón Helgason (1971: 58–62).

18.1.3 Editions

- Bjarni Aðalbjarnarson, ed. 1941–1951. Snorri Sturluson. *Heimskringla*. 3 vols. Íslenzk fornrit, vol. 26–28. Reykjavík: Hið íslenzka fornritafélag.
- Björn K. Þórólfsson and Guðni Jónsson, eds. 1943. *Vestfirðinga sǫgur*. Íslenzk fornrit, vol. 6. Reykjavík: Hið íslenzka fornritafélag.
- DN = *Diplomatarium Norvegicum*. Vols. 1–20, 1847–1915. Christiania/Kristiania: Det Norske Historiske Kildeskriftfond.
- Faulkes, Anthony, ed. 1982. Snorri Sturluson. *Edda: Prologue and Gylfaginning.* Oxford: Clarendon Press.
- Finnur Jónsson, ed. 1925. *Alexanders saga. Islandsk oversættelse ved Brandr Jónsson*. København: Gyldendal.
- Haugen, Odd Einar, ed. 1993. Norrøne tekster i utval. Oslo: Gyldendal Ad Notam.
- Indrebø, Gustav, ed. 1931. *Gamal norsk homiliebok*. Oslo: Kjeldeskriftfondet. Reprinted, Oslo: Universitetsforlaget, 1966.
- Jón Helgason, ed. 1971. Eddadigte. II. Gudedigte. 3rd ed. København: Munksgaard.
- Jón Jóhannesson, ed. 1950. *Austfirðinga sǫgur*. Íslenzk fornrit, vol. 9. Reykjavík: Hið íslenzka fornritafélag.
- Johnsen, Oscar Albert, ed. 1922. *Olafs saga ins helga*. Utg. for Den Norske Historiske Kildeskriftkommission. Kristiania: Dybwad.
- Keyser, Rudolf, and Peter Andreas Munch, eds. 1848. *Norges Gamle Love*. Vol. 2. Christiania: Gröndahl.
- Rindal, Magnus, ed. 1981. *Barlaams ok Josaphats saga*. Norrøne tekster, vol. 4. Oslo: Norsk Historisk Kjeldeskrift-Institutt.
- Tveitane, Mattias, and Robert Cook, eds. 1979. Strengleikar. An Old Norse Translation of Twenty-One Old French Lais. Norrøne tekster, vol. 3. Oslo: Norsk Historisk Kjeldeskrift-Institutt.
- Unger, Carl Richard, ed. 1869. Thomas saga Erkibyskups. Fortælling om Thomas Becket Erkebiskop af Canterbury. Christiania: Bentzen.

18.2 Old Norse Dictionaries

- Fritzner, Johan. 1883–1896. *Ordbog over Det gamle norske Sprog*. 2nd ed., 3 vols. Kristiania: Den norske Forlagsforening. Supplementary volume by Finn Hødnebø. Oslo: Universitetsforlaget, 1972. Reprint, Oslo: Universitetsforlaget, 1973.
- Ordbog over det norrøne prosasprog. København: Den Arnamagnæanske Kommission, 1989–.
- Simensen, Erik, Leiv Heggstad, and Finn Hødnebø. 2008. *Norrøn ordbok*. 5th ed. Oslo: Samlaget.

18.3 Secondary Literature

- Bamman, David, Marco Passarotti, Gregory Crane, and Savina Raynaud. 2007. Guidelines for the Syntactic Annotation of Latin Treebanks (v. 1.3, 1 March 2007). http://nlp.perseus.tufts.edu/syntax/treebank/1.3/docs/guidelines.pdf [last visited 25.09.2014]
- EAGLES [Expert Advisory Group on Language Engineering Standards]. *Recommendations for the Morphosyntactic Annotation of Corpora.* Version of March 1996. http://www.uni-leipzig.de/~burr/Verb/htm/LinkedDocuments/annotate.pdf [last visited 25.09.2014]
- Faarlund, Jan Terje, Svein Lie and Kjell Ivar Vannebo. 1997. Norsk referansegrammatikk. Oslo: Universitetsforlaget.
- Faarlund, Jan Terje. 2004. The Syntax of Old Norse. Oxford: Oxford University Press.
- Hanssen, Eskil, Else Mundal and Kåre Skadberg. 1975. *Norrøn grammatikk*. Oslo: Universitetsforlaget.
- Haug, Dag Trygve Truslew. 2010. *Proiel Guidelines for Annotation*. 29 June 2010. http://folk.uio.no/daghaug/syntactic_guidelines.pdf [last visited 25.09.2014]
- Haugen, Odd Einar. 2001. Grunnbok i norrønt språk. 4th ed. Oslo: Gyldendal Akademisk.
- Haugen, Odd Einar, ed. 2008. *The Menota Handbook*. Version 2.0. Bergen: Medieval Nordic Text Archive. http://www.menota.org/HB_index.xml [last visited 25.09.2014]
- Johannessen, Janne B. and Kristin Hagen. 2007. "Nye grammatiske termer i skoleverket". http://www.sprakradet.no/Toppmeny/Publikasjoner/Spraknytt/Arkivet/Spraknytt-2007/Spraknytt-22007/Nye-grammatiske-termer [last visited 25.09.2014]
- Knudsen, Trygve, ed. 1952. *Gammelnorsk homiliebok etter AM 619 Qv. Innledning.*Corpus Codicum Norvegicorum Medii Aevi, Qvarto Serie, 1. Oslo: Selskapet til utgivelse av gamle norske håndskrifter.
- Mel'čuk, Igor A. 1988. *Dependency Syntax: Theory and Practice*. Albany: State University of New York Press.
- Nivre, Joakim. 2005. "Dependency Grammar and Dependency Parsing." MSI report 05133. Växjö University: School of Mathematics and Systems Engineering.
- Nygaard, Marius. 1905. Norrøn syntax. Kristiania: Aschehoug.
- Særheim, Inge. 2013. "Person- og stadnamn". Ch. 10 in *Handbok i norrøn filologi*, ed. Odd Einar Haugen, 512–555. Bergen: Fagbokforlaget.
- Tesnière, Lucien. 1959. *Éléments de syntaxe structurale*. Paris: Klinksieck. 2nd rev. ed. 1965.

