

ENGLISH SUMMARY:

HOW MEANINGS PRODUCE STRUCTURE

The present introduction to North Saami syntax represents a basic linguistic theory approach to linguistic structure which minimizes the use of unobservable elements in description (in the spirit of the true minimalism suggested by Paul Kiparsky already in 1968) and takes **structure-independent assignment relations between the observable elements** (words, morphemes) of a sentence as its point of departure.

The elements of a sentence – words and morphemes – are expected to be semantically compatible. As a consequence, syntactic elements assign dependents by virtue of their semantic properties. **Syntactic structure** is the outcome of these assignment relations. In addition to syntactic structure sentences also have a **semantic structure** which is defined by the semantic relations between the elements of a sentence. Syntactic structure and semantic structure are similar but not identical: all assignment relations are also semantic relations but there are semantic relations between sentence elements which do not coincide with assignment relations. The semantic structure of a sentence is therefore richer than its syntactic structure.

Furthermore it is shown how the syntactic composition of a North Saami sentence is **semantically rather than structurally constrained**; this also means that structure is externally and independently constrained by the semantic and functional properties of its elements rather than internally constrained by structural principles. In this respect linguistic structure is guided by the same coherence principles as the natural structures observed in atoms, molecules, cells, organisms, ecological systems, solar systems, galaxies etc. The elements of a sentence are also expected to be encyclopedically compatible in normal discourse, i.e. they are expected to be in accordance with our conception of the world.

Generalizations about sentence structures consist of more or less abstract elements such as N, V, NP, PP etc. Such elements may also be used when describing the constituent structures of sentences. However, Sentence structures themselves are concrete and contain no unobservable elements. Hence, the

structural analyses are verifiable or falsifiable by standard scientific procedures. The descriptive model seems to be applicable to all human languages.

Many – or even most – of the relevant distinctions humans are capable to observe on the basis of their cognitive capabilities are codified in language lexically or structurally, but every language chooses which distinctions are codified structurally (i.e. morphologically or syntactically) or lexically and which are left out. This also means that there are structural and lexical differences between languages and that there is no universal grammar of which each language uses a subset. Linguistic structure is therefore not universal but its principles which reflect human cognitive capacities are likely to be the same from language to language.

The present view in generative grammar is that all the structural features found in languages are also features of universal grammar and that the sentences of all human languages are derived from the same basic structures through differing syntactic operations. This view seems to be based on a confusion between linguistic structure and human cognitive capabilities.

Furthermore, the generative view that structure is primary and meaningful elements secondary in language production and understanding contradicts the fact that speakers may begin their sentences without knowing how they will finish them. Speakers don't have to be committed to a specific sentence structure before uttering the first words of his utterance but structure emerges gradually the further the speaker proceeds. The same is true of the listener: the initial words of an utterance allow for a number of continuation possibilities to be expected by the listener and the choice is narrowed down when the speaker draws nearer to his conclusion of the sentence. The structure emerges in both cases when more and more words are brought into configuration. Hence, structure is the secondary outcome of uttering compatible words which finally form a sentence. This doesn't mean that language can't be described in the generative way, it only throws doubt on the psychological reality of the generative description.

Each language codifies a large number of human cognitive categories into its structure but no language is known to codify all of them. The view that all the structural features are included in the basic structure of every human language would imply that languages without articles in fact possess them but they are never realized, or that languages without adjectives in fact possess them but they are turned into verbs during syntactic derivation, or that all languages – English included – have negative verbs but they don't surface as audible or written words when some of these languages are used. In the generative point of view, there is

no principled way to tell which of these properties does or does not belong to universal grammar and therefore all of them have to be included.

All this seems unnecessary and therefore not plausible. Each language is built differently and codifies its own subset of the human cognitive categories. Some features – such as quantification – seem to be codified universally while others – such as definiteness – is not. This view regards human cognitive capabilities as a prerequisite for human language but does not say that they are biunique or even isomorphic. It represents a realistic alternative to generative grammar and allows one to write detailed and comprehensive grammars from language-specific starting points.

The final aim of the descriptive approach presented here is to integrate semantics, syntax, morphology and phonology into a single descriptive apparatus by taking morphemes instead of words as basic elements of structure.

As North Saami word order is dependent on pragmatic rather than structural factors, very little structural constraining (other than axioms 1 and 2 below) seems to be necessary except where word order cannot be varied under any pragmatic or stylistic circumstances. Partly for the same reason, **binarity is not assumed** as an aprioristic structural or descriptive principle; this is in line with other disciplines which deal with natural structure such as biology, chemistry and physics.

There is **no need for recursivity** as a property of the descriptive model since phenomena described as recursive in generative grammar are dealt with as natural consequences of **the capacity of words to assign dependents**, e.g. when verbs referring to situations assign as their dependents other verbs or clauses referring to other situations; the evolutionary step was that situations – probably on a par with other abstract objects – were conceptualized as entities. The ensuing complexity is one of the factors which distinguish human language from the communication systems of other animals; other factors relate to the functions which human language is used for.

A head and its dependent are joined by a bond which is the expression of the syntactic function of the dependent in relation to its head such as subject, object, predicative, attribute. Dependents with the same syntactic function share a bond and are coordinated with each other. Coordination is normally expressed with a coordinator (such as *ja* ‘and’) but dependents may also be coordinated *asyndetically* without a coordinator.

In the identification of head-dependent relationships standard syntactic criteria such as those based on permutation, morphology, word order, position and

semantic relationship are used. In addition the concept of **universality** is introduced: if a word assigns a dependent it should be able to assign it irrespective of the syntactic function or inflectional form of the assigning word.

Two dimensions (left-right, up-down) are both necessary and sufficient for the description of syntactic structures. Uttered or written sentences, however, are one-dimensional in the sense that two or more elements of a kind (words, morphemes or phonemes) cannot occur simultaneously. This discrepancy entails a **mapping** of two-dimensional structures into one-dimensional utterances; word order variation is described as different mapping alternatives.

A basic neutral order (S V O; S Aux O V; Adj N; V Adv etc.) of dependents in relation to their head, its head(s) and each other is assumed. Deviations from neutral order are most frequent in the dependents of verbal heads which have **pragmatically constrained word order**, but some dependencies of nominal heads hardly allow departures from basic neutral order even in poetical language. **No structural movements** are assumed and sentences are assumed to have the same head-dependent relations both when they are initially formed and when they are uttered. The different **mappings** of twodimensional sentence structures into linear utterances produce the variations in word order.

Four axioms have been posited:

- (1) The **syntactic structure** of sentence is a two-dimensional hierarchical **dependency** where **heads** assign **dependents** according to their semantic properties; in North Saami **the root** of the dependency is the finite verb.
- (2) The formal and/or semantic properties (such as word class, meaning and morphology) of dependents are constrained or determined by their heads.
- (3) A dependent has a **semantic function** (SUBSTANTIATION, COMPLEMENTATION, MODIFICATION, CATEGORIZATION, DETERMINATION, QUANTIFICATION (with several different aspects such as distributive, totalitive, limitative etc. quantification), LOCALIZATION, INCLUSION/ EXCLUSION, ESTIMATION, FOCUSING, TRUTH-VALUE SEEKING, and PREDICATION) in relation to its head or the whole situation set by the head (usually a verb), or two semantic functions, one in relation to its head and an other in relation to its codependent; the meaning of the head or codependent is amended by the meaning of the dependent. These semantic relations constitute the **semantic structure** of a sentence. The semantic functions referred to above are found in all languages and hence belong to universal grammar. Some languages may use additional semantic functions such as NEGATION but Saami doesn't seem to use it since

negation is expressed with an auxiliary (which is a head) and not with an operator (which is a dependent with the semantic function NEGATION).

- (4) Certain words (usually content verbs) set a situation which is actuated by entities with **semantic roles** within the situation; 24 semantic roles are postulated, 16 for participant entities (AGENT, EXPERIENCER, PATIENT, AUTOMATON, CHANGER, MOVER, STATIVE, THEME, CONTENTS, CONSEQUENCE, RESULT, OWNER, INSTRUMENT, COUNTERFORCE, BENEFACTIVE and REFERENT) and 8 for positioning entities (4 localizing entities: PLACE, SOURCE, PATH and GOAL; 4 possessive entities: POSSESSOR, DONOR, CONVEYER, RECEIVER). These are both necessary and sufficient to account for the entities and their configurations in the c. 10.000 different situations set by some 6500 North Saami basic verbs and their semantic variants; phrases with depictive function (such as adjectives functioning as predicatives) don't have semantic roles in the situations set by verbs (but they do have semantic functions in relation to their head and codependent). The roles AGENT and EXPERIENCER control the situations they actuate and PATIENT and THEME represent entities in such controlled situations; CHANGER, MOVER and STATIVE are the uncontrolled counterparts to PATIENT and the uncontrolled role CONTENTS corresponds to controlled role THEME. Some roles (such as PRODUCT) are control-neutral. These distinctions are important for the description and explanation of derived dependencies in passive and causative verbs (cf. p. 306-307). Semantic roles also belong to universal grammar and are needed in the deascription of all human languages.

Dependents are divided into three main categories according to their **semantic orientation**:

- (A) Dependents with a semantic function in relation to the head only; these are called **rectives**; their further division is given below;
- (B) Dependents with a semantic function in relation to the head and one codependent (normally subject or object); they are called **obliquives**; also their further division is given below;
- (C) Dependents with a semantic function in relation to the whole situation set by the head; these are called **adjunctives** and include contextual syntactic functions which have been traditionally called adjuncts or frame adverbials; they relate the local, temporal or rational context of the situation (*Mun deiven Máhte márkaniis* 'I met Matthew in the church village'; *Mun deiven Máreha ikte* 'I met Mary yesterday'; *Mun deiven Máreha, vaikko in lean vuordán* 'I met Mary even if I

had not expected it’, *Mun oainnán Máreba, juos manan dohko* ‘I’ll see Mary if I go there’, *Mun oainnán Máreba, dasgo mun manan dohko* ‘I’ll see Mary because I’ll go there’), quantify it (*Mun vážzen golbma beavvi* ‘I walked three days’) or relate it to a specific reference period or distance (*Máret ii oidnon guda vahkekui* ‘Mary was not seen for six weeks’; *Mañimus kilomehterii eai oidnon bohccot* ‘For the last kilometer no reindeer were to be seen’).

Rectives and obliquives are further divided into subcategories as follows:

(A) **Rectives** are divided into two main groups: those with semantic roles are called (Aa) **actuators** and those without are called (Ab) **satellites**. A third group, (Ac) **genitive actuators** is suggested for cases where the genitive dependent of a noun refers to an entity and has meanings corresponding to semantic roles (e.g. *Máreba govva* ‘a picture that belongs to Mary; a picture representing Mary; a picture taken by Mary; a picture Mary is looking at’ etc.).

(Aa) **Actuators** are divided into two groups: those with participant semantic roles are called (Aaa) **participants** (cf. below) and those with positioning semantic roles are called (Aab) **projectionals** (*Máhtte geahčai gámmárii* ‘Matthew looked into the bedroom’).

(Aaa) **Participants** COMPLEMENT their heads. The head assigns their morphology. They are divided into two groups:

(Aaaa) **Focal participants** occur in grammatical cases (nominative, accusative) and are generally called **subject** and **object**: *Máhtte oinnii Máreba* ‘Matthew saw Mary’.

The subject of a basic verb has one of the semantic roles AGENT (*Máhtte vážzá* ‘Matthew is walking’, *Máret geahčai Máhte* ‘Mary looked at Matthew’, *Máret gottii guoli* ‘Mary caught a fish’), CHANGER (*Bibttá laiggai* ‘A piece chipped off’), MOVER (*Geađgi gabčai* ‘A stone fell’), AUTOMATON (*Biilla jobtá* ‘The car is moving’), EXPERIENCER (*Máret oinnii Máhte* ‘Mary saw Matthew’), OWNER (*Máret eaiggáduššá dálu* ‘Mary owns a house’), STATIVE (*Biilla lea šiljus* ‘The car is in the yard’), CONTENTS (*Máret lea čeahppi* ‘Mary is clever’, *Máhtes* [LocSg] *lea beana* [NomSg] ‘Matthew has a dog’) and RESULT (*Fanas šattai ilá oanehaš* ‘The boat ended up too short’).

The object of a basic verb has one of the semantic roles PATIENT (*Máret dojii rissi* ‘Mary broke a twig’), THEME (*Máret oinnii Máhte* ‘Mary saw Matthew’), RESULT (*Máret goarui gávtti* ‘Mary sewed a tunic’), EXPERIENCER (*Máhtte buikkii Márehii* ‘Matthew shouted at Mary’),

STATIVE (*Máhtte garvvii geadggi* ‘Matthew dodged the stone’), BENEFICIARY (*Máhtte rengui Máreha* ‘Matthew served Mary’), CONSEQUENCE (*Máhtte lávllui lávлага* ‘Matthew sang a song’), MOVER (*Dulvi doalvvui stobu* ‘The flood took the house away’), REFERENT (*Máret sulastabttá Ánne* ‘Mary resembles Ann’) and CONTENTS (*Máret eaiggáduššá dálu* ‘Mary owns a house’).

The grammatical derivation of passive, reflexive, reciprocal, causative, applicative, antiapplicative and desiderative verbs involves changes in the dependency of the verb stem (such as the demotion of the subject and promotion of the object in passive verbs, the demotion of the subject in causative verbs, the addition of an object in applicative verbs, and the addition of a subject in antiapplicative verbs) and results in what is called a **derived dependency**: *Máret dojji oavssi* [active transitive basic verb, NomSg AGENT *Máret*, AccSg PATIENT *oavssi*] ‘Mary broke a twig’ → *Oaksi doddjojuvvui* [intentional passive verb, NomSg PATIENT *oaksi*] ‘A twig was broken’ or *Oaksi doddjui* [automotive passive verb, NomSg CHANGER *oaksi*] ‘A twig broke’; *Dat vázže* [active intransitive basic verb, NomPl AGENT *dat*] ‘They walked’ → *Vázžojuvvui* [impersonal passive verb, no AGENT] ‘Walking was done’; *Máhtte bargá* [intransitive basic verb, NomSg AGENT *Máhtte*] ‘Matthew is working’ → *Máret barggaba Máhte* [causative transitive verb, AccSg PATIENT *Máhte*] ‘Mary makes Matthew work’; *Máhtte viegai* [intransitive basic verb, NomSg AGENT *Máhtte*] ‘Matthew was running’ → *Máhtte viegabii Máreha* [applicative transitive verb, NomSg AGENT *Máhtte* + AccSg MOVER *Máreha*] ‘Matthew was running after Mary’], *Borggai* [intransitive basic verb, no dependents] ‘There was a snow flurry’ → *Sabehat borgojedje* [antiapplicative verb, NomSg CHANGER *sabehat*] ‘The skis were burried by the snow flurry.’

In addition to noun phrases the focal participants (subject and object) may also be propositions: impersonal infinitive phrases (*Lei somá oaidnalit* ‘It was nice to see each other’), embedded sentences (*Máret oinnii Máhte boahtime* ‘Mary saw Matthew coming’), referential sentences (*Máret diehtá, ahte Máhtte boahdá* ‘Mary knows that Matthew is coming’), truth-value seeking sentences (*Máret diehtá, boahtago Máhte* ‘Mary knows whether Matthew is coming’) or reference-seeking sentences (*Máret diehtá, gii boahdá* ‘Mary knows who is coming’).

A number of basic verbs (especially those describing natural non-agentive processes) do not assign a subject but may assign an object; the verb is in the 3rd person singular form: *Arvá* ‘It is raining’; *Dagai arvvi* ‘It began to rain (*dagai* ‘make IndPrsSg3’, *arvvi* ‘rain AccSg’)’; *Mu vuovssiba* ‘I feel sick (*mu* ‘I AccSg’, *vuovssiba* ‘make sick IndPrsSg3’)’.

(Aaab) **Role participants** represent the rest of the non-positioning entities. They are in content cases (genitive, illative, locative, comitative, essive) or have adpositions as heads. They are named here according to their semantic roles: *Máhtes lea beana* [LocSg; **owner participant**] ‘Matthew has a dog’, *Beana lea Máhte* [GenSg; **owner participant**] ‘The dog belongs to Matthew’, *Máret liikui Máhtti* [IllSg; **theme participant**] ‘Mary liked Matthew’, *Márehis gollot giedat* [LocSg; **experiencer participant**] ‘Mary’s hands [*giedat*] are cold’; *Máret luddii muora ákšuin* [ComSg; **instrument participant**] ‘Mary split the log with an ax’; *Máhte nordadii juolggi geađgái* [IllSg; **counterforce participant**] ‘Matthew knocked his foot against a stone’; *Máhte belkkii Máreha ala* [PPos *ala* ‘onto’; **theme participant**] ‘Matthew scolded Mary’ etc.

(Ab) **Satellites** are a complicated group of syntactic functions. They are dependents of various kinds of heads. In most cases the head assigns their morphology:

(Aba) **Substantiators** which SUBSTANTIATE (= bring semantic substance to) heads which do not refer to an entity, quality, category or identity (e.g. to the nominative and accusative forms of pronouns like *mii* ‘what, which’: *Mii* [Nom Sg] *jagiid* [AccPl] *dat lei?* ‘What year was it?’; to the nominative and accusative forms of non-singular numerals and pronumerals such as *golbma* ‘three’ and *moadde* ‘a couple of’: *Doppe ledje golbma* [NomSg] *beatnaga* [GenSg] ‘There were [*ledje*] three [*golbma*] dogs [*beatnaga*] there [*doppe*]’, *Doppe ledje moadde* [NomSg] *beatnaga* ‘There were a couple of [*moadde*] dogs there’; to the structural auxiliary *leat* ‘to have’: *Máret lea boahán* [Terminative Aspect] ‘Mary has come’, *Máret lea boahtime* [Non-terminative Aspect] ‘Mary is coming’; to modal auxiliaries like *soaitit* ‘maybe’: *Máret soaitá boahit* ‘Mary may come’; to the negation auxiliary *i-* ‘not’: *Máret ii* [IndSg3Prs] *boade* ‘Mary does not come’; to the copula *leat*: *Máret lea čeahppi* ‘Mary is clever’; to subordinators such as *abte* ‘that’: *Máret logai, abte Máhte boahá* ‘Mary said that Matthew will come’).

(Abb) **Complements** which COMPLEMENT semantically incomplete heads referring to entities, positions or qualities (e.g. to the postposition *alde* ‘on top of’: *vári alde* ‘on a hill’; to superlative adjectives: *čeahpimus mis* ‘the cleverest of us’).

(Abc) **Attributes** which MODIFY (*alla várri* ‘a high hill’, *viessu mi bulii* ‘the house that burned’; *báiki gos orrut* ‘a place to live’; *Máret viehká johtilit* ‘Mary runs fast’), CATEGORIZE (*báhppa Johnsen* ‘priest Johnsen’, *vázžá suoibu* ‘wobbles as s/he walks’), DETERMINE (*min Máret* ‘our Mary’, *duot fanas* ‘that boat’), QUANTIFY (*guda dálus* ‘in six houses’) or PREDICATE (*viehkki mánná* ‘a running child’, *oahppan olmmoš* ‘a learned person’) their heads.

(Abd) **Positioning attributes** which LOCALIZE their heads (*olbmot Guovdageainnus* [LocSg] ‘the people in Guovdageaidnu’)

(Abe) **Appositions** which refer to the same entity, quality, category, identity or quantity as their heads (*Runne, min boarráseamos beana* ‘Runne, our oldest dog’, *girji Golgadeamen* ‘the book *Golgadeamen*’).

(Abf) **Operators** (semantic function INCLUSION: *maiddái Máret* ‘also Mary’; TRUTH-VALUE SEEKING: *Galego don boadát?* ‘Will you come?’; *Boadátgo don?* ‘Will you come?’).

(Abg) **Comment satellites** (semantic function FOCUSING: *earenoamáži Máret* ‘especially Mary’; ESTIMATION: *oalle buorre* ‘fairly good’; *Máret bodii juo* ‘Mary came already’; *measta čuodi* ‘almost a hundred’).

(B) **Obliquives** are divided into two groups:

(Ba) **Statutives** are **positioners** for actuators in the situation set by a verb. They refer to (positioning) entities in the situation set by a verb, have positioning semantic roles and LOCALIZE one of their codependents. The verb does not determine their morphology which only has to be compatible with their semantic role: *Mun manan fatnasii* [IllSg] ~ *joga sisa* [AdP] ~ *dohko* [Adv] ‘I’ll go into the boat ~ into the river valley ~ there’; *Mun bálkestin lávkeka fatnasii* [IllSg] ‘I threw the bag into the boat’; *Beana lea Márehis* [LocSg] ‘The dog is with Mary’; *Máhtte attii lávkeka Márehii* [IllSg] ‘Matthew gave the bag to Mary’). Statutives COMPLEMENT their heads.

(Bb) **Predicatives** are another complicated group of syntactic functions; they are different kinds of **descriptions**. Predicatives do not refer to entities and have therefore no semantic role in the situation set by a verb; the verb

assigns the morphology of predicatives in the nominative, accusative or essive case. Predicatives have the same semantic functions as attributes (cf. [Abc] above) and MODIFY (*Máhtte lea čeahppi* [NomSg] ‘Matthew is clever’; *Máret lei morrašis* [LocSg] ‘Mary was sad’; *Máret anii Máhte čeahppin* [Ess] ‘Mary thought Matthew clever’; *Áidi lea divvut* [Inf] ‘The fence [*áidi*] is to be repaired’, *Gusat báhce božekeahttá* [VerbAbess] ‘The cows [*gusat*] were left [*báhce*] unmilked’), CATEGORIZE (*Máhtte lea báhppa* ‘Matthew is a priest’; *Máhtte šattai báhppan* [Ess] ‘Matthew became a priest’; *Mun doivon Máhte* [Acc] *báhppan* [Ess] ‘I believed [*doivon*] Matthew was a priest’), DETERMINE (*Duot lea Máhtte* ‘That is Matthew’, *Mun doivon du* [Acc] *Máhtten* [Ess] ‘I thought [*doivon*] you [*du*] were Matthew’) or QUANTIFY (*Biergu lei okta gilo* [NomSg] ‘There was [*lei*] one kilogram of [*okta gilo*] meat [*biergu*]’, *Máhtte osttii bierggu* [AccSg] *ovtta gilo* [AccSg] ‘Matthew bought one kilo meat’) one of their codependents or PREDICATE it (*Máret manai murret* [Inf] ‘Mary went [*manai*] to chop firewood’; *Máret doalvvui mánáid* [AccPl] *vuojadit* [Inf] ‘Mary took the children to swim’). Predicatives SUBSTANTIATE (*Máhtte lea čeahppi* ‘Matthew is clever’), COMPLEMENT (*Máret anii Máhte čeahppin* ‘Mary thought Matthew clever’) or MODIFY (*Máret geahčai Máhte oahpabeaddjin* ‘Mary looked at Matthew as a teacher’) their heads.

The North Saami **predicator** may consist of a content verb (such as *boahtit* ‘to come’, *lohkat* ‘to say; to read’, *jábkket* ‘to believe’), the copula (*leat* ‘to be’) or one or more **auxiliaries** SUBSTANTIATED by a **predicator substantiator** (a non-finite form of a content verb) or the copula *leat* together with its **substantiator predicative**: *Máret boahttá* ‘Mary is coming’; *Máhtte lea gievra* ‘Matthew is strong’; *Máret ii boađe* ‘Mary does not come’; *Máhtte ii dáidde boahtit* ‘Matthew probably won’t come’; *Máret ii dáidde leat boahttán* ‘Mary probably has not come’; *Máret ii leat čuorbi* ‘Mary is not clumsy’), *Máret ii dáidde leat čuorbi* ‘Mary is probably not clumsy’.

The morphology of the finite verb is in **semantical agreement** with the subject: *Mun boadán* ‘I am coming’; *Moai bohte* ‘We [Du] are coming’; *Mii boahtit* ‘We [Pl] are coming’. The following examples contain nominal subjects which are morphologically singular but refer to one, two or more people respectively: *Olm-moš boahttá* [IndPrsSg3] ‘A person is coming’; *Dat guovttos boahttiba* [IndPrsDu3] ‘The two of them [*guovttos* ‘two people, pair’] are coming’; *Ábku gázzi bohtet* [IndPrsPl3] ‘Grandmother and her companions [*gázzi* ‘party’] are coming’. Dual forms are used only with **definite** subjects: *Dohko bodiiga* [IndPrtDu3] *Máret guovttos Máhtiin* ‘Mary and Matthew came there [*dohko*]’ vs. *Dohko bohte* [IndPrtPl3]

guokte olbmo ‘Two people came there’. In the **deictic** first and second person the reference of the subject is fixed and the pronoun is optional especially in the singular: *Mun boadán ~ Boadán* ‘I am coming’. In the third person the subject may be **deictic**, **anaphoric** or **referential** and a separate subject word is therefore obligatory in system sentences: *Dat boabta ~ *Boabta* ‘S/he is coming’.

In addition to the structurally and semantically integrated parts of sentences accounted for above, utterances may contain words and phrases which are not structurally integrated with the sentence. These are called **sentence attachments** and include, among other things, **vocatives** (*Mana, Máhtte, dohko!* ‘Go there, Matthew!’) and **exclamatives** (*Hei, de muohttái!* ‘Strange, it started to snow!’).

The principle of **feature bequethal** down the dependency hierarchy is introduced in order to describe the binding of anaphors (pronouns and possessive suffixes) by focal participants and certain features of embedded sentences (e.g. the occurrence of the accusative case in such embedded sentences as *Máret logai Máhte leat čeahpi* ‘Mary said Matthew to be clever’; the same dependents are in the nominative case in the corresponding finite sentence *Máhtte lea čeahppi* ‘Matthew is clever’). A detailed account is given of the intricate logophoric use of pronouns (such as the 3rd person singular pronouns *dat*, *son* and *duot*), possessive suffixes of nominals and personal suffixes of finite verbs in North Saami.