

THE PHRASE STRUCTURES OF ETHIOPIAN OROMO

by

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ABSTRACT

This study is about the phrase structures of Oromo. It examines various constituent structures in the light of the X-bar theory of Jackendoff (1977) and recent developments. The theory assumes that constituent structures are hierarchically organized syntactic expressions of lexical categories.

The study starts with the identification of the lexical categories of the language. Four such categories have been recognized. Each category subcategorizes other maximal categories as complements or specifiers to form its minimal/maximal projections.

The theory predicts a uniform three-level projection for all categories. The study shows that only nominals and verbals are characterized by this potential. The other two categories fall short of a bar. The complements across the categories are functional arguments in the minimal projections and restrictive and appositive modifiers in the intermediate and maximal projections respectively. All of them occur in argument positions.

At the intermediate and maximal levels are also found specifiers of two types: those which are of quantifying and/or intensifying function, and those which are of deictic or referential use. They are generated at the intermediate and maximal levels respectively, as adjuncts.

Specifiers and complements assume non-head positions. The category by which they are subcategorized assumes a head position. The study shows that this position is by and large final. This fixes the parameter of Oromo as a head-final language.

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ERRATA

<u>Page</u>	<u>Line</u>	<u>Corrections</u>
63	16	Mathews → Matthews
65	2	mean → mead
94	9	v [- #] → v + [- #]
105	4	...[ $\bar{s}$ ...]... → [ $\bar{s}$ ...[ $\bar{s}$ ...]...]
325	21	relatin → relation
329	1	head of list = v
341	19	Agjectives → Adjectives
341	29	Affar → Qafar
342	30	Langua → Language
343	30	Affar → Qafar
344	3	Affar → Qafar
344	19	Beinding → Binding

CHAPTER ONE

1.0 About the Language

Oromo is one of the languages of the Lowland East Cushitic group within the Cushitic family of the Afro-Asiatic phylum. It is predominantly spoken in Ethiopia though several dialects are also spoken in Northern Kenya. Within Ethiopia alone it has a population of between 8 and 10 million speakers according to some estimates (Bender and Mulugeta 1976:195; Gragg 1976:166). Within Ethiopia it is spoken over a vast area of land stretching from the mid-north to the far south, and from the far east to the western border of the country.

According to Heine (1980:55), the dialects spoken outside Ethiopia include the following:

- (i) Gabra
- (ii) Boorana
- (iii) Sakuye
- (iv) Garreh
- (v) Ajuran
- (vi) Orma
- (vii) Munyo
- (viii) Waata.

Though adequate information is lacking concerning the types of variations and their isoglosses within Ethiopia, the following regions seem to have been recognized as distinct dialect areas:

- (i) Meççaa (Western Ethiopia)
- (ii) Tulamaa (Central Ethiopia)
- (iii) Kottu (Eastern Ethiopia)
- (iv) Rayya (Northern Ethiopia)
- (v) Boorana (Southern Ethiopia).

The feeling among scholars in the field is that, though there are such regional variations, on the grounds of mutual intelligibility and sharing of core vocabulary items, the various regions constitute a single language community (cf. Bender and Mulugeta 1976; Andrzejewski 1960).



According to Gragg (1976:174), Bender and Mulugeta (1976), Wako Tola (1981) and Haimanot Moges (1983), the phonemic inventory of the language has the following consonants and vowels:

<u>Consonants:</u>		<u>Labials</u>	<u>Alveolars</u>	<u>Palatals</u>	<u>Velars</u>	<u>Glottals</u>
Stops:	vls	(p)	t	c	k	ʔ
	vd	b	d	ɟ	g	
	ejective :	p̣	ṭ	ç	ḳ	
	implosive :		ɗ			
Continuants:	vls	f	s	s		h
	vd		(z)			
Nasals :		m	n	ɲ		
Liquids:			l, r			
Glides:		w	y			

Vowels:

i	u
e	o
a	

Each consonant and vowel has a long counterpart.

Since the purpose here is only to introduce the basic sounds as they will be represented in the orthography in this study, we will not go into the details of the phonology proper.

### 1.1 Previous Study

The literature relating to Oromo dates back to the mid-nineteenth century. On the basis of its content and purpose, it may be broadly divided into three types:

- (i) Word lists and/or dictionaries
- (ii) Pedagogical grammars
- (iii) Descriptive sketches.

The works of Viterbo (1892), Pretorius (1893), Foot (1913), Ducati (1937), Da Thiene (1939) and Gragg (1982) belong to type (i). Onesimus (1894), Hodson and Walker (1922), Moreno (1939), Nordfeldt (1947), and Launhardt (1973) comprise type (ii). The rest of the list in the bibliography belongs to type (iii).

Leaving aside Gragg's (1982) dictionary, the attempts made by those in types (i) and (ii) are utilitarian in purpose and traditional in approach. The main interest of these scholars was to present the language in such a way that anyone who did not have any knowledge of it could learn it in a short period of time and use it in day-to-day communication. In other words, the main objective of such works was to describe the language in one way or another as a means to a practical end. The end might, of course, vary slightly from author to author. For Hodson and Walker it was commercial. This is clearly stated in their preface to the Grammar of the Galla or Oromo Language where they say:

The grammars on Galla are not of great practical utility, and it was thus necessary to plan the lesson afresh keeping always in mind the needs of the trader and his desire for practical sentences used in ordinary life (1922:8).

For Moreno, it was translation. His intention was to write a grammar which would enable the Italian to communicate in the language and the Oromo to help as an interpreter. Like Hodson and Walker, he too says, "Le frasi degli esercizi sono congegnate in modo che l'italiano aiuti a comprendere il galla, e il galla faciliti la traduzione dall'italiano" (1939:10).

Such works, being constrained by non-linguistic factors, try to present the language as a whole. Phonology, morphology, and syntax along with texts and a host of exercises are presented all in one book though hardly any of them is dealt with at length. Descriptions are limited to surface phenomena, and explanations are more often notional than formal. In fact, in some cases, theoretical assumptions about language-learning and teaching

current then seem to have been deliberately avoided. Such is the case, for example, with Hodson and Walker who say:

It would have been possible to write a grammar based on the latest direct and oral methods, but such are not suited to the wilds where intelligent teachers may not be found (1922:8).

Whether they have been successful in accomplishing their aims or not is not something to be definite about, and it is not important for the purpose we are after. What is definite and important from our point of view is the fact of their laying the groundwork for whatever has been done since then in Cushitic studies in general and concerning Oromo in particular. The word-lists and dictionaries referred to above have provided good sources in terms of data, and the various pedagogical grammars have also acted as spring-boards in terms of providing directions for the descriptive works of the third category, and, needless to say, for the present study.

The works falling within the third category, like those of Hodson and Walker, and Moreno, are surface descriptions of one or other aspect of the language. Excepting Gragg (1976), which is an attempt made to give an overall picture of Oromo as spoken in Wallagga (Meččaa), the rest are either morphological or phonological in emphasis. There is very little on phonetics, particularly on suprasegmentals and still less on syntax.

These works, as opposed to those in groups one and two, are characterized by their description, which one may say is formal. Furthermore, they are limited to one particular dialect area. Most of them deal with the Meččaa dialect as indeed do the works of some of the earlier scholars such as Onesimus (1894), Nordfeldt (1947) and Launhardt (1973). To a certain extent, similar efforts have been made to describe the features of the Boorana dialect. The accounts of Webster (1959) and Andrzejewski (1960) focus mainly on this dialect.

Quite recently, some research works based on the Kottuu (Eastern) variety, have appeared. These are Owens' 1985a and 1985b analyses of 'causatives' and 'nominal relations' respectively. Unlike most other previous works, these are based on the theoretical assumptions of a particular framework.

Tilahun Gamta's (forthcoming) Dictionary of Oromo is another promising work to look forward to. To date nearly all that has been done on this language has been done by people who have had very little or no working knowledge of the language. This dictionary is an exception in the sense that it is the first of its kind to be prepared by a native speaker.

From the present state of affairs, one may gather that there is a growing interest in Oromo, and that there is also a lot to be done in the areas of phonetics, dialectology and needless to say, syntax, and as Gragg (1976:173) has said, 'Any work done along these lines...is bound to break new ground and open new perspectives'.

## 1.2 The Present Study

Looking at the literature on Oromo, it is not impossible to guess the direction linguistic researchers will have to take. The gap in each of the areas mentioned is enormous. In some cases, there is a total absence of materials. Such is the situation, for example, concerning the variety spoken in Rayya (Wello). In others, the available material is scanty.

To date there has not been anything done on the phrase structures of the language. This is basic to the study of the typology of languages and to the investigation of the principles governing the distribution and relations of categories within a particular language. The various attempts made hitherto, though commendable for the various purposes they were designed for, have not been geared towards this. The present study is, therefore, an attempt made with the intent of narrowing down a gap in this

area. The study tries to examine various constituent structures and formulate the rules that govern the relation of elements within such structures.

Like some of the earlier works, this study is limited to the form of the language used in Western Ethiopia (Meččaa). The reason is partly accidental and partly pragmatic. My Oromo-speaking colleagues are from Wallagaa and Ilubabor, and the available literature is mostly based on this variety of the language. The study is, therefore, primarily based on data elicited from my colleagues. Subsequent references for similar purposes have been limited to Gragg's (1982) dictionary which came out just as my study was to get underway; I am indeed greatly indebted to Gragg for saving me a lot of trouble.

There have been instances, however, when speakers of the language from other regions have been made use of as informants as the study was progressing, but again, the materials have been checked against their equivalents in the dictionary, and whenever a form was found to be entirely different, it was always the one in the dictionary which was used. One such example is the word for 'money' which is /mahaallek/ in Harar, /ganzaba/ in Shewa (Tulamaa), and /horii/ in Meččaa (Wallagga). Another is the form for 'yesterday' which is /kalee<sup>h</sup> halee/ in Harar but /kaleessa/ in Meččaa. The form for 'she' also varies between /išee/ in Meččaa and /išii/ in Tulamaa. Except in such minor cases, references have been limited to the one particular dialect. However, it is believed that such apparent differences, being so much a property of the lexicon, may not have any significant effect on the principles that underlie the organization of the constituent structures. To this extent, the syntactic descriptions that we will be dealing with throughout the study may be said to be Oromo in form though one may say that they are Meččaa in substance.

### 1.3 The Theoretical Framework

As stated earlier on, the attempts made at different times in the past to describe the language, have been geared towards some utilitarian purposes. This is to say that the scholar's main interest was the practical use of the language more than anything else. To achieve this, it might not be necessary to start the work with a well-defined set of assumptions about language, and with a set of strict procedures as to how to go about analyzing a body of data in the light of the assumptions made. In other words, some kind of theoretical framework could have been used unless this was thought unnecessary for the purpose the scholars were after. As one may infer from the quotation cited earlier, the approach of Hodson and Walker suggests that this was indeed the case. Such works suffer from the drawback that this type of approach would lead into, particularly when judged from a purely linguistic point of view which requires some degree of adequacy.

In this regard the present study may be said to have offset the drawback of the previous works, since it is based on a strictly defined theoretical framework. This emerges from the purpose of the study itself, which is one of making a modest attempt to discover the network of relations underlying the language and to account for the native speaker's ability to judge structures as grammatical or ungrammatical. There is no one particular way of 'achieving' this goal. There are a number of assumptions and approaches behind the frameworks linguists have proposed over the years. The choice of one framework over another seems to be partly determined by the individual's background. The framework adopted here is what is known as the Extended Standard Theory (EST) developed in Chomsky (1970, 1972, 1973, 1976, 1977), Emonds (1976), and outlined in Radford (1981).

This framework is a development of the ideas embodied in the Standard Theory of Chomsky (1965). For reasons of brevity, I shall only state the reasons that led to the revision and list the characteristics of the new version.

In the Standard Theory, it was felt that:

- (i) Deep Structure was too abstract
- (ii) The transformational component was too strong
- (iii) The categorial component was too restrictive in some sense and not restrictive enough in another.

In order to do away with the problems that had led to this situation, it was necessary to make some revisions with respect to each of these components by way of decreasing the degree of abstractness and the power of transformation and by constraining the rewrite rules of the categorial component. The revised form is an attempt to achieve this end.

As in Aspects, it is also assumed in EST that the organization of grammar presupposes the existence of the following five distinct but interacting components:

- (i) The lexicon
- (ii) The categorial component
- (iii) The transformational component
- (iv) The phonological component
- (v) The semantic component

The first two constitute what has often been called the base component (Chomsky 1977:71). The second and the third jointly constitute the syntactic component. The last two are interpretive in the sense that they relate to the ways the structures generated by the syntactic component are pronounced and associated with objects and events in a given context of situation.

(i) The Lexicon

This is the part of the base which is the repository of idiosyncratic information about the lexical and grammatical formatives of a language. In Aspects its role was limited to the entries of such formatives with the specification of their phonological, syntactic and semantic features, together with a set of lexical insertion rules which specified which item in the lexicon substitutes for which terminal symbol in the structures generated by the categorial rules.

In the revised version (EST), lexical redundancy rules, morpheme structure rules and rules of allomorphy have also been assigned to the lexicon. This increasing role is a concomitant of a position which Chomsky (1970) took to reduce the power of the transformational component, which until then had been concerned with the derivation of not only syntactic categories but also lexical categories (cf. Lees 1960). Chomsky argued that because of the irregular nature of word-formation processes, it was wrong to derive words by means of syntactic transformations. The latter should be limited to the derivation of syntactic structures, and that all processes of word formation should be relegated to derivational morphology, which operates in the lexicon. Hence one characteristic feature of EST is a new division of labour between the transformational component and the lexicon, which in the words of Mark Aronoff (1976:6) also lead to 'the birth of morphology or at least the declaration of its domain which is simultaneous with, and contained in Chomsky's "Remarks on Nominalization" (1970) '.

Word-formation processes, now gone to the lexicon and being handled lexically, the transformational component is left with a few obligatory syntactic rules whose application is both specific and predictable.

(ii) The Categorical Component

This is a set of context-free phrase structure rules which defines the hierarchical structure of syntactic categories and the linear ordering of the elements forming them. These rules generate a set of phrase markers whose initial symbol is a maximal category such as an  $s$  or  $\bar{s}$ . The process continues until a point is reached where no further syntactic derivation is possible. At this stage lexical items are drawn from the lexicon and are inserted under each category label according to rules which relate to lexical insertions and selectional restriction features. Some positions



may be left vacant or filled by empty elements whose nature is specified by some principles operating at some level in the derivation of the structures.

The categorial rules in the pre-EST version were too restricted with regard to the phrase types they could generate. These were limited to two levels of hierarchies in each syntactic category. These are the phrasal categories such as NP, VP, etc., which are maximal, and the lexical categories N, V, etc., which are their minimal primitives. In other words, there was no room for intermediate categories, that is, for categories smaller than the maximal and larger than the minimal categories. The elements constituting such categories were accounted for in terms of syntactic transformations; such was the case, for example, with prenominal adjectives, comparatives, etc. (cf. Selkirk 1977). In the new version, such structures are generated by categorial rules in the position in which they appear in surface structures as intermediate categories.

As stated earlier, this component was also unrestricted in another sense. The rules which derive one phrase marker from another were not of a type which would guarantee that in the derivation of a category, the categorial membership of the head of the derived category was the same as that of the category from which it was derived. In other words, there was no condition that could maintain the categorial relationship of any two derivationally related categories.

In order to avoid such anomalous situations and the problems arising therefrom, the component had to undergo some changes. One of these changes was the attempt made to relax the rules so that they could accommodate a number of intermediate categories. The other was a constraint governing the relationship between a maximal category and the head of its derived constituent. The heads of the two categories should be in the same lexical category.

Other restrictions relate to the dominance and precedence relationship of constituents branching from the same maximal node. Put formally this runs as follows:

If a node X dominates two nodes Y and Z, if Y precedes Z, then any node dominated by Y must precede both Z and any node dominated by Z (Radford 1981:83).

This is a well-formedness condition on the derivation of a phrase marker from a higher phrase marker.

With such changes implemented, the new version, popularly known as the 'X-bar' Convention, came out first in Chomsky (1970), though the ideas in it had been apparent in the works of Zellig Harris as early as the 1940s (cf. Chomsky 1970:211) and later in Lyons (1968) who says:

Phrase structure grammars fail to formalise the fact that NP and VP are not merely mnemonically convenient symbols, but stand for sentence constituents which are necessarily nominal and verbal respectively, because they have N and V as an obligatory major constituent. What is required, and what was assumed in traditional grammar, is some way of relating sentence constituents of the form XP to X (where X is any major category: N, V, etc.)... (p.33).

An elaborated version of this convention is found in Jackendoff (1977).

Since the present study is primarily concerned with the identification of the possible constituent structures of Oromo in the light of the ideas embodied in this new version, it might be necessary briefly to point out its major claims, the methods it employs to achieve them, and the problems it has encountered.

Jackendoff (1977:29) makes the following three claims for the X-bar convention as a theory of syntactic categories in universal grammar (UG):

- (i) Universal grammar provides a set of syntactic distinctive features in terms of which the possible lexical categories of a particular language are defined.
- (ii) Each lexical category X defines the set of syntactic categories  $X^n$  that can be developed from it. The syntactic category  $X^n$  and the lexical category X are related by a phrase structure schema of the type in (1):

(1)  $x^n \longrightarrow (c_1) \dots (c_j) \dots x^{n-1} \dots (c_{j+1}) \dots (c_k),$   
 where  $1 \leq n \leq 3$ , and either  $c_i = y''''$  for some  
 lexical category  $y$  or  $c_i =$  a grammatical formative (p.36).

(iii) Rules of grammar are stated in terms of syntactic feature complexes and bar/prime notation. In other words, the domains where syntactic rules operate are specified in terms of syntactic distinctive features and bar notation, the latter indicating the level at which the rules are expected to operate.

As stated above, the syntactic distinctive features which specify the possible lexical categories of a language are provided by UG. A language has to choose a set of its features on the basis of the degree of naturalness its syntactic rules may gain when they operate on or across syntactic categories at a particular bar level. In other words, it is the anticipated degree of generalization to be made that determines which set of features a particular language should take from UG.

The features for English as used in Chomsky (1970) are  $[\pm N, \pm V]$ . This set is based on the recognition of nouns, verbs and adjectives as the major lexical categories of the language. Jackendoff (1977) adds prepositions and adverbs to the list of lexical categories, and also recognizes particles, determiners, modals and quantifiers as 'minor' categories. To define each of these categories, he had to reformulate Chomsky's features and also introduce new ones. These are shown below:

- (a)  $[\pm \text{ sub.}]$
- (b)  $[\pm \text{ obj.}]$
- (c)  $[\pm \text{ comp.}]$
- (d)  $[\pm \text{ det.}]$

These features are based on what a category can or cannot have. For example, nouns are defined by the feature  $[+ \text{ sub.}, - \text{ obj.}]$  because they can have subjects but not objects (cf. Chapter Two for a discussion of this point).

Regarding claim (ii) and the schema in (1), Jackendoff believes that this schema is also provided by UG. The underlying idea here is that each constituent in a language is endocentric and that the head of the initial

constituent  $X^n$  is  $X^{n-1}$ . The symbols before and after it represent a major syntactic category functioning as a specifier or complement of this head, or as a grammatical formative of one type or another; such as those for aspect or numbers for example.

That the head of the category  $X^n$  is  $X^{n-1}$  shows the extent to which phrase structure rules have been constrained. This is in response to the feeling that such rules had been unrestricted in terms of the potential structures they could generate. The fact that they are now limited to generating structures whose heads are lexically related means that there cannot be derivations of the type:

$$X^n \longrightarrow \dots Y^n \dots$$

An important point implicit in claim (ii) is that constituents are hierarchically structured units. Their minimal expression is a lexical category  $X$ , whereas their maximal expression is  $X^n$ . Between these two categories, there could be a number of categories falling at different levels.

The role of the X-bar convention, as a theory of phrase structure rules, is to examine the syntactic properties of such categories and to determine their positions. This ultimately gives us the value of  $n$  in the maximal category of  $X^n$ . But this is not as simple as it sounds. Opinions have always been at variance about the value of  $n$ , though there is general agreement on the hierarchically structured nature of constituents (at least in one type of human language) and on the existence of intermediate categories. For example, in Chomsky (1970)  $n$  is two for nouns and three for verbs. In Vergnaud (1974) and Seigel (1974)  $n$  is four for nouns. In Dougherty (1968) it is three for nouns and six for verbs. Jackendoff (1971; 1974a) has two for all categories. In Jackendoff (1977), however, he allows three for both nouns and verbs, and he argues that this should be extended in all other categories for reasons of structural parallelism

(pp.35-6). If opinions about a particular language vary to such an extent, it might not be impossible to forecast how much more conflict might arise when taking many languages into account. It appears that it is for this reason that Jackendoff says that the best theory is one which provides 'just enough structure to make the relevant structural differences and no more' (p.35).

Another controversial point about this convention relates to the projection line of verbs. Jackendoff claims that the line includes s's and  $\bar{s}$ 's which means that any constituent in a clause is a part of the projection of V. This makes subject arguments in both Ss and NPs as projections of V and N, functioning as specifiers of some sort. But as specifiers belonging to the same functional category they should be subject to similar syntactic rules; but they are not, since there are rules which operate only on VPs leaving the subject, that is, the specifier, intact, as we shall observe in Chapter Five. Suggestions have, therefore, been forwarded to limit the maximal projection of V to  $V''(')$  and thereby make distinctions between it ( $V''(')$ ) and S (cf. Hornstein 1978).

As stated earlier on, the existence of intermediate categories, irrespective of how many they might be, is not a matter to be doubted. The desirability of describing the way such categories behave also does not seem to be in question. It is hence the purpose of this study to identify and examine the properties of the constituent structures of Oromo in the light of the claims of the X-bar convention as expounded in Jackendoff (1977) and briefly presented here.

### (iii) The Transformational Component

As stated earlier, this is a part of the syntactic component. Its function is to convert the deep structures which are generated by the categorial rules and lexicalized from the lexicon, into their corresponding surface structures (S-structures). As already mentioned, in Aspects this

component was too unrestricted since its rules (T-rules) could operate at both syntactic and lexical levels. In order to derive certain lexical items by means of transformational rules, it was at times necessary to postulate underlying structures which were much more abstract than was otherwise needed for deriving ordinary syntactic surface structures.

In EST, the rules of the component have been limited just to the derivation of syntactic structures; and all derivations of lexical items both regular and idiosyncratic have been assigned to the lexicon where they can be taken care of by derivational morphology.

It is not only the domain of the transformational component which has been limited the rules themselves have also been drastically reduced and their applications have also been highly constrained by a number of conditions (cf. Ross 1967; Chomsky 1973, 1977). There is now only one rule, viz., 'move  $\alpha$ ';  $\alpha$  being an abstraction of a syntactic category, NP, VP, etc., at the deep structure level of representation. This rule moves  $\alpha$  from its base position and substitutes it for, or adjoins it to another category. Such an operation has the following characteristics (Chomsky 1981:56):

- (i) Movement is always from a thematic position to a non-thematic position.
- (ii) Movement observes subjacency.
- (iii) Movement leaves a trace of a moved category which must satisfy certain well-formedness conditions.

In short, what these conditions say is that  $\alpha$  should move to a position which is unfilled by a referring expression in deep structure, and that when it moves, it should not cross more than one bounding node, that is, one NP or  $\bar{S}$ : Furthermore, its trace should form a structural configuration with a lexical head and should also obey certain principles which govern the distribution of categories.

Since our concern here is with the categorial component more so than with the rule 'move  $\alpha$ ' we need not elaborate this point any further. We

shall instead raise a point which relates to the typology of Oromo, with regard to the parameter configurationality versus non-configurationality.

The X-bar convention presented in Jackendoff (1977) as a theory of phrase structures is based on the assumption that English is a configurational language, as opposed to other languages such as Walpiri (Hale 1978) (cited in Chomsky 1981). This suggests that we need to make the same kind of assumption about Oromo and then go into the details of showing how this is reflected in the language in the light of the claims made by the theory. This also seems essential from the practical point of view, since the entire study is geared towards the examining of the possible constituent structures of the language. However, since a proposal has already been made by Owens (1984) to the effect that this language is non-configurational, we cannot start with such an assumption. Either we have to agree with the proposal and proceed with the description accordingly, or argue against it with some concrete evidence.

The proposal was made in relation to Owens' lexical-functional analysis of Oromo causatives. Accordingly the following has been presented as the base rule for Oromo sentences:

$$I \quad S \longrightarrow \quad NP \quad (NP) \quad (NP) \quad V^1$$

Owens has not forwarded any argument in favour of this rule nor has he given us any features which would characterize Oromo as a non-configurational language.

Although the discussion in the next chapters is believed to show that this language is configurational, it might still be necessary to mention a few points about Owens' proposal in the light of the properties of non-configurational languages. According to Hale (1980) (as stated in Bouchard 1984:159), the following are believed to be properties of such languages:

- (i) Free word order
- (ii) Discontinuous expressions
- (iii) No movement transformations
- (iv) Rich case systems
- (v) No pleonastic NPs
- (vi) Free pronoun drop.

Now, from the base rule in (I), it is clear that Oromo has NPs.

The elements forming these NPs follow a strict order. Hence (1a) but not (1b) or (1c) is possible.

- 1(a) [nama guddaa kana]  
 NP man big this  
 'this big man'
- (b)\* [kana nama guddaa]  
 NP this man big
- (c)\* [guddaa kana nama]  
 NP big this man

The ungrammaticality of such structures shows that Oromo does not have the characteristic features indicated in (1). As the base rule in (I) shows, the language is also verb-final. The verb cannot occur in initial or medial position without the structure being ill-formed. This again shows that the same type of order is maintained between constituents forming clauses. Consider (2) below.

- 2(a) [nam-ičč-i kuni hoolaa guddaa [bit-e]]  
 S man-sgl-nom this-nom sheep big buy-pf.  
 'this man bought a big sheep'
- (b)\* [[bit-e] nam-ičč-i kun-i hoolaa goodaa]  
 S buy-pf man-sgl-nom this-nom sheep big

The second characteristic feature is that non-configurational languages allow discontinuous expressions. What this would mean is that in a sentence like (3) below, the two nouns,  $N_1$  and  $N_2$  could be related to any of the adjectives or the demonstrative elements in the string.



3.       [nam-ičč-i<sub>1</sub>           guddaa-n       dubartii<sub>2</sub>    ḍeer-tuu     kana     rukkut-e]  
           S                   big-nom.       woman           tall-f     this     hit-pf  
           'the big man hit this tall woman'.

If Oromo were a non-configurational language, the noun /nam-ičč-i/'man-nom' could be linked to the adjective /guddaa-n/ 'big-nom' or /ḍeertuu/ 'tall-f', or to the demonstrative /kana/ 'this'. And the same could also be true of /dubartii/ 'woman'. But as can be observed from the sentence, the nouns form structural relations with the adjective or demonstrative immediately following them. This structural relationship is also manifested morphologically; the adjective /guddaa/ 'big' shows up the case affix /-n/ in agreement with /nam-ičč-i/ just as in the same way /ḍeertuu/ 'tall' displays the feminine affix /-tuu/ following the feminine noun /dubartii/ 'woman'.

According to Bouchard (1984:157ff), in languages like Walpiri or Japanese<sup>2</sup> which are cited as being non-configurational, the verb could also be related to either one of the nouns in (3). The effect of this on the sentence would be that any of the nouns could be the subject or the object. In other words, subject and object relationship is not something which is structurally determined in such languages. In Oromo, the subject is always the left most NP, i.e., [NP, S], and the object is the NP immediately preceding the verb. The ungrammaticality of (4b) below shows this.

- 4(a)     [nam-ičč-i           [Ḍaaltuu       rukkut-e]]  
           S                   Ḍ                   hit-pf  
           'The man hit Ḍ'.

- (b)\*     [Ḍaaltuu     [nam-ičč-i       rukkut-e]]  
           S                   man-sgl-nom       hit-pf

The ungrammaticality of such structures shows that there is structural configuration between, say, the verb and its object argument and that it is

this configuration which determines the role and the case assignment of the argument. In other words, the assignment of thematic roles and case in configurational languages presupposes structural relations between the assigning and the receiving elements. In the structures above, the subject and the object nouns fall into such relations in (a) but not in (b). If Oromo were a non-configurational language both structures would be perfectly acceptable since in such languages case relations are not determined structurally but are assumed by the arguments irrespective of their positions in structures of sentences (cf. Chomsky 1981:133ff.). In other words, /Ḑaaltuu/ and /namičči/ 'the man' could have assumed their respective cases in both (4a) and (4b) and since the type of case each would have assumed could have been identified from their forms, both structures would have been grammatical. But as we can observe, only (4a) is well formed.

The third characteristic feature of non-configurational languages is the absence of movement rules. As stated briefly earlier on, such rules move elements from one position in deep structure to another position in S-structure. The position to which the elements move must be empty. This suggests that the process can take place only if there is an empty position in deep structures. In other words, movement presupposes the existence of such empty positions.

As in other configurational languages, such as English, Oromo has such positions. There are verbs which do not select external arguments (in the sense of Williams (1981)). The position where such an argument would be expected is empty at the level of deep structures. In other words, it is unfilled by a lexical element. However, at the level of the corresponding S-structure, the empty position may be filled by a lexical argument. This involves movement. The moved element leaves its trace behind to satisfy the subcategorization property of the head. Such verbs include the

copulative verb /fakkaat-/ 'seem' and passive verbs in general. With regard to /fakkaat-/ 'seem', we will enter into a detailed discussion in Chapter Five. Here, we will consider only structures involving passives.

5(a) (i) [fard-i            gurgur-am-e]  
           S<sub>horse-nom</sub>    sell-ps-pf  
           'A horse was sold'.

(ii)\* [farda            gurgur-am-e]  
        S<sub>horse</sub>            sell-ps-pf

(b) (i) [man-ni            gub-am-e]  
           S<sub>house-nom</sub>    burn-ps-pf  
           'A house was burnt'.

(ii)\* [mana            gub-am-e]  
        S<sub>house</sub>            burn-ps-pf

Within the framework adopted here, passivization is an instance of the general rule of 'move  $\alpha$ '. The subcategorization properties of verbs with or without passive morphology is the same. The effect of passive morphology is on the case and thematic ( $\theta$ ) role assigning property of verbs. Such verbs are believed to have no potential for assigning case to their internal arguments and a thematic role to their external argument (cf. Chomsky 1981). The position where an external argument is expected to appear is hence empty at the level of deep structure.

The representation of the structures in (5) is accordingly as follows:

6(a) [NPe [farda            gurgur-am-e]]  
       S     V'  
           horse            sell-ps-pf

(b) [NPe [nama            gub-am-e]]  
       ;     V'  
           house            burn-ps-pf

The arguments /farda/ 'horse' and /mana/ 'house' must be case marked for the structures to be grammatical (cf. Chomsky and Lasnik 1977;

Chomsky 1981, 1982). But in the position they appear in (6) these arguments cannot receive case for the reason already stated. In order to receive case, they must move to the position of NP<sub>e</sub> where they can receive nominative case from Inflection. The ungrammatical structures in both (a ii) and (b ii) show exactly this situation.

We may say at this point that this may be true if the language is configurational, if it is not, the movement may not be necessary since the nouns could assume their cases in situ. In other words, how do we know that movement has taken place in (5)? What if the nouns have assumed their cases in situ; Oromo being a non-configurational language as proposed?

The fact that movement has taken place in (5) is deducible from the situations found in other structures of sentences with both subject and object positions filled in deep structure. As mentioned earlier on in this section, the subject argument in such sentences is the prominent NP, that is, the NP which is the left-most. This NP has the nominative case marker /-n/. The object argument is always the one before the verb. If it were the case that Oromo was non-configurational, such distributional restrictions would not have been necessary. The subject could have occurred anywhere in the sentence. But this is not the case. As the examples in (4) clearly show, the subject argument cannot occur in the position preceding a transitive verb. From this it follows that in the structures in (6), the arguments have to be generated in object position since the verbs are transitive. In order for these arguments to occur as subjects, they must move to the position they occupy in the corresponding structure in (5) since in the position they appear in in (6) no NP with nominative case marking would be allowed without the resulting structure being ill-formed.

The other characteristic feature of a non-configurational language is that such languages have rich case systems. Oromo, like English, has

nominative, accusative and genitive cases. The accusative is the unmarked one. The nominative is indicated morphologically by the affix /-n/ and the genitive by the configuration [N NP]. If the language had been non-configurational, it would perhaps have had a lot more cases, each indicated by a distinct morphological element, and in such cases the word order would have been a little freer. But this is again not the case. For example, a discontinuous genitive construction is not possible, as the example in (7b) shows.

- 7(a) [mana Tulluu]  
 NP house of T.  
 'T's house'.
- (b)\* [[mana] kana [Tulluu]]  
 NP house this of T.
- (c) [[mana Tulluu] kana]  
 NPN house of T this  
 'This house of Tulluu'.

The same may be said about accusative NPs. They are recognized as having this case only if they occur in positions strictly subcategorized by the category which assigns this case. If they occurred away from the category (as in structures like (4b) for example) the resulting structure would be ill-formed.<sup>3</sup> If on the other hand, each case is assumed and is also morphologically realized, then syntactic configurations might turn out to be minimally significant. And if a language is characterized by such features, that language might be argued to be a non-configurational one. The data presented so far do not lead us to draw such a conclusion about Oromo.

The last characteristic feature of a non-configurational language is free pro-drop. This means that NP arguments may be phonetically null. In other words, sentences without a surface subject are possible if a

language is non-configurational. This is not, however, a feature which is exclusive to such languages. There are well-known configurational languages like Italian and Spanish, for example, which allow null subjects. But in such languages it is only the subject which may be dropped, whereas in a non-configurational language it is both the subject and the object which can be dropped. The difference in this case may be said to be one of degree. Hence, whereas in a language like Italian the verb and its object may appear in surface structure, in a non-configurational language the verb alone may appear. In this respect Amharic could be a good example, though it cannot be conclusively said that it is a non-configurational language. In Amharic, structures like the following are possible:

8(a) [NPe NPe matta-hu-at]  
 S hit -I -her  
 'I hit her'.

(b) [NPe NPe matta-ačči-ññ]  
 S hit -she -me  
 'She hit me'.

In Oromo such is not the case since the corresponding structures in (9) are ungrammatical.

9(a)\* [NPe NPe rukkut-e]  
 S hit-3ms-pf.  
 'He hit'.

(b)\* [NPe NPe rukkut-t-e]  
 S hit-f-pf.  
 'She hit'.

Since Amharic has both object- and subject-referring affixes (Clitics) in its verb, it is possible for both NPs to be missing. On the other hand, Oromo shows only subject-referring elements in its verbal inflection, hence only the subject is permitted to be missing.

From this it follows that the base rule (I) which Owens has proposed for Oromo leads to wrong predictions, because according to this rule, object arguments may be missing. Moreover, on the other hand, subject arguments would appear unable to be missing. If taken seriously, this may mean that missing objects but not subjects are recoverable from the form of a verb. As can be observed from (9), the verb in this language does not have object-referring elements. In other words, (AGR)eement is not rich enough in Oromo (as it is in Amharic) to license object dropping. On the other hand, the subject, whose feature is recoverable from the verb, is indicated as if it were obligatory. This means that structures like (10) would be ungrammatical, which is simply not the case.

10(a) [NPe      hoolaa      bit-e]  
       S            sheep        buy-pf.  
           '(He) bought (a) sheep'.

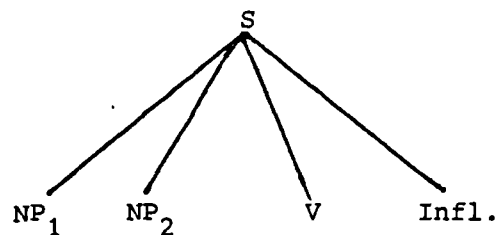
(b) [NPe      hoolaa      bit-an-i]  
       S            sheep        buy-3pl-pf.  
           'They bought (a) sheep'.

From the situation we have observed thus far, with regard to the feature pro-drop, it is not possible to maintain that Oromo is a non-configurational language. It can only be said that it is a null subject language like Italian or Spanish.

One property of a non-configurational language which Oromo does have is the absence of pleonastic elements. Such elements do not exist. The position where they would be expected to appear is vacant. But, the absence of this particular feature alone cannot lead to the conclusion that the language is non-configurational. It may only suggest that a language does not have to satisfy all the requirements listed above in order to be identified as belonging to languages of a certain parameter.

There is one other point which we need to consider with relation to the base rule (I). The rule shows that there is no VP in this language. This is what one would expect given the proposal that the language is non-configurational. As already discussed, in such languages there is no structural configuration of the type we find in configurational languages like English, between head and non-head elements. The subcategorization properties of verbs, for example, would be satisfied only by the presence of nouns. In other words, it is not a requirement that the nouns be tightly bound to the verbs and that the two form a structural unit, a VP. In fact, because of the 'flat' nature of such languages, there is a possibility for every structure of the type in (II) to be ambiguous if case were to be assigned (cf. Bouchard 1984).

II.



In (II), both  $NP_1$  and  $NP_2$  are governed by  $V$  and also by  $Infl.$  Hence there is a possibility for either one of these NPs to be the subject or the object. The effect of this is that the structure may be ambiguous between the interpretations: (1) where  $NP_1$  is the subject, and (2) when it is the object. If Oromo were such a language, structures such as (4 b) would have been grammatical, but as we saw they were not; which means that only  $NP_1$  can be the subject. From this may follow the question: Why is it that only  $NP_1$  can be the subject? What prevents  $NP_2$  from being the subject, and  $NP_1$  from being the object? Such questions may be answered satisfactorily if we assume a strict structural configuration between, say,  $NP_2$  and  $V$ , and that this configurational relationship is responsible for determining the function of the NP in a sentence. In other words, we have to assume



that NP<sub>2</sub> can only be an object because its relationship is with the verb and in the same way we have to believe that NP<sub>1</sub> cannot be the object because its relationship is not with the verb, but with something else.

As regards the assumption that NP<sub>2</sub> forms a structural unit with the verb, there are a number of constituency tests which we can use to prove such an assumption to be right. The rest of the discussion is intended to show this.

The assumption that the verb and the NP preceding it form a structural unit implies that there is cohesion between the two, and hence, any thing that affects one also affects the other. The following examples show this to be true.

- 12(a) [Tulluu-n        hoolaa        gurgur-e]  
<sup>S</sup>T-nom            sheep            buy-pf.  
 'T bought a sheep'.
- (b)? [Tulluu-n        gurgur-e]  
<sup>S</sup>T-nom            buy-pf  
 'T bought'.
- 13(a) [Tulluu-n        Dabalaa-ḍaf        aannan        kenn-e-(ef)]  
<sup>S</sup>T-nom            D to            milk            give-pf-to  
 'T gave milk to D'.
- (b)? [Tulluu-n        Daballa-ḍaf        kenn-e-(ef)]  
<sup>S</sup>T-nom            D-f            give-pf-to  
 'T gave to D'.
- 14(a) [Tulluu-n        barsiisaa        hin-ta?-a]  
<sup>S</sup>T-nom            teacher        cm-become-impf.  
 'T will become a teacher'.
- (b)? [Tulluu-n        hin-ta?-a]  
<sup>S</sup>T-nom            cm-become-impf.  
 'T will become'.

- 15(a) [Tulluu-n            wattadarii            fakkaat-a]  
<sup>S</sup>T-nom            soldier            look-impf.  
 'Tulluu looks like a soldier'.
- (b)? [Tulluu-n            fakkaat-a]  
<sup>S</sup>T-nom            look-impf/  
 'Tulluu looks like'.

The (b) structures of (12-15) cannot initiate discourse. They may be used only in strictly defined contexts set by sentences with structures such as those in (a). This suggests that the verbs in such structures cannot occur without a preceding NP under normal circumstances, that is, in the unmarked case. This implies that such NPs are indeed strictly subcategorized arguments and hence cannot be omitted. Notice, however, that according to Owens' base rule such structures as those in (b) above should have been possible, since the rule allows such NPs to be optional.

The fact that the (b) structures in (12-15) are marginally acceptable may also indicate that the NPs in question are not only obligatory but also form a structural unit (a VP) with the verbs. In other words, it might be because of the absence of a fully-fledged VP that such structures are possible only in restricted contexts. Whether this is sheer intuitive guesswork or something empirical will have to be proved. And there are syntactic facts which can justify the claim that this is more than intuitive appeal.

In (16) below, the verb and the preceding NP delete on identity with a parallel constituent in a running discourse. Neither the verb nor the NP alone can undergo this process. The ungrammatical structures show this.

- 16(a) [Tulluu-n    [aannan    hin - ʒaalat-a]].    [Fayyiisaa-n  
<sup>S</sup>T-nom            milk            cm - like-impf.    <sup>S</sup>F-nom  
 [aannan    hin - ʒaalat-a]  
 milk            cm.    like-impf.  
 'Tulluu likes milk. Fayyiisaa likes milk'.

- (b) [Tulluu-n [aannan hin - ʒaalat-a]]. [Fayyiisaa-n-iss [————]]  
<sup>S</sup>T-nom milk cm - like-impf. <sup>S</sup>F-nom too  
 'Tullu likes milk, so does Fayyiisaa'.
- (c)\* [Tulluu-n [aannan hin - ʒaalat-a]]. [Fayyiisaa-n [aannan [—]]]  
<sup>S</sup>T-nom milk cm like-impf. <sup>S</sup>F-nom milk
- (d)\* [Tulluu-n [aannan hin - ʒaalat-a]]/ [Fayyiisaa-n [[ — ]  
<sup>S</sup>T-nom milk cm like-impf. <sup>S</sup>F-nom N  
 hin - ʒaalat-a]]  
 cm - like-impf.

This situation suggests that gapping can operate only on strings of words which form a single constituent. If Oromo were a non-configurational language, we would not have such restrictions on the application of the rule, and structures like (16 c-d) would also have been well-formed.

Further support for this argument comes from pro-forms. The verb and the NP as a unit but not as independent entities may serve as an antecedent to a pro-form, which is again a possibility only if the two (the verb and the NP) are in a configurational relationship. Consider the following:

17. Speaker A: [Tulluu-n [abbaa - saa rukkut-e]]  
<sup>S</sup>T-nom father - his hit - pf.  
 'Tulluu his hi father'.

Speaker B: [Tulluu-n! inn-i [akka-na] hin-god-u]  
<sup>S</sup>T-nom he-nom as - this neg-do-impf.  
 'Tulluu! Hé wón't do like this'.

In B /akka-na/<akka-kana/ 'like this' refers only to the material in the inner bracket in A. The reference cannot include Tulluu because the latter is still present in B as subject of the clause. In other words, /akka-na/ can stand only in place of the material which is present in A but missing in B. This material, its antecedent, consists of the NP/abbaa-ssa/ 'his father' and /rukkut-/ 'hit'. Since antecedent-'anaphoric' relationship

is one to one,<sup>5</sup> we have to conclude that the antecedent /*abbaa-saa rukkut-/* 'hit his father' forms a single constituent.

As a single constituent, /*abbaa-saa rukkut-/* 'hit his father' can be conjoined with other similar structures. Hence (18a) but not (18b) or (c).

18(a) [haada - saa arrabs-e] -ett [abbaa - saa rukkut-e]  
<sub>VP</sub> mother - his insult-pf and <sub>VP</sub> father - his hit-pf  
 '(he) insulted his mother and hit his father'.

(b)\* [haada - saa arrabs-e] -ett [abbaa-saa]  
<sub>VP</sub> mother - his insult-pf and father-his

(c)? [haada - saa arrabs-e] -ett [rukkut-e]  
<sub>VP</sub> mother - his insult-pf and <sub>V</sub> hit

The fact that only /*abbaa-saa rukkut-/* 'hit his father' falls into a structure of co-ordination with /*haada-saa arrabs-/* 'insult his mother' shows that it is a single constituent and that only it as a unit, but not any of its internal elements, can occur as a conjunct on a par with /*haada-saa arrabs-/* 'insult his mother'. The ungrammaticality of (b) and the marginality of (c) are indicative of this restriction. In fact, the situation in (a) clearly shows that /*rukkut-/* 'hit' requires a preceding NP as a lexical property, just as /*arrabs-/* 'insult' demands one. If Oromo were a non-configurational language, the kind of conjoined structure we would have had might have been one which involved lexical ( $X^0$ ) elements, but not phrasal ( $X'$ ) structures. In other words, we would have had structures like (19) but not (18a).

19. [arrabs-e] -ett [rukkut-e]  
<sub>V</sub> insult-pf and <sub>V</sub> hit-pf  
 '(he) insulted and hit'.

That there is a constituent VP is also evident from rules involving movement. The verb and its NP move as a unit whenever the rule applies. Hence (20a), but not (20b), is grammatical.

20. [Tulluu-n farda gurgur-e]  
<sub>S</sub>T-nom horse sell-pf  
 'Tulluu sold a horse'.

- (a) [farda gurgure<sub>1</sub>, [Tulluu-n t<sub>1</sub>]]  
<sub>S</sub>horse sell-pf <sub>S</sub>T-nom  
 Literally, 'Horse sold, Tulluu'.

- (b)\* [gurgur-e [Tulluu-n farda t<sub>1</sub>]]  
<sub>S</sub>sell-pf <sub>S</sub>T-nom horse

Since in non-configurational languages, word order is free, structures like (20 b) would be perfectly acceptable. But in Oromo, as stated earlier on and as the example (20 b) shows, the verb is always final.

Finally, elements which form a single constituent can hardly be interrupted. This would have been possible if it had been the case that the NP /abbaa-saa/ 'his father' and the verb were not a single VP constituent in (21):

- 21(a) (i) [Tulluu-n [dugumaa-n] [abbaa - saa rukkut-e]]  
<sub>S</sub>T-nom truth-in <sub>VP</sub>father-his hit-pf  
 'Tulluu certainly hit his father'.

- (ii)? [Tulluu-n [abbaa - saa [duguma-n] rukkut-e]]  
<sub>S</sub>T-nom <sub>VP</sub>father - his truth-in hit-pf  
 Literally, 'Tulluu his father certainly hit'.

- (b) (i) [Tulluu-n [akka na-itti-fakkaat-u] [abbaa - saa rukkut-e]]  
<sub>S</sub>T-nom as me to - seem-impf father - his hit-p  
 'Tulluu, as it seems to me, hit his father'.

- (ii)? [Tulluu-n [abbaa - saa [akka na-itti-fakkaat-u] rukkut-e]]  
<sub>S</sub>T-nom <sub>VP</sub>father - his as me to seem-impf hit-pf.  
 Literally, 'Tulluu his father, as it seems to me, hit'.

- (c) (i) [Tulluu-n [dugumaa-n] [barisiisaa hin-ta?-a]]  
<sub>S</sub>T-nom truth in <sub>VP</sub>teacher am become-impf  
 'Tulluu will certainly become [a] teacher'.

- (ii)? [Tulluu-n [barisiisaa [ḍugumaa-n] hinta?-a]]  
 S<sub>T-nom</sub> VP<sub>teacher</sub> truth-in cm-become-impf  
 'Literally, 'T teacher, certainly will become'.

The structures in (ii) are marked though they may not be excluded as being ungrammatical. In each case, the NP is followed by a pause, as the comma shows. In copular structures, the adverbial /ḍugumaa-n/ 'certainly' cannot occur between the verb and the predicate NP. The structures below are illustrative of this.

- 22(a) [Tulluu-n [ḍugumaa-n] [gooftaa-ḍa]]  
 S VP<sub>lord</sub> is  
 T-nom truth-in lord is  
 'Tulluu is certainly a 'lord'.

- (b)\* [Tulluu-n [gooftaa [ḍugumaa-n] - ḍa]]  
 S VP<sub>lord</sub> truth-in is  
 T-nom lord truth-in is

- (c)\* [Tulluu-n [gooftaa [ḍugumaa-n] tur-e]]  
 S VP<sub>lord</sub> truth-in be-pf.  
 T-nom lord truth-in be-pf.

Such structures illustrate the extreme case where an NP can be bound to the verb which subcategorizes it in forming a syntactic unit. This would not have been the case if Oromo were a non-configurational language as scrambling is a feature of such languages.

From the data observed thus far, the most plausible conclusion to draw would be that this language has a VP, for in all the cases observed the verb and its preceding NP form a string which meets Radford's (1981:69) definition of a constituent which runs as follows:

- A given string of elements is a constituent just in case it has one or more of the following properties:
- (i) It behaves distributionally as a single structural Unit - i.e. it recurs as a single unit in a variety of other sentence positions.
  - (ii) It can be co-ordinated with another similar string.
  - (iii) It does not readily permit intrusion of parenthetical elements internally...
  - (iv) It can be replaced by, or serve as the antecedent of, a proform.
  - (v) It can be omitted, under appropriate discourse conditions.

As has been shown throughout, strings like /abbaasaa rukkut-/ 'hit his father' do meet these conditions, which means that they are VPs. If this is the case, then it has to be concluded that Oromo is a configurational language.

As stated earlier, Owens' proposal is based on the analysis of causatives. Causativization as a morphological process has the effect of increasing the number of the internal arguments of verbs. A transitive verb such as /miiçç-/ 'wash' which strictly subcategorizes only one argument, can get an additional argument whenever it has the causative affix /-siis-/ This will be dealt with in due course in some detail in Chapter Three, but for the purpose of the argument here, let us compare the following:

23(a) [Tulluu-n wayaa miiçç-e]  
<sup>S</sup><sub>T-nom.</sub> clothes wash-pf.  
 'Tulluu washed clothes'.

(b) [Tulluu-n Dabalaa wayaa miiçç-isiis-e]  
<sup>S</sup><sub>T-nom.</sub> D-acc clothes wash-cs-pf.  
 'Tulluu caused Dabalaa to wash clothes'.

In structures such as (23b), the internal argument which is the farthest from the verb may be optional since structures such as (c) below are possible:

(c) [Tulluu-n wayaa miiçç-isiis-e]  
<sup>S</sup><sub>T-nom.</sub> clothes wash-cs-pf.  
 'Tulluu caused (someone) wash clothes', or  
 'Tulluu got clothes washed'.

But the NP /wayaa/ 'clothes' which is subcategorized in accord with the inherent property of the verb /miiçç-/ cannot be so omitted since such a structure as (d) would be only marginally acceptable.

- (d)? [Tulluu-n Dabalaa miičč-isiis-e]  
<sup>S</sup>  
 T-nom. D-acc. wash-is-pf.  
 'Tulluu caused Dabalaa to wash'.

The same would be true with structures of causatives built on intransitive verb stems if the complement had been missing.

- 24(a) [bišaan-i damf-e]  
<sup>S</sup>  
 water-nom. boil-pf.  
 '(The) water boiled'.
- (b) [Tulluu-n bišaan damf-is-e]  
<sup>S</sup>  
 T-nom. water-acc. boil-cs-pf.  
 'Tulluu boiled [the] water'.
- (c)? [Tulluu-n damf-is-e]  
<sup>S</sup>  
 T-nom. boil-is-pf.  
 'Tulluu boiled'.

As the situation in (23-24) shows, it may be possible to say in general terms that no argument of a verb is subject to omission. Strictly speaking, however, one may say that the left-most argument of a transitive-based causative verb may be omitted as (23c) indicates. But this induces us only to make distinctions between types of arguments but not to say that such arguments do not fall into configurations with the verbs. Both types which we may call 'inherent' and 'acquired' arguments, form together with the verb a single structural unit which satisfies all the conditions of constituency we have referred to earlier.

If the arguments presented thus far are valid, then, the base rule for Oromo should be as follows (subject to changes to be made subsequently, see 5.3):

II S → (NP) VP

Assuming this to be correct, then the next thing we need to consider is the possible hierarchies within constituents and to determine the value



of  $n$  in  $X^n$ . The rest of the study is in the main about this. For purposes of ease of exposition the study is divided into the following chapters.

The chapter which follows immediately deals with the identification of  $X$ , which is an abstraction of the possible major lexical categories of the language. Chapter Three examines the minimal projections of  $X$ , whereas Chapter Four discusses its intermediate and maximal projections. These two chapters will determine the value of  $n$ . The fifth chapter will concentrate on the internal structures of two types of clausal complements in the light of the discussions in Chapters Three and Four, together with a discussion on the rule 'move  $\alpha$ ' and the principles governing it. Finally, we will have a chapter on the specifier of  $X$  and a summary of the major points discussed throughout the study. This is followed by an appendix of the vocabulary items used in the illustrative structures throughout the study.

#### 1.4 Transcription

The transcription used throughout is largely systematic phonemic (i.e., it is relatively morphophonemic). Vowel and consonant length is indicated by doubling the letter symbols. In nouns lengthening of a stem final vowel shows the genitive relationship.

Although Oromo is a tonal accent language, this has not been included in the transcription for it has no direct relevance for the present purpose.

NOTES TO CHAPTER ONE

1. He also calls this rule as function mapping rule.
2. Actually recent work on Japanese syntax has shown that there is a VP in this language (cf. Shishido, M., 1985), as quoted in Nagai, N. (1985).
3. This does not mean that adjacency is strictly observed in all cases. Accusative case assignment does not seem to obey this condition (cf. Chapter 5).
4. This element /hin-/ appears as a prefix to main verbs in declarative clauses. It seems to be similar to the Arbore /?anʋ?in/, which Hayward (1985) calls preverbal selector. For the present purpose I will call it simply a clause marker (cm) though it might be argued that it is a kind of complementizer (cf. Chapter Five).
5. It may be possible for a proform to have splitting antecedents in which case it gets its reference from two sources (cf. Chomsky 1981).

CHAPTER TWOLEXICAL CATEGORIES2.0 Introduction

In this chapter the lexical categories of Oromo will be identified and subsequently classified into types and sub-types. Both the identification and the classification will mainly be based on syntactic facts. Morphological evidence will be cited as supplementary support for arguments for which the syntactic evidence appears insufficient.

The identification is necessary since the categorial rules which we will be formulating throughout the chapters are the syntactic expression of a set of lexical units. It is the development of such basic units into syntactic categories that the categorial component deals with; which means that for an adequate description of the grammar of a language, the identification of such basic units and the classification of them into sets of categories is absolutely essential. In other words, in order to formulate a categorial rule that expands a syntactic category such as, for example, an NP, we have to make sure first that there is a lexical category N distinct from any other category or sets of categories.

From the descriptions made by early grammarians, such as Hodson and Walker (1922), Moreno (1939), Nordfeldt (1947), etc., one may get the impression that Oromo has all the categories known to exist. The description of such grammarians with respect to categories could be said to be based largely on semantic notions, although some have tried to take formal properties into account in their classifications of forms into sub-classes. Moreno (1939:98), for example, recognizes only one category which he calls *particelle* (=Particle) for what the others would consider as independent categories of adverbs, prepositions, conjunctions and interjections.

Formally the individual items in such "categories" are characterized by their having no inflectional or derivational morphology. In other words, they belong to a class which, in contrast to other classes, is closed or unproductive.

In our attempt to establish the type of lexical categories that characterize Oromo, we will argue in favour of Moreno's attempt to use formal criteria for the set of categories he has established.

The identification of lexical items and their classification into categories involves recognizing forms which recur throughout a text or a running discourse as independent lexical units having distinct phonetic shapes and meaning. Those items "that have essentially the same distribution and that recur as a structural unit in a variety of different sentence positions and sentence types" may then be recognised as belonging to a category of their own as distinct from "other items which are mutually substitutable in other positions in the same or different structures in which the former are excluded" (Radford 1981:48). In other words, the classification of forms into form classes or categories takes into account the positions where the forms in question either co-occur or substitute for one another in structures of sentences.

Each such class of items may have a number of subdivisions which is based again on facts pertaining to distributional or formal irregularities, or on deviations from what is understood to be characteristic of the class as a whole. It is in the light of such facts that we will attempt to establish (or re-examine) the lexical categories of Oromo.

## 2.1 Nominals

Forms which can occur in the position of /hoolaa/ 'sheep' in structures of the type in (1) will be considered as belonging to the category of nouns.

- 1(a) [[hoolaa] bit-uu-n] gaarii-ḍa  
 sheep buy-to-nom. good-is  
 'To buy/Buying sheep is good'.
- (b) [[hoolaa] bay?ee  
 sheep many  
 'Many sheep'.
- (c) [[hoolaa] kana]  
 sheep this  
 'This sheep'.
- (d) [akka hoolaa]  
 'I like sheep'.

In the structures in (1) /hoolaa/ 'sheep' may be replaced by such forms as /farda/ 'horse' or /mana/ 'house' but not by others like /guddaa/ 'big' or /deema/ 'go'. Hence (2), but not (3), is grammatical.

- 2(a) [[farda] bit-uu-n] gaarii-ḍa  
 horse buy-to-nom. good-is  
 'Buying horse is good'.
- (b) [[mana] bay?ee]  
 house many  
 'Many houses'.
- (c) [akka [fardaa]]  
 'Like horse'.
- 3(a)\* [[guddaa] bit-uu-n] gaarii-ḍa<sup>1</sup>  
 big buy-to-nom. good-is
- (b)\* [[deema] bit-uu-n] gaarii-ḍa  
 go buy-to-nom. good-is
- (c)\* [akka [deema]]  
 like go.

Personal and interrogative pronouns may also be included in the category since structures like those in (4) are grammatical.

- 4(a) [akka [isaa]]  
like him
- (b) [akka [iʃii]]  
like her
- (c) [akka [eeññu]]  
like who
- (d) [[maal] -in]  
what with.

But they do not occur in all of the positions indicated for /hoolaa/ 'sheep' in (1). In this respect, they are similar to proper nouns which are also restricted to certain positions.

- 5(a) [[fard-i] kun-i] guddaa-ḍa  
horse-nom. this-nom. big-is  
'This horse is big'.
- (b)\* [[at-i] kun-i] guddaa-ḍa  
you-nom. this-nom. big-is
- (c)\* [[Tulluu-n] kun-i] guddaa-ḍa  
T-nom. this-nom. big-is.
- 6(a) [[fard-i] guddaa-n] du?-e  
horse-nom. big-nom. die-pf.
- (b)\* [[at-i] guddaa-n] du?-e  
you-nom. big-nom. die-pf.
- (c)\* [[maal-i] guddaa-n] du?-e  
what-nom. big-nom. die-pf.
- (d)\* [[Tulluu-n] guddaa-n] du?-e  
T-nom. big-nom. die-pf.

The ungrammatical structures suggest that pronouns and proper nouns cannot replace nouns like /farda/ 'horse' in positions preceding modifiers or specifiers. The same type of substitutional restrictions exist between forms like /farda/ 'horse' and others such as /deemuu/ 'going/to go' in some

positions. Hence (7b) but not (8b) is possible.

- 7(a) [fard-i] gaarii-ḍa  
horse-nom. good-is  
'Horse is good'.
- (b) [deem-uu-n] gaarii-ḍa  
go-to-nom. good-is  
'Going/to go is good'.
- 8(a) [[fard-i] guddaa-n] gaarii-ḍa  
horse-nom. big-nom. good-is  
'(A) big horse is good'.
- (b)\* [[deem-uu-n] fagoo-n] gaarii-ḍa  
go-to-nom. far-nom. good-is

But in the position of /farda/ 'horse' in (7a) above, all the forms considered so far freely substitute for one another. This is indicated in (9) below.

- 9(a) [Tullu-n] gaarii-ḍa  
T-nom. good-is  
'Tullu is good'.
- (b) [at-i] gaarii-ḍa  
you-nom. good-is  
'You are good'.
- (c) [ǰira-ačč-uu-n] gaarii-ḍa  
exist-mid-to-nom. good-is  
'Living is good'.

Taking their syntactic similarities into account, we will consider all such forms as sub-classes of one major category. We will use the term *nominal* to refer to the category, and the terms *nouns*, *pronouns*, *infinitives*, etc., to refer to the sub-classes when such distinctions are necessary.

2.2 Verbs

Forms which occur in clause-final positions belong to a category which is distinct from that of nominals. Consider the following examples:

- 10(a)      [Tulluu-n      farda      bit-e]  
               <sup>S</sup>  
               T-nom.      horse      buy-pf.  
               'Tulluu bought a horse'.
- (b)        [Tulluu-n      kaleessa      duf-e]  
               <sup>S</sup>  
               T-nom.      yesterday      come-pf.  
               'Tulluu came yesterday'.
- (c)        [Tulluu-n      deeraa-da]  
               <sup>S</sup>  
               T-nom.      tall      -is  
               'Tulluu is tall'.

No forms other than those belonging to this category can occur in the position indicated for /bit-/ 'buy', for example, since structures such as those in (11) are ungrammatical.

- 11(a)\*      Tulluu-n      farda      [nama]  
               T-nom.      horse      man
- (b)\*        Tulluu-n      farda      [guddaa]  
               T-nom      horse      big

On the basis of the type of constituents they are associated with, verbs may be divided into a number of sub-classes. Anticipating the discussions about such sub-classes in the next chapter, we will use the term verbal to refer to the category as a whole.

The two categories, nominals and verbals, are central to the syntax of any language. They constitute what Lyons (1977:430) calls the nucleus of any proposition. They are hence believed to belong to the strong universals of human language. This is in contrast to the position of other categories which a particular language may or may not have as independent classes. Such categories include adjectives and adverbs.



Using the same type of syntactic devices we have employed in the identification of the two major categories, we will try to answer the question whether or not Oromo has such peripheral categories.

### 2.3 Adjectives

In order to recognize a category adjective on a par with that of nominals or verbals, we need to have elements whose distribution is different from those of verbals and nominals. In other words, there must be a position in a constituent structure which is exclusively for adjectives.

One such position in a clause is the slot following the noun /nama/ 'man' in (12) below:

12.           [Tulluu-n   [nama]guddaa]]   hin-beek-a  
               <sup>S</sup><sub>T-nom</sub>           <sup>NP</sup>   man   big                   cm-know-impf.  
               'Tulluu knows a big man'.

In the position of /guddaa/ 'big' above, verbals cannot occur without the structure being ill-formed, because as stated earlier, their position is clause-final. In this position only forms like /gaarii/ 'good', or /sooressa/ 'rich' can occur as shown in (13) below:

- 13(a)           [Tulluu-n   [nama   [gaarii]]   hin-beek-a]  
               <sup>S</sup><sub>T-nom.</sub>           <sup>NP</sup>   man   good                   cm.-know-impf.  
               'Tulluu knows a good man'.
- (b)           [Tulluu-n   [nama   [sooressa]]   hin-beek-a]  
               <sup>S</sup><sub>T-nom</sub>           <sup>NP</sup>   man   rich                   cm.-know-impf.  
               'Tulluu knows a rich man'.
- (c)\*           [Tulluu-n   [nama   [bit-e]]   hin-beek-a]  
               <sup>S</sup><sub>T-nom.</sub>           <sup>NP</sup>   man   buy-pf.               cm.-know-impf.

In some types of structures, nouns may occur in the position of the adjectives in (13). Consider the following, for example:

- 14(a)           [Tulluu-n   [nama   [Wallaggaa]]<sup>2</sup>   arg-e]  
               <sup>S</sup><sub>T-nom.</sub>           <sup>NP</sup>   man   of-Wallaggaa   see-pf.  
               (literally, 'Tulluu saw a Wallaggaa man' (A man from Wallaggaa)).

- (b) [Tulluu-n [afaan [Oromo]] hin-beek-a]  
 S<sub>T</sub>-nom. NP<sub>mouth</sub> of-Oromo cm.-know-impf.  
 (literally, 'Tulluu knows mouth of Oromo',  
 'Tulluu knows the Oromo language'. .

Such structures may suggest that nouns and adjectives have similar distributions and hence they may be treated as belonging to one major category. Before we adopt this as a plausible conclusion, we need to consider a number of other positions and check if they substitute for each other in such positions as well.

- 15(a) [Tulluu-n [bay?ee [deeraa]] -da]  
 S<sub>T</sub>-nom very tall -is  
 'Tulluu is very tall'.  
 (b)\* [Tulluu-n [bay?ee [nama]] -da]  
 S<sub>T</sub>-nom. very man is.

In structures such as (15) only adjectives can occur following the degree word /bay?ee/ 'very'. The ungrammaticality of (15b) illustrates this. In the same manner, nouns but not adjectives can occur preceding specifiers such as demonstratives or numerals. Consider the following:

16. i(a) [Tulluu-n [nama [kana]] arrabs-e]  
 S<sub>T</sub>-nom NP<sub>man</sub> this insult-pf.  
 'Tulluu insulted this man'.  
 (b)\* [Tulluu-n [guddaa [kana]] arrabs-e]  
 S<sub>T</sub>-nom. big this insult-pf.  
 ii(a) [Tulluu-n [nama [lama]] arg-e]  
 S<sub>T</sub>-nom NP<sub>man</sub> two see-pf.  
 'Tulluu saw two men'.  
 (b)\* [Tulluu-n [guddaa [lama]] arg-e]  
 S<sub>T</sub>-nom. big two see-pf.

Furthermore, nouns but not adjectives can occur in subject or object positions as we can gather from the following structures:

17. i(a) [[nam-ni] [du?-e]  
 S man-nom. die-pf.  
 '(A) man died'.
- (b)? [[guddaa-n] du?-e<sup>3</sup>]  
 S big-nom. die-pf.  
 ?'big died'.
- ii(a) [Tullu-n [hoolaa] bit-e]  
 S<sub>T</sub>-nom. sheep buy-pf.  
 'Tulluu bought a sheep'.
- (b)? [Tulluu-n [guddaa] bit-e<sup>4</sup>]  
 S<sub>T</sub>-nom big buy-pf.  
 'Tulluu bought big'.

In addition to the syntactic differences noted above, there are also morphological features which distinguish adjectives from nouns. Such features include gender markers. Only adjectives are characterized by the presence of gender markers. Observe the paradigms below:

18.	<u>mas.</u>	<u>fem.</u>	<u>gloss</u>
	gurraa-čča	gurraa-ttii	'black'
	daala-čča	daala-ttii	'grey'
	soore-ssa	soore-ttii	'rich'
	ham-aa	ham-tuu	'evil'
	ḍeer-aa	ḍeer-tuu	'tall'
	gudd-aa	gudd-oo	'big'
	furd-aa	furd-oo	'fat'

In addition to this, adjectives but not nouns reduplicate their initial syllables to show number. This is again demonstrated by the examples below:

19.	<u>sg.</u>	<u>pl.</u>	<u>gloss</u>
	gurraačča	gu-ggurraačča	'black'
	ḍeeraa	ḍe-ḍḍeeraa	'tall'
	diimaa	di-ddiimaa	'red'
	ḡabaa	ḡa-ḡḡabaa	'strong'.

In nouns the plural is indicated by the suffix /-oota/.

In Baye (1981) I argued that adjectives and nouns could be treated as sub-classes within the general category of substantives. This was based on some morphological similarities that the two categories seem to share. For example, both exhibit the feature case by the same affix /-n/. Furthermore, adjectives may use the suffix /-oota/ in addition to or instead of the type of reduplication described above in connection with the feature number, as in the following:

20.	<u>acc.</u>	<u>nom.</u>	<u>gloss</u>
	hoolaa	hoolaa-n	'sheep'
	guddaa	guddaa-n	'big'
	<u>sg.</u>	<u>pl.</u>	
	nama	nam-oota	'men'
	gurraačča	guggurraačča/ gurraačč-oota/ gu-ggurraačč-oota	'black' 'blacks'

Such apparent similarities are, however, attributable to agreement which holds between heads and non-heads in structures of modification. As shown in earlier examples, adjectives and specifiers agree in number, gender and case with their heads in NP structure. In other words, such features are basically characteristic of nominals and that other elements acquire them only if they form syntactic units with nouns. The argument becomes weak particularly in the face of the syntactic facts we have observed. A more reasonable approach would have been one which treated them as distinct categories.

Another question which we may need to pay attention to is whether or not adjectives belong to the category of verbals. This is particularly important given the fact that languages which in the terminology of Dixon (1977:20) are adjective-deficient tend to use intransitive verbs to express all sorts of adjectival concepts.

Oromo does not seem to belong with such languages. It has independent adjectival forms for all the attributes<sup>5</sup> Dixon mentions. There is, however, one problem that emerges from the syntactic criterion we have set up for distinguishing verbals from non-verbals. It has been stated that verbals occur in clause-final position, which implies that no other categories can occur in this position. But in structures such as the following, it appears that adjectives can also occur in this position without the structures being ill-formed.

- 21(a) [Tulluu-n gurraačča]  
<sub>S</sub>T-nom. tall-is  
 'Tulluu is tall'.
- (b) [Tulluu-n sooressa]  
<sub>S</sub>T-nom. rich-is

The question that arises from consideration of structures such as these relates to the syntactic status of the final elements. We have to prove that they are predicates having Tulluu as an argument or that they are complements of a phonetically empty copulative verb. From other copular structures it appears that such elements can meaningfully be analysed as complements rather than as predicates, i.e., verbs. Consider the following examples:

- 22(a) [Tulluu-n deeraa-ḍa]  
<sub>S</sub>T-nom tall-is  
 'Tulluu is tall'.
- (b) [Tulluu-n guddaa-ḍa]  
<sub>S</sub>T-nom. big-is  
 'Tulluu is big'.
- (c) [Tulluu-n hamaa-ḍa]  
<sub>S</sub>T-nom. bad-is  
 'Tulluu is bad/evil'.

In these and other similar structures, there is an overt copula /ḍa/ following the adjectival complements. Such structures would be ill-formed if they occurred without this verb. The structures in (21) may be said to have similar representations underlyingly. There is some evidence in support of this claim. The negative counterparts of both (21) and (22) are identical.

23(a) [Tulluu-n gurraaččaa miti<sup>6</sup>]  
 S T-nom. black not-is  
 'Tulluu is not black'.

(b) [Tulluu-n ḍeeraa miti]  
 S T-nom tall not-is.

If the forms in question in (21) were verbals, then their negative forms would not have contained /miti/ but /hin-n-/, as is always the case with other verbs, and that would have caused ungrammaticality as in (24b-c).

24(a) [Tulluu-n hin-ḍuf-n-e]  
 S T-nom. neg-come-neg-pf.  
 'Tulluu did not come'.

(b)\* [Tulluu-n hin-gurraačča-n-e]  
 S T-nom. neg-black-neg-pf.

(c)\* [Tulluu-n hin-sooressa-n-e]  
 S T-nom. neg-rich-neg-pf.

Such structures as (21) are possible only in the imperfective aspect. In the corresponding perfective aspect, there is always a form in the position where we would have expected /ḍa/ 'be'.

25(a) [Tulluu-n ḍeeraa tur-e]  
 S T-nom. tall be-pf.  
 'Tulluu was tall'.

(b) [Tulluu-n gurraačča tur-e]  
 S T-nom. black be-pf.  
 'Tulluu was black'.

- 25(c) [Tulluu-n sooressa tur-e]  
<sup>S</sup>T-nom. rich be-pf.  
 'Tulluu was rich'.

Notice that if forms like /ḍeeraa/ 'tall', or /gurračča/ 'black', were verbals, they would have had the various spectual features marked on them. In other words, the structures in (25) would have been ill-formed. But they are not. In fact the opposite would have been true if they had occurred with the adjectives showing the aspectual features. Observe (26), for example, corresponding to (25 a) .

- 26.\* [Tulluu-n ḍeer-e]  
<sup>S</sup>T-nom tall-pf.

Structures such as this would be perfectly grammatical if they occurred in the form in (27):

- 27(a) [Tulluu-n ḍeer-at-e]  
<sup>S</sup>T-nom. tall-mid-pf.  
 'Tall got tall'.
- (b) [Tulluu-n gurraáčč-at-e]  
<sup>S</sup>T-nom. black-mid-pf.  
 'Tulluu got black'.
- (c) [Tulluu-n ḵaba-at-e]  
<sup>S</sup>T-nom. strong-mid-pf.  
 'Tulluu got strong'.

Such forms are not adjectives, however. They are verbs derived from their corresponding adjectival sources. The manner of the derivation and the categories involved will be discussed in the next chapter. For the moment, we only need to note that the aspectual element /-e/ is attached to the verbal stems /ḍeer-at-/, /gurraáčč-at-/, etc., as we would expect, but not to the adjectival roots /ḍeer-/ 'tall', or /gurračča-/ 'black'.

If we are on the right track so far, then the next thing we need to do is explain the contexts in which copular structures are possible without a

surface copulative verb. First of all, it is not only adjectival complements of the type in (21) which occur without a following copula; certain nouns also behave like this (characterized by the same context). This is evidenced by the following structures.

- 28(a) [Tulluu-n nama]  
 S<sub>T-nom.</sub> man-is  
 'Tulluu is (a) man'.
- (b) [kun-i mana]  
 S<sub>this-nom.</sub> house-is  
 'This is (a) house'.

But notice also the following:

- 29(a) [Tulluu-n barsiisaa-ḍa]  
 S<sub>T-nom.</sub> teacher-is  
 'Tulluu is a teacher'.
- (b) [Çaaltuu-n dubart-ii-ḍa]  
 S<sub>Ç-nom.</sub> woman-is  
 'Çaaltuu is (a) woman'.

These structures would be ungrammatical if they occurred without the copula /ḍa/, just as in the same way those in (28) would have been ill-formed if they had occurred with it. If we argue that some adjectives are verbals, we have also to argue the same for some nominals, since they too appear in positions which appear to be clause-final. This would lead to a lot of problems for which neither syntactic nor semantic solutions could have been provided.

The simplest thing to do is to assume the presence of /ḍa/ in the underlying representations of all such structures and account for its absence from surface structures in terms of some low-level rules operating in the derivations of such clauses. In surface structures this element occurs as a kind of suffix attached to its complement. And it is only in some



instances that it is absent. This suggests that we might need to examine the phonological shape of those complements in order to tell where the copula does and where it does not appear. In all the structures considered, it is when the copula occurs following a complement ending in a short vowel that it disappears. In other words, the conditioning factor is phonological.

In surface structures, the element appears as an affix. It does not seem plausible to assume that it is an affix at the underlying level of representation particularly in view of the fact that other copulative forms such as /tur-/ or the negative /miti/ occur as independent elements separated from their preceding complements. We may argue that there is a copula encliticization rule which attaches /ḍa/ to the complement. This is followed by one of two processes which results in the disappearance of the copula from surface structures of the type (21) or (28). It may be argued that there is a rule which deletes the copula whenever the complement onto which it has been encliticized is one which ends in a short vowel. There is some phonological evidence which may be cited in support of this claim. This comes from the form of the complement. Following the deletion of the copula, the complements seem to lengthen their final vowel. Let us observe (21 a) repeated here as (30):

30.            [Tulluu-n    gurraačča    ḍa]====>  
               <sup>S</sup>T-nom.    black        is
- [Tulluu-n    gurraačča-ḍa]====>  
               T-nom        black        is
- [Tulluu-n    gurraaččaa]====>  
               T-nom.        black
- [Tulluu-n    gurraččaa]  
               T-nom.        black-is
- 'Tulluu is black'.

The same may be said to be true of the structures in (28) where the complements occur without /ḍa/ 'is'.

There is, however, a problem with this kind of argument. According to Chomsky and Lasnik (1977) no element with semantic content can be deleted, which means that we cannot explain the absence of /ḍa/ in terms of such a rule. We may argue that the copula has no semantic content and to this effect we may even cite some languages which have no copulative verbs. But even this kind of argument does not seem to help us either because Chomsky (1981) further constrains the rule by stating that no element with phonetic content can be deleted without recoverability. The analysis in (30) is a clear violation of this constraint which Chomsky assumes to be universal. We have, therefore, to look for an alternative analysis.

We have said that there is a lengthening of the final vowel of the adjectival or nominal complement following the deletion of /ḍa/. We may argue that this may make the deletion recoverable, or on the other hand, we may argue that the change in the quality of the vowel is not a result of deletion, but that of reduction. We may say that the copula /ḍa/ is not deleted but reduced to /-a/. It is as a result of this vowel that the complements appear to have lengthened their final vowel. In other words, what we have is a rule which deletes part of an item and attaches the remaining part to a preceding element.

The process is not idiosyncratic. It takes place in clefted adpositional phrases as well. Consider the following for example:

- 31(a) [farda ḍeeraa-ḍa-n]  
           horse tall-is-by  
           'It is by (a) tall horse that...'

- (b) [farda gurraaččaa-n]] /<gurraačča-ḍa-n/  
 horse black-is-by  
 'It is by a black horse that...'

In (a) /ḍeeraa/ 'tall' ends in a long vowel. The copula /ḍa/ appears in its full form. In (b) /gurraačča/ 'black' ends in a short vowel. The copula is thus reduced to /-a/ and appears as such. (Cf. Saeed (1982) for a similar kind of reduction in Somali.)

From the data presented thus far, and from the explanation given for structures which lack a copulative verb in surface structures, a most plausible conclusion would be one which recognizes a category adjective on a par with the other two major categories we have already established.

#### 2.4 Adpositionals

These are elements whose syntactic relation is with NPs or clauses. They differ from all the three categories we have recognized so far, both in their forms and distributions. They do not occur in any of the positions associated with each of the other categories, nor do they show any of the morphological features the others exhibit. As has been stated earlier on, the other categories have inflectional affixes which designate such grammatical features as number gender, aspect, etc. Adpositionals do not have any such features. They belong to what are called closed (as opposed to open) classes. In Oromo only the latter have such morphological features.

In constituent structures, their positions may precede or follow the category with which they form a syntactic unit. On the basis of this, they may be referred to by the less general terms preposition or postpositions. The following are examples of the former:

- 32(a) [Tulluu-n [waaye [ofi-saa]] dubb-ačč-uu hinjjaalat-a]  
 S T-nom. about NP head-his talk-mid-to cm.-like-impf.  
 'Tulluu likes to talk about himself'.
- (b) [Tulluu-n [gara [konna-saa]] deem-uu hin-barbaad-a]  
 S T-nom. to NP farm-his go-to cm.-like-impf.  
 'Tulluu wants to go to his farm'.

In (32) /waaye/ 'about' and /gara/ 'to' occur preceding the nominals.

In the structures below we have instances of adpositions occurring after nominals.

- 33(a) [Tulluu-n [[abbaa-saa] wajjin] duf-e]  
 S T-nom. NP father-his with come-pf.  
 'Tulluu came with his father'.
- (b) [Tulluu-n [[šiiġġuṭi] - dan]<sup>7</sup> leenča ajjjes-e]  
 S T-nom. NP pistol-with lion kill-pf.  
 'Tulluu killed a lion with a pistol'.

In both (32) and (33), the adpositional elements cannot occur without the preceding or following nominals respectively, nor can they be replaced by elements belonging to any of the other categories.

In the examples above, we have seen pre-/post-positions occurring with nominals. In what follows we have examples of them occurring with clauses:

- 34(a) [[erga [Tulluu-n deem-ee]] Fayyiisaa-n duf-e]  
 S S after T-nom. go-pf. F-nom. come-pf.  
 'After Tulluu went, Fayyiisaa came'.
- (b) [[akka [Tulluu-n deem-ee]] Fayyiissa-n duf-e]  
 S S as T-nom. go-pf. F-nom. come-pf.  
 'As (soon as) Tulluu went Fayyiisaa came'.
- (c) [Tulluu-n [[mana-saa gub-ačč-uu-saa-ti] -f] bay?ee  
 S T-nom S house-his burn-mid-to-his-is-for very  
 hin-gadde]  
 cm.-be-sad.  
 (literally), 'Tulluu is sad because of the burning of his house'.

The structures in inner brackets are subordinate clauses of adverbial functions. The elements which occur with such clauses have often been called subordinate conjunctions (Hodson and Walker 1922:116). But these same elements can also occur with nominals as the following examples demonstrate:

- 35(a) [boodee [saʔaati tokkao]] deem-iil  
 S after NP hour one go-imp.  
 'Go after one hour'.
- (b) [Tulluu-n [akka [abbaa-saa]] deeraa-ḍa]  
 S T-nom. as NP father-his tall-is  
 'Tulluu is tall like his father'.
- (c) [aannan-ni [[namaa] -f] gaarii-ḍa]  
 S milk-nom. NP man- for good is  
 'Milk is good for man'.

Such situations seem to suggest that there are no syntactic distinctions between pre-/post-positions and the so-called subordinative conjunctions. The same element is called pre-/post-position when it occurs with an NP and a subordinate conjunctive when it occurs with a clause. In other words, there is nothing inherent in it which makes it one but not the other, other than the clausal or non-clausal status of the category which it takes as its complement. If this is the deciding factor, then assuming with Chomsky (1970) and Jackendoff (1977) that NPs and clauses are similar both in their internal structures and in the type of syntactic rules they are subject to, we may argue that the elements which form structural units with them may as well be similar. In other words, if the distinction between NPs and clauses is so fine that they may be considered as one, it is possible to say the same about pre-/post-positions and conjunctions for the reason that they do not exist independent of their nominal or clausal complements. Hence adopting this position and borrowing a term

from Comrie (1981:85), we will continue to call pre-/post-positions and conjunctions adpositions, and we will also recognize only one category - the category of adpositionals - on a par with those of verbals, nominals and adjectivals.

Subordinate conjunctions thus absorbed into and treated as adpositions, we are now left with only a few co-ordinative conjunctions. Syntactically such elements do not form a structural unit with a single NP or a clause. This distinguishes them from adpositionals in general. They occur between two categories and as such any two categories whose categorial membership and structural level is the same. Consider the following examples:

36. i(a) [[Tulluu-fi Fayyiisaa-n] duf-an-i]  
<sub>S</sub> T. and F-nom. come-pl-pf.  
 'Tulluu and Fayyiisaa came'.

(b)\* [Tulluu-f duf-e]  
<sub>S</sub>T-and come-pf.

ii(a) [buddena ŋaat-e] --ett [bišaan duf-e]  
<sub>VP</sub> bread eat-pf-and water drink-pf.  
 '(He) ate bread and drank water'.

(b)? [buddena ŋaat-e] -ett [dug-e]  
<sub>V</sub> bread eat-pf-and drink-pf.  
 Ate bread and drank.

In (ib) /-f/ 'and' occurs with one NP and as a result the structure has turned out to be ungrammatical. In (iib) it occurs between a VP and a V rather than between two VPs. The result is again the same as that of (ib).

In all structures of NPs or VPs, with a co-ordinative conjunction, there is no head and non-head relationship between the conjunction and any of the conjuncts. This causes a problem for the theory of X-bar syntax which has been developed on the assumption that constituent structures are

headed and that the relationship between any two elements within a constituent structure is that of head and non-head. In the structures concerned, neither the conjunction nor the NP or the VP constitutes the head. Jackendoff (1977:50) considers such constructions as exceptions to the general phrase structure schema he has proposed. It has also been argued that co-ordinative conjunctions may be left aside as connectives, logical or pragmatic, essential in the analysis of discourse, since the type of relationship they show is one which exists across constituents but not within a constituent. Hence in the analysis of any conjoined structures one may disregard the (conjoining) elements by taking into account only the lexical elements which form the constituent within each conjunct. This position is adopted for the type of analysis envisaged here.

## 2.5 Adverbials

Adverbs are to verbs as adjectives are to nouns. Their function is to restrict the action(s) denoted by verbs to certain contexts. The contexts may be temporal, spatial, causal, etc. Mathews (1981:122) borrowing a term from Tesnière, calls them the 'circumstants' as opposed to the 'actants', the latter being restricted to designating the participants and their actions. In other words, adverbials may be treated as elements having the function of relating actors and actions to certain circumstantial contexts.

In what follows, we will examine a number of such contexts and the manner in which they get expressed.

### 2.5.1 Time Adverbials

What have traditionally been called adverbs of time can be grouped into the following two sets:

37 (a)	(h)amma	'now'
	kaleessa	'yesterday'
	har?a	'today'
	bor(u)	'tomorrow'
	dafinoo	'Monday'
(b) (i)	bara kana	
	year this	'this year'
	duur duur	
	before before	'long ago'
	bara baraa-n	
	year year-by	'forever'
	yaroo kana-tti	
	time this-at	'at this time'
	ʃalkaba-tti	
	beginning-at	'at the beginning'
(ii)	hamma hamma	
	now now	'frequently'
	taka takka	
	one one	'sometimes'
	guyya guyya-tti	
	day day-by	'daily'
	har?a bor(u)	
	today tomorrow	'always'

Those in set (a) and others like them are lexical in the sense that they are morphologically indivisible units. They denote a particular point in time. Their structural relationship is with verbs since their function is to relate the actions which the latter express to some point in time. Consider the following examples:

38(a)	[Tulluu-n [[{bor(u)}]]	hin-ḍuf-a]
	<sup>S</sup> T-nom. tomorrow	cm.come-impf.
	'Tulluu will come tomorrow).	



- 38(b) [Tulluu-n [[har?a]] [daadii hin-ḡug-u]]  
<sup>S</sup>T-nom. today mean neg.drink-impf.  
 'Tulluu will not drink mead today'.

But such forms do also occur in positions where nominals would be expected. The following are some examples:

- 39(a) [[har?-i] guyyaa gaarii miti]  
<sup>S</sup> today-nom day good not-is  
 'Today is not a good day'.
- (b) [[dafinoo-n] guyyaa hoʃii-ti]  
<sup>S</sup> Monday-nom. day of-work-is  
 'Monday is a working day'.

In (39), the forms in the inner brackets occur as subjects of their respective clauses. Morphologically this is indicated by their having the nominative case marker /-i~-n/. Since case is a feature of nominals, a possible conclusion about the forms in question would be to say that they are also nominals. This may be further substantiated by structures of the type in (40):

- 40(a) [aannan-ni kun-(i) [[boru-f] [gaarii hin-ta?-a]]]  
<sup>S</sup> milk-nom. this-nom. tomorrow-for good cm.become-impf.  
 'This milk will be good for tomorrow'.
- (b) [Tulluu-n [[har?aa-f] [birri lama hin-barbaad-a]]]  
<sup>S</sup>T-nom. today-for birr two m-want-impf.  
 'Tulluu wants two birr for today'.

In the above structures, both /boru/ 'tomorrow' and /har?aa/ 'today' occur with a following adpositional element. As stated earlier, adpositionals occur only with nominal or clausal complements, which means that the forms in question must be nominal for the structures to be well-formed.

Forms like /dafinoo/ 'Monday' can also occur as heads of relative clauses. This is possible only with forms belonging to the category of

nominals, but it is not the case for adverbials. Observe the following examples:

- 41(a) [Tullu-n [dafinoo [darb-e]] gara Gimbii deem-e]  
<sup>S</sup>T-nom. <sup>NP</sup>Monday <sup>S</sup>past-pf. to Gimbii go-pf.

(literally), 'Tulluu went to Gimbii on Monday which has passed'.

'Tulluu went to Gimbii last Monday'.

- (b) [Tulluu-n [dafinoo [duf-u]] hoolaa hin-bit-a]  
<sup>S</sup>T-nom. <sup>NP</sup>Monday <sup>S</sup>come-impf. sheep cm.buy-impf.

'Tulluu will buy sheep next Monday'.

Going back to those in set (b), we may treat them in the same manner we have treated those in set (a). The only difference between the two sets is the fact that those in set (b)(i) are phrasal whereas those in (i) are lexical NPs.

- 42(a) [Tulluu-n [[barana] [hoolaa hin-bit-u]]]  
<sup>S</sup>T-nom. year-this sheep neg.buy-impf.

'Tulluu won't buy sheep this year'.

- (b) [[barr-i kun-i] bara gaḍee-ḍa]  
<sup>S</sup> year-nom. this-nom. year bad-is

'This year is a bad year'.

These structures are parallel to those in (39). /bara-na/ 'this year' occurs in an adverbial position in (a) and in a nominal position in (b). Its function is also that of an adverb in the former and that of a noun in the latter.

Those in (b ii) are what are called frequency adverbs. Their function is to show the number of times an action takes place within a period of time. In this respect, they may be treated along the same lines as other forms which show degree or intensity. Compare the following examples:

- 43 (a)(i) [Tulluu-n [guyya-guyya [hin-kaat-a]]]  
<sup>S</sup>T-nom. <sup>VP</sup>day day cm.run-impf.

'Tulluu runs always'.

- 43 (a) (ii) [Tulluu-n [taka takka [hin-ḍuf-a]]]  
 S<sub>T-nom</sub> VP one one cm.come-impf.  
 'Tulluu comes sometimes'.
- b i [Tulluu-n [bayʔee furdaa] -ḍa]  
 S<sub>T-nom.</sub> AP very fat-is  
 'Tulluu is very fat'.
- ii [Tulluu-n [hoolaa bayʔee]<sup>8</sup> kab-a]  
 S<sub>T-nom.</sub> NP sheep many has-impf.  
 'Tulluu has many sheep'.

The frequency adverbs in (43 'a) are structurally related to the verbal heads just as in the same way /bayʔee/ 'very/many' is related to the adjectival and nominal heads in (b). In each case, what is indicated is the frequency, degree or quantity of an entity or of an attribute or an action. From this, we may infer that frequency adverbs are similar to degree or amount forms and hence they may be treated as belonging to the same category we shall propose for the latter.

Now going back to those forms in sets (a) and (b), we have said that they belong to the category of nominals. If this is so, then we have to answer a question concerning their functional status as adverbs. Nouns are characteristically understood as playing the roles of agents and patients. Syntactically this is reflected by their occurrences in subject and object positions. The position they occupy in those structures where they function as adverbs are positions where adpositional phrases or clauses of various adverbial functions are expected.

One possible way of responding to this situation is to assume that in the positions where they appear as adverbs, such nouns occur as complements of abstract adpositional elements. In other words, what appear in surface structures as NPs are headless adpositional phrases.<sup>9</sup>

If this assumption is plausible, then what we have as adverbs of time are adpositional phrases.

### 2.5.2 Place Adverbials

These include forms like the following:

44 i.	ačč(i)	'there'
	asi	'here'
	keessa	'inside'
	aalaa	'outside'
	ol(i)	'up'
	ǰala	'under'

Their position is as shown below:

45(a)	[Tulluu-n	[ačč(i)]	ǰira]
	<sup>S</sup> T-nom.	here	exist-impf.
	'Tulluu is here'.		
(b)	[Tulluu-n	[as(i)]	ǰir-a]
	<sup>S</sup> T-nom.	here	exist-impf.
	'Tulluu is here'.		

Such forms do also occur in the form they appear in in (ii) below:

(ii)	ačč-itti	'towards there'
	as-itti	'towards here'
	keessa-tti	'towards inside'
	ool-itti	'towards above'
	ǰala-tti	'towards under'

Both from their forms and glosses it seems quite obvious that these too are adpositional phrases, which means that forms like /as(i)/ and /ačč(i)/ 'there' are nominals and not adverbials since as we will observe in the next chapter, only the former can occur as complements of adpositional heads.

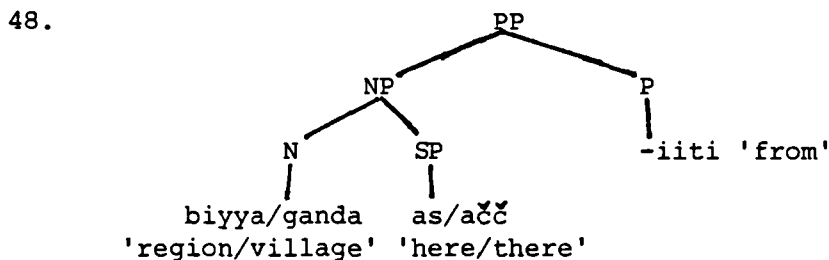
Structures such as those below where such forms occur in subject position may give further support to this claim.

- 46(a) [keess-i bal?aa-ḍa]  
 S<sub>inside-nom.</sub> good-is  
 '(The) inside is wide'.
- (b) [all-i ṣaggaa-ḍa]  
 S<sub>outer-nom.</sub> good-is  
 ?'(The) outer is good'.

However, forms like /as(i)/ 'here' have very restricted distributions. They cannot occur as heads of relative clauses or allow adjectives or specifiers to occur with them. This raises some doubts about their status as nominals. In fact, there are structures in which they occur as specifiers rather than as heads. Consider the following:

- 47(a) [Tulluu-n [biyya as-iiti] ḍuf-e]  
 S<sub>T-nom.</sub> Adp<sub>region</sub> here-from come-pf.  
 (literally), 'Tulluu came from here region';  
 'Tulluu came from this region'.
- (b) [Tulluu-n [ganda ačč-iiti] ḍuf-e]  
 S<sub>T-nom.</sub> Adp<sub>village</sub> there-from come-pf.  
 'Tulluu came from that village'.

The bracketed structures are adpositional phrases. The head is /-iiti/ 'from'. The rest constitutes the NP complements in which /biyya/ 'region' and /ganda/ 'village' occur as heads and /as/ 'here' and /ačč/ 'there' as specifiers. In other words, the internal structures of such constituents is as shown in the tree below:



In such structures, /as/ 'here' or /ačč/ 'there' can be replaced by the forms /kana/ 'this' and /sana/ 'that'. These are forms which as we shall argue in the next chapter, constitute a sub-class within the general class of specifiers.

- 49(a) [Tulluu-n [biyya kana-ti] duf-e]  
<sup>S</sup>T-nom. region this-from come-pf.  
 'Tulluu came from this region'.
- (b) [Tulluu-n [biyya san-iiti] duf-e]  
<sup>S</sup>T-nom. region that-from come-pf.  
 'Tulluu came from that region'.

From these and other similar structures a more plausible conclusion to draw would be that forms like /as/ or /ačč/ are specifiers and that structures like /ačč-iti/ and /as-iiti/ are reduced adpositional phrases derived from a full underlying representation of the type in (50):

50. [ [ [e] [as/ačč]] [-(i)iti]].  
 Adp NP SP p

The same may be said about forms like /aalaa/ 'outside', /klessa/ 'inside', etc. since structures such as the following are possible:

- 51(a) biyya aalaa-ti  
 region outside-from  
 'from a foreign land'.
- (b) mana klessa-ti  
 house inside-from  
 'from inside (the) house'.

However, in such structures /aalaa/ 'outside' or /klessa/ 'inside' may not be treated as specifiers if we restrict the term to deictics such as /kana/ 'this' and /sana/ 'that', or /as/ 'here' and /ačč/ 'there'. It might be argued that they are complements. But this is not very important. What is important here is that they are part of the NPs which occur as complements of the adpositional element /-iiti/ and that it is the adpositional phrase which functions as an adverb of place in structures such as (52):

52. [Tulluu-n [biyya aalaa-ti] duf-e]  
 S<sub>T</sub>-nom. land outside-from come-pf.  
 'Tulluu came from a foreign land'.

If what has been said so far is sound, then we may conclude that there are no lexical adverbs of place.

### 2.5.3 Manner Adverbials

These are forms connected with questions asking 'how?' rather than with questions asking 'when?' or 'where?'. They refer to the way an action has been carried out. In some cases, this may include reference to the means by which an action has been effected. The following are some examples:

- 53(a) [Tulluu-n [doksaa-n dubb-at-e]  
 S<sub>T</sub>-nom. Adp<sub>secret</sub>-in speak-mid-pf.  
 'Tulluu spoke secretly'.
- (b) [Tulluu-n [afɕaal-umaa-n̄] dubb-at-e]  
 S<sub>T</sub>-nom. Adp<sub>clever</sub>-ness-with speak-mid-pf.  
 (literally), 'Tulluu spoke with cleverness'.
- (c) [Tulluu-n [dug-umaa-n] dubb-at-e]  
 S<sub>T</sub>-nom. Adp<sub>true</sub>-ness-in speak-mid-pf.  
 'Tulluu spoke truly'.

The expressions of manner are adpositional phrases. The adpositional element is the postpositional enclitic /-n/.

It might perhaps be argued that this /-n/ is a derivational affix and that the forms in question are adverbs derived from nominal stems. The suggestion that they are derived adverbs is not implausible, but the idea that they are derived from nominal sources is difficult to believe. Semantically adverbs are related more to adjectives than to nouns since both of them are qualifying expressions of nouns and verbs. Hence, the kind of derivation we would expect is one which assumes adjectival rather than nominal sources. This can be verified by facts from other languages, such as English.

Other expressions of manner include what Hodson and Walker (1922:99) call balancing of verbs. This term refers to concatenating verbs. The following are some examples:

- 54(a) [Tulluu-n [daddaf-ee] duf-e]  
<sub>S</sub>T-nom. hurry-pf. come-pf.  
 (Literally), 'Tulluu having hurried came';  
 'Tulluu came quickly'.
- (b) [Tulluu-n [ʃab-eess-ee] hoʃʃ-et-e]  
<sub>S</sub>T-nom. strong-cs-pf. work-mid-pf.  
 (Literally), 'Tulluu having made strong worked';  
 'Tulluu worked hard'.

The elements within the inner brackets are verbs. This is easily deducible from the aspectual features which they exhibit, or from their clause-final positions in structures such as those below:

- 55(a) [ʃaaltuu-n mana-ʃii deem-uu-daaf [daddaf-t-e]]  
<sub>S</sub>ʃ-nom. house-her go-to-for hurry-f-pf.  
 'ʃaaltuu hurried to go to her house'.
- (b) [Tulluu-n muʃaa-saa [ʃab-eess-e]]  
<sub>S</sub>T-nom. child-his strong-cs-pf.  
 'Tulluu made his child strong'.

In either case, what is noticeable is that such forms are not adverbs though their function is adverbial. They may not be simple verbs either. They may be analyzed as subordinate clauses with a (pro)nominal subject, but without a subordinative conjunction. In other words, it might be argued that structures like (54a) are derived from underlying structures of the type of (56):

56. [Tulluu-n [ [e] [ [Pro daddafe]]] [duf-e]]  
<sub>S</sub>T-nom. Adp  $\bar{S}$  S hurry-pf. VP come-pf.  
 'Tulluu came hurried'.

Alternatively such structures might be considered to be conjuncts with the subject of /duf-/ 'come' deleted on identity with Tulluu. But this



does not seem to be the case because (1) there is no co-ordinative conjunction linking the conjuncts; (2) the relation between them is not chronological in the sense that the coming did not take place after the hurrying, but simultaneously, and (3) the interpretation of /daddaf-/ 'hurrying' is not independent of that of /ḍuf-/ 'come'. In other words, it is not intended to give the sense that Tulluu hurried but concerns the manner in which he did the coming.

Other adverbial expressions follow the same pattern. For example, reason and instrumental adverbials employ the same type of adpositional phrases or clauses as the following examples demonstrate:

57(a) [Tulluu-n [eeboo-(ḍa)an] leenča aḵḵees-e]  
 S<sub>T</sub>-nom Adp<sub>spear-with</sub> lion kill-pf.  
 'Tulluu killed a lion with a spear'.

(b) [Tulluu-n [waan ḍukkubsat-ee-f] gara mana koričča deem-e]  
 S<sub>T</sub>-nom. Adp<sub>because sick-be-pf-for</sub> to-house of-medicine go-pf.  
 'Tulluu went to hospital because he fell ill'.

The general situation as we have observed so far seems to suggest clearly that adverbial functions are not lexicalized. They are expressed in adpositional phrases or clauses. From this may follow a further conclusion that a lexical category adverb does not exist in this language. There is only a functional category which gets expressed in the form which has been described throughout this section.

This is not, however, as straightforward as it may have appeared. There are some elements which cannot be accounted for in the light of the discussions presented so far. These include forms like /irriigii/ 'perhaps'(?). Though they are insignificantly small in number compared to the host of adpositional phrases, their existence may be indicative of the existence of a category adverb, and to that extent we may even need to

recognize such a category. But such a category is not lexically productive since as we have observed throughout, the various adverbial functions receive their expression in terms of phrases and/or clauses. A better alternative would be to recognize a minor category for such forms and for others which do not have the potential for maximal projections. We will adopt this alternative in this study.

## 2.6 Specifiers

The categories we have established so far are major categories. They can occur as heads of constituents. Among the elements which they optionally select to form a maximal category are specifiers. Semantically these may be understood as being entity- or quantity-denoting elements. The following is simply a list of them, due to be discussed in greater detail in Chapter Six.

### 2.6.1 Articles

These are entity-denoting elements within the class of specifiers. Their syntactic relation is with nominals. They include the following:

- i. deictics: kana 'this'  
sana 'that'
- ii. pronominals:
  - a. possessives: koo 'my'  
kee 'your'  
etc.
  - b. interrogatives: kam(i) 'which'  
eeñnu 'whose'
  - c. indefinites: tokko 'alone'  
wan 'any'  
homaa 'none'

All of these are substitutable. As regards their position they follow the head, as the example below demonstrates:

- 58(a) [farda kana]  
 NP horse this 'This horse'.
- (b) [farda kam(i)?]  
 NP horse which 'Which horse'.
- (c) [farda tokko]  
 NP horse one 'A horse'.

### 2.6.2 Quantifiers

As stated above, these include all elements which refer to quantity or amount. Positionally they precede articles when both occur in the same noun phrase.

- 59(a) [farda lama]  
 NP horse two 'Two horses'.
- (b) [Tulluu-n [fardoota lama-n sana] bit-e]  
 S  
 T-nom. horse two ? those buy-pf.  
 'Tulluu bought those two horses'.

The following are some more examples of such phrases:

- 60(a) [hoolaa bay?ee]  
 NP sheep many 'Many sheep'.
- (b) [hoolaa homaa]  
 NP sheep no 'No sheep'.
- (c) [hoolaa ṭinnoo]  
 NP sheep few '(A) few sheep'.

The class may be extended to include expressions of degree or intensity, which also involve the same forms /bay?ee/ and /ṭinnoo/.

- 61(a) [Tulluu-n [[bay?ee] deeraa] -da]  
 S  
 T-nom. AP very tall -is  
 'Tulluu is very tall'.
- (b) [Tulluu-n [[ṭinnoo] furdaa] -da]  
 S  
 T-nom. AP little far -is  
 'Tulluu is a little fat'.

Again, these same forms may occur with the corresponding verbal heads to express intensity or degree. Their position is the same as in (61).

62(a) [Tulluu-n [[bayʒee] deer-at-e]]  
 S<sub>T-nom.</sub> VP<sub>very</sub> tall-mid-pf.

(Literally) ?'Tulluu very talled';  
 'Tulluu became very tall'.

(b) [Tulluu-n [[tinnoo] furd-at-e]]  
 S<sub>T-nom</sub> VP<sub>little</sub> fat-mid-pf.

'Tulluu became a little bit fat'.

In (63) below they occur with adpositional phrases with a similar sort of function that they have with the other categories.

63(a) [Tulluu-n [[bayʒee] suut-uma-tti] mana-saa-rra ba?-e]  
 S<sub>T-nom.</sub> Adp<sub>very</sub> . slow-ness-with house-his-from leave-pf.  
 'Tulluu came out of his house very slowly'.

(b)\* [Tulluu-n bayʒee mana-saa-rra ba?-e]  
 S<sub>T-nom.</sub> very house-his-from leave-pf.

The grammaticality of (63a) and the ungrammaticality of (b) suggests that /bayʒee/ 'very' is structurally related to the manner adverbial /sutt-uma-tti/ 'slowly', and not to the locative adverbial /mana-saa-rra/ though the latter, like the former is also an adpositional phrase. The difference may have to do with the inherent properties of the complement nouns of /suttuma/ 'slowness' and /mana/ 'house'. But this is not very important. What is important to note is the fact that it does occur with adpositional phrases of some sort and that the position it assumes is the same position it occupied in the structures (61-62).

Such structural similarities may give support to the view that the class of quantifiers includes such forms. Anticipating the discussion in Chapter Six, we shall take this position here and, whenever necessary, we shall make distinctions between nominal and non-nominal quantifiers.

## 2.7 Particles

Not all items, grammatical or lexical, fall neatly into the categories established thus far. There are a number of elements which cannot be assigned to any of these categories. The following are but a few examples:

64.	-kaa	'then' (?)
	yaa	vocative (?)
	-llee	'even' (?)
	ee	'yes'
	ii	'no'
	boo	?
	mee	'please' (?)
	iššoo	?

Some of these may be significant in discourse analysis. Some may be expressions of suddenly felt emotions (exclamations). All of them are distinguishable from forms in all other categories by their inability to occur as heads or as non-heads in constituent structures. Their relation may be to an entire utterance or set of utterances, which means that the type of syntactic rules which govern the relation of elements within a single constituent may not give a proper account of them.

It is therefore necessary to have a separate category for all such elements. A category 'particle' may serve this purpose.

The major categories and the category we have proposed for specifiers are categories which occur as heads or as non-heads in forming maximal categories such as NPs, VPs, etc. In addition to these, two other categories may be recognized. These categories are: Infl. for all verbal (infl)ections, and comp. for complementizers. The former is claimed to be the head of a sentence (S) and the latter that of  $\bar{S}$  (cf. Chomsky 1981; Stowell 1981). We will argue along the same lines in Chapter Five. For the present purpose, we will assume only the categories already established, and we shall deal with the rules that govern their hierarchical structures.

## 2.8 Syntactic Distinctive Features

The categories we have recognized may be decomposed into features which are assumed to be provided by UG.

The definition of categories in terms of such features is necessary for making cross-category generalizations which X-bar syntax aims at achieving.

As stated in Chapter One, Chomsky (1970, 1971) used the features [ $\pm V$   $\pm N$ ] to define the four major lexical categories: verbs, adjectives, nouns and prepositions. Jackendoff (1977) recognizes adverbs, particles, and modals as minor categories and also makes distinctions among the various elements within the class of specifiers. In order to define both the major and the minor categories as distinct from each other and from the various specifying elements, he introduces the following features:

[ $\pm$  sub.]  
 [ $\pm$  obj.]  
 [ $\pm$  comp.]  
 [ $\pm$  det.] (p.33).

Jackendoff believes that the names of these features have no theoretical significance. They are just heuristic devices designed to keep the various categories separate and also to enable us to collapse them into some natural classes whenever this is necessary. The difference between these features and those introduced by Chomsky lies in the fact that the former are based on whether a category does or does not have the feature(s), whereas those of Chomsky are based on what a category is or is not. In other words, Jackendoff's features are based on co-occurrence restrictions. In order for a category to be [ $+$  obj.] for example, it must co-occur with an object NP. The same may be said about the other features. And to this extent the features may indeed be called syntactic distinctive features.

But they are not without problems. For example, verbs and prepositions are characterized by the feature [+ obj.] in contrast to nouns and adjectives, the latter being [- obj.]. And in order to distinguish them from modals and particles, the feature [+ comp.] has been employed. Again only prepositions and verbs are characterized by this new feature. The question which arises from this state of affairs relates to the difference between the two features [+ obj.] and [+ comp.]. How is an object different from a complement? Or is the feature [+ comp.] a mere label introduced for convenience? Jackendoff does not tell us the difference. But from what he says about the names of the features in general, it may be inferred that these also are convenient labels introduced to distinguish the categories in question from those others. This makes the features rather ad hoc, for as we shall observe in the next chapter, both categories are characterized by NPs which function as direct or indirect objects. In other words, there is no distinction between objects and complements at the minimal level of projection of the categories concerned.

Further problems arise with the feature [+ obj.] itself. This feature is supposed to distinguish verbs and prepositions from the other major categories. But it distinguishes prepositions and the class of transitive verbs only, since only these are characterized by object complements. This may also suggest that other types of verbs do not belong to the category. And we may perhaps be forced to include them with the categories which are [- obj.], that is, with nominals and adjectivals. This would create a more serious problem at the level where they operate as heads of constituents.

Furthermore it may be argued that the feature [+ obj.] includes nominals which are derived from transitive verbs, for they too are characterized by objects. Compare the following, for example:

- 65(a) [Tulluu-n [hoolaa bit-e]  
<sup>S</sup>T-nom. sheep buy-pf.  
 'Tulluu bought (a) sheep'.
- (b) [[hoola bit-uu-n] gaarii-ḍa]  
<sup>S</sup> sheep buy-toling-nom. good-is  
 (Literally), 'Sheep buying is good'.

/bit-uu/ 'buying' like its verbal source /bit-/ 'buy' is characterized by an object NP which means that the feature [+obj.] does not take derived nominals into account.

The features introduced by Chomsky do not seem to have such problems since they are based on what categories are. For this reason we may adopt them for purposes of generalizations that we may need to make in cross-categorial terms.

As Jackendoff (1977:31) has pointed out, the association of features with categories should be based on the notion of which categories can go together to make a natural class. This presupposes the existence of certain rules which govern some categories but not others. Anticipating the discussions in subsequent chapters, we shall adopt the following features for the various lexical categories we have established:

nominals	[+N -V]
verbals	[+V -N]
adjectivals	[+N +V]
adpositionals	[-N -V]

Regarding the two minor categories of specifiers and particles, we may introduce the feature [SPEC.] and distinguish them as [+SPEC.] and [-SPEC.] respectively. And in order to make distinctions between nominal and non-nominal specifiers, the use of the feature [±N] may be extended. This goes in line with the argument that specifiers are not lexical categories



in the sense that they do not subcategorize other categories or occur as heads of constituents, but rather appear as adjuncts to other major categories (cf. Jackendoff 1977). Hence their association with the feature of the categories with which they form syntactic units is valid. Other minor distinctions such as those between articles and quantifiers or intensifiers may follow the same pattern.

## 2.9 Summary

In this chapter we have established four major and two minor categories. The identification has been based to a large extent on syntactic facts. These categories have been defined in terms of syntactic features. The definition is believed to be essential for making strong generalizations about rules which operate across categories.

These major categories have the potential to develop into maximal categories. The categorial component, which we will be dealing with in subsequent chapters, is a specification of this potential.

We have also recognized two minor categories: specifiers and particles. The former comprises all elements which form syntactic units with one or the other of the major categories. They denote the entity, quantity or intensity of such categories. The same may not be said about the latter. They do not seem to co-occur with a particular lexical category to form a syntactic unit in which they constitute either the head or the non-head. Their relation may be said to be with an entire utterance or set of utterances, in which case their behaviour may not be captured by syntactic rules. We may perhaps need to consider them as discourse formatives rather than as lexical or grammatical formatives. For the present purpose they have been separated from specifiers by means of the syntactic feature [-SPEC.]

In traditional accounts a category adverb has been recognized (cf. Hodson and Walker 1922). We have argued against this. The various adverbial expressions are phrasal categories, involving mainly adpositional phrases or subordinate clauses. Some are what are called time nouns. But it can be argued that they are reduced adpositional phrases.

In his account of the categories of Oromo, Moreno (1939) has included adverbial in his category of particles which also includes pre-/post-positions, conjunctions as well as what we have called particles. Though we follow him in not recognizing a category adverb, we differ from him in making distinctions between pre-/post-positionals and subordinative conjunctions on the one hand, and particles on the other. We have not only made such distinction but also collapsed pre-/post-positions and subordinative conjunctions into one broad category - the category of adpositionals.

We have also suggested that a category comp. for complementizers and Infl. for inflections of verbs may be necessary. These are recognized in the literature as heads of  $\bar{S}$  and S respectively; we shall consider them in Chapter Five.

NOTES TO CHAPTER TWO

1. May be possible only as a reduced constituent.
2. These are genitive NPs and are different from adjectives.
3. Possible as a reduced NP.
4. Possible as a reduced NP.
5. Such attributes include dimensions, size, colour, etc.
6. The copula *da* has various alternants which are grammatically conditioned. One of these is /-ti/ (cf. Eshetu 1981).
7. The adpositional element may be only /-n/. /*da*/ may be the same copula we have discussed. Such structures seem to be clefts.
8. We will recognize two /bayʔees/ here.
9. Alternatively, we may argue that these are nominals functioning as adverbs. But this may cause a problem. If they are NPs, they must be case marked and in order to receive case they must be adjacent to a transitive verb. But such NPs can also occur in structures in which the verb is intransitive, and when they occur in such structures where the verb is a transitive one, they do not occur adjacent to it. The alternative argument that they are headed by an adpositional element solves this problem if following Bresnan and Grimshaw (1979) we assume that the NPs get case from the feature of the empty adpositional element. (Cf. Larson 1985) for an alternative analysis of such NPs.

CHAPTER THREECOMPLEMENT ONE3.0 Introduction

In the preceding chapter, we have identified four major and some minor lexical categories. In the present chapter, we shall address ourselves to the inherent lexical properties of individual lexical or grammatical formatives in each of these categories.

Such properties are expressed in the lexicon where each item is entered together with the specification of its categorial membership, subcategorization potential, phonological description and semantic interpretation(s). The categorial description specifies the form class of the item in question, whereas its subcategorization frames show the possible sister constituents which it selects at its minimal level of projection. The phonological and semantic information relate to the way it is pronounced and interpreted respectively.

Other than providing such information, the lexicon is also the place where word formation processes and the rules accounting for such processes are indicated. Of the major categories we shall be considering, all but adpositionals are characterized by some such rules. This will be taken up towards the end of the chapter.

Since our main concern here is the syntactic specifications of the categories, we shall begin with the description of the constituents which the major categories select at the minimal level of their projection. The minor categories will be dealt with only in relation to the major ones by which they are optionally selected at an intermediate or maximal level of projection.

According to the claim of X-bar theory, each major category has a complement at every level in its projection line. At the  $X^0$  level, the

complements are believed to be obligatory<sup>1</sup> and hence may not be omitted without some particular context. In the light of this claim, we shall now examine the types of complements each lexical category X selects to form its syntactic category X'.

### 3.1 X' Complements

As stated above, every lexical item X enters the lexicon with a specification of some syntactic frames. Such frames include, inter alia, information about its form class, and a list of the possible constituents which it selects as its complements.

Before we go into the details of the analysis of such complements, it would seem quite necessary to have a working definition of some sort for the term complement itself, as much of the discussion in this and in the next two chapters depends on what we mean by this term.

According to Chomsky (1970:210) and Jackendoff (1977:37), a complement is an abbreviatory term for "some concatenations of ordinary syntactic categories". Such concatenations include all the materials following the head of a constituent in a VO language like English. In OV languages like Oromo, such a definition would lead to the inclusion of all the materials preceding the head, that is the verb, in a VP, as complements. This is problematic.

Firstly, in Oromo, both specifiers and complements are prehead in VP, PP, and AP as we shall see in due course, which means that specifiers are going to be treated as complements if we adopt Jackendoff's definition as it stands. Secondly, the defining phrase "some concatenations of ordinary syntactic categories", appears to be unduly vague. It does not tell us what types of syntactic categories are "ordinary", nor why. Are specifiers which are NPs, such as measure phrases or genitive NPs, "ordinary", compared

say, to deictics? If we adopt the definition as it stands now, it does not seem possible for anyone to tell whether a syntactic category is part of the specifier or the complement in a language like Oromo, in terms of its position in relation to the head, or in terms of the defining phrase "concatenations of ordinary syntactic categories". Thirdly, as we shall observe in this and in the chapter following, simple nominals, unlike all other categories, are left-headed, which means again that everything else, including specifiers, which also follow their heads, is going to be included in the complement. It does, therefore, appear that this definition would lead to wrong predictions if applied across categories. Jackendoff seems to have realized the problems that such a definition would lead into, for he says, "the definition is a convenient device without any theoretical import" (ibid.).

His definition seems to be based mainly on VPs and NPs of the type "destruction of the city" (p.40) in which "of the city" is the complement of the nominal head "destruction". Such categories are derivationally related, and a definition given for one may apply for the other. But such a definition fails to take into account structures of NPs of the type "big boys" in which the complement "big" precedes the head "boys", or still more structures of NPs in which the head is both preceded and followed by complements as in the "big boys who came yesterday". According to the definition given above, only the relative clause "who came yesterday" would be the complement of the head "boys", since only it follows the head, though we are told (p.74) that both adjectives and relative clauses are complements of N'.

If the definition is a convenient device and has no theoretical significance, then it may be adopted with all the qualifications necessary, so that it

accounts for all the differences among the various categories in terms of their positions as heads and in terms of the type of complement structures they permit at every level in their projection lines.

In the light of this, we shall define complements in terms of their category labels, positions and functions. In terms of categories, only maximal projections of major lexical categories can be complements. This means NP, AP, etc. may be complements since they are projections of such major lexical categories as Ns and As. This distinguishes them from the elements we have mentioned in the preceding chapter as specifiers and particles, since the latter are not projections of any of the major lexical categories we have identified. In terms of positions, complements are found in argument positions (= A—positions). These are positions where object NPs, and adpositional phrases or clauses of various adverbial functions are found. This is in VPs and PPs. The same may be said about constituents which occur in parallel positions in the projection lines of the other major lexical categories.

In terms of distribution, we may define complements as maximal categories occurring between any of the elements we have listed as specifiers and the head of a constituent structure at any one particular bar level. This makes specifiers the most peripheral elements in constituent structures.

Functionally, complements are either objects or modifiers. Those which are objects have direct thematic relations with the lexical head by which they are strictly subcategorized. These are specified in the lexicon in the manner to be described throughout this chapter. Those which function as modifiers will be taken up in the next chapter as complements of X'' or X'''.

3.1.1 Nominals (N')

In this subsection we shall consider only simple nominals. Infinitivals or gerundives are assumed to be characterized by the same frames that their verbal sources are associated with. For example, the infinitival/bit-uu/'to buy' and the verb/bit-/'buy' from which it is derived subcategorize the same complement types. The difference between them is thus categorial rather than subcategorial, and may be handled by a general redundancy rule in a manner to be explained. With regard to simple nominals, it may be said that their complements at this level include some genitive NPs. The following are illustrative examples:

- 1(a) [Tulluu-n [ [mana] [ḍagaa] iḵaar-e]  
 S<sub>T</sub>-nom. N'N<sub>house</sub> N''<sub>of-stone</sub> build-pf.  
 (literally), 'Tulluu build [a] house of stone'.
- (b) [Tulluu-n [ [siree] [sibiilaa] ḵab-a]  
 S<sub>T</sub>-nom. N'N<sub>bed</sub> N''<sub>of-steel</sub> has-impf.  
 (literally), 'Tulluu has a bed of iron'.
- (c) [Tulluu-n [ [foon] [hoolaa] hin-barbaad-a]  
 S<sub>T</sub>-nom. N'N<sub>meat</sub> N''<sub>of-sheep</sub> cm-want-impf.  
 (literally), 'Tulluu wants mutton'.

The complements in (1) define the head, N, in terms of the material from which it is made or has originated. In this respect they may be called genitives of 'source' in contrast to other genitives such as those of 'possession', 'location', etc.,. The latter are analysable as specifiers, and complements of N'' respectively. We shall consider these in Chapters Four and Six.

Syntactically, the genitives in (1) are tightly bound to their heads and may not be easily separated from them. This is apparent from the ungrammaticality of (2) below:



- 2(a)\* [Tulluu-n [ [mana] [guddaa] [dagaa] ijaar-e]  
 S<sub>T-nom.</sub> N'N<sub>house</sub> A''big N''''of-stone build-pf.
- (b)\* [Tulluu-n [ [siree] [bareed-duu] [sibiilaa] kab-a]  
 S<sub>T-nom.</sub> N'N<sub>bed</sub> ''beautiful-f. N''''of-steel has-impf.

As will be discussed in depth in the next chapter, adjectives are complements of N'', which means that they cannot occur within N' without this causing ungrammaticality such as that seen in the above examples. Such structures would be grammatical only if the adjective followed the entire N' as in (3) below.

- 3(a) [Tulluu-n [ [ [mana] [dagaa] [guddaa] ijaar-e]  
 S<sub>T-nom.</sub> N''N' N<sub>house</sub> N''''of-stone A''big build-pf.  
 'Tulluu built a big stone house'.
- (b) [Tulluu-n [ [ [siree] [sibiilaa] [bareed-duu] kab-a]  
 S<sub>T-nom.</sub> N''N' N<sub>bed</sub> N''''of-steel A''beautiful-f. has-impf.  
 'Tulluu has a beautiful metal bed'.

Nominals like /mana/ 'house' may, hence, be characterized by the following frame:

/mana/ : N ± [-N'''] 'house'

The frame shows that /mana/ belongs to the category of nominals, and that it selects an N'''' (NP) as its modifying complement to form a syntactic category N'. It also tells us that its position is one preceding the complement.

Other genitive NPs which may also be considered as complements of N' are those which show 'purpose'. The following are some examples of N' with such complements.

- 4(a) [ [sa?a] [aannanii]]  
 N' N<sub>cow</sub> of-milk  
 'A cow raised for milk' (i.e., milch cow).

4 (b) [ [garbuu] [farsoo]]  
 N' N<sub>barley</sub> N'''<sub>of-beer</sub>  
 'barley for beer'.

(c) [ [hoolaa] [foonii]]  
 N' N<sub>sheep</sub> N'''<sub>of-meat</sub>  
 'sheep for meat'.

The head-complement relation in such structures seems to be the converse of the relation we observed with respect to the structures of N's in (1). The difference in meaning between the purposive genitive of /hoolaa foon/ 'sheep for meat' in (3c), and the source genitive of /foon hoolaa/ 'meat of sheep' in (1c) seems to have resulted from the configurational differences the two structures exhibit. The head of an N' with a source genitive complement can become a purposive complement of another N'. This type of relationship may be taken as characteristic of N' complements. Other genitive NPs such as those which show 'location', for example, do not seem to follow the same pattern as the examples in (5) show.

5 (a) (i) [worḳii Wallaggaa]  
 gold of-W.  
 Gold from Wallaggaa

(ii)\* [Wallagga worḳii]  
 Wallagga of-gold.

(b) (i) [damma Gimbi]i  
 honey of-G.  
 Honey from Gimbi.

(ii)\* [Gimbi]i dammaa]  
 Gimbi of-honey.

Notice that in purposive constructions, both /damma/ 'honey' and /worḳii/ 'gold' can occur in the position where they appear in the (b) structures above, as (6) below shows.

6 (a) (i) [amartii worḵii]  
 ring of-gold  
 'ring of gold'.

(ii) [worḵii amartii]  
 gold of-ring  
 'gold for ring'.

(b) (i) [daadii dammaa]  
 mead of-honey  
 'mead from honey'.

(ii) [damma daadii]  
 honey of-mead  
 'honey for mead'.

Further distinctions seem to arise in copular constructions of the type shown in (7-8) where again purposive and source genitives behave in a manner that distinguishes them from other types of genitives. For example, corresponding to /daadii dammaa/ 'mead of honey' and /amartii worḵii/ 'ring of gold', both (7 a) (i-ii) , and (7 b) (i-ii) are possible. But corresponding to /worḵii Wallaggaa/ 'gold of Wallagga' and /damma kaleessaa/ 'honey of yesterday', only (8 a) (i) and (8 b) (i) are permissible.

7 (a) (i) daadii-n kan dammaa-ti  
 mead-nom. of honey is  
 '[The] mead is from honey'.

(ii) damm-i kan daadii-tti  
 honey-nom. of mead is  
 '[The] honey is for mead'.

(b) (i) amartii-n kan worḵii-tti  
 ring-nom. of gold-is  
 (literally), '[The] ring is of gold'.

(ii) worḵii-n kan amartii-tti  
 gold-nom. of ring is  
 '[The] gold is for ring'.

8(a)(i) damm-i kan kaleessaa-ti  
 honey-nom. of yesterday is  
 (literally), '[The] honey is of yesterday'.

(ii)\* kaleess-i kan dammaa-ti  
 yesterday-nom. of honey is

(b)(i) workii-n kan Wallaggaa-ti  
 gold-nom. of W. is  
 '[The] gold is from Wallagga'.

(ii)\* Wallagga-n kan workii-tti  
 W-nom. of gold is

Source genitives occur following their heads but preceding other genitives such as those which show place or time. This may suggest that the latter may be N'' complements parallel to the place and time adverbials of V'', which will be discussed in the next chapter. For the moment let us observe the following:

9 (a) [ [amartii workii] Wallaggaa]  
 S N'  
 ring of-gold of-W.  
 'A ring of gold of Wallaggaa'.

(b)\* [ [amartii Wallaggaa] workii]  
 S N'  
 ring of Wallaggaa of gold.

Such distributional differences between source and purposive on the one hand, and genitives of other functions on the other, may support the claim that the two types of genitives belong to different bar levels. The latter may be analysed as complements or specifiers generated at a higher level in the projection of N.

To make distinctions between source and purposive genitives in the entries of nominals the subscript (pur)posive may be employed in the manner shown below for /daadii/ 'mead':

/daadii/ : N±[—N'''] 'mead'  
 pur.

Subcategorization frames such as this show the marked cases, that is, those cases in which the heads have complements. Those which do not have complements need not be specified as such, for this is obvious from the presence of the marked ones. Hence the entries of heads which do not have complements would include only categorial, phonetic and semantic information. Thus, a nominal like /waaḡa/ 'God', for example, would be characterized by an entry of the following type:

/waaḡa/ : N 'God'.<sup>3</sup>

### 3.1.2 Verbals (V')

Verbals have a much wider choice of complements than nominals. On the basis of the type of complements they select at this (minimal) level, they may be divided and subdivided into types and subtypes. The following is a discussion of each type..

#### Type One

The verbs in this group do not select any complements. Their grammatical functional relation is solely with their external arguments, as in the sense of Williams (1981).

The following are examples of structures with such verbs:

- 10 (a) [Tulluu-n      ḡeer-at-e]  
           <sup>S</sup>  
           T-nom.      táll-mid-pf.  
           'Tulluu got tall'.
- (b) [Tulluu-n      furd-at-e]  
           <sup>S</sup>  
           T-nom.      fat-mid-pf.  
           'Tulluu got fat'.
- (c) [Tulluu-n      hin-gammad<sup>3</sup>e]  
           <sup>S</sup>  
           T-nom.      cm-please-pf.  
           'Tulluu rejoiced'.

Such verbs describe a state of being their subject (external) argument enters into. In the case of the above examples, Tulluu is the experiencer of the state of being 'tall' or 'fat'. For this reason such verbs have often been called stative verbs (cf. Lyons 1977).

As in the case of the nominals already discussed, these too may be said to constitute the unmarked cases; the marked ones being those which occur with complements. The entry for such verbs is along the following lines, as shown for / $\dot{d}$ eer-at-/ 'become tall':

/ $\dot{d}$ eer-at-/ : V[-#]<sup>4</sup> 'become tall'.

Other verbs which may or may not be stative but which are characterized by the same frame include those in (11) below:

- 11 (a) [Kuasii-n        doo?-e]  
           <sup>S</sup>ball-nom.        burst-pf.  
           '[The] ball burst'.
- (b) [Tulluu-n        kufa?-e]  
           <sup>S</sup>T-nom.        cough-pf.
- (c) [ $\dot{k}$ eerrens-i        hark?-e]  
           <sup>S</sup>leopard-nom.        roar-pf.  
           '[A] leopard roared'.
- (d) [nam-ni        du?-e]  
           <sup>S</sup>man-nom.        die-pf.  
           '[A] man died'.

Though such verbs fall into the same frame as those in (10), the two are not the same in every respect since only the latter show events, for which reason the term eventive may be used in describing them. This is, however, a morphological (and probably semantic) difference and has no bearing on the classification which is purely syntactic.

#### Type Two

In contrast to the verbs in Type One, those in Two are characterized

by the presence of some form of complement. The complements are mainly adpositional phrases. The following are representative examples.

- 12 (a) [Tulluu-n [ [as-iiti] [ool-e]]]  
 $S_{T-nom.}$  V' Adp' 'here-from V stay-pf.  
 (literally), 'Tulluu stayed (spent) the day from here'.
- (b) [Tulluu-n [ [gara mana-saa] [gal-e]]]  
 $S_{T-nom.}$  V' Adp' 'to house-his V enter-pf.  
 'Tulluu entered into his house'.
- (c) [Tulluu-n [ [mana-saa-ti] [ba?-e]]]  
 $S_{T-nom.}$  V' Adp' 'house-his-from V leave-pf.  
 (literally), 'Tulluu went out from his house'.

The complements in (12) are locative adverbial phrases. The subcategorization frames of the verbs are as shown below for /ool-/ 'stay':

/ool-/ :  $\dot{V}$  + [Adp' '\_\_\_\_\_'] 'stay/spend the day'.  
 Dir.

The subscript (Dir)ectional is necessary in order to avoid the over-generation of structures with other types of adpositional phrases.

Notice that whereas the complements of the type of verbs in (12) are obligatory, the complements of those in (13) below are not.

- 13(a) (i) [Tulluu-n [ [farda-rra] [kuf-e]]]  
 $S_{T-nom.}$  V' Adp' 'horse-from fell-pf.  
 'Tulluu fell from a horse'.
- (ii) [Tulluu-n [ [kuf-e]]]  
 $S_{T-nom.}$  V' V fell-pf.  
 'Tulluu fell'.
- (b) (i) [Tulluu-n [ [siree-rra] [raf-e]]]  
 $S_{T-nom.}$  V' Adp' 'bed-on V lie-pf.  
 'Tulluu lay on [a] bed'.
- (ii) [Tulluu-n [ [raf-e]]]  
 $S_{T-nom.}$  V' V lie-pf.  
 'Tulluu lay'.

The frame suggested for the verbs in (12) will have to be modified in the manner shown below in order for it to accommodate such verbs as well.

/kuf-/ : V ±[Adp' '\_\_\_\_\_'] 'fall'.  
Abl.

As stated above, the specifications of the type of adpositional phrase is important in order to avoid anomalous structures such as (14).

14.        ?[Tulluu-n [        [gara mana-saa].        [raf-e]]] <sup>5</sup>  
             S<sub>T-nom.</sub>        V' Adp'' 'to house-his        V<sub>lie-pf.</sub>

The verbs in this group are generally known as intransitives, a term which may also be extended to include stative verbs as well. The difference between the two is the absence or the presence of some form of complement. Action verbs, of which the verbs in (11) or (12) are examples, generally opt for one in order to give the action some spatial context.

### Type Three

The verbs in this group have a wider range of subcategorization potential than those we have observed so far. Their complements include nominals and adjectivals. Consider the following examples.

- 15 (a) [Tulluu-n [ [deeraa] [da]]]  
         S<sub>T-nom.</sub>        V' A'' 'tall        V<sub>is</sub>  
         'Tulluu is tall'.
- (b) [Tulluu-n [ [barsiisaa] [ta?-e]]]  
         S<sub>T-nom</sub>        V' N'' 'teacher        V<sub>become-pf.</sub>  
         'Tulluu became a teacher'.

The verbs in (15) are what are called copulatives. Their syntactic function is to 'link' the adjectival or nominal complement with the external argument, Tulluu. Their subcategorization frame may be indicated as follows:

/da/ : V + [{N'', A'} \_\_\_\_\_] 'is'.



In (15 b) /ta?-e/ 'become' has a nominal complement which is co-referential with the external argument Tulluu. In (16) below, this same verb occurs with a clausal (?) complement.

- 16 i(a) [Tulluu-n [ [akka [pro deem-u]] [ta?-e]]]  
 $S_{T-nom.}$   $V'$   $\bar{S}'_{as}$   $S_{go-impf.}$   $V_{become-pf.}$   
 (literally), 'Tulluu becomes like one who is to go'  
 'Tulluu tends to go'.
- (b) [ $\check{C}$ aaltuu-n [ [akka [pro deem-t-u]] [taa-t-e]]]  
 $S_{\check{C}-nom.}$   $V'$   $\bar{S}'_{as}$   $S_{go-f-impf.}$   $V_{become-f-pf.}$   
 'Caaltuu tends to go'.
- ii (a) [Tulluu-n [ [akka [pro kolf-u]] [ta?-e]]]  
 $S_{T-nom}$   $V'$   $\bar{S}'_{as}$   $S_{laugh-impf.}$   $V_{become-pf.}$   
 'Tulluu tends to smile'.
- (b) [ $\check{C}$ aaltuu-n [ [akka [pro kofal-t-u]] [taa-t-e]]]  
 $S_{\check{C}-nom.}$   $V'$   $\bar{S}'_{as}$   $S_{laugh-f-impf.}$   $V_{become-f-pf.}$   
 'Caaltuu tends to smile'.

As the labelling indicates, it is possible to argue that the complements here are clauses. The subject is pro in each case, and there is co-reference between this subject (pro) and the subject of the matrix clause. In other words, there is no co-reference between the clause as a unit and the external argument of the verb /ta?-/ 'become', as such. This is not, however, peculiar to this particular verb. In (17) below, for example, we have an instance of the verb 'be' occurring with an infinitival complement with a pro subject which is co-referential with the matrix subject.

- 17 (a) [Tulluu-n [ [ [pro deem-uu-saa] -tii]]  
 $S_{T-nom}$   $V'$   $\bar{S}$   $S_{go-to/ing-his}$  is  
 'Tulluu is about to leave'.
- (b) [ $\check{C}$ aaltuu-n [ [ [pro deem-uu-šii] -tii]]  
 $S_{\check{C}-nom.}$   $V'$   $\bar{S}$   $S_{go-to/ing-her}$  is  
 (literally), ' $\check{C}$ aaltuu her going is'  
 ' $\check{C}$ aaltuu is about to leave'.

In Chapter Five we shall argue that the position of *pro* is a governed position, and hence a lexical subject which may be null can occur in it. For the present purpose, let us assume that the complements are clauses, and as in (16), there is coreference between the subject of the matrix clause and *pro*, but not between this subject and the entire clause. Following this, we may modify the entry we have proposed for /*ḍa*/ 'is' or /*ta?*-/ 'become' in the manner shown below so that it accounts for such facts as well:

/*ta?*-/ : V + [{AP NP  $\bar{S}$ } —] 'become'.

The interpretation of structures such as (16) and (17) shows what the subject of the matrix clause tends to 'be' or 'become/do' rather than what he 'is' or 'has become'. The latter interpretation seems to be possible only when the complement is either an NP or AP as in (15) above.

However, in structures like those in (16), the complements seem to be in accord with the analysis of adpositional phrases. This is not without some intuitive appeal. There are copular structures which have adpositional phrases as complements. Consider the following.

- 18 (a) [Tulluu-n [ akka [namaa]] ta?-e]]  
 S<sub>T-nom.</sub> V' Adp as NP man become-pf.  
 'Tulluu became like a man'.
- (b) [Ḍaaltuu-n [ akka [haaḍaa]] taa-t-e]]  
 S<sub>Ḍ-nom.</sub> V' Adp AS NP mother become-f-pf.  
 'Ḍaaltuu became like a mother'.

In (18) /*akka*/ 'as' is a prepositional head, the NP following it is its complement. The entire adpositional phrase has the adverbial function of showing degree. The complement structures in (16) may be argued to be adpositional phrases as well, partly because of their being headed by the same element /*akka*/ 'as', and partly because of the possibility of

interpreting them as adverbial phrases of degree. In both (16) and (18), the subject of the matrix verb is compared with the complement of /akka/ 'as' for a certain value, which is not stated, but is implicit from the entire structure. It may, hence, be said that the complement of the matrix verb is not the clause or the adpositional phrase as has been assumed so far, but an NP/AP which is empty. This goes in line with the analysis of degree phrases or clauses as complements of V' for which we shall argue in the next chapter. (18a) may, for example, be understood as being similar to (19) below.

19. [Tulluu-n [ [akka [namaa]] [sooressa ta?-e]]]  
 S<sub>T-nom.</sub> V' Adp' as man V' rich become-pf.  
 'Tulluu became rich like a man'.

In (19) /akka namaa/ 'like a man' is a comparative phrase. Tulluu is compared with /namaa/ 'man', the complement of /akka/, for the value of being rich. Such phrases or clauses of degree are outside V', which, as shown by the labelled brackets, comprises the verb /ta?-/ 'become' and its adjectival complement /sooressa/ 'rich'.

If this is the case, then the complement structure in (16) may have to be treated along the same line, since, as we have hinted at above, they are introduced by the 'same' element /akka/. Hence, we may say that underlying (16(i)) is the structure in (20).

20. [Tulluu-n [ [akka [e [ [pro deem-u]]] [ta?-e]]]  
 S<sub>T-nom.</sub> V' Adp' as NP  $\bar{S}$  S go-impf. V' become-pf.  
 (literally), 'Tulluu became like one who is to go'.  
 'Tulluu tends to go'.

What we have in (20) is an adpositional phrase which has /akka/ as its head and an empty NP as its complement. This empty NP has itself a relative clause complement. The entire adpositional phrase functions as a

degree adverbial parallel to the adpositional phrase in (19) and is as such outside V'. But notice that there is no complement, adjectival or nominal, within V', nor does it seem possible to have one since such structures as (21) are ill-formed.

21\*            [Tulluu-n    [            [akka    [e [deemu]]] [sooressa ta?-e]]]  
                  S<sub>T-nom.</sub>    V'' Adp''    as    NP    S<sub>go-impf.</sub>    V' rich            became-pf

This goes contrary to the subcategorization potential of /ta?-/ 'became', which we proposed earlier. Furthermore, if the adpositional phrase has the function of a degree adverbial, then the comparison must be between Tulluu and the empty NP, again parallel to what we saw in (19). This does not seem to be intuitively appealing, because in (19), the comparison is between two overt entities, Tulluu and /nama/ 'man', but here we have only Tulluu and an entity which has no phonetic realization at all. Even if it were possible to compare them, we would still lack the 'value' for which they would be compared since the verb /ta?-/ 'become', has no adjectival complement corresponding to /sooressa/ of (19).

This contradictory situation forces us to stick to our earlier analysis of structures like /akka deemuu/ as clauses. The element /akka/ 'as(?)' may be treated as a complementizer rather than as a preposition. The clause is strictly subcategorized by the verb /ta?-/ 'become' and its function may be that of an argument complement rather than that of a degree phrase. This may explain the reason why structures like (21) are excluded as being ill-formed. The verbal head would have occurred with two complements and this would have gone against the subcategorization properties of the verb, for it can only have an NP or AP or a clause but not a combination of these.

Assuming this to be on the right track, we will now go back to (15). The copula /ḍa/ 'is' occurs in the form it appears in (15a) in so far as

the complement has no genitive element. Whenever there is such an element, the form is /-ti(i)/ as in (17) above, or as in the grammatical structures in (22) below.

22 (a) (i) [Tulluu-n barsiisaa-ḍa]  
 S  
 T-nom. teacher is  
 'Tulluu is [a] teacher'.

(ii) [Tulluu-n barsiisaa-koo-tii (\*ḍa)]  
 S  
 T-nom. teacher my is  
 'Tulluu is my teacher'.

(b) (i) [iṣii-n barsiiftuu-ḍa]  
 S  
 she-nom. teacher-f. is  
 'She is a teacher'.

[iṣii-n barsiiftuu-ḍa Tulluu-tii (\*ḍa)]  
 S  
 she-nom teacher-f of-T.-is  
 'She is Tulluu's teacher'.

(c) (i) [man-ni guddaa-ḍa]  
 S  
 house-nom. big is  
 '[The] house is big'.

(ii) [man-ni kan Tulluu-tii (\*ḍa)]  
 S  
 house-nom. of Tulluu is  
 (literally) '[The] house is of Tulluu'  
 '[The] house is Tulluu's'.

The situation seems to suggest that in order to bar the ungrammatical structures in (22), we need to enrich the subcategorization frame we have formulated for /-ḍa/ by adding information about allomorphs. This is necessary given the fact that the distribution of the allomorphs is one which is syntactically governed. In other words, it is not a case where we could take one allomorph as the base from which the other is derived by a general phonological rule. In the light of this, then, we may associate /tii/ with the frame shown below.

/-tii/ : V[N''—] 'is'  
Gen.

Apart from such cases involving allomorphy, there are also other copulative verbs which do show some degree of regularity, and these need mentioning. They include verbs like /fakkaat-/ 'resemble' or 'look' as in (23).

- 23(a) [Tulluu-n        abbaa-saa        fakkaat-a]  
S<sub>T-nom.</sub>    1                    1                    resemble-impf.  
'Tulluu resembles his father'.
- (b) [Tulluu-n        deeraa        fakkaat-a]  
S<sub>T-nom.</sub>                    tall                    look-impf.  
'Tulluu looks tall'.
- (c) [Tulluu-n        nama gaarii        fakkaat-a]  
S<sub>T-nom.</sub>                    man good                    seem-impf.  
'Tulluu seems [to be] a good man'.

In (23) /fakkaat-/ 'resemble' or 'look', selects either an NP or AP as its complement. As in the other copular constructions we have already examined, the complement in each case is coreferential or near coreferential with the external argument. The subcategorization frame of this verb may hence be said to be the same as that we have formulated for any of the other copulative verbs. But notice the structure in (24) vis-à-vis the one in (23(a)):

- 24(a) [Tulluu-n [ [mana kan ijaar-e] [fakkaat-a]]]  
S<sub>T-nom.</sub>    V' S<sub>house comp.build-pf.</sub>    V<sub>seem-impf.</sub>  
'It seems Tulluu built a house'.
- (b) [Čaaltuu-n [ [hoolaa kan bit-t-e] [fakkaat-a]]]  
S<sub>Č-nom.</sub>    V' S<sub>sheep comp. buy-f-pf.</sub>    V<sub>seem-impf.</sub>  
'It seems Čaaltuu has bought [a] sheep'.

The complement of /fakkaat-/ here is not a simple NP; it is a clause. This is obvious from the presence of the (comp)lementizer /kan/. But this /kan/ is what has traditionally been called a relative pronoun (Hodson and

Walker 1922:77). If this were the case, then the complement in (24) would have to be an NP with a relative clause complement. The absence of this NP in surface structures might be explained in terms of an empty category. The NP may also be said to have no phonetic entity though its context is identifiable from the features of the external argument. But such analysis does not seem to be plausible for two reasons. Firstly, there is some discrepancy of agreement between the matrix verb and the external argument in (24). This is particularly true of the second sentence. The external argument, i.e., Čaaltuu, is a feminine noun, but the verb, which normally agrees in gender with 'its' subject, fails to do so here. In other words, the verb is in the same form we would expect it to appear in if the external argument were 3ms.<sup>6</sup> Furthermore, this same structure may also occur in the form in (25) below, i.e., with the verb showing the relevant agreement phenomena we would expect.

25.        [Čaaltuu-n [ [hoolaa kan bit-t-e] [takkaat-t-i]]]  
           S<sub>Č-nom.</sub>    V' S<sub>sheep</sub> comp. buy-f-pf.    V<sub>seem-f-pf.</sub>  
           'It seemed [that] Čaaltuu bought [a] sheep'.

The question which arises from this state of affairs is: Why does the verb show the feminine morpheme /-t-/ in (25) but not in (24 b)? Could it be that the subject in (24 b) is not Čaaltuu?

Secondly, if the complement in both structures of (24) is a relative clause with its head optionally missing in surface structure, then, structures without a missing head should be possible. But this again does not seem to be the case as the corresponding structure in (26) below shows:

- 26\*        [Čaaltuu-n [ [ [dubartii] [hoolaa kan bit-t-e]]  
           S<sub>Č-nom.</sub>    V' N'' N'' woman        S<sub>sheep</sub> comp. buy-f-pf.  
           [takkaat-a]]]  
           V<sub>seem-impf.</sub>  
           ?'Čaaltuu seemed a woman who bought a sheep'.

The dubious ungrammaticality of (26) may induce us to believe that the complement here may not be a relative clause at all, for in that case, the structure would not have been ungrammatical. But it is. The ungrammaticality might be said to have resulted from the lack of agreement between Čaaltuu and the matrix verb, which is an indisputable fact. But the question which also follows from this is why does this happen in this particular structure? (24 b) above is grammatical without there being any such agreement between Čaaltuu and this same matrix verb? If the verb had shown the agreement feature in (26), the structure would have been grammatical, but its meaning would have been entirely different from the meaning of the structure in (25).

27. [Čaaltuu-n [ [ [dubbartii] [hoolaa kan bit-t-e]]  
 S<sub>Č</sub>-nom. V' N' N' woman S<sub>š</sub> sheep comp. buy-f-pf.  
 [takkaat-t-i]]  
 root-f-pf.  
 'Čaaltuu looks like a woman who has bought [a] sheep'.

The complement here is an NP with a relative clause complement, there is also agreement between the matrix verb and the feminine subject Čaaltuu. But as stated above, the structure has a different interpretation. Here /fakkaat-/ means 'look like' and is similar to /fakkaat-/ 'resemble' in the structures in (23), in terms of its complement types. In both, the complement is an NP, with or without a relative clause complement. In (27) /fakkaat-/ 'seem' is different from either of the two /fakkaat/s in that (1) its complement is a clause rather than an NP, and (2) its external argument is an empty NP<sub>e</sub>. This may explain the reason why the verb shows agreement features at times and fails to do so at other times. To make the point a little clearer, let us consider the following structures.



- 28 (a) [nam-oon-ni    [Çaaltuu    kan    jaalat-an-i] fakkaat-a]  
 S                    S<sub>v</sub>                    comp. love-pl-pf.    seem-impf.  
 '[It] seemed the men loved Çaaltuu'.
- (b) [nam-oon-ni    [Çaaltuu    kan    jaalat-an-i] fakkaat-an-i]  
 S                    S<sub>v</sub>                    comp. love-pl-pf.    seem-pf-pf.  
 'The men seemed that [they] loved Çaaltuu'.

The situation in (28) is parallel to that we have observed in relation to the structure in (24 b) and in the corresponding (25). As there, the verb here shows the agreement feature in (b) in relation to the plural subject /nam-oon-ni/ 'men-nom', although superficially, this same noun appears to be the subject in (28 a) too. In other words, in those cases where the verb does 'not' seem to show any agreement features, its subject is the empty NP. (cf. Note 6).

In languages like English such empty positions are filled by pleonastic elements. Oromo does not have such elements. The position is, hence, left vacant or covered by a raised subject of a complement clause. In short, then, the structure in (28 b) is one which is derived from a corresponding structure of the type in (29).

29. [NPe [ [ [nam-oon-ni    kan    Çaalt-uu    jaalat-an-i]] [fakkaat-a]]]  
 S    V'   S<sub>v</sub>   S<sub>v</sub>                    comp. Ç.                    love-pl-pf.    V<sub>v</sub> seem-impf.  
 '[It] seems that [the] men loved Çaaltuu'.

Notice that the embedded verb is in agreement with its subject /nam-oon-ni/ 'men-nom' with respect to the feature of number as expected, just as in the same way the matrix verb agrees with its empty subject NP.

If this line of argument is sound, then the subcategorization frame of this verb must be along the following lines:

/fakkaat-/ : V + [ $\bar{S}$  —] 'seem'.

The frame tells us what the complement of the verb is. It does not tell us that its subject is an empty NP. For such particular cases, it is

necessary to include in the frame information idiosyncratic to the particular element. In this case, the frame above may be modified in the manner shown below:

V + [NPe[ $\bar{S}$ ]—]

Now, if /fakkaat-/ subcategorizes a clause, and if we maintain the claim made earlier that it is a copulative verb, then we need to answer a question pertaining to the relation between the clausal complement and the empty NP subject. Earlier on we said that the relation between the external and internal arguments in such copular structures is one of coreference, which if maintained, would also mean that in (29) the empty NP and the clausal complement are in similar relations. And it seems to be so. The empty NP subject may be treated as being the same as the state of affairs which the clause expresses. In other words, what 'seems' is what is expressed by the clause.

The internal structure of the complement clause, the nature of /kan/ and the manner in which such structures as (28 b) are to be derived will be the subject of Chapter Five. For the moment, assuming that the argument is on the right track, we shall move on to the next type of verb.

#### Type Four

The verbs in this group select simple nominals or clauses as their complements. They are also characterized by their potential for passive morphology. For purposes of presentation, they may be divided into three subtypes. Using traditional terms, we may call them semi-transitives, transitives and ditransitives.<sup>7</sup> In what follows, we shall be concerned with each subtype.

##### (i) Semi-transitives

The verbs in this subgroup have complements consisting of simple NPs which do not necessarily have to appear in surface structure. Most of them are cognate objects. The following are some examples:

- 30(a) [Tulluu-n [ [ñaata] [hin-ñaat-a]]]  
 S<sub>T-nom.</sub> V' N''' food V<sub>cm-eat-impf.</sub>  
 'Tulluu will eat food'.
- (b) [Tulluu-n [ [sirba] [sirb-e]]]  
 S<sub>T-nom.</sub> V' N''' song V<sub>sing-pf.</sub>  
 'Tulluu sang a song'.
- (c) [Tulluu-n [ [uffaata-saa] [uffat-e]]]  
 S<sub>T-nom.</sub> V' N''' clothes-his V<sub>put on-pf.</sub>  
 'Tulluu put on his clothes'.

Other similar verbs but with non-cognate object complements include those seen in the structures below:

- 31(a) [Tulluu-n [ [nama] [hin-sodaat-a]]]  
 S<sub>T-nom.</sub> V' N''' man V<sub>cm.-fear-impf.</sub>  
 'Tulluu fears men'.
- (b) [Çaaltuu-n [ [muçaaayyo] [deeč-č-e]]] / <deeč-t-e]  
 S<sub>Ç-nom.</sub> V' N''' baby V<sub>deliver-f-pf.</sub>  
 'Çaaltuu gave birth to a baby'.

The complements of such verbs may be null in surface structure without any loss of meaning or without the sentence becoming ungrammatical. The reason for this seems to be related to our knowledge of the world. For example, once we know that Çaaltuu is a woman, we do not need to be explicit about what she would give birth to. This is pretty obvious from our knowledge that a woman gives birth to a baby. The same may be said about the verb in (31 a). Unless Tulluu is fearful of animals (in which case, the complement would need to appear in surface structure), it is not necessary to mention /nama/ 'man' for this is understandable from our knowledge of people who find it difficult to mix with others easily. In other words, syntactically the complements are always there, but for pragmatic reasons they do not obligatorily appear in surface structures.

Since our concern here is the representation of such objects in D-structure, we need to specify the entry of such verbs in the manner shown here for / $\check{n}$ aat-/ 'eat':

/ $\check{n}$ aat-/ : V + [N' ' ' —] 'eat'.

(ii) Transitives

Unlike the semi-transitives, these are characterized by complements which cannot be missing without the resulting structure being incomplete or totally ill-formed. Consider the following structures:

32 i(a) [Tulluu-n [ [bi $\check{s}$ aan] [fid-e]]]  
 $S$ <sub>T-nom.</sub> V' N' ' ' water  $V$ <sub>bring-pf.</sub>  
 'Tulluu brought water'.

(b) ?[Tulluu-n fid-e]  
 $S$ <sub>T-nom.</sub> bring-pf.  
 'Tulluu brought'.

ii(a) [Tulluu-n [ [farsool] [j $\check{a}$ alat-a]]]  
 $S$ <sub>T-nom.</sub> V' N' ' ' beer  $V$ <sub>like-impf.</sub>  
 'Tulluu likes beer'.

(b) ?[Tulluu-n j $\check{a}$ alat-a]  
 $S$ <sub>T-nom.</sub> like-impf.  
 'Tulluu likes'.

iii(a) [Tulluu-n hoolaa bit-e]  
 $S$ <sub>T-nom.</sub> sheep buy-pf.  
 'Tulluu bought [a] sheep'.

(b) ?[Tulluu-n bit-e]  
 $S$ <sub>T-nom.</sub> buy-pf.  
 'Tulluu bought'.

The structure in (b) may be possible only in restricted contexts, such as when the participants of a discourse are in the middle of their conversation and when each knows what the discourse is all about. Only in such cases can such structures be used. Their subcategorization frames are essentially the same as that proposed for / $\check{n}$ aat-/ 'eat', above.

(iii) Di-transitives

The verbs in the previous two subgroups, subcategorize only one complement. In contrast to these are verbs which are characterized by one NP and one adpositional phrase or a clause, as the case may be.

We shall first consider those with phrasal complements.

33(a) [Tulluu-n [ [Fayyiisaa-daf] [aannan] [kenn-e(-ef)] ] ]  
 S<sub>T-nom.</sub> V' Adp'' F. to N''' milk V<sup>8</sup> give-pf-to  
 'Tulluu gave milk to Fayyiisaa'.

(b) ?[Tulluu-n [ [Fayyiisaa-daf] [kenn-e(-ef)] ] ]  
 S<sub>T-nom.</sub> V' Adp''' F. to V<sup>8</sup> give-pf-to

(c) ?[Tulluu-n [ [aannan] [kenn-e]] ]  
 S<sub>T-nom.</sub> V' N''' milk V<sup>8</sup> give-pf.  
 'Tulluu gave milk'.

34(a) [Tulluu-n [ [Çaaltuu-daf] [doksa] [him-e(-ef)] ] ]  
 S<sub>T-nom.</sub> V' Adp'' Ç. to N''' secret V<sup>8</sup> tell-pf-to  
 'Tulluu told [as] secret to Çalittuu'.

(b) ?[Tulluu-n [ [Çaaltuu-daf] [him-e(-ef)] ] ]  
 S<sub>T-nom.</sub> V' Adp'' Ç. to V<sup>8</sup> tell-pf-to

(c) ?[Tulluu-n [ [doksa] [him-e]] ]  
 S<sub>T-nom.</sub> V' N''' secret V<sup>8</sup> tell-pf.  
 'Tulluu told [a] secret'

The structures in (b) and (c) are restricted to the same type of context we described in connection with the structures shown in (32 b) above.

Such verbs may be associated with the entry shown for /him-/ 'tell':

/him-/ : V + [Adp'' N'''—] 'tell'  
 dat.

The subscript (dat)ive is necessary in order to avoid other phrases of the same category from occurring in this position. For example, in (35) below, the verb /kaa?-/ 'put' like /him-/ 'tell' above, subcategorizes

an adpositional phrase as well as an NP as its complements. But the adpositional phrase here is locative in function, which means that unless it is labelled as (loc)ative in the entry, it may not be distinguished from a dative one, or from other types of adpositional phrases for that matter.

35(a) [Tulluu-n [ [siree-rra] [wayaa] [kaa?-e]]]  
 S<sub>T-nom.</sub> V' Adp' 'bed on N' ' ' clothes V<sub>put-pf.</sub>  
 'Tulluu put clothes on [the] bed'.

(b) [ʔTulluu-n wayaa kaa?-e]  
 T-nom. clothes put-pf.  
 'Tulluu put clothes'.

The complements we have considered thus far are all phrases. They have been either NPs or adpositional phrases, or both as in the examples in (35). In what follows, we shall consider some verbs within the same class of transitives which require clausal complements. First, we shall deal with those which subcategorize finite clauses. These include epistemic verbs like /beek-/ 'know', /daga?-/ 'hear', /arg-/ 'see', etc. The following are illustrative examples of these.

36(a) [Tulluu-n [ [akka [Fayyiisaa-n deem-e]] [beek-a]]]  
 S<sub>T-nom.</sub> V' S<sub>'as'</sub> S<sub>F-nom.</sub> go-pf. V<sub>know-impf.</sub>  
 (literally), 'Tulluu knows as Fayyiisaa went'.  
 'Tulluu knows that Fayyiisaa has left'.

(b) [Tulluu-n [ [akka [iʃii-n duf-t-e]] [daga?-e]]]  
 S<sub>T-nom.</sub> V' S<sub>'as'</sub> S<sub>she-nom.</sub> come-f-pf. V<sub>hear-pf.</sub>  
 'Tulluu heard that she came'.

(c) [Tulluu-n [ [akka [nam-ičč-i dukkubsat-e]] [arg-e]]]  
 S<sub>T-nom.</sub> V' S<sub>'as'</sub> S<sub>man-sgl-nom.</sub> be-sick-pf. V<sub>see-pf.</sub>  
 'Tulluu saw that the man was sick'.

Such verbs like other transitive verbs, do also occur with simple NP complements as the examples in (37) show.

37(a) [Tulluu-n [ [nama] [beek-a]]]  
 $S_{T\text{-nom.}}$  V' N''' man  $V_{\text{know-impf.}}$   
 (literally), 'Tulluu knows man',  
 'Tulluu knows people'.

(b) [Tulluu-n [ [sagalee] [ḍaga?-e]]]  
 $S_{T\text{-nom.}}$  V' N''' noise  $V_{\text{hear-pf.}}$   
 'Tulluu heard [a] noise'.

Accordingly, their subcategorization frame may have to be as shown here for /ḍaga?-/ 'hear':

/ḍaga?-/ : V + [ {  $\bar{S}$  N''' } — ] 'hear'.

The clausal complements above are finite in the sense that their verbs show (ASP)ectual and (AGR)eement features. It is also possible for such types of verbs to select clauses whose lexical heads are characterized by some pronominal elements. Such clauses may be called 'finite infinitivals'.

38(a) [Tulluu-n [ [ [Fayyiisaa-n deem-uu-saa] [beek-a]]]  
 $S_{T\text{-nom.}}$  V'  $\bar{S}$   $S_{F\text{-nom.}}$  go-to-his  $V_{\text{know-impf.}}$   
 'Tulluu knows Fayyiisaa's going'.

(b) [Tulluu-n [ [ [Ḍaaltuu-n deem-uu-ḡii] [ḍaga?-e]]]  
 $S_{T\text{-nom.}}$  V'  $\bar{S}$   $S_{Ḍ\text{-nom.}}$  go-to-her  $V_{\text{hear-pf.}}$   
 'Tulluu heard Calltuu's going',

Whereas verbs like /ḍaga?-/ 'hear' are characterized by finite clauses of one sort or another, others like /barbaad-/ 'want', which we may call 'desiderative verbs', are associated with both finite and infinitival clauses. The following examples are illustrative of this.

39(a) [Tulluu-n [ [ [deem-uu] [barbaad-a]]]  
 $S_{T\text{-nom.}}$  V'  $\bar{S}$   $S_{\text{go-to}}$   $V_{\text{want-impf.}}$   
 'Tulluu wants to go'.

(b) [Tulluu-n [ [ [Ḍaaltuu-n akka ḍuf-t-u] [barbaad-a]]]  
 $S_{T\text{-nom.}}$  V'  $\bar{S}$   $S_{Ḍ\text{-nom.}}$  as come-f-impf.  $V_{\text{want-impf.}}$   
 (literally), 'Tulluu wants that Ḍaaltuu come',  
 'Tulluu wants Ḍaaltuu to come'.

Whenever the complement is one of the type seen in (b), i.e., a tensed clause, the verb is always in its subjunctive (which is imperfective as far as aspect is concerned) form, since structures like (40) with the verb in the perfective aspect are ill-formed.

- 40\*, [Tulluu-n [ [ [Čaaltuu-n akka ɖuf-t-e]] [barbaad-a]]]  
 S<sub>T-nom.</sub> V' S S<sub>Č-nom.</sub> as come-f-pf. V<sub>want-impf.</sub>

Like the epistemic verbs, /barbaad-/ 'want' does also occur with a simple NP complement, as in (41):

41. [Tulluu-n [ [horii] [hin-barbaad-a]]]  
 S<sub>T-nom.</sub> V' N''' money V<sub>cm- want-impf.</sub>  
 'Tulluu wants money'.

The subcategorization frame of such verbs may hence be said to be the same as that we suggested above for verbs like /ɖaga?-/ 'hear'. In fact, this same frame may be extended to account for the situation we have with verbs like /aman-/ 'believe' since they too are associated with clausal or simple nominal complements. Observe the following.

- 42(a) [Tulluu-n [ [nama] [hin-aman-a]]]  
 S<sub>T-nom.</sub> V' N''' man V<sub>cm- believe-impf.</sub>  
 'Tulluu trusts people'.
- (b) [Tulluu-n [ [akka [Čaaltuu-n ɖuf-t-e]] [hin-aman-a]]]  
 S<sub>T-nom.</sub> V' S as S<sub>Č-nom.</sub> come-f-pf. V<sub>cm- believe-impf.</sub>  
 (Tulluu believes that Čaaltuu came (has come)).
- (c) [Tulluu-n [ [ [Čaaltuu-n ɖuf-uu-šii]] [hin-aman-a]]]  
 S<sub>T-nom.</sub> V' S S<sub>Č-nom.</sub> come-to-her V<sub>cm- believe-impf.</sub>  
 ?'Tulluu believes Čaaltuu's going'.

In contrast to the verbs we have considered which may take either tensed or non-tensed clauses as well as simple NP complements, there are a few verbs which are strictly limited to one of the two clause types. The verbs /mokkar-/ 'try' and /danda?-/ 'be able' select only non-tensed clauses, whereas the quotative verb /jed-/ 'say' and the question verb /gaaf-/ 'ask',



occur only with tensed clauses. Consider the following examples as illustrative of the former two:

- 43(a) [Tulluu-n [ [ [wayaa miiččuu(-f)] [mokkar-e]]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$   $S$  clothes wash-to-for  $V$  try-pf.  
 (literally), 'Tulluu tried for to wash clothes',  
 'Tulluu tried to wash clothes'.
- (b) [Tulluu-n [ [ [wayaa miičč-uu] [hin-danda?-a]]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$   $S$  clothes wash-to cm-be-able-impf.  
 'Tulluu is able to wash clothes'.
- (c)\* [Tulluu-n [ [akka [wayaa miičč-uu] [hin-danda?-a]]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$  as  $S$  clothes wash-impf.  $V$  cm-be-able-impf.

Just as /danda?-/ 'be able' is sensitive to non-tensed clauses, so is /jed-/ 'say' to tensed clauses. This is obvious from the grammaticality of the structures in (a) and the ungrammaticality of the corresponding structures in (b) of (44).

- 44(a)(i) [Tulluu-n [ [ [aannan na-n-barbaad-a] [jed-e]]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$   $S$  milk I-cm want-impf.  $V$  say-pf.  
 'Tulluu said "I want milk".'
- (ii)\*[Tulluu-n [ [ [aannan na-n-barbaad-uu] [jed-e]]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$   $S$  milk I-cm-want-to  $V$  say-pf.
- (b)(i) [Tulluu-n [ [ [čaaltuu-n duf-t-e] [jed-e]]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$   $S_{\check{C}-nom.}$  come-f-pf.  $V$  say-pf.  
 'Tulluu said, "čaaltuu came".'
- (ii)\*[Tulluu-n [ [ [čaaltuu-n duf-uu] [jed-e]]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$   $S_{\check{C}-nom.}$  come-to  $V$  say-pf.

The complement clauses in (44) are not only finite but also simple in the sense that they are not introduced by overt complementizers or other subordinating elements. In other words, the structures are in the form of direct statements. And this seems to be predominantly the case not only in Oromo but also in Amharic, and probably in other Ethiopian languages. Indirect statements are hardly used if they are used at all.

In the structures above /jɛd-/ selects a declarative clause complement.

In (45) below it occurs with an interrogative clause.

45(a) [Tulluu-n [ [ [maḵaa-n-kee eeññu]] [jɛd-e]]]  
 S<sub>T-nom.</sub> V' S̄ S name ←-nom-your who-is V' say-pf.  
 'Tulluu said, "What is your name?"'

(b) [Tulluu-n [ [ [biyy-i-kee eessa]] [jɛd-e]]]  
 S<sub>T-nom.</sub> V' S̄ S country-nom-your where-is V' say-pf.  
 'Tulluu said, "Where is your country?"'

Though questions are predominantly direct, it is not absolutely impossible to make them indirect whenever this is desirable. When such is the case, the verb used is /gaafat-/ 'ask' as the examples in (46) demonstrate.

46(a) [Tulluu-n [ [ [maḵaa-n-koo akka eeññu ta?-e]] [na  
 S<sub>T-nom.</sub> V' S̄ S name-nom-my as who become-pf. N' ' ' me  
 [gaaf-at-e]]]  
 V<sub>ask-mid-pf.</sub>  
 (literally), 'Tulluu asked me [as to] what my name became',  
 'Tulluu asked me what my name was'.

(b) [Tulluu-n [ [ [biyy-i-koo akka eessa ta?-e]] [na]  
 S<sub>T-nom.</sub> V' S̄ S country-nom-my as become-pf. N' ' ' me  
 [gaaf-at-e]]]  
 V<sub>ask-mid-pf.</sub>  
 (literally), 'Tulluu asked me [as to] where my country became',  
 'Tulluu asked me where my country was'.

These same questions may be asked in a manner that also involves the verb /jɛd-/ 'say'. But such structures appear to be co-ordinative rather than subordinate clauses. Consider (47):

47(a) [Tulluu-n [ [ [maḵaa-n-kee eeññu]] [jɛd-e]]]  
 S<sub>T-nom.</sub> V' S̄ S name-nom-your who-is V' say-pf.  
 -ett [ [na] [gaaf-at-e]]]  
 having(?) V' N' ' ' me V<sub>ask-mid-pf.</sub>  
 (literally), 'Tulluu asked me having said "What is your name?"'

- (b) [Tulluu-n [ [ [biyy-i-kee eessa]] [ʃed̥-e]]  
 S<sub>T-nom.</sub> V' S̄ S country-nom-your where V say-pf.  
 -ett [ [na] [gaff-at-e]]]  
 having V' N''' me V ask-mid-pf.  
 (literally), 'Tulluu asked me having said "Where is your country?'

In some cases /ʃed̥-/ 'say' may be used with a clause and a simple NP as in:

48. [Tulluu-n [ [ [biyy-i-kee eessa]] [naa-n] [ʃed̥-e]]]  
 S<sub>T-nom.</sub> V' S̄ S country-nom-your where N''' me-cm V say-pf.  
 (literally), 'Tulluu said me "Where is your country?"'

From the examples above, verbs like /ʃed̥-/ 'say' or /gaafat-/ 'ask' may be associated with the following entries:

- /ʃed̥-/ : V + [S(N''')] 'say'  
 /gaafat-/ : V + [S̄, N'''] 'ask'.

### 3.1.3 Adjectivals (A')

Like nominals, adjectivals may be characterized by optional complements. This is particularly true of what Dixon (1977:63) calls 'value adjectives'. They select adpositional phrases as complements. The following are some such examples:

- 49(a) [arakee ɖug-uu-n [ [kɔraa-f] [gaarii]] -ɖa]  
 S arakee drink-to-nom. A' Adp''' cold for A good -is  
 'Drinking arakee is good for the cold [weather]'.  
 (b) [daaɖii ɖug-uu-n [ [namoomsaa-f] [hamaa]] -ɖa]  
 S mead drink-to-nom. A' Adp''' body-for A bad -is  
 'Drinking mead is bad for the body'.  
 (c) [Tulluu [ [sirba sirb-uu-n] [çimaa]] -ɖa]  
 S<sub>T-nom</sub> A' Adp''' song sing-to-at A strong -is  
 'Tulluu is good at singing songs'.

The complements here may be said to be similar to those of N' since they seem to have the same function of showing the purpose in terms of which the external argument is evaluated as 'good' or 'bad'.

Such adjectivals may be identified by the sample entry shown for /gaarii/ 'good'. (See 3.2.1.3 for an alternative analysis.)

/gaarii/ : A ± [Adp' —] 'good'  
Pur.

### 3.1.4 Adpositionals

Like verbals, adpositionals may be divided into types and subtypes. The first division is between those which select simple nominal complements and those which select clausal complements. The following are examples of each.

50 (a) (i) [Tulluu-n [ [gara] [nama koriččaa] deem-e]  
S<sub>T-nom.</sub> Adp' Adp to N''' house of-medicine go-pf.  
'Tulluu went to hospital'.

(ii) [Tulluu-n [ [waaye] [waraanaa] dubb-at-e]  
S<sub>T-nom.</sub> Adp' Adp about N''' war speak-mid-pf.  
'Tulluu spoke about war'.

(iii) [Tulluu-n [ [akka] [abbaa-saa] nama gaarii-ḍa]  
S<sub>T-nom.</sub> Adp' Adp as N''' father-his man good is  
'Tulluu is [as] good like [as] his father'.

(b) (i) [Tulluu-n [ [erga] [išii-n ḍuf-t-e] deem-e]  
S<sub>T-nom.</sub> Adp' Adp after S she-nom. come-f-pf. go-pf.  
'Tulluu went after she came'.

(ii) [ [ [yoomuu] [ [Čaaltuu-n ḍuf-t-e]]] Tulluu-n hin-deem-a]  
S Adp' Adp when S Č-nom. come-f-pf. T-nom. -go-impf.  
'Tulluu will go when Čaaltuu has come'.

(iii) [ [ [yoo] [ [kana ḵed-e]]] soba ḵed-e]  
S Adp' Adp if S this say-pf. lie say-pf.

'If he said this, he said a lie' (Gragg 1982:407).

Both types of adpositionals may be represented by the following entries:

/gara/ : Adp + [—N'''] 'to/towards'

/yoomuu/ : Adp + [—S̄] 'when'.

Some adpositionals may freely select either one of the two complement types. Consider the following, for example:

51(a) (i) [ S Adp' Adp as S̄ S<sub>T-nom.</sub> [ [akka] [ [Tulluu-n duf-e]] ]<sup>9</sup> Čaaltuu-n deem-t-e]  
 Č-nom. go-f-pf.  
 'As [soon as] Tulluu came Čaaltuu went'.

(b) (i) [ S<sub>T-nom.</sub> Adp' Adp<sub>after</sub> S̄ S [ [išii-n duf-t-e]] ] as-i tur-e]  
 she-nom come-f-pf. here-from be-pf.  
 'Tulluu was here after she came'.

(ii) [ S<sub>T-nom.</sub> Adp' Adp<sub>after</sub> N''' [ [sa?aa-ti torbaa] ] as-i tur-e]  
 hour seven here-from be-pf.  
 'Tulluu was here after seven o'clock'.

In (51 a) as opposed to (50 a) (iii) /akka/ occurs with a clause. In much the same way /erga/ 'after' occurs with a clause in (51 b) (i) and with a simple NP in (51 b) (ii). This calls for a subcategorization frame of the following type:

/erga/ : Adp + [—{N'''S̄}] 'after'.

The division we have made above is based on the types of complements that adpositionals are associated with. Another way of dividing them would be by taking their positions as heads into account. The structures we have observed so far are left-headed. But there are others which are right-headed. The examples below have such structures.

52(a) [ S<sub>T-nom.</sub> Adp' N''' [ [abbaa-saa] [woj̃jin] ] duf-e]  
 father-his<sub>Adp</sub> with come-pf.  
 'Tulluu came with his father'.

(b) [ S<sub>T-nom.</sub> Adp' N''' [ [hoj̃ii] [booda] ] farsoo hin-ḍug-a]  
 work<sub>Adp</sub> after beer cm-drink  
 'Tulluu drinks beer after work'.

52 (c) [Tulluu-n [ [kawwee] [-dan leenča ajjees-e]  
 S<sub>T-nom.</sub> Adp' N''' gun Adp<sub>with</sub> lion kill-pf.  
 'Tulluu killed a lion with a gun'.

(d) [Tulluu-n [ [Fayyisaa-] [-daf]] aannan kenn-e (-ef)  
 S<sub>T-nom.</sub> Adp' N''' F. to milk give-pf-to  
 'Tulluu gave milk to Fayyissaa'.

Such adpositional elements may also occur with infinitival complements as the following examples show.

53(a) [Tulluu-n [ [deem-uu-] [-fi]] barbaad-a]  
 S<sub>T-nom.</sub> Adp' S<sub>go-to-</sub> Adp<sub>for</sub> want-impf.  
 (literally), 'Tulluu wants for going', 'Tulluu wants to go'.

(b) [Çaaltuu-n [ [ [hoolaa bit-uu]] [-fi]] deem-t-e]  
 S<sub>Ç-nom.</sub> Adp' S<sub>S</sub> sheep buy-to- Adp<sub>for</sub> go-f-pf.  
 (literally), 'Çaaltuu went for buying [a] sheep',  
 'Çaaltuu went to buy sheep'.

The subcategorization frame for such adpositionals is substantially the same as that required for those which are left-headed. What is different is the position of the head in relation to its complement. This must be indicated in entries along with other idiosyncratic properties for which the lexicon is believed to be the reservoir, (cf. Selkirk 1982). Hence, the frames for /wojǰin/ 'with' and /-fi/ 'for' may be shown as follows:

/wojǰin/ : Adp + [N'''—] 'with'  
 /-fi/ : Adp + [S̄—] 'for'.  
 pur.

A question which we need to raise at this point is whether adpositions assume a single position in deep structure. Or whether we should formulate two phrase structure rules for them: one for all those which are left-headed and another for all those which are not.

From the point of view of economy, it seems advantageous to assume one underlying position for both types and account for surface differences by means of movement rules. But in order to do this, we need to have some means of choosing one or other of the two contending positions. Since both involve movement, the choice of one over the other could be made arbitrarily. However, in quantitative terms, the number of postpositions is greater than the number of prepositions, which means that if we assume adpositional phrases to be right-headed, our work would be less than if we assumed otherwise. For purposes of comparison observe the following:

Adpositions

Prepositions

akka - 'like'  
gara - 'to'  
hamma - 'until'  
waayee - 'about'

Conjunctions

akka - 'as'  
otuu - 'while'  
yoomuu - 'when'  
erga - 'after'  
yoo - 'if'  
sababi - 'because'

Postpositions

bira - 'beside'  
booddee - 'after'  
duuba - 'behind'  
gidduu - 'between'  
gubbaa - 'over'  
-irra - 'on'  
-itti- 'to'  
ɣala - 'under'  
keessa - 'inside'  
malee - 'without'  
wojɣin - 'with'  
-(a)n - 'by', 'at'  
-fi - 'for'  
-iti - 'from'  
dura - 'before'  
-(da)f - 'to'

From the data above and from Greenberg's (1963:79) generalization (which is also based on such observations of data) about SOV languages being postpositional, we may adopt right-headedness for adpositional phrases/clauses in Oromo. Following this assumption then, a very general entry for any adpositional element would be like the one shown below:

$X : \text{Adp} + [\{N'''\bar{S}\} \text{---}]$

What we have attempted to do so far is show the possible constituents that the basic lexical items ( $X^0$ ) in each of the major categories are associated with in forming their syntactic categories ( $X'$ ). The next thing we need to pay attention to is the specifications of words derived from other words in terms of similar syntactic frames and in terms of the word formation rules which are involved in their derivations. The rest of the chapter will concentrate on these two aspects.

### 3.2 Lexical Redundancy Rules

As hinted at earlier on, lexical redundancy rules are rules of word formation. Their domain is the lexicon. It may not be wise to try to give a complete picture of the processes involved in the derivation of such lexical items in each of the three major categories, nor might it be necessary for the purpose we are after, which is primarily the identification of the complement structures of lexical heads at the minimal level of projection. It is, therefore, only secondarily and to a very limited extent that we will be dealing with this complex area of derivational morphology.

#### 3.2.1 Derivations

To the exclusion of adpositionals all the other major categories have derived forms in addition to their simple forms, which we have already dealt with in the preceding section. In what follows we shall be concerned with the properties of the derived forms.

##### 3.2.1.1 Nominals

Nominals may be derived from adjectives, nouns and verbs. The following are examples derived from the first two sources:



Paradigms One :

<u>N</u>		<u>N</u>
nam-		nam-ummaa
man		body/manhood
nag-		nag-ummaa
peace		peacefulness
moot-		moot-ummaa
king		'kingdom'
	-ummaa	
<u>A</u>		
gaar-		gaar-ummaa
good		'goodness'
bareed-		bareed-ummaa
beautiful		'beauty'
furd-		furdummaa
fat		'fatness'

The derivational process involved may be captured by the following rule. For purposes of generalization features will be used.

Rule One:

$$\begin{matrix} X \\ [+N] \end{matrix} \longrightarrow \begin{matrix} X \\ +N \\ -V \end{matrix} / \text{---} -ummaa \quad x\text{'ness'}.$$

The rule is partly category changing since it converts adjectives into nouns. A more or less similar type of rule derives nominals from exclusively adjectival sources. The following are some examples of this.

Paradigms Two

<u>A</u>		<u>N</u>
deer-		deer-ina
tall		'tallness'
gudd-	+ina →	gudd-ina
big		'bigness'
bay?-		bay?-ina
abundant		'abundance'

Rule Two : /-ina/

$$[\overset{X}{\underset{+N}{\downarrow}}] \longrightarrow [\overset{X}{\underset{-N}{\downarrow}}] / \text{---} \text{-ina} \quad x\text{'ness'}$$

The derived nominals in both Paradigms One and Two have the selectional restriction feature [-CONCRETE] in common. Syntactically such nominals are characterized by their lack of complements.

Notice that the rules do not change only the categorial status of the forms in question, but also their subcategorization properties as well. For example, the adjectival /gaarii/ 'good' selects an optional purposive phrase as its complement, as we have seen in 3.1.3, but the same is not true of its derivative /gaar-ummaa/ 'goodness'. The latter is characterized by the absence of any complement at all. Hence its entry specifies only categorial and other interpretive information:

/gaar-ummaa/ : N 'goodness'.

Regarding nominals with verbal stems consider the following paradigms:

Paradigms Three

	<u>V</u>		<u>N</u>
i)	barsiis-		barsiis-aa
	'teach'		'teacher'
	fayyiis-		fayyiis-aa
	'save'	+ -aa →	'saviour'
	faars-		faars-aa
	'sing'		singer
ii)	haal-		haalii
	'deny'		'denying'
	bit-		bitt-ii
	'buy'	+ -ii →	'buying'
	haadd-		haadd-ii
	'shave'		'shaving'
iii)	duul-		dull-tuu
	'war'		'warrior'
	gargaar-		gargaar-tuu
	'help'	+ -tuu →	'helper'
	bar-		bar-tuu
	'learn'		'learner'

iv)	ḍug		ḍug-uu
	'drink'		'to drink/drinking'
	deem-	+ -uu →	deem-uu
	'go'		'to go/going'
	ḍuf-		ḍuf-uu
	'come'		'come/coming'
v)	daan-		daan-ičča
	'punish'		'punishment'
	fid-	+ -ičča → <sup>10</sup>	fid-ičča
	'bring'		'bringing'
	fiig-		fiig-ičča
	'run'		'running'

Each of these rules needs to be indicated in the manner shown below for the paradigms in (i) above:

Rule Three:

$$[+\frac{X}{N}] \longrightarrow [+\frac{X}{N}] / -aa$$

Of the nominals in (i-v), only those with the ending /-aa/, /-uu/ and /-tuu/ seem to be characterized by the same subcategorization frames that their corresponding base forms are associated with. For example, both the transitive verb /bar-/ 'learn' and its derivative /bar-tuu/ 'learner' have the same complement structure. The differences are only the function of these complements and in the position they assume in relation to their heads.

Compare the following:

54(a) (i) [Tulluu-n [ [afaan faranʒii] [bar-e]]]  
 S<sub>T-nom.</sub> V' N''' mouth of-foreigner V<sub>learn-pf.</sub>  
 'Tulluu learnt English'.

(ii) [Tulluu-n [ [bar-tuu] [afaan faranʒii]] tur-e]  
 S<sub>T-nom.</sub> N' N<sub>learn-er</sub> N''' mouth of-foreigner be-pf.  
 (literally), 'Tulluu was learner of English'.

(b) (i) [Tulluu-n [ [hoolaa] [gurgur-e]]]  
 S<sub>T-nom.</sub> V' N''' sheep V<sub>buy-pf.</sub>  
 'Tulluu bought a sheep'.

- 54(b) (ii) [ [ [hoolaa] [gurgur-uu-n] gaarii-ḍa]  
 S N' N''' sheep N<sub>buy-to-nom.</sub> good is  
 'Buying/to buy sheep is good'.
- (c) (i) [Tulluu-n [ [Ḥaaltuu-ḍaf] [afaan Sidaamaa]  
 S<sub>T-nom.</sub> V' Adp''' Ḥ-nom. to N''' mouth of-Sidama  
 [barsiis-e(ef)]]]  
 V<sub>teach-pf-to</sub>  
 'Tulluu taught Ḥaaltuu Sidama language' (=Amharic).
- (ii) [Tulluu-n [ [ [barsiisaa] [ [afaan Sidaamaa]  
 S<sub>T-nom.</sub> V' N' N<sub>teacher</sub> N''' N''' of-A.S.  
 [Ḥaaltuu]] tur-e]]  
 N''' of-Ḥ. be-pf.  
 'Tulluu was Ḥaaltuu's Amharic teacher'.

As is observable from the structures, in each of the pairs, the verbal and the corresponding nominal heads seem to have corresponding complements. In fact, there is no difference even in position between the complements of the nominals ending in /-uu/ and those of their corresponding verbs. It is only between the complements of those nouns ending in /-aa/ or /-tuu/ and those of their verbal sources that such differences appear to exist. From these situations, it appears that it may not be necessary to have independent entries for derivatives unless they are substantially different in their choice of complements. The derivatives may be identified by the same frames that their sources are associated with. The only information we need to provide is that which relates to their position as heads. This may be made explicit by a general statement to the effect that nominals other than infinitivals are left-headed. Accordingly, the relation between, say, /bar-/ 'learn' and /bar-tuu/ 'learner' may be indicated in the manner shown below:

/bar-/ : V + [N'''—] 'learn'  
 : N[-tuu] 'learner'.

Notice, however, that this type of relationship does not always exist between any two derivatives. For example, the complements of the verb

/barsiis-/ 'teach' include a clause as well as a simple NP, whereas that of the corresponding nominal /barsiisaa/ 'teacher' has only simple NPs.

Observe the following examples.

55 (a) [Tulluu-n [ [mana iḵjaar-uu]] [ana] [barsiis-e]]  
 S<sub>T-nom.</sub> V'  $\bar{S}$  S<sub>house</sub> build-to N''' me V<sub>learn-cs-pf.</sub>  
 'Tulluu taught me to build a house'.

(b)\* [Tulluu-n [ [barsiisaa] [(a)na] [mana iḵjaar-uu]] tur-e]  
 S<sub>T-nom.</sub> N' N<sub>teacher</sub> N''' me S<sub>house</sub> build-to be-pf.

(c)\* [Tulluu-n [ [barsiisaa] [-koo [mana iḵjaar-uu]] tur-e]  
 S<sub>T-nom.</sub> N' N<sub>teacher</sub> N''' S<sub>house</sub> build-to be-pf.  
 ?'Tulluu was my house-building teacher'.

But notice also that the structure below is grammatical with an NP occurring in the position of the infinitival clause in (55).

56 [Tulluu-n [ [barsiisaa] [afaan Oromo]] tur-e]  
 S<sub>T-nom.</sub> N' N<sub>teacher</sub> N''' of-mouth of-Oromo be-pf.  
 'Tulluu was an Oromo teacher'.

The ungrammatical structures in (55) show that /barsiisaa/ cannot occur with a clausal complement though its verbal source /barsiis-/ 'teach' can. This suggests that the two cannot be associated with the same frame. We may hence need to have the following independent entries:

/barsiis-/ : V + [Adp' '{ $\bar{S}$  N'''}] —] 'teach'  
 /barsiisaa/ : N + [— N'''] 'teacher'.

### 3.2.1.2 Verbals

The morphology of Oromo verbs is very complex. Only to attempt to make a complete description of it is to do no justice to it. We shall, therefore, limit the discussion to those processes which have some bearing on the subcategorization properties of the forms undergoing them.

Among the forms concerned are: causatives, passives, and middles or reflexives. Excepting some derivation resulting in reflexives, the rest

are non-category changing processes. The effects they have on the forms in question are subcategorial rather than categorial.

### 3.2.1.2.1 Causatives

As hinted at in Chapter One, causativization is a lexical process in Oromo. To the exclusion of the 'be' verb /-da/, all other verbs may be causativized. The elements which show this are /-(i)s/ and /-(i)sis- (i)siis-/. Their distribution is partly determined by the intransitive-transitive nature of the verbs undergoing the process. Those which are intransitive require /-(i)s/,<sup>11</sup> whereas those which are transitive take /-(i)sis- (i)siis-/. Paradigms Four and Five below are illustrative examples of each type.

#### Paradigms Four

<u>V</u>		<u>N</u>
arreed-		arreed-is-
run		'cause to run'
ḥoom-	+ - (i)s →	ḥoom-s-
get fat		'fatten'
book-		book-is
ferment		'ferment/leaven'.

The morphological process may be summed up as follows:

#### Rule Four : /-(i)s/

[X-] → [ [X-] - (i)s - ] 'transitive counterpart of X'  
 Vi                    Vt Vi

The subcategorization frames of the resulting forms are different from those of their intransitive base forms. They are characterized by an NP complement which they acquire as a result of the morphological process they have undergone. The entries for /ḥoom-/ and /ḥooms-/ show this difference.

/ḥoom-/ : V [-] 'get fat'

/ḥooms-/ : V + [N'' -] 'fatten'.

Since the subcategorization frame of forms like /čooms-/ 'fatten' is the same as that of any transitive verb, the affix /-(i)s-/ may be considered as being a transitivizer, and the verbs as transitivized verbs (Hayward 1975, 1976; Gragg 1976). The following examples give support to this consideration.

- 57 (a) [sang-ičč-i      čoom-e]  
 S bull-sgl-nom.      get-fat-pf.  
 'The bull got fat'.
- (b) [Tulluu-n    sang-ičča    čoom-s-e]  
 S T-nom.      bull-sgl.      fat-tr.-pf.  
 'Tulluu fattened the bull.'

Paradigms Five

<u>V</u>		<u>V</u>
bit-		bit-isiis-
'buy'		[biččisiis-] 'cause to buy'
arg-	-isiis- →	arg-isiis-
'see'		[agarsiis-] 'cause to see'
abboom-		abboom-isiis-
'order'		[abboom-siis-] 'cause to order'.

The following rule may capture the process involved here.

Rule Five : /-(i)siis/<sup>12</sup>

[X-] → [[X-] -isiis-] 'causative'.  
 V            VV

Following structures like:

58. [Tulluu-n [[Fayyiisaa] [hoolaa] bičč-isiis-e]]  
 S T-nom.    V' F.            sheep      buy-cs-pf.  
 'Tulluu caused Fayyiisaa to buy a sheep',

the subcategorization frame of such verbs as /biččisiis-/ 'cause to buy', may be formulated as /biččisiis-/ : V+ [N'' N''—] 'cause to buy'.

As hinted at earlier on, transitivizations and causativizations are processes which increase subcategorization potentials. Verbs with the

suffix /-is-/ or /-isiis-~~v~~-isis-/ are always a complement ahead of their base forms. This is noticeable from the examples in (57) and (58) above. Moreover, since the complement which a verb acquires as a result of its having either one of these affixes is the external argument of a corresponding non-transitive or non-causative form, the process may be considered as being one of internalizing an external argument (cf. Chomsky 1981).

As has been stated in Chapter One, the complement which a verb acquires as a result of its having a causative affix may be optional, whereas the complement which it requires in order to satisfy its inherent lexical property is always obligatory. Hence structures like (58) above may have the surface realization as in (59a) but not as in (b).

- 59 (a) [Tulluu-n hoolaa bičč<sup>x</sup>-isiis-e]  
<sub>S</sub>T-nom. sheep buy-cs-pf.  
 'Tulluu had [a] sheep bought'.
- (b)? [Tulluu-n Fayyiisaa bičč<sup>x</sup>isiis-e]  
<sub>S</sub>T-nom. F. buy-cs-pf  
 'Tulluu cause Fayyiisaa to buy'.

Transitivized verbs, like other transitive verbs, may undergo the same process, as the following examples demonstrate.

#### Paradigms Six

<u>V</u>		<u>V</u>
damf-is-		damf-is-iis-
boil-tr.		'cause to boil'
buu-s-	-iis →	buu-s-iis-
'get down'		'cause to get down'
daam-is-		daam-is-iis-
extinguish-tr.		'to get extinguished'.

Taking the transitivized stems as base forms, the corresponding causative forms may be derived by the same rule we proposed earlier for causativizing basic transitive verbs. The only difference between the



paradigms above and those of the basic transitives is in the form of their causativizing affix. The affix above is /-iis-/ whereas that of the basic transitives is /-siis-/. This is, however, a case of allomorphy and does not seem to have any effect on the subcategorization potential of the forms in question. What is important to note is that the number of complements that a verb requires progressively increases as it changes from intransitive to transitive and then to causative. This is what the structures in (60) below show.

- 60 (a) [biṣaan(i) damf-e]  
 water-nom. boil-pf.  
 '[The] water boiled'.
- (b) [Tulluu-n biṣaan damf-is-e]  
<sup>S</sup>T-nom. water boil-tr-pf.  
 'Tulluu boiled the water'.
- (c) [Tulluu-n Fayyiisaa biṣaan damf-is-iis-e]  
<sup>S</sup>T-nom. F. water boil-tr-cs-pf.  
 'Tulluu caused Fayyiisaa boil [the] water'.

The situation seems to suggest that though such verbs are derivationally related, they differ from one another with respect to the number of complements they require, which means that they need to be identified by independent entries of the type shown below.

- /damf-/ : V [—#] 'boil'  
 /damf-is-/ : V + [N''' —] 'cause to boil'  
 /damf-s-iis-/ : V + [N''' N''' —] 'cause someone to boil'

There are, however, some problems with such entries. Firstly, causativization is productive, nearly every verbal root/stem can undergo the process. If we therefore show both the root/stem and its causative form in the lexicon in the manner indicated above, the lexicon will be overburdened with both general and idiosyncratic information. Secondly, the

frames of the causative forms show us only the number of complements. They do not tell us that such complements are arguments whose thematic roles have been changed from agent to goal. Even if we show the role of each argument in every entry by a subscript, we will still be faced with the first problem. In order to avoid such problems, it seems necessary to have a general redundancy rule of the type in (61) below.

- 61 (a)  $V + [A, \text{---}] \longrightarrow V \text{-(i)s-} + [A \text{ G, ---}]$   
 (b)  $V + [A, \text{ G ---}] \longrightarrow V \text{-siis-} + [A \text{ G,G ---}]$ .

where  $A_1$  = external argument.

What (61) tells us is that any root verb may be transitivized/causativized by attaching /-is/ or /-siis-/, and when this happens, its external argument, which was an agent, becomes an internal argument, a goal. Once we introduce such a general rule, it will not be necessary to have an independent entry for every causative form. The lexicon will hence be reduced to general statements and to entries of forms which are derivationally unrelated.

The verbs we have considered thus far may be called morphological causatives since they are all derived from transitive or intransitive base forms by affixing /-(i)s-/ or /-siis-/. The verb /goḍ-/ 'make' is a little different in this respect, since it behaves like causatives 'without' having a causative affix. Observe the following examples.

- 62 (a) [Tulluu-n [ [Fayyiisaa] [wattadarii] [goḍ-e]]]  
 $S_{T\text{-nom.}}$   $V'$   $N''''$   $F.$   $N''''$  soldier  $V$  make-pf.  
 'Tulluu made Fayyiisaa [a] soldier'.
- (b) [Tulluu-n [ [muḩaa-saa] [bartuu] [goḍ-e]]]  
 $S_{T\text{-nom.}}$   $V'$   $N''''$  child-his  $N''''$  student  $V$  made-pf  
 'Tulluu made his child a student'.

The relation between Tulluu and Fayyiisaa is direct in the sense that Tulluu is personally involved in forcing the latter to become a soldier. And from the gloss it appears that the lower clause, for which Fayyiisaa is the subject is copular, in which case /goḏ-/ 'make' may be treated as being the causative counterpart of the copulative verb /-ḏa/ or /ta?-/ 'be/become' and Fayyiisaa as its internalized argument.

In structures of indirect causatives, the form used is /gočč-isiis-/ as in (63) below.

- 63 (a) [Tulluu-n [ [Dabalaa] [Fayyiisaa] [wattadarii]  
 S<sub>T-nom.</sub> V' N''' D. N''' F. N''' soldier  
 gočč-isiis-e]]  
 make-cs-pf.  
 'Tulluu make Dabalaa force Fayyiisaa to be a soldier'.
- (b) [Tulluu-n [ [Dabalaa] [mučaa-saa] [bartuu] gočč-isiis-e]]  
 S<sub>T-nom.</sub> V' N''' D. N''' child-his N''' learner make-cs-pf.  
 'Tulluu make Dabalaa force his child to be a student'.

The verb in (63) has one more complement than its counterpart in (62). The interpretations of the corresponding structures are also different. In the (a) structures of both (62) and (63), for example, Fayyiisaa is the causee. However, whereas Tulluu is the direct causer in (62), in (63) this is not the case. The direct causer in (63) is Dabalaa. Tulluu is an indirect causer. Except for Tulluu, which is the subject of the clause, all the other arguments are all in the accusative case.

The question which arises from this situation concerns the manner in which such arguments get their cases. If we follow the adjacency condition of Stowell (1981) on case assignment which dictates that the case-assigning and the case-receiving categories should be next to each other for case assignment to take place, only that argument which is the closest

to the verb could receive accusative case. According to this condition, the other arguments cannot get case marked without violating this condition. And since the structures are perfectly grammatical, we cannot say that the arguments are without case. We need only to account for the manner in which they receive it.

If, following Chomsky (1981), we assume that case may be assigned inherently at the level of D-structure and structurally at the level of S-structure, the argument which is not the closest to the verb may be said to have received case inherently, and the one which is nearest to it may be said to have received it structurally. Accordingly, in (63) /wattaddarii/ 'soldier' may get its case structurally, whereas /Fayyiisaa/ and /Dabalaa/ may get theirs inherently. However, Chomsky's proposal is based on non-causative verbs which subcategorize double NPs. The situation we have here is, thus, slightly different since we are dealing with causative verbs though the spirit of the explanation is the same.

Alternatively, we may argue that the adjacency condition does not hold for Oromo. The fact that structures like (64 b) where the NP argument is separated from its verbal head, are grammatical may give support to this view.

- 64 (a) [Tulluu-n Dabalaadaf aannan kenn-e(-ef)]  
<sup>S</sup>T-nom. D. to milk give-pf-to  
 'Tulluu gave milk to Dabalaa'.
- (b) [Tulluu-n aannan Dabalaadaf kenn-e(-ef)]  
<sup>S</sup>T-nom. milk D.to give-pf-to  
 (literally), 'Tulluu gave to Dabalaa milk'.

The difference between (64 a) and (b) is that there is a slightly prolonged pause following /aannan/ 'milk' in (b). In the light of this, we may dispense with the condition and assume that causativization as a

morphological process has the property of increasing not only the number of internal arguments but also the case-assigning potential of verbs undergoing this process. In other words, as a verb increases its internal arguments by progressively changing its form from intransitive to transitive and then to causative in the manner shown in (60) or in (62-63), its case-assigning property also increases. This appears plausible given the fact that in general, there is correlation between the number of arguments and the number of causative affixes a verb has. This has also been attested by Hayward (1975:216) and Owens (1985).

#### 3.2.1.2.2 Passives

Like causativization, passivization is lexical. Every verb with the subcategorization frame [N''—] has a corresponding passive form indicated by the affix /-am-/. But unlike causativization, passivization is also syntactic since it involves NP movement. The following paradigms show the morphological process.

#### Paradigms Seven

· bit-		bit-am-
buy		'be bought'
gurgur-	-am- →	gurgur-am-
sell		'be sold'
ajjees-		ajjeef-am
kill		be killed

#### Rule Seven /-am-/

[X-] → [[X-]-am] 'passive'

The above rule tells us that every transitive verb has a passive counterpart. It does not tell us whether the converse is also true. But from the existence of such forms as /deekk-am/ 'be angry' without a

corresponding transitive form, we may infer that the converse is not true. This means then we have to make distinctions between two types of passives: those with and those without transitive base. This distinction is important since it is also reflected in the thematic role ( $\theta$ -role) assigning property of the verbs in question. According to Burzio's (1981) generalizations (in Chomsky 1981) only passives with transitive base forms are characterized by their inability to assign theme to their external arguments and case to their internal arguments. Those passives which have no transitive base do, however, assign theme to their external arguments. In this respect they are similar to intransitive verbs. This is also obvious from the fact that, like the latter, they are associated with no internal arguments. Compare the following structures.

- 65 (a) [Tulluu-n      $\dot{d}$ eekkam-e]  
 $S$   
T-nom.           angry-pf.  
'Tulluu got angry'.  
(b) [Tulluu-n     rukku $\bar{t}$ -am-e]  
 $S$   
T-nom.           hit-ps-pf.  
'Tulluu was hit'.

Corresponding to (65) are the S-structures in (66):

- 66 (a) [Tulluu-n      $\dot{d}$ eekkam-e]  
 $S$   
T-nom.           angry-pf.  
(b) [Tulluu-n [     [t] [rukku $\bar{t}$ -am-e]]]  
 $S$            1 V' N'' 1 V  
T-nom.           hit-ps-pf.  
(c)\* [e [Tulluu     rukku $\bar{t}$ -am-e]]  
 $S$  V'  
T.               hit-ps-pf.

(66) shows that the S-structure in (a) is the same as the surface structure in (65 a) whereas the S-structure in (b) is different from the corresponding surface structure in (65). Tulluu in (65 a) is generated in situ whereas Tulluu in (b) is derived by move  $\alpha$ . The movement is

necessary in order for Tulluu to be able to receive case from INFL and to escape the case filter mentioned earlier on. It cannot receive case in its base position from the governing verb, because the verb has passive morphology and according to Chomsky (1981:124) passive morphology has the effect of absorbing the case-assigning property of transitive verbs. This makes the movement obligatory as structures like (66 c) are ill-formed.

Passive morphology does not affect the subcategorical status of verbs. Its effect is only on their  $\theta$ -marking and case-assigning properties, and once this is made clear by such general statements as Burzio's, it does not seem necessary for every passive form of a verb to have an entry independent of its active counterpart for that would make the lexicon unnecessarily bulky. Instead, the affix /-am-/ may be introduced by a lexical redundancy rule of the type shown earlier on.

### 3.2.1.2.3 Middles

Other than the processes which we have observed in the preceding sections, Oromo has also a process which derives what have been called middle/reflexive verbs (Gragg 1976) from adjectives, nouns or other verbs. The paradigms below show some examples:

#### Paradigms Eight

(i)	<u>v</u>		<u>v</u>
	fuud- + add- →		fud-add-
	take		take for oneself
	hid-		hid-add-
	tie		tie by oneself
	bit-		bit-add-
	buy		buy for oneself

(ii)	<u>A</u>	<u>V</u>
	ʃabaa	ʃaba-aḏḏ-
	strong	'get strong'
	furdaa	furda-aḏḏ-
	'fat'	get fat
	deeraa	deera-aḏḏ-
	tall	'get tall'
(iii)	<u>N</u>	
	hoʃii	hoʃʃ-edḏ
	work	'work by/for oneself'
	deebuu	deeb-oḏḏ
	thirst	'be thirsty'

The process is partly category-changing as the examples in (ii) and (iii) show. The forms in (i) and (iii) are similar to those verbs we have considered as transitives as far as their basic subcategorizations are concerned. The difference lies in the type of external arguments the middles require. Their subjects are not only agents but may also be patients or experiencers or beneficiaries. Consider the following examples:

- 67 (a) [Tulluu-n hoolaa bit-e]  
<sup>S</sup>T-nom. sheep buy-pf.  
 'Tulluu bought [a] sheep'.
- (b) [Tulluu-n hoolaa bit-at-e]  
<sup>S</sup>T-nom. sheep buy-mid-pf.  
 'Tulluu bought a sheep for himself'.
- (c)\* [Tulluu-n Dabalaa-ḏaf hoolaa bit-at-e]  
<sup>S</sup>T-nom. D-for sheep buy-mid-pf.  
 'Tulluu bought [a] sheep for Dabalaa'.
- (d) [Tulluu-n Daballaḏaf hoolaa bit-e(-ef)]  
<sup>S</sup>T-nom. D-for sheep buy-pf-for.

As stated earlier, both middles and transitives are characterized by a preceding complement. This is also clear from the examples above. However, whereas transitives allow any dative object, the middles don't.



The ungrammaticality of (67 c) and the grammaticality of (d) is indicative of this difference. Structures like (67 a) tell us only the fact that Tulluu has bought a sheep. They do not tell us for whom he bought the sheep. In other words, we do not know the beneficiary. Whenever the beneficiary is the agent himself, the affix /-at-/ appears on the verb. The ungrammaticality of (67 c) emerges from this fact, because there, we have a situation where the agent and the beneficiary of the action of buying a sheep differ in reference. The structure would be grammatical only if it appeared in the form in (67 d) or in (68) below, where the dative object is coreferential with the agent subject.

68. [Tulluu-n of-ifi hoolaa bit-at-e]  
<sup>S</sup>T-nom. self-for sheep buy-mid-pf.  
 'Tulluu bought a sheep for himself'.

The syntactic effect of the middle verbs of the type /bit-at-/ 'buy for oneself' seems to be on the choice of dative objects. Such objects must be coreferential with the agent subject. For this reason, such verbs have often been called autobenefactives (Hayward 1975:219).

However, as Hayward has noted, not all verbs with the affix /-at-/ are autobenefactive. In structures like (69 b) below, for example, the affix gives the meaning that Tulluu personally did the action without necessarily being the beneficiary.

- 69 (a) [Tulluu-n balbala çuf-at-e]  
<sup>S</sup>T-nom. door close-mid-pf.  
 'Tulluu closed the door personally'.

Furthermore, in structures involving those verbs with an adjectival base, /-at-/ shows that the subject is the experiencer of the state which the verb denotes. Consider the following.

- 70 (a) [Tulluu-n ɖeera-at-e]  
<sup>S</sup>T-nom. tall-mid-pf.  
 'Tulluu got tall'.
- (b) [Tulluu-n ʃaba-at-e]  
<sup>S</sup>T-nom. strong-mid-pf.  
 'Tulluu got strong'.

In both structures, the subject is an experiencer of the state of becoming 'tall' or 'strong'. Assuming adjectival roots/stems as statives, Hayward (1975:213) calls the affix an inchoativizing formative.

A proper analysis of the middles may be possible if we approach them via the type of thematic subjects they require, that is, whether they select a subject which is a beneficiary, an experiencer, a patient, etc., or a subject which is just an agent, as Hayward has suggested. In the light of this, such verbs may need to have entries that provide information not only about their complement types but also about the thematic status of their external arguments. Since the lexicon is the place for both general and idiosyncratic properties of lexical items, or grammatical formatives, the entries of such verbs may be enriched by including such information as well.

Regarding the morphological process involved in their derivations a rule of the type shown below may be formulated.

Rule Eight /-at-/<sup>13</sup>

$$\begin{array}{ccc} [X -] & \longrightarrow & [ [X -] - at-] \quad \text{'middle'} \\ \alpha & & V \quad \alpha \end{array}$$

A point which we need to stress here is that the meanings of the middles in the structures observed are not the same as the meanings we get from structures involving pronominal anaphors, nor are the structures of these two similar. This is evident from the examples below:

- 71 (a) [Tulluu-n farda bit-at-e]  
<sup>S</sup><sub>T-nom</sub> horse buy-mid-pf.  
 'Tulluu bought a horse for himself'.
- (b) Tulluu-n of-if farda bit-at-e  
 T-nom. self-for horse buy-mid-pf.  
 'Tulluu bought a horse for himself'.
- (c) Tulluu-n of-iin farda bit-at-e  
 T-nom. self-by horse buy-mid-pf.  
 'Tulluu bought a horse by himself for himself'.
- 72 (a) Tulluu-n of mur-e  
 T-nom. self cut-pf.  
 'Tulluu cut himself'.
- (b) Tulluu-n of miid-e  
 T-nom. self hurt-pf  
 'Tulluu hurt himself'.
- (c) Tulluu-n of haad-e  
 T-nom. self shave-pf.  
 'Tulluu shaved himself'.

From the structures in (71) it is possible to associate the affix /-at-/ with an adpositional phrase showing the beneficiary of the action or the agent who personally carries it out. This is evident from the adpositional elements /-if-/ 'for' in (71 b) and /-iin/ 'by' in (c). The pronoun /of-/ 'self' which they govern is both the beneficiary and the agent respectively. In other words, it is not the goal.

If it were the case that /-at-/ showed a reflexive action, then the presence of the reflexive pronoun /of-/ 'self' would have made the structures sound redundant if not ungrammatical, for, in that case, both the affix and the pronoun would be doing the same thing. But the structures are well-formed, which means that the two are not the same either structurally and/or semantically.

In the structures in (72) the verbs occur with anaphoric pronominal objects. They also do not show any of the middle affixes which again means that such affixes are limited to verbs of such structures as (71).

Since their function in such structures is to show the agent, beneficiary, etc., status of the subject NP, that is, whether the action is for, or by the subject, and since such notions imply that there is an adpositional phrase of the type we have seen in (71), the affixes may be collectively treated as 'pro-forms' of such adpositional phrases. In this regard they may be said to be similar to the element /-itt-/ which appears in relativized positions of adpositional phrases of the type shown in the (ii) structures of (73) below.

- 73(a) (i) [Tulluu-n [ulee-dan] nama rukkut-e]  
 S<sub>T-nom.</sub> Adp' stick-with man hit-pf.  
 'Tulluu hit a man with a stick'.
- (ii) [ [ulee-n [Tulluu-n nama itti-rukkut-e(-n)---]] [VP]]  
 S NP S<sub>T-nom.</sub> stick--nom. T-nom. man which-hit-pf-with  
 '[The] stick with which Tulluu hit a man...'
- (b) (i) [Tulluu-n [gara Gimpii] deem-e]  
 S<sub>T-nom.</sub> Adp' to G. go-pf.  
 'Tulluu went to Gimpii'.
- (ii) [ [bakk-i [Tulluu-n itti - deem-e(-n)---]] [VP]]  
 S NP S<sub>T-nom.</sub> place-nom. T-nom. which - go-pf-to(?)  
 '[The] place to which Tulluu went..'
- (c) (i) [Tulluu-n [dafinoo] gara Gimpii deem-e]  
 S<sub>T-nom.</sub> Adp' Monday to G. go-pf.  
 'Tulluu went to Gimpii on Monday'.
- (ii) [ [guyyaa-n [Tulluu-n gara Gimpii itti-deem-e(-en)]] [VP]]  
 S NP S<sub>T-nom.</sub> day-nom. T-nom. to G. which-go-pf. on  
 '[The] day on which Tulluu went to Gimpii'.

As is observable from the (ii) structures, there is always the element /-itti-/ preceding the verb of the relative clause. It refers to the head of the relative clause (or the complement of the adpositional head in the corresponding structures in (i)). It is invariably the same for all such complements of adpositional heads, irrespective of whether the phrases are locative, temporal, instrumental, etc., just as /-at-/ is the same for the various interpretations of the middles. In this case both /-at-/ and /-itti-/ may be considered as 'pro-forms' referring to the entire adpositional phrase in the case of the former, i.e., /-at-/, and to the complement of the adpositional head in the case of the latter. In other words, /-at-/ refers to an 'auto-benefactive' type of phrase whereas /-itti-/ refers to the complement NP in an adpositional phrase of some adverbial function.

Notice that the presence of /-at-/ has some effect on the subcategorization potential of some types of verbs. For example, transitive verbs like /arg-/ 'see' are characterized by one NP complement. But the corresponding middle form, /arg-at-/ 'see (find) for oneself' indicates the presence of an adpositional phrase like /of-if/ 'for self'. This is in fact what the structures in (71 b-c) show. There we have adpositional phrases with pronominal complements which are coreferential with the subject NPs. In other words, forms like /arg-at-/ or /bit-at-/ have one more complement than their corresponding base forms. And in this regard they may be classified along with such verbs as /kenn-/ 'give' which selects two complements: one a direct object and the other an indirect object. The latter is always an adpositional phrase just like /of-if/ 'for self' is in the structures in (71). The difference between them is simply that in one, the complement of the adpositional phrase is an anaphor whereas in

the other it is a (R-)eferring expression. And it appears that the reason why /of-if/ 'for self' is optional in surface structure is that it is construable from /-at-/, its 'proform', or from the features of the external argument. Hence for a middle verb like /arg-at-/ the subcategorization frame looks like the following.

/arg-at- -/ : V + [(Adp')] N'' '—] 'find (see) for oneself'.

### 3.2.1.3 Adjectivals

In the paradigm of three in the preceding section we have noticed processes of deverbative agent formations. The same process seems to derive adjectivals as well. The deverbative affix in either case is the same /-aa/. Consider the following.

#### Paradigm Nine

<u>V</u>		<u>A</u>
fokkis-		fokki-saa
'look ugly'		'ugly'
gonkis-	+ -aa —>	gonkis-aa
be harsh		harsh
barbaačč-is		barbaaččis-aa
be necessary		necessary
* kabbanaa?-		kabbanaaw-aa
be cold		cold

#### Rule Nine /-aa/

[X-(is)] —> [[X-(is)] -aa]  
 V                    S V

The derived forms above have all the properties of adjectives. They can occur in both predicative and attributive positions and can also be preceded by the degree word /bay?ee/ 'very'. Observe the following examples.

- 74 (a) [ [nam-ičč-i fokkisaa-n kuni-i] eessaa ðuf-e]?  
 S NP man-sgl-nom. ugly-nom this-nom where come-pf.  
 'Where did this ugly man come from?' (Gragg 1982:180)
- (b) [nam-ičč-i kuni-i [fokkisaa-ðə]]  
 S man-sgl-nom. this-nom. VP ugly is  
 'This man is ugly'.
- (c) [bay?ee fokkisaa]  
 AP 'Very ugly'.

The same is true of the others.

The subcategorization properties of such adjectivals are basically the same as those of their corresponding verbs. In both cases the complement is an adpositional phrase of purpose. Compare the following.

- 75 (a) (i) [aannan(i) [ [namaa-fi] [hin-barbaaččis-a]]]  
 S milk-nom. V' Adp'' man-for 'cm-be-necessary-impf.  
 'Milk is necessary for man'.
- (ii) [aannan(i) [ [namaa-fi] [barbaaččisaa] -ðə]]  
 S milk-nom. A' Adp'' man-for A necessary is  
 'Milk is necessary for man'.
- (b) (i) [ilkaan(i)-šii [ [arg-uu-ðaf] [hin-fokkis-a]]]  
 S tooth-nom-her V' S see-to-for V cm-ugly-impf.  
 'Her teeth appear ugly to look at'.
- (ii) [ilkaan(i)-šii [ [arg-uu-ðaf] [fokkisaa] -ðə]]  
 S tooth-nom-her A' S see-to-for A ugly is  
 'Her teeth are ugly to look at'.

Such adjectivals, like those simple forms we have observed in Section 3.1.3, might be associated with optional adpositional phrases of purpose. And as stated earlier in connection with the complements of simple adjectival heads, the fact that such complements are purposive adpositional phrases may lead to some degree of generalization about [+N] categories, since simple nominals can also take the same type of complements, though of a different category.<sup>14</sup>

There is, however, some problem with this line of argument. The problem is that what have been considered as complements of A', that is, the adpositional phrases in such structures as (75 b) above, might be complements of the VP (V''). In other words, the structural relation of such complements may be with the VP rather than with the adjectival head. Accordingly, (75(b)) above might be relabelled as shown in (76) below.

76. [aannan(i) [ [namaa-fi] [ [barbaaččisaa] -da]]]  
 S milk-nom. V'' Adp'' man-for V' A' necessary is  
 'Milk is necessary for man'.

According to this analysis, the purposive phrase /namaa-fi/ 'for man' is a part of V'' and not of A'. And as we shall observe in the next chapter, such relationship is a property of VP adverbials. Such adverbials can be fronted as in (77 a) , or remain unaffected by gapping as in (b ii) .

- 77 (a) [namaa-fi [aannan(i) [ t [ [barbaaččisaa] -da]]]]  
 S man-for<sup>1</sup> S milk-nom. V''<sup>1</sup> V' A' necessary is  
 'For man, milk is necessary'.
- (b) (i) [aannan(i) [ [namaa-fi] [ [barbaaččisaa] -da]]]  
 S milk-nom. V'' Adp'' man-for V' A' necessary is  
 'Milk is necessary for man'.
- (ii) [araķee-ni immo [ [kōraa-f] [—]]]  
 S araķee-nom.also V'' Adp'' cold-for V'  
 'And so is arakee for cold [weather]'.

From such constituency tests it seems that the purposive adpositional phrases in (75) may indeed be treated as V'' complements and that adjectives may be considered as having no complements. But this again is not without any problems. In structures like (75 a) (ii), the purposive phrase /namaa-fi/ 'for man' and the adjective /barbaaččisaa/ 'necessary' can be fronted as a unit leaving the copula /tur-e/ 'was' intact. Consider the following.



- 78 (a) aannan-(i) [namaa-fi gaarii] tur-e  
 milk-nom man-for good be-pf.  
 'Milk was good for man'.
- (b) [namaa-fi gaarii-n<sup>15</sup> [aannan-(i) t tur-e]]  
 $\bar{S}$  man-for good -? <sup>1</sup> S milk-nom. <sup>1</sup> be-pf.  
 (literally), 'Good for man, milk was'.

/namaa-fi gaarii/ 'good for man' can also be deleted on identity with a similar constituent as in (79).

- 79 (a) aannan-i [namaa-fi gaarii] -da  
 milk-nom. A' man-for good is  
 'Milk is good for man'
- (b) arakee-n garu [——] miti  
 arakee-nom but A' not-be  
 'But arakee is not'.

Such facts suggest that /namaa-fi/ 'for man' forms a syntactic unit with the adjective /gaarii/ 'good' just as it did with V' in forming V'' in (76). It does, therefore, seem that in copular structures of the type under consideration, a purposive adpositional phrase may be treated as a complement of either the adjective as in (79) above, or the VP(V'') as shown in (76). In short, copular structures with such adpositional phrases are structurally ambiguous between the two configurations (75 ii) and (76).

Having this in mind, we may associate adjectives with the entry shown below for /barbaaččisaa/ 'necessary' for purposes of maintaining the generalization referred to earlier on in connection with [+N] categories and for reasons of completeness.

/barbaaččisaa/ : A[Adp' '——] 'necessary'  
 pur.

### 3.3 Summary

We have tried to show two things in this chapter. The first is the

specification of lexical items in each of the major categories in terms of syntactic semantic and phonological information. Syntactically this involves formulating subcategorization frames in which are expressed the possible constituents that an item selects at its minimal level of projection. These include, inter alia, the argument complements of [-N] and the modifying complements of [+N] categories.

The discussion we have had with respect to such properties may be captured by the following rules:

$$\begin{array}{l}
 N' \longrightarrow N (N''') \\
 V' \longrightarrow \left\{ \begin{array}{l} \text{Adp}''' \\ \text{Adp}'' N''' \\ N''' \bar{S} \\ A'' \\ \bar{S} \end{array} \right\} V \\
 A' \longrightarrow (\text{Adp}''') A \\
 \text{Adp}' \longrightarrow \left\{ \begin{array}{l} N''' \\ \bar{S} \end{array} \right\} \text{Adp}
 \end{array}$$

Two cross-category generalizations seem to emerge from this state of affairs. The first relates to the types of complements the [+N] categories permit. Their complements are optional. This is in contrast to the complements of the [-N] categories which are always obligatory.

In terms of headedness, it appears that the four categories fall into two: those which are left-headed and those which are right-headed. Only the category [+N-V] belongs exclusively to the former which suggests that there is some imbalance in the distribution of the categories with respect to the notion of headedness since only one out of the four major categories is left-headed.

It might perhaps be necessary to reconsider the position we have taken with regard to the analysis of adpositional phrases. The category

has both pre- and post-positional elements. The analysis was based on the fact that the post-positions outnumber the prepositions from which also follows the typology of Oromo as a postpositional language. If we argue in favour of its being prepositional (contrary to observable data) we may achieve a nice symmetry between [+V] and [-V] categories since adpositionals will form a natural class with nominals, both of which are [-V] and which are left-headed.

The other thing we have dealt with in this chapter is a brief overview of the derivational morphology of lexical heads and the effect this has on subcategorization properties. As Chomsky (1981:126) has noted, morphological processes have the effect of blocking  $\theta$ -roles or assigning new  $\theta$ -roles, which seems to be true since as we have observed, passivization has the effect of blocking the assignment of  $\theta$ -roles to the position where an external argument is expected, whereas causativization has the effect of assigning new  $\theta$ -roles to internalized arguments. Hence a causativized verb has more complements than its non-causativized counterpart.

These two processes are widely discussed in the literature in relation to languages like English. The situation in Oromo, and perhaps in others like it, seems to require us to consider processes which derive a category of middle verbs along the same lines. The process does not seem to have a blocking effect on  $\theta$ -roles. In fact, one may argue that it has the effect of producing new  $\theta$ -roles. Whereas the subject of a clause with a transitive non-middle verb is just an agent, the subject of a clause with a transitive middle verb may be both an agent and a beneficiary. Following this we have argued that transitive verbs with middle morphology may be considered as having an adpositional phrase as a complement in addition to the Np which they require to satisfy their inherent lexical properties.

The benefactive role may then be associated with this (adpositional) complement. The effect of such a proposal on the relation of  $\theta$ -roles and arguments is that it makes the relation unique as required by Chomsky's (1981)  $\theta$ -criterion which dictates that an argument should have one and only one  $\theta$ -role. The association of both agent and benefactive  $\theta$ -roles to the subject of a clause is a clear violation of this criterion, which Chomsky assumes to be universal. The association of the (auto)benefactive role with this complement may avoid this problem.

NOTES TO CHAPTER THREE

1. This is true mainly of the complements of the [-N] categories.
2. There are cases, however, where a derivative differs from its source in its subcategorization potential (cf. 3.2.1.3).
3. Figuratively it is possible to say /waaḵa iyyeessaa/ 'God of the poor'.
4. The frame is necessary to show that the verb is final in clauses.
5. Such anomalies would not arise if the frame included selectional restriction features as part of the specification of the item in question.
6. This does not mean that there is no agreement between the verb and the subject. What is meant is that the verb does not actually have overt agreement features when the subject is 3ms. This is the unmarked form of the verb.
7. These are differences based on surface structures. Underlyingly all of the verbs belong to the class of transitives.
8. The verb in Oromo does not have direct object marking. But it seems that it shows indirect object by affixing the element /-f/.
9. There are in fact three /akka/s to recognize: the comparative, the temporal, and the complementizer /akka/.
10. This /-iḵḵa/ may not be a deverbative element. It could be the same singulative or determinative element discussed in Chapter Five.
11. This classification is perhaps not so simple. For example, /deem-/ 'go' is intransitive, but it takes /-siis-/ to form the causative. The reason for such irregularities may be attributed to the semantics of such verbs. They show volition (cf. Hayward 1975) in addition to causation. In other words, the process is not of simple causativization only.
12. As stated above in note 11, this is just one instance of three alternants. Hayward (1976) argues in terms of Is, IIs, and IIIs, the numbers indicating the number of arguments a causative verb may have.
13. Other alternants are /-add-/ for first person singular, and /-an-/ for all plurals. (See Hayward 1975).
14. The similarity between the complements of the two categories is, hence, only functional.
15. /-n/ may be a focus marker.

CHAPTER FOURCOMPLEMENT TWO4.0 Introduction

The major lexical categories we have established in Chapter Two have the potential for maximal projections. This potential accords with the theory of X-bar syntax which stipulates that constructions are endocentric and that lexical categories constitute the heads of such constructions.

The projection potential of a lexical category is determined by the hierarchies of structures in a construction unit in which it constitutes the head. The hierarchies in such constructions are indicated by bar notations. For example, for a major lexical category X, the bars which are associated with each level of hierarchy in the construction unit of which X is the head, may range from  $X^{(0)}$  to  $X^{(0+n)}$  where n is a specified number indicating the maximal projection of X.

In the preceding chapter we have observed various types of constituents which X selects in forming its minimal projection X'. Following Jackendoff (1977:57) we have argued that such constituents are functional arguments strictly subcategorized by X and should be entered in the lexicon as part of the inherent lexical specifications of X.

In this chapter, we shall consider each of the major lexical categories again, and examine the type of constituent structures they select to form the next higher level(s) in their projections. In the course of the discussion we shall try to see if the Uniform Three-level Hypothesis which Jackendoff (1977:42) argues for for English applies for Oromo as well. According to this hypothesis, all major lexical categories have the potential for a treble bar maximal projection. Furthermore, the structures which they select at every bar level in their projection lines are believed to be

similar across all categories. We have noticed in the preceding chapter that this is partially true. The complements are tightly bound to their heads in the [-N] categories though they do not necessarily belong to the same category. The complements of intransitive verbs are, for example, adpositional phrases whereas those of transitive verbs may be clausal or phrasal (NP) arguments. But both are strictly subcategorized by their heads, and hence belong to the same bar level, though not to the same category.

In what follows, we shall consider constituents which occur at the next higher level. Before we go into that, however, it may be necessary to make some distinctions among the major categories. Such distinctions are not far removed from those we have already made in the preceding chapter with regard to the subcategorization properties of lexical items.

The first distinction to be made is that between nominals on the one hand and non-nominals on the other. This distinction relates to the notion of head and to its position in syntactic categories. As mentioned earlier, non-derived nominals are left-headed, which means that in a simple noun phrase, the head occurs preceding its complement, whereas in all other categories, it occurs following them.

The second distinction is between [-N] and [+N] categories. The complements of the former are tightly bound to their lexical heads at the minimal level of the projection line. In other words, such complements are strictly subcategorized so that their omission would lead to ungrammaticality. It is only those complements which appear at the intermediate and maximal levels of projections which may be omitted freely. On the other hand, the complements [+N] categories are not so strictly subcategorized and hence may be omitted at any level in the projection line.

In other words, they are in effect similar to those complements of [-N] categories which occur at the intermediate and maximal levels of projection.

At the minimal level of projection, all types of complements occur as sister of X . These are treated in the lexicon (in the manner shown in the preceding chapter) as part of the specifications of the inherent properties of X (i.e. a lexical item, in terms of which they are subcategorized). They will not be dealt with in this chapter for the main reason that this would lead to unnecessary redundancy as noted in Chomsky (1981:31) and Hoekstra (1984:24) where it is argued that such strictly subcategorized functional arguments<sup>1</sup> should be included in the lexicon as a specification of their lexical heads.

This means that the categorial component should be restricted to the specifications of the complements at the level(s) higher than the minimal projections. In other words, the categorial rules specify the positions to which those complements which have no direct thematic relations with their lexical heads and which are hence optionally selected by such heads are associated in D-structures. These include structures of adverbial functions which, on the basis of their restrictive or non-restrictive nature, are associated with one or another level of projection across all major categories.

The function of the categorial component is in this sense reduced to that of determining the levels or nodes with which a complement or concatenation of complements (or specifiers for that matter), are associated. It does not seem to show the precedence relations of such complements at any level, for there do not seem to be uniform co-occurrence restrictions, and even if there were one, it would be disrupted by the rule move  $\alpha$  at some level in the derivation of clauses, as Hoekstra (ibid.) has noted in relation



to languages like English which allow movement. The same might be said about the situation in Oromo since the language is characterized by some type of movement, and co-occurrence restrictions at the levels higher than the minimal projections seem to be loose. This will be observed in due course.

Anticipating the arguments that will follow, we shall assume here (n) in  $X^{(0+n)}$  to be 3, and following Jackendoff, we shall call  $X'$  complements 'arguments' and  $X''$  and  $X'''$  complements 'restrictive' and 'appositive' complements respectively. The categorial component as a device for specifying the positions of the latter two is the subject of the rest of the discussions in this chapter.

#### 4.1 $X'$ Complements

These are maximal phrasal or clausal constructions which restrict the reference of the head by supplying information about its attributes, means, manner, etc., all of which are circumstantial to the event or the assertion which a strictly subcategorized complement and its head express. As stated earlier, such complements are optional as opposed to those complements of  $X'$  which are obligatory, and which they immediately precede or follow, depending on the type of the category which constitutes the head. In the discussion that follows, we shall concentrate on the syntactic properties of such complements across all major categories. We shall take up each category in turn.

##### 4.1.1 $N''$ Complements

As discussed in Chapter Three, two types of nominals are recognizable: simple nominals and derived nominals. The latter refer to infinitivals/gerundives. They have the internal structures of clauses, and hence differ

from other nominals, which may also be derived but may not have such characteristics. The distinction between the two is also important for two other reasons: (1) they select different types of complements, and (2) they differ in their positions as heads of constructions.

#### 4.1.1.1 Simple Nominal (N'') Complements

These include adjectives, restrictive relative clauses, and some genitive NPs, all of which may have the effect of restricting the head of the construction in which they occur as modifying complements. Let us observe the following:

##### (i) Adjectives

- 1(a) [ [fard-i                    [guraa-~~č~~-i]                    du?-e]  
       S N''    horse-nom.                    A''    black-m-nom.                    die-pf.  
               '[A] black horse died'.
- (b) [ [dubaartii-n                    [bareed-duu-n]                    duf-t-e]  
       S N''    woman-nom.                    A''    beautiful-f-nom.                    come-f-pf.  
               'The beautiful woman came'.

In the structures above, and in others like them, the nominal heads /fard-i/ 'horse-nom' and /dubaartii-n/ 'woman-nom' are followed by the adjectival complements and are restricted in reference to only those which are characterized by the attributes which the complements express.

The complements in the above structures and in all other similar structures are maximal projections. This is in accordance with the definition of complements as 'concatenations of syntactic categories'. The adjectives in (1) are hence maximal categories which, in anticipation of the discussions that will follow soon, are believed to be at the double bar level.

N'' complements always follow N' complements as the following examples show.

- 2(a) [Tulluu-n [ [farsoo [garbuu]] [gaarii]] hin-ḵaalat-a]  
 S T-nom. N' N' beer N' of-barley A' good cm-like-impf.  
 'Tulluu likes good beer [made] of barley'.
- (b)\* [Tulluu-n [ [farsoo [gaarii]] [garbuu]] hin-ḵaalat-a]  
 S N' N' beer A' good N' of-barley cm-like-impf.  
 T-nom.
- 3(a) [nam-ni hund-i [ [buddeena [ṭaafii]] [adii]]  
 S man-nom. all-nom. N' N' bread N' of-ṭef A' white  
 hin-barbaad-a]  
 cm-want-impf]  
 'Everybody wants white bread [made] of ṭef.'
- (b)\* [nam-ni hund-i [ [buddeena [adii]] [ṭaafii]  
 S man-nom. all-nom. N' N' bread A' white N' ṭef  
 hin-barbaad-a]  
 cm-want-impf].
- 4(a) [Tulluu-n [ [wayaa [muḵaa]] [bareed-duu]] bit-e]  
 S T-nom. N' N' garment N' of-child A' beautiful-f. buy-pf.  
 'Tulluu bought [a] beautiful garment [for] a baby'.
- (b)\* [Tulluu-n [ [wayya [bareeduu]] [muḵaa]] bit-e]  
 S T-nom. N' N' garment A' beautiful N' child buy-pf.

The ungrammaticality of the (b) structures suggests that in such structures of NPs, the adjectives can occur only after the genitive NPs. The latter are complements of N' as has been discussed in the preceding chapter, which results in their position being immediately after the head and before other complements.

#### (ii) Genitive NPs

These may be divided into two sets: those which function as specifiers, and those which function as complements. As shown in Chapter Three, and as will also be discussed in depth in Chapter Six, genitive phrases of possession may belong to the class of specifiers while all other types of genitive phrases may belong to the class of complements. As complements,

they may fall into two groups: those having some adverbial function and those without such functions. The former may be treated as complements of N' or N''' depending on whether their relation with the head is one of restriction or of apposition. Those which have a restricting effect on their heads may be assigned to N' and those without such an effect to N'''. Those which do not have adverbial functions may be treated as complements of N'. These are to be indicated in the lexicon as part of the lexical specification of the head. Consider the following examples:

- 5(a) [ [ [daaḍii-n [dammaa]]<sup>2</sup> [Gimbii] gaarii-ḍa]  
 S N' N' mead-nom. N''' of-honey N''' of-Gimbii good-is  
 (Literally), 'mead of honey of Giimbii is good'.
- (b)\* [ [ [daaḍii-n [Gimbii] [dammaa] gaarii-ḍa]  
 S N' N' mead-nom. N''' of-Gimbii N''' of-honey good-is
- 6(a) [ [ [daaḍii-n [dammaa] [kaleessaa] gaarii tur-e]  
 S N' N' mead-nom N''' of-honey N''' of-yesterday good be-pf.  
 (literally), 'Mead of honey of yesterday was good',  
 'Yesterday's honey mead was good'.
- (b)\* [ [ [daaḍii-n [kaleessa] [dammaa] gaarii tur-e]  
 S N' N' mead-nom. N''' of-yesterday N''' of-honey good be-pf.

The ungrammaticality of the (b) structures may be attributed to the fact that the locative and temporal genitives /Gimbii/ and /kaleessaa/ 'of-yesterday', have occurred in the position of an N' complement, or that the 'source' genitive /dammaa/ 'of-honey' has been raised from its base position in N' to another position in the next higher level.

In either case the situation is one which shows that the two types of genitives cannot freely exchange positions.

The position of the locative and the temporal genitives in the grammatical structures above is the same position where adjectives were seen to occur in our earlier examples (2-4).

(iii) Relative Clauses

Unlike genitives and adjectives which are phrasal, relative clauses are sentential and are, therefore, subject to an independent analysis on their own. However, in so far as their functions and distributions are concerned, they are similar to adjectives, and those genitive NPs which we have considered as N' complements. Like them, they always occur following N' complements. as the following examples illustrate:

- 7(a) [Tulluu-n [ [daaḍii [dammaa]] [Fayyiisaa-n bit-e]] ḍug-e]  
 S<sub>T-nom.</sub> N' N' mead N' of-honey S<sub>F-nom.</sub> buy-pf. drink-pf.  
 (literally), 'Tulluu drank the mead of honey [which] Fayyiisaa bought'.
- (b)\* [Tulluu-n [ [daaḍii [Fayyiisaa-n bit-e]] [dammaa]] ḍug-e]  
 S<sub>T-nom.</sub> N' N' mead S<sub>F-nom.</sub> buy-pf. N' of-honey drink-pf.
- 8(a) [ [ [farsoo-n [garbuu]] [Tulluu-n ḍug-e]]  
 S N' N' beer-nom. N' of-barley S<sub>T-nom.</sub> drink-pf.  
 gaarii tur-e]  
 good be-pf.  
 '[The] beer of barley [which] Tulluu drank was good'.
- (b)\* [ [ [farsoo-n [Tulluu-n ḍug-e]] [garbuu]]  
 S N' N' beer-nom. S<sub>T-nom.</sub> drink-pf. N' of-barley  
 gaarii tur-e]  
 good be-pf.

The reason for the ungrammaticality of the (b) structures is the same as that stated in connection with the structures in (5) and (6). The relative clause in such structures cannot occur immediately following the head if there is an N' complement. This is possible only when the N' complement is missing, as in (9) below, for example, which is derived from (8 a) :

9. [ [ [farsoo-n [Tulluu-n ḍug-e]] gaarii tur-e]  
 S N' N' beer-nom. S<sub>T-nom.</sub> drink-pf. good be-pf.  
 '[The] beer [which] Tulluu drank was good'.

It is not our purpose here to deal with the internal structure of the relative clause. Disregarding that for the moment (cf. Chapter 5), we shall limit the discussion to a description of their position in structures of the type under consideration. As the examples indicate, the position they assume in such structures is the same as that where the adjectives and those genitive NPs of time or location are found in structures such as (5-6). Like other modifying complements, relative clauses restrict the reference of the head, that is, N' in (7-9), to the one which Tulluu 'bought' or 'drank'.

In all the examples we have seen so far, the distinction we have made between N' and N'' complements is based on distribution. The complements of N'' occur only after those of N'. This may be a necessary condition, but it is not a sufficient one. The ungrammaticality of those structures like (8 b), for example, could also be explained in terms of precedence relations within a level of hierarchy. In other words, it may be argued that what we have labelled as N' and N'' complements could all be treated as N' complements, but with a strict linear ordering. Accordingly, we could dispense with N'' as an independent bar level in the projection line of N.

Such arguments would ultimately lead to the conclusion that there may not be any intermediate categories at all. In order to justify the claim that there is a distinct level N'', and that the types of complements at this level are different from those of N', we need to apply some constituency tests. One such device is gapping. It operates on string of items which form a single constituent, or on a level within a larger constituent. In the light of this then, let us consider the structures in (10) below:

- 10(a) [ [ [farsoo-n [garbuu]] [Tulluu-n (kan) bit-e]]  
 S N'' N' beer-nom. N''' of-barley S T-nom. comp. buy-pf.  
 gaarii-da]  
 good is.  
 (Literally), '[The] beer of barley which Tulluu bought is good'.

10 (b) [ [ [farsoo-n [garbuu] [Fayyiisaa-n (kan) bit-e]]  
 S' N'' N' beer-nom. N'' of-barley S F-nom. comp. buy-pf.  
 gaarii miti]  
 good neg-is  
 (Literally), '[The] beer of barley which Fayyiisaa bought is  
 not good'.

(c) [ [ [farsoo-n [garbuu] [Tulluu-n (kan) bit-e]] gaarii-ḍa]  
 S N'' N' beer-nom. N'' of-barley S T-nom. comp. buy-pf. good is  
 '[The] beer of barley which Tulluu bought is good'.

[ [ [————] [Tulluu-n (kan) bit-e]] garuu gaarii miti]  
 S N'' N' S T-nom. comp. buy-pf. but good neg-is  
 'But [that] which Tulluu bought is not good'.

In (10 c) , /farsoo-n garbuu/ 'beer of barley', is deleted. The process does not exclude /garbuu/ 'of-barley', a case which would have been possible if it were not part of N'. In addition, the relative clause is not affected by the process which means that it belongs to a different level. This, plus the strict linear ordering we have observed earlier on (cf. (8 b))' strengthens the argument that there are hierarchical levels, and that each level is characterized by a different set of complements.

Now if this is the case, then the next question we have to address ourselves to is whether or not there is a restriction on the precedence relation of complements belonging to the same level. Structures of N''s with all their complements, that is, genitive locatives, adjective and relative clauses are very rare but not absolutely impossible. Whenever they all occur, they maintain a strict linear order. This is noticeable from the following examples:

11(a) [ [amartii [worḱii] [Wallaggaa] [bareed-duu]  
 N'' N' ring N'' of-gold N'' of-W. A'' beautiful-f.  
 [Tulluu-n (kan) bit-e] ---]  
 S T-nom. comp. buy-pf.  
 (Literally), '[A] beautiful ring of gold of Wallaggaa which  
 Tulluu bought'.

- 11 (b)\* [ [amartii [worḳii] [bareed-duu] [Wallaggaa]  
 N' N' ring N''' of-gold A' beautiful-f. N''' of-W.  
 [Tulluu-n (kan) bit-e] ---]  
 S<sub>T</sub>-nom. comp. buy-pf.
- (c)\* [ [amartii [worḳii] [Tulluu-n (kan) bit-e]  
 N' N' ring N''' of-gold S<sub>T</sub>-nom. comp. buy-pf.  
 [bareed-duu] [Wallaggaa] ---]  
 beautiful-f. N''' of Wallaggaa.

From the grammaticality of (11(a)) and the ungrammaticality of (b) and (c), it may be inferred that the linear ordering of the complements is as shown in (12) below.

$$12 \quad N' \longrightarrow N' (N''') (A'') (\bar{S})$$

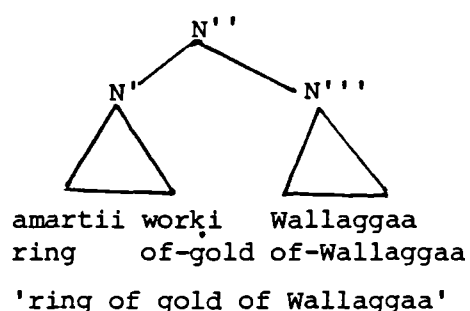
In cases where a genitive NP (N''') is used, a structural ambiguity may arise if the N' complement which is also a genitive NP is already there. Consider the following examples.

- 13(a) [Tulluu-n [ [amartii [worḳii]] [Wallaggaa]] bit-e] .  
 S<sub>T</sub>-nom. N' N' ring N''' of-gold N''' of W. buy-pf.  
 'Tulluu bought a gold ring of Wallagga'.
- (b) [Tulluu-n [ [daaḍii [dammaa]] [Gimbii]] ḍug-e]  
 S<sub>T</sub>-nom. N''' N' mean N''' of-honey N''' of-G. drink-pf.  
 'Tulluu drank honey mead of Gimbii'.

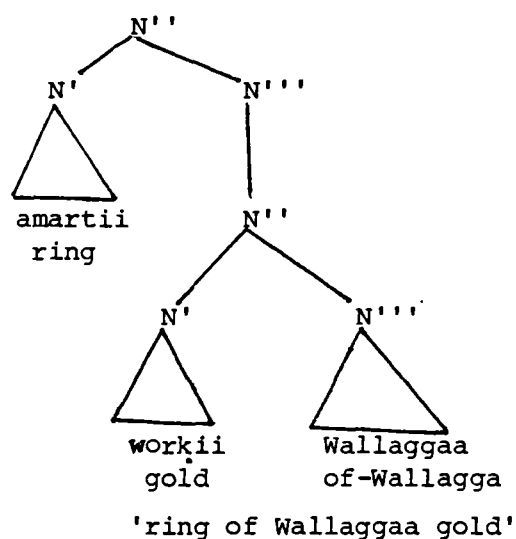
In (13 a) , the N' complement /worḳii/ 'of-gold' and the N''' complement /Wallaggaa/ 'of-Wallaggaa' occur in contiguity though they belong to different levels in the hierarchy. In the reading indicated by the labelled brackets, /amartii worḳii/ 'ring of-gold' constitutes the head of the larger constituent N', and /Wallaggaa/ occurs as a complement of this head. This gives us the interpretation as shown in the gloss. In another reading, it is also possible for /worḳii/ 'of-gold' to be in configuration not with /amartii/ 'ring', but with /Wallaggaa/, in which it constitutes the head. The two readings are shown below in (14).



14(a) (=13)



(b)



As is observable from the trees, the ambiguity is between /workii/ 'of-gold' being the complement of N' in (14 a) = (13 a), or the head of N'' in (14 b). Such ambiguities arise not so much from the contiguous occurrences of the two genitive NPs, as from the lack of any overt genitive morphemes. As stated earlier (cf. note 2), such genitive relationships are indicated by syntactic positions and by phonological means. There is, therefore, every possibility for the second NP in structures of phrases of the type in (13) to be read either as a complement of a preceding head or as a head of a following complement. In short, /workii/ 'of-gold' may be treated as part of N' or N''.

One way of disambiguating such structures as (13) is to leave one of the genitive NP complements phonetically null, which is possible given the fact that the complements of [+N] categories are optional. Hence, instead of (13) above, we may have (15), below.

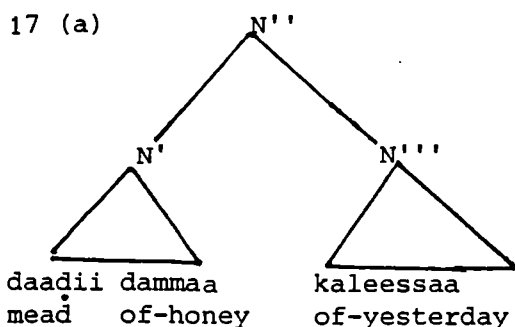
15(a) [Tulluu-n [amartii [workii]] bit-e]  
S<sub>T-nom.</sub> N' ring N''' of-gold buy-pf.  
'Tulluu bought a ring of gold'.

(b) Tulluu-n [workii [Wallaggaa]] bit-e  
T-nom. N''' gold N''' of-W. buy-pf.  
'Tulluu bought gold of Wallaggaa'.

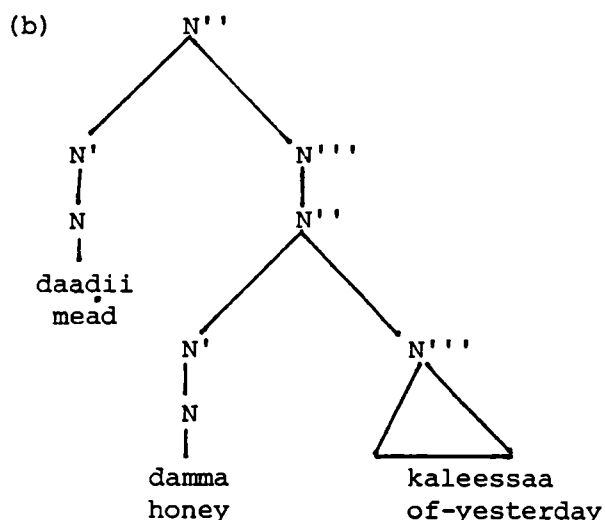
Another way of disambiguating structures like (13), without missing a complement, is by paying attention to the location of pause in the clause. In (14) above, /wɔrkii/ 'of-gold' forms a pause group either with /amartii/ 'ring', or with /Wallaggaa/, each intended for a different interpretation, as shown in the glosses in (14).

The situation would remain the same if instead of the locative genitive in (13), we put a temporal genitive as in (16) below, which has either one of the readings in (17).

- 16 [ [daadii [dammaa] [kaleessaa] ---]  
 N'' N' mead N''' of-honey N''' of-yesterday  
 (Literally), '[The] mead of honey of yesterday'.



'Mead of honey of yesterday.'



'mead of yesterday's honey'.

In (17), /dammaa/ 'of-honey', is a complement of /daadii/ 'mead' in (a). In (b), it forms the head of N' of which /kaleessaa/ 'of-yesterday' is a complement. In each case, the interpretation is different.<sup>3</sup>

#### 4.1.1.2 Derived Nominals

In this subsection, we shall be dealing with one type of deverbative nominal in the light of the preceding discussions concerning simple nominals.

The type we will be concerned with here is one which is sentential in character. We shall not consider its internal structure directly now. That will be the subject of Chapter Five. Here we shall concentrate on its choice of complements at the level we are considering. Let us observe the following examples.

18(á). [ [Tulluu-rra [hoolaa bit-uu-n]] hin-danda?-am-u]  
 S N' T-from N' sheep buy-to-nom. neg-be-able-ps-impf.  
 'Buying/to buy a sheep from Tulluu is impossible'.

(b) [ [eeboo-ḍan [bineensa aḵḵee-s-uu-n]] gaarii mitii]  
 S N' spear-with<sup>N'</sup> animal kill-cs-to-nom. good-neg-is  
 'Killing [an] animal with a spear is not good'.

In (a), the source adpositional, /Tulluu-rra/ 'from Tulluu', and in (b), the instrumental adpositional /eeboo-ḍan/ 'with spear', occur as complements of their respective heads (N'). Positionally, such complements precede the strictly subcategorized complements of N' as we can observe from both structures. In terms of their function, they modify the head by restricting it to the particular context they designate. Compared to the complements of N', which are NPs, and are tightly bound to their heads, these are adpositionals and are not so bound to the head. Hence only they but not the NPs of N' may occur optionally. This is observable from the grammaticality of (19 a) compared with the marginal status of the corresponding (19 b) below, both of which are derived from (18 a) above.

19(a) [ [(Adp) [hoolaa bit-uu-n]] hin-danda?-am-a]  
 S N' N' sheep buy-to-nom. cm-be able-ps-impf.  
 'Buying/to buy a sheep is possible'.

(b) ?[ [Tulluu-rra [(NP) bit-uu-n]] hin-danda?-am-a]  
 S N' T-from N' buy-to-nom. cm-be able-ps-impf.  
 'From Tulluu buying/to buy is possible'.

The claim that such adpositional phrases belong to N' can be further substantiated if we apply the syntactic device of gapping on either of the

examples in (18). The process deletes the head of N'' on identity with another phrase in a previous structure in an appropriate discourse situation. Thus (18 a) may be reduced to (20) below:

- 20 [ [Tulluu-rra [hoola bit-uu-n]] hin-danda ?-am-a],  
 S N'' T-from N' sheep buy-to-nom. cm-be-able-ps-impf.  
 (Literally), 'From Tulluu to buy a sheep is possible'.  
 [ [Fayyisaa-rra garuu [—————]] hin-danda ?-am-u]  
 S N'' F-from but N' neg-be able-ps-impf.  
 'From Fayyisaa it is not possible'.

The fact that /Tulluu-rra/ 'from Tulluu' has not been deleted along with its head N' shows that its relationship with the head is at a level higher than N'. That level is the level of N''. At the level of N', the relationship we have obtains between /hoolaa/ 'sheep' and the lexical head /bit-uu/ 'buying/to buy'.

Along with or instead of adpositional phrases, we may also find subordinate clauses of adverbial functions occurring as complements. The following are examples with such structures:

- 21(a) [ [ [yoomuu bokkaa-n roob-u] [deem-uu-n]] [gaarii miti]]  
 S N'' S when rain-nom. rain-impf. N' go-to-nom. good not-is  
 'Going when it rains is not good'.  
 (b) [ [ [erga Tulluu-n deem-e] [həj̥j̥-ečč̥-uu-n]] [gaarii-ɖa]]  
 S N'' S after T-nom. go-pf. N' work-mid-to-nom. good is  
 'Working after Tulluu has gone is good'.

In both structures, the subordinate clauses are structurally related to their infinitival heads /deem-uu-n/ 'going/to go' and /həj̥j̥-ečč̥-uu-n/ 'working/to work', respectively. This is what the labelled brackets show. However, it might not be impossible to argue here that in such structures the subordinate clauses may be treated as complements of the predicate phrase rather than of the noun phrase (N''). But this does not seem to be

the case, because in that case, the position of the subordinate clause has to be in the predicate, preceding the VP (V'), and following the subject NP, unless we also argue that the position in which they appear in (21) is a derived position. In other words, such structures are derived from the corresponding structures in (22) below. Again, this does not seem to be right because the structures in (22) are ungrammatical.

22(a)\* [deem-uu-n        [ [yoomuu bokka-n roob-u]        [gaarii miti]]]  
           S<sub>go-to-nom.</sub>    V'    S<sub>when rain-nom rain-impf.</sub>    V' good not-is  
           (Literally), 'Going when the rain rains is not good'.

(b)? [hoj̃j̃-ečč-uu-n        [ [erga Tulluu-n deem-e] . [gaarii-ɗa]]]  
           S<sub>work-mind-to-nom.</sub>    V'    S<sub>after T-nom.</sub>    go-pf.    V' good is  
           'Working after Tulluu has gone is good'.

If the examples in (22) were grammatical, we could argue that the structures in (21) had been derived by preposing the subordinate clause. But even then the argument would still fail to hold because preposing involves adjunction to  $S/\bar{S}$ , but not to an NP, which means that the clause would still have no structural relation with the latter. But subject postposing shows that this is not the case either. In (21a), for example, /deem-uu-n/ 'going/to go', cannot be postposed without the subordinate clause. This is obvious from the degree of acceptability of (23) below.

23(a) [ [t] [gaarii miti]]    [ [yoomuu bokkaa-n roob-u] [deem-uu-n]]  
           S N' '1 V' good not-is N' ' S<sub>when rain-nom rain-impf.</sub> go-to-nom.<sub>1</sub>  
           'Going when it rains is not good'.

(b)\* [ [ [yoomuu bokkaa-n roob-u [t]] [gaarii miti] [deem-uu-n]]  
           S N' ' S<sub>when rain-nom rain-to</sub> 1 V' good not-is go-to-nom<sub>1</sub>

The situation in both (22) and (23) favours the analysis of the subordinate clause as labelled in (21).

Assuming this to be correct, we shall now consider the relative position of subordinate clauses and adpositional phrases when both occur preceding the

same head. Such structures as (24) below may demonstrate this:

- 24(a) [ [ [yoomuu bokkaa-n roob-u] [namaa wajjin]  
 S N''  $\bar{S}$  when rain-nom. rain-impf. Adp'' man with  
 [deem-uu-n]] [gaarii miti]]  
 N' go-to-nom. V' good neg-is.  
 'When it rains going with a man is not good'.
- (b)? [ [ [nama wajjin] [yoomuu bokkaa-n roob-u] [deem-uu-n]]  
 S N'' Adp'' man with  $\bar{S}$  when rain rain-impf. N' go-to-nom.  
 [gaarii miti]]  
 V' good not-is.  
 'When it rains going with a man is not good'.

From (24 b) it seems that the clause and the adpositional phrase cannot easily exchange positions, though they belong to the same level, N''. In the light of this, a categorial rule of the type below may be postulated to show their relative order:

$$25 \quad N'' \longrightarrow (\bar{S}) (Adp'') N'$$

In Chapter Two, it was argued that pre-/post-positions and subordinative conjunctions could be treated as subclasses of the more general category - the category of adpositionals, idiosyncratic properties in their choice of complements being left aside for the lexicon. If we maintain that analysis, then the rule in (25) could be reduced to the one in (26) with the diacritic mark (\*) showing the possibility of having concatenations of such complements.

$$26 \quad N'' \longrightarrow (Adp''*) N'$$

It does not seem possible to collapse this rule with the one in (12), which has been proposed for simple nominals, for two reasons. Firstly, there is a difference between the two nominals in their choice of complements. The complements here are all adpositional phrases/clauses<sup>4</sup> whereas those in (12) are not. Secondly, even if it were the case that they had some complements in common, it would still be difficult to collapse them into

one class for they also differ in the position of their heads. The head in (26) follows its complements, whereas the head in (12) precedes them. A possible generalization we can think of is that which puts such deverbative nominals along with verbals, which is very natural given the fact that they (deverbatives) are basically derived from verbs. We shall consider this possibility after we have observed the type of complements verbals take at the same level at which we have examined the deverbatives.

#### 4.1.2 V' Complements

The structures which occur as complements of V' are manner, time, purpose, instrumental, etc. phrases, and/or clauses of adverbial function. Traditionally all of these have been known as VP adverbials (Chomsky 1965: 102). They are circumstantial to the action or event which a verbal head and its strictly subcategorized arguments designate. Their position, whenever they optionally appear in a constituent, is immediately preceding V' complements in the unmarked case.<sup>5</sup>

27(a) [Pro [ [kaleessa] [na-barbaada tur-t-ee?]]]  
 S V' Adp' yesterday V' me want be-2p-pf.

'Had you been looking for me: yesterday?'

(b) [Tulluu-n [ [kawwee-dan] [nama ajjees-e]]]  
 S<sub>T-nom.</sub> V' Adp' gun-with V' man kill-pf.

'Tulluu killed [a] man with a gun'.

Both /kaleessa/ 'yesterday' and /kawwee-dan/ 'with a gun', do normally occur outside V'. The position they occur at within V' is where the strictly subcategorized arguments (NPs) are found. As discussed in the preceding chapter, the verbal heads in both structures belong to the subclass which selects only one NP argument as its complement. In the structures above, the pronominal /(a)na/ 'me' in (a), and the nominal /nama/ 'man'

in (b) are such argument complements. Since the adverbials are not arguments directly subcategorized by the verbs their position is always outside V' where they occur as projections of V'.

As shown in the preceding section, the syntactic process of gapping may also operate here on V' only leaving the adverbial intact. This is what the ungrammatical (28 d) shows.

- 28(a) [Tulluu-n [ [kaleessa] [hoolaa bit-e]]]  
 S<sub>T</sub>-nom. V'' Adp'' yesterday V' sheep buy-pf.  
 'Tulluu bought [a] sheep yesterday'.
- (b) [Fayyiisaa-n [ [har?a] [hoolaa bit-e]]]  
 S<sub>F</sub>-nom. V'' Adp'' today V' sheep buy-pf.  
 'Fayyi [a] cheep today'.
- (c) [Tulluu-n [ [kaleessa] [hoolaa bit-e]]] [Fayyiisaa-n  
 S<sub>T</sub>-nom. V'' Adp'' yesterday V' sheep buy-pf. S<sub>F</sub>-nom.  
 immoo [ [har?a] [—]]]  
 also V'' Adp'' today V'  
 'Tulluu bought a sheep yesterday. Fayyiisaa did so today'.
- (d)\* [Tulluu-n [ [kaleessa] [hoolaa bit-e]]] [Fayyiisaa-n  
 S<sub>T</sub>-nom. V'' Adp'' yesterday V' sheep buy-pf. S<sub>F</sub>-nom.  
 immoo [—]]  
 also. V''

The ungrammaticality of (d) suggests that /kaleessa/'yesterday' cannot be deleted along with V', which means that the two do not belong to the same level of hierarchy. In this connection, it might be possible to treat /immoo/ 'also' as pro-V' since it appears only whenever the process has deleted V', in which case, the ungrammaticality of (28 d) could also be accounted for in terms of its(/immoo/)standing in place of V'' rather than of V'.

In addition to gapping and the resulting pro-form, there are also some semantic cues which may enable us to identify V'' complements. Such



cues include the scope of negative elements. V' complements may be interpreted as being outside the scope of such elements, whereas V' complements may not. Consider the following examples.

- 29(a) [Tulluu-n [nama aǰǰees-e]]  
<sub>S</sub>T-nom. V' man kill-pf.  
 'Tulluu killed [a] man'.
- (b) [Tulluu-n [nama hin-aǰǰeef-n-e]] (/< hin-aǰǰees-n-e/)  
<sub>S</sub>T-nom. V' man neg-kill-neg-pf.  
 'Tulluu did not kill a man'

In (29 b) the scope of the negative verb extends primarily to the argument /nama/ 'man' which this verb strictly subcategorizes. If we want to negate the external argument, it is necessary to leave the internal argument empty given the context set in (29 b). Hence (30):

30. [Tulluu-n hin-aǰǰeef-n-e]  
<sub>S</sub>T-nom. neg-kill-neg-pf,  
 'Tulluu did not kill'.

In other words, for a constituent to be unambiguously affected by negation, it must be adjacent to the form carrying the negative element. If it is away from the latter there is always a possibility for it to be interpreted as being unaffected by the negative element.

In the light of this, the adpositional phrase in (31) below may primarily be interpreted as being outside the scope of negation since there is the strictly subcategorized argument intervening between it and the negative verb.

- 31 [Tulluu-n [ [eeboo-ḍan] [nama hin-aǰǰeef-n-e]]]  
<sub>S</sub>T-nom. V' Adp' spear-with V' man neg-kill-neg-pf.  
 'Tulluu did not kill a man with a spear'.

For /eeboo-ḍan/ 'with [a] spear' to be properly affected by the negative verb, it has to occur close to the verb. This may lead to a

situation where we either leave the argument /nama/ 'man' empty as in (30), or raise and adjoin it to V'' so that the adpositional phrase could occur immediately preceding the negative verb as in (32 b) below. When the latter process takes place, there is always a change in the intonation contour of the clause. There is a marked pause following /nama/ 'man'.

- 32(a) [Tulluu-n [eeboo-ḍan hin-ajj̥eef-n-e]]  
 S<sub>T-nom.</sub> V'' spear-with neg-kill-neg-pf.  
 'Tulluu did not kill with a spear'.
- (b) [Tulluu-n [nama — [eeboo-ḍan t hin-ajj̥eef-n-e]]]  
 S<sub>T-nom.</sub> V'' man- 1 V'' spear-with 1 neg-kill-neg-pf.  
 'Tulluu did not kill with a spear'.

The fact that /eeboo-ḍan/ 'with spear' has to be close to the negative element in order to be strongly affected, suggests that in the unmarked case, that is, in structures of the type in (31), it is outside the scope of the negative element whereas the strictly subcategorized argument /nama/ 'man' is not.

Since the interpretation of negative structures is very complex, it may not be wise to depend too much on it. We shall therefore cite other syntactic facts to substantiate further the claim we have made about adverbials being of V'' complements. Earlier on, we have stated that /immoo/ 'also' might be treated as pro-V' since it occurs whenever V' is deleted. In the same manner, we may argue that /-iss/ 'too' could be treated as a pro-V'', since it occurs whenever gapping operates on V''. This is observable from the following examples:

- 33 (a) [Tulluu-n [ [eeboo-ḍan] [leenḥa ajj̥ees-e]]]  
 S<sub>T-nom.</sub> V'' Adp'' spear-with V' lion kill-pf.  
 'Tulluu killed a lion with a spear'.

33 (b) [Fayyiisaa-n [ [eeboo-ḍan] [leenča ajjees-e]]]  
 S<sub>F-nom.</sub> V'' Adp'' spear-with V' lion kill-pf.  
 'Fayyiisaa killed a lion with a spear'.

(c) [Tulluu-n [ [eeboo-ḍan] [leenča ajjees-e]]]  
 S<sub>T-nom.</sub> V'' Adp'' spear-with V' lion kill-pf.  
 [Fayyiisaa-n-iss [—]]  
 S<sub>F-nom-too</sub> V''  
 'Tulluu killed a lion with a spear. Fayyiisaa too'.

In (33 c) it is /-iss/ 'too' which substitutes for V''. The sentence would be ungrammatical if we put /immoo/ 'also' instead of /-iss/ as in (d) below.

(d)\* Tulluu-n eeboo-ḍan leenča ajjees-e. Fayyiisaa-n immoo [—]  
 T-nom. spear-with lion kill-pf. F-nom. also. V''

From the structures thus far, it seems almost certain that V' and V'' constitute distinct levels of hierarchies in the projection line of V, and that their pro-forms are also different.

The examples we have considered so far involve temporal and instrumental adverbials. Other types of adverbials which also occur at the same level include those in the structures below:

34(a) [Tulluu-n [ [niitii-saa waɣɣin] [daaḍii hin-ḍug-a]]]  
 S<sub>T-nom.</sub> V'' Adp'' wife-his with V' mead cm-drink-impf.  
 'Tulluu drinks mead with his wife'.

(b) [Tulluu-n [ [kaačča-n] [gara Gimbii hin-deem-a]]]  
 S<sub>T-nom.</sub> V'' Adp'' running-with V' to G. cm-go-impf.  
 'Tulluu will go to Gimbii quickly [with speed]'.

(c) [Tulluu-n [ [hoolaa bit-uu-fi] [gara Gimbii hin-deem-a]]]  
 S<sub>T-nom.</sub> V'' Adp'' sheep guy-to-for V' to G. cm-go-impf.  
 'Tulluu will go to Gimbii to buy [a] sheep'.

In all such structures, as in those we have already considered, the position of the adverbials is outside V' for the same reason stated earlier on in connection with the temporal and instrumental adverbials. In (34 b)

and (c) the locative adverbial /gara Gimbii/ 'to Gimbii' is within V' though it is an adverbial phrase like any one of those we have treated as V' complements. The reason for this is inherent to the lexical head /deem-/ 'go'. As shown in the preceding chapter, this verb subcategorizes a locative adverbial which means that all other adverbial phrases can occur only outside V', parallel to the comitative and the manner adverbials in (34 a) and (b).

Other than simple phrases of adverbial functions, subordinate clauses with or without overt subordinators may also occur as complements of V''. Already we have an instance of this in (34 c) where the purposive infinitive occurs in V''. Others include those in (35) below:

- 35(a) [Tulluu-n [ [daddaf-ee] [gara Gimbii hin-deem-a]]]  
 S<sub>T-nom.</sub> V' S<sub>hurry-pf.</sub> V' to G. cm-go-impf.  
 'Tulluu will go to Gimbii quickly', Literally, 'Tulluu, hurrying, will go to Gimbii'.
- (b) [Çaaltuu-n [ [daddaf-t-ee] [gara Gimbii hin-deem-t-i]]]  
 S<sub>C-nom.</sub> V'' S<sub>hurried-f-pf.</sub> V' to G. cm-go-f-impf.  
 'Caaltuu will go to Gimbii quickly'.

In (35) the elements in V'' are basically verbal. They display agreement phenomena. In (b) for example, the verb has a feminine morpheme /-t-/ in agreement with the feminine subject /Çaaltuu/.

The presence of two finite verbs in one clause suggests that that clause is not a simple one. In the structures above /daddaf-t-ee/ may be considered as being the head of a clause embedded in V''. Its subject is a (pro)noun which is coreferential with the subject of the matrix clause. This is deducible from AGR. As a subordinate clause and as a complement of V'' its function is that of a manner adverbial. It shows how the action denoted by the matrix verb is effected. But unlike other subordinate

clauses, it is not introduced by an overt subordinative element. The element seems to be optional in such clauses, as also in others which show time or reason. Compare the following, for example:

- 36(a) [Tulluu-n [ [deena-saa ñaat-ee] [gara ɔonna-saa deem-e]]]  
 S<sub>T-nom.</sub> V'' S meal-his eat-pf. V' to farm-his go-pf.  
 'Tulluu went to his farm after he ate his meal'.
- (b) [Tulluu-n [ [erga deena-saa ñaat-ee] [gara ɔonna-saa deem-e]]]  
 S<sub>T-nom.</sub> V'' S after meal-his eat-pf. V' to farm-his go-pf.  
 'Tulluu went to his farm after he ate his meal'.
- 37(a) [Tulluu-n [ [daaɗii bay?ee ɗug-ee] [hin-ɗukkubs-at-e]]]  
 S<sub>T-nom.</sub> V'' S mead much drink-pf. V' cm-sick-mid-pf.  
 'Tulluu got sick because he drank much mead'.
- (b) [Tulluu-n [ [waayee daaɗii bay?ee ɗug-ee] [hin-ɗukkubs-at-e]]]  
 S<sub>T-nom.</sub> V'' S because mead much drink-pf. V' cm-sick-mid-pf.  
 'Tulluu got sick because he drank much mead'.

Other parallel structures are also possible, and it seems that in the structures in (a), the subordinator, which is the head of the clause, is optional, or alternatively, if we assume that such clauses are base-generated with a phonetically null head, then we may also have to say that such clauses are in free variation with those which occur with overt subordinators. These are, however, formal properties. Functionally, we can say that both types occur as complements and that their position is as labelled in the structures in (35).

If this line of argument is sound, then we shall maintain the claim that subordinate clauses and pre/post-positional phrases of adverbial function may be treated as one category. Accordingly the phrase structure rule that expands V'' should be along the following lines:

38 V'' → (Adp''\*) V'.

This rule does not show the linear ordering of the various adpositional phrases/clauses. In general, this relationship may be left free to be determined by the logical or chronological sequence of the complements themselves in relation to the head V', which they modify. For example, whereas (39 a) is readily acceptable, (b) and (c) may be acceptable only marginally.

39(a) [Tulluu-n [ [waayee argat-ee] [wayaa bit-uu-fi]  
 S<sub>T-nom.</sub> V' Adp'' because money get-pf. Adp'' clothes buy-to-for  
 [niitii-saa wajjin] [gara Gimpii deem-e]]  
 Adp'' wife-his with V' to G. go-pf.  
 'Tulluu went to Gimpii with his wife to buy clothes since  
 he got money'.

(b)? [Tulluu-n [ [niitii-saa wajjin] [waayee, horii argat-ee]  
 S<sub>T-nom.</sub> V' Adp'' wife-his with Adp'' because money get-pf.  
 [wayaa bit-uu-fi] [gara Gimpii deem-e]]  
 Adp'' clothes buy-to-for V' to G. fo-pf.

(c)? [Tulluu-n [ [wayaa bit-uu-fi] [waayee horii argat-ee]  
 S<sub>T-nom.</sub> V' Adp'' clothes buy-to-for Adp'' because money get-pf.  
 [niitii-saa wajjin] [gara Gimpii deem-e]]  
 Adp'' wife-his with V' to G. go-pf.

(b) and (c) sound odd, not so much for their structure as for their logical relations.

In cases of structures in which there are no such problems of logic or pragmatics, the order seems to be absolutely free as the following structures show.

40(a) [Tulluu-n [ [kaleessa] [niitii-saa wajjin]  
 S<sub>T-nom.</sub> V' Adp'' yesterday Adp'' wife-his with  
 [makiina-dan] [gara Gimpii deem-e]]  
 Adp'' car-by V' to G. go-pf.  
 'Tulluu went to Gimpii with his wife yesterday by car'.

- 40(b) [Tulluu-n [ [makiina-ḍan] [niitii-saa wajjin]  
 S<sub>T</sub>-nom. V'' Adp'' car-by Adp'' wife-his with  
 [kaleessa] [gara Gimbi deem-e]]  
 Adp'' yesterday V' to G. go-pf.
- (c) [Tulluu-n [ [niitii-saa wajjin] [kaleessa]  
 S<sub>T</sub>-nom. V'' Adp'' wife-his with Adp'' yesterday  
 [makiina-ḍan] [gara Gimbi deem-e]]  
 Adp'' car-by V' to G. go-pf.

Taking the examples in (40) as the unmarked or the core cases as against those in (39) which are marked, the base rule in (38) may be taken as holding for all cases of V'' complements.

#### 4.1.3 A'' Complements

As stated in Jackendoff (1977:64) adjectivals, like adpositionals, which we will be considering shortly, 'are consistent with the Three-level Hypothesis, although they do not push it to its limits as do Ss and NPs'. Although this statement is made with reference to English, it may also be taken as being valid for the situation in Oromo. At the level of A', their complements include some adpositional phrases of purpose, as has been observed in the preceding chapter.<sup>6</sup>

At the level of A'', the complements include adpositional phrases of degree. The phrases are associated with the forms /hamma/ 'as much as', /akka/ 'as/like', /çaalaa/ 'be better/excel', or /manaa/ 'be worse'. This is demonstrated by the following examples:

- 41(a) [Tulluu-n [ [hamma abbaa-saa] [sooressa]] miti]  
 S<sub>T</sub>-nom. A'' Adp'' as father-his A' rich neg-is.  
 'Tulluu is not rich as his father'.
- (b) [Tulluu-n [ [abbaa-saa-rra (kan) çaal-e] [deeraa]] -ḍa]  
 S<sub>T</sub>-nom. A'' Adp'' father-his-from comp. excell-pf. A' tall is

(41 b) is difficult to translate. But the idea is as follows: 'Tulluu is exceedingly taller than his father'.

In both structures the complements are adpositionals and their position is immediately preceding A' complements as expected. This is clear from structures like the one below where A' has an overt complement:

42(a) [Tulluu-n [ [akka abbaa-saa] [kaačča-n čimaa]] -ḍa]  
 S<sub>T</sub>-nom. A'' Adp'' like father-his A' running-at strong is  
 'Tulluu is good at running like his father'.

(b) [Tulluu-n [ [akka abbaa-saa] [wan beekaa]] -ḍa]  
 S<sub>T</sub>-nom. A'' Adp'' like father-his A' thing wise is  
 'Tulluu is wise [at] things like his father', (literally), 'Tulluu is matter knowing like his father'.

These structures would be accompanied by a prolonged pause if the complements of A' had occurred preceding those of A'' as in (43) below derived from (42 a) above.

43. [Tulluu-n [kaačča-n], [ [akka abbaa-saa]  
 S<sub>T</sub>-nom. Adp''<sup>1</sup> running-at A'' Adp'' like father-his  
 [t čimaa]] - ḍa]  
 A'<sup>1</sup> strong is  
 (Literally), 'Tulluu is good like his father at running'.

The fact that /kaačča-n/ 'at running' in (43), unlike in (42), constitutes a pause group on its own suggests that it is a displaced constituent, moved from its base position in A'.

The complements here are not any different from those discussed in connection with the previous two categories. The degree phrases may be treated along the same lines as the various adpositional phrases of V'' and N''.<sup>7</sup> Hence the base rule (44) may be proposed, parallel to the one in 38:

44. A'' → (Adp''\*) A'.



4.1.4 P'' Complements

There does not seem to be any restrictive adpositional phrase or clause occurring as a complement of P'' in a manner similar to the adverbial phrases of V'', or the restrictive relative clauses of N''. Nor is it the case that degree clauses, which we have considered with regard to A'' complements are recurrent in P''. The few instances of such complements are of the following type:

- 45(a) [Pro [ [ [erga haad-i-saa duu-t-e]  
S V'' Adp'' Adp' after mother-nom-his die-f-pf.  
[hamma bara lamaa-tti]]] [gara Gimpii hin-deem-n-e]  
Adp'' until year two up V'  
(Literally), 'After his mother died, up until two years [later]  
he has not gone to Gimpii'.
- (b) [ [ [ [erga gannaa-ti] [hamma har?aa-tti]]]  
S V'' Adp'' Adp' after winter-from Adp'' until today-up  
bokaa-n [hin-roob-n-e]  
rain-nom. V' neg-rain-neg-pf.  
'After winter, up until today, rain has not rained'.

In such structures as (45 a) /hamma bara lamaa-tti/ 'up until two years' optionally modifies the head Adp', by showing the amount of time lapsed since the death of his mother, without him going to Gimpii. In other words, the phrase, which is itself adpositional, has the effect of restricting the period of time expressed by Adp'. Without it, the duration between the death of his mother and the time at which the statement was made would remain indefinite. This is noticeable from (46) below:

- 46 [Pro [ [ [erga haad-i-ssa duu-t-ee]]  
S V'' Adp'' Adp' after mother-nom-his die-f-pf.  
[gara Gimpii hin-deem-n-e]]]  
V' to G. neg-go-neg-pf.  
'Since his mother died he has not gone to Gimpii'.

From Adp' alone in (46) it is not possible to tell (in specific terms) the length of time Tulluu has been away from Gimbii. This is possible only with the temporal adpositional phrase /hamma bara lamaa-tti/ 'up until two years' included in Adp'' in the manner indicated in (45 a) . From the restrictive effect this phrase has on the interpretation of the clause as a whole, it may be possible to assume that its structural relationship is as labelled. However, given the possibility for such complements to occur in concatenations, it might as well be not impossible to argue that the structural relationship of /hamma bara lamaa-tti/ 'up until two years' is with V'' rather than with Adp'', in which case the labelling would have to be as shown in (47) below:

- 47 [Pro [ [erga haad-i-saa duu-t-ee]  
S V'' Adp'' after mother-nom-his-die-f-pf.  
[hamma bara lamaa-tti] [gara Gimbii hin-deem-n-e]]  
Adp'' until year two-up V' to G. neg-go-neg-pf.  
'Since his mother died, up until two years, [he] has not  
gone to Gimbii'.

Though this is quite sound at the level of assumption, all the evidence seems to prove that (47) is not the right analysis. Observe the following, for example:

- 48(a) [Pro [ [erga haad-i-saa duu-t-ee hamma bara lamaa-tti]  
S V'' Adp'' after mother-nom-his-die-f-pf. until year two-up  
[dugumaa-n [gara Gimbii hin-deem-n-e]]  
Adp'' truth-in V' to G. neg-go-neg-pf.  
'Truly [he] has not gone to Gimbii for two years since/after  
his mother died'.
- (b)? [Pro [ [erga haad-i-saa duu-t-ee] [dugumaa-n]  
S V'' Adp'' after mother-nom-his-die-f-pf. Adp'' truth-in  
[hamma bara lamaa-tti] [gara Gimbii hin-deem-n-e]]  
Adp'' until year two-up V' to G. neg-go-neg-pf.

In (48) /*ɖugumaa-n/* 'truly', which is a sentence adverbial, occurs between the complements of V'' and V', that is, between the two major nodes or levels, and the structure is grammatical. In (b), however, this same phrase occurs between /*erga haad-i-saa duu-t-ee/* 'after his mother died' and /*hamma bara lamaa-tti/* 'up until two years', and the result is that the structure turns out to be dubious. The reason for this can only be linked with the non-interruptable nature of strings of words forming syntactic units (cf. Radford 1981:69). In other words, /*erga haadi-saa duu-t-e hamma bara lamaa-tti/* in (48 a) is an uninterruptable syntactic unit.

This argument may also be further substantiated by facts related to movement. As stated in Chapter One, and as will further be shown in Chapter Five, structures which form a single constituent move as a unit; no part of the constituent can be left behind without the resulting structure being ill-formed. The situation in (49) below is an instance of this. The structure in (a) is grammatical with the movement of Adp'' as labelled in (45 a), where (49 b) is only marginally acceptable although it has the same kind of movement, but operating only on the second Adp'', that is, on /*hamma bara lamaa-tti/* 'up until two years' of (45 a).

- 49(a) [ [ [erga haad-i-saa duu-t-e]  
 S Adp'' Adp' after mother-nom-his-die-f-pf.  
 [hamma bara lamaa-itti] [Tulluu-n [t  
 Adp'' until year two-up 1 S v''1  
 [gara Gimbii hin-deem-n-e]]]  
 V' to G. neg-go-neg-pf.  
 'After his mother died for two years, Tulluu has not gone  
 to Gimbii'.

49(b)? [ [hamma bara lamaa-tti] [Tulluu-n  
 S Adp'' until year two-up S T-nom.  
 [ [ [erga haad-i-saa duu-t-ee]]  
 V'' Adp'' Adp'' after mother-nom-his-die-f-pf.  
 [gara Gimpii hin-deem-n-e]]]]  
 V' to G. neg-go-neg-pf.

(Literally), 'Up until two years, Tulluu after his mother died, has not gone to Gimpii'.

The marginal status of (49 b) can be explained only if we assume /hamma bara lamaa-tti/ 'up until two years' to be a part of /erga haad-i-saa duu-t-ee/ 'after his mother died', for if it were an independent temporal phrase, its preposing in (b), which is a natural process for any adverbial phrase to undergo, would not have led to this situation. But this is not the case here, which suggests that /hamma bara lamaa-tti/ 'up until two years' and /erga haad-i-saa duu-t-ee/ 'after his mother died' are two chunks of the same constituent.

There is also another piece of evidence in support of this argument, though it is a semantic one. Both /erga haad-i-saa duu-t-ee/ and /hamma bara lamaa-tti/ are temporal phrases and their function is to modify the action designated by the head of V'. As there is only one action in the clause, there can only be one such modifying expression projecting from the verb, which expresses the action. Therefore, unless there are two actions as in structures of co-ordination, for example, it is not plausible to assume that two temporal expressions project from a single verb designating a single action under normal circumstances.<sup>8</sup>

Although we have argued that the two temporal phrases are parts of a larger constituent, we have not yet said explicitly which of the two forms constitutes the head, though this is something which has been indicated in the labelling. Again from such constituency devices as omissibility of

complements (Radford 1981:69), though not of heads, and from the consideration of substitutability of an entire constituent by its head (a fact of endocentric constructions), though not by its complement,<sup>9</sup> it can be proved that /erga haad-i-saa duu-t-ee/ 'after his mother died' is the head and that /hamma bara lamaa-tti/ 'up to two years' is the complement of Adp'' in (45 a) . Let us consider the following:

50(a) [Tulluu-n [ [erga haad-i-saa duu-t-ee]]  
 S<sub>T-nom.</sub> Adp'' Adp' after mother-nom-his-die-f-pf.

gara Gimbii hin-deem-n-e]

'Tulluu has not gone to Gimbii after his mother died'.

(b)? [Tulluu-n [hamma bara lamaa-tti] gara Gimbii hin-deem-n-e]  
 S<sub>T-nom.</sub> Adp'' until year two-up to G. neg-go-neg-pf.

(Literally), 'Tulluu has not gone to Gimbii up until two years'.

It is also evident from the observation of the internal structure of the phrases and the facts following from the argument about their head/complement relations, that such structures are left-headed like non-infinitival nominals, and unlike verbals, which as we have seen are right-headed. Whether this relation is consistent and natural is a thing one cannot be definite about now, since there are also structures of the same category which are right-headed. Structures of purposive and instrumentals, for example, belong to this group, unless we argue that in such structures what appear to be postpositional clitics are actually case affixes, and may hence be relegated to noun morphology.<sup>10</sup> Even if we accepted this to be valid, we would still have problems with adpositional phrases having independent postpositions as heads, as in /niitii-saa wajjin/ 'with his wife'.

It seems then that although there is a possibility for a language to have both case affixes and pre/post-positional elements,<sup>11</sup> the position of

such elements in relation to the complements which they strictly subcategorize and govern has to be determined in view of the overall effect this relationship may have on the grammar. Following Greenberg's (1963:76) observation and generalization about SOV languages, and the theoretical framework followed here, it might be more generalizing if not very economical to assume right-headedness for adpositionals in general.

Whereas the structures cited so far as examples of Adp'' complements are restrictive, the complements of some adpositional phrases appear to be non-restrictive. Consider (51) below for example:

- 51 [Tulluu-n [ [gara Gimpii [gara biyyaa bunaa]] deem-e]  
 S<sub>T-nom.</sub> Adp''' Adp' to G. Adp'' to land of-coffee go-pf.  
 'Tulluu went to Gimpii to [the] land of coffee'.

In such structures, the complement may be treated as having an appositive rather than restrictive role. In fact the complement seems to be a comment on the complement of Adp', that is, on /Gimpii/, rather than on the head<sup>12</sup> (Adp') itself. This is deducible from the fact that the complement /gara biyyaa bunaa/ 'to the land of coffee' is headed by the same element /gara/ 'to' which is also the head of the head /gara Gimpii/ 'to Gimpii'. This may lead us to one possible conclusion: that structures like /gara biyyaa bunaa/ 'to the land of coffee' are Adp''' rather than Adp'' complements. But, unlike the appositives of X''' complements, these can be affected by negation, or clefted as we can observe from (52 a) and (b) respectively.

- 52(a) [Tulluu-n [ [gara Gimpii] [gara biyyaa bunaa]]  
 S<sub>T-nom.</sub> Adp''' Adp' to G. Adp'' to land of-coffee  
 hin-deem-n-e-]  
 neg-go-neg-pf.  
 'Tulluu did not go to Gimpii to [the] land of coffee'.

- (b) [Tulluu-n [ [gara biyyaa bunaa] [gara Gimpii-ti]]<sup>13</sup>  
 S<sub>T-nom.</sub> Adp'' Adp'' to land of-coffee Adp' to G. is  
 kan deem-e]  
 comp.go-pf.  
 'It is to Gimpii to the land of coffee that Tulluu went'.

The ability to be affected by negation or to be clefted is the characteristic feature of X' (') complements. The reason why the complements in (51) appear to be appositive rather than restrictive seems to be related to the fact that /Gimpii/ is a proper noun, which means that anything that follows or precedes such a noun has no defining effect on it as the thing is inherently defined.

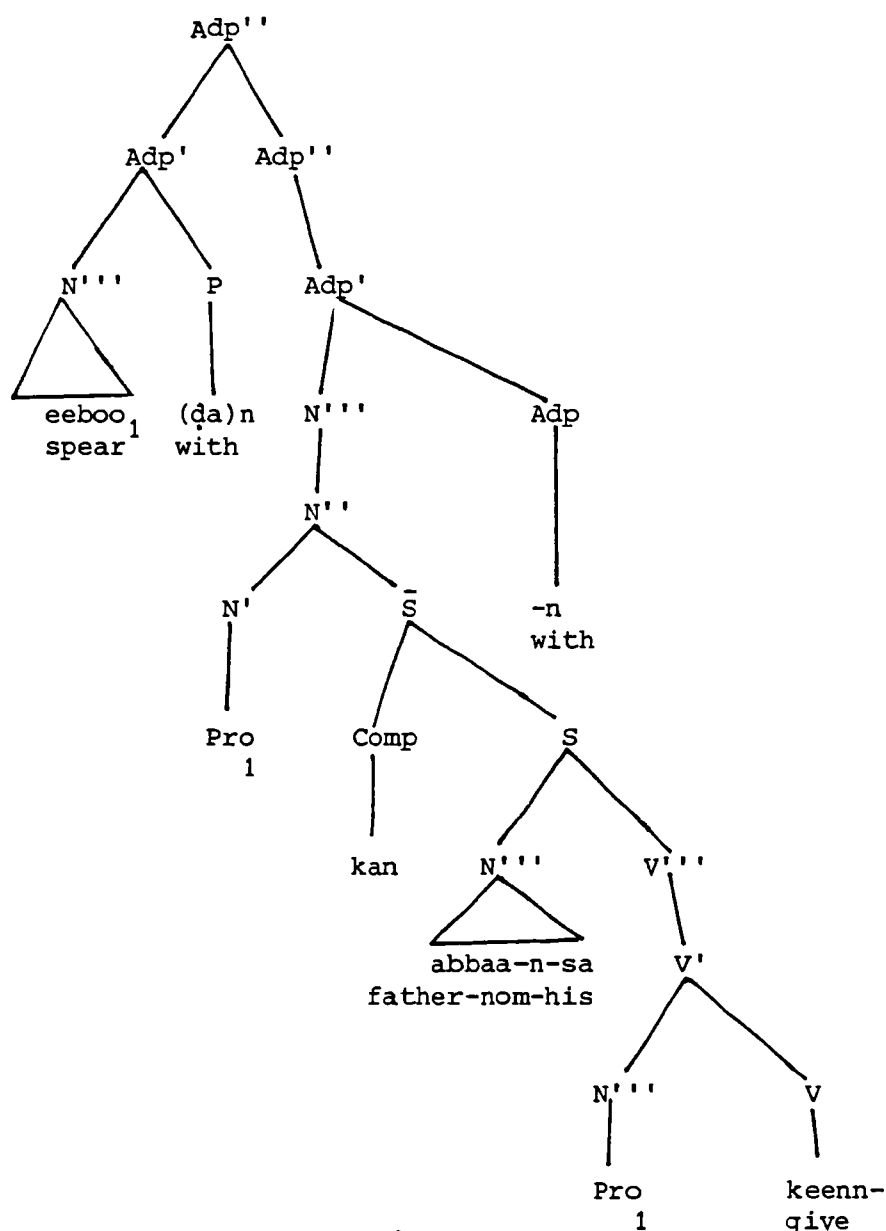
In structures of other adpositional phrases with common noun complements in Adp', the complement of Adp'' is always restrictive, thus supporting the claim made above. This is observable from the following:

- 53(a) [Tulluu-n [ [eeboo-ḍan], [abbaa-n-saa (kan) keenn-ee-n]]  
 S<sub>T-nom.</sub> Adp'' Adp' spear-with Adp'' father-nom-his give-pf-with  
 [leenca aḵḵees-e]]  
 V' lion kill-pf.  
 'Tulluu killed a lion with the spear with that which his  
 father gave him'
- (b) [Tulluu-n [ [fard-ičča-n], [kaleessa (kan) bit-ee-n]]  
 S<sub>T-nom.</sub> Adp'' Adp' horse-slg-on Adp'' yesterday comp.buy-pf-on.  
 gara Gimpii deem-e]  
 to G. go-pf.  
 'Tulluu went to Gimpii on the horse on that which he bought  
 yesterday'.

From their forms and their glosses, these complements appear to be relative clauses, and as such non-restrictive ones, because of the prolonged pause following the heads /eeboo-ḍan/ 'with spear' and /fard-ičča-n/ 'on the horse [back]' respectively. If this is the case, then they have to be treated as Adp'' rather than Adp' complements, for as we shall see

shortly, prolonged pauses are characteristic of X''' complements. However, the complements in question here appear as relative clauses only superficially, because relative clauses occur only as N'' complements as discussed earlier. What appear here as relative clauses are adpositional heads, that is Adp', with a strictly subcategorized nominal complement N''' which itself is a head to a relative clause complement. This relationship is shown in the tree below:

54 (=53)



'eeboo-ḍan abbaa-n-sa kan keenn-en'

'with the spear with [that] which his father gave him'



In (54) it is Adp'' which is the complement of Adp' (eeboo-dan). The relative clause is the complement of N'' in Adp' which is directly dominated by the initial Adp''. The two Pros in N'' get their reference from /eeboo/ 'spear' with which they are in c-command relationships in the sense of Chomsky (1981:166) and are hence co-indexed with this noun.

If we are on the right track, then the rule that expands Adp'' must be along the following lines:

55      Adp'' → Adp' (Adp'').

Notice that according to this rule, the complement comes after the head. This is what we have observed in all the structures considered earlier on, though in the chapter preceding this what we argued was that Oromo is postpositional, which means that the head is final. And this is still the case if we take Adp' /eeboo-dan/ 'with [a] spear' in (54) above, for example. What this leads us to conclude is that adpositionals are right-headed at their minimal, and left-headed at their maximal levels of projections, and accordingly two base rules should be formulated, one for each level. This is very uneconomical.

The alternative is either to maintain the argument that the language is postpositional and account for such cases as (54) by a movement rule, or to reconsider Oromo as a prepositional language, in which case no movement is needed at the level of Adp''. The rule will apply only on Adp'. In terms of cost this option appears economical because there will only be one movement applying at the minimal level whereas if we adopt the other option there will be two - one at each level, since there are also structures like /gara Gimbii/ 'to Gimbii' which are prepositional, and which need to be accounted for as deriving from a postpositional base. Furthermore, the antecedent-anaphoric relation in (54) seems to favour the prepositional

analysis. The (pro)nominals are co-indexed with a nominal /eeboo/ 'spear' which is in an antecedent position. This relationship will not be maintained if the postpositional option is adopted. For these reasons the rule in (55) may be adopted as a first approximation.

#### 4.2 X''' Complements

In the preceding sections of this chapter, we have considered all structures which have a restrictive effect on their heads as X'' complements. In the rest of the chapter, we shall argue that other structures which have no such effects on their heads are base generable as complements of X'''. It will also be shown that only two of the major categories, namely, verbals and nominals, are characterized by such complements.

As previously, we shall take up each category in turn and examine the characteristics of its complements at this level of projection.

##### 4.2.1 N''' Complements

At the level of N''', the complements associated with simple nominals include non-restrictive relative clauses and some noun phrases. Consider the following examples:

- 56(a) [ [ [nam-ičč-i [kaleessa (kan) duf-e]],  
 S N''' N'' man-sgl-nom. S yesterday comp. come-pf.  
 [Tulluu-n kan arrabs-e] [deeraa-ḍa]  
 S T-nom. comp. insult-pf. tall is  
 'The man who came yesterday, whom Tulluu insulted is tall'.
- (b) [ [ [muç-ičč-i [as(i) (kan) tur-e]],  
 S N''' N'' child-sgl-nom. S here comp. be-pf  
 [Gimbii-ti kaleessa kan duf-e] [bareedaa-ḍa]  
 S G.-from yesterday comp.come-pf. handsome is  
 'The child who was here, who came from Gimbii yesterday, is handsome'.

In (56) the first clause ( $\bar{S}$ ) following N'' is a restrictive relative clause, as already discussed (in 4.1.1). This clause restricts the reference of the head /nam-ičč-i/ 'the man-nom' in (a) to 'the one who came yesterday'. The clause outside N'' is also a relative clause, but its role is not that of defining, since the noun has already been defined by the first clause. Hence, its function is that of providing extra information about the head.

There is no formal difference between the two relative clauses in such structures, other than the intonation break.<sup>14</sup> The restrictive relative clause forms a single pause group with its head /nam-ičč-i/ 'the man-nom', whereas the non-restrictive one does not. There is always a prolonged pause separating it from the rest of the clause.

One other device for distinguishing a non-restrictive relative clause from a restrictive one is that the pronominal subject of the former always has a phonetic matrix. The example in (57) is an instance of this.

- 57 [ [ [nam-ičč-i], [inn-i Tulluu arrabs-e]], [deeraa-ḍa]]  
 S N'' N'' S  
 man-sgl-nom. he-nom. T. insult-pf. tall is  
 (Literally), 'The man, he insulted Tulluu, is tall',  
 'The man who insulted Tulluu is tall'.

The pronominal /inn-i/ 'he-nom' is the subject of the clause and is coreferential with the head. The intonation break is still apparent. This is indicated by the comma.

The pronominal subject may be dropped in such structures (as in (57)) if the head of the relative clause is a proper noun, as in (58), for example.

58. [ [ [obboo Tulluu-n]], [kaleessa Gimbii-ti (kan) ḍuf-e]]  
 S N'' N'' S  
 Mr. T-nom. yesterday G.from comp.come-pf.  
 [nama gaarii-ḍa]  
 man good is  
 'Mr. Tulluu, who came yesterday from Gimbii is a good man'.

Appositives, unlike restrictives, can occur preceding their heads. Whenever this is the case, they form one pause-group with the head (and are not separated by a comma in the transcription). Let us observe the following:

- 59(a) (i) [ [ [obboo Tulluu-n], [kaleessa Gimbii-ti (kan) duf-an-i]]<sup>14</sup>  
 S N''' N'' Mr. T-nom. S yesterday G. from comp. come-pol-pf.  
 [du?-an-i]  
 die-pl-pf.  
 'Mr. Tulluu, who came from Gimbii yesterday, died'.
- (ii) [ [ [kaleessa Gimbii-ti kan duf-an-i]  
 S N''' S yesterday G-from comp. come-pol-pf.  
 [obboo Tulluu-n] [du?-an-i]  
 N'' Mr. T-nom. die-pl-pf.  
 'Mr. Tulluu who came from Gimbii yesterday died'.
- (b) (i) [ [ [fard-ičč-i] [Tulluu-n (kan) bit-e] [du?-e]]  
 S N'' N' horse-sgl-nom. S T-nom. comp. buy-pf. die-pf.  
 'The horse which Tulluu bought died'.
- (ii) ?[ [ [Tulluu-n kan bit-e] [fard-ičč-i] [du?-e]]  
 S N'' S T-nom. comp. buy-pf. N' horse-sgl-nom. die-pf.  
 'The horse which Tulluu bought died'.

(59(a ii) derived from (59(a i) is possible, whereas (59(b ii) derived from the corresponding (59(b i) is only marginally acceptable.

Such differences between restrictives and appositives suggest that the two clauses need to be treated differently. In Section 4.1.1.1, we have treated restrictive relative clauses as complements of N''. What we are left with here is the non-restrictive (appositive) relative clause which may be associated with the next higher level, in which case a rule of the type below is necessary:

60. N''' → N'' (S̄)

Rules like (60) show general cases. There are, however, instances of structures of NPs with a proper noun head followed by another NP complement.

The structures in (61) are examples of such cases.

61(a) [ [ [obboo Tulluu-n], [abbaa-n Tolasaa]], [as(i) tur-an-i]]  
 S N''' N'' Mr. T-nom. N''' father-nom. of-T. here be-pol-pf.  
 'Mr. Tulluu, father of Tolasaa, was here'.

(b) [ [ [obboo Tulluu-n], [abbaa-n farda gurraa<sup>xy</sup>caa]],  
 S N''' N'' Mr. T-nom. N''' father-nom. horse black  
 [as(i) tur-an-i]]  
 here be-pol-pf.  
 'Mr. Tulluu, owner of a black horse, was here'.

In such structures, the complement NP is coreferential with the head /obboo Tulluu-n/. Functionally, it seems to be doing exactly what an appositive relative clause could have done. It does not modify the head because the latter is a proper noun and hence does not need any restrictive modifier.

In some cases, instead of simple NPs, NPs with a relative clause complement may also occur as complements. (62) is such an example.

62 [ [ [obboo Tulluu-n], [ [ [nam-i<sup>xy</sup>ca-i]  
 S N''' N'' Mr. T-nom. N''' N'' N' man-sgl-nom.  
 [[kaleessa as(i) tur-an-i]]]]] [du?-an-i]]  
 SS  
 yesterday here be-pol-pf. die-pol-pf.  
 'Mr. Tulluu, the man who was here yesterday, died'.

One characteristic feature which distinguishes such complement NPs from complements of the type seen in (61) is their ability to undergo extraposition. Hence corresponding to (62) above, (63) below is possible.

63 [[ [ [obboo Tulluu-n] [t]] [du?-an-i]] [ [ [nam-i<sup>xy</sup>ca-i]  
 SS N''' N'' Mr. T-nom. N''' 1 VP die-pol-pf. N''' N'' N' man-sgl-nom.  
 [[kaleessa as(i) tur-an-i]]]]]  
 SS  
 yesterday here be-pol-pf. 1  
 'Mr. Tulluu died, the man who was here yesterday'.

In the light of the examples in (61-62), the rule in (60) needs to be modified along the following lines:

64  $N''' \longrightarrow N'' (\{\bar{S} N'''\})$

#### 4.2.2 V''' Complements

In the section on V'' complements, we have argued that their complements include VP adverbials. In this subsection we shall argue that sentence adverbials may be considered as V''' complements, parallel to the appositive clauses in nominals.

The following are structures with such adverbials:

65(a) [Tulluu-n [ [duguma-an] [ [bor(u)]  
S<sub>T-nom.</sub> V''' Adp''' truth-in V'' Adp''' tomorrow

[gara Gimbii hin-deem-a]]]]

V' to G. cm-go-impf.

'I will certainly go to Gimbii tomorrow'.

(b) [Tulluu [ [hookan] [ [bor(u)]  
S<sub>T-nom.</sub> V''' Adp''' perhaps V'' Adp''' tomorrow

[gara Gimbii hin-deem-a]]]]

V'

'Tulluu will perhaps go to Gimbii tomorrow'.

One of the characteristics of sentence adverbials is their ability to move freely across the sentence. This is observable from (66) below, which is derived from (65 a) where the adverbial is base-generated in situ.

66(a) [duguma-an] [Tulluu-n [[t] [ [bor(u)]  
Adp' truth-in 1 S V''' 1 V'' Adp''' tomorrow

[gara Gimbii hin-deem-a]]]]

V' to G. cm-go-impf.

'Certainly Tulluu will go to Gimbii tomorrow'.

(b) [Tulluu-n [ [t] [ [bor(u)]] [duguma-an]  
S<sub>T-nom.</sub> V''' 1 V'' Adp''' tomorrow Adp''' truth-in 1

[gara Gimbii hin-deem-a]]]]

V' to G. cm-go-impf.

'Tullu will certainly go to Gimbii tomorrow'.

- 66(c)? [Tulluu-n [ [t] [ [bor(u))] [gara Gimbii hin-deem-a]]]  
 S<sub>T-nom.</sub> V''' 1 V'' Adp'' tomorrow V' to G. cm-go-impf.  
 [duguma-an]  
 Adp'' truth-in 1  
 'Tulluu will go to Gimbii tomorrow certainly'.

When a V''' complement is preposed in the manner suggested by (66 a), it is not separated from the rest of the clause by a pause. This distinguishes it from V'' complements, because the latter are always followed by a prolonged pause. Consider (67), for example.

67. [booru], [Tulluu-n [ [t] [gara Gimbii hin-deem-a]]]  
 Adp'' tomorrow S<sub>T-nom.</sub> V'' 1 V' to G. cm-go-impf.  
 'Tomorrow, Tulluu will go to Gimbii'.

Going back to (66), it appears that the sentence adverbials may not be postposed without the resulting structure being dubious. There are, however, other structures where such is not the case. Consider (68) below in relation to (66 b) above.

- 68(a) hookan [Tulluu-n [ [t] [bor(u) [gara Gimbii hin-deem-a]]]]  
 perhaps S<sub>T-nom.</sub> V''' 1 V'' tomorrow V' to G. cm-go-impf.  
 'Perhaps, Tulluu will go to Gimbii tomorrow'.
- (b) [Tulluu-n [ [bor(u) hookan [gara Gimbii hin-deem-a]]]]  
 S<sub>T-nom.</sub> V''' V'' yesterday perhaps V' to G. cm-go-impf.
- (c) [Tulluu-n [ t [bor(u) [gara Gimbii hin-deem-a]] hookan]  
 S<sub>T-nom.</sub> V''' 1 V'' yesterday V' to G. cm-go-impf. perhaps

A further characteristic of V''' complements is that they are not affected by negation. Let us observe the following again.

- 69(a) [Tulluu-n [duguma-an] bor(u) gara Gimbii hin-deem-u]  
 S<sub>T-nom.</sub> truth-in tomorrow to G. neg-go-impf.  
 'Trulluu will truly not go to Gimbii tomorrow'.
- (b) [Tulluu-n [duguma-an] nama gaarii miti]  
 S<sub>T-nom.</sub> truth-in man good not-is  
 'Tulluu is truly not a good man'.

In structures such as these, only the V' and/or V'' complements may be said to be within the scope of the negative element. For this reason, questions like /egaa eessa hin-deem-a/ 'where will he go then?' or (with the temporal phrase /bor(u)/ 'tomorrow' as its response), /egaa yoommuu hin-deem-a/ 'when will he go then?' are likely to be raised. No questions of these types will arise in relation to /duguma-an/ 'truly'.

Finally, V''' complements, again unlike those of V'' or V' cannot be clefted. Hence (a) but not (b) may be derived from the structure in (70).

70. [Tulluu-n [hookan [bor(u) [hoolaa hin-bit-a]]]  
 S<sub>T-nom.</sub> V''' perhaps V'' tomorrow V' sheep cm-buy-impf.  
 'Tulluu will perhaps buy a sheep tomorrow'.

(a) [bor(u)-da (>∅)]<sup>16</sup> [Tulluu-n hookan hoolaa kan bit-u]  
 S<sub>tomorrow is</sub> S<sub>T-nom.</sub> perhaps sheep comp-buy-impf.  
 'It is tomorrow that Tulluu will perhaps buy [a] sheep'.

(b)\* hookan-da Tulluu-n boru hoolaa kan bit-u  
 perhaps-is T-nom. tomorrow sheep comp. buy-impf.

The complements we have considered so far are adpositional phrases. There are also clauses which may be argued to be V''' complements. (71) below is an example with such a clause.

71. [Tulluu-n [ [akka na-tti fakkaat-u] [nama gaarii miti]]]  
 S<sub>T-nom.</sub> V''' S<sub>as me-to seem-impf.</sub> V' man good neg-is.  
 'As it seems to me, Tulluu is not a good man'.

Syntactically, such modifying clauses behave in much the same way as other positive complements do. They cannot be clefted or affected by negation. They can also undergo postposing. The structures in (72) are demonstrative examples.

72(a)\* [[akka na-tti fakkaatu-da] [Tulluu-n t nama gaarii miti]]  
 S<sub>as me-to seem-impf-is</sub> S<sub>T-nom.</sub> 1 man good neg-is



- 72 (b) [Tulluu-n [t [nama gaarii\_miti] [akka na-tti fakkaat-u]]]  
 S<sub>T-nom.</sub> 1 V'' man good neg-is as me-to seem-impf.<sup>1</sup>  
 'Tulluu is not a good man as it seems to me'.

From the differences we have noticed between V'' and V''' complements, it seems appropriate to suggest a base rule of the type (73) for V''' complements.

$$73 \quad V''' \longrightarrow (Adp'*) \underline{V''}$$

### 1.3 Summary

From the discussions we have had so far, some general statements may be made about the complement structures of the major categories at the intermediate and maximal levels of their projections. The complements associated with each level are restrictive and non-restrictive modifiers respectively. For nominals, these include adjectives, restrictive relative clauses and some genitive NPs of adverbial function at the level of N'', and non-restrictive relative clauses and appositive NPs at the level of N'''.

Verbals may have adpositional phrases or clauses of time, instrument, manner, etc. at the level of V''. These may be generally called VP adverbials as opposed to the complements of V''' which are sentence adverbials.

Regarding the complements of adjectivals and adpositionals, it may be said that theirs too include adpositional phrases/clauses of degree at the level of V'' and Adp''. Unlike the other two categories, they also terminate their projection line at the double bar level. This is contrary to Jackendoff's Uniform Three-level Hypothesis which we mentioned at the beginning of the chapter. The hypothesis predicts that all categories have a maximal treble bar expansion.

However, the hypothesis seems to predict the potential capacity for, rather than the actual occurrence of a maximal projection. Hence the fact that nominals and verbals expand to the level of three-bars as predicted means that the hypothesis holds strongly for these two categories, and less strongly for

the other two. It is with this in mind, it appears, that Jackendoff (1977:64) says, '...there is strong evidence for all three levels in S(=V''') and NP and for at least two levels in AP and PP'. Although this is said with reference to English, it may also be extended to apply to the situation we have observed in Oromo as well.

The base rules we have been formulating throughout the discussion may be presented here again for purposes of exposition and subsequent generalization.

$$N''' \longrightarrow N'' (\{S, N'''\})$$

$$N'' \longrightarrow N' (\{N''', A'', \bar{S}\})$$

$$V''' \longrightarrow (\text{Adp}''_*) V''$$

$$V'' \longrightarrow (\text{Adp}''_*) V'$$

$$A'' \longrightarrow (\text{Adp}'' ) A'$$

$$\text{Adp}'' \longrightarrow \text{Adp}' (\text{Apd}'' )$$

At the level X'' the following cross-category generalizations may be made:

$$[+V]'' \longrightarrow \text{Adp}'' [+V]'$$

With regard to the notion of headedness, the four categories seem to fall into two: those which are right-headed and those which are not. [+V] categories belong to the former, whereas [-V] categories belong to the latter.

NOTES TO CHAPTER FOUR

1. This term refers primarily to NP arguments, though some PPs may be included in the list of strictly subcategorized complements.
2. There is no genitive morpheme. The relation is indicated by the two NPs occurring in a possessed-possessor order. Phonologically the final vowel of the possessor NP becomes long. Hence,

/nama/ 'man', but [mana namaa] 'a man's house'.

This lengthening could be considered as a genitive morpheme.

3. Such genitive NPs of the type we have considered thus far may be thought of as being reduced relative clauses. For example, /amartii worḱii/ 'ring of gold' in (15) may be assumed to have derived from a structure like the one below (details have been avoided).

i) [ [amartii [[worḱii-rra kan hoj̃j̃-et-am-e]]]---  
 N''' N' ring SS gold-from comp. work-mid-ps-pf.  
 'A ring which is made of gold'.

If this is the case, then /worḱii/ 'of-gold' or /dammaa/ 'of-honey' in (15) and (16) respectively, which have been treated as N' complements, will have to be reconsidered as N'' complements since the relative clauses, from which they have been assumed to have derived are complements of N'', but not of N'. And in accordance with this analysis, the base rule in (12), which expands N'' as N' (N''') (A'') (S̄), would have to be modified in the manner of (ii):

ii) N'' → N' (A'') (S̄)

Whereas such an analysis works well for some genitives such as /worḱii/ 'of gold', it does not seem to hold for others, because in structures such as (iii) below, there is no appropriate relative clause to which the genitive NP could reasonably be traced back.

iii) (a) [ [ [aynatii [waḱii]]] nan-beek-a]  
 S N'' N' type N''' of-stew I-cm know-impf.  
 'I know [about] varieties of stew'.

(b) [ [ [karaa [miilaa]] [fagoo]] Tulluu-n deem-e hin-beek-u]  
 S N'' N' road N'' of-leg A'' far T-nom. go-pf. neg-know-impf.  
 (Literally), 'Tulluu has never gone a long walk of leg',  
 'Tulluu has never gone on foot'

Furthermore, if we maintain this type of analysis for all genitive structures, some of them will have to be accounted for as deriving from more than one relative clause source. Such structures include the following:

iv) [ [mana [margaa]]  
 N'' N' house N''' of-grass  
 'Grass house'.

If we treat (iv) as a reduced relative clause, its source will have to be either (a) or (b) below.

- a)            [ [mana]    [[marga-rra (kan) iɣaar-am-e]] ]  
               N' '' N' house     $\overline{SS}$  grass-from comp.build-ps-pf.  
               'A house built from thatched grass'.
- b)            [ [mana]    [[marga tee-siis-uu-f kan ta?-u]] ]  
               N' '' N' house     $\overline{SS}$  grass put-as-to-for comp.become-to  
               'A house for storing hay'.

The source clause in (a) shows the material from which /mana/ 'house' is built, whereas the one in (b) indicates the purpose the house is built for. It is not clear from the structure (iv) which of these two clauses is underlying /mana margaa/ 'grass house'. Even if we knew from pragmatic considerations that (a) might be a more likely source for the derivation, we would still have to face the complex problems that would arise from the derivation itself. Quite apart from this, we should certainly have to recognize three types of genitive NPs, *viz.*:

1. Those which have no relative clause source.
2. Those which can be derived from a single source.
3. Those which may have more than one source.

Instead of deriving them from clausal sources of the type shown above, and thereby facing the problems arising either from the process itself or from the identification of the clause type from which a particular genitive NP derives, we can take the other alternative, which generates them *in situ*, that is, as complements of N' or N'' and account for the structural ambiguities encountered in the manner shown in (14) and (17). This is quite possible since one of the strong claims of X-bar syntax is its ability to capture such subtle ambiguities (cf. Hornstein and Lightfoot 1981).

4. Time adverbials such as /bor(u)/ 'tomorrow' are considered here as reduced or headless adpositional phrases. There are cases when they occur with a head, since we have structures such as:

guyyaa-n har?aa bokkaa-n hin-roob-a  
 day-on today rain-nom. cm-rain-impf.  
 (Literally), 'On day of-today rain will rain'.

5. The marked case is one in which they or X' complements are preposed as in (1 b) derived from (1 a) :

- 1(a) Tulluu-n eeboo-ḍan            bineensa    aɣɣees-e  
       T-nom.    spear-with            animal            kill-pf.  
       'Tulluu killed an animal with a spear'.
- (b) eeboo-ḍan Tulluu-n t bineensa aɣɣees-e  
       <sup>1</sup> spear-with T-nom.            <sup>1</sup> animal            kill-pf.  
       'With a spear, Tulluu killed an animal'.

6. Adjectives which are derived from transitive verbs may subcategorize NPs as their complements, as in (42 b) . Such structures seem to suggest that derived adjectives have  $\theta$  and case-assigning properties.
7. This refers mainly to complements of infinitival heads.
8. This is to exclude cases of structures like /hamma kaleessa/ 'now yesterday' which is possible if one wants to emphasise that 'yesterday' does not refer to some day a long time ago.
9. The complement may substitute the whole constituent with some loss or change of meaning.
10. If this argument is seriously followed it will have a weakening effect on the theory of case assignment which is based on government in the sense of Chomsky (1981; 1982). Every such noun must be assigned case by the verb irrespective of whether it is adjacent to the case assigner or not.
11. In fact Oromo is one such language having both case affixes and postpositional clitics.
12. The reason for this seems to be related to the fact that /gara/ 'to' is lexically empty.
13. It is the entire Adp'', and not just the complement, which appears to be clefted as we can observe from the position of the copula /-ti/. Under normal circumstances we would expect it to occur following /gara biyyaa bunaa/, as in,
 

? gara biyyaa bunaa-ti    gara Gimbii kan deem-e  
to land of-coffee-is to C.    comp. go-pf.

What makes this kind of clefting exceptional is that both the complement, which undergoes the process, and the head belong to the same category of adpositionals.
14. This is equivalent to what Jackendoff (1977:63) calls 'comma intonation'.
15. The plural is used as a polite form of address.
16. As discussed in Chapter One, the copula is reducible to  $\emptyset$  following a stem-final short vowel or consonant.

CHAPTER FIVE

CLAUSAL COMPLEMENTS

5.0 Introduction

In the preceding two chapters, we have discussed two types of complements. In Chapter Three, we observed the complements of lexical heads. Such complements are usually obligatory.<sup>1</sup> It has been argued that these should be included in the lexicon as part of the lexical specifications of the heads by which they are subcategorized. The second type of complements is that which we have discussed throughout Chapter Four as projections of X' or X''. These are peripheral to the main predicate structure of the lexical head (X) and its strictly subcategorized functional argument(s).

At the levels of X' and X'', there are complements which are clausal. This is true of the [-N] categories of verbals and adpositionals. Both subcategorize sentential complements as their lexical specifications at their minimal levels of projection. These complements are functional arguments and occur in thematic positions. At the intermediate and maximal levels of their projections their complements may include subordinate clauses of various adverbial functions. These are modifying complements and are outside the strictly subcategorized argument complements of the head.

With regard to the [+N] categories of nominals and adjectivals, it has been argued that they too have sentential complements at the level of X''. At their minimal level they are characterized by genitive NPs of some type, or by adpositional phrases. What is noticeable here is that all the categories have clausal complements at one level or another in their projection line, and that these complements are functionally distinct.

Throughout the preceding chapters we have simply treated all clauses as complements of either a lexical or a phrasal category, without making any

reference to their internal structures. This chapter is an attempt towards this end. Here we shall attempt to examine the internal structure of the argument complements of the [-N], and the modifying complements of the [+N] categories. It is believed that the analysis of these two types of clause will help us in determining the position of the complementizer and the nature of the Infl node, on the basis of which a more comprehensive generalization about the notion of head in this language will also be made. It may also enable us to see the type of movement the language allows, the conditions constraining its application, and the principles governing the relation between moved categories and their traces.

Tangential as it is, the discussion will be limited just to the two clause types mentioned. Other types of clauses, such as those with adverbial functions, will not be dealt with directly for the main reasons (1) that such clauses are not arguments nor a part of such complements, and are as such outside main predicate structures; and (2) that their analysis may not be substantially different from the analysis we shall be proposing for the argument complements.

The two types of clauses we shall be dealing with may be called nominal and adnominal clauses. The latter deals with relative clauses, which have been treated in the preceding chapter as N'' or N''' complements. The main objective here will be to raise some points about traditional accounts of such clauses and to propose an alternative analysis.

### 5.1 Clausal Arguments

As already stated, these are arguments and as such occur in argument positions as complements of such verbs as /beek-/ 'know', /ḍaga?-/ 'hear', /arg-/ 'see', which we have collectively called epistemic verbs (cf. Chapter Three). There are two types of such clauses: finite (tensed) and

non-finite (non-tensed). The former is introduced by the element /akka/ 'that', and the latter by an optional adpositional element /-f/ 'for'. For purposes of exposition we shall call them /akka/ and /-f/ clauses respectively.

### 5.1.1 The Akka-clause

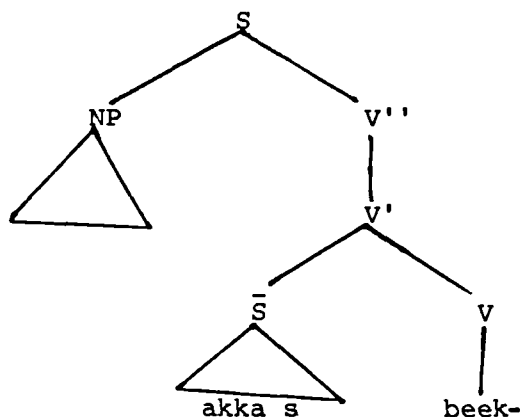
Akka-clauses are finite. Their verbal heads carry (AGR)reement and (ASP)ectual features. The following are examples of structures with such clauses.

- 1(a) [Tulluu-n [ [akka [Fayyiisaa-n duf-e]] [hin-beek-a]]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$  that  $S_{F-nom.}$  come-pf.  $V$  cm-know-impf.  
 'Tulluu knows that Fayyiisaa came'.
- (b) [Tulluu-n [ [akka [Çaaltuu-n hoolaa bit-t-e]] [daga?-e]]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$  that  $S_{\check{C}-nom.}$  sheep buy-f-pf.  $V'$  hear-pf.  
 'Tulluu heard that Çaaltuu bought [a] sheep'.
- (c) [Tulluu-n [ [akka [Fayyiisaa-n duf-e]] [arg-e]]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$  that  $S_{F-nom.}$  come-pf. see-pf.  
 'Tulluu saw that Fayyiisaa came'

In such structures the constituents in  $V'$ , namely the  $\bar{S}$ s are the akka-clauses. Like simple nominal arguments, they occur in thematic positions which the verbal head strictly subcategorizes and  $\theta$  (theta) marks in accord with its inherent lexical property.

The structural relations such clauses have with their verbal heads may be better observed if presented in the form of a tree structure as in (2):

2.





Such clauses occur as internal arguments of verbs like /beek-/ 'know' or /ḍaga?-/ 'hear'. They cannot occur as external arguments of verbs with NP complements, as (3) below is ungrammatical:

- 3\*     [ [akka Tulluu-n ḍuf-e] [na aars-e]]  
       S  $\bar{S}$  that T-nom.    come-pf. <sup>VP</sup>me annoy-pf.  
       'That Tulluu came annoyed me'.

Such structures would be possible only if the matrix verb were the copula /ḍa/ 'is', as in (4).

4.     [ [akka Tulluu-n ḍuf-e] [ḍugaa-ḍa]]  
       S  $\bar{S}$  that T-nom.    come-pf. <sup>VP</sup>certain is  
       'That Tulluu came is certain'.

The question which arises from this situation is: why is it that (4) but not (3) is grammatical? Can this be explained in a principled way?

It might be possible to explain this situation by referring to the theory of case. According to Chomsky (1981:178ff.) case is assigned as a lexical property of nominals. The subject clause in (3) may hence be assumed to have been assigned nominative case by ASP/AGR of the matrix Infl. But case is an abstract relation, it may or may not have morphological realizations, whether it does or not will depend on the language. In Oromo nominative case is realized by the affix /-n/. But this element is a feature of the category [+N-V]. In other words, it is realized only if the head of the argument which receives the case is a noun. The verbal head of the clausal argument in (3) is [-N+V], though the clause as a whole is nominal. Hence it cannot have the nominative marker /-n/. This means that the clause has been assigned abstract case but that this case has not been (and cannot be) morphologically realized because of the [-N] nature of the verbal head of the clause. The reason for the ungrammaticality of (3) might hence be attributed to the lack of the morphological realization of the case rather than to its abstract relation. In other words, the structure is ill-formed

because the subject clause does not have the nominative marker /-n/. Even if it had this element, the structure would still have been ill-formed because the element is a feature of [+N-V] categories only.

If this is the case, then we may ask why (4) is grammatical for it too is a subject clause lacking the nominative marker /-n/. It seems to me that in (4) the external argument of the matrix verb is not the clause /akka Tulluu-n duf-e/ 'that Tulluu came', for in that case the structure would have been ill-formed for the same reason that (3) was. It could be argued here that the external argument in (4) is a pleonastic element which in Oromo is phonetically null. The clause which appears to be the external argument seems to be an adjunct of V', similar to the situation in such English structures as 'It is clear that John came' where 'that John came' is an adjunct, and 'It' is the subject of the clause (cf. Koster 1978).

Notice that if this argument is correct, it means that the structures in (1) would have been ill-formed if Oromo had accusative case marking because the clausal arguments would have failed to show up this morpheme for the same reason stated above, though they could have received accusative case from the verb. There is some evidence in support of this assumption. Infinitival clauses are characterized by the nominative marker /-n/ when they occur in subject positions, and by its absence when they are in object position, because as we shall observe in the next section, the internal head of such clauses is nominal and may hence carry the morphological feature of case.

Regarding movement, in such structures as (1), the entire clause, but not any of the NPs contained in it, may be optionally raised to topic position for purposes of emphasis. Thus, (5 a) but not (b) or (c) may be derived from (1 b) above.

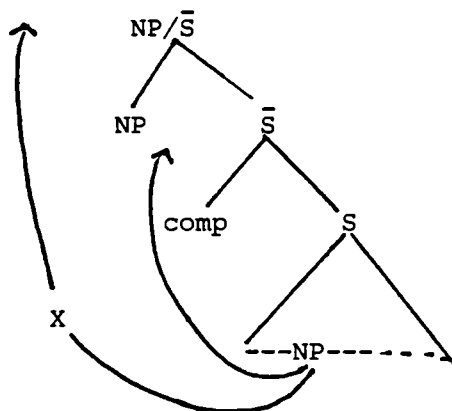
- 5(a)  $\bar{S}$   $\bar{S}_1$  that  $S_{\check{C}}$ -nom. sheep buy-f-pf.  
 [ [akka [Čaaltuu-n hoolaa bit-t-e]]  
 [ [Tulluu-n t hin-beek-a]]]  
 $S_{T}$ -nom. 1 cm.-know-impf.  
 'That Čaaltuu bought a sheep, Tulluu knows'.
- (b) \*  $\bar{S}$   $\bar{S}_1$  sheep  $\bar{S}$   $S_{T}$ -nom. [akka [Čaaltuu-n t bit-t-e]]  
 $S_{\check{C}}$ -nom. that  $S_{\check{C}}$ -nom. 1 buy-f-pf.  
 hin-beek-a]]]  
 cm.-know-impf.
- (c) \*  $\bar{S}$   $\check{C}$ -nom. 1  $\bar{S}$   $S_{T}$ -nom. [akka [ t hoolaa bit-t-e]]  
 $S$  1 sheep buy-f-pf.  
 hin-beek-a]]]  
 cm.-know-impf.

Such structures would be grammatical only if the NPs in question moved out of the  $\bar{S}$  in which they are base-generated, as in (6) below:

6.  $S_{T}$ -nom.  $\bar{S}$  sheep  $\bar{S}$  that  $S_{\check{C}}$ -nom. 1 buy-f-pf. cm.-know-impf  
 'Tulluu knows that Čaaltuu bought [a] sheep'.

The ungrammaticality of (5 b) and (c) and the grammaticality of (6) suggests that NP movement observes subadjacency, a constraint on movement rules which, according to Chomsky (1973:247), disallows the extraction of NPs from structural configurations of the type in (7).

7.



What (7) shows is that movement is possible only within or across  $\bar{S}$ , but not across the upper  $\bar{S}$  or NP which contains it. This means that  $\bar{S}$  or NP is a bounding node for Oromo, just as it is for English.

Akka-clauses may also undergo postposing, though this is not as frequent a process as preposing is. Hence corresponding to (5 a) above, (8) below is possible.

8.            [ [Tulluu-n t hin-beek-a], [akka Čaaltuu-n hoolaa bit-t-e]]  
 $\bar{S}$   $S_{T-nom.}$             1            cm.know-impf.            1 that Č-nom.            sheep            buy-f-pf.  
 'Tulluu knows that Čaaltuu bought [a] sheep'.

As stated earlier, akka-clauses are tensed, which means that the Infl. node is characterized by ASP and AGR. The former specifies the completedness-incompletedness of the action denoted by the verb, whereas the latter identifies the external argument of the verb in terms of the nominal features of person, number and gender. Since such features are reflected in the morphology of verbs, the external argument may easily be dropped, as in (9 b), derived from the corresponding underlying structure seen in (9 a):

- 9(a)            [Tulluu-n [ [akka [isaan(i) hoolaa bit-an-i]] ḍaga?-e]]  
 $S_{T-nom.}$             V'  $\bar{S}$             that            S they-nom            sheep            buy-pl-pf.            hear-pf.  
 'Tulluu heard that they bought [a] sheep'.
- (b)            [Tulluu-n [ [akka [(NP) hoolaa bit-an-i]] ḍaga?-e]]  
 $S_{T-nom.}$             V'  $\bar{S}$             that            S (they)            sheep            buy-pl-pf.            hear-pf.  
 'Tulluu heard that they bought [a] sheep'.

However, there are structures of tensed clauses where the subject cannot be dropped. Such structures include negative clauses, in which the verbs are in the perfective aspect. In such clauses, the Infl. node is characterized by ASP only. The agreement elements do not appear at all, with the result that the subject argument cannot be dropped without the resulting structure being multiply ambiguous. Consider the following, for example:

10. [Tulluu-n [ [akka [Pro hoolaa hin-bin-n-e]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$  that  $S_{Pro}$  sheep neg-buy-neg-pf.  
 hin-beek-a]]  
 cm-know-impf.  
 'Tulluu knows that Pro did not buy [a] sheep'.

Pro in (10) is not specified in terms of the features person, number and gender since the verb does not show such features whenever it has the negative morpheme /-n-/. It seems that in such clauses negative morphology has the effect of blocking AGR, and whenever this is the case, the subject argument cannot be Pro or else the interpretation of structures like (10) would have the reading in (11).

11. [Tulluu-n [ [akka [X hoolaa hin-bin-n-e]] hin-beek-a]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$  that  $S$  sheep neg-buy-neg-pf. cm.know-impf.  
 'Tulluu knows that X did not buy sheep'.

This situation suggests that AGR and ASP are independent features in Infl.

The position of X in (11) is a governed position which means that a lexical subject is licensed to occur. This is noticeable from the structure in (9) where we have /isaani/ 'they' or in (12) where we have /išii/ 'she'.

12. [Tulluu-n [ [akka [išii-n hoolaa hin-bin-n-e]]  
 $S_{T-nom.}$   $V'$   $\bar{S}$  that  $S_{she-nom.}$  sheep neg-buy-neg-pf.  
 hin-beek-a]]  
 cm.know-impf.  
 'Tulluu knows that she did not buy sheep'.

In such structures, the case-assigning element must be ASP in Infl. since AGR is not available, for the reason stated above. We shall pursue this argument in the next section.

Going back to the question of movement, we have noticed that fronting or postposing of a constituent to a non-argument ( $\bar{A}$ ) position<sup>2</sup> is possible, and that Oromo observes subadjacency. In what follows we shall consider

movements of substitution, that is, movement to an argument (A) position. Such movements are syntactic in the sense that they map D-structure into S-structure as opposed to some stylistic movements of adjunction which may operate at the level of the phonological component (Chomsky 1981:18). Only such movements are optional. This is in relation to languages like English which are characterized by both obligatory and optional movements. For Oromo the situation is different. Consider the following structures:

- 13(a) (i) [nam-oon-ni [kan Čaaltuu jaalat-an-i] fakkaat-a]  
 S<sub>man-pl-nom.</sub> S<sub>comp.</sub> Č. love-pl-pf. seem-impf.  
 'It seems that the men loved Čaaltuu'.
- (ii) [nam-oon-ni [kan Čaaltuu jaalat-an-i] fakkaat-u]  
 S<sub>man-pl-nom.</sub> S<sub>comp.</sub> Č. love-pl-pf. seem-3pl.  
 (Literally), 'The men seem they loved Čaaltuu'.
- (b) (i) [Čaaltuu-n [kan horii kab-d-u] fakkaat-a]  
 S<sub>Č-nom.</sub> S<sub>comp.</sub> money hold-f-impf. seem-impf.  
 'It seems that Čaaltuu holds/has money'.
- (ii) [Čaaltuu-n [kan horii kab-d-u] fakkaat-t-i]  
 S<sub>Č-nom.</sub> S<sub>comp.</sub> money hold-f-impf. seem-f-impf.  
 (Literally), 'Čaaltuu seems that she holds/has money'.

The structures in both (a) and (b) are paraphrases despite the formal differences shown by their matrix verbs. In the (i) structures, there is 'no agreement' between the matrix verb /fakkaat-/ 'seem' and the subject arguments. In the (ii) structures, however, there is agreement between the verb and /nom-oon-ni/ 'men-nom' in (a) and Čaaltuu in (b). For example, the verb in (a ii) is plural in agreement with the plural subject /nam-oon-ni/. Similarly /fakkaat-/ 'seem' in (b ii) agrees in gender with the feminine noun Čaaltuu, though this is not the case in (b i).

The verbs in the embedded clause are consistent in their agreement relations with /nam-oon-ni/ 'men-nom' in (13 a) and Čaaltuu in (13 b). This situation suggests that in those cases where there is no agreement

between /nam-oon-ni/ 'men-nom' or Čaaltuu and the matrix verb, the subject of the main clause may not be /nam-oon-ni/ or Čaaltuu. It could be an empty NP, in which case such structures may be treated as being derived from an underlying representation of the type in (14):

- 14(a) [NPe [ [kan [nam-oon-ni [Čaaltuu jaalat-ani-i]]]]  
 S V' S<sub>comp.</sub> S<sub>man-pl-nom.</sub> V' Č. love-pl-pf.  
 [fakkaat-a]  
 V<sub>seem-impf.</sub>  
 'It seems that the men loved Čaaltuu'.
- (b) [NPe [ [ [Čaaltuu-n [horii kab-d-u]]] [fakkaat-a]]  
 S V' S<sub>Č-nom.</sub> S<sub>money</sub> V' have-f-impf. V<sub>seem-impf.</sub>  
 'It seems that Čaaltuu holds/has money'.

In (14) the matrix verb is singular and in agreement with the empty subject NPe, just as in the same way the embedded verbs show the relevant features in agreement with their respective subjects.

This approach seems to explain the reason for the apparent discrepancy of agreement between the structures in (13). There we have noticed that the matrix verb agrees with the lexical subject in (a ii) and (b ii), but not in the corresponding structures in (a i). In those cases where there is agreement, we may argue that the subjects of the embedded clauses have undergone a movement rule which raises them to the empty NPe position in the matrix clause, and in those cases where there is no such agreement, we may assume that the movement has not taken place. In other words, the rule optionally operates on the underlying structure in (14) to derive the corresponding surface structure in (13).

This approach also goes in line with the lexical property of /fakkaat-/ 'seem' described in Chapter Three. There we have indicated that this verb does not select an external argument. The position where such an argument is expected is vacant since Oromo does not have non-referring or pleonastic

pronouns to cover it whenever movement has not taken place.

Certain questions arise from this state of affairs:

- i) Why does the rule apply only optionally?
- ii) Why should such a movement take place at all? (This is a more serious question from the point of view of syntactic theory.)

The kind of movement seen in corresponding structures in languages like English is obligatory, because the NP undergoing the movement has to receive case in order to escape the case filter which bars NPs having phonetic matrices from structures if they are not case-marked (cf. Chomsky 1981). Since the position where such NPs are base-generated is not governed and hence not case-marked (the clause being non-finite), the NPs cannot receive case in situ. Hence, they should move to another position where they can receive case and so escape the filter. One such position is the subject position of the matrix clause which is empty, but which is governed and hence case-marked by AGR/ASP in Infl. In other words, the movement in such languages is independently motivated by the theory of case.

There is no such motivation for the movement of /nam-oon-ni/ 'men-nom' or Čaaltuu in the (ii) structures in (13). As is observable from (14), the embedded verbs have both aspectual and agreement features, which means that the clauses are finite, and that the Infl. node has AGR/ASP, the element which, according to Chomsky (1981:170), assigns nominative case to an external argument. In short, then, both /nam-oon-ni/ 'men-nom' and Čaaltuu could receive and in fact do receive nominative case within their own clauses as the structures in (13 i) demonstrate. In such cases, there is no difference between the base and the corresponding derived structures in terms of the linear positions of arguments. Such differences



arise only when an argument moves from its base position and lands in another position in the corresponding S-structure as in the (ii) structures in (13), the S-structure of which is as shown below:

- 15(a) [nam-oon-ni [kan [t Čaaltuu jaalat-an-i]] fakkaat-u]  
 S<sub>man-pl-nom.</sub> S S 1 Č. love-pl-pf. seem-3pl-impf.  
 '[The] men seem [they] loved Čaaltuu'.
- (b) [Čaaltuu-n [kan [t horii kab-d-u]] fakkaat-t-i]  
 S<sub>Č-nom.</sub> 1 S 1 money comp. has-f-pf. seem-f-p-impf.  
 'Čaaltuu seems [she] holds money'.

Although the movement in (15) is not triggered by the case filter and hence is optional, its application does not seem to violate the  $\theta$  criterion<sup>3</sup> since the moved element lands in a non-thematic ( $\bar{\theta}$ ) position, that is, in a position which has not been  $\theta$ -marked by the VP of the matrix clause, and which hence has been empty. In other words, the position has been vacant until the raising has taken place. The relation between the raised NP and the trace does not seem to violate the empty category principle (ECP) of Chomsky (1981:250), which requires that traces should be properly governed, whereby 'proper government' is meant, in one sense, government by a c-commanding antecedent,<sup>4</sup> that is, by the moved element, or, in another sense, government by a lexical head such as [ $\pm N \pm V$ ]. Infl., the element which governs the trace in (15), is a governor but not a lexical governor. Hence the trace is properly governed only by its antecedent. In either case there is no violation of this principle, in fact, since Infl. in Oromo is richer than Infl. in languages like English, it may be considered as a lexical governor, which means that even the trace may be properly governed by it.

The other principles which govern the relation between a moved NP and its trace are the binding principles of Chomsky (1981:188). One of

these principles states that anaphors must be bound in their governing categories.<sup>5</sup> NP traces are anaphors, which means that they too must be bound in their governing categories. The governing category of the trace in (15) is the matrix clause since only it meets the definition given by Chomsky (1981:211). And, as predicted by the theory, the trace may be said to have observed this principle since it is bound by the antecedent NP for its reference in this clause. Notice, however, that the trace is also governed by Infl. which has AGR, its(trace)accessible SUBJECT. This means that it can also get its features from AGR in its own clause and hence does not need to be bound by the antecedent for its reference. But this violates the principle which dictates that it should be bound. It cannot be bound by AGR because AGR is not a binder; only NPs are binders. In other words, the trace behaves like a pronoun in this situation, since pronouns are free in their governing categories. This is a contradictory situation. I leave it open.

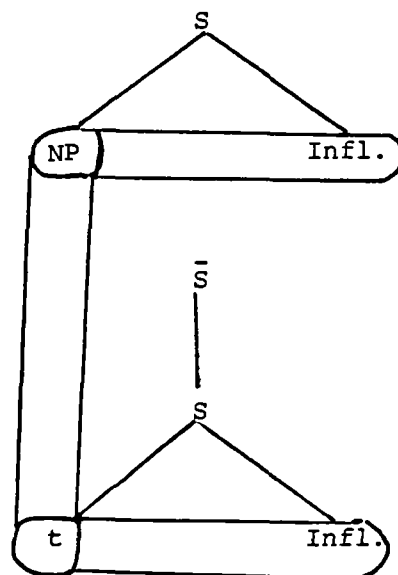
Further problems arise when we consider the status of the trace in relation to case. As stated above /nam-oon-ni/ 'men-nom' or Čaaltuu-n have been extracted from a case-marked position and moved to another case-marked position. If we assume with Chomsky (1981:170) that structural case assignment takes place at the level of S-structure, then /nam-oon-ni/ 'men-nom' and Čaaltuu-n may receive nominative case from AGR/ASP in Infl. of the matrix clause whenever movement takes place, or from the AGR/ASP of Infl. in their own clauses when movement has not taken place. The question which follows from this concerns whether or not the trace also has case.

According to Chomsky (1981:80) the trace of an NP does not have case since its position is not case-marked. Instead, it is the chain which the antecedent forms with the trace that gets case. In other words, the

trace cannot have case independent of or other than that which is assigned to the head of the chain. But the situation we have in (15) does not seem to fit into this line of argument. The trace may be said to be part of a chain which is headed by the antecedent, but it does not seem possible to say that the trace has no case given the fact that it is in a governed and hence in a case-marked position. If it is case-marked, then it means the chain is doubly case-marked, once from its position in the lower clause and a second time from the matrix clause. This is contrary to the property of chains. They are supposed to have one case only (cf. Chomsky 1981).

The relation of the trace with AGR in Infl. in its own clause and with its antecedent NP in the matrix clause at the levels of S.S and logical form (LF) is as follows:

16.



In (16), the relation between the trace (t) and Infl. in the  $\bar{S}$  is a relation that may involve both binding and case, since as stated above, Infl. has AGR, the case-assigner. The trace may be coindexed with AGR or with the NP in the matrix clause for its reference. The NP gets its case from Infl. in S.

The movement we have observed in (15) involves extraction from a case-marked subject position, and the problems with regard to the principles of binding and case theory which arise from such extractions concern the status of the trace left behind by the moved NP. Oromo appears to violate some of the principles involved when a subject argument is moved. In what follows we shall consider extraction from an object position and check whether or not this also leads to the same kind of problems we have observed with respect to subject extraction. In order to do this, we have to raise the object  $\check{C}$ aaltuu in (15) and substitute it for the empty NPe of the matrix clause in the manner suggested in (17) below:

- 17\*    [ $\check{C}$ aaltuu-n    [ [kan [nam-oon-ni t  $\check{J}$ aalat-an-i]] [fakkaat-t-i]]]  
          S $\check{C}$ -nom.    1    v' S $\bar{S}$     comp. man-pl-nom.    1    love-pl-pf.    V $\check{V}$  seem-f-pf.  
          (Literally), ' $\check{C}$ aaltuu seems that the men loved'.

Unlike in (15), the extraction in (17) leads to ungrammaticality. The reason for this does not seem to be related to the movement as such, because: (i) the movement crosses only one bounding node ( $\bar{S}$ ), hence there is no violation of subjacency; (ii) the moved NP lands in  $\bar{\theta}$  position, thus avoiding violating the  $\theta$  criterion, and (iii) the trace of the moved NP observes the empty category principle, which dictates that it should be properly governed. The trace is properly governed by the verb / $\check{J}$ aalat-an-/.

As in (15) the position from which  $\check{C}$ aaltuu has been extracted is a case-marked position, which means that  $\check{C}$ aaltuu would not have to move for reasons of case. In other words, the situation in (17) is exactly the same as that in (15) except for the terms themselves. In (15) it was the subject which has been raised, here it is the object. But this difference does not seem to be the real cause for the ungrammaticality of the structure. In fact, the structure may be said to be well-formed from

the point of view of its syntactic derivation. In other words, its derivation does not violate the principles that govern NP movement.

The problem with (17) may be explained in terms of the principles of binding, which operate at the level of LF, that is, after movement has taken place. As stated earlier in connection with the structures in (15), the trace left behind from a moved NP is an anaphor and according to principle A of the binding theory of Chomsky (1981:188) it should be bound in its governing category. The governing category of the trace in (17) is the lower clause. But there is no NP in this clause with which the trace can be associated. It cannot be coindexed with /nam-oon-ni/ 'men-nom' because /nam-oon-ni/ is in a  $\theta$ -position and coindexing it with the trace would violate the  $\theta$ -criterion. Hence the trace remains without being bound to any antecedent NP for its reference in the governing category, which is in violation of the said principle. This means that  $\check{C}$ aaltuu cannot be raised in (17), not so much on account of a principle of movement such as subjacency, but for principles that operate on the output of such movement.

From the discussion so far it appears that Oromo is characterized by NP movement which operates optionally on tensed clauses. The process observes subjacency. But the trace fails to satisfy the requirement that it should not bear case, and that it should be bound since it is an anaphor.

### 5.1.2 The f-clause

This is what has traditionally been called the infinitive or gerund. It is morphologically identifiable by the deverbalizing suffix /-uu-/. The derivation is lexical and is also highly regular. Any verb stem, with the exception of the copula / $\check{d}$ a/ 'be' may be nominalized by affixing /-uu-/.

The derived form behaves like any other nominal. It occurs in thematic positions and is also subject to the case filter. It is also characterized by the same syntactic features that characterize its verbal base. For example, the verb /iʃaar-/ 'build' strictly subcategorizes an object argument as part of the specification of its inherent lexical properties. It also selects an external argument for the syntactic subject position. In the same manner, its nominalized form /iʃaar-uu/ 'to build/building' is characterized by an object argument. It may also select an external argument, which could be Pro. in the marked case. The difference between the verb and its nominal form may hence be said to be categorial rather than of subcategorization.

As has been shown in Chapter Three, infinitivals occur as complements of a set of verbs we have called desiderative verbs. The following are some examples of such complements.

- 18(a) [Tulluu-n [ [ [mana iʃaar-uu] hin-barbaad-a]]  
 $S_{T-nom.}$  V'  $\bar{S}$   $S_{house}$  build-to cm.-want-impf.  
 'Tulluu wants to build a house'.
- (b) [Tulluu-n [ [ [aannan ɖug-uu] hin-ʃaalat-a]]  
 $S_{T-nom.}$  V'  $\bar{S}$   $S_{milk}$  drink-to cm.-like-impf.  
 'Tulluu likes to drink milk'.

The infinitival clause in (18), like the finite akka-clauses we have already seen, may be preposed as in (19 a) or postposed as in (19 b), both being derived from (18 a).

- 19(a) [ $\bar{S}$  [mana iʃaar-uu]<sub>1</sub>] [ $\bar{S}$  [Tulluu-n t hin-barbaad-a]]  
 $S_{house}$  build-to  $S_{T-nom.}$  1 cm.-want-impf.  
 ?'To build [a] house, Tulluu wants'.
- (b)? [Tulluu-n [ t hin-barbaad-a] [mana iʃaar-uu]]  
 $S_{T-nom.}$  V' 1 cm.-want-impf.  $S_{house}$  build-to  
 'Tulluu wants to build a house'.

Whereas preposing of a complement is quite natural and readily acceptable, judgments vary about postposing, though structures with such postposed complements are not regarded as being ill-formed.

Again as in akka-clauses, movement out of infinitival clauses observes subjacency. This is deducible from the structure in (20) below derived from (18 b) above.

20?  $\bar{S}$  [aannan  $\bar{S}$  [Tulluu-n  $\bar{S}$  [ [ t  $\dot{d}$ ug-uu] hin- $\check{y}$ aalat-a]]]]  
 milk 1  $\bar{S}$  S<sub>T-nom.</sub> v'  $\bar{S}$  S 1 drink-to cm. like-impf.

(Literally), "Milk, Tulluu likes to drink'.

In (20) /aannan/ 'milk' crosses two bounding nodes, the embedding and the embedded  $\bar{S}$ s, before it gets to its surface position. Even if we argued that the movement was cyclic and that /aannan/ 'milk' first landed in the position of the complementizer of the clause in which it is base-generated, and finally got to the topic position by crossing the upper  $\bar{S}$ , the resulting structure would still be excluded at LF for the reason that the trace, which, as we have said earlier, is an anaphor, would fail to satisfy principle (A) of the binding theory, which dictates that it should be bound to an antecedent in its governing category. The governing category in (20) is the embedded S since according to the definition we had, it is this clause which contains the governor of the trace, the verb / $\dot{d}$ ug-/ 'drink' and the accessible subject, Tulluu. But the trace cannot be bound in this clause because the accessible subject, Tulluu, which is supposed to be its binder is in an independent thematic position and coindexing it with this subject would violate the  $\theta$ -criterion.

Whereas infinitival clauses are similar to akka-clauses with respect to subjacency, they differ from the latter with respect to their scope of distribution. As we have observed in the preceding section, akka-clauses

are limited to the position of objects. In other words, they function only as internal arguments of verbs. In contrast, infinitivals can occur not only as objects of verbs as in (19), but also as complements of adpositions and as subjects of clauses. To this extent infinitivals are similar to simple nominals. Consider the following examples:

- 21(a) [ [aannan d̥ug-uu-n] [gaarii-ḍa]  
 S S milk drink-to-nom. V' good is
- (b) [Tulluu-n [hoolaa bit-uu-fi] gara Gimpii deem-e]  
 S<sub>T</sub>-nom. Adp'' sheep buy-to-for to G. go-pf.  
 'Tulluu went to Gimpii for buying sheep'.

In (21), the infinitival clause /aannan d̥ug-uu-n/ is in subject position in (a) and in complement position in (b). As subject of the clause, it displays the nominative case affix /-n/.

The distributional differences between the two types of clauses seem to reflect the categorial differences the internal heads of the clauses show. As stated earlier, the head of the VP in akka-clauses is verbal, and, as we have assumed in the preceding section, such clauses seem to resist features of case and hence fail to occur in positions where NPs with morphological case marking are expected. Contrary to these, however, the heads of infinitivals are nominal, and as stated above, they are subject to the case filter. The structure in (21 a) would be ungrammatical if the head of the infinitival clause, i.e., /d̥uguu/ 'drinking/to drink' occurred without the nominative marker /-n/. Hence the difference in distribution between the two clauses is a difference that results from the verbal vs. nominal nature of the heads.

Going into the internal structure of infinitival clauses, it is noticeable that in (21) the subject position of the infinitival clause, which is itself the subject of the matrix clause, is not lexically filled.



The structure would have been ill-formed if this position had a subject with a phonetic matrix as in (22) below:

22\*     [ [ [Tulluu-n aannan d̥ug-uu-n]] [gaarii-ḍa]]  
           S S S<sub>T-nom.</sub>     milk     drink-to-nom.<sup>V'</sup> good     is

The reason for the ungrammaticality of (22) is again the case filter. The position of Tulluu is an argument position, but it is not a case-marked position because the clause being non-finite, Infl. does not have the governing and hence the case-assigning element AGR/ASP. But in accordance with the extended projection principle of Chomsky (1981:25ff) and (1982:10), which stipulates that all clauses have subjects, the subject of infinitivals is assumed to be an abstract entity, that is, an entity which does not have a phonetic matrix. This entity, called PRO, behaves like other pronominals with respect to certain principles which determine co- or disjoint references at LF.

In the structures in (21) or (22), the subjects of the infinitival clauses must be PRO according to the principle mentioned above; which means that at the level of D-structure (21) is like (23):

23.     [ [ [ [ [PRO aannan d̥ug-uu-n]] [gaarii-ḍa]]]  
           S S S<sub>S</sub> S     milk     drink-to-nom     V' good     be  
                               'To drink/drinking milk is good'.

As stated earlier, PRO is like a pronoun with respect to its reference, which means that it may be deictic (disjoint) or anaphoric. When it is deictic, it has independent reference and when it is anaphoric it gets its reference from an NP outside its own clause. In (23) above, for example, PRO is deictic since there is no NP in the matrix clause with which it can be coindexed for reference.

As opposed to PRO in (23) which is free for its reference, PRO in (24) below is not free, though the clause in which it occurs is in the same subject position as the clause in (23):

24. [ [ [ [PRO horii kab-uu-n]] [Tulluu [hin-gammaččis-a]]] ]  
 S S S S money have-to-nom. V' T. V cm. please-cs-impf.  
 'To have/having money pleases Tulluu'.

Here PRO refers to Tulluu, the object of the matrix verb. Hence PRO is anaphoric. But unlike other anaphoric pronominals such as reflexives which are bound in their governing categories in accord with principle A of the binding theory, PRO is free in its governing category. In this respect it is like pronouns which may be free in their governing categories. But in (24), PRO is not free since it gets its reference from the object NP Tulluu. But Tulluu is not in its governing category. Besides, Tulluu is not in a c-commanding<sup>6</sup> position, a condition which antecedent-anaphoric relationships should satisfy. The situation suggests that the relation between PRO and its controller (binder) is not and cannot be the same as the relation between an anaphor and its local binder. Instead, it appears that PRO may have to find an antecedent somewhere in the root clause irrespective of whether that antecedent is in a c-commanding position or not. From this follows that the relation between PRO and its controller may not be determined in terms of syntactic configurations, but, as Chomsky (1981:76) has said, it may involve 'thematic roles or other semantic properties of verbs, or perhaps pragmatic conditions of some sort'.

This seems to be true with respect to the structure in (24) and with others having the same type of matrix verb as (24). The verb /gammaččis-/ 'please' is morphologically causative. Its non-causative counterpart is intransitive, and it is the subject of this intransitive verb which occurs as the object of the causative form in (24). Consider (25) below.

25. [Tulluu-n gammadd-e]  
 S T-nom. please -pf.  
 'Tulluu became happy (pleased)'.

The causative counterpart of /gammadd-/ 'please' has the property of subcategorizing an NP as its complement. Whenever this is the case, it seems that PRO is controlled by an object NP which may or may not be in antecedent and hence in c-commanding position. In (24), for example, when PRO is in a subject sentence, the controlling NP is in object position. In (26) below, the controller is still an object NP and is also in an antecedent and c-commanding position:

26.  $\left[ \begin{array}{l} \text{[Tulluu-n} \\ \text{S} \end{array} \begin{array}{l} \text{[[Fayyiisaa]} \\ \text{S} \end{array} \begin{array}{l} \text{[ [PRO farda guluf-uu]} \\ \text{S} \end{array} \text{barsiis-e]]} \right]$   
 $\begin{array}{l} \text{T-nom.} \\ \text{V'} \end{array} \begin{array}{l} \text{F.} \\ \text{F.} \end{array} \begin{array}{l} \text{horse} \\ \text{ride-to} \end{array} \begin{array}{l} \text{learn-cs-pf.} \\ \text{learn-cs-pf.} \end{array}$   
 'Tulluu taught Fayyiisaa to ride [a] horse'.

The matrix verb /barsiis-/ 'teach' like /gammačč-is-/ in (24) is causative. But unlike the latter, it is a two-place verb, which means that it requires two complements. The clause with the PRO subject and Fayyiisaa are expressions of this lexical requirement. In such cases PRO is controlled by an object NP. So, it seems that whenever PRO is in an object sentence, the controlling NP is in antecedent position, and whenever it is in subject sentence, the controlling NP is in a non-antecedent position. The structures in (24) and (26) above, and the one in (27) below support this view.

- 27(a)  $\left[ \begin{array}{l} \text{[Tulluu-n} \\ \text{S} \end{array} \begin{array}{l} \text{[[Fayyiisaa]} \\ \text{S} \end{array} \begin{array}{l} \text{[[PRO hoolaa bit-uu]} \\ \text{SS} \end{array} \text{gargaar-e]]} \right]$   
 $\begin{array}{l} \text{T-nom.} \\ \text{V'} \end{array} \begin{array}{l} \text{F.} \\ \text{F.} \end{array} \begin{array}{l} \text{sheep} \\ \text{buy-to} \end{array} \begin{array}{l} \text{help-pf.} \\ \text{help-pf.} \end{array}$   
 'Tulluu helped Fayyiisaa to buy [a] sheep'.
- (b)  $\left[ \begin{array}{l} \text{[Tulluu-n} \\ \text{S} \end{array} \begin{array}{l} \text{[[Fayyiisaa]} \\ \text{S} \end{array} \begin{array}{l} \text{[ [PRO hojji hojji-isiis-uu]} \\ \text{S} \end{array} \text{hin-barbaad-a]]} \right]$   
 $\begin{array}{l} \text{T-nom.} \\ \text{V'} \end{array} \begin{array}{l} \text{F.} \\ \text{F.} \end{array} \begin{array}{l} \text{work} \\ \text{work-cs-to} \end{array}$   
 cm.-want-impf.  
 'Tulluu wants to work Fayyiisaa'.

In the data provided so far, we have observed two types of PRO: one which refers freely to anyone, and another which depends on an NP. The NP in the examples cited is an object NP. Thus PRO in such structures is

object-controlled. In contrast to this, PRO may be controlled by the subject NP of a matrix clause, as in (28).

- 28(a) [Tulluu-n [ [ [PRO wayaa miiçuu]] hin-danda?-a]]  
 $S_{T-nom.}$  V'  $\bar{S}$  S clothes wash-to cm. be-able-impf.  
 'Tulluu is able to wash clothes'.
- (b) [Tulluu-n [ [ [PRO mana ijaar-uuu-f]] hin-ta?-a]]  
 $S_{T-nom.}$  V'  $\bar{S}$  S house build-to-for im-think-impf.  
 (Literally), 'Tulluu thinks for building a house',  
 'Tulluu plans to build a house'.

Earlier it was suggested that PRO may not be subject to the same principle of binding theory as are anaphors since it is free in the governing category, whereas the latter are bound. In other words, PRO, though not anaphors, may be controlled by or bound to a distant antecedent. In order to capture PRO and other pronominals in one domain where they may be free or bound to an antecedent and where such a relationship is expressed in terms of syntactic configurations, rather than in terms of semantic notions or pragmatic cues, Manzini (1983) has extended the notion of 'governing category' as per Chomsky (1981:188) to 'domain governing category'.<sup>7</sup> It is claimed that anaphors are bound in their governing and domain-governing categories, whereas pronominals are free in their governing categories.

Whether this theory or those proposed by Bresnan (1982) or Williams (1980) are fully applicable to Oromo or not is a subject not to be definitive about at this point. One needs to consider other anaphors, such as reflexives, reciprocals, NP traces in structures across all maximal categories. For the moment we may tentatively say that PRO is either free, or controlled by an antecedent or a non-antecedent NP in the matrix clause.

In the discussion so far we have observed infinitival structures with PRO subjects. These constitute only one type of such structures.

The other type includes infinitives which may have lexical subjects.

The following are examples of such structures.

- 29(a) [[(Tulluu-n) deem-uu-n-isa] [na-aar-s-e]]  
 S T-nom. go-to-nom-his V' me-annoy-cs-pf.  
 'Tulluu's going annoyed me'.
- (b) [Tulluu-n [ [ [Čaaltuu-n) deem-uu-išii]] ḍaga?-e]]  
 T-nom. V S S Č-nom. go-to-her hear-pf.  
 'Tulluu heard of Čaaltuu's going'.

In (29) the infinitival structures in both sentences have subjects which have phonetic matrices. As stated earlier, such subjects can occur only in positions which are case-marked. In order for such a position to be case-marked, the Infl. node of the clause must have AGR/ASP, or else the position must be subject to government by a case-assigning element in the matrix clause. In the structures concerned, the entire infinitival clause is assigned nominative case in (a) and accusative case in (b). This is indicated by the presence of the nominative marker /-n/ in the head of the infinitival clause in the former, and by its absence in the latter. The subject position within the clauses in both cases cannot be governed, and hence case-assigned, by the matrix Infl. or verb because such clauses, being  $\bar{S}$ s, are a barrier to government. However, as it is observable from both structures, the subjects Tulluu in (a) and Čaaltuu in (b) have the nominative case-marker /-n/, which shows that nominative case has been assigned to them within their respective clauses. What is significant to note here is that in (29 b) whereas the entire infinitival clause is assigned accusative case by the subcategorizing verb /ḍaga?-/ 'hear', the subject of the clause Čaaltuu is in the nominative case. This suggests that the clause is assigned accusative case as a unit by this verb, but the subject of this object clause is assigned nominative case

independently. In other words, we have a situation where the part is assigned a case which is different from that assigned to the whole.

This situation suggests that the subjects of the infinitival clauses in such structures as (29) are case-marked by an element within their own clauses. If it were the case that they had the same case features as their heads, we should perhaps argue in terms of agreement relations, although this again is difficult given the fact that the structures are one of subject and predicate and not of head and modifier. In other words, it is not a case where a non-head category copies the features of its head for reasons of concord.

What distinguishes the infinitival heads in (29) from other infinitives is their having such pronominal affixes as /-saa/ 'his' or /-šii/ 'her'. It must therefore be the case that it is the presence of such affixes which licenses the occurrence of lexical subjects in positions which are otherwise filled by PRO. These pronominal elements may be considered as being the counterparts of the person marking elements in verbs in tensed clauses. In other words, they are the person-markers in infinitivals or gerunds just as the others are in verbs. For purposes of illustration and comparison let us observe the following paradigms below, one for the verb /deem-/ 'go', and the other for its infinitival counterpart /deem-uu-/ 'to go/going'.

30.	1.	deem-θ-	deem-uu-koo
	2.	deem-t-	deem-uu-kee
	3m.	deem-θ-	deem-uu-isaa
	f.	deem-t-	deem-uu-išii
		deem-an-	deem-uu-keenna
		deem-t-an-	deem-uu-keesan
		deem-θ-an-	deem-uu-saani

The difference between the paradigms above lies in the possibility for the verbs to have tense or aspect-marking elements. This is obvious given the fact that tense or aspect is a feature which distinguishes them from other categories. In so far as the feature person is concerned, however, there does not seem to be any difference since the infinitivals, just like the corresponding verbals, have pronominals which refer to their possible subjects.

Compare the following structures.

- 31(a) [ [ati [gara Gimbií deem-t-e]] ]  
 S S V' to G. go-2-pf.  
 'You went to Gimbií'.
- (b) [ [Çaaltuu-n [gara Gimbií deem-uu-n-išii...]] ]  
 S S Ç-nom. to G. go-to-nom-her  
 'Çaaltuu's going to Gimbií...'

Because of the presence of the person-marking elements in both the verbal and infinitival heads of such structures, the subjects may be dropped as in (32).

- 32(a) [Pro [gara Gimbií deem-t-e]]  
 S V' t0 G. go-2-pf.  
 'You went to Gimbií'.
- (b) [Pro [gara Gimbií deem-uu-n-išii...]]  
 S V' to G. go-to-nom-her  
 'Her going to Gimbií...'

This parallel situation induces us to believe that it is the person-marking elements in both types of structures which determine whether a lexical subject is possible or not, and also whether that subject may be dropped or not. The only difference between the person-markers in the two types of clauses is that in the case of the infinitivals, the markers are genitives. But this difference does not have any effect on the type

of case the subjects should have since in either case they are in the nominative case. In other words, the form of the affix in the verb or in the corresponding infinitive has no bearing on the case form of the subject.

In parallel structures in languages like English, the subject of the gerund is in the genitive case and this case is assigned to the noun in subject position by an inserted (poss)essive element. This is the situation in (33 b) below, derived from (33 a) .

33(a) [John going]

(b) [[John + poss] going]

John's going.

In (33), there is nothing in 'going' that refers to John. Hence, John is not licensed to occur by AGR in Infl., but by the fact that it has received the genitive case from the inserted (poss)essive. The situation we have in Oromo is not the same as what we see here, because parallel to (33) above, the structure in Oromo would be the ungrammatical (34) below.

34\* [ [Tulluuisaa deem-uu] [na aar-s-e]]  
 S S<sub>T</sub>-his go-to V' me annoy-cs-pf.

In Oromo, the genitive element is part of the inflection of the gerund, just like the person-marking elements are part of the inflectional morphology of verbs.

From this situation the most plausible approach to the analysis of infinitives or gerunds in Oromo would be that which recognizes the pronominal elements as AGR in Infl., i.e., as on a par with those in finite clauses. In other words, the Infl. node in Oromo infinitival clauses has AGR, and it is this element which assigns nominative case to the subject parallel to the AGR in finite clauses.



Notice that Infl. only has AGR in infinitival clauses. It does not have ASP. This may lead to the conclusion that it is only AGR which is involved in the assignment of nominative case. Chomsky (1981:170) has taken this position, although in 1980 he had argued that it was the presence of tense in Infl. which was responsible for the assignment of this case.

The negative structures we have examined in the preceding section may suggest that in Oromo ASP alone may also assign nominative case. As we have observed earlier, negative morphology appears to block AGR.. Verbs in tensed clauses do not show person-marking elements if they contain a perfect negative marker in them. But the subjects of such clauses are case-marked. Since in such structures only ASP is available in Infl., the case-assigner must be ASP, just as it is AGR in the case of the infinitivals. From this it follows that both AGR and ASP are case-assigners, and since Infl. may have either one or the other or both or neither of the two, the node has to be specified in terms of features (cf. Picallo 1984) rather than in terms of just AGR or ASP. Accordingly, clauses may have to be divided into tensed and non-tensed categories. Those which are tensed have [+ASP ± AGR] in Infl. Those which are non-tensed have either [-ASP - AGR] or [-ASP + AGR] in Infl. These may be called non-finite and finite infinitivals respectively.

If this is plausible, then we may also have to distinguish between clauses in terms of their possible subjects. The subject of a clause is PRO if Infl. is characterized by the features [-ASP - AGR] and PRO when it is characterized by [+ASP + AGR] and a variable when it has the features [+ASP ± AGR].

This analysis is based on the assumption that the infinitive or gerund in Oromo has person-marking inflections. The fact that such elements are

identical in form to the possessive pronouns, which occur as specifiers of simple NPs (cf. Chapter Six) may induce us to treat them as specifiers of infinitival heads. In other words, the situation is comparable to what we see in (35).

- 35(a) deem-uu-isaa  
 go-to-his  
 'his going'.
- (b) mana-isaa  
 house-his  
 'his house'.

First of all, the two structures differ in their level of projection /deemuu-saa/ is clausal, whereas /mana-isaa/ 'his house' is not. Hence the former but not the latter allows a subject since (36 a) but not (b) is grammatical.

- 36(a) Tulluu-n deem-uu-n-isaa  
 T-nom. go-to-nom-his.  
 'Tullu's going'.
- (b)\* Tulluu-n mana-isaa  
 T-nom. house-his.

Secondly /-isaa/ 'his' in /mana-isaa/ shows possession, whereas /-saa/ in /deemuu-isaa/ does not. This is obvious from the structures in (37) below, corresponding to those in (35) above.

- 37(a)\* Tulluu-n deem-uu ḳaba  
 T-nom. go-to has
- (b) Tulluu-n mana ḳaba  
 T-nom. house has  
 'Tulluu has a house'.

Thirdly, according to Jackendoff (1977), the specifier of a clause is the subject itself; in which case the specifier of /deemuu. 'going/to go', in (35) is the subject PRO or Tulluu as in (36 a) , but not /-saa/.

Furthermore, like simple nominals, infinitivals such as /deemuu/ may be followed by their specifier. Hence corresponding to (36 a) we may have (38) below.

38. [deemuu Tulluu]  
       go-to of-T.  
       (Literally), 'Going of Tulluu'.

This is parallel to the head-specifier relationship in simple NPs of the type:

39. mana Tulluu  
       house of-T.  
       (Literally), 'House of Tulluu'.

Notice that in structures like (38) the infinitival does not have /-isaa/. Its presence would have made the structure ill-formed. The reason why it is not there seems to be related to the type of structure (38) is in. The structure is still clausal. The subject Tulluu seems to have undergone a postposing rule, and received genitive case from the infinitival head. In other words, in such a structure Tulluu is not in the position where it was base-generated and where it would have received nominative case from AGR in Infl. in the manner discussed. The type of postposing and the problems that arise from it will be discussed in the next chapter where we deal with specifiers in general.

The analysis of pronominal elements like /-isaa/ in infinitivals as specifiers does not tell us how nominative case is assigned to subjects of infinitivals. It cannot be assigned under government because the clause being non-finite does not have AGR in Infl. One possible answer is to say that the subject is identified and case-marked without government being involved. But this leads to a situation where we have two types of case assignment: one under government as in tensed clauses, and another under

no government as in non-tensed clauses. This lacks in generalization unless we also argue that the assignment of case does not depend on government but on other factors. This is not an attractive solution because if pursued seriously it would end up with case no more being a structural notion. For purposes of generalization, and with a view to having a highly constrained grammar, we shall maintain the claim that the gerund or infinitive in Oromo is inflected and that case assignment is based on the notion of government in clauses of every type.

## 5.2 Adnominal Clauses

What we have been concerned with so far are types of clauses which occur as complements of V'. The other types of clausal complements we need to consider are those which we have treated in the preceding chapter as complements of N' or N''' – depending on the restrictive or non-restrictive effect they have on their heads. Such clauses are modifying complements, and like any other such complements, they are optionally selected by their NP heads. This is one major point which distinguishes them from the argument complements of V', which, as we have discussed in the preceding section, are obligatory.

As stated earlier in this chapter, our main concern here is to examine the nature of such clauses and also to propose an alternative analysis for the so-called 'relative pronoun'.

Let us observe the following structures.

- 40(a) [ [fard-ičč-i [Tulluu-n (kan) bit-e]] [du?-e]]  
 S N' horse-sgl-nom.  $\bar{S}_2$  T-nom. comp. buy-pf. die-pf.  
 'The horse which Tulluu bought died'
- (b) [ [nam-ičč-i [kaleessa (kan) duf-e]] [abbaa-koo-ti]]  
 S N' man-sgl-nom.  $\bar{S}_2$  yesterday comp. come-pf. father-my-is  
 'The man who came yesterday is my father'.

In (40),  $\bar{S}_2$  is the modifying complement of the head /fardičč-i/ 'the horse-nom' in (a) and /namičč-i/ 'the man-nom' in (b). Both heads are external arguments of the matrix verbs. In (41) below, we have structures in which such clauses occur as complements of arguments in two object positions. The first head occurs as complement of V' and the second as that of P'. In either case, the clause is still a complement of N'.

- 41(a) [fard-ičč-i [marga [Tulluu-n kan bit-e]] [ñaat-e]]  
 $S_{\text{horse-sgl-nom.}}$   $N''$  grass  $\bar{S}_{\text{T-nom.}}$  comp. buy-pf. eat-pf.  
 'The horse ate the grass which Tulluu bought'.
- (b) [Tulluu-n [waayee [ [nam-ičča [kaleessa kan du?-e]]]]  
 $S_{\text{T-nom.}}$   $P'$  about  $N''$   $N''$  man-sgl.  $\bar{S}_{\text{yesterday}}$  comp. die-pf.  
 [dubb-at-e]]  
 speak-mid-pf.  
 'Tulluu spoke about the man who died yesterday'.

The modifying complements in the examples in (40-41) are headed. Moreover, they occur following phonetically realized heads. But structures without such heads are also possible as the examples in (42) show.

- 42(a) [ [e [kan hojčč-et-u]] [horii hin-argat-a]]  
 $S$   $N''$   $\bar{S}_{\text{comp.}}$  work-mid-impf. money cm. get-impf.  
 '[One] who works gets money'.
- (b) [Tulluu-n [e [kan barbaad-u]] [hin-beek-u]]  
 $S_{\text{T-nom.}}$   $N''$   $\bar{S}_{\text{comp.}}$  want-impf. neg.know-impf.  
 'Tulluu does not know what he wants'.
- (c) [Tulluu-n [gara [ [e [haad-i-saa itti-deem-t-e]]]]  
 $S_{\text{T-nom.}}$   $P'$  to  $N''$   $N''$   $\bar{S}_{\text{mother-nom-his}}$  to-go-f-pf.  
 deem-e]]  
 go-pf.  
 (Literally), 'Tulluu went to [the place] to which his mother went',  
 'Tulluu went to where his mother went'.

The headless NPs with the clausal complement are in a subject position in (a) and in object positions in (b) and (c).

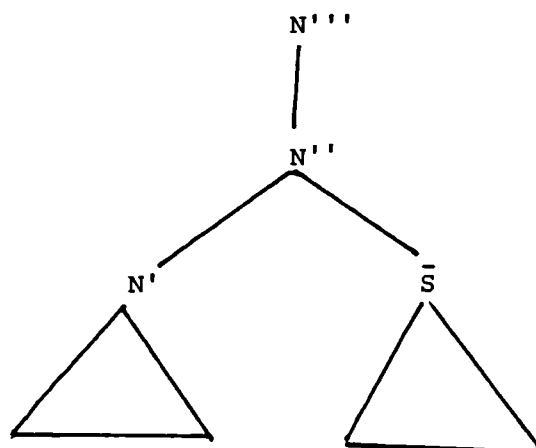
The empty heads in such constructions may be construed from or identified by the selectional restriction features of the embedded or main verb. In (42 a), for example, the verb /hojjet-/ 'work' is one which basically selects a [+ HUMAN] noun as its external argument. Hence the head, of which the clause is a modifying complement, must be one which is characterized by the feature [+ HUMAN]. On the other hand, /barbaad-/ 'want' as a transitive verb subcategorizes arguments which may or may not have the feature [+ HUMAN], in which case the empty head may remain indeterminate, which again means that one is free to put any noun consonant with the other selectional restriction features of the verb. The complement clauses in such examples may hence be understood as being associated with some heads at some point in their derivations. In other words, structures like (42) may have derived from a structure of the type in (43).

43(a) [ [nam-ni [kan hojjet-et-u]] [horii hin-argat-a]]  
 S N' man-nom. S comp. work-mid-impf. V' money cm-get-impf  
 'A man who works gets money'.

(b) [Tulluu-n [ [wan [kan barbaad-u]] [hin-beek-u]]]  
 S<sub>T</sub>-nom. V' N' thing S comp. want-impf. neg-know-impf.  
 'Tulluu does not know the thing he wants'.

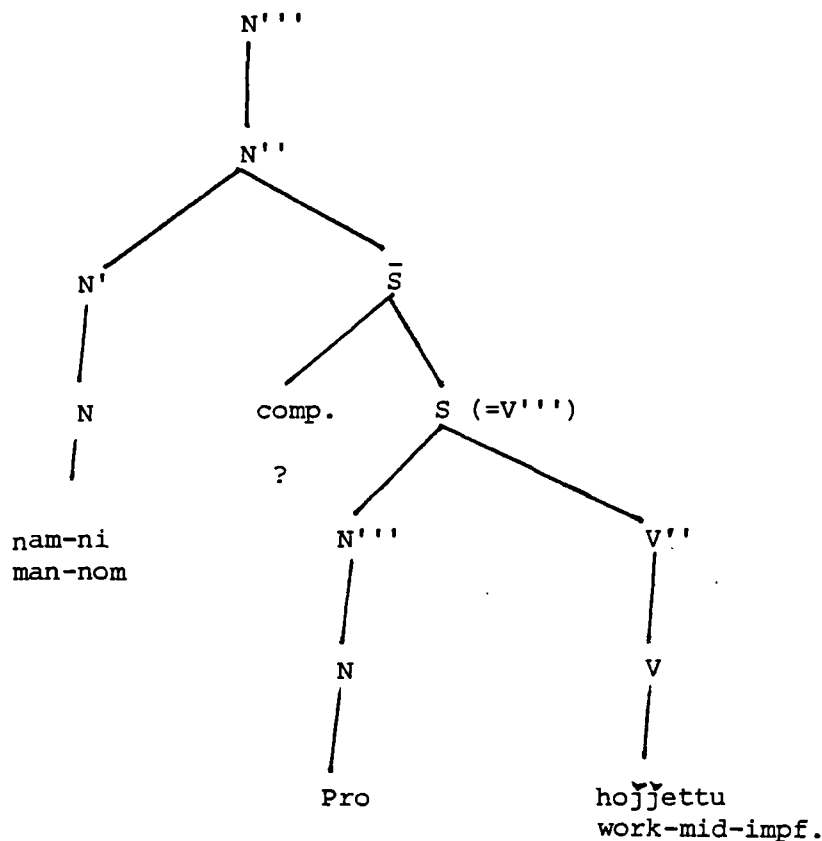
Following the base rule which generates restrictive relative clauses as complements of N', as discussed in the preceding chapter, structures of NPs with such complements may be represented in the manner shown below.

44.



Following again the discussion in Chapter Four, the internal structure of  $\bar{S}$  in (44) is as in (45).

45.



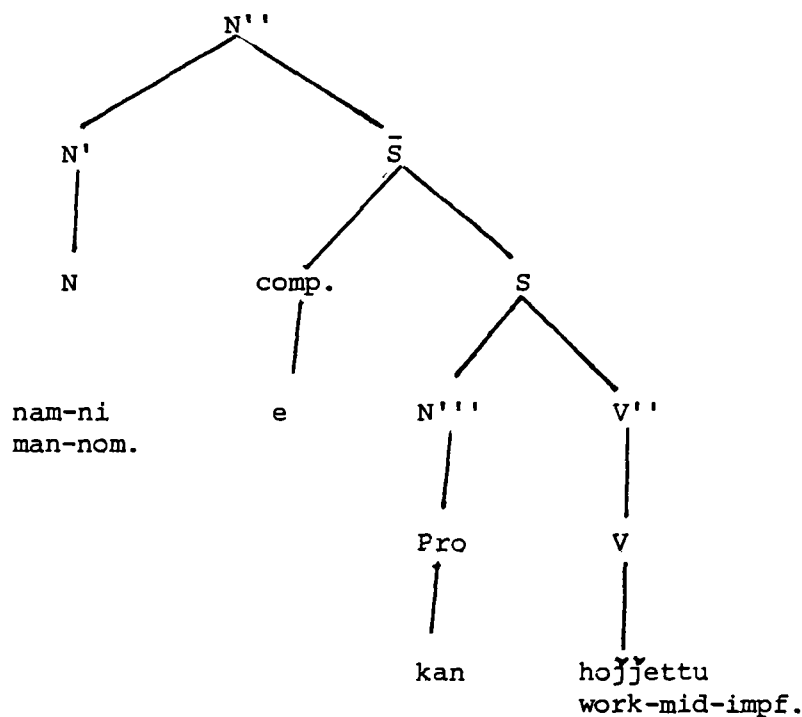
Anticipating the discussion in the next section, we shall assume here that the complementizer in this language is base-generated in clause initial position.

In (45), we know from subcategorization properties that verbs like /hojjett-/ 'work' select certain positions as thematic positions. Such positions must be filled by arguments at the level of D-structure. The argument may or may not have a phonetic matrix, depending on the type of clause. In this particular case, the internal argument position of the verb /hojjett-/ 'work' may or may not be filled by the argument /hojjii/ 'work'. The external argument position is filled by a pronominal element (Pro). This element may surface with a phonetic matrix, as we shall observe shortly.

As a pronominal element, Pro may be free in its governing category or be bound by a c-commanding antecedent NP in accordance with the principles of binding. In (45), Pro is free in S, its governing category, and bound in N'', which is another governing category according to the definition given by Chomsky (1981:188), and also according to that of Manzini (1983). In either case, Pro is coindexed with /nam-ni/ 'man-nom', for its reference.

Notice that in (45) there is an element which has not been accounted for. This element is /kan/. It is different from Pro. In the discussions we have had so far, it has been taken for granted that it is a complementizer. This is contrary to the traditional account, since in Hodson and Walker (1922:77), Moreno (1939:178), Gragg (1976:191), etc., this element has been assumed to be the relative pronouns, though arguments are not advanced in support of this assumption. If this assumption is correct, then the structure in (45) would have to be represented in the manner of (47).

47.





The complementizer here is null as there is no other element in the clause to be associated with the comp node. This means there is an asymmetry between this type of clause and those which we have considered as complements of V' in the preceding section. There we have the element /akka/ 'that' playing the role of a complementizer.

If /kan/ is a relative pronoun, then it must be subject to the case filter like any other argument. In other words, it must be case-marked and that case-marking should be morphologically realized for the structure to be grammatical. But as we can gather from the structures in (47) above and (48) below, this element is invariably the same without this causing any degree of ungrammaticality.

48. [ [nam-ičč-i [ [Tulluu-n kan rukkut-e]]] ;[deeraa-ḍa]]  
 S N' ' man-sgl-nom. S<sub>T</sub> S<sub>T</sub>-nom. comp. hit-pf. tall-is  
 'The man whom Tulluu hit is tall'.

In (47) /kan/ occurs in 'subject' position. The position is case-marked since the clause is finite, but the element does not have the nominative case-marker /-n/. Even if it had this affix, the structure would still be ill-formed. In (48), /kan/ seems to occur in object position as per the lexical requirement of the verb /rukkut-/ 'hit'. The question that arises from this situation is: why is /kan/ without the nominative case-marker, whereas all other arguments – variables and pronominals alike – are characterized by it? This is another problem which the analysis of /kan/ as a relative pronoun fails to explain (other than the asymmetry problem mentioned above).

From facts in other languages like English in which there are differences between relative pronouns in the nominative and accusative or genitive cases, we may wonder why there are no such distinctions in Oromo (of course there does not necessarily have to be any, as the two languages are not related in any way).

Furthermore the fact that relative pronouns in English and many other languages are *wh*-words may again induce us to question the status of /*kan*/, for it is not a *wh*-element, nor is it like any other pronominals for that matter, though it appears to occur in thematic positions and so should receive case like other arguments. Other pronominals vary according to the case they are assigned. Observe the following:

49(a) [inn-i obbooleessa-koo-ti]

<sup>S</sup>he-nom.brother-my-is

'He is my brother'.

(b) [Tulluu-n isa rukkut-e]

<sup>S</sup>T-nom. him hit-pf.

'Tulluu hit him'.

50(a) [maal-tu duf-e?]

<sup>S</sup>what-nom. come-pf.

'What came?'

(b) [Tulluu-n maal arg-e?]

<sup>S</sup>T-nom. what see-pf.

'What did Tulluu see?'

As the structures in (49) and (50) show, there is a formal as well as a functional difference between the pronominals in subject and object positions. This may further lead us to question why the 'relative pronoun' is invariably the same for all cases, and also why it is different in form from all other pronominals including interrogatives.

Pronominals have lexical content in the sense that they refer to an entity both in context or in isolation, and the interpretation of structures in which they occur depends partly on their meaning. /*Kan*/ is not like them in this respect either, for it has no reference outside itself, and the interpretation of structures in which it occurs does not depend on it, but on the meanings of other lexically significant forms. In fact, in

simple clauses it does not appear at all, for structures like those below are both ungrammatical and uninterpretable as simple clauses.

51(a)\* [kan hoolaa bit-e]  
<sub>S</sub> ? sheep buy-pf.

(b)\* [Tulluu-n kan bit-e]  
<sub>S</sub> T-nom. ? buy-pf.

Notice that the positions where /kan/ occurs in (51) are thematic positions and may be filled by nominal or pronominal arguments, including relative pronouns, since they too are arguments. Now, if /kan/ is such a pronoun, why should such structures be excluded? Other pronominals do occur in such positions without this causing any ungrammaticality. The structures in (46-47) are examples of this.

The fact that /kan/ does not occur in simple clauses, parallel to other pronominals, may also mean that its distribution is limited to embedded clauses of the type under consideration. Even in such clauses, its occurrence is often optional except when the clause is headless or when it (the clause) occurs preceding its head (cf. 4.2). Consider (52).

52(a) [ [hoolaa-n [ [Tulluu-n bit-e]]] [guddaa-ḍa]]  
<sub>S</sub> N' 'sheep-nom. <sub>S</sub> <sub>S</sub> T-nom. buy-pf big-is  
 '[The] sheep which Tulluu bought is big'.

(b) [ [nam-ičč-i [ [kaleessa ḍuf-e]]] [ḍeeraa-ḍa]]  
<sub>S</sub> N' 'man-sgl-nom. <sub>S</sub> <sub>S</sub> yesterday come-pf. tall-is  
 'The man who came yesterday is tall'.

Such facts may push us to doubt whether /kan/ is a relative pronoun and to look for an alternative analysis of relative clauses. The following is an attempt at this.

We have said earlier that the complementizer is null, and as a result there is an asymmetry between relative clauses and akkə-clauses. We have also said that /kan/ as 'a relative pronoun' is in no way similar to other

pronouns or arguments in general. In order to avoid the asymmetry between relative clauses and akka-clauses, and also to account for the differences between /kan/ and other pronouns, it is necessary and possible to assume /kan/ to be the complementizer in relative clauses. Its function, like that of any other complementizer is to introduce the clause as complement of N' or N'''. Its base position may also be assumed to be clause initial though in surface structures it may appear in other positions. The fact that it is lexically empty, and also why it is optional, may be attributed to this fact, that is, to its being a complementizer, rather than an argument of the type which refers freely and which cannot be omitted so easily.

This approach gains support from copular constructions of the type we have considered in relation to the verb /fakkaat-/ 'seem' in the preceding section. There we have argued that this verb subcategorizes a clause which is introduced by /kan/. For purposes of comparison, we shall consider some structures again. (53) below is one such example.

53. [NP<sub>e</sub> [ [kan [Čaaltuu-n hoolaa bit-t-e]] [fakkaat-a]]]  
 S    V' S            S<sub>Č</sub>-nom.    sheep    buy-f-pf.    seem-impf.  
 'It seems that Čaaltuu bought a sheep'.

As stated earlier, /fakkaat-/ 'seem' does not select an external argument. Its subject position is thus empty. But it has an internal argument which is a clause. This is what we have said earlier and also what we observe in (53). In the complement clause, the lexical requirements of the verb /bit-/ 'buy' are satisfied. It requires an object complement, and accordingly we have the nominal /hoolaa/ 'sheep'. It also needs an external argument, and again we have Čaaltuu in that position. Since the clause is a complement, there is /kan/ playing the role of a complementizer. We cannot argue here that it (kan) is a relative pronoun

because both the external and the internal arguments of the verb are NPs. Relativization presupposes that one of the two arguments of a verb or that of a pre- post- position is a pronoun. The pronoun is coreferential with the antecedent NP which is the head of the clause. In the light of this, the lower clause in (53) cannot be a relative clause although it contains the element /kan/. This supports the claim that /kan/ is not a relative pronoun.

The question which follows from this concerns what the relative pronoun would be in Oromo if /kan/ is a complementizer. It is possible that this language, like Amharic (Hailu 1972), modern Hebrew (Borer 1984), or Chinese (Huang 1982), may have no relative pronouns equivalent to the English 'who' or 'which'. It may also be the case that the reason why such languages have no wh-movement in their syntax (Huang 1982) could be related to this fact.

In the base position, where a wh-element would be expected, what we find in Oromo relative clauses is a personal pronoun which may be Pro. In his 1976 account, Gragg has observed this, although he still believes that /kan/ is the usual relative pronoun. If both /kan/ and third-person pronouns are relative pronouns, then one would expect relative clauses with both /kan/ and the third-person pronoun to be ungrammatical. However, this is not the case, as (54) below demonstrates.

54. [ [nam-ičč-i [ [inn-i kaleessa hoolaa kan. bit-e]]  
 S N' ' man-sgl-nom. S S he-nom. yesterday sheep comp. buy-pf.  
 [fira Tulluu-ti]]  
 V' relative of-T.-is  
 (Literally), 'The man, he came yesterday is Tulluu's relative',  
 'The man who came yesterday is Tulluu's relative'.

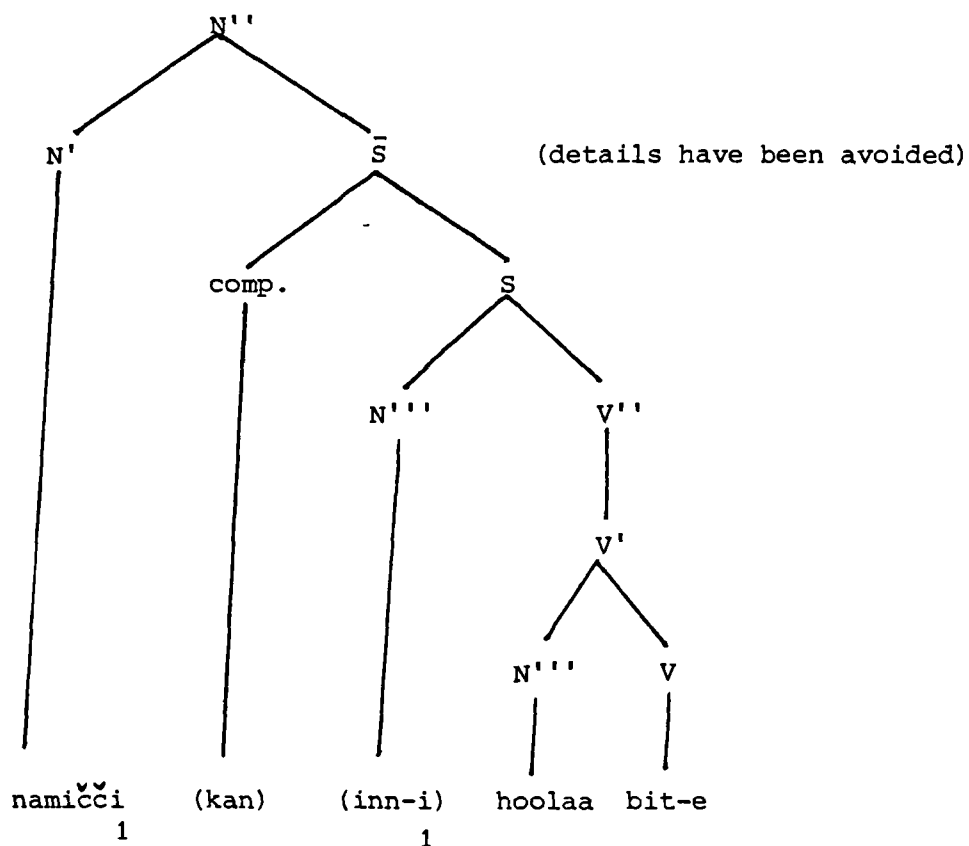
(54) is perfectly acceptable although the relative clause contains both /kan/ and /inn-i/ 'he-nom'. The latter is generated in the position where we would generate the relative pronoun 'who' in a corresponding

structure in English. The former is found in the position preceding the verb. If /kan/ were a relative pronoun it could not have occurred in this position, since: (1) the relativised argument is a subject rather than an object NP, and (2) the subcategorization property of the verb /bit-/ 'buy' is already satisfied by the presence of the object argument /hoolaa/ 'sheep'. This makes /kan/ an adjunct rather than an argument.

As an adjunct (complementizer) its base position is clause initial. The position it assumes in (54) is hence a surface position. The reason for the change in position will be explained later.

According to this analysis, the NP with its relative clause complement may have the representation as shown in the tree below at the level of D-structure.

55.



In the above representation, the pronominal /inn-i/ 'he-nom' occurs as an external argument of the verb /bit-/ 'buy' in S. As a pronoun, it is free in S in accordance with principle B of the theory of binding of Chomsky (1981). But /inn-i/ is also like an anaphor since it is bound for its reference in N''. As an anaphor it satisfies principle A of the same theory of binding which states that an anaphor must be bound in its governing category. The governing category here is N''.

Such pronominals may be null at the level of surface structure as the examples in (52) show. This is possible since the identity of such pronouns is construable from their antecedents with which they share all the relevant features and/or from AGR in Infl. within their own clauses when they are free.

Notice that such pronominals unlike /kan/ are characterized by case affixes which suggests that they are case-assigned. In order to get case, they must occur in a governed and case-marked position. In (55) /inn-i/ 'he' is in the nominative case indicated by the affix /-i/. The pronoun can get this case from AGR in Infl. only if it is generated in the position it appears in in (55). The other thematic position in (55) is the position occupied by /hoolaa/ 'sheep'. There is no other thematic position with which /kan/ could be associated. In other words, both the projection and the extended projection principles are satisfied which means that /kan/ cannot be analysed as an argument, for there is no argument position left in the clause. This leaves us with the option of treating it as a complementizer.

If, on the other hand, we argue that it is a relative pronoun, then we will have to analyse pronominals like /inn-i/ in structures like (55) in terms other than as arguments. But there does not seem to be any other

way we can explain them other than as arguments. We cannot call them adjuncts because they have features of case, which suggests that they have been assigned some case, and since only arguments can receive case, we have to conclude that they are arguments. This excludes /kan/ from the possibility of being a relative pronoun and hence also from being an argument.

In languages like English relative pronouns are moved to comp. This constitutes part of the wh-movement in the language. In Oromo, the pronominal arguments occur in comp. whenever they are overt, which means that there is movement. Consider (56 a) derived from (56 b) .

56(a)\* [Tulluu-n [ [nam-ičča [isa [kan [Fayyiisaa-n t  
 $S_{T-nom.}$   $V' N''$  man-sgl.  $S_1$  him comp.  $S_{F-nom.}$  1  
 arrabs-e]]] [waam-e]]]  
 insult-pf.  $V$  call-pf.  
 'Tulluu called the man whom Fayyiisaa insulted'.

(b) [Tulluu-n [ [nam-ičča [kan [Fayyiisaa-n isa  
 $S_{T-nom.}$   $V' N''$  man-slg.  $S$  comp.  $S_{F-nom.}$  him  
 arrabs-e]]] [waam-e]]]  
 insult-pf  $V$  call-pf.

The movement is obligatory since structures of clauses like (56 b) where the pronoun is overt in situ are hardly acceptable. Such pronouns can be overt only if they are in comp. The effect of the movement on the resulting structure is that the clause becomes appositive rather than restrictive. This is indicated by a prolonged pause following the head /namičča/ 'the man'.

When the pronoun is in comp., /kan/ has either to delete or move to the VP of the clause for a structure like (56 a) to be well-formed. The reason for this seems to be related to the principle which governs the relation between the moved pronoun and its trace. According to this principle (the empty category principle - ECP) the trace, which is an



empty category, must be properly governed, whereby 'properly governed' is meant government by a lexical head or by a c-commanding and coindexed antecedent. In (56 a) the trace fails to be governed by its antecedent in comp. because of the presence of /kan/ in this same position. However, since the trace is governed by the lexical head /arrabs-/ 'insult' there is no violation of this principle. Hence the ungrammaticality of such structures as (56 a) cannot be explained in terms of ECP.

This principle accounts for structures like (57) below where the moved pronoun is the subject of the relative clause.

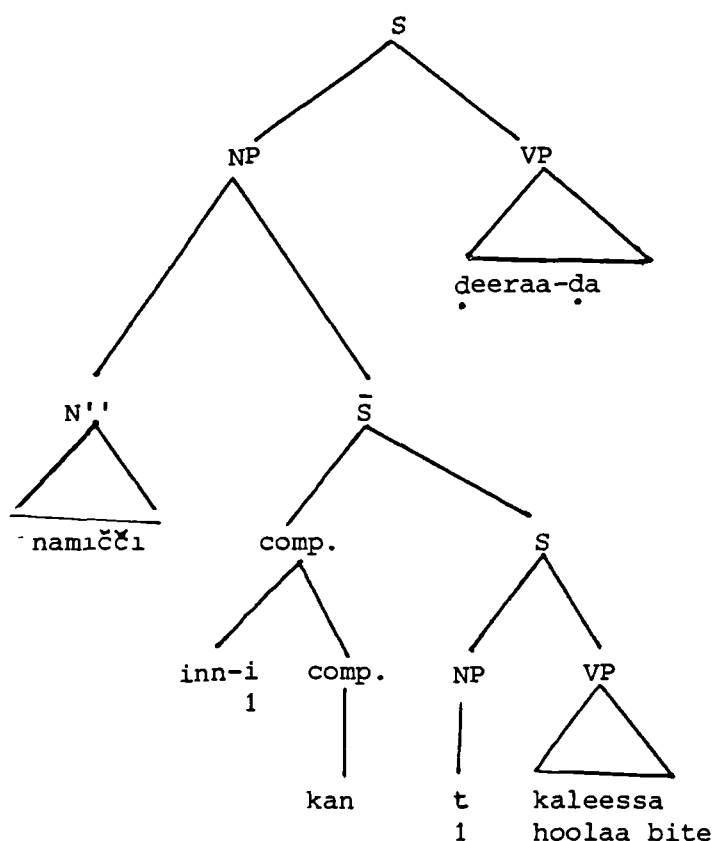
57(a)\* [ [nam-ičči [inni kan [t kaleessa hoolaa bit-e]]  
 S N' man-sgl-nom. S 1 comp. 1 yesterday sheep buy-pf.  
 [deeraa-ɖa]  
 tall-is  
 'The man who bought sheep yesterday is tall'.

(b) [ [nam-ičči [inn-i [t kaleessa hoolaa bit-e]]  
 S N' man-sgl.-nom. S he-nom. S 1 yesterday sheep buy-pf.  
 [deeraa-ɖa]  
 tall-is  
 'The man who bought sheep yesterday is tall'.

In (57 a) the trace is not properly governed by the antecedent because of the presence of /kan/ in comp. It cannot be governed by Infl. in its own clause because Infl. is not a proper governor. Proper governors are N, V, A and NP<sub>1</sub>.<sup>10</sup> (57 b) is grammatical because the trace is properly governed by its antecedent in comp. since there /kan/ has been deleted.

The c-command relation holding between the antecedent and the trace may appear clearer if the structure is represented in a tree.

58.



From the situations in (56-57) it appears that ECP accounts for cases of extractions from subject positions only. Structures with extractions from object positions are not accounted for. This may suggest that the problem with the ungrammatical structures may not have to do with this principle at all, for in that case (56 a) would have been grammatical since there is no violation of the principle, but it is not. Such structures would be grammatical only if either /kan/ or the pronoun is deleted, or if /kan/ is moved to the VP of the relative clause.

- 59(a) [ [namičči [inn-i [ t kaleessa hoolaa bit-e]]]  
 S N' S he-nom. S 1 yesterday sheep buy-pf  
 [deeraa-ɖa]  
 tall is  
 'The man who bought sheep yesterday is tall'.

- 59(b) [ [namičči [inn-i [ t kaleessa hoolaa bit-e]]]  
 S N' man-sgl-nom. S<sub>1</sub> he-nom. S<sub>1</sub> yesterday sheep buy-pf.  
 [deeraa-da ]  
 tall is  
 'The man who bought sheep yesterday is tall'.
- (c) [ [namičči [kan [kaleessa hoolaa bit-e]]] [deeraa-da]]  
 S N' man-sgl-nom. S<sub>1</sub> comp. yesterday sheep buy-pf. tall-is.  
 'The man who bought a sheep yesterday is tall'.

The situation seems to suggest that the pronoun and/kan/ cannot both appear in the same position, that is, in comp. The presence of one always excludes the other. This may lead us to a possible conclusion that what is involved in all the cases of the ungrammatical structures is not something that can be attributed to any deep principle such as ECP or binding. It may be said that the structures are correct as far as such principles are concerned. Their ill-formedness may hence be explained only in terms of rules (filters) which operate on the output of movement. One such rule which is relevant to the problem here is the multiply filled comp. filter of Chomsky and Lasnik (1977:446). According to this rule, no comp. can contain more than one overt constituent. In the structures in question, comp. violates this constraint since it contains both the complementizer /kan/ and the moved pronoun. In order for such structures to be grammatical, the complementizer has either to be null (delete) or move to some other place as shown in (59 b) .

Assuming this to be correct, we now move to another point that also relates to this same movement. Before movement takes place a pronominal shares the features of person, gender and number with its antecedent NP, the head of the relative clause. There is no matching in the feature of case. However, when movement takes place and the pronominal lands in comp., it obligatorily takes the case form of its antecedent and becomes

identical with it in all its features. Observe the following, for example.

60(a) (i) [ nam-ičč-i [(kan) [Tulluu-n (isa)  
 S N' man-sgl-nom. S comp. S<sub>T</sub>-nom. he  
 arrabs-e]]] [duf-e]]  
 insult-pf. come-pf.  
 'The man whom Tulluu insulted came'.

(ii) [ [nam-ičč-i [(inn-i [Tulluu-n t arrabs-e]]]  
 S N' man-sgl-nom. S<sub>1</sub> he-nom. S<sub>T</sub>-nom. 1 insult-pf.  
 [duf-e]]  
 come-pf.  
 'The man whom Tulluu insulted came'.

(iii)\* [ [nam-ičč-i [isa [Tulluu-n t arrabs-e]]]  
 S N' man-sgl-nom. S<sub>1</sub> him S<sub>T</sub>-nom. 1 insult-pf.  
 [duf-e]]  
 come-pf.  
 'The man whom Tulluu insulted came'.

(b) (i) [Tulluu-n [ [nam-ičča [(kan) [(inn-i) hoolaa bit-e]]]  
 S<sub>T</sub>-nom. V' N' man-sgl. S comp. S he-nom. sheep buy-pf.  
 [arg-e]]]  
 see-pf.  
 'Tulluu saw the man who bought [a] sheep'.

(ii) [Tulluu-n [ [nam-ičča [isa [t hoolaa bit-e]]]  
 S<sub>T</sub>-nom. V' N' man-sgl. S<sub>1</sub> him 1 sheep buy-pf.  
 [arg-e]]]  
 see-pf.  
 'Tulluu saw the man who bought [a] sheep'.

According to the projection and the extended projection principles and the theta (θ) criterion of Chomsky (1981, 1982), the relative clauses in (60) should have all their argument positions filled by NP arguments. These requirements are satisfied in (60). Both the external and the internal argument positions are filled by NPs. These NPs satisfy the case filter

since they occur in case-marked positions and have the feature of case assigned to them in their own clauses. Hence they do not need to move for reasons of case. However, as stated above, the pronominal subject or object may move out of its base position and land in comp. for the reason stated earlier. And whenever such a movement takes place, the pronominal acquires the case form of its antecedent NP and thereby becomes identical with it in all features.

The situation seems to suggest that there is what Andrews (1981:1ff), referring to a similar situation in Icelandic, calls case attraction. And according to McKee (personal communication) relative clauses in ancient Greek behave in the same way.

As stated earlier, such pronominals have no independent reference. They are hence bound to their antecedents with which they share the features of person, number and gender in order to satisfy the matching condition that should exist between any such coreferential elements. This is not, however, a condition with regard to the feature of case. The pronominal and its antecedent may be characterized by different case forms since they occur in different argument positions. However, when the pronominal element leaves its base position and gets closer to its antecedent by landing in comp., a complete matching of features takes place between the two elements.

However, if we consider Chomsky's (1981:332) chains and their formations and properties, the analysis we have offered for the structures in (60) in terms of case attraction does not seem to be valid. According to Chomsky, a moved element and its trace form a chain. The chain is an argument chain (A chain) if the head (antecedent) is an argument and is also in an argument position. If the antecedent is a non-argument element such as a wh-element in comp., the chain is an  $\bar{A}$  chain. The antecedent of the trace in (60) is

in comp. and since comp. is an  $\bar{A}$  position, the chain which the pronoun and its trace form may be said to be an  $\bar{A}$  chain.

The property of chains is that there should be feature agreement between the head and its members. The chain in (60) does not seem to satisfy this condition in full, as the members are characterized by different case features. The trace in (a ii) is in the accusative case since its position is governed by the verb, whereas the antecedent with which it forms the  $\bar{A}$  chain is in the nominative case, in agreement with the antecedent NP.

The situation seems to suggest that whenever a pronominal becomes identical in features with its antecedent NP, the possibility for the chain formed by this pronominal and its trace ceases to exist.

The fact that a moved pronominal takes the case form of its antecedent has some parallel in structures of simple noun phrases. Consider the following for examples.

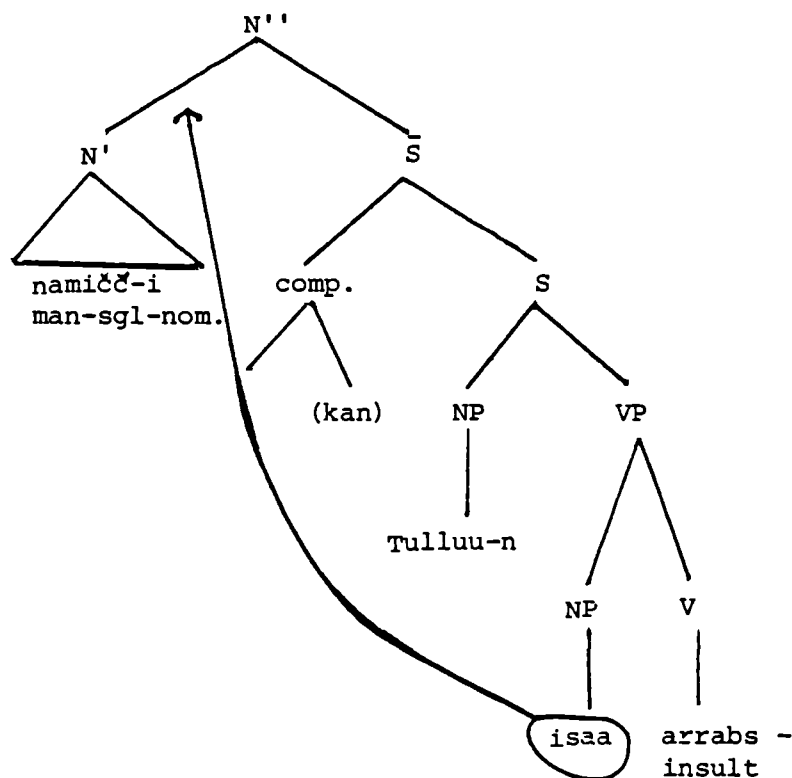
- 61(a) (i) [ [nam-ičč<sup>v</sup>-i      đeera-n]      [đuf-e]]  
 S N'''      man-sgl-nom. tall-nom. come-pf.  
 'The tall man came'.
- (ii) [Tulluu-n [ [nam-ičč<sup>v</sup>a      đeeraa]      [arg-e]]]  
 S T-nom.      V' N'''      man-sgl. tall see-pf.  
 'Tulluu saw a tall man'.
- (b) (i) [ [fard-ičč<sup>v</sup>-i      kun-i]      [aadii-đa]]  
 S N'''      horse-sgl-nom. this-nom. white-is  
 'This horse is white'.
- (ii) [Tulluu-n [ [fard-ičč<sup>v</sup>a      kana]      [bit-e]]]  
 S T-nom.      V' N'''      horse-sgl. this buy-pf.  
 'Tulluu bought this horse'.

In (61), the adjective /đeeraa/ 'tall' and the demonstrative element /kana/ 'this' are characterized by the same case affixes that the head of the noun phrase is associated with. The process here may be argued to be

one of agreement. The non-head elements in the category, that is, in the NP, agree with the head in the features of person, number, gender and case by attracting or copying them from the head. The same argument may be extended to the situation we saw in (60) since the pronoun seems to function like the demonstrative /kana/ 'this' in (61), when it moves to comp.

A question which is likely to arise here concerns the landing site of the moved pronominal in (60). It has been argued that the movement is to the position of comp. and since this position is within  $\bar{S}$ , that is, within the relative clause, it is difficult to assume that the moved pronominal element gets the case feature of the antecedent by agreement of the type we saw in the NPs, in the structures in (61). In order for us to argue in terms of agreement, the pronoun should move out of the  $\bar{S}$  and land somewhere in the NP. In other words, the movement should be as shown below.

62.



If we assume that the movement is adjunction to N' or N'', we may be able to argue in terms of agreement. The pronominal may be said to have agreed with the head /nam-ičč-i/ 'the man' which is nominative. But this would lead to a more serious theoretical question concerning the motivation of the movement and the extraction and landing sites of the element. The element must move to an empty position (A position) or it must be adjoined to a maximal category, that is, to an  $\bar{A}$  position. Since N' is not a maximal category, /isaa/ 'him' cannot be adjoined to it without violating the projection principle of Chomsky (1981). Hence the movement must be adjunction to comp., although this also has its own problem.

The problem with this type of adjunction is connected with the nature of the moved pronoun. According to the data presented and the analysis proposed, /inn-i/ or /isaa/ 'he' is an argument. If this is the case, then it cannot move to comp. in (60), for according to Chomsky (1981:115), 'move  $\alpha$  can move  $\alpha$  to comp. only if  $\alpha$  contains the feature wh'. In other words, only wh-elements can move to comp. But /inn-i/ (or /isaa/ in (60) is not a wh-element, and as stated earlier, Oromo does not have wh-movement in the syntax. We may, hence, say that Chomsky's condition should be limited to languages like English which are characterized by both NP and wh-movements.

However, if we consider the trace left by the moved pronoun, it looks like a wh-trace since it is case-marked and its antecedent is in an  $\bar{A}$  position. If it had been an NP trace, it would not have had case, and the antecedent would have been in an argument (A) position. From this situation we may argue that the movement of the pronoun /inn-i/ or /isaa/ 'he' within the structures in question is a kind of wh-movement, although the pronoun is not an actual wh-element. If so, the relation between



the trace and the pronoun could be that of a variable and an  $\bar{A}$  (non-argument) binder. The problem with this kind of argument consists in the chain having to be characterized by two cases. .

A possible way out of this problem is to assume that in the structures in question what we have is not a pronoun moved to the position of the complementizer, but a pronoun which is base-generated in topic position, that is as sister of  $\bar{S}$ . This pronoun takes the case form of the head of the relative clause by copying rules. The relativized position may also be assumed to be filled by Pro. Since there is no movement, there will not be any chain involving the moved element and the trace left behind. This alternative may appear neat and economical, and may hence be adopted temporarily. Its strength, however, will have to be tested in the light of other structures involving topicalizations.

### 5.3 The Position of the Complementizer

In the foregoing discussion it has been assumed that elements like /akka/ 'that' and /kan/ function as complementizers. Their position in relation to the rest of the clause has also been assumed to be initial. In this section we shall examine the syntactic and semantic properties of these and other similar elements, and in order to justify the proposal that their base position is clause initial, we shall consider two other positions where such elements also appear in surface structures and see why such positions cannot be base positions.

Before we go into that, it is necessary to raise a few points about what complementizers are and how they differ from other elements in clauses. According to Bresnan (1979:6), complementizers are clause-particles found in predicate complementation and in comparative and relative clause

constructions. Their function is to distinguish clause types. Such elements include 'that', 'for', 'than', 'as', and 'wh' or 'Q' in English. They distinguish main clauses from subordinate clauses and statements from questions.

For Oromo we have noted the elements /akka/ 'that' and /kan/ occurring in predicate complement and relative clauses respectively. These are the clauses we have discussed throughout this chapter to be complements of verbs and nominals. Other types of clauses with which complementizers may be associated include independent clauses of various mood types. We can, for example, distinguish clauses in indicative mood from clauses in imperative or optative moods. Compare the following.

- 63(a) [Tulluu-n hoolaa hin-bit-e]  
<sub>S</sub>T-nom. sheep cm. buy-pf.  
 'Tulluu bought a sheep'.
- (b) [Tulluu-n hoolaa hoo-bit-u gaarii-da]  
<sub>S</sub>T-nom. sheep cm. buy-pf.good-is  
 'It is good if Tulluu buys [a] sheep'.
- (c) hoolaa bit-ii  
 sheep buy-imp.  
 'Buy [a] sheep'.

In (63 a) that the mood is indicative is indicated by the pre-verbal element /hin-/. As stated in Chapter One, this element occurs only in declarative independent clauses. It does not occur in subordinate clauses or in interrogative clauses. The structures in (64) are illustrative of this.

- 64(a)\* [Tulluu-n . [akka Fayyisaa-n hoolaa hin-bit-e] beek-a]  
<sub>S</sub>T-nom. <sub>S</sub>that F-nom. sheep cm. buy-pf. know-impf.  
 'Tulluu knows that Fayyisaa bought a sheep'.

- 64(b) (i)?? [Tulluu-n hoolaa hin-bit-ee-ree!?]
   
S<sub>T-nom.</sub> sheep cm.buy-pf. Q S
   
'Did Tulluu buy a sheep?!'
- (ii)?? [eeññuu-tu hin-duf-e?]
   
S<sub>who-is-it</sub> cm..come-pf.
   
'Who came?'

These structures would be perfectly acceptable if they contained no /hin/. This same element is also excluded from structures of the type in (63 b-c) above.

In negatives /hin/ occurs but with a different tone, as the examples in (65) demonstrate.

- 65(a) [Tulluu-n farda hin-bit-e]
   
S<sub>T-nom.</sub> horse cm. buy-pf.
   
'Tulluu bought a horse'.
- (b) Tulluu-n farda hin-bin-n-e /< hin-bit-n-e/
   
T-nom. horse neg-buy-neg-pf.
   
'Tulluu did not buy a horse'.

The indicative affirmative mood-marker /hin-/, but not the negative marker /hin-/, may be reduced to  $\emptyset$  or /-n/. When the latter takes place, /-n/ may be encliticized on to the element before it. Hence corresponding to (65 a-b) (66 a) but not (b) is possible.

- 66(a) [Tulluu-n boor-n adeem-a]
   
S<sub>T-nom.</sub> tomorrow-cm. go-impf.
   
'Tulluu will go tomorrow' (Gragg:188).
- (b)\* [Tulluu-n farda-n bin-n-e]
   
S<sub>T-nom.</sub> horse-neg. buy-neg-pf.
   
'Tulluu did not buy [a] horse'.

Now, if complementizers are elements indicating clause types, then the class should include not only /akka/ and /kan/, but also all the other elements we have considered in relation to the various mood types since mood is also one feature which distinguishes one clause type from another.

The next question we need to address ourselves to is whether complementizers belong to the class of subordinative conjunctions or form an independent class of their own. In order to answer this question we need to see the syntax and semantics of complementizers vis-à-vis other subordinative elements. As stated earlier, elements like /akka/ 'that' and /kan/ occur with clauses which occur as argument complements of verbals or as modifying complements of nominals. In other words, they introduce clauses which occur in a strictly subcategorized argument position. In this regard, they are different from subordinative conjunctions since the latter are associated with clauses which have adverbial functions. Such clauses are complements of VPs (V'') and their position is outside the main predicate structure (V').

Complementizers show that the clause which they introduce is definite in terms of mood or in terms of the feature tense/aspect. In this sense they may be considered as definitizing or determining elements (cf. Bresnan 1979). Hence they differ from subordinative conjunctives which as stated above indicate adverbial clauses relating to the time, manner, reason, etc. of the action designated by a verbal head. Let us compare the following structures.

- 67(a) [ [akka [Tulluu-n deem-e]] [Fayyiisaa-n t duf-e]]  
 $\bar{S}$   $\bar{S}$   $S_{T-nom.}$   $S_{F-nom.}$   
 as go-pf. come-pf.  
 'As Tulluu went, Fayyiisaa came'.
- (b) [Fayyiisaa-n [ [akka [Tulluu-n deem-e]] [daga?-e]]]  
 $S_{F-nom.}$   $V'$   $\bar{S}$   $S_{T-nom.}$  go-pf. hear-pf.  
 'Tulluu heard that Fayyiisaa went'.

In (67) the same clause /Tulluu-n deem-e/ 'Tulluu went' functions as an adverb of time in (a) and as a nominal complement of the verb /daga?/ 'hear' in (b). The functional distinction is due to the difference in the

meaning of the two homophonous elements. The meaning of /akka/ in (b) is that the clause which it introduces is a tensed nominal clause occurring in a position which is strictly subcategorized by the matrix verb. The same cannot be said about /akka/ in (a) because here the element shows that the clause is used in a temporal reference to the action denoted by the main verb. In short, the element changes the clause into an adverbial expression. As shown in Chapter Four, such clauses are modifiers of V' and are different from the argument complements of V'. Such distinctions suggest that complementizers ought to be treated as either a subclass within the category of adpositionals or as an independent class of their own. The fact that there are mood-marking elements which are associated with main clauses may give support to the view that complementizers should be recognized as forming an independent class. This is the position taken in Bresnan (1979) and Chomsky (1981). According to them, all clauses may be treated as being  $\bar{S}$ s with (comp)lementizers branching down as a right or left sister of S.

As claimed earlier, the complementizers in Oromo occur basically in clause initial position. Before we go into the details of substantiating this claim, let us observe the other positions where complementizers and other mood-indicating elements occur in surface structures. Such structures include the following.

- 68(a) [Tulluu-n akka [Fayyiisaa-n hoolaa gurgur-e]] [ḍaga?-e]]  
 $S_{T-nom.}$       $S_{that}$       $S_{F-nom.}$      sheep     sell-pf.     hear-pf.  
 'Tulluu heard that Fayyiisaa sold [a] sheep'.
- (b) [Tulluu-n [ [Fayyiisaa-n akka hoolaa gurgur-e]] [ḍaga?-e]]  
 $S_{T-nom.}$       $S_{S_{F-nom.}}$      that     sheep     sell-pf.     hear-pf.
- (c) [Tulluu [ [Fayyiisaa-n hoolaa akka gurgur-e]] [ḍaga?-e]]  
 $S_{T-nom.}$       $S_{S_{F-nom.}}$      sheep     that     sell-pf.     hear-pf.
- (d)\* [Tulluu-n [ [Fayyiisaa-n hoolaa gurgur-e akka]] [ḍaga?-e]]  
 $S_{T-nom.}$       $S_{S_{F-nom.}}$      sheep     sell-pf.     that     hear-pf.

As (68) shows /akka/ 'that' can occur in any position preceding the verb /gurgur-/ 'sell', but not in the position following it. This is also the case with /kan/ in relative clauses.

- 69(a) [ [nam-ičč-i [kan [Tulluu-n arg-e]]] [deeraa-ɖa]]  
 S N''' man-sgl-nom. S<sub>comp.</sub> S<sub>T-nom.</sub> see-pf. tall-is  
 'The man Tulluu saw is tall'.
- (b) [ [nam-ičč-i [ [Tulluu-n kan arg-e]]] [deeraa-ɖa]]  
 S N''' man-sgl-nom. S<sub>S</sub> S<sub>T-nom.</sub> comp. see-pf. tall-is
- (c)\* [ [nam-ičč-i [ [Tulluu-n arg-e kan]]] [deeraa-ɖa]]  
 S N''' man-sgl-nom. S<sub>S</sub> S<sub>T-nom.</sub> see-pf. comp. tall-is

In infinitival (non-finite) clauses the element /-f/ 'for' which might be argued to be the complementizer occurs in clause final position only, as the structures in (70) demonstrate.

- 70(a) [Tulluu-n [ [aannan ɖug-uu-(f(i)) [hin-barbaad-a]]]  
 S<sub>T-nom.</sub> V' S<sub>S</sub> milk drink-to cm. want-impf.  
 (Literally), 'Tulluu wants for to drink milk',  
 'Tulluu wants to drink milk'.
- (b)\* [Tulluu-n [ [aannan-f ɖug-uu] [hin-barbaad-a]]]  
 S<sub>T-nom.</sub> V' S<sub>S</sub> milk for drink-to cm. want-impf.

Regarding the elements which show various types of mood, we need to make distinctions between those which are morphological and those which are syntactic. The element /hin-/ which shows indicative mood may be treated as being part of the inflectional morphology of the verb. This is evident from the fact that it occurs as a prefix attached to main verbs in clauses. The examples in (71) are illustrative of this.

- 71(a) [Tulluu-n hoolaa hin-bit-a]  
 S<sub>T-nom.</sub> sheep cm. buy-impf.  
 'Tulluu will buy a sheep'.
- (b)\* [Tulluu-n hin hoolaa bit-a]  
 S<sub>T-nom.</sub> cm. sheep buy-impf.
- (c)\* [hin Tulluu-n hoolaa bit-a]  
 S<sub>cm.</sub> T-nom. sheep buy-impf.

The same may be said about the imperative mood markers /-ii ~ -uu/ since they too occur as suffixes of main verbs.

72(a) deem-ii!  
go-imp.  
Go!

(b) koott-uu!  
come-imp.  
Come!

Of those which are syntactic, /haa/ behaves in a manner similar to that of /akka/ or /kan/ as (73) below demonstrates.

73(a) [haa Tulluu-n deem-uu]  
S let T-nom-nom. go-impf.  
'Let Tulluu go'.

(b) [Tulluu-n haa deem-uu]  
S T-nom. let go-impf.

(c)\* [Tulluu-n deem-uu haa]  
S T-nom. go-impf. let

In interrogative clauses there is always an optional question particle occurring in final position. The fact that the speaker is asking a question but not making a statement is also noticeable from the intonation final contour of the utterance. Consider (74).

74(a) [Tulluu-n hoolaa bit-e-ree?]  
S T-nom. sheep buy-pf-Q!  
'Did Tulluu buy [a] sheep?!

(b) [Tulluu-n hoolaa bit-ee↑]  
S T-nom. sheep buy-pf.  
'Did Tulluu buy [a] sheep?'

Now, going back to the question of where complementizers are found in D-structure, we may take both initial and final positions as possible sources. Though there are instances where a complementizer may occur preceding the verb or its complement, as in the examples in (68 b-c) , it does not seem

possible to argue for a clause internal base position. All positions in the projection line of verbs are argument positions. Such positions must be filled by arguments such as NPs, PPs, etc., but not by complementizers since the latter are not arguments; they are adjuncts and as such they must be generated in adjunct positions. One such position is the node which branches down from  $\bar{S}$ .

A clause internal position might be possible only if we assume that complementizers are particles attached to verbs as (68-69(c)). This has some parallel in structures of simple declarative clauses, where the mood marker /hin-/ appears as a prefix of the verb. And this seems plausible given the fact that Oromo does not have cyclic movement which would otherwise necessitate a clause initial comp. position for intermediate traces, as in successive wh-movements in languages like English, for example. But whereas particles are tightly bound to some category in a clause, the complementizers /akka/ 'that' and /kan/ are not. They move freely towards the VP or the V of their clause. The downward movement, which is less permissible compared to an upward movement, may be avoided if these elements are treated only as verbal particles, optionally moving to clause initial positions.

Without denying the plausibility of this line of argument, I shall make the choice between the initial and the final positions for the purpose of this study. Since complementizers can occur in both these positions, the choice of one over the other may be made arbitrarily. However, if we assume that complementizers are heads of  $\bar{S}$ , then the fact that other categories including Ss are head-final (cf. Chapter Four) may induce us to favour the clause-final analysis. But taking this position as basic and other positions as derived would mean that the complementizers /akka/ and



/kan/ have to undergo an obligatory movement rule, since such structures as (68 d) and (69 c) where they appear in final position are ill-formed. This is not appealing from the point of view of economy.

The clause-initial analysis does not involve any such movement. The question particle /-ree/, and the element /-f/ 'for' which we have considered as a complementizer of non-finite clauses are both optional. That a clause is a question can always be deduced from the intonation. If it were the case that Oromo used wh-words to introduce such clauses and that the position of such words were in clause-final position, then the clause-final analysis would have been preferred. But it does not use wh-elements as question words. Such forms are used as wh-NPs. Observe the following, for example.

- 75(a) [Tulluu-n maal bit-e]?  
<sub>S</sub>T-nom. what buy-pf.  
 'What did Tulluu buy?'
- (b) [eeññu-ttu hoolaa bit-e]?  
<sub>S</sub>who-is-it sheep buy-pf.  
 'Who is it that bought a sheep?'

In short, there is no obligatory movement with the clause initial analysis. It may even be argued that the element /-f/ 'for' is a postpositional clitic and that the infinitival clause in Oromo may be said to have no complementizer. In other words, the comp. node in such clauses is not lexically filled. If the complementizer is  $\emptyset$  and if the question particle /-ree/ is optional, then the only obligatory elements in the position of comp. would be /akka/ 'that' and /kan/ 'of(?)', and since these occur only in the position as shown in the grammatical structures of (68-69), the clause-initial position appears attractive. Further support

comes from movement. As shown earlier, pronominals like /isaa/ 'him' move to this position, which means the comp. node can serve as a landing site only if it is in this position.

If the arguments forwarded in favour of a clause-initial comp. are sound, then the categorial rule that expands clauses in general should be as follows:

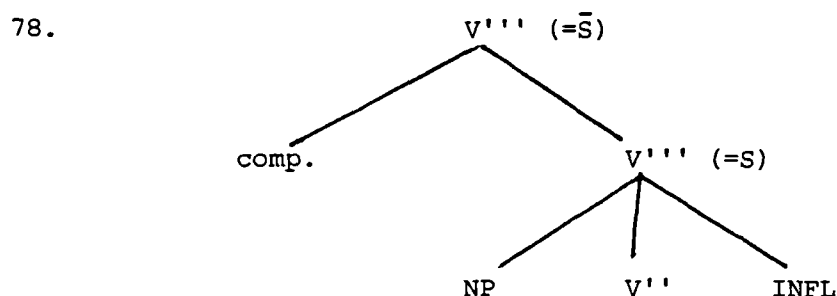
76.  $\bar{S} \longrightarrow \text{comp. S}$

Before we wind up this section, we need to mention the Infl. node and make a few points about its position in relation to the type of categorial rules we have discussed in Chapters Three and Four. In surface structures, aspectual and agreement features appear as affixes of verbs. These features are believed to have the role of assigning case to the external arguments of verbs. According to Chomsky (1981:170) nominative case is assigned to the subject (external argument) of a verb under government. This means that AGR or ASP should be in a position from which it can govern the position of subject NPs. As affixes attached to verbs, they cannot govern this position in the sense of the definition we had for government. Hence AGR/ASP should appear as realizations of an abstract category Infl. This category branches down as head of a clause(S) from the same node that dominates the subject argument. In other words, we have a categorial rule of the type in (77).

77.  $S \longrightarrow \text{NP VP INFL.}$

But notice that (77) violates a constraint of the X-bar theory which dictates that in the expansion of a maximal  $X^n$ , the head must be in the same category as X but with one less bar. This is not the case in (77) for there is no such categorial similarity between the maximal category S and any of its daughter nodes.

If we assume with Jackendoff (1977:47) that  $\bar{S}$  and  $S$  are instances of  $V'''$ , again violating in part the above-mentioned constraint, since that would also mean a category dominating itself, (77) would have the form in (78):



Although (78) appears to have solved the problem (77) faced (though still only in part) it is not itself free from other problems. According to Jackendoff (1977), and the discussions we have had in the previous two chapters,  $V''$  is the head of  $V'''$ . The subject NP has been argued to be a specifier. The complements of  $V''$  are some sentence adverbials. Infl. (= AUX in his terminology) is simply regarded as a daughter of  $V'''$  and it dominates (T)ense and (M)odal (p.50). Tense is believed to be part of the  $V'''$  specifier and Modal part of the  $V''$  specifier, which means implicitly that AUX, from which both elements branch down, is a specifier too.

If this is the case, then nominative case cannot be assigned to the subject NP by AUX (= Infl) because in order to assign case, the case-assigner must be a head. In (78) it is  $V''$  rather than Infl. (=AUX) which is the head of  $V'''$ , which means that  $V''$  should assign case to the NP in subject position. This is contrary to the theory of case developed by Chomsky. According to his theory, only lexical (minimal) heads are case-assigners.  $V''$  is a maximal category, and as such its role is to  $\theta$ -mark the position where subject arguments are expected. As stated above, only Infl. or AGR/ASP in Infl. assigns case to the NP in such positions.

One way out of this problem is to dispense with the idea of nominative case assignment under government as hinted at earlier, and assume, instead, that case is a concomitant of agreement between the subject NP and the verb. In this way, we can also do away with the Infl.node altogether (cf. Bouchard 1987).

This may appear simple and nice. But it leads to a situation where we lack generalizations. It may work only in affirmative clauses, in which the verb displays features of agreement. In negative structures of the perfect type, such features are not available in Oromo verbs (as discussed earlier in this chapter), which means that the subject argument cannot receive case even under agreement. But the position is case-marked and hence a lexical subject is licensed to occur. Consider (79) below.

79. [Tulluu-n farda hin-bin-n-e]  
<sup>S</sup>T-nom. horse neg-buy-neg-pf.  
 'Tulluu did not buy [a] horse'.

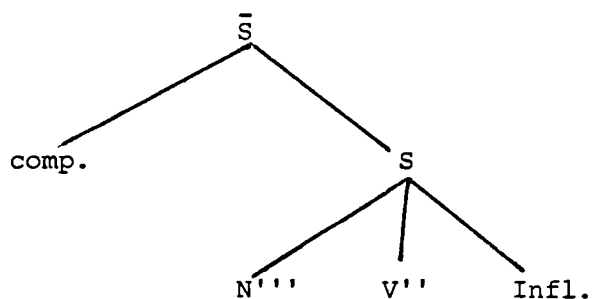
The situation seems to force us to believe that in such cases, nominative case is assigned as a result of the presence of the feature ASP. But ASP is not a nominal feature like person, gender and number. Rather it is a verbal feature. Hence it is difficult to believe that case is assigned as a result of agreement for there is nothing in the verb in (79) which relates to the subject, Tulluu. This means we have to reconsider the assumption that nominative case is a result of agreement, and look for another alternative.

We may maintain the claim that there is an Infl. node carrying either or both features of AGR and ASP, and that this node governs the subject position and assigns case to the subject argument. In order to do this, however, Infl. has to be treated as the head of S in (78). For this reason, we have to disagree with Jackendoff about his treatment of both S

and  $\bar{S}$  as being part of the projection of V or as instances of  $V'''$  as stated earlier. Instead, we may follow Hornstein (1978:137), Chomsky (1981) and Hoekstra (1984:72) in assuming that the projection of V ends at  $V''(')$ , and that S is an independent major category.

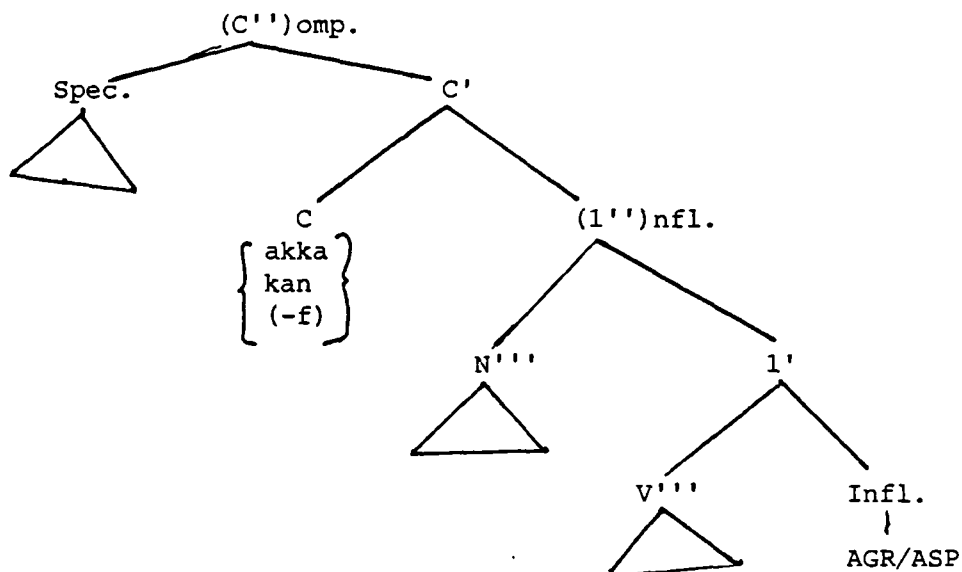
Extending the notion of head to clauses, we may treat Infl. as being the head of S. If so, then Infl. may assign nominative case to the subject NP under government. In other words, we have a structural configuration of the following type:

80.



Notice, however, that (80) violates the same constraint (78) did above, since both Infl. and comp. fail to have the same category label as their dominating categories. Furthermore, the subject NP and Infl. are not adjacent to each other as required by the adjacency condition on case assignment.<sup>9</sup> In order to avoid this problem we may extend the use of bar notations to both Infl. and comp. as in Chomsky (forthcoming) to a double-bar level, parallel to the categories of adjectivals and adpositionals, which, as we have discussed, are also characterized by two bar levels. Accordingly (80) has to be modified to (81).

81.



This analysis differs from that of Jackendoff (1977), since: (1) it makes a distinction between V''' and S, and (2) it treats V''' and N''' as independent categories instead of as single constituents with a head and specifier relationship. His analysis fails to hold in cases when certain syntactic rules such as gapping and postposing operate on NPs and VPs. In the case of gapping, for example, the rule deletes only the VP leaving the NP, its specifier, intact. If it were the case that the two form a unified constituent, the rule would have deleted the NP as well and if it had done that, the structure would have meant something entirely different from the intended interpretation. Consider (82) for example.

82(a) [Tulluu-n hoolaa bit-e]. [Fayyisaa-n [hoolaa bit-e]]  
<sup>S</sup>T-nom. sheep buy-pf. <sup>S</sup>F-nom. sheep buy-pf.  
 'Tulluu bought [a] sheep. Fayyisaa bought [a] sheep'.

(b) [Tulluu-n hoolaa bit-e] . [Fayyisaa-n-iss[————]]  
 T-nom. sheep buy-pf. F-nom. too  
 'Tulluu bought [a] sheep. So did Fayyisaa'.

The same is true in VP preposing or NP postposing. In either process, the movement of one does not include the other. In other words, NP postposing moves the NP only leaving the VP intact. On the other hand,

the same rules delete or move the specifiers of NPs along with their heads. If we, therefore, accepted Jackendoff's analysis as valid, we would have to explain the reason why the same rule operated only on the head in one category, and on both the head and its specifier as a unit in another category. In other words, we would have a case where a rule failed to apply across categories as required by the X-bar convention itself.

The problem may not arise if we distinguish N''' and V''' and treat them as independent maximal categories related only in thematic terms, as arguments and predicates, in other words, if we follow Chomsky's analysis as indicated in the tree structure in (81). One problem which we may have to face by following Chomsky's analysis is that the subject NP in (81) is not governed by Infl.(1), as required by the definition of government of Chomsky (1981). The governing category here is the intermediate Infl. (1') since only it is adjacent to the NP. This problem seems to have been noticed for distinctions have recently been made by Hoekstra (1984:78), for example, between structural and  $\theta$ -governors. Infl. belongs to the former whereas [-N] categories belong to the latter. The relation between Infl. and the subject NP is a simple structural configuration, whereas the relation between, say, a verb and its strictly subcategorized argument is a relation of theme-assigning and theme-receiving elements as well. The verb has the lexical property of assigning thematic roles to its internal argument. This involves the notion of government by a lexical head. The relation between Infl. and the subject NP on the other hand, is not based on the assignment of thematic roles, hence Infl. may not have to be a lexical (minimal) governor.

#### 5.4 Summary

In this chapter we have been concerned with the internal structures of two types of clausal complements. These are the modifying complements of nominals and the argument complement of verbals.

Like any other clause, such clauses may be tensed or non-tensed. The former are characterized by lexical subjects whereas the latter are associated with an abstract pronominal element. We have, however, noticed instances of non-tensed clauses with lexical subjects. In such cases, it has been argued that the Infl. node has the feature AGR. Since this feature is a case-assigner, the subject NP can receive case in order to escape the case filter. Because of this we have recognized two types of non-tensed clauses: those with and those without the feature AGR. We may call them finite and non-finite infinitival clauses. The finite infinitival lacks the feature (ASP)ect, which is understandable given the fact that aspect is a verbal feature.

In both tensed and finite infinitival clauses, the subject can be dropped since it is always identifiable from the feature AGR in Infl. However, such is not the case in structures of perfect negatives. In such clauses, AGR is not available in Infl., though a lexical subject is possible, which suggests that in such structures only ASP may assign case to the subject NP, but this NP cannot be dropped. In the light of this situation, we have argued that the Infl. node should be recognized as having or lacking both or one or none of these features. This determines the type of NP a clause may have as its subject.

The akka-clause is limited to object positions, whereas the infinitival clauses can occur in all positions associated with nouns. This asymmetry



seems to have to do with case and its morphological realizations. Any NP in subject position should be characterized by the nominative case-marker /-n/, in other words, it should be case-marked. Akka-clauses appear to be either case-resistant or that their verbal heads fail to show case morphologically; case affixes, like other nominal affixes being exclusively features of the category nominal, and not of verbal. On the other hand, the heads of infinitival clauses are nominal and as such categories are case-recipient, they can occur with the nominative marker /-n/ in any case-marked position.

Regarding adnominal clauses, we have argued that such clauses do not have relative pronouns. The role of such pronouns is assumed by independent personal pronouns. What has often been treated as a relative pronoun, that is, the element /kan/, is analysable as a complementizer.

As in languages like English where wh-elements in relative and interrogative clauses move from their base positions to the position of comp., the personal pronouns in Oromo relative clauses also move to the position of the complementizer. However, such movement is optional; but whenever it takes place, the moved pronoun attracts the case form of its antecedent, which is the head of the relative clause; it also fails to observe one of the conditions of chains-case uniqueness.

In both tensed and infinitival clauses NP movement is possible. But the type of movement is again optional not only in adjunction but also in substitution. Whenever a category is moved, it observes subjacency and the ECP (empty category principle). But there is one problem with such movements as raising to subject, with regard to case. The trace is case-marked since the movement is out of a governed position. That is why it is optional. We have noticed that in such cases the chain, which is formed

by the moved element and its trace is associated with two possible sources of case. Furthermore, the trace is both free and bound in the sense of binding relations. This is problematic.

Regarding the notion and position of complementizers, we have made distinctions between subordinate clauses of various types, of adverbial functions and of subordinate clauses of nominal function. The elements which introduce the latter types of clauses have been argued to be different from those associated with the former. Hence a category complementizer has been recognized. Its function is to introduce such clauses as finite or non-finite or as declarative as opposed to interrogative.

Concerning the position they occur in in D-structure, we have argued in favour of a clause-initial position. The elements which occur in clause-final position are optional, whereas those in initial position are obligatory. A clause-internal position does not seem plausible given the fact that all positions within a clause are argument positions and that only arguments such as NPs and PPs can occur in such positions. Since complementizers are not arguments, they cannot occur in any such positions without this leading to a violation of some other principles. It might, perhaps, be argued that they may occur as adjuncts adjoined to arguments. And this may appear quite possible given the fact that in surface structure such elements do appear in clause-internal positions adjoined to either the verbal head or to any of its complements. But this would lead to another problem, namely that movement rules of the type seen in relative clauses would have no landing site for the extracted category. In other words, comp. would fail to attract moved categories if it were clause-internal. Furthermore, preposing of categories to which comp. is adjoined would not take place, since the resulting structure would be

ill-formed. Hence, pending the discovery of facts to the contrary, a clause-initial comp. has been adopted.

Finally, we have considered the abstract category of Infl. and argued that it constitutes the head of S. As a head, it governs the subject position when it has the feature AGR or ASP. In doing this, we have argued against Jackendoff's claim that both S and S-bar are extensions of the projection of verbs. This would cause problems in the assignment of case and also in the application of certain syntactic operations. We have, hence, made distinctions between the projections of V on the one hand, and that of Infl. on the other. Similarly we have recognized NPs and VPs as independent maximal projections of their lexical heads, N and V, and that their relationship in predicate structures is that of argument and predicate as opposed to head and specifier.

Regarding the contents of Infl., it has been observed that in case-assignment, it is not only AGR which assigns nominative case to the subject of a clause. We have noticed that in perfect negatives AGR is blocked and that nominative case is assigned by ASP. In infinitival clauses, nominative case can be assigned by AGR alone. On account of this situation, we have made the suggestion that Infl. should be treated as a complex of features, and that what determines the case of the subject NP in a clause is the presence or absence of one of the two features, namely [ASP] and [AGR].

NOTES TO CHAPTER FIVE

1. This excludes the modifying complements of nominals and adjectivals.
2. These are positions of adjuncts such as (comp)lementizer and topic.
3. According to Chomsky (1981:101), the  $\theta$ -criterion 'requires that each argument bear one and only one  $\theta$ -role and that each  $\theta$ -role be filled by one argument...'
4. The definition of government according to Aoun and Sportiche (1983) is as follows:  $\alpha$  governs  $\beta$  iff they share all the same maximal projections.  $\alpha$  is a governor if  $\alpha$  is X in the X-bar system, i.e., lexical category, [+TENSE] and [+AGR].
5. A governing category, according to Chomsky (1981:211) is a category containing  $\alpha$ , a governor of  $\alpha$  and a SUBJECT accessible to  $\alpha$ .  
 $\alpha$  is accessible to  $\beta$  iff  $\beta$  is in the c-command domain of  $\alpha$  and assignment to  $\beta$  of the index  $\alpha$  would not violate the i-within-i constraint (Chomsky 1981:212). i-within-i is formulated in Chomsky (*ibid.*) as  $*[\gamma \text{ --- } \delta \text{ ---}]$ . The idea here is that  $\delta$  (= an anaphor) in the domain of  $\gamma$  (= NP subject) cannot be coindexed with AGR since AGR is already coindexed with its  $\gamma$ .
6.  $\alpha$  c-commands  $\beta$  iff the first branching node dominating  $\alpha$  also dominates  $\beta$ , and  $\alpha$  does not dominate  $\beta$  nor  $\beta$   $\alpha$  (Radford 1981:314).
7.  $\gamma$  is a domain-governing category for  $\alpha$  iff (a)  $\gamma$  is the minimal category with a subject containing the c-domain of  $\alpha$  and a governor for the c-domain of  $\alpha$  and (b)  $\gamma$  contains a subject accessible to  $\alpha$  (Manzini 1983:433). A c-domain (constituent domain) is the  $\bar{S}$  containing PRO.
8. This refers to akka- and f-clauses only.
9. Travis (1984) argues that this condition does not hold for SOV languages. The condition works for the assignment of other cases within VP.
10. Infl. is not a lexical governor for English. The reason is that it is not rich enough to identify the empty category. In Oromo Infl. may be a lexical governor since it is rich enough to let us know the content of the empty category.

CHAPTER SIXSPECIFIERS6.0 Introduction

In the last three chapters we have been dealing with the various types of complements of the major lexical categories at every level of their projection lines. In this chapter, we shall take up the class of specifiers associated with each category and give a syntactic-semantic account of them in the light of the discussion we had on complements.

Before we go into that, however, a definition of some sort is in order for the term specifier. Chomsky (1972) considers specifiers as syntactic categories, that is, as categories with the potential for maximal projections, occurring preceding a head in constituent structures in English. Jackendoff (1977:37) argues that there is no evidence that specifiers function as syntactic categories since 'they do not move or delete as units and, unlike normal constituents, no part can be designated as a head'. Both Jackendoff and Chomsky use the term as a cover name for all the material preceding the head of a constituent structure. In this sense it might be said that the term is used as a convenient device to refer to material in pre-head positions, without this having any theoretical import.

According to claim (ii) of the X-bar convention, which we have stated in Chapter One (1.2.2), syntactic categories are expressions of lexical categories. In this sense, specifiers cannot be syntactic categories as assumed by Chomsky, since there is no lexical category-specifier to which all the material which can occur before a head of a constituent uniformly belong, and which like other categories, develop into maximal projections.

This suggests that the term simply refers to concatenations of elements occurring in the position stated above for English, as Jackendoff argues.

As we have stated in Chapters Three and Four, Oromo is not uniformly headed. The category [+N-V] is left-headed, whereas all other categories are right-headed. This means a definition of the type given for English which is based on the notion 'preceding the head' cannot be fully adopted to apply for Oromo since (1) such material follows the head in the category [+N-V] and precede it in all others, and (2) complements, like specifiers, also occur preceding or following their heads, and, hence distinctions between what is a specifier and what is not, may not be easily made in terms of the definition given above.

What we may perhaps say about Oromo is that in all categories specifiers assume peripheral positions, and as stated in the chapters on complements, complements occur in between them and the heads. A possible definition in the light of this situation is therefore one which runs: material which occurs in adjunct positions following complements in noun phrases, and preceding complements of heads in constituents of all other categories and their derivatives. This is a distributional definition. A functional definition would include a statement that specifiers define the heads of the constituents in which they occur in terms of their entity (what they are) and/or quantity or intensity. This involves the use of articles, quantifiers and intensifiers respectively. Excepting some quantifying expressions, the rest are characterized by their lacking the potential for maximal projections of the type discussed in connection with the major lexical categories. In other words, specifiers do not occur as heads having other categories as their complements. This distinguishes them from complements. The latter have this potential as discussed throughout Chapter Four, and also occur in argument (A) positions.

6.1.1.1.1 Definite Articles

These include deictics and genitive NPs. Both refer to what may be called in pragmatic terms the 'old information' in discourse. The following are structures with such elements.

- 1(a) [ [fard-ičč-i] [duf-e]]  
 S NP horse-sgl-nom. come-pf.  
 'The horse came'.
- (b) [ [fard-ičč-i kun(-i)] [gurraaččaa]]  
 S NP horse-sgl-nom. this-nom. black-is  
 'This horse is black'.
- (c) [ [fard-i-koo] [adii-ɖa]]  
 S NP horse-nom-my. white-is  
 'My horse is white'.
- (d) [ [fard-i kam-(it)] [du?-e]]?  
 S NP horse-nom. which-is it die-pf.  
 'Which horse died?'

The NPs in (1) are normally used in non-discourse initial contexts, that is, after the head has been introduced into discourse and become part of the shared knowledge of the participants. This pragmatic process may be grammaticalized either morphologically as in (1 a) or syntactically as in (1 b-d) .

In (1 a) /-ičč-/ is an inflectional affix. The noun inflects for the feature singulative and/or determinative. in (1 b-d) the head is made definite by the element following it, which would be base-generated in situ. The fact that /-koo/ 'my' (1 c) is attached to /fard-i/ 'horse-nom' may make it look like an affix, in which case it may be treated as an inflectional element like /-ičč-/ ~ probably showing genitive case. But such an approach would lead to a problem, since the noun is already in the nominative case indicated by the affix /-i/, and according to Chomsky

On the discussions that follow, it is anticipated that all the major categories have certain elements which meet the definitions given in both Chomsky and Jackendoff and adopted here with the qualifications as noted.

Nominals select deictics and quantifiers, whereas all other categories take intensifiers and quantifiers of some sort. It will be noted that both intensifiers and quantifiers belong to the same level of hierarchy across all categories. Furthermore, in nominals and verbals, unlike in the other two major categories, the treble-bar projection, which we have argued for in the sections on complements, will be confirmed here by the type of specifiers occurring at each level.

It will also be argued that what have been called demonstratives, interrogatives, and indefinite pronouns (cf. Gragg 1976:178) may be analysed as forming a subclass within the class of specifiers in general. Likewise, what may be called indefinite quantifiers may be treated as belonging to the category of adjectivals.

Finally, some cross-categorial rules will be proposed to show the various levels to which the various specifying elements may be attached.

### 6.1 Nominal Specifiers

These may be loosely defined as elements that restrict the referential range of the head of constituents in which they occur. One may argue that this is a definition which may also be used in defining modifying complements, which is also true. There does not seem to be any significant semantic difference between the two. Both are elements which restrict the head in some sense. However, as stated earlier, there is a formal difference separating one from the other. Specifiers do not have the



potential for maximal projections, whereas complements do. In other words, complements but not specifiers can be reduced to lexical categories which are characterized by inherent properties of selecting certain other categories as their complements. In short, specifiers are not lexical categories in the sense nouns and verbs are. As Jackendoff (1977) has noted, they are concatenations of elements and the name specifier is an abbreviatory term used to cover all such elements. Assuming this to be a valid difference, we shall make further distinctions between types of specifiers as we go on.

#### 6.1.1 Simple Nominal Specifiers

These include all elements which occur in constituents of NPs the heads of which are simple nominals<sup>1</sup> whose referents are either identifiable as single entities or quantifiable as a mass of substance. Accordingly, their specifiers may be understood following Lyons (1977:664) as entity- or quantity-denoting formatives. The former may be referred to by the term article, while the latter may just be called quantifiers. Each will be dealt with in turn.

##### 6.1.1.1 Articles

As stated above, the term article is a general label for all entity-denoting elements. These include demonstratives, interrogatives and singulatives,<sup>2</sup> for which the narrower term deictics may be employed in contradistinction to indefinite pronouns and genitive NPs.<sup>3</sup> On the basis of the type of information, old or new, they are associated with in discourse contexts articles may be definite or indefinite.

(1981:170ff) an argument can have only one case assigned to it by the lexical governor with which it is in configuration. The analysis of /-koo/ 'my' as a genitive case-marker would, therefore, mean that the head is both in the nominative and in the genitive cases at the same time. And adopting such analysis goes contrary to our goal of having a highly constrained grammar.

The alternative is to consider such elements as /-koo/ 'my' as possessive pronouns having the role of specifiers in a manner characteristic of genitive NPs. In other words, they may be analysed as base-generated elements, like the deictics, but undergoing a process of encliticization at some stage of the derivation of the phrase.

There are examples which may give support to this analysis. Consider the following.

- 2(a) [ [fard-i [Tulluu]] [ḍuf-e]]  
 S horse-nom of T. come-pf.  
 '[The] horse of Tulluu came'.
- (b) [ [miill-i [fard-iččaa]] [adii-ḍa]]  
 S leg-nom. of horse-sgl. white-is  
 'The leg of the horse is white'.

In (2) the elements in the innermost brackets are genitive NPs functioning as specifiers.<sup>4</sup> Like the deictics in (1 b) and (d), these elements are also independent and their position is as labelled. Parallel to this, /-koo/ 'my' may be treated as being base-generated and later encliticized on to its head. This alternative gives us a neat generalization about genitive pronominals and genitive NPs as being base-generated specifiers. Furthermore, it enables us to avoid the case conflict that we referred to above, if such pronominals were to be treated as genitive case-markers.

Following Jackendoff (1977:104), we shall put a semantic constraint on the maximal number of specifiers a head may have. If we limit the number to one quantifying and one defining/referential element, structures such as those in (3) will be easily excluded.

- 3(a)\* [[fard-i        kun(-i)        kam(-it)]        [du?-e]]?  
       S horse-nom. this-nom.        which-is-it        die-pf.  
       'Which this horse died'.
- (b)\* [[nam-oon-ni    bay?ee sadii]    [du?-an-i]]  
       S man-pl-nom. many    three        die-pl-pf.  
       ?'Many three men died'.

The structures are excluded as being semantically anomalous for the reason that the specifiers are contradictory in terms. The presence of one excludes the other.

Following the constraint we have assumed, we shall determine the position of each specifier type in the projection line of the head. Before we go into that, however, we need to determine the status of /-ičč-/. In the examples in (1 a-b) earlier, we have stated that it is an inflectional element indicating the singulative. We have also included it in the list of deictics which means that it is also a determinative element. This is also deducible from its gloss as 'the' in the structures in which it occurs.

If /-ičč-/ is a determinative element, then structures like those below should be excluded as being ill-formed, on account of the constraint we assumed above. For here the head is made definite by two defining elements one of which is /-ičč-/.

- 4(a) [[fard-ičč-i      kun(i)]      [adii-ḍa]]  
<sup>S</sup> horse-sgl-nom.    this-nom.    white-is  
 'This horse is white'.
- (b) [[sang-ičč-i      kam(it)]      [du?-e]]  
<sup>S</sup> bull-sgl-nom.    which is it      die-pf.  
 'Which bull died?'
- (c) [[muč-ičč-i      Tulluu]      [bareedaa-ḍa]]  
<sup>S</sup> child-sgl-nom.    of T.      beautiful-is  
 'The child of Tulluu is beautiful'.

However, these structures, unlike those in (3), are perfectly grammatical, which means that either the constraint we have suggested is not workable, or that /-ičč-/ is not a determinative element.

Assuming the constraint to hold, we shall argue that this element is primarily a singulative marker. Moreno (1939:129) calls it 'forma individuante' - the singulative form. What it shows is that the noun with which it is associated refers to a single referent, as opposed to two or more. In other words, it is a singular marker. If this is correct, then it should be limited to nouns which are [+ COUNT] but [-Pl.]. In other words, it should not occur with mass or collective or plural nouns, since such nouns do not refer to individual entities. Let us observe the following structures.

- 5(a) (i)      [Tulluu-n    [[nam-ičč-a]    [arg-e]]]  
<sup>S</sup><sub>T</sub>-nom.      man-sgl.      see-pf.  
 'Tulluu saw the single man'.
- (ii)\*      [Tulluu-n    [[nam-oot-ičč-a]    [arg-e]]]  
<sup>S</sup><sub>T</sub>-nom.      man-pl-sgl.      see-pf.
- (b) (i)      [horii    hor-siis-uu]      [nan-jaal-aḍḍ-a]]      (Gragg 1982:214)  
<sup>S</sup><sub>I</sub>      cattle    raise-cs-to      I-cm. like-mid-impf.  
 'I like to raise cattle'.

- 5(b) (ii)\* [[hor-ičča] hor-siis-uu nan jaal-add-a]  
<sup>S</sup> cattle-sgl. raise-caus-to I-cm. like-mid-impf.  
 ?'I want to raise one single cattle'.
- (c) (i) [[kurtummii-n] bišaan keessa hin-ǰira-a]  
<sup>S</sup> fish-nom. see inside cm.exist-impf.  
 'Fish live in [the] see'.
- (ii)\* [[kurtummii-ičč-i] bišaan keessa hin-ǰir-a]  
 fish-sgl-nom. sea inside cm.exist-impf.
- (d) (i) [Tulluu-n [aannan] dug-e]  
<sup>S</sup>T-nom. milk drink-pf.  
 'Tulluu drank milk'.
- (ii)\* [Tulluu-n [aannan-ičča] dug-e]  
<sup>S</sup>T-nom. milk-sgl. drink-pf.

The comparison between the grammatical and the corresponding ungrammatical structures in (5) shows that /-ičč-/ cannot occur with plural nouns as in (a ii) , collective nouns as in (b ii)-c ii) or mass nouns as in (d ii) . As predicted, it only occurs with singular nouns, and as such functions as a specifier showing singularity or individuality, that is, the noun is specified as a single or individual entity, as opposed to a collection of entities or an agglomerated mass. From this may follow that it is a quantifying rather than a defining element. This explains the reason why structures like those in (4) are not ungrammatical. In such structures, /-ičč-/ specifies the head of the phrase indicated in brackets in terms of its quantity, just as in the same way the deictics restrict it in terms of its entity, which again means that the constraint we have proposed earlier has not been violated.

If we are correct thus far, then a further possible conclusion that emerges from this situation is that [+ COUNT] nouns in Oromo are inflected

for both singular and plural number. In other words, the language has both singular and plural marking devices. These are /-ičč-/<sup>5</sup> for the former, and /-(q)ota/ for the latter. (See Webster (1960) for other plural markers.)

In the same way [-COUNT] nouns may be divided into [+MASS]. [+MASS] nouns include those like /aannan/ 'milk' whose amount can be specified in terms of units of measurement as we shall see later. Those like /horii/ 'cattle', which are [-MASS], may be specified in terms of the collection of individual elements forming the whole unit, that is, as a special class of collective nouns.

The one problem that the analysis of /-ičč-/ as a quantifying element faces is the determinative interpretation it also acquires in the structures in which it occurs as a singulative marker. This is again observable from the following examples.

- 6(a) [[muč-ičč-i] raf-e]  
 S child-sgl-nom. sleep-pf.  
 'The child slept'.
- (b) [[nam-ičč-i] deem-e]  
 S man-sgl-nom. come-pf.  
 'The man came'.
- (c) [[gabr-ičč-i] kolf-e]  
 S slave-sgl-nom. laugh-pf.  
 'The slave laughed'.

In such structures the function of /-ičč-/ does not seem to be just that of a singulative, but also that of a determinative. Nouns with this affix do not constitute new information in discourse. They always refer to old information. New information is introduced either by use of the generic or by use of the indefinite form of a noun, as in (7 a) and (b) respectively.

- 7(a) [[fard-i] horii mana-ti]  
 S horse-nom. animal-of house-is  
 'Horse is a domestic animal'.
- (b) [[fard-i tokko] duf-e]  
 S horse-nom. one come-pf.  
 'A horse came'.

Once a noun is introduced into discourse in such a manner, subsequent references to it employ the use of /-ičč-/ , if it is masculine, and /-itt-/ , if it is feminine or diminutive. In such cases, the interpretation of the noun is not that it is single or just one, but also the same one mentioned earlier in the discourse.

Now the question is whether we should recognize two /-ičč-/s; one for the singulative and another one for the determinative, or whether we should recognize only one /-ičč-/ , which is primarily singulative, and argue that it has developed the determinative function incidentally. If we recognize two types, then the determinative /-ičč-/ should occur with all types of nouns, and that only the singulative one should be limited to [+ COUNT] nouns. In other words, we should be able to find distinctions of syntactic usage between the two of them. This does not seem to be possible, however, because no noun other than those with the feature [+ COUNT] allows /-ičč-/ . This is what we noticed in the structures in (5). The situation is, therefore, one which forces us to accept only one /-ičč-/ , indicating singularity, and maintain that its determinative use may only be incidental. This may gain support from the fact that Oromo, unlike Amharic (and perhaps certain other languages in Ethiopia) does not have a determiner per se. What it does have are deictics, as mentioned earlier. Hence it might be the case that it extends the use of /-ičč-/ to show what in other languages is expressed by a determiner. It might even be said

that this is perhaps by analogy with Amharic, which has both a determiner, /-u-/, and a singulative marker /-ṭyyä-/. Since Oromo has only a singulative marker, it seems that it extends its use to include the role of the Amharic /-u/ as well. This is a likelihood given the extent to which the two languages have been in contact, and have influenced one another.

We have mentioned /-itt-/ as the feminine counterpart of /-ičč-/. Its use may be said to be basically the same as that of /-ičč-/. It occurs only with [+ COUNT] but singular nouns. Like /-ičč-/ it has the extended use of showing diminutiveness. The following are some examples.

- 8(a) [[fard-ittii-n]      ḍuf-t-e]  
 S horse-sgl-nom.      come-f-pf.  
 'The horse (mare) came'.
- (b) [[muč̣-ittii-n]      ḍuf-t-e]  
 S child-sgl-nom.      come-f-pf.  
 'The baby girl came'.
- (c) [[lenč̣-ittii-n]      deem-t-e]  
 S lion-sgl-nom.      go-f-pf.  
 'The lioness went'.

In all such examples, the idea expressed by the morpheme is singulativity. The idea of definiteness or diminutiveness seems to be secondary. The situation is parallel to what we have seen with regard to /-ičč-/ as a singular marker and its extended use as a determiner. This again is parallel to the Amharic /-itu/ which shows both the feminine singulative and/or the diminutive.

Assuming this to be on the right track, we may maintain the claim we hinted at earlier that /-ičč-/ is basically a quantifying element indicating a single entity, in opposition to /-oota/ which shows multiples of entities.



Like the latter it is an inflectional element and may hence be accounted for in terms of noun morphology as a specification of the grammatical feature of number. This leaves us with just deictics and genitive NPs to comprise the set of definite articles.

#### 6.1.1.1.2 Indefinite Article

Indefiniteness may be indicated by the presence or absence of indefinite pronouns. However, unless it is clear from the context, the absence of an indefinite pronoun may lead to ambiguities between the generic and the indefinite use of a noun. This is noticeable from examples like (7 a) above, or (9 c) below.

- 9(a) [[fard-i] horii feʔisaa-ti]  
 S horse-nom. anomal-of load-is  
 'Horse is [a] draught animal'.
- (b) [[fard-i tokko] ɖuf-e]  
 S horse-nom. one come-pf.  
 'A horse came'.
- (c) [[fard-i] ɖuf-e]  
 S horse-nom. come-pf.  
 '[A] horse came'.

In (9 a) , the absence of the pronoun /tokko. 'a/one' gives /farda/ 'horse' a generic interpretation. In this sense, it refers to the class as a whole, as distinct from other classes of animals, such as that of lions, for example. In (b) this generic reference is reduced to just one member only. This interpretation is possible because of the presence of the pronoun /tokko/ 'a/one'. The situation in (c) is slightly different. As in (9 a) , /farda/ 'horse' is not followed by a pronoun; so a generic interpretation is possible. But unlike (9 a) , where the structure is a

copulative one, as is usually the case in such statements of general reference, the structure in (c) is non-copulative. In other words, (9 a) is a kind of definition, whereas (c) is not. In this sense, /farda/ 'horse' in (c) may be interpreted as being distinct from the generic /farda/ 'horse' of (9 a) . But such distinction is not possible in structures such as (10) below.

10. [Tulluu-n [farda] bit-e]  
 T-nom. horse buy-pf.  
 'Tulluu bought [a] horse'.

Here /farda/ 'horse' may be generic if understood as Tulluu buying not mules but horses, or indefinite, if interpreted as Tulluu buying a horse. Either interpretation is possible unless context – either pragmatic or linguistic – makes it clear.

The point at issue is not, however, one of interpretation, as it is of the syntactic relation that exists between a head and its specifier. As shown in the examples above and in those below, the pronouns occur following the head.

- 11(a) [ [yaroo kam-iyyuu] deem-ii]  
 S NP  
 time which-ever go-imp.  
 'Go any time'.
- (b) [ [biyya eessaa-yyuu] deem-e hin-beek-u]  
 S NP  
 region where-ever go-pf. neg-know-impf.  
 'He has never been to any country'.
- (c) [ [mučaa-n eeñnu-yyuu-n] aannan hin-jaalat-a]  
 S NP  
 child-nom.who-ever-nom. milk cm.like-impf.  
 'Any child likes milk'.
- (d) [ [wan maal-iyyuu] daga?-uu hin-barbaad-u]  
 S NP  
 thing what-ever hear-to neg-want-impf.  
 'I don't want to hear anything'.

In these and other similar structures, the position of the pronouns is the same one we have noticed in relation to the deictics or the genitive NPs in the preceding section. And in accordance with the constraint we have assumed, only substitution, but not co-occurrence, is possible between any two of such elements. Hence, structures like those in (12) are ill-formed.

12(a)\* [[biyya [eessaa-yyuu] [kana] deem-e hin-beek-u]  
<sup>S</sup> region where-ever this go-of. neg-know-impf.

(b)\* [muçaa-n [eeñu-yyuu-n] [kun-(i)] aannan hinjaalat-a]  
<sup>S</sup> child-nom. who-ever-nom. this-nom. milk neg-like-impf.

Such structures would be possible if only one of the bracketed elements followed the head.

From what we have noticed thus far, it appears that the class of article includes deictics and genitive NPs on the one hand and indefinite pronouns on the other. The former constitute the subclass of definite article and the latter the indefinite article.

#### 6.1.1.2 Quantifiers

As stated earlier, these are specifiers of the type which denotes quantity rather than entity. The elements are related to questions of 'how much' rather than 'what' or 'which'. Like articles, they may be divided into definite and indefinite quantifiers on the basis of the type of nouns they are associated with.

##### 6.1.1.2.1 Definite Quantifiers

These are elements which are associated with the class of nouns whose referents may be counted directly as individual units or measured as an

agglomerated mass. They include numerals and what Lyons (1977:461ff) calls measure and classifier phrases. The latter are analysable as syntactic categories as we shall observe later on.

#### 6.1.1.2.1.1 Numerals

To the exclusion of /tokko/ 'one', which, as we have seen earlier, also functions as an indefinite article, all cardinal numerals are quantifiers. Their distribution is restricted to [+ COUNT] nouns, as can be gathered from the following examples.

13(a) [ [farda lama]<sup>6</sup> na-n bit-a]  
 S NP horse-two I-cm. buy-impf.  
 'I will buy two horses'.

(b)\* [[bišaan lama] na-n d̥ug-a]  
 S water two I-cm. drink-impf.

Corresponding to (13 a) above, (14) below is also possible with an inflected numeral.

14(a) [ [iǰ-oolle-n lamaa-nuu] d̥uf-an(i)]  
 S NP child-pl-nom. two-the(?) come-pl-pf.  
 'The two children came'.

(b) [Tulluu-n [nam-oota sadee-nuu] arg-e]  
 S T-nom. NP man-pl. three-the(?) see-pf.  
 'Tulluu saw the three men'.

From the glosses it appears that the suffix /-nuu/ is a determinative element equivalent to 'the' in English or /-u/ in Amharic, and that its relationship is with the numeral.

Such structures as those of (14) are used when the head of the phrase, namely the noun, is restricted in reference to a group of men whose identity is already made known. In other words, when the head is definite and plural. In such cases, the numeral seems to agree with the head by

exhibiting this affix, and whenever this is the case, the head may even be dropped as in (15) derived from (14).

15(a) [[lamaa-nuu] duf-an(i)]  
 S two-the come-pl-pf.  
 'The two came'.

(b) [Tulluu-n [sadee-nuu] arg-e]  
 S T-nom. three-the see-pf.  
 'Tulluu saw the three'.

The fact that /-nuu/ occurs with numerals which are in configuration with a definite plural head makes it an agreement phenomenon, which means that it is basically a feature of the nominal head, and that the numeral acquires it for reasons of concord. But nouns do not allow it since structures like (16) are unacceptable for the intended interpretation.<sup>7</sup>

16(a)\* [[farda-nuu] nan-bit-a]  
 S horse-the I-cm. buy-impf.  
 'I will buy the horse'.

(b)\* [[farda-nuu] duf-e]  
 horse-the come-pf.  
 'The horse came'.

The situation seems to suggest that /-nuu/ is an inflectional element characterizing numerals (and other modifying elements as we shall observe soon).

If it were the case that /lamaa-nuu/ 'the two' or /sadee-nuu/ 'the three', etc. could occur without a preceding NP, we could perhaps argue that numerals are nominals or a subclass of them as they are in Somali (cf. Saeed 1982) a language to which Oromo is both genetically and geographically related. But the examples in (15) show that they occur only as derivatives of structures like those in (14). In other words, numerals cannot occur in discourse-initial contexts, contexts in which they could have appeared if they had been nominals.

To substantiate this argument further, we may cite some examples of structures in which numerals — but not nominals — are excluded. Such examples include the following:

- 17(a) (i) [nam-oo-ni [kaleessa (kan) duf-an(i)]]...  
 NP<sub>man-pl-nom.</sub> yesterday comp. come-pl-pf...  
 'The men who came yesterday...'
- (ii)? [lamaa-nuu [kaleessa (kan) duf-an(i)]]  
 two-the yesterday comp. come-pl-pf.  
 'The two who came yesterday'.
- (b) (i) [Tulluu-n [nam-oota lamaa-nuu] arg-e]  
 S<sub>T-nom.</sub> NP<sub>man-pl.</sub> two-the see-pf.  
 'Tulluu saw the two men'.
- (ii)? [Tulluu-n [lamaa-nuu] arg-e]  
 S<sub>T-nom.</sub> two-the see-pf.  
 'Tulluu saw the two'.
- (c) (i) [nam-ičč-i duf-e]  
 S<sub>man-sgl-nom.</sub> come-pf.  
 'The man came'.
- (ii)\* tokkoo-nuu duf-e  
 one-the come-pf.  
 'The one came'.

The structures (17(a ii)-(c ii) in which the numeral appears to have substituted the nominal are dubious, in each case, for the reason that they have no independent references. Their occurrence without a preceding nominal head is only apparent, for underlying there is the NP itself realized as [e]. In other words, such structures with the numerals occurring as 'heads' of phrases are derived, not base-generated.

The most plausible conclusion that we can draw from the observations we have made thus far is that numerals are not analysable as nominals, although like the latter, they may display some defining elements.

Before we definitely draw this conclusion we need to make some more observations. Earlier we mentioned that /-nuu/ also occurs with other modifying elements. Such elements include adjectives. It might, hence, be possible that they are adjectives. If this is the case, then they should occur in all the positions associated with such items. Two such positions are: following a nominal, and preceding a verbal head in structures of NPs and VPs respectively. And in both positions numerals also appear as the following examples demonstrate:

18(a) [[nama lama] arg-e]  
 S man two see-pf.  
 '[He] saw two men'.

(b) [nam-oón-ni [lama tur-an-i]]  
 man-pl-nom. two exist-pl-pf.  
 'The men were two'.

In this case, they may be treated as belonging to the category of adjectives. But there are two other positions where only adjectives but not numerals are found. Consider the following examples.

19(a) (i) [araḱee-n [ [ḱorra-af] gaarii] -da]  
 S wine-nom. A' PP cold-for. good  
 'Spirits is good for colds'.

(ii)\* [araḱee-n [ [ḱorra-af] tokko] -da]<sup>8</sup>  
 S spirits-nom. A' PP cold-for one is

(b) (i) [farsoo-n [ [ḱorra-af] hamaa] -da]  
 S beer-nom. A' PP cold-for bad is  
 'Beer is bad for colds'.

(ii)\* [farsoo-n [ [ḱorra-af] tokko] -da]  
 beer-nom. A' PP cold-for one is

The examples show that only adjectives but not numerals subcategorize adpositional phrases.

The other position where adjectives, though not numerals, are found is the position following a degree word. The following is an example of this.

20(a) [bay?ee dəeraa]  
 AP very tall

(b)\* [bay?ee tokko]  
 very one

The fact that numerals occur in two of the positions where adjectives are found may lead us to conclude that they are a subclass of this category. There is no harm in drawing such a conclusion, since some other quantifying elements which, as we shall observe later, also belong to this category. What is important is the function they perform which, as we have noticed throughout, is one of specifying the heads of those phrases in which they occur, and with which they agree, for such features as definiteness and number. It is in such cases as when the head is a definite plural that the numerals show up with /-nuu/.

#### 6.1.1.2.1.2 Measure Phrases

As we have observed in the preceding section, nouns which are [+COUNT] may involve numerals in specifying their amount. There are, however, other sets of nouns whose quantity or amount cannot be figured out by direct counting as such. Such nouns are [-COUNT] and their specification involves measure phrases. The following are some examples:

21(a) [ [daadii [birille sadii]] dəg-e]  
 S NP mead NP bottle three drink-pf.  
 '[He] drank three bottles of mead'.

(b) [ [taafii [kunnaa lama]] nan-barbaad-a]  
 S NP t'ef NP basket two I-cm.want-impf.  
 'I want two baskets of tef'.



- 21(c) [ [lafa [kalaadii lama]] nama tokko-f hin-ga?-u]  
 S NP<sub>land</sub> NP<sub>rope</sub> two man one-for neg-suffice-impf.  
 (Literally), 'Two rope lengths of land is not enough for a man'.

The constituents in the innermost brackets, which are noun phrases themselves, are the measure phrases which specify the amount of the head in the outer bracket. The use of numerals alone in the position of the measure phrase will lead to the following ungrammatical structures.

- 22(a)\* [[daadii sadii] nan-barbaad-a]<sup>9</sup>  
 S mead three I-cm.want-impf.

- (b)\* [[taafii lama] nan-barbaad-a]  
 S tef two I-cm.want-impf.

In the same manner, the head of the measure phrase alone cannot function as a specifier since structures like those below are ill-formed.

- 23(a)\* [[daadii birille] nan-barbaad-a]<sup>10</sup>  
 S mead bottle I-cm.want-impf.

- (b)\* [[taafii kunnaa] nan-barbaad-a]  
 S tef basket I-cm.want-impf.

The situation suggests that it is neither the numeral nor the head of the measure phrase but the two as a structural unit which function as a specifier. Furthermore, the head of the measure phrase is not just any noun, but a noun which is associated with certain standards of measurement. The same kind of restriction can be put on the nouns referring to the things to be measured, since they too are limited to a set which is high up in the hierarchy of relevance for human life. In other words, only nouns referring to things which, because of their significance for life, are quantified, allow measure phrases.

### 6.1.1.2.1.3 Classifier Phrases

Like measure phrases, classifier phrases are noun phrases. They are used within phrases in which the head is one of a set of collective nouns. Such nouns are formally identifiable by their inability to take a plural marker, their reference being to the class as a whole rather than to the individual members forming it.

Reference to individual entities forming the whole may be made by using one of a set of classifier phrases as demonstrated by the following examples.

24(a) [ [waraḱata [baala sadii]] fid-i]  
 S NP paper NP leaf three bring-imp.  
 'Bring three pieces of paper'.

(b) [ [aṣeeta [mataa lama]] na-kenn-i]  
 S NP green corn NP head two me-give-imp.  
 'Give me two heads [cobs] of corn'.

Because of their reference to individual entities, such phrases have often been called individuating or enumerating elements (cf. Lyons 1977:462). As in measure phrases, a classifier phrase should contain a numeral. This is noticeable from the ungrammatical structures in (25).

25(a)\* [[waraḱata baala] fid-i]  
 S paper leaf bring-imp.  
 (b)\* [[aṣeeta mataa] na-kenn-i]  
 S greencorn head me-give-imp.

Again, like the head of a measure phrase, which, as stated before, is a type of noun associated with units of measurement or their equivalents, the head of the classifier phrase is limited to a set of nouns whose referents are similar, literally or figuratively, in shape to the thing to be measured. Further restrictions are also made on such nouns in terms of

such selectional restriction features as [ $\pm$  ANIMATE], [ $\pm$  PLANT], etc. Hence, /baala/ 'leaf' and /mataa/ 'head' cannot substitute for each other without this leading to some degree of anomaly of the type in (26).

- 26(a)\* [ [waraḡata [mataa sadii]] fid-i]  
 S NP NP  
 paper head three bring-imp.  
 ?'Bring three heads of paper'.
- (b)\* [[aṣeeta [baala lamaa]] na-keen-i]  
 S  
 greencorn leaf two me-give-imp.  
 'Give me two leaves of corn'.

Furthermore, it does not appear to be the case that every collective noun allows a classifier phrase as its quantifying expression; rather, it is only those nouns which are high up in the hierarchy of salience in the sense of Comrie (1981:182) that allow such quantifying expressions. Hence, structures like those in (27) are excluded on pragmatic grounds.

- 27(?) [ [burtukaanii [mataa sadii]] na-kenn-i]  
 S NP NP  
 orange head three me-give-imp.  
 ?'Give me three heads of oranges'.

It is therefore only nouns like /aṣeeta/ 'greencorn' but not others like /burtukaani/ 'orange' with which classifier phrases form structural relationships without there being any anomaly.

What we have considered so far is the specification of nouns whose referents are quantifiable either by direct counting or by measurement, the latter involving the two quantifying phrases. However, there are other types of nouns which cannot be specified either by direct counting or measurement.

#### 6.1.1.2.2 Indefinite Quantifiers

The nouns referred to above as being unspecifiable in the manner discussed include those with the feature [- CONCRETE]. Nouns like /rakkoo/

'difficulty', /rafiitii/ 'sleep', etc., belong to this type. Such nouns employ the use of forms like /ṭinnoošee/ 'little', /guddaa(saa)/ 'abundant', or /bay?ee/ 'much', not much as a measure of quantity but as an expression of the intensity or the seriousness of the thing the terms designate.

Hence we have phrasal structures like (28).

28(a) [rakoo guddaa(saa)]...  
 NP difficulty great  
 'Great difficulty'.

(b) [rafiitii ṭinnoo(šii)]...  
 NP sleep little  
 'A little nap'.

Such quantifying elements are not, however, limited to [- CONCRETE] nouns since structures like those in (29) are also possible. It is only the nouns themselves which are sensitive (only) to them.

29(a) [nam-oota guddaa(saa)]...  
 NP man-pl. great  
 'A large number of men'.

(b) [farda bay?ee]...  
 NP horse many  
 'Many horses'.

(c) [bišaan ṭinnoo(šii)]  
 NP water little  
 'A little water'.

Only some, such as /tokko tokko/ (literally) 'one one', i.e., 'some', are restricted to [+ COUNT] nouns. Hence (30 a) but not (30 b) ,

30(a) [ṵaara tokko tokko]...  
 NP people one one  
 'Some people'.

(b)\* [bišaan tokko tokko]...  
 water one one

In all such structures, the quantifying elements (perhaps with the exception of /tokko tokko/ 'some') may be treated as adjectives for the simple reason that the position they occupy is the same as that where the former are found. Further instances of such distributional similarities are also noticeable from structures like the following.

- 31(a) [nam-i<sup>χ</sup>-i [guddaa] -<sub>da</sub>]  
<sub>S</sub> man-sgl-nom. big is  
 'The man is big'.
- (b) [bi<sup>χ</sup>saan(i) [t<sub>in</sub>noo(šii)] -<sub>da</sub>]  
<sub>S</sub> water little is  
 '[The] water is little'.
- (c) [rakkoo-n [guddaa(saa)] -<sub>da</sub>]  
<sub>S</sub> difficulty-nom. great is  
 'The difficulty is serious'.
- (d) [nam-oon-ni [bay?ee] -<sub>da</sub>]  
<sub>S</sub> man-pl-nom. many is  
 'The men are many'.

Furthermore, such forms, like adjectives proper, do allow a preceding degree word. The structures in (32) are examples of this.

- 32(a) [nama [bay?ee guddaa] arg-e]  
<sub>S</sub> man <sup>AP</sup>very big see-pf.  
 '[He] saw a very big man'.
- (b) [bi<sup>χ</sup>saan [bay?ee t<sub>in</sub>noo] d<sub>ug</sub>-e]  
<sub>S</sub> water <sup>AP</sup>very little drink-pf.  
 '[He] drank very little water'.
- (c) [hool-oota [guddaa bay?ee] arg-e]  
<sub>S</sub> sheep-pl. <sup>AP</sup>big many see-pf.  
 '[He] saw very many sheep'.

One other structural device often used to distinguish adjectives from other categories is comparison. And as expected, the forms in question do occur in such structures, as the examples below show.

- 33(a)  $\begin{bmatrix} \text{Tulluu-rra} & [\text{Fayyiisaa-n} & t & \text{guddaa-ḍa}] \\ \text{S} & \text{T-from} & 1 & \text{S}_F\text{-nom.} & 1 & \text{big-is} \end{bmatrix}$   
 (Literally), 'From Tulluu Fayyiisaa is big',  
 'Fayyiisaa is bigger than Tulluu'.
- (b)  $\begin{bmatrix} \text{hunduma-rra} & [\text{Fayyiisaa-n} & t & \text{guddaa-ḍa}] \\ \text{S} & \text{all-from} & 1 & \text{S}_F\text{-nom.} & 1 & \text{big-is} \end{bmatrix}$   
 (Literally), 'From all Fayyiisaa is big',  
 'Fayyiisaa is the biggest of all'.
- (c)  $\begin{bmatrix} \text{biṣaan} & \text{kana-rra} & [\text{biṣaan(i)} & \text{sun-(i)} & t & \text{bayʔee-ḍa}] \\ \text{S} & \text{water} & \text{this-from} & \text{S}_F\text{-nom.} & \text{that-nom.} & 1 & \text{much is} \end{bmatrix}$   
 (Literally), 'From this water that water is much',  
 'That water is more than this water'.
- (d)  $\begin{bmatrix} \text{hunduma-rra} & [\text{biṣaan(i)} & \text{kun-(i)} & t & \text{ṭinnoo-ḍa}] \\ \text{S} & \text{all-from} & 1 & \text{S}_F\text{-nom.} & \text{this-nom.} & 1 & \text{little is} \end{bmatrix}$   
 (Literally), 'From all this water is little',  
 'This is the least of all the water'.

From what we have seen thus far regarding indefinite quantifiers, with the exception of /tokko tokko/ 'some', which we may consider as an indefinite pronoun, the most plausible conclusion to draw would be one which treated them as adjectives.

If we are on the right track about the claims we have made regarding specifiers as entity- and quantity-denoting elements, and with the argument presented to support this claim, then the next thing we have to do is determine their relative position in structures of phrases in which both types occur. In order to do this we have to consider structures like the following.

- 34(a)  $\begin{bmatrix} \text{ij-oollee} & \text{sana} \\ \text{NP} & \text{child-pl.} & \text{these} \end{bmatrix}$   
 'These children'.
- (b)  $\begin{bmatrix} \text{ij-oollee} & \text{lamaa-n} & \text{sana} \\ \text{NP} & \text{child-pl.} & \text{two?} & \text{these} \end{bmatrix}$   
 'These two children'.

34(c)\* [ij̣-oollee sana lama]  
 child-pl. these two.

35(a) [fard-oota Tulluu]  
 NP horse-pl. of T.  
 'Horses of Tulluu'.

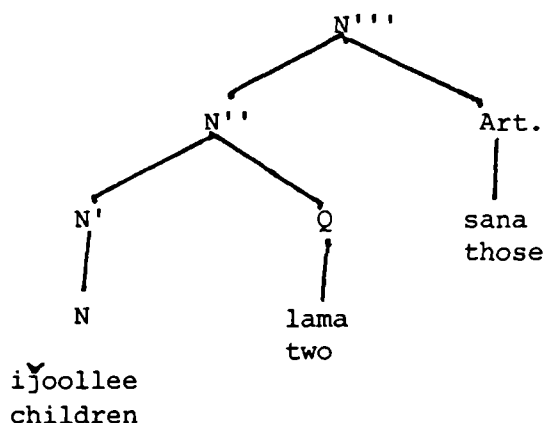
(b) [fard-oota sadeen Tulluu]  
 NP horse-pl. three of-T.  
 '[The] three horses of Tulluu'.

(c)? [fard-ota Tulluu sadeen]  
 NP horse-pl. of-T. three.

From the ungrammatical structures of (34-35) it is possible to infer that the position of the quantifying element is after the head, but preceding the deictic /sana/ 'these' or the genitive NP, of-Tulluu.

From the fact that specifiers are optional elements it follows that they cannot be sisters of N, for N allows only strictly <sup>11</sup> subcategorized argument complements. This makes them either a sister of N' or N'' in a noun phrase. The structures in (34-35) show that the quantifying elements follow the head, and that the deictics come last in the string. This suggests that the former branch down as a sister of N' and the latter as a sister of N''. And according to the semantic constraint we have postulated, an NP can at most have one article and one quantifying element, which means that we have no other elements to consider as specifiers. Hence the structural relationship of the elements in question in relation to the head must be as shown in the tree below.

36.



.'Those two children.'

This analysis accounts for the structure of phrases involving deictics and quantifiers, and it also observes the constraint we have postulated. But there are structures which it cannot account for. Such structures include the following.

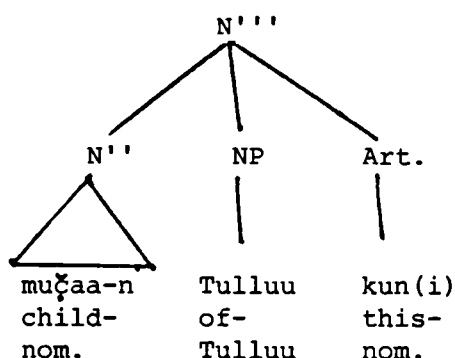
- 37(a) [ [muçaa-n Tulluu kun(i)] gaḍee-ḍa]  
 S NP child-nom. of-T. this-nom. rude-is  
 (Literally), 'This child of Tulluu is rude'.
- (b) [ [muçaa-n Tulluu kam(iti)] du?-e] ?  
 S NP child-nom. of-T. which-is-it die-pf.  
 (Literally), 'Which child of Tulluu died?'

In (37), the head noun /muçaa-n/ 'child-nom' is followed by the genitive NP 'of-Tulluu' and the deictic element /kun(i)/ 'this-nom'. Both belong to the subclass of article, and their occurrence following the same head violates the semantic constraint we postulated earlier.

The presence of both elements does not seem to have any effect on the head as far as the degree of definiteness is concerned. The head could have been made definite by either one of them.

Given the concatenative nature of specifiers, structures like these may be analysed in the manner shown below.

38.



'This child of Tulluu'.

In other words, both the genitive NP and the deictic /kun(i)/ 'this man' branch down from the same node, and their linear relationship is as

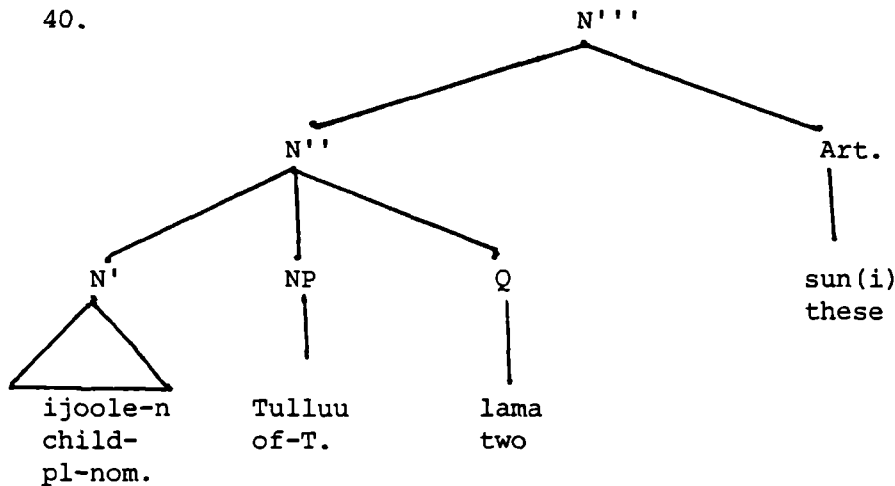


indicated. The problem mentioned earlier with regard to the analysis in (36) and the counter-examples in (37) consists in the violation of the constraint. We may disregard this as a tenuous issue. But if we add a quantifying element to structures such as (38) the situation becomes entirely different. Consider (39).

39(a) [ [ij̣-oolle-n Tulluu lamaa-n sun(i)] gaḍee-ḍa]  
 S NP<sub>child-pl-nom.</sub> of-T. Two ? those-nom. rude is  
 'Those two children of Tulluu are rude'.

(b)\* [ [ij̣-oolle-n lama Tulluu sun(i)] gaḍee-ḍa]  
 S NP<sub>child-pl-nom.</sub> two of-T. these-nom. rude is

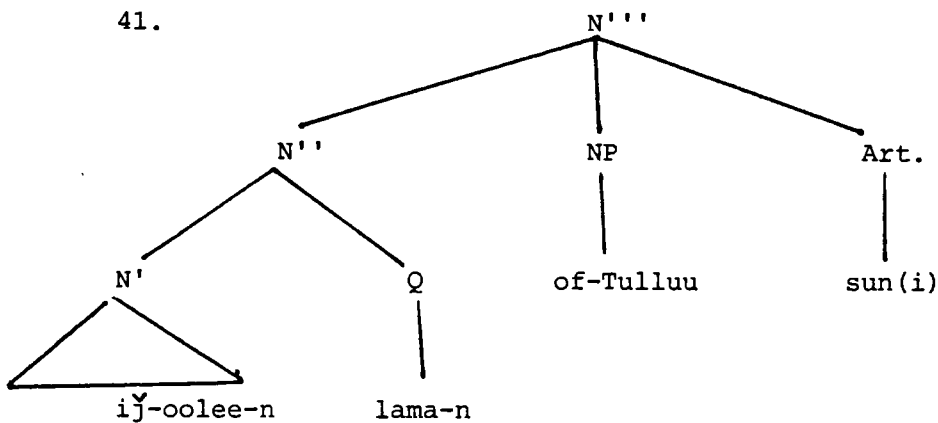
In (39), it is the genitive NP 'of-Tulluu' which is closest to the head contrary to the analysis in (36) where the quantifier is shown as being the closest. According to (39) then, the genitive NP has to branch down from N'' as sister of the quantifier /lama/ 'two' in the manner shown below.



'These two children of Tulluu'.

The comparison of (40) and (38) shows that the genitive NP has two possible positions. It may branch down from the maximal node as in (38), or from the intermediate node as shown above. The question is which position is basic? Or could it be the case that Oromo is characterized by three types of specifiers instead of by two as we have been arguing?

If we maintain the idea that the specifiers are basically of two types and that their positions are as shown in (36), we shall have to account for the analysis of (40) as being derived from a corresponding structure in which the genitive NP is sister of Art. In other words, (40) is a transform of the structure in (41).



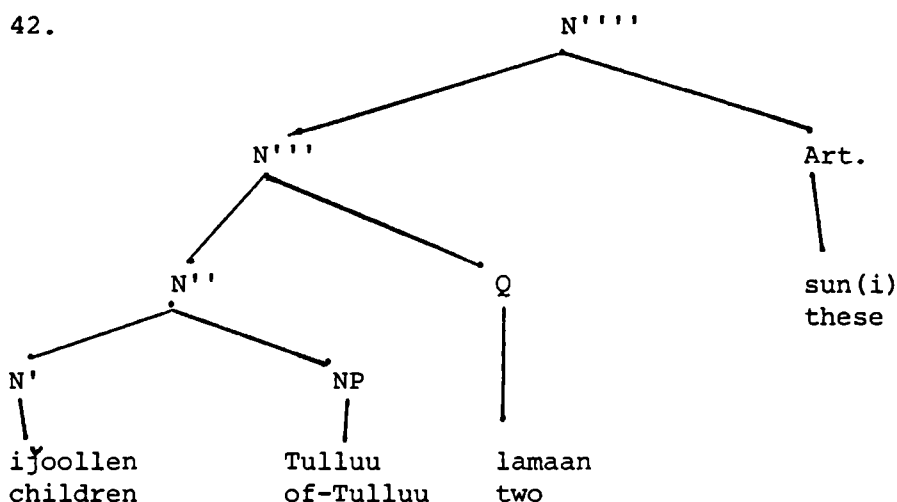
'Those two children of Tulluu'.

According to this analysis, the genitive NP 'of-Tulluu' moves from N''' in (41) to N'' in (40). And this appears quite possible given the fact that the genitive relation is indicated by the possessor NP coming next to the possessed NP. In such structures as (41), the possessed NP, that is, the head is separated from the possessor by the quantifier /lama/ 'two'. In order for the structure to be grammatical, the possessor NP has to move down to N'' and be immediately next to the head, which it possesses.

If Oromo had a genitive morpheme similar to the Amharic /yā-/ 'of', for example, then the movement might not be necessary. The possessed-possessor relationship could still be maintained while the genitive phrase remained in situ, i.e., under N'''. It is the way in which Oromo shows such relationships that makes the movement obligatory.

Alternatively, as we have hinted at earlier, it might be possible to argue for a three-way specifier system for Oromo. A nominal head may be

said to be restricted in terms of its possessor, spatio-temporal context and in terms of its quantification; in which case its projection potential in terms of bar levels would be quadruple instead of treble. And accordingly such structures as (39) would have to have the analysis given in (42), instead of, or rather than the one in (40) and which was derived from (41).



'These two children of Tulluu'.

Whereas this analysis avoids the transformation which the genitive NP had to undergo in (40) and hence appears economical, it is not free of problems itself. As we have noted in Chapter Four, a degree of cross-category generalization has been achieved with regard to the value of  $n$  in  $X^n$ . This generalization, which X-bar syntax wants us to look for and maintain, is now endangered because  $n$  is going to be four for nominals instead of three as has been claimed until now.

In order to maintain the generalization we need to do away with this analysis and look for a better one, or else maintain the analysis shown in (40). This is particularly necessary given the fact that the presence of both the genitive NP and the deictic element has no significant effect on the head in terms of the degree of definiteness. This means then that

the analysis in (40) may be adopted in favour of the three-way specifier system we have been considering as an alternative.

A last alternative would be to consider genitive NPs not as part of the specifier of a head but as part of its complement. As discussed in Chapter Four, genitive NPs of various functions have been treated as complements either of N' or N''. It might not be impossible to include genitive possessives as complements of N' along with genitives of 'source', for example. This alternative is appealing for three reasons. Firstly, it enables us to maintain the cross-category generalizations we have otherwise managed to achieve. Secondly, it enables us to make yet further generalizations about genitive NPs. As discussed in Chapter Four, other genitive NPs are complements. It was only the present type of genitive which had been left aside as a specifier. This would, in effect, mean making distinctions between a complement genitive and a specifier genitive. The distinction is vague since the definitions of both specifiers and complements as 'concatenations of elements' are equally vague and appear to be two terms that are used simply as devices without any theoretical import (cf. Jackendoff 1977). If we include genitive possessives in the list of complements, we can make a better generalization and the class of specifiers will be limited just to deictics and quantifiers. Thirdly, this alternative gets rid of the transformation we would have had otherwise to apply to (41) if we had adopted that option. In addition to these advantages, this alternative leads to a situation where the genitive NP fits the distributional definition of complements we made previously. We have stated that complements always occur immediately next to the head and that specifiers assume peripheral positions. This is noticeable from the structure in (39 a) , where the genitive occurs after the head

and from the ungrammatical counterpart in (39(b)), where the genitive is separated from the head by the quantifier /lama/ 'two'.

Since this alternative avoids the problems the previous two approaches have faced, while at the same time lending to further generalizations, it may be adopted as a better option.

### 6.1.2 Derived Nominal Specifiers

What we have considered so far is the class of specifiers associated with simple nominals. In this subsection we shall examine the type of specifiers that derived nominals are characterized by, in the light of the arguments presented for the former.

As stated earlier (cf. Note 1), we shall restrict the notion of derived nominals to infinitivals. This restriction is necessary for the distinction which is to be made between them on the one hand and other non-infinitival nominals on the other. The latter are subject to the same kind of analysis we have argued for for simple nominals.

Regarding the former, consider the following structures:

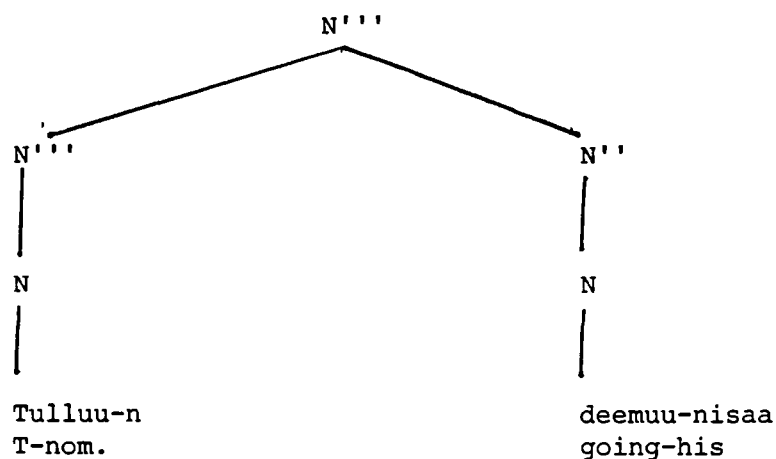
- 43(a) [ [deem-uu-n] gaarii-ḍa]  
 S S<sub>go-to-nom.</sub> good-if  
 'To go/going is good'.
- (b) [ [deem-uu-n-isaa] gaarii-ḍa]  
 S S<sub>go-to-nom-'his'</sub> good-is  
 'His going is good'.
- (c) [ [Tulluu-n [deem-uu-n-isaa]] gaarii-ḍa]  
 S S<sub>T-nom.</sub> go-to-nom-'his' good-is  
 'Tulluu's going is good'.

The structures in the innermost brackets in (43) are infinitivals. As we have observed in the preceding chapter, they are indicated by the deverbative element /-uu-/.

Within the theoretical framework we are following, infinitivals are clauses and are as such subject to the same kind of analysis other types of clauses are characterized by. In the structure in (43), the subject of the head is *Pro*.in (a), *PRO*.in (b), and /*Tulluu*/ in (c). It is *PRO* in (a) in accordance with the Extended Projection principle of Chomsky (1982) which stipulates that all clauses have subjects. It is *Pro*.in (b) because the head has the pronominal element /-isaa/ 'his' which refers to the possible subjects in this case to a subject which is 3ms and which can be dropped as in this particular case or maintained as in (c).

Now if we assume with Jackendoff (1977) that subjects of both NPs and clauses are specifiers of their respective heads, /*Tulluu*/ in (43 c) may be treated as being both a subject and a specifier of its infinitival head /*deemuunisaa*/ 'his going'. Its position in the hierarchy is parallel to that of articles in the simple nominals discussed in the preceding section. In other words, it branches down from the maximal node  $N'''$  as sister of  $N''$  in the manner shown below.

44.



'Tulluu's going'.

One difference between simple NPs and infinitivals or gerundives like /*deemuu-n-isaa*/ 'his going' is in the position of the head. As shown in the preceding section, simple NPs are left-headed, whereas gerundives are

right-headed. It does not, therefore, seem possible to make a general statement about the two types of NPs with regard to the notion of head. In fact, gerundives are very much like verbals both in the position they assume as heads, and the type of specifiers and complements they select. This will become more explicit when we get to the section on verbals. Now we shall consider a point that makes gerundives and simple NPs look alike. This emerges in structures like (45).

45(a) [ [deem-uu-n Tulluu] gaarii-ḍa]  
 S S  
 go-to-nom. of-T. good-is  
 (Literally), 'Going of Tulluu is good'.

(b) [ [ḍuf-uu-n Tulluu] gaarii-ḍa]  
 S S  
 come-to-nom. of-T. good-is  
 (Literally), 'Coming of Tulluu is good'.

What we have in (45) is a gerundive NP which is left-headed. This is identical to the situation we find in such simple NPs as:

46(a) [ [fard-i Tulluu] guddaa-ḍa]  
 S NP  
 horse-nom. of-T. big-id  
 (Literally), '[The] horse of Tulluu is big'.

(b) [ [hoolaa-n Tulluu] adii-ḍa]  
 S NP  
 sheep-nom. of-T. white-is  
 (Literally), '[The] sheep of Tulluu is white'.

In both (45) and (46), the head is on the left, and again in both the non-head categories are genitive NPs. The situation is, therefore, one which makes the distinction between the two types of nominals very tenuous, and also induces one to treat them alike. To treat them alike means to assume that all NPs – gerundive or simple – are basically left-headed and that structures like /Tulluu-n deem-uu-n-saḍ../ 'Tulluu's going' in (43 c) or (44) which are right-headed are derivatives of the former.

This is problematic. As stated earlier, infinitivals or gerundives are clausal, and in order to analyse them as such, we need to assume a base rule of the type:  $S \longrightarrow NP VP$ . If we adopt the idea that NPs are basically all left-headed, then subjects of infinitivals such as /Tulluu-n/ in /Tulluu-n deem-uu-n-saa/ in (43 c), for example, would have to be base-generated in post-head position and then undergo some transformation(s) to assume their surface positions. This in effect would also mean having to write two base rules for clauses: one for finite clauses with the usual NP-VP order and another for infinitivals with the opposite order. This goes against our goal of achieving a highly constrained grammar.

In order to avoid this, we need to assume that although the structures /Tulluu-n deem-uu-n-isaa/ 'Tullu's going' and /deem-uu-n Tulluu/ 'going of Tulluu' are paraphrases, and so may be assumed to be derivatives, the direction of the derivation must be the opposite of what has been assumed to be the case above. In other words, /deem-uu-n Tulluu/ 'going of Tulluu' must be derived from /Tulluu-n deem-uu-n-isaa. 'Tulluu's going' by an optional rule of agent 'postposing'. Hence, the similarity of structures like /deem-uu-n Tulluu/ 'going of Tulluu' and /farda Tulluu/ 'horse of Tulluu' is superficial, and that in terms of headedness the two are different, the former look very much like verbals rather than nominals as stated before.

Notice that the derivation of /deem-uu-n Tulluu/ 'going of Tulluu' from /Tulluu-n deem-uu-n-isaa/ 'Tullu's going' has a number of morphological or perhaps morphosyntactic effects, other than or in addition to the 'postposing' of the subject NP Tulluu. Firstly, Tulluu is no more in the nominative case for such structures as (47 b) are ungrammatical.



47(a)\* [ [deem-uu-n Tulluu-n] gaarii-ḍa]  
 S  $\bar{S}$   
 go-to-nom. T-nom. good-is

(Literally), 'Going of Tulluu is good'.

(b) [ [deem-uu-n Tulluu] gaarii-ḍa]  
 S  $\bar{S}$   
 go-to-nom. of-T. good-is

Secondly, the pronominal /-isaa/ 'his' is no longer on the infinitival head, since again structures like (48) are ill-formed.

48\* [ [deem-uu-n-isaa Tulluu-(n)] gaarii-ḍa]  
 S  $\bar{S}$   
 go-to-nom-his. T-(nom) good-is

? 'Going of Tulluu is good'.

The questions which follow from a consideration of this state of affairs are: why is the 'postposed' subject without nominative marking, and why is the infinitival head without the pronominal element /-isaa/? These questions need attention because in simple clauses postposed subjects retain their nominative marker as the example in (49) shows.

49(a) [Tulluu-n deem-e]  
 S  
 T-nom. go0pf.

'Tulluu went'.

(b) [ t [ [deem-e] Tulluu-n]]  
 S I VP VP  
 go-pf. T-nom. 1

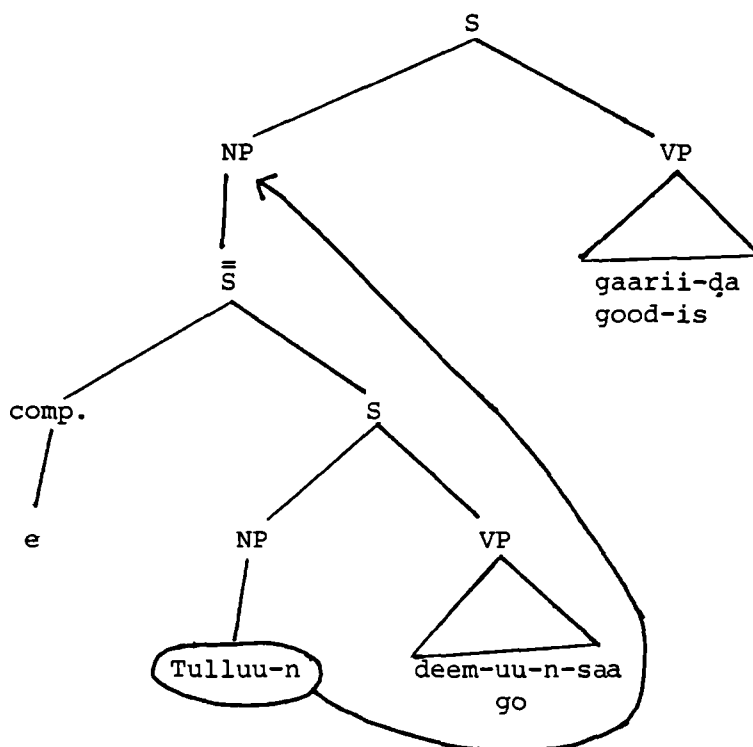
'Tulluu went'.

(c)\* [t [ [deem-e] Tulluu]]  
 S VP VP  
 go-pf. T.

'Tulluu went'.

The answer to the questions seems to be linked to the category to which the postposed NP is adjoined, and to the type of structural configuration which results from this relationship. In order to have a closer observation of the process involved, let us observe the structure in question i.e. (43 c) in the form of a tree. (Details have been avoided.)

50.



In (50), if Tulluu moves and gets adjoined to the VP or even higher to the S in  $\bar{S}$ , the structure would still be one of predication. In other words, Tulluu would still be the subject and it should, therefore, retain its nominative marker /-n/. But such structures are excluded as ill-formed, as shown in (48). This kind of movement seems to be possible only in simple clauses like (49 b) for example. The movement indicated in (50) must, therefore, be adjunction to the NP of the matrix clause. In other words, Tulluu has moved out of its clause and forms a new structural relationship with this NP. In this position Tulluu functions as a specifier of the infinitival head /deemuu-n/ 'going-nom'. As is observable, Tulluu is not in the nominative case in this position, it is in the genitive case. And it seems that it receives this case from the infinitival head /deemuu-/ 'going' since Infl. which would otherwise have assigned nominative case to it (Tulluu) is not available in the new configuration of /deemuu-n Tulluu/ 'Tulluu's going'.

The movement does not violate subjacency since Tulluu crosses only one  $\bar{S}$ . It does not seem to violate any of the principles that determine the relation between the moved element and its trace. It does show, however, a minor violation of the projection principle, since the derived structure fails to show Infl., and with it the feature AGR, which is the nominative case-assigner. In other words, the movement has resulted in the loss of the category Infl. This is why the moved NP (Tulluu) has to get its genitive case from the infinitival head.

It might perhaps be argued (as an alternative) that some infinitives are like simple (ordinary) nouns, and that NPs like Tulluu may be base-generated in post-head positions as specifiers of such infinitives. In other words, /deemu Tulluu/ 'Tulluu's going' may be treated as a simple (non-clausal) NP with Tulluu functioning as a specifier generated in situ. This may avoid having to recognize a violation of the said principle. But it has its own problem. How do we know which infinitives are simple and which ones are clausal? There is no formal distinction between any infinitives. Besides we have to make further distinctions between such infinitives and simple nominals with regard to their subcategorization and other formal properties. For this reason, the movement analysis is adopted as a less problematic solution.

## 6.2 Non-nominal Specifiers

In this subsection of the discussion we shall argue that the arguments presented with regard to nominal specifiers may be extended to the other categories, allowing for some degree of variation.

### 6.2.1 Verbals

Like nominals, verbals select certain types of quantifiers as specifiers.

Consider the following structures.

51(a) [Tulluu-n [ [yaroo sadii [kuf-e]]]]  
 S<sub>T-nom.</sub> V' N' time three V' fall-pf.  
 'Tulluu fell three times'.

(b) [Tulluu-n [ [yaroo sadii [bišaan ɖug-e]]]]  
 S<sub>T-nom.</sub> V' N' time three V' water drink-pf.  
 'Tulluu drank water three times'.

In both structures the quantifier phrase, which is an NP, is structurally related to V', which is the head of the larger category V''. As the labelling shows /yaroo sadii/ 'three times' is outside V'. It cannot be inside V' because only complements are allowed in this position since they, but not specifiers like /yaroo sadii/ 'three times', are expressions of the inherent properties of lexical heads. Hence, their position is always peripheral, as stated earlier in this chapter.

This situation is parallel to the position of quantifiers in nominals. There we have seen that their position is outside N' for the same reason as that stated above.

Some types of verbs select degree words such as /bayʔee/ 'very' rather than NP quantifiers of the type shown in (47). The following are some examples with such verbs.

52(a) [dubartii-n kun(i) [bayʔee [iiyyit-e]]]  
 S<sub>woman-nom.</sub> this-nom. V' very V' yell-f-pf.  
 (Literally), 'This woman cried very',  
 'This woman cried a lot'.

(b) [Tulluu-n [bayʔee [ʃaba-at-e]]]  
 S<sub>T-nom.</sub> V' very V' strong-mid-pf.  
 'Tulluu got very strong'.

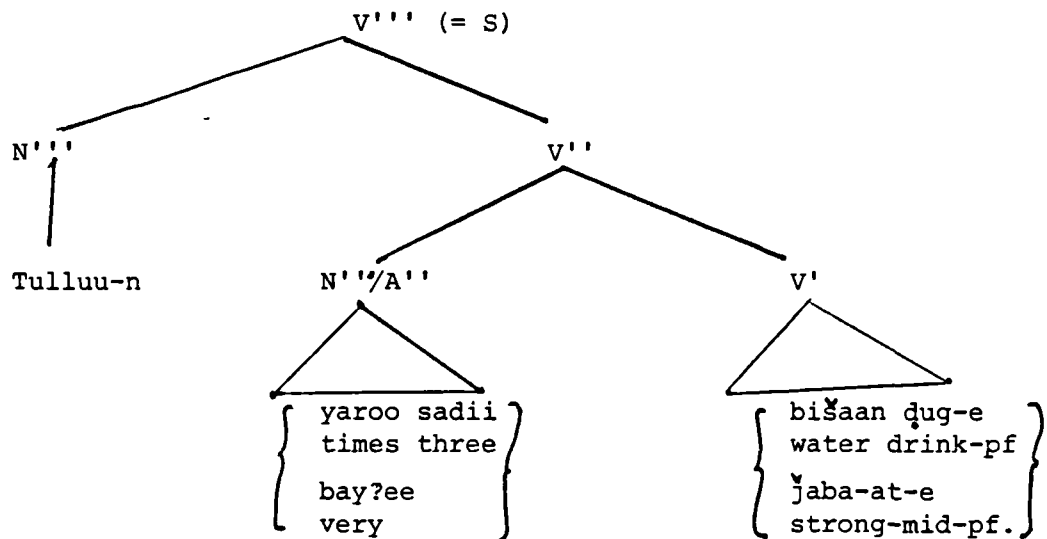
In both structures /bayʔee/ 'very', like /yaroo sadii/ 'three times' in earlier examples, forms a syntactic unit (V'') with the head in the

inner brackets. That this is so is verifiable by any constituency-testing device such as gapping or VP preposing. In (52), for example, V' alone cannot be preposed without the resulting structure being ungrammatical. This is what (53) below demonstrates.

- 53(a)\*  $\begin{array}{l} \text{[iiyyi-t-e} \\ \text{S} \\ \text{yell-f-pf.} \end{array}$   $\begin{array}{l} \text{[dubartii-n} \\ \text{S} \\ \text{woman-nom.} \end{array}$   $\begin{array}{l} \text{kun(i)} \\ \text{this-nom.} \end{array}$   $\begin{array}{l} \text{[bay?ee} \\ \text{V'} \\ \text{very} \end{array}$   $\begin{array}{l} \text{[t]]]} \\ \text{1} \end{array}$
- (b)\*  $\begin{array}{l} \text{[jaba-at-e} \\ \text{S} \\ \text{strong-mid-pf.} \end{array}$   $\begin{array}{l} \text{[Tulluu-n} \\ \text{S} \\ \text{T-nom.} \end{array}$   $\begin{array}{l} \text{[bay?ee} \\ \text{V'} \\ \text{very} \end{array}$   $\begin{array}{l} \text{[t]]]} \\ \text{1} \end{array}$

The position of the quantifier /yaroo sadii/ 'three times' or the degree word /bay?ee/ 'very' has to be in V'' if we argue with Jackendoff (1977:48) that V''' is the position where the subject branches down as a specifier<sup>12</sup> parallel to the articles in simple NPs and infinitives. The structural relationship of the quantifier in (51) or the degree word in (52) in relation to the head, V', is as shown below.

54.



As mentioned earlier, the infinitives fit this analysis. Like verbals they are left-headed; they may have quantifiers of the same type, and as already discussed, they may even select a lexical subject. Compare the following for example.

- 55(a) [Tulluu-n [yaroo lama [gara Gimbii deem-e]]]  
 V''' T-nom. V''' time two V' to G. go-pf.  
 'Tulluu went to Gimbii three times'.
- (b) [Tulluu-n [yaroo lama [gara Gimbii deem-uu-n-isa...]]]  
 N''' T-nom. N''' time two N' to G. go-to-nom-his  
 (Literally), 'Tulluu's three times going to Gimbii...'

The difference between (55 a) and (b) is a difference of category. The head /deem-/ 'go' in (a) is [+ V - N] whereas /deem-uu-n-/ in (b) is [- V + N].

### 6.2.2 Adjectivals

Adjectives do not seem to permit quantifiers. Structures with quantifier phrases are ill-formed as the following examples demonstrate.

- 56(a)\* [Tulluu-n [ [yaroo sadii [ḍeeraa]]] -ḍa]  
 S T-nom. A' N''' time three A' tall is  
 ?'Tulluu is three times tall'.
- (b)\* [Tulluu-n [ [yaroo lama [gabaabaa]]] -ḍa]  
 S T-nom. A' N''' time two A' short is  
 ?'Tulluu is twice times short'.

Such quantifying phrases may, however, occur with verbs of adjectival origin in structures of comparative clauses as in (57) below.

57. [Tulluu-rra Fayyiisaa-n [ [yaroo sadii  
 S T-from F-nom. V''' N''' time three  
 [(hin) ḍeer-at-a]]]  
 V' cm. tall-mid-impf.  
 (Literally), 'From Tulluu Fayyiisaa "talls" three times',  
 'Fayyiisaa is three times taller than Tulluu'.

Although they do not allow quantifiers, adjectives do allow degree words.

58(a) [Tulluu-n [bay?ee [ḍeeraal] -ḍal]  
 S<sub>T</sub>-nom. A'' very A' tall is  
 'Tulluu is very tall'.

(b) [nam-iḥḥ-i [bay?ee [furdaa]] -ḍal]  
 S<sub>man-sgl-nom.</sub> A'' very A' fat is  
 'The man is very fat'.

The position of the degree word may be argued to be the same as that of the quantifiers in nominals and verbals. Examples of structures containing adjectives derived from transitive verbs may give support to this, since in such structures, the degree word appears preceding the complement of the adjectival head. Consider, for example, the following:

59(a) (i) [Ḥaaltuu-n [bay?ee [sirba sirbi-tuu]] tur-t-e]  
 S<sub>Ḥ</sub>-nom. A'' very A' song singer-fem. be-fem-pf.  
 (Literally), 'Ḥaaltuu was a very song singer',  
 'Ḥaaltuu was a "nice" singer'.

(ii) ?[Ḥaaltuu-n [sirba [bay?ee sirbi-tuu]] tur-t-e]  
 S<sub>Ḥ</sub>-nom. A'' song A' very singer-fem. be-fem-pf.

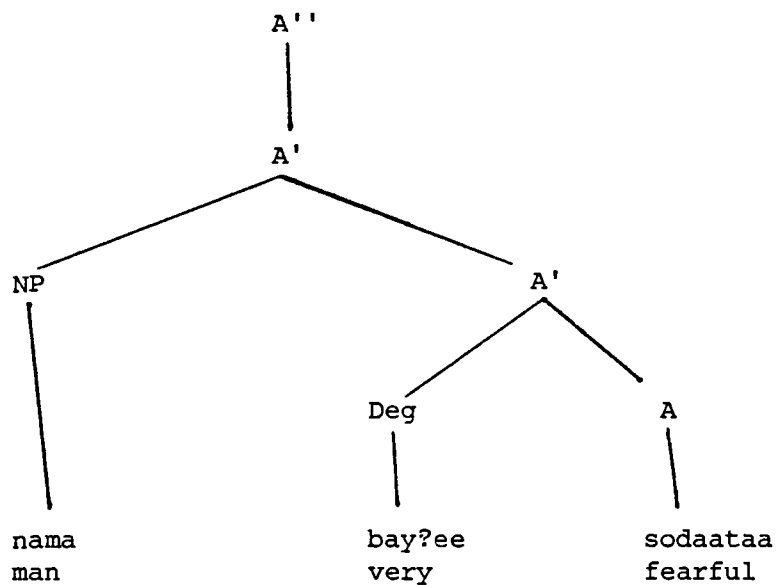
(b) (i) [Tulluu-n [bay?ee [nama sodaataa]] tur-e]  
 S<sub>T</sub>-nom. A'' very A' man fearful be-pf.  
 (Literally), 'Tulluu was very man fearful',  
 'Tulluu was too afraid of people'.

(ii) ?[Tulluu-n [nama [bay?ee sodaataa]] tur-e]  
 S<sub>T</sub>-nom. A'' man very fearful be-pf,

The (ii) structures may not be totally excluded as ungrammatical, but would be marked by a relatively longer pause following the nouns /sirba/ 'song' or /nama/ 'man'. This might suggest that the nouns have been displaced from their base positions. In fact, the occurrence of the degree word /bay?ee/ 'very' following the noun and preceding the adjective may lead to some type of ambiguity if there is not such a pause. The degree word /bay?ee/ 'very' is homophonous with the quantifier /bay?ee/

'many/much'. The syntactic difference between them is the position they assume relative to their respective heads. The degree word /bay?ee/ 'very' occurs preceding its adjectival head, whereas the quantifier /bay?ee/ 'many/much' follows its nominal head. This means that in structures such as (58 b) , the degree word may be treated as being part of either of the preceding noun, in which case it is a quantifier, or as part of the following adjective, in which case it is an intensifier element. The following trees may make this clearer.

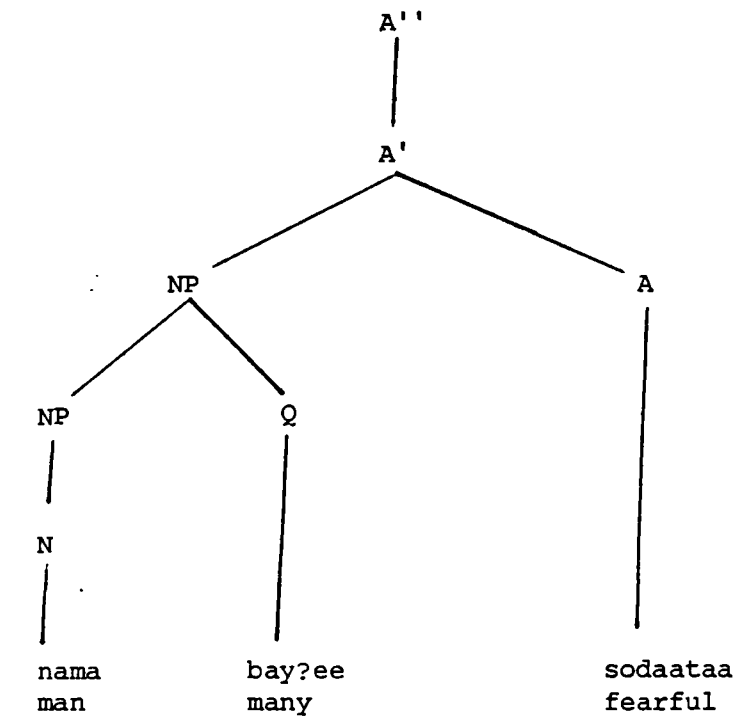
60(a)



'Very fearful of man.'



60(b)

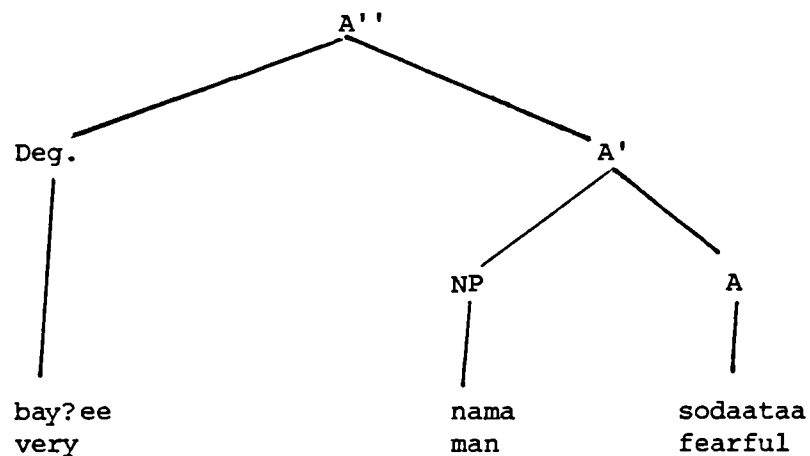


'Fearful of many men'.

It is the structure in (60 a) which we have said is (and should be) marked by a pause in order for its interpretation to be distinguished from the one associated with the corresponding structure in (b), where /bay?ee/ 'many' is part of the complement NP.

For the degree word /bay?ee/ 'very' to be unambiguously part of the adjectival head, it should branch down from the maximal node A'' as shown in (61) below.

61.



It was claimed in Chapter Four that adjectives have only two levels of projection; in other words, there is no A'''. And this really does seem to be the case, for the category is not characterized by articles which would otherwise have branched down from such a node, parallel to the situation in the other two categories we have observed.

### 6.2.3 Adpositionals

The situation with adpositions is more like that of adjectivals with respect to their potential for maximal projection. Like the latter, they are limited to a double-bar projection level. As regards their choice of specifier, they are not any different from the other categories in general. They are characterized by both the quantifying and intensifying (degree) phrases. The structures below are illustrative of this.

61(a) [ [lookoo lama [gara fuuldura]] deem-ii]  
 S Adp'' metre two Adp' towards front go-imp.  
 'Go forward two metres'.

(b) [ [tarkaanfii sadii [gara-na]] koott-u]  
 S Adp'' stride three Adp' towards me come-imp.  
 'Come towards me three strides'.

In both structures the quantifying NPs/lookoo lama/ 'two metres' or /tarkaanfii sadii/ 'three strides' is structurally related to Adp', that is, to the structure in the innermost brackets. This is easily verifiable from structures of co-ordination like the following:

62(a)' [lookoo lama gara fuulduraa] (-f)  
 Adp'' metre two towards front (and)  
 [lookoo sadii gara duubaa]  
 Adp'' metre three towards back  
 'Two metres towards the front and two metres towards the back'.

62(b)\*            [lookoo lama gara        fuuldura] (f)        [lookoo sadii]  
                   Adp'' metre    two    towards front        (and) N'''' metre three.

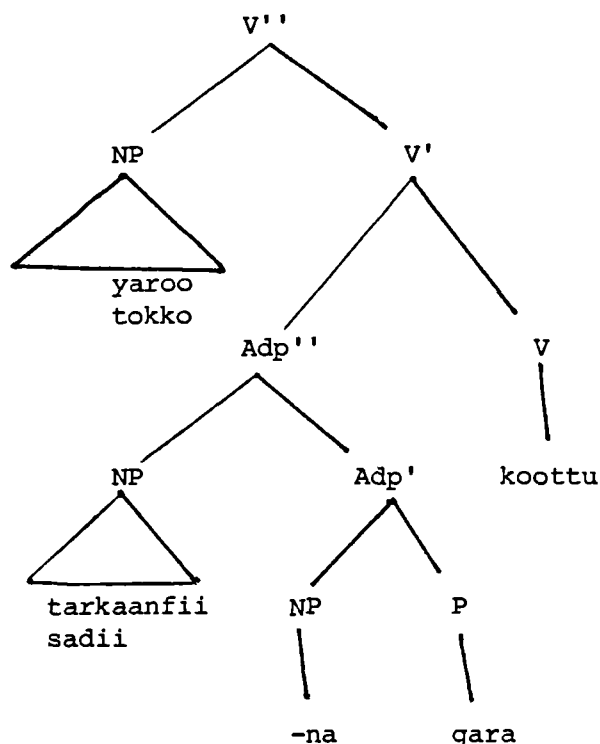
Given the fact that co-ordination is possible only between parallel constituent structures, the grammaticality of (62 a) and the ungrammaticality of the corresponding (62 b) prove that /lookoo lama/ 'two metres' and /gara fuuldura/ 'towards the front' form a single structural unit.

Structures like (62 a) show that the quantifier and the adpositional phrases are in configuration. They do not tell us whether the quantifier phrase is exclusively a specifier of the adpositional phrase Adp' or of the verb phrase V''. The fact that the latter is also characterized by the same type of specifier makes this question very important. The argument that /tarkaanfii sadii/ 'three strides' is part of Adp', would be strong only if it were possible for such structures as (61) to be grammatical with a second quantifier phrase. In other words, we need to have structures like (63) to support our claim.

63.            [ [yaroo tokko        [tarkaanfii sadii        [gara-na]]  
                   S V'' time        one    Adp'' stride        three    Adp' towards me  
                   [koott-u]]]  
                   come-imp.  
                   (Literally), 'Come three strides towards me one time (once)'.

The structural configuration of (63) is as shown in (64). (Details have been avoided.

64.



In (63) as represented in (64) /tarkaanfii sadii/ 'three strides' is part of Adp'' which is the complement of V'. The argument that this quantifier phrase might be part of V'' along with /yaroo tokko/ 'one time' does not seem to hold, because in that case, the structure should remain grammatical when gapping operates on V'. But this is not the case as we can gather from structures like (65 d) .

- 65(a) [Tulluu-n [yaroo sadii [tarkaanfii sadii gara fuuldura]  
 S<sub>T-nom.</sub> V'' time three Adp'' stride three towards front  
 deem-e]]  
 go-pf.  
 'Tulluu went three steps forward three times'.
- (b) [Fayyiisaa-n [yaroo lama [tarkaanfii sadii gara fuuldura deem-e]  
 S<sub>F-nom.</sub> V'' time two Adp'' strides three towards front go-pf.  
 'Fayyiisaa went three steps forward two times'.
- (c) [Tulluu [yaroo sadii [tarkaanfii sadii gara fuuldura  
 S<sub>T-nom.</sub> V'' time three V' strides three towards front  
 deem-e,]] [Fayyiisaa-n immo [yaroo lama [—]]  
 go-pf. S<sub>F-nom.</sub> also V'' time two V'  
 'Tulluu went three steps forward three times, and Fayyiisaa  
 two times'.

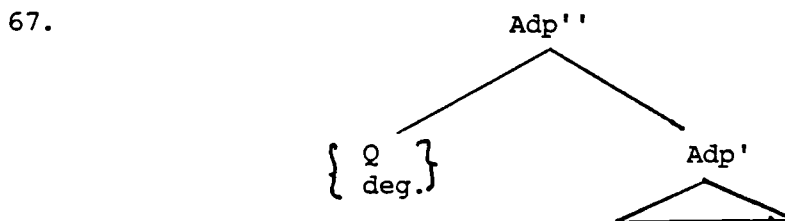
- 65(d)\* [Fayyiisaa-n immo [yaroo lama tarkaanfii sadii [—]]]  
 S<sub>F-nom.</sub> also V' 'time two strides three V'  
 'And Fayyiisaa two times three strides'.

(d) would have been grammatical if /tarkaanfii sadii/ 'three strides' were part of V''. But it is not, which means that the phrase is part of V', and within V' it is a part of the complement Adp'' as shown in the tree in (64).

Like adjectivals, adpositionals do also allow the same degree word /bay?ee/ 'very'. Consider (66) for example.

66. [Tulluu-n [bay?ee [rakkoo-rra]] ĵira]  
 S<sub>T-nom.</sub> P' 'very P' difficulty-on exist  
 (Literally), 'Tulluu is very in difficulty',  
 'Tulluu is seriously in difficulty'.

The structural relationship of both the quantifier and the intensifier in relation to the head is as shown in (67) below.



This is identical to what we saw in the other categories. The quantifier and/or intensifier branches from the X'' node.

### 6.3 Summary

From the data presented and the discussions that followed throughout this chapter, the following general statements may be made:

- a) All the major categories have some kind of elements, phrasal or lexical, which restrict them in terms of their identity, quantity and/or intensity. Nominals have articles and

quantifiers. Adjectivals have intensifiers only.

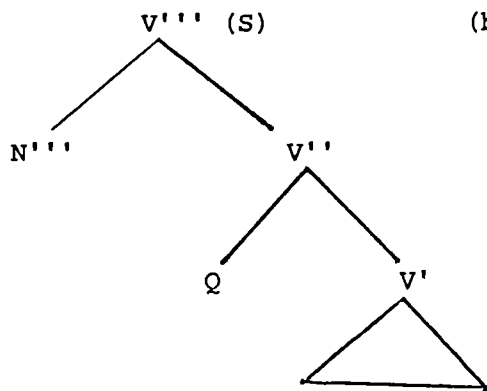
Verbals and adpositionals have both quantifiers and intensifiers.

- b) In all the categories the quantifiers or intensifiers branch down from the same node level, as predicted by the theory of X-bar syntax.
- c) Apart from simply nominals which are left-headed, all other categories are right-headed, meaning that they are preceded by their specifiers.
- d) Regarding the specifiers of simple nominals, we have argued that demonstratives, interrogatives, and indefinite pronouns may be treated as belonging to the sub-class of articles within the broader class of specifiers. The element /-ičč-/ has been treated as a quantifier which mainly shows singularity, in opposition to /-(o)ota/ which shows plurality. Its use as a determiner seems to be incidental and perhaps analogical.

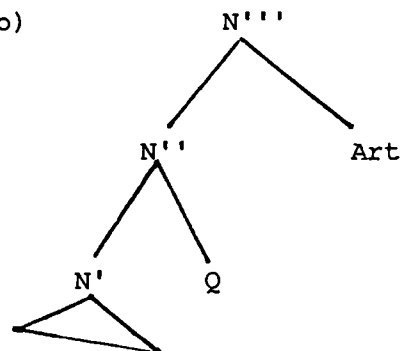
Genitive NPs of possession may be treated as specifiers. They branch from the same node that dominates articles. However, in structures of NPs with quantifiers, they must undergo a movement rule which adjoins them to the node that dominates the quantifiers. An alternative analysis which we have proposed to avoid the movement is one which treats them as complements. According to this alternative they may be base-generated in situ as the sister of N', parallel to other genitive complements.

Finally, the following phrase structure rules may be proposed for each category:

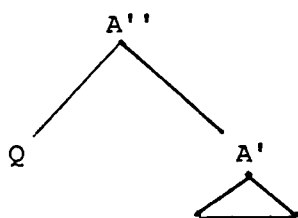
68(a)



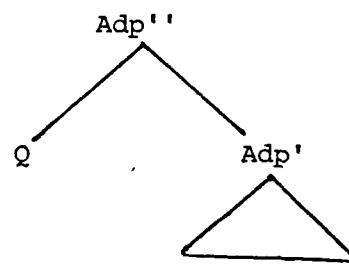
(b)



(c)



(d)



(where Q = quantifier and/or intensifier).

With regard to the position of Q, the following cross-category generalization may be made:

$$69. \quad X''' \longrightarrow Q X'$$

(where  $X \neq [\pm \frac{N}{V}]$ )

This distinction is not a substantive one. Rather it is a formal or positional one holding between the category of nouns on the one hand and all the other categories on the other. The former is left-headed. In fact, at the level of assumption the distinction may not be relevant, so that (69) may be recognized as characteristic of Oromo.

NOTES TO CHAPTER SIX

1. These include all nominals, derived or not, which have no deep subject.
2. This is in reference to their use as determiners. But since we shall provide an alternative analysis of them, their classification as articles here is tentative.
3. Heads of NPs with a genitive NP 'specifier' may not be old information. It is the head of the genitive NP which appears to be the old information. For example, one may start discourse with:
 

[hoolaa-n Tulluu] du?-e  
                   sheep-nom. of T. die-pf.  
                   'The sheep of Tulluu died'.  
   /hoolaa/ 'sheep' may not have been previously mentioned, hence it may be indefinite. It is Tulluu who is known to both participants. In other words, it is through Tulluu that /hoolaa/ 'sheep' is made definite.
4. An alternative analysis will be proposed later on.
5. According to Andrzejewski (1960) only nouns with the feature [+ HUMAN] are characterized by the singulative affix in the Boranaa dialect of Oromo spoken in Southern Ethiopia. This is not the case in Mec as every [+ COUNT] noun is characterized by it.
6. A quantified NP may not be marked for the plural.
7. Possible to mean 'even with a horse'.
8. The problem here could be seen as semantic or pragmatic. But there are no instances where a numeral subcategorizes a category as its complement.
9. Possible only in restricted contexts where the measure phrase is understood to be there underlyingly.
10. Possible only as a reduced measure phrase.
11. This is a very general statement, the complement of simple nominals may be optional.
12. According to the alternative analysis proposed in Chapter Five, such specifiers are out of the projection line of the verb. Their relation with the latter is in this case that of argument and predicate, rather than of specifier and head.



CHAPTER SEVEN

CONCLUSION

In this chapter we shall recapitulate the major points discussed throughout the preceding chapters. This may help us to put the whole study in perspective and evaluate it in the light of the claims and predictions of the theoretical framework we have adopted.

The central theme of the study is the identification of the major lexical categories that constitute the Oromo lexicon and the specification of the potential of these categories for maximal syntactic projections in terms of bar levels, following the theoretical assumptions and claims of the X-bar convention. In short, it is the identification of X and the value of n in Jackendoff's schema of  $X^n \longrightarrow \text{---} X^{\text{n-1}}$  which we have discussed in Chapter One.

The schema presupposes that Oromo belongs typologically to the class of configurational languages. Configurationality is a feature which distinguishes languages with a fairly rigid word order from those with no such order. The former are believed to be hierarchically structured, whereas the latter are 'flat'. We have argued in Chapter One that Oromo belongs to the former. The argument has been substantiated and developed further in subsequent chapters. We have observed that non-head elements, that is, complements and specifiers, are tightly bound to their heads. Hence any syntactic rule that operates on any category  $X^n$  does not leave the complement or the specifier intact so as to operate only on the head or vice-versa. Rather the rule takes the entire string as its domain of application. We have observed instantiation of this throughout Chapters Four, Five and Six.

Regarding lexical categories, we have (on purely formal grounds) recognized four major and two minor categories. These categories are:

nominals, verbals, adjectivals and adpositionals. The minor ones include specifiers and particles.

The major lexical categories have the potential to develop into maximal syntactic categories. This potential is a concomitant of their inherent property for subcategorizing certain maximal categories as their complements and certain others as their specifiers. The categorial component and the lexicon are the two domains where such potentials are expressed. We have observed this in Chapters Three, Four and Six.

As stated in Chapter One, Jackendoff (1977) claims that the maximal value of  $n$  in  $X^n$  is treble bar. In other words, all major lexical categories have the potential for a uniform three-bar projection. The types of categories they select as complements or specifiers are also believed to be similar across the categories with the implication that the rules which operate on such categories at any one level are also similar. Hence, in order to capture such cross-categorial similarities by a general rule, the use of syntactic distinctive features has been proposed in the manner discussed in Chapter Two.

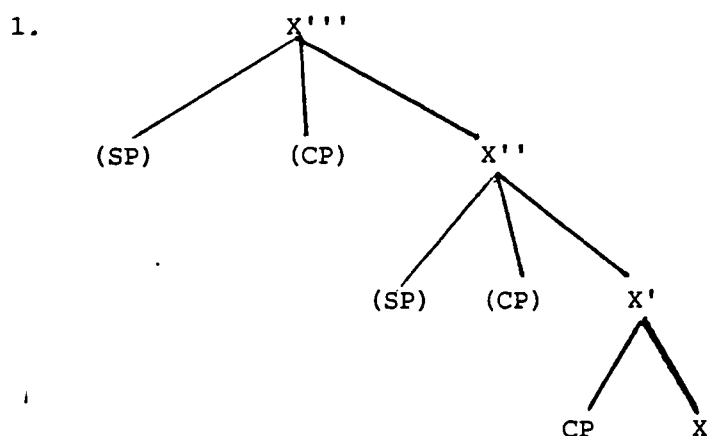
It has been one of the objectives of this study to test the validity of Jackendoff's claims with data from a language which is in no way related to the one on which the theory was originally based. We have observed throughout Chapter Four that not all the major categories have a uniform treble-bar projection. Only verbals and nominals realized this potential; the categories of adjectivals and adpositionals are one bar short. Furthermore, the complements of the categories at every level of projection are similar only if the categories are derivationally related. Hence only adjectivals or nominals which are derived from verbal sources can have complements which are similar to those of verbs. We have observed, for

example, that nouns such as /buddeena/ 'bread' optionally select genitive NPs of purpose or source at their minimal level of projections whereas at this same level, verbs such as /bit-/ 'buy' are characterized by NPs which function as patients. On the other hand, both /bit-/ 'buy' and its derivatives /bituu-/ 'buying' or /bitaa/ 'buyer' are characterized by similar complements all along their projection lines. The same may be said about adpositionals since their complements are similar to those of verbals, though their potential for projection is a bar short of that for the latter.

At the level higher than their minimal projections, all the major categories are characterized by restrictive modifiers. In the case of nominals these are: relative clauses, adjectival phrases and some genitive NPs having locative and temporal functions; in the case of verbals: all adpositional phrases and clauses of various adverbial functions; and in the case of adjectivals and adpositionals: the various degree phrases and clauses. At the maximal level, we have observed appositive relative clauses and sentence adverbials occurring as complements of nominals and verbals respectively. As Jackendoff (1977) has noted, the complements at the minimal levels are the functional arguments that the heads require to form their main (nuclear) predicate structures. Those complements at the intermediate and maximal levels of projection are restrictive and appositive modifiers respectively. They are believed to be peripheral to the main predicate structure.

Regarding specifiers, we have observed throughout Chapter Six that all the major categories have certain quantifying or intensifying phrases at their intermediate levels and that only verbals and nominals are characterized by articles and certain NPs at their maximal levels.

From the positional relationships of the head and non-head terms, it may be said that Oromo is a head-final language. Taking this into account and abstracting away from minor surface differences that some categories exhibit, the discussions on complements and specifiers may be roughly captured by the following tree structure.



where: SP = specifier (max)imal  
 CP = complement max.

Although (1) shows the general picture of the projection of the major categories, we have argued in Chapter Five that this projection should not include  $S_s$  and  $\bar{S}_s$ . This is contrary to Jackendoff (1977), who argued that  $S$  and  $\bar{S}$  could be treated as projections of verbals. Their inclusion leads to problems when considered in relation to other principles which interact with the X-bar convention itself. Such principles include those of the case and binding theories of Chomsky (1981; 1982). Both are deep-rooted in the notions of government, which in turn presupposes structural configurations of some type between head and non-head terms. The assignment of nominative case by Infl. may not be effected as required if the subject NP which receives this case is a projection of V, for according to the theory, V does not govern this NP and hence cannot assign case to it. For this reason, and following the literature, distinctions have been

made between the maximal projection of V on the one hand, and of Ss on the other. S has been considered as a projection of the category Infl. and  $\bar{S}$  as that of comp.; both Infl. and comp. constituting the head in each case.

In Chapter Five we have argued that Infl. should be treated as a complex of the features [ $\pm$ AGR] and [ $\pm$ ASP]. This consideration is a result of a background discussion on types of complement clauses and their properties with regard to the theory of case. We have argued that infinitival clauses may be [+AGR - ASP] and that whenever this is so, a lexical subject is always possible in the position, which is otherwise filled by PRO. We have also observed that in some tensed clauses Infl. may be characterized by [+ASP - AGR]. In such cases the subject can have case, but it cannot be dropped because AGR which licenses its dropping is not available in Infl.

Regarding the comp. node and its lexical realization, it has been argued that in complement clauses it is realized as /akka/ 'that' and /kan/ 'of(?)'. The latter is found mainly in relative clauses. In either case, a clause-initial base position has been preferred to both final and clause-internal positions. A clause-internal position is intuitively appealing, since in surface structures the complementizers may appear in this position.

In relation to the internal structure of both types of complement clauses, we have argued that Oromo does not have relative pronouns. The element /kan/ which has been believed to be the relative pronoun, is a complementizer. The clause satisfies the projection principle by having a (pro)nominal argument in the relativized position. This pronominal argument moves to the position of the complementizer. Whenever this takes place, the pronoun takes the case form of the head of the relative

clause. This has some impact on Chomsky's theory of chains and their properties, since the chain formed by the moved element and its trace is characterized by two cases: the case of the trace and the case the moved element takes from the head of the relative clause. Although the chain is an  $\bar{A}$ -chain, since the moved element is in comp., which is an  $\bar{A}$ -position, and that Chomsky leaves such chains aside, and concentrates only on A-chains, others have argued that  $\bar{A}$ -chains should be treated in the same way A-chains are treated as a mapping principle. (See Koopman and Sportiche 1982.)

An alternative analysis, which generates such pronominals in topic position, has been suggested. This alternative avoids the chain and with it the problems that the movement analysis has encountered. Furthermore, according to rules of movement to comp. the pronoun cannot land in this position because comp. attracts only wh-elements. The pronoun is not such an element, though the movement is like that of a wh-element. This is not surprising given the fact that Oromo does not have wh-movement in its syntax. It may be argued that the constraint that only wh-elements should land in comp. may not apply to languages like Oromo, which have no such movement per se. Such languages may use comp. as a landing site for elements which correspond to wh-elements in languages which allow wh-movement.

In predicate nominal clauses, we have noticed that Oromo has NP movement. The movement is not only adjunction to comp. or to topic position, it also includes raising to subject. This position is empty in D-structure and in S-structure this position may remain empty, since Oromo does not have non-referring (pleonastic) arguments. Equally, it may be occupied by the subject of the complement clause, as in corresponding structures in languages like English.

The problem with this movement in Oromo is that the clause from which the extraction takes place is finite, which means that the movement is not motivated by case. The chain, which is an A-chain since the landing site is in an A-position, is going to have two cases, one from the complement clause and one from the matrix clause. In languages like English, the trace of a raised NP has no case since the movement is triggered by the absence of a case-assigner in the complement clause. In Oromo the trace can receive case since there is a case-assigner. Further problems arise in relation to the binding theory. The trace is an anaphor, and as such should behave like any other anaphor. Such elements should be A-bound (argument-bound) in their governing categories. The trace here satisfies this condition since it is bound to the antecedent, but it is also free since it can get its reference from AGR in Infl. in its own clause. In this sense it behaves like a pronoun rather than an anaphor. In other words, the trace is like a pronoun and an anaphor at the same time. This is a property of PRO. This problem has been left unresolved and needs a fresh start.

APPENDIX

The following are a sample representative of the lexical categories established in Chapter Two. The [-N] categories are indicated along with their complements. The [+N] categories are not so indicated because their complements are not obligatory. It is believed that the inclusion of this appendix may provide data for anyone wanting to do further research on this language.



## APPENDIX

abaar-	[NP — ]	'curse'
abboom-	[NP — ]	'obey'
abdat-	[ $\bar{S}$ — ]	'hope'
adams-	[NP — ]	'hunt'
agarsiis-	[NP NP — ]	'show'
aĵaa?-		'stink'
aĵfees-	[NP — ]	'kill'
aman-	(NP/ $\bar{S}$ — ]	'believe'
aram-	[NP — ]	'weed'
araars-	[NP — ]	'reconcile'
arg-	[NP/ $\bar{S}$ — ]	'see'
ariifat	[PP — ]	'hurry'
aṭṭifat-		'sneeze'
bad-		'disappear'
baĵat-	[PP — ]	'flee'
baʔ-	[PP — ]	'go out'
balʔis-	[NP — ]	'widen'
bar-	[NP/ $\bar{S}$ — ]	'learn'
barbaad-	[NP/ $\bar{S}$ — ]	'want'
barsiis-	[NP NP/S — ]	'teach'
baat-	[NP — ]	'carry'
bit-	[NP — ]	'buy'
bobees-	[NP — ]	'burn'
buʔ-	[PP — ]	'descend'
bul-	[PP — ]	'spend a night'
ĉabs-	[NP — ]	'break'
ĉaal-	[NP — ]	'excel'
ĉuf-	[NP — ]	'close'
dabal-	[NP — ]	'increase'
daĉĉaas-	[NP — ]	'fold'

daddaf-	[PP — ]	'hurry'
daḡḡab-		'be tired'
damf-		'boil'
danda?-	[S̄ — ]	'be able'
dubbat-	[PP — ]	'speak'
dukkana?-		'get dark'
du?-		'die'
ḡa	[NP/AP/S̄ — ]	'be'
ḡab-	[NP — ]	'lack'
ḡaga?-	[NP/S̄ — ]	'hear'
ḡal-	[NP — ]	'give birth to'
ḡeeboḡḡ-	[NP — ]	'be thirsty'
ḡeekkam-		'be angry'
ḡi?aat-	[PP — ]	'get near'
ḡiis-	[NP — ]	'leave'
ḡoks-	[NP — ]	'hide'
ḡo?-		'burst'
ḡuf-		'come'
ḡug-	[NP — ]	'drink'
ḡukkubsat-		'get sick'
ebbis-	[NP — ]	'bless'
elm-	[NP — ]	'milk'
erg-	[(PP) NP — ]	'send'
fakkaat-	[NP/AP — ]	'resemble'
fakkaat-	[S̄ — ]	'seem'
faḡaas-	[NP — ]	'sow'
fayyiis-	(NP PP — ]	'save'
fiig-	[(PP) — ]	'run'
finḡa?-	[NP — ]	'urinate'
fiḡ-	[NP — ]	'finish'
fo?-	[NP — ]	'choose'
fudat-	[NP — ]	'take'

gaafat-	[(PP) NP — ]	'ask'
ga?-	[PP — ]	'suffice'
gal-	[PP — ]	'enter'
gammad-		'rejoice'
gargaar-	[NP — ]	'help'
god-	[NP NP — ]	'make'
gog-		'dry'
gowwaams-	[NP — ]	'fool'
gubat-	[NP — ]	'burn'
guddat-		'get big'
gunguum-		'murmur'
gurgur-	[NP — ]	'sell'
guut-	[PP NP]	'fill'
haaddat-	[NP — ]	'shave'
haf-	[ $\bar{S}$ — ]	'remain'
haam-	[NP — ]	'mow'
hammumat-		'yawn'
haasa ?-	[PP — ]	'talk'
hat-	[NP — ]	'steal'
hiḍ-	[NP — ]	'tie'
hiik-	[PP — ]	'move'
him-	[PP NP — ]	'tell'
hir-	[NP — ]	'distribute'
hirmat-	[PP NP — ]	'share'
hodḍ-	[NP — ]	'sew'
hojjet-	[NP — ]	'work'
hokkol		'limp'
hook-	[NP — ]	'scratch'
hubat-	[NP — ]	'understand'
hukkat-		'get thin'
ijaar-	[NP — ]	'build'
irraanfāt-	[NP/ $\bar{S}$ — ]	'forget'
iiy-		'cry'
iiyom-		'get poor'

jaallat-	[NP — ]	'love'
jalqab-	[NP/ $\bar{S}$ — ]	'start'
jeḍ-	[S — ]	'say'
jibb-	[NP/ $\bar{S}$ — ]	'hate'
jir-	[PP — ]	'exist'
ka?-	[(PP) — ]	'stand up'
kaa?-	[PP NP — ]	'put'
kaat-		'run'
kenn-	[PP NP — ]	'give'
kolf-	[PP — ]	'laugh'
kutat-	[NP — ]	'cut'
qab-	[NP — ]	'grasp'
qot-	[NP — ]	'plough'
quf-	[PP — ]	'fall'
qufa?-		'cough'
qunḥis	[NP — ]	'peel'
lakkaa?-	[NP — ]	'count'
lallab-	[NP — ]	'preach'
liḳeess-	[PP NP — ]	'lend'
maḥḥaa?-	[(PP) — ]	'get drunk'
miid-	[NP — ]	'hurt'
miiḥḥ-	[NP — ]	'wash'
naat-	[NP — ]	'eat'
oobaas-	[NP — ]	'water'
ool-	[PP — ]	'spend a day'
raf-	[PP — ]	'sleep'
rakkat-		'be troubled'
raas-	[NP — ]	'shake'
roob-		'rain'
rukut-	[NP — ]	'hit'

sodaat-	[NP — ]	'fear'
ta?-	[NP/AP — ]	'become'
teessis-	[NP — ]	'seat'
uffat-	[NP — ]	'dress'
utaal-	[NP — ]	'jump'
waam-	[NP — ]	'call'
waraan	[PP NP — ]	'pierce'
wayy-	[PP — ]	'be better than'
Yaad-	[PP — ]	'think'
yadaat-	[NP — ]	'remember'

N

abba	'father'
adaadaa	'aunt'
adeemsa	'hunter'
aduu	'sun'
adurree	'cat'
afaan	'language'
aaga	'fortune'
agabuu	'hunger'
(a)ala(a)	'outside'
albee	'knife'
akaakayyuu	'grandfather'
akkoo	'grandmother'
amartii	'ring'
andaqo	'hen'
ankaakuu	'egg'
aannan	'milk'
arba	'elephant'
arakee	'alcoholic drink'
areeda	'beard'

arraba	'tongue'
aseeta	'ripe corn'
ayyaana	'grace'
baʔa	'load'
balbala	'door'
bara	'year'
beekuma	'wisdom'
bineensa	'animal'
birrii	'Ethiopian currency'
biṣaan	'water'
bitaa	'buyer'
biyyaa	'country'
bofa	'snake'
booru	'muddy'
bor	'tomorrow'
bokkaa	'rain'
buddeena	'bread'
buna	'coffee'
daččaa	'valley'
daadii	'mead'
dafinoo	'Monday'
daggala	'forest'
damma	'honey'
dubartii	'woman'
durba	'girl'
ḍaḍaa	'butter'
ḍagaa	'stone'
ḍeena	'food'
ḍuguma	'truth'
ḍukkuba	'illness'
farda	'horse'
farsoo	'beer'
fayyiisaa	'saviour'
foon	'meat'

ganna	'winter'
ganda	'village'
gaangee	'mule'
gaara	'mountain'
gara	'stomach'
garbuu	'barley'
gatii	'price'
gurra	'ear'
gurbaa	'boy'
guyyaa	'day'
haaduu	'knife'
haada	'mother'
haafa	'dirt'
halkan	'night'
(h) amma	'now'
har?a	'today'
harree	'donkey'
harka	'hand'
hojii	'work'
hoolaa	'sheep'
horii	'wealth'
humna	'power'
ibidda	'fire'
iĵa	'eye'
iĵoolee	'children'
ilkaan	'tooth'
intala	'girl'
irbaata	'supper'
ĵaldeessa	'monkey'
ĵara	'people'
karaa	'road'
ḵalaadii	'measure of land'

ḵamadii	'wheat'
ḵeereensi	'leopard'
ḵilleensa	'wind'
ḵonna	'farm'
ḵoraan	'firewood'
ḵuba	'finger'
ḵurṭumii	'fish'
lafa	'land'
laga	'river'
laagaa	'throat'
maḵaa	'name'
mana	'house'
marga	'grass'
miillaa	'leg'
muḵaa	'child'
muka	'tree'
naḵeen	'woman'
nagaa	'peace'
nama	'man'
naata	'food'
niitii	'wife'
obboo	'mister'
obboleessa	'brother'
oduu	'news'
rifeensa	'hair'
sagalee	'voice'
sangaa	'ox'
saʔa	'cow'
saree	'dog'



siibiila	'steel'
sirba	'song'
siree	'bed'
soba	'lie'
warakata	'paper'
warkii	'gold'
wayaa/wayyaa	'clothes'
yeroo	'time'
<u>A</u>	
aadii	'white'
afčaalaa	'clever'
arĵaa	'generous'
baʔeessa	'fine'
balʔaa	'wide'
bareedaa	'handsome'
bayʔee	'much'
čaalaa	cunning
čimaa	'strong'
dalačča	'grey'
diimaa	'red'
deeraa	'tall'
fagoo	'far'
gababaa	'short'
gaarii	'good'
gurraačča	'black'
guddaa	'big'

hamaa		'evil'
happii		'thin'
haraa		'new'
iiyessa		'poor'
jabaa		'strong'
naafa		'lame'
sooressa		'rich'
taliila		'clear'
ṭikṭoo		'little'
ṭinnoo		'small'

Adpositionals

akka	[ — NP/S]	'as'
booddee	[NP — ]	'after'
duuba	[NP — ]	'behind'
duura	[NP — ]	'before'
erga	[ — NP/ $\bar{S}$ ]	'after'
-f	[NP — ]	'for'
gara	[ — NP]	'to'
gidduu	[NP — ]	'between'
gubba	[NP — ]	'on'
(h) amma	[ — $\bar{S}$ /NP]	'until'

irra	[NP — ]	'from'
-itt	[NP — ]	'from'
-itii	[NP — ]	'towards'
Ƴala	[NP — ]	'under'
malee	[NP — ]	'without'
-n	[NP — ]	'with'
otuu	[ — ḡ]	'while'
waƳƳin	[NP — ]	'with'
yommuu/yommu	[ — ḡ]	'when'

Pronominals

<u>nom.</u>	<u>acc.</u>	
ani	(a)na	I
ati	si	you
inni	isa	he
iseen	iše	she
nuy	nu	we
isiin	isiin	you
isaan	isan(i)	'they'
wan/tokoo		'anyone'
hundaa		'all'
eeññu		'who'
maali	mal	'what'



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