Word Formation in Oromo

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WORD FORMATION IN OROMO

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ABSTRACT

Word formation is a process of creating new words from existing ones. Derivation and compounding are the most common processes of word formation.

In this study, an attempt is made to describe such word formation processes in Oromo. The main body of the paper has two parts. In the first part derviational processes are described. It is shown that different lexical categories are derived by adding various affixes to bases belonging to different lexical categories; and that the addition of the affixes entails different properties of phonology, morphology, syntax and semantics.

In the second part, the process of compounding is described. It is shown that different lexical categories are formed by combining two words or stems; and that such a process also entails different phonological, morphological, syntactic and semantic characteristics.

Furthermore, the gaps to be found in the combination of different lexical categories in word formation of the language are explained.

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LIST OF ABBREVIATIONS

WFR	=	Word formation rule	P	=	Adpositional
N	=	Noun	Num	=	Numeral
abs	=	abstract	Son	=	Sonorant
af	=	affix	ø	=	Zero morpheme.
v	=	verb			
Res	=	result			
Ger	=	gerundive			
Man	=	Manner			
Inst	=	Instrumental			
Ag	=	agentive			
c	=	consonant			
v	=	vowel			
Masc	=	masculine			
fem	=	feminine			
sg.	=	singular			
pl	=	plural			
3ms	=	3rd person masculine singular			
3fs	=	3rd person feminine singular			
nom	=	nominative			
caus	=	causative			
Do	=	Direct Object			
IO	=	Indirect Object			
NP	=	Noun Phrase			
Stat.	=	Stative			
cf	=	compare			
a - b	=	auto - benefactive			
pass	=	passive			
trans	=	transitive			
intrans	=	intransitive			
A	=	Adjective			

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1. Introduction

1.1 The Oromo Language

Oromo is one of the major languages of Ethiopia which belongs to the Lowland East Cushitic in the Cushitic sub-family. It is spoken over a vast area of the country and in Kenya, with a variety of dialects.

1.2 Objective and Significance of the Study.

This study is an attempt made to describe the word formation processes in Oromo. It tries to show how words are formed by the processes of derivation and compounding.

There are some attempts at present by the Ministry of Education to use this language as a medium of instruction in the elementary schools and also to teach it as a subject. This study may have some contribution to such attempts.

Furthermore, the study of word formation or morphology in general is the youngest branch of generative linguistics. The morphological descriptions of different languages is essential to the development of the field. In addition, the description may contribute to the study of other Cushitic languages.

1.3 Review of the Literature

As compared to other vernaculars in the country, a lot has been done on Oromo. In this section, I shall present only those which are related to word formations.

1.4 The Present Study

As could be observed from the survey, none of the works mentioned above gives a detailed description of the word formation processes in the language. Each has different aims and scopes and has hence touched upon the morphology only in passing. The present study tries to describe the word formation processes as exhaustively as possible. Furthermore, the phonological, morphological, syntactic and semantic characteristics resulting from the processes will be discussed because, as Oehrle (1981:202) says, "It is standard in grammatical analysis to assume that lexical elements are endowed with syntactic, phonological, and semantic properties of some kind".[1]

The scope of the present study is limited to the Mecha dialect of Oromo, the variety spoken by the researcher. The description is based on my idiolect and data collected from Wellega.

1.5 The Theoretical Framework

The study of word formation has come to the fore as an independent component of the grammar with Chomsky's (1970) "Remarks on Nominalization" where it was pointed out that a separate component was needed for the study of x^0 level items. This marked the beginning of the lexicalist approach to the study of derived forms.

Within this framework two main approaches known as the strong and the weak lexicalist approaches have developed with regard to inflectional morphology. For the Strong Lexicalists inflection is studied in the lexican whereas for the weak lexicalists it is treated in the syntax (Scalise, 1984: 101). Some strong lexicalists

believe that both derivation and inflection are the same processes while others argue that they are different. Furthermore, some weak lexicalists assume that inflectional rules are syntactic processes while others believe that they are phonological (Scalise, 1984: 101).

As stated earlier the present study aims at describing how new lexical items are formed by the processes of derivation and compounding. The process of inflections is avoided for the descriptive purposes; and for the formulation of rules the framework of Selkirk (1982) is followed.

This framework assumes that native speakers of a language have intuitions about the internal structure of words in their language. Such intuitions are said to be captured by the word structure rules of the language which are known as context-free rewriting rules. They are more or less similar to syntactic phrase structure rules. They differ from the latter in the category types involved and also in the way they combine categories. Moreover, unlike phrase or sentence structure rules which operate in the syntax word structure rules operate in the lexicon.

Word structure rules constitute one sub-component of the lexicon. The other subcomponents are the dictionary consisting of freely occurring words; the extended dictionary which includes the list of affixes and other bound forms; and the word structure rules.

Some other notions of the $\bar{X}$ - theory of syntax used in this model include the specification of the type and level of categories involved in word formation processes and in feature specification

(syntactic or morphological). A category level shows whether an item is a word (X^0), stem (X^{n-1}), or root (X^{n-2}), etc. and the category symbols show whether the item is A(djectives), N(ouns), V(erbs), etc.

The relation between mother and daughter nodes in word structures are constrained by the following universal rewrite rule presented in Selkirk (1982:64):

(1) $X^n \longrightarrow \varphi\ Y^m\ \psi$

where $0 \geq n \geq m$

The rule shows that, unlike in syntax, a category may not be formed from constituents one of which is higher in the $\bar{X}$- hierarchy than the mother node.

The relations between mother and daughter nodes are governed by the notion of head. Every complex word has a head which bears the features of the mother node. The mother node inherits the features by a convention known as Feature percolation stated in (2) below.

(2) Percolation

If a constitutent α is the head of a constituent β, α and β are associated with an identical set of features (syntactic and diacritic) (Selkirk, 1982:21).

The fact that lexical formatives are headed is shown in the manner in (3).

(3) $X^n \longrightarrow \varphi\ x^m\ \psi$

where X is a variable standing for a complex of categorical features, both syntactic and diacritic.

This, in combination with the rule given in (1) above, can be represented as in (4) below for the generation of words in a language.

(4) $X^n \longrightarrow \varphi\ X^m\ Y^p\ \psi$

$X^n \longrightarrow \varphi\ Y^p\ X^m\ \psi$

where $0 \geq n \geq m, p$

It is stated that such a formulation underdetermines the morphology of a language unless particular statements are made for specific categories. Selkirk (1982:9) says, "... any given language has a (particular) grammar of word structure ..., one which nonetheless conforms to certain quite general principles governing possible word structures in the language". It is this last point which the present study attempts to do; i.e. the word structure rules by which the formation of Oromo words are governed will be presented.

2. DERIVATION

Derivation is one of the morphological processes by which new words are formed from other words or stems. Although, in most cases, words are derived by an addition of overt affixes the process may involve zero affixation, also known as zero derivation or conversion (Jensen, 1990:5).

Oromo is derivationally a rich language. Baye (1986:120) says that "To the exclusion of adpositionals all the other major categories have derived forms in addition to their simple forms". Mahammed Ali (1989:166) also states that derivational processes are productive in the language. In this chapter, I shall describe such processes.

2.1 Nominalization

Nominalization is a process of forming nominals from different categories. In Oromo, there is a large stock of nominals derived from adjectival, verbal and nominal bases (Gragg, 1976:181). The formatives can be classified into types on the basis of their semantic characteristics following Comrie et al (1985:349) who says "the resulting nouns may be the name of the activity or state designated by the verb or adjective, or may represent one of their arguments". Such semantic characteristics will be used to classify derived nominals.

2.1.1 The Structure of Derived Nominals

In this subsection, I shall describe the different kinds of derived nominals along with their word formation rules (WFR's).

2.1.1.1 Abstract Nominals

Abstract nominals are derived form adjectival and nominal bases by the addition of different suffixes as shown in the following table.

(1)

Base		Affix	Derived nominal	
gaarii	'fine'	-ummaa	gaar-ummaa	'fineness'
gamna	'wise'	-uma	gamn-uma	'wisdom'
diimaa	'red'	-ina	diim-ina	'redness'
adii	'white'	-eeňňa	add-eeňňa	'whiteness'
durba	'girl'	-ummaa	durb-ummaa	'girlhood'
miččuu	'friend'	-ummaa	mičč-ummaa	'friendship'

The rule deriving such nominals may be represented as in (2).

(2) $N_{[-\text{+abs}]} \longrightarrow \left\{ \begin{matrix} N \\ A \end{matrix} \right\} + N^{af}_{[-\text{+abs}]}$

The rule shows that abstract nominals may be derived from non-abstract nominals or adjectivals with an affix having the feature [-+abs]. Since the base categories share the syntactic distinctive feature, [-+N], the rule in (2) may be reduced to (3).

(3) $N_{[-\text{+abs}]} \longrightarrow X_{[\begin{matrix} +N \\ -abs \end{matrix}]} + N^{af}_{[-\text{+abs}]}$

Such a formulation supports Sealiede's (1984: 13) argument that "WFR's could be allowed to operate not on syntactic categories (N, V, etc.) but rather on syntactic category features([-+N, +V], [-+N, -V], etc.)"[2]

Owens (1985a: 249) says that /-ina/ is added to some such derived forms for the purpose of emphasis. He gives such examples as /gaar-om-ina/ 'niceness', /bal'-in-ina/ 'blindness', etc. But such forms are unacceptable to me as a native speaker of the language. It may be due to the fact that the suffix /-ina/ is

added only to adjectival bases and not to verbals or nominals. The stem /gaar-om-/ is a verbal stem derived from gaarii 'nice' by the addition of the verbal suffix /-om-/ as we shall see later. /bal'-ina/ is a nominal derived with the /-ina/ from an adjective.

Furthermore, previous studies such as Kebbede (1981), Gragg (1976), Owens (1985a) show that there is also the suffix /-oma/. But, this does not seem to be true because /-om-/ is a verbalizing and not a nominalizing suffix. To it is added /-a/ to derive result nominals as will be shown later.

The distribution of such suffixes is difficult to predict with precision. The suffixes /-ummaa/ and/-uma/ are formally similar but only /-ummaa/ occurs with nominal bases. In some adjectival bases they complement each other while in others they substitute for one another. The following are examples.

(4) With nominals

muC' -ummaa/'uma	'childness'
dubart-ummaa/'uma	'womanhood'
garb-ummaa/'uma	'slavery'

(5) With adjectivals

gamn-ummaa/uma	'wisdom'
goww-ummaa/uma	'foolness'
gaar-ummaa/'uma	'niceness'
dab-'ummaa/uma	'cowardice'

The suffixes /-ina/ and /-eenna/ which appear only with adjectival bases are also physically similar. But their distribution is unpredictable since they are in some cases free variants and in others in complementary distribution as shown in (6).

(8) $N \xrightarrow{[-\text{process}]} V + N^{af}_{[-\text{process}]}$

To predict the distribution of such suffixes is not again simple. The alternation between /-aa/ and /-a/ may be accounted for in terms of syllable structures in that /-aa/ is found when the vowel of the base is short[3] and /-a/ otherwise. The free variation between /-$\overset{VV}{C}$a/ and /-$\overset{VV}{C}$oo/ is observed only with a few bases.[4]

2.1.1.3 Result nominals

Some of the suffixes in (2.1.1.2) such as /-umsa/, /-sa/, /-(a)a/ and /-aatii/ are also used in the formation of result nominals from verbal roots. These may be homophones. In addition to these are others like /-tee/, /-ii/, /-$\overset{VV}{C}$uu/, /-oo/ and /-suu/ which are used to derive result nominals.

(9)

Base	Affix	Derived nominal
beek- 'know'	-umsa	beek-umsa 'knowledge
ʔabaar- 'curse'	-sa	ʔabaar-sa 'cursing'
kenn- 'give'	-aa	kenn-aa 'gift'
Dug- 'drink'	-aatii	Dug-aatii 'drink(n)'
mur- 'cut'	-tee	mur-tee 'decision
daDDab- 'exhaust'	-ii	daDDabb-ii 'exhaustion'
gammad- 'be happy'	-$\overset{VV}{C}$uu	gammad-$\overset{VV}{C}$uu 'happiness'
ʔarrabs- 'insult'	-oo	ʔarrabs-oo 'insult(n)'
dallan- 'be sad'	-suu	dallan-suu 'sadness'

The following WFR captures the formation of such forms.

(10) N ---------> V + N^{af}

[+Res] [+Res]

2.1.1.4 Gerundive nominals

Gerundives are derived from verbal roots by the addition of /-uu/ as in the following examples.[5]

(11)

Base	Affix	Derived Nominal
bit- 'buy'	-uu	bit-uu 'buying/to buy'
deem- 'go'	-uu	deem-uu 'going/to go'
ňaat- 'eat'	-uu	ňaat-čuu 'eating/to eat'
ʔuffat- 'wear'	-uu	ʔuffat-čuu 'wearing/to wear'

The derivation can be represented as in (12).

(12) N ---------> V + N^{af}

[+Ger] [+Ger]

2.1.1.5 Manner nominals

These are nominals which refer to the means or ways of doing something (Comrie et al, 1985: 354). They are derived from verbal roots with the suffixes /-ii/, /-umsa/ and /-aatii/[6] as shown in (13).

(13)

Base		Affix	Derived nominal	
ʔijaajj-	'stand'	-ii	ʔijaajj-ii	'manner of standing'
taaʔ-	'sit'	-umsa	taaʔ-umsa	'manner of sitting'
Dug-	'drink'	-aatii	Dug-aatii	'manner of drinking'

The rule is as follows.

(14) $N \dashrightarrow V + N^{af}$

$[^{-}_{+}man]$ $[^{-}_{+}man]$

2.1.1.6 Instrumental nominals

These are nominals formed with /-ata/ and /-tuu/. They include the following.

(15)

Base		Affix	Derived nominal	
har-	'sweep'	-ata	har-ata	'broom'
hiD-	'tie'	-ata	hiD-ata	'armament'
hoD-	'suck'	-tuu	hoD-tuu	'milk-feeder'
haam-	'harvest'	-tuu	haam-tuu	'harvesting machine'

The rule for the derivation of such nominals is as follows.

(16) $N \dashrightarrow V + N^{af}$

$[^{-}_{+}inst]$ $[^{-}_{+}inst]$

2.1.1.7 Agentive nominals

Agentive nominals are derived from verbs of action and have a meaning like 'one who does the action of the verb' (Comrie et al, 1985:351). In Oromo, such nominals are derived with /-aa/ and /-tuu/. The following are examples.

(17)

ʔajjees-	'kill'	-aa	ʔajjees-aa	'killer'
barsiis-	'teach'	-aa	barsiis-aa	'teacher'
ʔeeg-	'keep'	-tuu	ʔeeg-duu	'keeper'
ǹaat-	'eat'	-tuu	ǹaat-tuu	'eater'

The rule may be formulated as follows.

(18) $N \dashrightarrow V + N^{af}$

$[+Ag]$ $[+Ag]$

The suffixes may vary freely. However, /-tuu/ may also show the feminine exclusively.

(19) barreess-aa/-tuu 'writer (masc/fem)'
ʔeeg-aa/-duu 'keeper (masc/fem)'
duul-aa/-tuu 'campaigner (mase/fem)'

But with some bases only /-tuu/ is used as can be illustrated below.

(20) hat-tuu/*aa 'thief'
tum-tuu/*aa 'blacksmith'
duug-duu/*aa 'scraper'

The fact that only /-tuu/ is used in such cases may be accounted for in terms of pragmatics. Since the speech community shows contempt to such activities, the nominals which designate them have the feminine or diminutive form[7]. This claim gains support from the fact that such forms are possible with /-aa/ but are non-existent.

The problem with such affixes is how to treat them; that is, whether they are derivational or inflectional. Like derivational affixes they are used to derive nominals from verbal roots, but they also show gender distinctions like inflectional affixes. The problem is not unique to Oromo as it is also found in other Cushitic languages like Iraqw, a Southern Cushitic language (Cf. Nous, 1992:74). In such languages it is stated that different suffixes are used for different genders and numbers: "-usmo for male agents, -uso'o for the female agent, and -use for the plural of agents" (Nous, 1992:74).

2.1.2 Some Characteristics of Nominalization

In this section, I shall briefly present some of the phonological, morphological, syntactic and semantic properties of derived nominals.

2.1.2.1 Phonology

The most obvious change common to all of the processes is the deletion of root final vowel before a suffix. Because of this Owens (1985a: 240) concludes that Oromo roots are always -c final; and because of this he wrongly treats forms like/deem-/ 'go', /lol-/ 'fight', etc. as classless roots. Moreover, he considers some morphemes as classless. But the derivational morphemes carry some class features as could be observed from the presentations in the preceding section. Forms like /deem-/ 'go', /lol-/ 'fight', etc. are

also not classless since they belong to the class of verbals. They take inflections for tense, aspect and person.

(21) /0l/-e 'fought (he)

fight-pst

/0l/-t-e 'fought(she)'

fight-fem-pst

It is true that verbal roots are -c final but the problem is with nominals and adjectivals ending in vowels. One may argue that the v vowels are class formatives. Another approach, and a better one, is to treat them as part of the root and that they drop when an affix is attached. Some evidence in support of this is the loss of word-final vowels before vowel- initial inflectional affixes.

(22) nama + ota ⟹ nam-oota 'men

man pl

nama + -ummaa ⟹ nam-ummaa 'manhood'

'man' + 'ness'

This may lead to a possible conclusion that Oromo verbal roots are -C final, but nominals and adjectivals may be -c or -V final.

Another phonological process in nominalization is the lengthening of root vowels with bases ending in /-ʔ/ or /-D/. This is especially true with agentive, result or instrumental nominals where the suffix /-tuu/ is attached to verbal roots ending in either of these sounds.

(23) [[duʔ-'die']$_V$ + -tuu]$_N$ ⟹ duu-tuu 'deceased'

[[10ʔ- 'invade']$_V$ +-tuu]$_N$ ⟹ 100-tuu 'intruder'

[[hoD- 'suck']$_V$ + -tuu]$_N$ ⟹ hoo-tuu 'milk feeder'

2.1.2.2. Morphology

This relates to the question of whether the bases of nominalization are roots, stems, or words. As shown in the examples in (1) above the bases of abstract nominals are words. But in the case of the others the suffixes are attached to either roots or stems[9]. Thus, one can say that nominalization takes roots, stems or words as its domain. But the rules we have formulated in the preceeding section do not show such differences. In order to capture this one may formulate the rules as follows.

(24) $X \longrightarrow X^s, X^r$

Word $\longrightarrow$ Stem, Root

This rule states that the category level 'word' may include the levels 'stem' and 'root' as pointed out in Selkirk (1982:95) who says, "Necessarily, the grammar includes a rule (Schema) which in effect "connects" the levels".

Another point with regard to the morphology of nominalization is the unpredictable distribution of the affixes. As one could observe in the preceding section some nominals are formed with different affixes, the distribution of which is difficult to account. One could say that this is indeed the characteristics of derivational morphology as pointed out in Allerton (1979:225-6) who says, "As a result of their semantic diffuseness, derivational affixes... come into competition with each other, and it is impossible to give watertight rules for the selection of a particular affix".

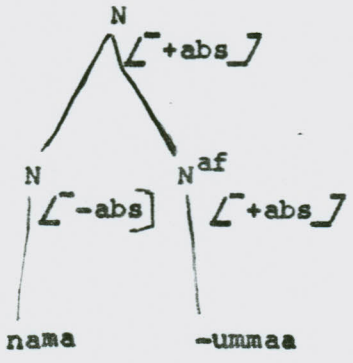
2.1.2.3 Syntax

Syntactically, the effect of nominlization is in changing the category or the subcategory of a form. In the case of abstract nominals, for example, the change is one of subcategory as [-abstract] noun is changed into a [+abstract] noun. In all other cases, the process is category-changing, that is, the form class of the base changes from verbal to nominal.

Regarding the subcategorizations of bases and derived nominals in this language, Baye (1986:123) states that those "with the ending /-aa/, /-tuu/ seem to be characterized by the same sub-categorization frames that their corresponding base forms are associated with". That means a transitive verb does not lose its transitivity as a result of the nominli.zation process.

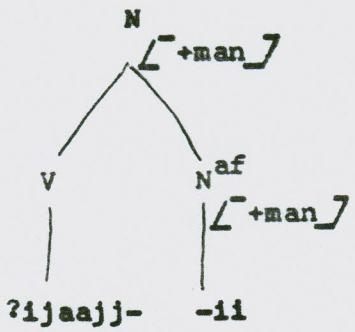
The nominalizing suffixes can be considered as the syntactic heads of the derived nominals since it is their feature which determines the category of the derived form. For example, if we observe the abstract nominals, the feature [+abs] results from the suffix as shown in the following tree structure.

(25)



Other syntactic features also percolate to the mother node from the suffix.

(26)



And since the affixes from which the features percolate are the right-hand constituents the forms can be treated as right-headed. Following this a general rule may be formulated for all derived nominals.

(27) $N \longrightarrow \left\{ \begin{matrix} N \\ A \\ V \end{matrix} \right\} \quad N^{af}$

2.1.2.4 Semantics

It is difficult to give a general semantic characterization for the nominalization processes since there is a lot of variation. This may be due to the idiosyncratic nature of words as against to syntactic phrases which are predic table. With regard to this Selkirk (1982:62) says, "the appropriate semantic functions can simply be listed as part of the affix's lexical entry".

2.2 Verbalization

In this section, we shall present derived verbs which include causatives, Statives, reflexives, and passives.

2.2.1 Causatives

Causatives are said to be derived from verbal roots by the addition of the suffix /-(si)is-/ as can be illustrated below (Cf. Gragg, 1976; Abera, 1982; Owens, 1985b; Baye, 1986).

(28)

Base	Affix	Causativized verb
mur- 'cut'	-siis-	mur-siis- 'make cut'
raf- 'sleep'	-is-	raff-is- 'make sleep'
gub- 'burn'	-siis-	gub-siis- 'make burn'

But it seems that there are also other causatives derived from nominals and adjectivals.

(29)

Nominal base	Affix	Causative verb
malaa 'pus'	-si	malaa-s- 'discharge pus'
?iita 'swelling'	-ess-	?iit-ess- 'cause to swell'

(30)

Adjectival base	Affix	Causative verb
guddaa 'big'	-is-	gudd-is- 'make big'
furdaa 'fat'	-is-	furd-is- 'make fat'
Deeraa 'tall'	-ess-	Deer-ess- 'make tall'

One may argue here that the cuasatives in (29) and (30) may be derived from verbal stems which are themselves derivatives of nominals and adjectivals as in (31) below:

(31) $\text{malaa}\rfloor_N + \text{-a?}\rfloor_V + \text{-s}\rfloor_V \Longrightarrow \lfloor\text{malaa-s-}\rfloor$

$\text{adii}\rfloor_A + \text{-at-}\rfloor_V + \text{-s}\rfloor_V \Longrightarrow \lfloor\text{add-ess-}\rfloor$

Such processes are possible with the /-a?/ and /-at/ being lost when the causative suffix is attached. Some supporting evidence comes from the phonology of the language. In Oromo, when a form

that ends in the glottal stop /-ʔ/ is followed by a suffix the glottal stop is dropped and a compensatory lengthening of the vowel in the stem takes place as shown in (32), for example.

(32) du?- 'die' + -tuu ⟹ duutuu 'deceased'. Thus, in (31) above, the causative suffix may be attached to the verbal stem /mala?-/ and the glottal stop is dropped and the vowel in the stem is lengthened to give /malaa-s-/. From this may follow a possible conclusion that causative verbs are formed only from verbal bases. However, the truncation of /-at/- does not seem to hold true in all cases as there are at least two pieces of counterevidence. First, truncation does not take place in the derivation of causatives from verbal roots ending in the similar segments as in (33) below.

(33) ňaat- 'eat' + -sis- ⟹ ňaat-čis- 'cause to eat'

t'abat-'play' + -sis ⟹ t'abat-čis- 'cause to play'

If there was truncation taking place at all, we would expect it in these forms as well. Secondly, with some verbs derived from nominals by the addition of /-at-/ the causative suffix is attached without causing truncation.

(34) sodaa 'fear'$_{N}$ + -at-$_{V}$ +-sis- ⟹ sodaat-čis- 'frighten'

dubbii 'talk'$_{N}$ + -at-$_{V}$ +-sis ⟹ dubbat-čis- 'cause to talk'

gaffii 'question'$_{N}$ + -at-$_{V}$ +-sis- ⟹ gaaf-at-čis- 'cause to ask'

The fact that there is no truncation in such forms suggests that there is no truncation rule in others as well and that causatives may also be derived from adjectivals. Thus, the rule in (35) may be formulated.

(35) $V_{[+caus]} \longrightarrow \left\{ \begin{matrix} V \\ A \end{matrix} \right\} + V^{af}_{[+caus]}$

The categories here may be represented in terms of features [ ] as in (36).

(36) $V_{[+caus]} \longrightarrow X_{[+v]} + V^{af}_{[+caus]}$

According to Maria - Rosa (1987) the causative morpheme is /-s-/ and the /-iii)/ is an epenthetic vowel. The alternation between long and short /-i-/ can be explained in terms of the vowel lengthening rule suggested before. But Maria-Rosa (1987:152) also argues that causatives are formed from verbal stems and not adjectivals as assumed here. But I would still argue that the causative suffix is /-s-/ and that the bases are adjectives and not verbs. The change of vowel in some cases from /e(e)/ to /i(i)/ is due to harmony. When the vowel of the base is non-high the epenthetic vowel is non-high as shown in the following examples[10].

(37) guddaa + -s- ⟹ gudd-is- 'make big'
furdaa + -s- ⟹ furd-is- 'make fat'
Deeraa + -s- ⟹ Deer-es- 'make tall'
jabaa + -s- ⟹ jab-ees- 'make strong'

The syntactic effect of the causative morpheme is that it changes intransitives into transitives and transitives into causatives. Baye (1986:128) says, "Taking the transitivized stems as base forms, the corresponding causative forms may be derived by the same rule proposed for causativizing basic transitive verbs". The process also increases the number of complements of a verb. Again, Baye (1986:129) says that "the number of complements that a verb requires progressively increases as it changes from intransitive to transitive and then to causative". His examples are:

(38) a. bi$\overset{v}{s}$aan-ni danf-e 'The water boiled'
water -nom boil-pst

b. tulluu-n bi$\overset{v}{s}$aan danf-is-e
Tullu-nom water boil-caus-pst.
'Tullu boiled the water'

c. Tulluu-n fayisaa bi$\overset{v}{s}$aan danf-is-iise
Tullu-nom Fayisa w water boil-caus-cous-pass
'Tullu caused Fayisa to boil the water'.

This is consistent with Owens (1985b:26-8) who also says that the number of /-s-/ suffixes coincides with the number of absolutive complements. However, he is wrong in saying that "if the causative suffix has three absolutive NP's within its scope it has the form of a single - is". But the examples below which he cites contain three -s's.

(39) inn-i isi alii mana garsiisise
'He made her show Ali the house'

Another effect of causativization is in the grammatical function of the arguments of a causative verb. If we observe the examples in (38) above /bi$\overset{v}{s}$aan/ which is a subject in (a) has become a direct object (DO) in (b) and an indirect object in (c). As stated in Owens (1985b:33) this is a syntactic change only, semantically the NP remains with the same roles.

2.2.2 Stative Verbs

Stative verbs are defined as verbs which "denote qualities or attributes possessed by the subject of the clause in which they appear" (Hayward, n.d.:93). In Oromo, such verbs are derived form different lexical categories.

They can be derived from adjectivals and nominals with the suffix /-at-/.

(40)

Base	Affix	Derived Stative
diimaa 'red'	-at-	diim-at- 'become red'
furdaa 'fat'	-at-	furd-at- 'become fat'
hojii 'work'	-et-	hojj-et- 'to work'
Deebuu 'thirst'	-ot-	Deeb-ot- 'to become thirsty'

The fact that the suffix vowel changes with different words may indicate that the suffix forming stative verbs is the /-t-/ and that the vowels are epenthetic. Haymard (1975:207) argues that the alternation of the vocalic elements is unexplainable because the environment is not one which requires spenthesis; and that the epenthetic vowels in the language are usually front vowels whereas in these cases other vowels are also found and that the alternation is in accordance with a final vowel of a nominal or adjectival base as in the following examples.

(41) a. hojed- 'work', cf. hoji 'work' ;
b. hubaḍ- 'care(v), cf. hubi care(n);
c. ḍebod- become thirsty, cf. ḍebu thirst

But, examples like (41b) and the following do not fit into his analysis.

(42) hirr-at- 'become not full' ∠ 'hirruu 'not full'
mill-at- 'glance(v)' ∠ 'milluu' 'glance(n)'
dubb-at- 'talk(v)' ∠ dubbii 'talk(n)'

But, this may not weaken the argument that the alternation of the vowels as epenthesis is untenable.

Furthermore, Hayward (1975:208-9) raises the alternation between /-at/- and /-aDD-/ and suggests, on diachronic grounds, that "Relatively early on the development of Eastern Cushitic ... an innovation affected some dialects in which ḍ came to replace earlier *t in the middle - voice stem extensions". But from synchronic point of view one may argue, atleast for Oromo, that /-at-/ is the stative morpheme and /-D-/ is a first and second person morpheme which appears following verbal roots ending in /-at-/[11]. One may say that the occurrence of /-D-/ is not morphological but phonological, that is, the occurrence of/-D-/ is not motivated by stativity but by the root final sound[12]. The evidence for this is that /-D-/ does not pattern with other stative suffixes like /-a?-/ and /-om-/ as shown in (43).

(43)

qaanii	'shame'	-a?-	qaan-a?-	'get ashamed'
gaDee	'bad'	-a?-	gaD-aa?-	'become bad'
fira	'relative'	-om-	fir-oom-	'become relative'
gamna	'wise'	-om-	gamn-oom-	'become wise'

This may suggest that there is no /-aDD-/ at all. /-at-/ becomes /-aDD-/ in the first and second persons imperative as a result of assimilation of /t/ to /-D/. That is why we do not have a single /-D-/ in such environments even though Hayward mistakenly transcribes it as a single /-D-/. The assimilation is analogous to the other similar processes as shown below.

(44) d Deeraa + -at- + -D- ⟹ Deer-at-D ⟹

Deer-aDD- 'become tall'

Deeraa + -at- + -V̆cuu ⟹ Deer-at-V̆cuu ⟹

Deer-aVVccuu 'to become tall'

Deeraa + - at- + - ne ⟹ Deer-at-ne ⟹

Deer-ann-e 'we become tall'

Stative verbs, then, are derived with the affixes /-at-/ /-a?-/ and /-om-/ by a rule of the type in (45).

(45) $V_{[+stat]} \dashrightarrow X_{[+N]} + V_{[+stat]}$

(where [+N] stands for adjectivals and nominals).

There are instances where stative verbs are derived from bound forms as in (46).

(46)				
	bilV̆c-aat-	'become ripe'	cf.	*bilV̆c-
	huuqq-at-	'become thin'	cf	*huuqq-
	dull-oom-	'get cold'	Cf	*dull-
	dur-oom-	'get rich'	Cf	*dur-

The rule in (45) may not account for these since their category is not obvious. One may, however, use some formal criteria in order to categorize them into nominals and adjectivals since they take suffixes like /-ina/ and /-uma/.

(47)		
	bilV̆c - ina	'ripeness'
	huuqq-ina	'thinness'
	dull-uma	'oldness'

In this case the derivation of statives is category - changing in that [-N] categories are derived from [+N] categories.

With regard to argument structure, there is no difference between the base and the derivative.

2.2.3 Middles

Some of the formatives presented in (2.2.2) have been discussed as middles and reflexives in Baye (1986:135-6). But although stative /-at-/ is homophonous with the middle /-at-/ it is different. Middle verbs are identified by their subject which "performs the action or participates in the event denoted by the verb expressely for his own benefit" (Hayward, 1975: 209) Hence, they are different from the reflexive verbs[13] only in function, i.e. whereas in the case of stative verbs the subject of the clause in which they occur undergoes some change of state with middles the subject participates in the action of the verb and as a beneficiary from the action. Formally the morpheme is the same /-at-/ as can be shown below.[14]

(48)

Base	Affix	Derived form
bit- 'buy'	-at-	bit-at- 'buy for onself'
qab- 'catch'	-at-	qab-at- 'catch for oneself'
haadd- 'shave'	-at-	haadd-at- 'shave oneself'
Diq- 'wash'	-at-	Diq-at- 'wash oneself'

The following rule may be formulated for the formation of such verbals.

(49) $V \xrightarrow{[+a-b]} V + V^{af}$ $[+a-b]$

This derivational rule is non-category chahging since it derives middle verbs from other verbal bases. Regarding their Syntactic properties Baye (1986:135-142) says that they "have one more complement than their corresponding base forms". It is also discussed that though the complement may not be seen at the surface it can be constructed from the affix morpheme. This means that a complement like /Ofi/ 'self' which is not observed at the surface in clauses with a middle verb is constructed from the morpheme /-at-/. At the surface level such a complement is optional.

(50) a. tolaa-n hoolaa bit-at-e
Tola-nom sheep buy-bem-pst
'Tola bought a sheep (for himself)'

b. tolaa-n ofii-f hoolaa bit-at-e
'Tola bought a sheep for himself'

2.2.4 Passives

Passive verbs in this language are derived from transitive bases by the addition of the suffix /-am/.

(51)

Base	Affix	Derived form
rukut- 'hit'	-am-	rukut-am- 'be hit'
gurgur- 'sell'	-am-	gurgur-am- 'be sold'
mur- 'cut'	-am-	mur-am- 'be cut'
jibb- 'hate'	-am-	jibb-am- 'be hated'

For this one can formulated the following WFR.

(52) $V \xrightarrow{\quad} V + V^{af}$

$[-\text{pass}] \qquad \begin{bmatrix} +\text{trans} \\ -\text{pass} \end{bmatrix} \qquad [+\text{pass}]$

It is stated in Baye (1986:184) that every passive form may not have a transitive counterpart in Oromo. Such claim is made by considering verbs like /Deekkam-/ 'scold' as passives for they end in /-am-/. But the /-am-/ in such verbs is part of the root. Such verbs are also transitives, and like any such forms they take the passive suffix /-am-/ to become /Deekkam-am-/ 'be scolded' as in the following.

(53) tolaa-n muc'aa Deekkam-e

Tola scolded a child'

(54) muc'aa-n Deekkam-am-e

'The child was scolded'

The process of passivization is non-category changing. The effect is that transitives become intransitives because of which the process is considered as intransitivization (Hayward, 1975: 204). The process reduces the arguments of the base as shown in (54) above[15].

One general point about derived verbs in Oromo is that they are bound and need inflectional affixes in order to be complete words. Regarding this Scalise (1984:52) says, "in some languages, the outputs of some WFR's require overt inflectional markers before they can appear in surface structure "implying that the level of derived verbs is that of stems just like that of the bases from which they are derived.

2.3 Adjectivization

This is the process of forming adjectivals from other lexical categories. Most adjectivals in Oromo seem to be derived as one can see from their endings which are consistent. The problem is how to determine the category of the roots to which these endings are attached. Let us begin with /-aa(-tuu)/ in the following.

(55) diim - aa 'red(masc)' diim-tuu 'red(fem)'
bareed-aa 'handsome' bareed-tuu 'beautiful'
č'ululuq-aa 'shiny(masc)' č'ululuq-tuu 'shiny(fem)'

In the case of /diim-aa(-tuu)/ 'red' it may be possible to regard the root as inherently adjectival and the affixes as inflectional designating gender, masculine and feminine respectively. This claim gets support from the fact that the stative morpheme /-at-/ is added to this base as in diim- + -at- ⟹ diim-at- 'become red', gabaab- 'short' + -at- ⟹ gabaab-at- 'become short', etc. But, on the other hand, there are other roots which seem to be verbal since they take verbal inflections as illustrated below.

(56) č'ululuq-e 'became shiny'
č'ululuq-t'-e 'she became shiny'
č'ululuq-an 'they became shiny' etc.

Furthermore, from stative verbs like /diim-at-/ 'become red' one can derive the adjectival /diim-at-aa (-tuu)/ 'reddened' which can be seen in such NP's like:

(57) buna diim-at-aa 'reddened coffee'
not
* buna diim-aa 'red coffee'

In some cases, the base to which the affix is added is the stative as in (58)[16].

(58)	ʔulf-aat-aa	'heavy'	cf. *ʔulf-aa
	gabb-at-aa	'fat'	cf. *gabb-aa
	etc.		

Another problem with this suffix is that it is used as derivational affix in nominalizations identifying the gender of the derived nominal at the same time.

Other adjectives are formed with /-ssa/ and /-ttii/ as in the following.

(59)	soore-ssa	'rich(masc)'	soore-ttii	'rich(fem)'.
	baʔee-ssa	'good(masc)'	baʔee-ttii	'good(fem)'
	qabee-ssa	'wealthy(masc)'	qabee-ttii	'wealthy(fem)'

Here again, it seems that the affixes are both derivational and inflectional. Such affixes are also used to derive nominals of different genders in the same way as in (60).

(60)	jaldee- ssa/ttii	'monkey (masc/fem)'
	waraabe-ssa/ttii	'hyena (masc/fem)'

Still other adjectives end in /-ee/, /-uu/, /-ii/ and /-oo/ as shown below.

(61)	gaD-ee	'bad'
	Deed-ii	'raw'
	gaar-ii	'nice'
	fag-oo	'far'
	qat'al-ee	'alret'
	madaq-oo	'strange'
	goob-uu	'dense'

Even though such endings show consistency of form, it is not possible to tell to what lexical categories they are attached. The plausible thing to do is to regard them as simple (non-derived) adjectives.

In general, then, the productive adjectivization process in the language is the addition of /-aa(-tuu)/ which, at the same time, also marks the gender of the derived form. The formation of derived adjectives may be captured by the rule in (62).

(62) $A \dashrightarrow V + A^{af}$

2.4 Some Concluding Remarks

2.4.1 Gaps

Selkirk (1982:82) states that the context - free rewriting rules that show the word structure of a given language can also be used to encode the gaps. In this subsection we shall briefly point out the gaps which are observed in the process of derivation.

Most of the major lexical categories[17] of the language are used in the process; as shown in the following chart.

(63)

	N	A	V	P
N	+	-	+	-
A	+	-	+	-
V	+	+	+	-
P	-	-	-	-

+ Permissible combinations

- impermissible combinations

The chart shows that Adpositionals (p) are not used in the process of derivation. This seems to be the case in other languages also (cf - Selkirk, 1982:82). The other major lexical categories have derivational relations.

2.4.2 The Nature of Derivational Affixation

As we have observed in the preceding presentation Oromo is an exclusively suffixing language with regard to derivation. This may enable us to formulate the following general rule for its derivational morphology.

(64) $X \dashrightarrow Y \quad X^{af}$

Such a rule schema, Selkirk (1982:83) argues, helps to make "language-particular generalizations concerning $\bar{X}$-levels or types, as well as the simple generalization that there is suffixation in this language". Furthermore, it may enable one to conclude that affixes in this language are always the head of derivationally complex words since they share the syntactic category feature with their mother node.

3. COMPOUNDING

Compounding is the process of forming new words by combining different words which may belong to different lexical categories. According to Bauer (1983:28) "when two (or more) elements which could potentially be used as stems are combined to form another stem, the form is said to be a compound". However, it is not the case that any two words (or stems) combine to form a compound word. Every language follows certain rules by which it forms compounds (Selkirk, 1982:14).

Furthermore, the formation of compounds differs in important ways from the formation of larger forms such as phrases, clauses or sentences[18]. In this chapter, we shall describe Oromo lexical coumpounds and the characteristics which distinguish them from higher forms.

3.1 The Structure of Oromo Compounds

In this section, we shall consider the types of compounds along with the rules by which they are formed. We shall also indicate the gaps.

3.1.1 The Combinatorial Possibilities.

As stated in Bauer (1983:203), "... the normal way of classifying compounds is the function they play in sentences as nouns,verbs, adjectives, etc.". We shall use this as a criterion for the classification of Oromo compounds.

3.1.1.1 Compound Nouns

In Oromo, compound nouns are productively formed by a combination of different lexical categories.

3.1.1.1.1 Noun - Noun Compounds

Two nouns can combine to form various kinds of compound nouns. For example, the noun /?abbaa/ 'father' or /haaDa/ 'mother' can occur as a first member in compounds like

(1)	ʔabbaa	buddeena	'step father'
	father	food	
	haaDa	manaa	'wife'
	mother	house	
	ʔabbaa	kellaa	'gateman'
	father	gate	
	haaDa	kiristinnaa	'Godmother'
	mother	christian	

A noun referring to a container and another one referring to a thing contained in it combine to form a locative compound noun.

(2)	qodaa bukoo		'dough container'
	material dough		
	/ ʔokkotee	biššaanii/	'water-containing pot'
	pot	water	
	/saanduqa	wayyaa/	'a box of clothes'
	box	clothes	

Instrumental compounds are formed by combining two nouns of which the first member is instrumental for the realization of the thing designated by the second member.

(3)	/Dagaa	daakuu/	'millstone'
	stone	flour	
	/t'uwwee	marqaa/	'porridge-pot'
	pot	porridge	
	/makiinaa	hoDDaa/	'sewing-machine'
	machine	sewing	

Names of certain parts of the body may also be combined with other nouns to form compounds designating names of diseases.

(4)

mataa	c'absaa	'headache'
head	breaker	
'dugda	kutaa	'backache/pain'
back	cutting	
'garaa	c'iniimnaa	'stomachache'
stomach	biting	

Other compounds may be formed by combining nouns referring to locations where activities take place. Examples are the following.

(5)

mana	barumsaa	'school'
house	learning	
bakkee	waraanaa	'battlefield'
field	fighting	
mana	sagadaa	'church/mosque'
house	praying	

Such compounds can be treated as locatives. They also differ from those in (2) above in that those in (2) refer to instrumental nominals and these ones refer to locations.

3.1.1.1.2 Noun-Adjective Compounds

Compound nouns can also be formed by combining noun and adjectives. The process is not productive; we have examples like the following.

(6)

sanbata	guddaa	'Sunday'
sabath	big	
muka	gurraacca	'a kind of tree'
tree	black	
[illegible]	bokkee	' a type of plant (who
head	round	head is round)'

3.1.1.1.3 Adposition-Noun Compounds

A combination of an adposition and a noun may result in a compound noun. In such compounds the nominal element is always a derived form.[19]

(7)	gadi	qabaa	'oppression'
	down	having	
	dura	taa?aa	'chairman'
	front	sitting	
	irra	č'iisicca	'bed'
	on	sleeping	
	keessa	deebii	'revision'
	in	returning	

3.1.1.1.4 Verb-Noun Compounds

In this pattern, nominals are formed by combining verbals with other nominals.

(8)	qotee	bulaa	'farmer'
	plough	live-he who	
	dafqee	bulaa	'proletariat'
	toil	live-he who	
	lootee	galtuu	'guerrilla'
	intrude	enterer	

The compounds observed so far may be captured by the following WFR.

(9) $N \longrightarrow \left\{ N \left\{ \begin{matrix} N \\ A \end{matrix} \right\} \left\{ \begin{matrix} P \\ V \end{matrix} \right\} N \right\}$

Rule (9) states that compound nouns can be formed by combining a noun with another noun or adjective; or an adposition or a verb followed by a noun.

3.1.1.2 Compound Adjectives

Compound adjectives are not as productive as compound nouns. But we have instances of them formed by a combination of different categories.

3.1.1.2.1 Noun-Noun Compounds

Compound adjectives can be formed by combining two nominals of which the first is /ʔabbaa/ 'father' or /haaɒa/ 'mother' and the second a nominal designating some attributes. Baye (1981:30) also mentions the existence of such compounds in Oromo. The follwing examples can be given.

(10) ʔabbaa/haaɒa boo'iccaa 'crying'
father mother crying

ʔabbaa/haaɒa dubbii 'talkative'
talk

ʔabbaa/haaɒa hirribaa 'sleepy'
sleep

Another possible combination is that of two nominals the second of which is an agent nominal.

(11) ʻof tuulaa 'boasting'
self piler

nama ŋaataa 'man-eating'
man eater

of ʔeegaa 'careful'
self keep er

3.1.1.2.2 Noun-Adjective Compounds

In this type of compounding the second member is a modifier of the first

(12) bifa badii 'ugly'
color useless

garaa qulqulluu 'clean-hearted'
stomach clean

ʔija jaamaa 'blind'
eye blind

Other similar compounds include those in which the second constituent is a derived adjective.

(13) humna qabeessa 'strong'
power having

bifa toleessa 'good-looking'
color be-good

ʔija jabeessa 'shameless'
eye strong

3.1.1.2.3 Noun-Numeral Compounds

Compound adjectives can be formed from nouns and numerals.

(14) ʔija afurii 'four-eyed'
eye four

qub- lamee 'two-fingered'
finger two

gur - sadee 'three-eared'
ear three

3.1.1.2.4 Adjective-Noun Compounds

In such compounds the nominal qualifies the adjective by showing degree.

(15) gurraaccca č'ilaattii 'charcoal-black'
black characoal

adii ?aannan 'milky-white'
white milk

jabaa muka 'very strong(strong as wood)'
strong wood

3.1.1.2.5 Adjective-Adjective Compounds

A combination of two adjectives can form a compound adjective in which the second qualifies the first in terms of degree.

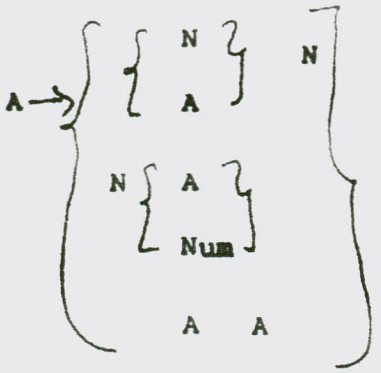
(16) diimaa bareedaa 'pretty-red'
red pretty

adii qulqulluu 'pure-white'
white clean

?ajaa?aa tortoraa 'rotten-stinky'
stinky rotten

The compound adjectives presented so far follow the rule in (17)

(17)



According to this rule, compound adjectives can be formed in different ways with apparent problem to be raised later.

3.1.1.3 Compound Adpositionals

Here we shall consider adverbs of time, and direction in relation to pre- and post-positionals. Compounds of this type are not very common. The following are [illegible] examples:

(18) asii gadi 'downwards'
here down

?aččii asi 'towards here'
there here

?aččii oli 'upwards'
there up

Such compounds show direction. The rule that derives them may be shown as follows:

(19) P ------> P P

3.1.2 Gaps

In the preceding section, the combinatorial possibilities of the lexical categories are shown. Most of the categories are combinable as shown in the following chart.

(20)

	N	A	V	P
N	+	+	-	-
A	+	+	-	-
V	+	-	-	-
P	+	-	-	+

+ = where there are combinations.

- = where there are no combinations.

The chart shows that there are gaps in the combination of Nouns with verbs and adpositionals; Adjectives with verbs and Adpositionals; and Adpositionals with verbs.

When we compare the combinatorial possibilities and the gaps with syntactic collocations we observe some parallel between the two.

The combination is possible for the categories which co-occur as syntactic phrases and clauses. Thus, even though we do not argue that lexical compounds are derivatives of phrasal or clausal collocations, following Scalise (1984:190), it may be said that lexical collocations are possible in the formation of compounds between categories which also have syntactic collocations in the formation of phrases and/or clauses. We also observe from the chart that verbs do not come as second members in compounds even with those categories which they form syntactic phrases or clauses. The reason for this may relate to the fact that Oromo is a verb-final language and whenever a verb combines with another category the result is clausal and not lexical. This may be the reason why there are no compound verbs in Oromo[19]. Mahammed (1989:160-63) treats as compound verbs forms which he calls noun + ballees- 'spoil', ifi 'self' + verb, preverb + verb. But, as we shall see later (3.2.2) such forms are syntactic clauses and not lexical compounds.

3.2 Different Characteristics Of Oromo Compounds

In this section, we shall see the phonological, morphological, syntactic and semantic characteristics of compounds as lexical itmes.

3.2.1 Phonological Characterisitcs

Certain phonological modifications may take place on the constituents of a compound. In most cases these modifications consist of loss of segments. For instance, nouns ending in the glottal stop (ʔ) lose this sound when they are used in compounds. Observe the contrast between the forms in (21) and those in (22).

(21) a. ?abba? 'father'

birri? 'birr'

hoola? 'sheep'

b. ?abbaa buddeenaa 'step father'

birrii waraqataa 'paper money'

hoolaa bišaanii 'a kind of wild sheep'

This is also true with other categories such as adjectives ending in /?/.

(22) diima? + bareeda? ⟹ diimaa bareeda? 'Pretty red'

adi? + ?aannan ⟹ adii ?aannan 'milky-, white'

Following the loss of /?/ the vowel preceding it becomes long.

In some cases the vowel /a/ may be lost in stem/word final position in compounds like the following:

(23) /jala + bultii/ ⟹ /jal bultii/ 'eve'

/sanbata + guddaa/ ⟹ /sanbat gudda/ 'Sun day'

In compounds of Noun - Numeral type, the numeral changes its final vowels.

(24) /gurra + sadii/ ⟹ gur-sadee 'three eared'

quba + lama ⟹ qub-lamee 'two fingered'

gaafa + torba ⟹ gaaf-torboo 'seven-horned'

Such canges are also apparent in Noun - Adjective compounds as in the following.

(25) mataa + duudaa ⟹ mata duudee ' a kind of corn'

harka + duwwaa ⟹ harka duwwee 'bare-handed

In some cases the final vowel of the second member may become long.

(26) ʔabbaa + seera ⟹ ʔabbaa seeraa 'lawyer'

qubata + t'iyyaara ⟹ qubata t'iyyaaraa 'airport'

In some other cases, the lengthening of the final vowel affects the first member of the compounds.

(27) wali + galtee ⟹ walii galtee 'agreement'

loote + galtuu ⟹ lootee galtuu 'guerilla'

qote + bulaa ⟹ qotee bulaa 'farmer'

Except the loss and change of the final vowels as in (24) and (25) respectively, the other characterisitcs are of phrasal combinations too. This makes it difficult to distinguish lexical compounds from phrases on phonological grounds. Bloomfield (1933:228) says, "As to the phonetic pattern, compound words are generally treated like phrases".

The other problem with the phonological modifications in Oromo compounding is that they are predictable in no way. It is difficult, in most cases, to tell which modifications take place and where. This may be ascribed to diachronic factors, however; and it is possible to argue that those which exhibit phonological changes are those compounds which are "strict" as opposed to those which are "loose" in the sense of Scalise (1984:24-5) quoted from Allen (1975). According to this dichotomy "Strict" compounds are real compounds which allow "rules of phonological amalgamation" whereas loose ones are not regulated by such phonological characteristics.

3.2.2. Morphological Characteristics

The first question to answer about the morphology of Oromo compounds is [illegible] type of the constituents. That is to say whether the bases of compounds are roots, stems or words.

Some compounds are formed from simple words as can be illustrated below.

(28) ?abbaa manaa 'husband'
garaa bisaanii 'water-hearted'
?ija afurii 'four-eyed'

Others may have second members which are derived forms.

(29) mataa c'abs-aa 'headache'
gadi qab-aa 'oppression'
gara laafee-ssa 'tender-hearted'

Furthermore, as shown in Verb-Noun compounds, the verbal constituents are inflected whereas the nominal constituents are derived.

(30) qot-ee bul-aa 'farmer'
dafq-ee bul-aa 'proletariat'

From such structures we see that simple forms (28), derived forms (29), or inflected forms (30) can be used to form compounds. This means that compounds and their constituents may belong to the same level and that this level is that of a word since it includes both inflected and derived forms.

But one may follow Williams (1981:263) in arguing that words can sometimes be stems since some compounds can be imput to derivational morphology as in the following example.

(31) [?abbaa manaa] + -ummaa ⟹

[?abbaa man-ummaa] 'husbandness'

Another morphological property of compounds is that they do not allow interrupting elements. For instance, a possessive pronoun is attached to nouns but not to the first member of a compound. Thus:

(32) inn-i ofii-saa jaallata
He-nom self-his love
'He likes himself'

*ofi-saa jaallataa cf. ofi jaallataa 'selfish'
self-his likes-er

ʔabbaa manaa-šee 'her husband' cf. *ʔabbaa-šee manaa
husband -her

Mahammed (1989:161) describes {ifti, wafii} + Postpositions as lexical compounds. But since such structures, like other Noun – Postposition constructions, allow interrupting elements such as possessive pronouns they are treated here as phrases. His examples are the following:

(33) if gubbaa 'on oneself'
cf
ifi-see gubbaa 'on herself'
her

walbira 'besides each other'
cf
walii-saanii bira 'besides one another'
their

One other point about the morphology of compounding is the appearance of inflectional elements like number morpheme which appear on the head of a compound as in (34):

(34) ?abb-oota biyyaa 'country leaders'

Dag-oota daakuu 'milestones'

etc.

This shows that Oromo is not regulated by the IS A condtion,[21] which states that compound is formally and semantically identical to its right-hand constituents (Scalise, 1984: 92)[22]. This does not mean, however, that inflectional elements are always attached to the first member of the compounds. There are cases when they are attached to the second member or to the compound as a whole.

(35) dafqee bul-oota 'proletariate'

lootee galt-oota 'guerrillas'

dura taa?-ota 'chairmen'

Such forms show that inflectional elements are attached to the head of a compound as stated in Scalise (1984:125).

3.2.3 Syntactic Characteristics

Compounds exhibit a number of syntactic characterisitcs. As shown above a compound and its constituents belong to certain syntactic categories. Except verbs all other lexical categories can be formed by compounding and they can also be imput to the formation of other compounds. Furthermore, all compounds are derived by word structure rules which are identical to syntactic structure rules.

Another syntactic property is headedness. Even though the definitions of heads are different for phrases and compounds as Selkirk (1982:20) says, "(i) the members of compounds are of the same level as the parent node ... and (ii) both members of a compound may be of the same category as the parent". When we examine headedness in Oromo compounds using category features we see a complex situation. As can be observed from the rule in (9) above the position of the head is not predictable since it is the first in some and the second in others. If we see compound adjectives also we see that the head is not strictly one on the left or right and in Noun + Numeral compounds there are no adjectival constituents from which the head feature percolates to the whole word. How, then, do we solve such problems?

To get out of such problems we may assume that the heads of compounds are the right-hand members and the defining criteria for this are the syntactic distinctive feature and not the categorial label alone. This is to say that in the case of compound nouns, for instance, the right-hand members are [+N] categories and it is this feature which is percolated to the parent node to make it [+N]. This is true also of compound adjectives except those with Numlerals which may be treated also as adjectives since they occur in positions where adjectives occur[23]. They may hence be regarded as having the feature [+N].Thus following Gaddar et al (1981:115), We may formulate the following general rule for Oromo compounds in terms of syntactic headedness[24].

(35) X ------> Y H
[+x]

This means that the right-hand constituent of a given compound is the syntactic head of that compound.

3.2.4 Semantic Characterisitcs

Semantically, compounds have single reference. Regarding this Bauer (1983:143) says that they "have to be associated with an appropriate denotatum". In this sense, all the compounds considered in this study refer to single units of reference as can be observed from the meanings given to the examples in (3.1) above.

Another semantic characteristics is the relation holding between the head and the non-head members and also to the compound as a whole. Selkirk (1982:22) says that this relation is of various types and hence may be difficult to give a general characterization. When we consider Oromo compounds in the light of this we find a variety of semantic relations. For instance, combinations like sabbata 'girdle' + waaqayyo 'God' means 'rainbow'. The relation between the two constituents is that of possession, i.e. sabbata is possessed by waaqayyo but the meaning of neither of these constituents is related to that of the whole compound. Such are what Bauer (1983:20) calls "opaque compounds" whose meaning cannot be predicated from the meaning of any of their constituents. With some compound nouns the possessive relation is pragmatically derived from both the constituents. For example, ?abbaa 'father' + mana 'house' gives 'husband'. The speaker, here, knows pragmatically that the compound means 'head of the household' or 'master of the house'. Still there are noun compounds which structurally show genitive relations but their semantic relation is different. For instance, Daqaa 'stone' + daakuu 'flour' gives 'millstone' whose literal meaning is 'a stone used for grinding', and qubata 'settlement' + t'iyyaara 'airplane' gives 'airport' which literally

means ' a place where a plane lands'. Thus, the former shows a purposive relation whereas the latter shows a locative relation. The fact that we have such a variety of semantic relations, even, within the same one type of compounds indicates that there is no way of generalizing the semantic relations holding between the constituents of a compound. In order to account for such relations one may try to list the possible relations but Selkirk (1982:23) criticizes this as futile since it does not aim towards generalization.

One predic table semantic relation between the constituents of a compound is in Nouns + Adjectives and Adjectives + Adjectives compunds. In such compounds, the non-head constituent is used to modify the head. This is not unique to Oromo compounds; Botha (1984:139-40) states, quoting Allen (1978:255), that English Adjective + Adjective compounds such as grey - green, bitter - sweat; and /-ed/ compounds such as tight-fisted, one-handed, etc. have a modfier-modified relation. A question to be raised here relates to the way one distinguishes between phrasal and lexical compounds of the type where the adjectives modify the nouns, for example. In such cases meaning may be used as a criterion. For instance, muka gurraacca[VV] 'black tree' can be a lexical compound or a noun phrase according to its reference.

(36) a. muka gurraacca[VV] 'a kind of tree'

b. muka gurraacca[VV] 'a black tree'

Thus, when it refers to a certain type of tree (as in (36a) it is a compound and when it refers to any tree which has a black colour (36b) it is a noun phrase. Furhtermore, in forms where a noun follows

an adjective as in (16) above the noun qualifies the adjective. Thus, in adii 'white' + ?aannan 'milk' ?aannan shows the degree of whiteness.

When we treat synthetic compounds, that is in cases where one of the constituents is a derived noun or an adjective, the semantic relation between the constituents is like that which holds between a verb and its arguments in syntactic structures. Thus, if the sister constituent of a deverbal noun, for instance, is theme in syntactic configurations, the same relation holds in compounds.

(37) a. mana har-ti 'She cleans a house'
house clean-3fs

b. mana har-tuu 'house cleaner'
house clean-er (3fs)

But there is one problem here which is that of accounting for the semantic headedness of a compound. That is to say that for a given constituent to be considered as head of a compound, it "should display the syntactic and semantic characteristics that are expected of heads " (Selkirk, 1982: 13)[25]. Oromo compounds do not satisfy this because although heads are the right-hand members of compounds from the point of syntax, in some cases the semantic heads are those on the left-hand side. For instance, Dagaa daakuu 'milstone' refers to Dagaa 'stone' whereas daakuu Dagaa refers to daakuu 'flour' which shows that the semantic heads are the left-hand members.

If we extend this notion of semantic headedness, we have headless compounds like sabbata waaqayyoo 'rainbow', etc., right-headed compounds like nama ňaataa 'man-eating', etc. The existence of

such left-headed compounds contradicts our earlier conclusion that Oromo compounds are right-headed. In order to solve such problems Scalise (1984:93) suggests that the formatives which are not subject to generalizations "are stored directly in the dictionary"[26] since they are lexicalized, i.e. they have developed idiosyncracy.

In general, since all the compounds we have seen refer to single units of reference, we may suggest that semantics is the best criterion for distinguishing lexical compounds from phrasal collocations.

4. SUMMARY AND CONCLUSION

Oromo is a morphologically rich language. It has a wide range of word - formation processes. Different types of nominals, verbals, and adjectivals are formed by the process of derivation.

There are a variety of affixes which are used to derive nominals. The derived forms can be categorized according to the semantic features. In some cases, we observe homophonous suffixes in the formation of nominals like action, result, manner, etc., for example. The distributions of such nominalizing suffixes are not predictable.

The derivation of verbals is also complex. Causatives, statives, reflexives and passives are derived. In some cases, determining the bases from which they are derived is difficult.

Most adjectives of the language are basic and the few derived ones are formed in the analogy of these basic ones. A detailed investigation is essential, however.

Compounding is another word-formation process treated. Nominals, adjectivals and adpositionals are formed by this process.

The process has phonological, morphological, syntactic and semantic characteristics. Determining the head of compounds in general is difficult; it needs more thorough investigation.

NOTES

[1] See Aronoff (1976:46-7).

[2] See also Selkirk (1982:60) for a similar argument.

[3] This phenomenon is common in the language.

[4] With regard to the /-i/ before /-$\overset{VV}{C}$a / and /-sa/ it is possible to say that it is an epenthetic vowel. It is inserted when a base ends in a non-sonorant consonant and the suffix begins in a consonant. This epenthetic vowels becomes long following the rule that lengthens the suffixal vowel while the vowel of the base is short. Such a rule may be formulated as follows:

(i) vowel insertion rule.

$$\emptyset \longrightarrow V/C \underset{[-son]}{\_\_\_\_\_} + C \qquad \text{(where + C = morpheme boundary)}$$

$$[[qot-] + -sa] \Longrightarrow [qot + -isa]$$

(ii) vowel lengthening rule:

$$V \longrightarrow VV/(c)\ V\ (c) + -$$

$$[qot + isa] \Longrightarrow [qotiisa]$$

[5] Note that this morpheme is /-$\overset{V}{C}$uu/ whenever there is a root-final /-at/. But I found the following exceptions to this.

goD-$\overset{V}{C}$uu	'to make'
beqot-$\overset{V}{C}$uu	'to rest'
jeD-$\overset{V}{C}$uu	'to say'

cf.

gotot - uu	'to pull'
hoD-uu	'to suck'
hiD-uu	'to tie'

[6] Note that, once again, /-umsa/ and /-aatii/ are homophones with result and action nominals.

action

himself.

[7]In this language suffixes that are used for marking feminine are used also as diminutivizing suffixes (for the detail see Gragg, 1976:180).

[8]A detailed investigation of a large body of data is needed, and across categories, to deal with this problem.

[9]For the defintion of roots and stems see Bauer (1983:20).

[10]The causative /-s-/ has a variant /-č-/ when the last consonant of the base is an alveolar. Observe the following examples.

gal-t-s- ⟹ gal-č- 'cause to enter'

gammad-t-s ⟹ gammad-cis- 'cause to be happy'

ňaat- + -s ⟹ ňaat-čis- 'cause to eat'

One may go deeper than this phonetically but this would suffice for the present.

[11]Hayward (1975:208) discusses that this phoneme comes with 1sg and with the imperative sg and pl.

[12]Such word-final /-at-/ can either be a morpheme or part of the root. That is, it is not only with a stative /-at-/ that this phoneme (/-D-/) comes in the first and second persons but it comes whenever the root verb ends in /-at-/.

ňaat-	'to eat' ⟹	ňaat-D-e	'I ate'
		naat-D-u	'you(sg) eat'
laat-	'to give' ⟹	laat-D-e	'I gave'
		laat-D-u	'you(sg) give'

etc.

[13]Where the subject of the clause in which they occur participates in the action such that he acts upon himself or the action is performed by his volition and upon himself.

č'al jeD- 'keep silent'

lip'goD- 'off a light'

kaš jeD- 'break'

gagam goD- 'snatch'

[21]Scalise (1984:124) also discusses that there are languages (Italian for example) which "do not conform to the "IS A" condition, but rather have a large number of compounds in which the head is left-most element". Selkirk (1982:52) as well gives examples from English which show that inflections may appear compound-internally contrary to Allen (1978), as quoted in Scalise (1984:122), who argues that inflections do not appear compound - internally.

[22]The problem related to headedness in Oromo compounds will be raised later in the discussion of syntax and semantics of compounds.

[23]Phonologically also we have seen above (3.2.1) that they have the same characteristics.

[24]This conclusion matches with headedness in derived words. But it is not without a problem of its own as we will see in the next section (3.2.4).

[25]Note that the IS A condition also requires the fulfillment of these two characteristics (see Scalise, 1984: 92).

[26]This, however, is a tentative solution; and the matter needs a much thorough investigation.

REFERENCES

Abera Nefa. 1981. Oromo Verb Inflection (unpublished Senior Essay). Linguistics Department, Addis Ababa University.

Allerton, D.J. 1979. Essentials of Grammatical Theory: A Consensus view of syntax and Morphology. London: Routledge & Kegan paul.

Aronoff, M. 1976. Word - Formation in Generative Grammar. Cambridge, Massachussetes: The MIT Press.

Bauer, L. 1983. English Word - Formation. Cambirdge: Cambridge University Press.

Baye Yimam. 1981. Oromo Substantives: Some Aspects of their Morphology and Syntax (unpublished M.A. Thesis). School of Graduate Studies, Addis Ababa University.

_____. 1986. The Phrase Structure of Ethiopian Oromo (Unpublished Doctoral Thesis). University of London.

Bender, M.L. et al. " Galla" in Bender, M.L. et al (eds.). 1976. Language in Ethiopia. London:OXford University Press.

Bloomfield, L. 1933. Language. New York: Holt.

Botha, R.P. 1984. Morphological Mechanisms: Lexicalist Analysis of Synthetic Compounding. Oxford: Pregmen Press.

Comrie, et al "Lexical Nominalization" in Shopen, T.(ed). 1985. Language Typology and Syntactic Descriptions: Grammatical Categories and the Lexicon, V. III. Cambridge: Cambridge University press.

Gazdar, G. et al "Subcategorization, constitutent order and the Nation head" in Moortgat, H. et al. 1981. The Scope of lexical Rules. Netherlands: Foris Publications.

Gragg, G. "Oromo of Wollega" in M.L. Bender (ed). 1976. The Non-Semitic Languages of Ethiopia. Michigan: African Studies center.

Hayward, R.J. 1975. "Middle voice verb forms in Eastern Cushitic" Language: Miscellanea 11.

_____ n.d. "The Stative conjugation in Afar" Language: Miscellanea

Jensen, J.T. 1990. Morphology: Word Structure in Generative Grammar. Amsterdam: John Benjamin's Publishing company.

Kageyama, T. 1982. "Word Formation in Japanese" Lingua 57, 215-258. Amsterdam: North Holand Publishing Company.

Kebbede Hordofa. 1981. Nominalization Patterns in Oromo (Unpublished Senior Essay). Linguistics Department, Addis Ababa University.

Mahammed Ali. "Trends in Oromo Lexicon and Lexicography" in Bokamba, E.G. (ed). 1989. Studies in Linguistic Sciences. V. 19, N. 2, Illinois: University of Illinois.

Maria-Rosa, L. 1987. "The Morphology of the Causative in Oromo" Journal of African Languages and Linguistics, 9. 14-156.

Nous, M. 1992. A Grammar of Iraqw (PHD Dissertation). University of Leiden.

Oehrle, R.T. "Lexical Justifications" in Moortgat H.vd. et al. 1981. The Scope...

Owens, J. 1985a. A Grammar of Harar Oromo. Hamburg: Buske.

_____ 1985b. The Oromo Causatives: Lexical Grammar without Lexical rules. Bloomington: Indiana University Linguistics club.

Pulleyblank, D. 1988. "Phrasal Morphology in Yoruba" Lingua 74, 2/3 (141-166). Amsterdam: North Holland Publishing company.

Scalise, S. 1984. Generative Morphology. Holland, Foris Publications.

Selkirk, E. 1982. The Syntax of Words. Cambridge: The MIT Press.

Tilahun Gamta. 1989. Oromo - English Dictionary. Addis Ababa: Addis Ababa University Press.

Williams, E. 1981. "On the notions "Lexically related" and "Head of a word" Linguistic Inquiry, 12, 2 (245-274).

[14]Hayward (1975:211) suggests that since the forms with the auto-benefactive (a-b) sense are more productive than the reflexives, the autobenefactive label is better given. This way will be followed in this paper.

[15]See also Baye (1986: 134-5).

[16]Note that Owens (1985a : 242-3) mistakenly gives /gabb-aa/ 'fat' as a well -formed word. Furhtermore, a well-formed /gudd-at-aa/ 'growing' derived from /gudd-at-/ 'get big' is given in this work as ill-formed.

[17]Baye (1986) identifies four major (Nouns, Adjectives, verbs, Adpositions) and two minor (Specifiers and Numerals) lexical categories in Oromo.

[18]There are some approaches in the lexicalist tradition which argue for the interaction of lexical and syntactic components in the formation of compound words (see Pulleyblank (1988) and Kageyama (1982). But we do not go into the detail of such arguments.

[19]These may be good examples of synthetic compounds in the language since they are parallel to Adposition + verb syntactic collocations.

[20]One may regard as compounds forms with /jeD-/ 'say' and /goD-/ 'make'. But since the first members of such forms are words of onoma-topoeic nature we cannot categorize them into any of the lexial categories of the language. Thus, they are left out from the present discussion. The following are some examples.