## WORD FORMATION IN OROMO*

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## 1. Introduction

Oromo is one of the languages which belong to the Lowland East Cushitic in the Cushitic subfamily. It is spoken over a vast area in Ethiopia and Kenya, with a variety of dialects.

So far no one has attempted to make a detailed study of word formation in Oromo. The present study is an attempt to fill in this gap. It is concerned with the analysis of the process of derivational affixation and compounding.

The theoretical framework followed is that of Selkirk (1982). This framework assumes that native speakers of a language have intuitions about the internal structure of words in their language. Such intuitions are captured by the word structure rules of the language which are known as context-free rewriting rules. The rules are more or less similar to syntactic phrase structure rules though they differ in some important ways.

Furthermore, every language follows certain rules of word structure which should be stated in its grammar. Thus, this study tries to show the word structure rules of the language and the different characteristics the processes of word formation entail.

## 2. Affixation

This is one of the morphological processes by which new words are formed from different bases. Although, in most cases, words are derived by additions of overt affixes, the process may involve zero affixation, also known as zero derivation or conversion (Jenson, 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. 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 here 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 $\quad$ Abstract Nominals

Abstract nominals are derived from 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' | -eeňn̆a | ?add-eeňňa | 'whiteness' |
| durba | 'girl' | -ummaa | durba-ummaa | 'girlhood' |
| mič̌uu | 'friend' | -ummaa | mičč-ummaa | 'friendship' |

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

$$
\xrightarrow[{[+ \text { abs }}]]{\mathrm{N} \cdots \rightarrow-\rightarrow}\left\{\begin{array}{l}
\mathrm{N}  \tag{2}\\
\mathrm{~A}
\end{array}\right\}+\begin{gathered}
\mathrm{N}^{\text {af }} \\
{[+ \text { abs }]}
\end{gathered}
$$

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, $[+\mathrm{N}]$, the rule in (2) may be reduced to (3) following Scalise (1984: 13) who says that "WFR's could be allowed to operate not on syntactic categories ( $\mathrm{N}, \mathrm{V}$, etc.) but on syntactic category feature $[+\mathrm{N},+\mathrm{V}],[+\mathrm{N},-\mathrm{V}]$, etc.."


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 ones. The form /gaar-om-/ is a verbal stem derived from the adjective/gaarii/ 'nice' by the addition of the verbal suffix /-om-/. /Bal'-ina/ 'blindness' is a nominal derived with the suffix /-ina/ from the adjective /bal'aa/ 'blind'.

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 $/-\mathrm{a} /$ 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

$$
\begin{array}{ll}
\text { muč' -ummaa/*uma } & \text { 'childhood' } \\
\text { dubart-ummaa/*uma } & \text { 'womanhood' } \\
\text { garb-ummaa/*uma } & \text { 'slavery' }
\end{array}
$$

(5) With adjectivals

$$
\begin{array}{ll}
\text { gamn-ummaa/-uma } & \text { 'wisdom' } \\
\text { goww-ummaa/-uma } & \text { 'foolness' } \\
\text { gaar-ummaa/*-uma } & \text { 'niceness' } \\
\text { dab-*ummaa/-uma } & \text { 'cowardice' }
\end{array}
$$

The suffixes /-ina/ and /-eeňňa/ which appear only with adjectival bases are also formally similar, but their distribution is unpredictable since they are in some cases free variants and in others in complementary distribution as shown in (6).
(6) jab-ina/-eeňňa hamm-ina/-eeňňa
salp' -ina/*-eeňňa
diim-ina/*-eeňňa
Di?-*ina/-eeňňa
?ad-*ina/-eeňn̆a
'strength'
'cruelty'
'lightness'
'redness'
'nearness'
'whiteness'

### 2.1.1.2 Process/Action nominals

Such nominals refer to "the fact, the act, the quality, or occurrence of" the base from which they are derived (Comrie et al, 1985: 350). In Oromo, such nominals are derived from verbal roots by adding different suffixes of which /-čča(-ččoo)/, /-sa/, /-umsa/, /-(a)a/, /-aatii/, and $/$-taa/ are just a few as the following examples illustrate.
(7)

|  | Verbal base | Affix | Process/Action nominals |  |
| :--- | :--- | :--- | :--- | :--- |
| fiig- | 'run' | - ccca | fiig-ičč | 'running' |
| ?ilaal- | 'see' | - cča | ?ilaal-cča | 'seeing' |
| ?ijaar- | 'build' | - sa | ?ijaar-sa | 'building' |
| taa?- | 'sit' | - umsa | taa?-umsa | 'sitting' |
| qot- | 'till' | - sa | qot-iisa | 'tilling' |
| burraaq- | 'jump' | - -a | burraaq-a | 'jumping' |
| kaD- | 'beg' | -aa | kaD-aa | 'begging' |
| kuf- | 'fall down' | -aatii | kuf-aatii | 'falling down' |
| gurgur- | 'sell' | -taa | gurgur-taa | 'selling' |

The formation of such nominals may be represented in the manner as in (8).

| $\mathrm{N}----\cdots--\cdots$ | $\mathrm{V}+\mathrm{N}^{\text {af }}$ |
| :--- | :--- |
| $[+$ process $]$ | $[+$ process $]$ |

To predict the distribution of such affixes is not again simple. The alternation between $/-\mathrm{aa} /$ and $/ \mathrm{-a} /$ may be accounted for in terms of syllable structures in that $/-\mathrm{aa} /$ is found when the vowel of the base is short and $/-\mathrm{a} /$ otherwise. This phenomenon is quite common in the language. The free variation between /-čča/ and /-ččoo/ is observed only in a few bases ${ }^{1}$.

### 2.1.1.3 Result nominals

Some of the suffixes in (2.1.1.2) such as /-umsa/, /-sa/, /-(a)a/ and $/$-attii/ 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/, /-cccuu/, /-oo/, and /-suu/ which are also used to derive other result nominals.
(9)

| Base |  | Affix | Result |  |
| :--- | :--- | :--- | :--- | :--- |
| nominals |  |  |  |  |
| beek- | 'know' | -umsa | beek-umsa | 'knowledge' |
| ?abaar- | 'curse' | -sa | ?abaar-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' | -ču | gammad-̌uu | 'happiness' |
| ?arrabs- | 'insult | -oo | ?arrabs-oo | 'insult(n)' |
| dallan- | 'be sad' | -suu | dallan-suu | 'sadness' |

The following WFR captures the derivation of such forms.

$$
\begin{align*}
& \mathrm{N} \cdots+--\cdots-\mathrm{N}^{2 f}  \tag{10}\\
& {[+ \text { Res. }]} \\
& \text { [+Res.] }
\end{align*}
$$

## Gerundive nominals

Gerundives are derived from verbal roots by the addition of $/-\mathrm{uu} /$ as in the following examples ${ }^{2}$.
(11)

| Base |  | Affix | Gerundive nominals |  |
| :--- | :--- | :--- | :--- | :--- |
| bit- | 'buy' | - uu | bit-uu | 'buying/to buy' |
| deem- | 'go' | - -uu | deem-uu | 'going/to go' |
| ňaat- | 'eat' | - uu | ňaat-čuu | 'eating/to eat' |
| ?uffat- | 'wear' | - -uu | ?uffat-ččuu | 'wearing/to wear' |

The derivation can be represented as in (12).

$$
\begin{align*}
& \mathrm{N} \\
& -------\rightarrow V+N^{a f}  \tag{12}\\
& \text { [ + Ger.] } \\
& \text { [ +Ger.] }
\end{align*}
$$

### 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 $/-\mathrm{ii} /$, /-umsa/ and $/$-aatii $/{ }^{3}$ as shown in (13).

| Base |  | Affix | Manner nominals |  |
| :--- | :--- | :--- | :--- | :--- |
| ?ijaajj- | 'stand' | -ii | ?ijaajj-ii | 'manner of standing' |
| taa? | 'sit' | -umsa | taa?-umsa | 'manner of sitting' |
| Dug- | 'drink' | -aatii | Dug-aatii | 'manner of drinking' |

The rule is as follows.

$$
\begin{equation*}
\underset{[+ \text { man. }]}{\mathrm{N}-\cdots-\cdots---\cdots} \mathrm{V}+\underset{[+ \text { man. }]}{\mathrm{N}^{\text {af }}} \tag{14}
\end{equation*}
$$

### 2.1.1.6 Instrumental nominals

These are nominals formed with /-ata/ and /-tuu/. They include the following.
(15)

|  |  | Base | Affix |  |
| :--- | :--- | :--- | :--- | :--- |

The rule for the derivation of such nominals is as follows.
(16) $\mathrm{N} \rightarrow------\rightarrow \mathrm{V}+\mathrm{N}^{\mathrm{af}}$

$$
[\text { +inst }] \quad[\text { +inst }]
$$

### 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: 35). In Oromo, such nominals are derived with $/-\mathrm{aa} /$ and $/$-tuu/. The following are examples.

| Base |  | Affix | Agentive nominals |  |
| :--- | :--- | :--- | :--- | :--- |
| ?ajjees- | 'kill' | -aa | ?ajjees-aa | 'killer' |
| barsiis- | 'teach' | -aa | barsiis-aa | 'teacher' |
| ?eeg- | 'keep' | -tuu | ?eeg-duu | 'keeper' |
| ňaat- | 'eat' | -tuu | ňaat-tuu | 'eater' |

The rule is as follows.

$$
\begin{align*}
& \mathrm{N} \cdots \cdots \rightarrow-\cdots+\mathrm{N}^{\text {af }}  \tag{18}\\
& {[+\mathrm{Ag}] \quad[+\mathrm{Ag}]}
\end{align*}
$$

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

| barreess-aa/-tuu | 'writer(masc/fem)' |
| :--- | :--- |
| ?eeg-aa/-duu | 'keeper(masc/fem)' |
| duul-aa/-tuu | 'campaigner(masc/fem)' |

But with some bases only/-tuu/ is used as shown below.

| 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 ${ }^{4}$. This claim gains support from the fact that such forms are possible with /-aa/ though non-existent.

### 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 a root final vowel before a suffix. Because of this, Owens (1985a: 240) concludes that Oromo roots are always -C final; and he wrongly treats forms like /deem-/ 'go', /lol-/ 'fight', etc. as classless roots. 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 not classless since they belong to the c'ass of verbals. They take inflections for tense, aspect and person as in the following example:
(21) lol-e 'fought(he)'
fight-pst
lol-t-e 'fought(she)'
fight-fem-pst

It is true that verbal roots are - C final but nominals and adjectivals are not; they end in vowels which may be considered as class formatives.

Another approach, and a better one, is to treat such vowels as part of the root and that they drop before an affix. Some evidence in support of this is the loss of word final vowels before vowel-initial inflectional affixes.

| (22) | nama + -ota $======\Rightarrow$ nam-oota | 'men' |
| :--- | :--- | :--- |
| man pl |  |  |
| nama + -ummaa $=====\Rightarrow$ nam-ummaa |  |  |
| 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 common in all nominalization is the lengthening of root vowels in bases ending in /-?/ 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.

$$
\begin{array}{lll}
{\left[[\text { du?- 'die' }]_{\mathrm{V}}+-t \mathrm{tuu}\right]_{\mathrm{N}}} & \text { duu-tuu } & \text { 'deceased' } \\
{\left[[\text { lo?- 'intrude }]_{\mathrm{V}^{+}}\right.} & -\mathrm{tuu}]_{\mathrm{N}} & \text { loo-tuu } \\
{\left[[\text { hoD- 'suck' }]_{\mathrm{V}^{+}}\right.} & \text {-tuu }]_{\mathrm{N}} & \text { 'intruder' }
\end{array}
$$

### 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. Thus, one can say that nominalization takes roots, stems or words as its domain. However, the
rules we have formulated in the preceding section do not show such differences. In order to capture this, one may formulate the rules as follows.

$$
\begin{array}{lc}
X \quad------\cdots & X^{s}, X^{r}  \tag{24}\\
\text { Word }-----\cdots & \text { Stem, Root }
\end{array}
$$

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 suffixes. As one could observe in the preceding section, some nominals are formed with different affixes, the distribution of which is difficult to account for. One could say that this is indeed the characteristics of derivational morphology as discussed 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 nominalization 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 subcategorization of bases and derived nominals in this language, Baye (1986: 123) states that those "with the ending /-aa/ and /-tuu/ seem to be characterized by the same subcategorization frame that their corresponding base forms are associated with". That means a transitive verb does not lose its transitivity as a result of the nominalization 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 suffixes from which the features percolate are the righthand constituents, the forms can be treated as right-headed. Following this, a general rule may be formulated for all derived nominals.
(27)


### 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 more predictable. 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 illustrated below (cf. Gragg, 1976; Owens, 1985b; Baye, 1986).
(28)

| Base |  | Affix | Causative verb |  |
| :--- | :--- | :--- | :--- | :--- |
| mur- | 'cut' | -siis- | mur-siis- | 'make cut' |
| raf- | 'sleep' | -is- | raff-is- | 'make sleep' |
| gub- | 'burn' | -siis- | gub-siis- | 'make burn' |

In addition, it seems that there are also other causatives derived from nominals and adjectivals.
(29)

| Base |  | Affix | Causati'e verb |  |
| :--- | :--- | :--- | :--- | :--- |
| malaa | 'pus' | -s- | malaa-s- | 'discharge pus' |
| ?iita | 'swelling' | -s- | ?iit-es- | 'cause to swell' |

(30)

| Base |  | Affix | Causate 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 causatives in (29) and (30) may be derived from verbal stems which are themselves derivatives of nominals and adjectivals as in (31) below.

$$
\begin{align*}
& \text { malaa } \left.\left.]_{\mathrm{N}}+-\mathrm{a} \text { ? }\right]_{\mathrm{V}}+-\mathrm{s}-\right]_{\mathrm{V}}>[\text { malaa-s- }]_{\mathrm{V}}  \tag{31}\\
& \text { ?adii } \left.\left.]_{\mathrm{A}}+- \text { at- }-\right]_{\mathrm{V}}+-\mathrm{s}\right]_{\mathrm{V}}>[\text { ?add-eess }-]_{\mathrm{V}}
\end{align*}
$$

Such processes are possible with $/-\mathrm{a}$ ?-/ and $/-\mathrm{at}-/$ 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 $/-? /$ 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 $>$ duu-tuu '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 counter evidence. First, truncation does not take place in the derivation of causatives from verbal roots ending in similar segments as in (33) below ${ }^{5}$.
(33) ňaat- 'eat' + -siis- > ňaat-čis- 'cause to eat' t'abat- 'play' + -siis- > t'abat-čis- 'cause to play'

If there were 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 any truncation.
(34) sodaa 'fear' $]_{\mathrm{N}}+-$ at- $]_{\mathrm{V}^{+}}$-siis- $>$sodaat-Eis- 'frighten'
dubbii 'talk' $]_{\mathrm{N}}+-$ at- $]_{\mathrm{V}}+$-siis-> dubbat--is- 'cause to talk'
gaaffii 'question' $]_{\mathrm{N}}+-$ at- $]_{\mathrm{v}}+$-siis-> gaafat-čiis- 'cause to ask'

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

$$
\begin{align*}
& V  \tag{35}\\
& {[+ \text { caus }]}
\end{align*} \quad---->\left\{\begin{array}{c}
V \\
A
\end{array}\right\}+\underset{[+ \text { caus }]}{V^{\text {af }}}
$$

The base categories here may be represented in terms of features as in (36).
(36) V $----->X+V^{\text {af }}$ [+caus] [+v] [+caus]

According to Lloret (1987), the causative morpheme is $/-s-/$ and the $/$-(i)i-/ is an epenthetic vowel. The alternation between long and short $/-\mathrm{i} /$ "can be explained in terms of the vowel lengthening rule suggested before. But Lloret (1987: 152) also argues that causatives are formed from verbal stems and not adjectivals as assumed here.

However, I would still argue that although the causative suffix is $/-\mathrm{s}-/$ the bases could be adjectives and not only verbs. The change of the epenthetic vowel from $/-\mathrm{i}-/$ to $/-\mathrm{e}-/$ in some cases is due to harmony. When the vowel of the base is non-high the epenthetic vowel is also nonhigh and vice versa as shown in the following examples.


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:
a. bišaan-ni danf-e 'The water boiled' water-nom boil-pst
b. tulluu-n bišaan danf-is-e
'Tulluu boiled the water'
Tulluu-nom water boil-caus-pst
c. tulluu-n Fayisaa bišaan danf-is-iis-e

Tulluu-nom Fayisaa water boil-caus-caus-pst
'Tulluu caused Fayisaa 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 example below which he cites contains three -s's.
(39) ?inn-i ?isii ?alii mana gar-siisis-e '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, /bišaan/ which is a subject in (a) has become a direct object (DO) in (b), and an indirect object (IO) in (c). As stated in Owens (1985b: 33), this is a syntactic change only, semantically the NP remains with the same semantic role.

### 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 from adjectival and nominal bases with the suffix /-at-/.
(40)

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

The fact that the suffix vowel changes with different bases may indicate that the suffix forming stative verbs is $/-\mathrm{t} /$ and that the vowels may be epenthetic. But Hayward (1975: 207) argues that the alternation of the vocalic elements is unexplainable because the environment is not one which requires epenthesis, and that the epenthetic vowels in the language are the front vowels whereas in these examples other vowels are also found. The alternation is in accordance with the final vowel of the base as in the following examples.
a. hojed- 'work', cf. hoji 'work(n)';
b. hubad- 'care', cf. hubi 'care(n)';
c. debod- 'become thirsty', cf. debu 'thirst'

But, examples like (41b) and the following do no fit into his analysis.

| hirr-at- | 'become not full' $<$ | hirruu 'not full' |
| :--- | :--- | :--- |
| mill-at- | 'glance(v)' | $<$ |
| dubb-at- | 'talk(v)' | $<$ |

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

Furthermore, Hayward (1975: 208-9) raises the case of alternation between $/-\mathrm{at}-/$ and $/-\mathrm{aDD}-/$ and suggests, on diachronic grounds, that "Relatively early on the development of Eastern Cushitic ... an innovation affected some dialects in which [d] came to replace earlier $/ * \mathrm{t} /$ in the middle-voice stem extensions". But from synchronic point of view one may argue, at least for Oromo, that /-at-/ is the stative morpheme and/-Dis a first and second person morpheme which appears following verbal
stems ending in $/-$ at- $/ /^{6}$. One may say that the occurrence of /-D-/ is not morphological but phonological, since it is not motivated by stativity but by root-final sound(s). The evidence for this is that /-D/ does not pattern with other stative suffixes like $/-\mathrm{a}$ ?-/ and $/-\mathrm{om}-/$ as shown in (43), below.

|  | Base | Affix | Derived stative |  |
| :--- | :--- | :--- | :--- | :--- |
| 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 person 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 other similar processes such as the following.
(44) Deeraa + -at- + -D- > Deer-at-D- > Deer-aDD- 'become tall' Deeraa + -at- + -čuu $>$ Deer-at-čuu $>$ Deer-aččuu 'to become tall' Deeraa + -at- + ne $>$ Deer-at-ne $>$ Deer-anne 'we became tall'

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

$$
\begin{array}{cc}
\mathrm{V}-------> & \mathrm{X}+\mathrm{V}^{\mathrm{af}}  \tag{45}\\
{[+ \text { stat }]} & {[+ \text { stat }]}
\end{array}
$$

In this case, the derivation of statives is category-changing in that $[-\mathrm{N}]$ categories (verbs) are derived from $[+\mathrm{N}]$ categories (Nouns and Adjectives). With regard to argument structure, there is no difference between the base and the derivatives.

### 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 the stative /-at-/ is homophonous with the middle/-at-/, the two are different. Middle verbs are identified by their subject which "performs the action or participates in the event denoted by the verb expressly for his own benefit" (Hayward, 1975: 209). Hence, they are different from reflexive verbs ${ }^{7}$ only in function, i.e whereas in the case of statives, the subject of the clause 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 ${ }^{8}$.

| Base |  | Affix | Benefactives |  |
| :--- | :--- | :--- | :--- | :--- |
| bit- | 'buy' | -at- | bit-at- | 'buy for oneself' |
| qab- | 'catch' | -at- | qab-at- | 'catch for oneself' |
| haad- | 'shave' | -at- | hadd-at- | 'shave oneself' |
| Diq | 'wash' | -at- | Diq-at- | 'wash oneself' |

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

$$
\begin{array}{lrr}
V-------\gg & V+V^{\text {af }} & a-b=\text { autobenefactive }  \tag{47}\\
{[+a-b]} & {[+a-b]} &
\end{array}
$$

This derivational rule is non-category changing since it derives middle verbs from other verbal bases.

### 2.2.4 Passives

Passive verbs in this language are derived from transitive bases by the addition of the suffix $/-\mathrm{am}-/$.
(48)

| Base |  | Affix | Passives |  |
| :--- | :---: | :--- | :--- | :--- |
| rukut- | 'hit' | - am- | rukut-am- | 'be hit' |
| gurgur- | 'sell' | - am- | gurgur-am- | 'be sold' |
| mur- | 'cut' | - am- | mur-am- | 'be cut' |

For this one can formulate the following WFR.
(49)


The process of passivation is non-category-changing. The effect is that transitives become intransitives and because of this the procoss is considered as one of intransitivization (Hayward, 1975: 204).

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 structures," 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 different lexical categories. Most adjectives in Oromo seem to be derived. The problem is how to determine the category of the roots to which suffixes are attached. Let us begin with /-aa/-tuu/ in the following.

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

In the case of /diim-aa/-tuu/ 'red', it may be possible to regard the root as inherently adjectival and the suffixes as inflectional designating gender. But, there are other roots which seem to be verbal since they take verbal inflections as illustrated below.
(51) č'ululuq-e č'ululuq-t'-e č'ululuq-an

'became shiny'<br>'she became shiny'<br>'they became shiny'

Furthermore, from stative verbs like /diim-at-/ 'become red' one can derive the adjectival /diim-at-aa/-tuu/ 'reddened' which can be seen in NP's like:
(52) buna diim-at-aa 'reddened coffee'
not
*buna diimaa 'red coffee'

In some cases, the base to which the affix is attached is a stative verb as in $(53)^{9}$.

| ?ulf-aat-aa | 'heavy' | cf. *?ulf-aa |
| :--- | :--- | :--- |
| gabb-at-aa | 'fat' | cf. *gabb-aa |
| etc. |  |  |

Other adjectivals are formed with /-ssa/, /-ttii/ as in the following.
(54) soore-ssa/-ttii 'rich(mase/fem)' ba?ee-ssa/-ttii 'good(masc/fem)' qabee-ssa/-ttii 'wealthy(masc/fem)'

Still others end in $/-\mathrm{ee} /, /-\mathrm{uu} /$, $/-\mathrm{ii} /$ and $/-\mathrm{oo} /$ as shown below.
(55) gaD-ee 'bad'
gobb-uu 'dense'
DeeD-ii 'raw'
fag-oo 'far'

Even though such endings show consistency of form, it is difficult to assume that all the vowels in the language are used to derive adjectivals. Furthermore, the bases with which these vowels appear cannot be categorized into any of the lexical categories except adjectivals. Therefore, the only plausible thing to do is to regard them as simple (non-derived) adjectives. But we have to recognize that some adjectivals are derived on the analogy of such simple ones.

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 (56).

```
A -------->> V + A af
```


## 3. Compounding

Compounding is the process of forming new words by combining different lexical categories (Bauer, 1983: 28). However, it is not the case that every two words (stems) combine to form a compound word. Every language follows certain rules by which it forms its compounds (Selkirk, 1982: 14).

Furthermore, the formation of compounds differs in important ways from the furmation of larger forms such as phrases, clauses or sentences ${ }^{10}$. In this chapter, we shall describe Oromo lexical compounds 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 by 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 kombination 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 the following.

| (1) ?abbaa buddeenaa | 'step father' |
| :--- | :--- |
| father food |  |
| haaDa manaa | 'wife' |
| mother house |  |
|  | ?abbaa kellaa |
| father gate | 'gateman' |

haaDa kiristinnaa $\quad$ '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.
(2) qodaa bukoo 'dough container' material dough "okkotee bišaanii 'water-pot' pot water
saanduqa wayyaa 'cloth-box' 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 |  |$\quad$| t'uwwee marqaa |
| :--- |
| pot porridge |$\quad$ 'porridge-pot' $\quad$.

Names of certain parts of the body may also be combined with other nouns to form compounds designating names of diseases.
(4) mataa č'absaa
head breaker
dugda kutaa
back cutting
garaa č'iniinnaa 'stomachache'
stomach biting

Other compound nouns may be formed by combining nouns referring to locations where activities take place.
(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 which are instrumental.

### 3.1.1.1.2 Noun-Adjective Compounds

Compound nouns can also be formed by combining nouns and adjectives. The process is not productive; we have examples like the following.
(6) sanbata guddaa 'Sunday'
sabath big
muka gurraačča 'a kind of tree'
tree black
mata bookee 'a kind of plant(whose head is round)'
head 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.
(7) gadi qabaa 'oppression'
down having
dura taa? aa 'chairman'
front he who sits
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 he who lives
dafqee bulaa 'proletariat'
toil he who lives
lootee galtuu 'guerrilla'
intrude entere ${ }^{\text {‘ }}$

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

> (9)

$$
N\left\{\begin{array}{l}
N \\
A
\end{array}\right\}
$$

$\left.N \ldots-\cdots+\begin{array}{l}\text { N }\end{array} \begin{array}{l}\text { N } \\ A\end{array}\right\}$

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 /?abbaa/ 'father' or /haaDa/ 'mother' and the second a nominal designating some attributes.
?abbaa/haaDa boo?iččaa 'crying'
father/mother crying
?abbaa/haaDa dubbii 'talkative' father/mother talk
?abbaa/haaDa hirribaa 'sleepy'
father/mother sleep

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

| of tuulaa <br> self piler | 'boasting' |
| :--- | :--- |
| nama ňaataa <br> man eater | 'man eating' |
| -of ?eegaa | 'careful' |
| self keeper |  |

### 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 quiqulluu $\quad$ 'clean-hearted'
stomach clean
? ija jaamaa
'blind' eye blind

Other similar compounds include those in which the second constituent is a derived adjective.
humna qabeessa 'strong'
power having
bifa toleessa
'good-looking'
color be good
?ija jabeessa
'shameless'
eye strong

### 3.1.1.2.3 Noun-Numeral Compounds

Compound adjectives can be formed from nouns and numerals.
(14) ?ija afurii 'four-eyed' eye four
qub-lamee
'two-fingered'
finger two

> gur-sadee ear three

### 3.1.1.2.4 Adjective-Noun Compounds

In such compounds the nominal qualifies the adjective in terms of degree or intensity.
gurraačča č'ilaattii 'charcoal-black'
black charcoal
?adii ?aannan 'milk-white'
white milk
jabaa muka
'very strong'
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.
(16) diimaa bareedaa 'pretty-red' red pretty
?adii quiqulluu 'pure-white'
white clean
?ajaa?aa tortoraa 'rotten-stinky'
stinky rotten

The compound adjectives presented so far follow the rule in (17). $\left\{\begin{array}{l}N \\ A\end{array}\right\} \quad N$
(17) A ------> N


A

According to this rule, compound adjectives can be formed in different ways with apparent problems 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 the only examples.

$$
\begin{array}{ll}
\text { ?asii gadi } & \text { 'downwards' }  \tag{18}\\
\text { here down } & \\
\text { ?aččii ?asi } & \text { 'towards here' } \\
\text { there here } & \\
\text { ?aččii ?oli } & \text { 'upwards' } \\
\text { there up } &
\end{array}
$$

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 | + | - | - | + |

$+\quad=\quad$ where combinations are possible

- = where no combinations are impossible

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, eyen 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 with which they form syntactic structures. 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 ${ }^{11}$. Mahammed (1989: 160-63) treats as compound certain verbs which he labels 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 consider the phonological, morphological, syntactic and semantic characteristics of lexical compounds.

### 3.2.1 Phonological Characteristics

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

| (21) | ?abba? | 'father' |
| :--- | :--- | :--- |
|  | birri? | 'birr' |
|  | hoola? | 'sheep' |
|  | diima? | 'red' |
|  | ?adi? | 'white' |

(22) ?abbaa buddeenaa 'step father' birrii waraqataa 'paper money'
diimaa bareedaa 'pretty red' ?adii quiqullu 'pure white'

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

In some cases, the vowel /a/ may be lost in stem/word final positions in compounds like the following:
(23) jala + bultii $>$ jal bultii
'eve'
sanbata + guddaa $>$ sanbat guddaa 'Sunday'

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

$$
\begin{array}{lll}
\text { gurra }+ \text { sadii }>\text { gur-sadee } & \text { 'three-eared' }  \tag{24}\\
\text { quba }+ \text { lama }>\text { qub-lamee } & \text { 'two-fingered' } \\
\text { gaafa }+ \text { torba }>\text { gaaf-torboo } & \text { 'seven-horned' }
\end{array}
$$

Such changes 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.

$$
\begin{array}{lll}
\text { ?abbaa }+ \text { seera } & >\text { ?abbaa seeraa } & \text { 'lawyer' }  \tag{26}\\
\text { qubata }+ \text { t'iyyaara } & >\text { qubata t'iyyaaraa } & \text { 'airport' }
\end{array}
$$

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

| (27)wali + galte $>$ waliigaltee$\quad$ 'agreement' |  |  |
| :--- | :--- | :--- |
| loote + galtuu | $>$ looteegaltuu | 'guerrilla' |

Except the loss and change of final vowels as in (24) and (25) respectively, the other characteristics 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; 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" compounds are those which are not regulated by such phonological characteristics.

### 3.2.2 Morphological Characteristics

The first question to answer about the morphology of Oromo compounds is the level and 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.

| ?abbaa manaa | 'husband' |
| :--- | :--- |
| garaa bišaanii | 'water-hearted' |
| ?ija ?afurii | 'four-eyed' |

Others may have second members which are derived forms.

| mataa č'abs-aa | 'headache' |
| :--- | :--- |
| gadi qab-aa | 'oppression' |
| gara laaf-essa | 'tender-hearted' |

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

| qot-ee bul-aa | 'armer' |
| :--- | :--- |
| 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, which 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 input 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) inni ofii-saa jaallata he-nom self-his love
*ofii-saa jaallat-aa
?abbaa manaa šee 'her husband'
'He likes himself'
cf. ofi jaallataa 'selfish'
cf. *?abbaa-šee manaa

As stated earlier, Mohammed (1989:161) describes $\{\underset{\text { walii }}{\text { ifi }}\}+$ 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.

| if gubbaa $\quad$ cf. | on oneself' |
| :--- | :--- |
| ifi-šee gubbaa <br> wal bira | 'on herself' |
| 'besides each other' |  |

One other point about the morphology of compounding is the position of inflectional elements like number morphemes which are attached to the head of a compound as in (34).

$$
\begin{array}{ll}
\text { ?abb-oota biyyaa } & \text { 'country-leaders' }  \tag{34}\\
\text { Dag-oota daakuu } & \text { 'millstones' }
\end{array}
$$

This shows that Oromo is not regulated by the "IS A condition ${ }^{12}$," which states that a compound is formally and semantically identical to its righthand constituents (Scalise, 1984: 92). This does not mean, however, that inflectional elements are always attached to the first member of the compounds, there are cases where they are attached to the second member or to the compound as a whole.

| 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 characteristics. 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 input 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, 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, we also see that the head is not strictly on the left or on the 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?

We may assume that the heads of compounds are the right-hand members and the defining criteria for this are the syntactic distinctive features rather than the categorial labels alone. This is to say that, in the case of compound nouns, for example, the right-hand members are $[+\mathrm{N}]$ categories and it is this feature which is percolated to the parent node to make it $[+\mathrm{N}]$. This is true also of compound adjectives except those with numerals which may be treated as adjectives since they occur in positions of adjectives ${ }^{13}$. They may hence be regarded as having the feature $[+\mathrm{N}]$. Thus, following Gazdar et al (1981: 115), we may formulate the following general rule for Oromo compounds in terms of syntactic headedness ${ }^{14}$.
(36) X ---------> Y H

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

### 3.2.4 Semantic Characteristics

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 examples in (3.1) above.

Another semantic characteristics is the relation holding between the head and the non-head members and also 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 is related to that of the whole compound. Such are what Bauer (1983: 20) calls "opaque compounds" whose meaning cannot be predicted from the meaning of any of their constituents. With some compound nouns, the possessive relation is pragmatically deriven from both constituents. For example, /?abbaa/ 'father' +/manaa/ '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, /Dagaa/ '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 one. The fact that we have such a variety of semantic relations, even within the same type of compounds, indicates that there is no way of generalizing the semantic relation holding between the constituents of a compound. In order to account for such relations one may try to list all possible relations but Selkirk (1982: 23) criticizes this as futile since it does not aim towards generalization.

One predictable semantic relation between the constituents of a compound is in Nouns + Adjectives, and Adjectives + Adjective compounds. In such forms, 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 modifiermodified relation. A question to be raised here relates to the way one distinguishes between phrases 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 gurraačča/ 'black tuee' can be a lexical compound or a noun phrase according to its reference.
a. muka gurraačča 'a kind of tree'
b. muka gurraačča 'a black tree'

Thus, when it refers to a certain type of tree as in (37a)), it is a compound and when it refers to any tree which has a black color (as in (37b), it is a noun phrase. Furthermore, in forms where a noun follows an adjective as in (15) 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 adjective, the semantic relation between the constituents is like that which holds between the verb and its arguments in syntactic structures. Thus, if the sister constituent of adeverbial noun, for instance, is a Theme in syntactic configurations, the same relation holds in compounds.
8) 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 headed'ness 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) ${ }^{15}$. Oromo compounds do not satisfy this because although heads are the right-hand members of compounds, from a syntactic point of view, in some cases, the semantic heads are those which are on the left-hand side. For instance, /Dagaa daakuu/ 'millstone' 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', and 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" 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 on the analogy of the basic ones. A detailed investigation is essential.

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

* A version of this paper has been presented to the Graduate School of Addis Ababa University in partial fulfillment of the requirements for the degree of Master of Arts in Linguistics.
${ }^{1}$ With regard to the $/-\mathrm{i}-/$ before $/$-čča/ and $/-$ sa/ it is possible to say that it is an epenthetic vowel. It is inserted when a base ends in a nonsonorant consonant and the suffix begins in a consonant. This epenthetic vowel becomes long following the rule that lengthens the suffixal vowel when the vowel of the base is short. Such a rule may be formulated as follows.
(i) Vowel insertion rule:
$\qquad$
[-son] (where+ = morpheme boundary).
(ii) Vowel lengthening rule:
V --------> VV/ (C)V(C) +_
${ }^{2}$ Note that this morpheme is /-čuu/ whenever there is a root final /at/. But I have found the following exceptions.

| goD-čuu | 'to make' |
| :--- | :--- |
| boqot-čuu | 'to rest' |
| jeD-čuu | 'to say' |
| cf. | 'to pull' |
| gotot-uu | 'to suck' |
| hoD-uu | 'to tie' |

${ }^{3}$ Note that again, /-umsa/ and/-aatii/ are homophones witb result and action nominals.
${ }^{4}$ In this language, suffixes that are used for marking the feminine are also used as diminutivizing suffixes (for the detail see Gragg, 1976: 180).
${ }^{5}$ The causative /-s-/ has a variant /-č-/ when the last consonant of the base is an alveolar as in the following examples:

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gal- + -s- > gal-č- 'cause to enter'
gammad- + -s- > gammad-čis- 'cause to be nappy'
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${ }^{6}$ Such word-final /-at-/ can either be a morpheme or part of a 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' ňaat-D-u 'you(sg) eat'
laat- 'to give' > laat-D-e 'I gave' laat-D-u 'you (sg) give'
${ }^{7}$ Where the subject of the clause in which they occur participates in the action such as by doing it upon himself or with his own volition.
${ }^{8}$ Hayward (1975: 211) suggests that since the forms with autobenefactive (a-b) sense are more productive than the reflexives, the (a-b) label is better used. This will be followed in this paper.
${ }^{9}$ Note that Owens (1985: 242-3) mistakenly gives */gabb-aa/ 'fat' as a well-formed word. Furthermore, a well-formed/guddat-aa/ 'growing' derived from /gudd-at-/ 'get big' is given in this work as ill-formed.
${ }^{10}$ 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 here.
"One may regard as compounds forms with /jeD-/ 'say' 'make'. But sine the first members of such forms a) vods of onomatopoeic nature we cannot categorize them into any of the lexical categories of the language. Thus, they are left out from the present discussion. The f. fl owing are some examples.

| č'al jeD- | 'keep silent' |
| :--- | :--- |
| lip' goD- | 'put off a light' |
| kaš jeD- | 'brcak' |
| gagam goD- | 'snatch' |

${ }^{12}$ Scalise (1984: 124) also discusses that there are languages like 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 the leftmost 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.
${ }^{13}$ Phonologically also we have seen above (3.2.1) that they have the same characteristics.
${ }^{14}$ This conclusion matches the headedness condition in derived words. But it is not without a problem as we shall see in the next section (3.2.4).
${ }^{15}$ Note that the "IS A" condition also requires the fulfillment of these two characteristics (see Scalise,1984: 92).

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