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WORD FORMATION IN DIDDESSA MAO

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***BY
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***July, 2007
ADDIS ABABA***

TO MERERTU M. LELLISA

DECLARATION

I, undersigned, declare that this thesis is my original work and has not been presented for a degree in any other university, and that all sources of material used for the thesis have been duly acknowledged.

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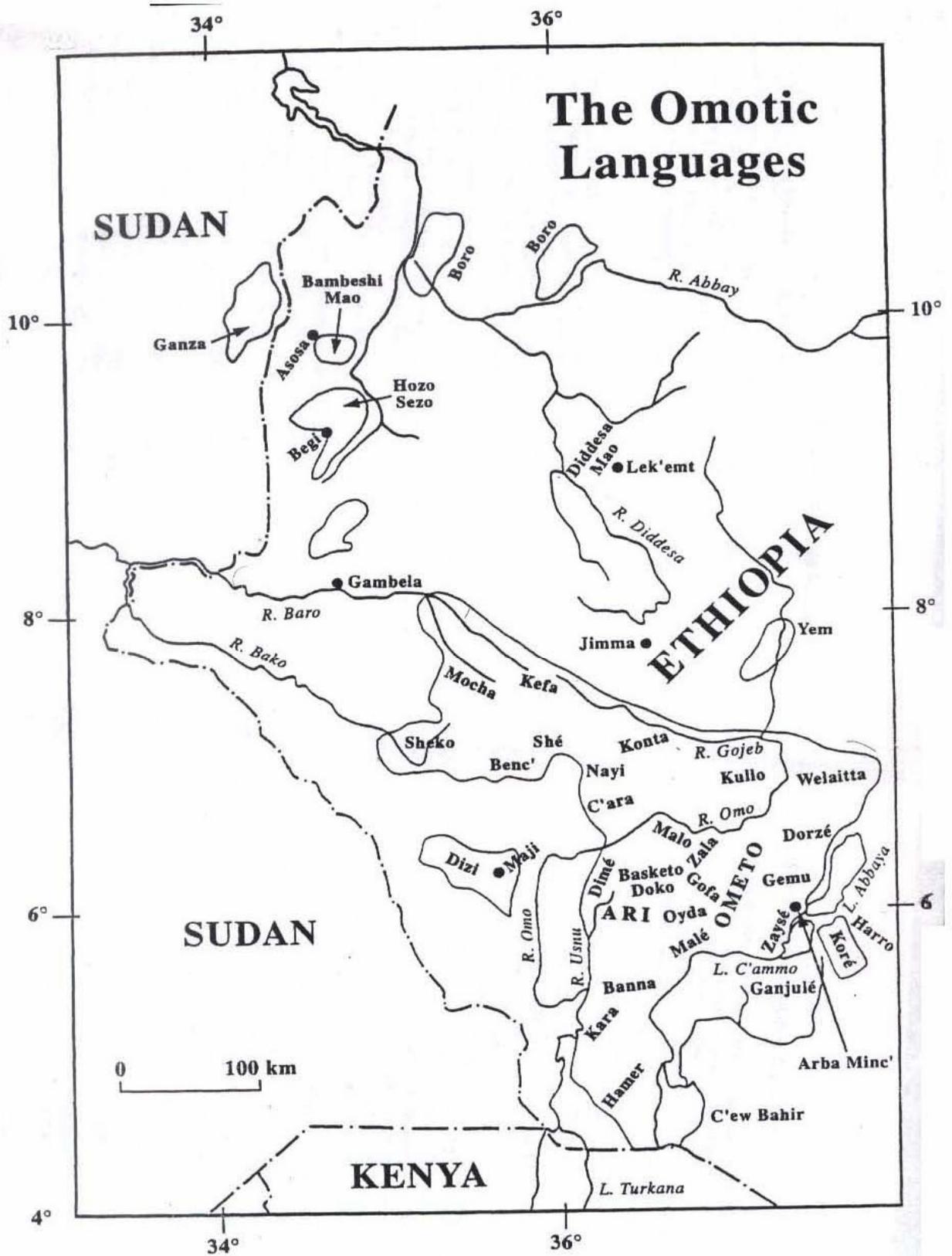
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(Adopted from Bender 2003:154)

LIST OF WORD FORMATION RULE'S

WORD FORMATION RULES (WFRs)	PAGES
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ABBREVIATIONS

A,Adj	=	adjective
A ^{af}	=	adjectival affix
abst	=	abstract
acc	=	accusative
af	=	affix
ag	=	agentive
c	=	consonant
Caus	=	causative
comp	=	compound
cop	=	copula
det	=	determiner
du	=	dual
foc	=	focus
gen	=	genetive
inte	=	intensive
imperf	=	imperfective
iter	=	iterative
N ^{af}	=	nominal affix
N ^r	=	nominal root
mann	=	manner
N	=	noun
NP	=	noun phrase
nom	=	Nominative
noml	=	nominalizer
Num	=	number
P	=	adposition
PASS	=	passive

Pf	=	perfective
pl	=	plural
proc	=	process
refl	=	reflexive
res	=	result
sg	=	singular
stat	=	stative
suff	=	suffix
V ^{af}	=	verb affix
V ^b , V ^r , V ^s	=	Verb base, Verb root, Verb stem respectively.
WF	=	Word formation
WFR	=	Word formation rule
1sg	=	1 st person singular
2sg	=	2 nd person singular
3sg	=	3 rd person singular
1pl	=	1 st person plural
2pl	=	2 nd person plural
3pl	=	3 rd person plural
//	=	enclosed phonemic items
[]	=	enclosed phonetic items
_	=	morpheme boundary
*	=	ill-form
+	=	has that value
→	=	becomes

Abstract

This thesis has attempted to investigate and describe the word formation processes in Diddessa Mao, the variety of Northern Mao of Omotic family spoken around Diddessa River Valley. Derivation, compounding and reduplication have been dealt with as the major word formation processes. The derivational processes in this variety of Mao included nominalization, verbalization, and adjectivalization.

Derived nominals such as: manner nominals suffix /-ä/ to action verbs. Abstract nominals suffix /-iyä/ to adjectival and nominal bases. Action nominals suffix /-i/ to verb roots, and result nominals suffix /-e/ to verb bases. In verb derivation causatives are derived from verb roots, adjectivals and nominal bases by suffixing /-sisa/. Passives suffix /-ek'-/ to transitive verb roots. Reflexives suffix /-inke/ to simple verb roots, causative verbal stems and intensive verbal stems. Statives attach the morpheme /-inke/ to adjectives. The reflexive /-inke/ is homophones with the stative /-inke/. Adjectivals are derived from nominals by suffixing the morpheme /-itä/.

Compounding in this variety of Mao is formed through the combination of two or more words from the same or different word-classes. Compound nominals are formed from verbals and nominals or from two nominals. Compound adjectives are formed from two adjectivals, or nominals and adjectivals, adjectives and nominals and number with nominals. Compound adpositions are formed from two adpositions.

Intensive verbal stems are formed from verb roots through complete reduplication process. Adverbials are derived from nouns that refer to time with the suffix /-at/. Some phonological, morphological, syntactic and semantic characters of the derivatives and compounds are considered in this study. For all kinds of word formation processes, word formation rules (WFRs) have been proposed and their positions are also described.

CHAPTER ONE: INTRODUCTION

1.1. The People and their Language

1.1.1 The People

The Diddessa Mao live in western Ethiopia at the area bordering the Benishangul Gumuz and Oromia Regional States at the bank of Diddessa River Valley. From the side of Benishangul Gumuz Regional State, they settle in Gomme Village, Hore Dimtu Kebele, Belojegonfoy Woreda, Kamashi Zone. In Oromia Regional State, they live in Degaga Diddessa Kebele, Digga Woreda, East Welega Zone. The people of Diddessa Mao lead subsistence way of life based on small scale farming mainly sorghum, maize, and cotton cultivation. The 1994 Population and Housing Census of Ethiopia indicate that the number of Diddessa Mao speakers is only 44. This number shows that Diddessa Mao is seriously endangered.

The report of the Survey of Little Known Languages of Ethiopia (SLLE 15:8), indicates that the Diddessa Mao people migrated from Bambasi Mao around 1900. My Diddessa Mao informants also told me that they are descended from Bambasi Mao. They believe that they speak the same language except some dialectal variation. They also informed the researcher that they call themselves “Mao Abba Shora’ named after their ancestor who lead the migration from Bambasi to Diddessa River Valley, and their Language /ma:ʔes ʔa:s’ä/which literally means ‘mouth of Mao man’. The Diddessa Mao people are Christians

(Orthodox or protestant). Unlike other neighboring nationalities, Diddessa Maos do not have any visible tribal mark on their body.

1.1.2 The Language

The name Mao designates two Mao groups (Southern Mao and Northern Mao) who speak two different Languages. The Southern Mao (also called Anfillo) is a Gonga cluster of the Omotic family (Fleming 1984:31). It is spoken by the Mao found in Anfillo and Sayo Woredas, in the West Wellega Zone of the Oromia Regional State (Debela and Girma 2005: 54).

The second group is the Northern Mao with two dialect clusters: one around Begi consisting of two main varieties (Hozo and Sezo), and the second around Bambasi with an emigrated group in Diddessa River Valley (Bender 2000:179).

As for its classification, the Northern Mao is a subject of controversy among scholars. Grottanelli (1940), for instance, classifies it as a member of the Koman branch of Nilo-Saharan phylum. His classification is based on non-linguistic factors, such as, physical features and cultural similarities that the Mao people share with the Koman (Fleming 1984:31). Other scholars namely, Cerulli (1956), Greenberg (1963), and Fleming (1965) simply followed Grottanelli except Bender (1971) who challenged the classification with empirical lexicostatistic evidences. He reclassified 'Grottanell's North Mao' (Medegi, Hozo, Sezo, and Gebisi), as well as Bambasi and Diddessa Mao within the Omotic family, while the other languages of the area Komo, Kwama,

Gumuz, Berta are Nilo-Saharan (Bender 2000:180). Bender's (1971), (1976) and (2000) works depend on tangible linguistic evidences. Hence, the researcher takes Diddessa Mao as an Omotic language following Bender.

1.2. Previous Studies

The Mao family has the weakest documentation in Omotic. Some works have been done on the description of individual Mao languages. For instance, Grottanelli (1940) presents history of Mao people with minimal linguistic information in the form of word lists.

Fleming (1984, 1988) contributes two analytical and historical articles. The former deals with the prehistory of western Ethiopia based on linguistic and other data. The latter is an attempt to reconstruct the Proto-Mao phonology.

Bender (2000) compares the phonological and morphological systems of the Mao languages such as Begi Mao (Hozo and Sezo), Bambasi Mao and Diddessa Mao. In this work, the data for Diddessa Mao was not sufficient to give a full description of morphological systems of the dialect. Thus, the intension of the present researcher is to complement this gap on word formation processes in the variety under investigation.

Devis et al (2004) conducted a survey on the mutual intelligibility among the Mao varieties (Begi Mao, Hozo, Sezo, Bambasi Mao and Diddessa Mao) as well as Komo and Kwama languages of the Nilo-Saharan super family of the Koman

languages. The result of their survey indicates that Bambasi Mao and Diddessa Mao are dialects of one language as 92% of the lexicon is the same.

More recently, based on the data collected from Bambasi Mao, Baye (2006) makes an overall documentation and phonological, morphological, and syntactic description of the language. From a stock of about 250 words elicited, he identified the following 26 consonant and 5 vowel phonemes.

Table 1: A phonemic chart of Mao consonants:

Place of Articulation Manner of articulation		Bilabials	Labiodentals	Alveodentals	Alveopalatals	Velars	Glottals
Stops: Vd:		b		d		g	
	Vls:	p		t		k	ʔ
Ejectives:		p'		t',s'		k'	
Affricates: Vd:					ǰ		
	Vls:				č		
Fricatives Vd:				z	ž		
	Vls:		f	s	š		h
Nasals:		m		n	ɲ		
Laterals:				l,r			
Glides:		w			y		

Table 2: A phonemic chart of Mao Vowels:

	Front	Central	Back
High	i,i:		u,u:
Mid	e,e:		o,o:
Low		a,a:	

Based on the data collected from the native speakers of Diddessa Mao, in addition to the 26 consonant phonemes the alveodental implosive /D/ was detected as phoneme by the present researcher:

The Alveodental Implosive /D/ as in:

biya:Dä	‘night’	kiDišä	‘sholder’
Došä	‘plant’	beDä	‘salt’
Donk’iDonk’ä	‘bow’	foDä	‘thigh’
keDä	‘house’		

It appears that /D/ occurs in word initial and medial positions. The existence of this alveodental implosive consonant /D/ in Diddessa Mao may be due to the influence of Afan Oromo the socially dominant language in the area. It can also be taken as originally inherent in the variety as this consonant phoneme is common in other Omotic languages, as for example, Oyda (Abraham, 2003:3).

The occurrence of central mid vowel /ä/ is uncommon in Omotic languages. But the central mid vowel /ä/ is found as a phoneme in Anfilo (Debela and Girma 2005:65), and in Bambasi Mao (Baye 2006) found this vowel as a terminal vowel at the end of nominals and adjectivals. In this study, the researcher has found this vowel at the end of Diddessa Mao Nominals and Adjectivals with wide distribution and meaning difference. Thus, he considers the central mid vowel /ä/ as vowel phoneme in Diddessa Mao too. Consider the following minimal pairs:

hup'a 'stole'	me:na 'mowed'	šwi:la 'cleaned'
hup'ä 'thief'	me:nä 'buffalo'	šwi:lä 'canoe'

1.3. The Scope of the Study

Following Bender's (2000) classification of Mao, the present researcher restricts himself to the study of word formation processes in the Diddessa Mao variety. The study describes the word formation processes involving derivational affixes, compounding and reduplication. In addition to the description of word formation processes, the study looks at the effect of phonological, morphological, syntactic and semantic characteristics involved in the word formation processes.

1.4. Objectives of the Study

As pointed out above, the study aims at describing the word formation process of Diddessa Mao. It specifically has the following objectives:

- 1) to describe various word formation processes that involve derivational affixes, compounding and reduplication;
- 2) to determine the word formation rules that governs the word formation processes;
- 3) to show the effect of phonological, morphological, syntactic and semantic characteristics involved in the word formation processes.

1.5. Significance of the study

The results of this study may serve different purposes. First, it can be considered as part of the documentation of the grammatical aspects of Diddessa Mao, as Diddessa Mao is one of the endangered varieties of Northern Mao. Recording and documenting the linguistic properties of the variety will in turn foster the linguistic identity of the communities of Mao who speak it as a mother tongue.

Second, as this variety is not yet adequately studied, the research may provide basic linguistic information for further studies on the Omotic languages in general and the dialect of Diddessa Mao in particular.

Third, it may help for developing literacy materials in Mao.

1.6. The Theoretical Framework

In Generative Grammar, various approaches were outlined to the study of word formation. Among these approaches, the Transformationalist and the Lexicalist Approaches are very influential.

The Transformationalist Approach did not consider word formation rules as lexical processes. According to this approach, the only items found in the lexicon are simple words. All compounds and derivatives are believed to be derived by syntax, that is, the rules of morphology applied to structures

created by syntax (Bauer 1983:5). After Chomsky's 'Remarks on Nominalization' in 1970, it was argued that much of derivational morphology was semantically irregular and should not be handled by syntactic rules which are regular. Out of this argument the Lexicalist Approach were developed.

The Lexicalist Approach, contrary to the Transformationalist Approach, advocates that syntax does not have access to the internal structure of words. As pointed out above, Chomsky (1970), the pioneer of the Lexicalist Approach, strongly argues that words with derivational features cannot be derived syntactically from the deep structures as they should be part of it (Selkirk 1982:1).

Based on the assumption that the Lexicalists have on derivational and inflectional morphology, the Lexicalist Approach was divided into two: Weak and Strong Lexicalist (Selkirk 1982:1) and (Aronoff 1976:9). The Weak Lexicalist Approach assumes that derivation and compounding takes place in the lexicon. On the other hand, the strong Lexicalist Approach assumes that inflectional and derivational morphology are in the lexicon; and excludes all morphological issues out of syntax (Aronoff 1976:9).

In the description of the Diddessa Mao word formation, the researcher follows the Weak Lexicalist Approach for the Weak Lexicalist Approach stipulates words with derivational morphology and compounding are not formed by syntactic transformation. The study tries to identify the various derivational,

compounding and reduplication processes the Diddessa Mao employs in word formation processes. For the formation of rules, the framework developed by Selkirk (1982) is followed.

1.7. The Research Questions

The study attempts to answer the following major questions:

- 1) How are various words in Diddessa Mao formed?
- 2) What are the rules that govern word formation in Diddessa Mao?
- 3) What are the effects of phonological, morphological, syntactic and semantic characteristics involved in the word formation processes in Diddessa Mao?

1.8. Methodology and Procedure

The methodology employed in this study is informant method, where native speakers of Diddessa Mao were interviewed. The writer prepares appropriate linguistic questionnaires: derivational paradigms of words, phrases, clauses and sentences that help him to collect qualitative data. The lingua franca was Afan Oromo which both the researcher and the informants speak and understand. The informants were asked to utter each linguistic unit through elicitation and in the form of texts from continuous speech. The researcher records on tape what the informants produce and then transcribed them phonemically using the International Phonetic Alphabet (IPA symbols) and glossed them in English. Then thorough analysis is made to identify the

various derivational affixes, compounds and reduplicated forms. The data was gathered from Kejela Amercan, Mekonin Hundessa and Niguse Ettana, aged 20, 26, and 33 respectively. Three of them are speakers of Diddessa Mao variety and speak Afan Oromo as a second language.

CHAPTER TWO: DERIVATIONAL AFFIXES

2.1 Introduction

The derivation of a word is the set of morphological operations used to form new word (Radford 1997:503). In the same manner, Lyons (1977:522) defines derivation as the morphological process that results in the formation of new lexemes. New words or lexemes can be derived by the attachment of different derivational affixes to different bases, roots or words.

Traditionally there are two types of morphological affixes, derivational and inflectional affixes. According to Aronoff (1976:2) inflections are purely grammatical markers, such as tense, aspect, person, number, gender, case etc. which simply produces word-forms of a single morpheme, while, derivation conversely produces new lexemes. In most cases, in natural languages as Bauer (1983:26) puts, “where both derivational and inflectional elements are found together, the derivational element is more intimately connected with the root”. As this study focuses on the derivationally derived forms only, the researcher restricts himself to the derivational aspect (word formation).

As Katamba (1993:50) summarizes, derivational affixes are used to create new lexemes by either:

First, modifying significantly the meaning of the base to which they are attached, without necessarily changing its grammatical category; second, they bring about a shift in the grammatical class of a base as well as a possible change in meaning; or, third, they may cause a shift in the grammatical sub-classes of a word without moving it into a new word class.

In this chapter, different derivational affixes that are used to derive nominals, verbals, and adjectivals in Diddessa Mao will be described.

2.2 Nominalization

Nominalization is a process by which some other types of expression are converted into a nominal (i.e. noun expression). Such expressions can be converted from nouns or other word-classes by attaching different derivational affixes to a base, root, or word (Radford 1997: 519). The processes by which these words are formed is known as nominalization. In Diddessa Mao, nominals are derived from nominal, verbal or adjectival bases. In the following section, the researcher shall describe this fact. First, different kinds of derived nominals such as manner, abstract, action, and result nominals formed by attaching various derivational affixes will be described. Second, the word formation rules (WFRs) for derived nominals will be explained.

2.2.1. Manner Nominals

Manner nominals express the way or manner of doing the actions of the verb from which they are derived. In Diddessa Mao manner nominals are formed by suffixing /-ä / to the verb roots. Consider the following data presented in Table (3) below:

Table 3: Manner nominals derived from verbal roots

No	Verb Root	Gloss	Affix	Manner Nominal	Gloss
1	tos-	'speak'	-ä	tos-ä	'manner of speaking'
2	ku-	'sit'	-ä	ku-w-ä	'manner of sitting'
3	iš-	'drink'	-ä	iš-ä	'manner of drinking'
4	nunk'-	'stand'	-ä	nunk'-ä	'manner of standing'
5	ho-	'walk'	-ä	ho-w-ä	'manner of walking'
6	s'el-	'finish'	-ä	s'el-ä	'manner of finishing'

As we can see from Table (3) manner nominals are derived from verb roots by suffixing /-ä/. As the derived items presented in Table (3) above are manner nominals, we can consider the suffix /-ä/ as a manner nominalizer morpheme. This morpheme always contrasts with /-a/, which is a terminal vowel of verbs showing perfective aspect. We can develop the following word formation rule for such derivation:

WFR (1): $V^r + N^{af} [+mann.] \rightarrow N_{[+mann.]}$

Rule (1) refers that manner nominals are developed from verb roots with an affix having the features [+Manner, +Nominal]. That is, verb root becomes manner nominal with a suffix morpheme /-ä /.

The above derived manner nominals occur in such structures as the following:

- (6) a. ?i-n tos-ä ge:s'-i-tä
 3sg- gen speaking-noml good-foc:cop
 'His/her manner of speaking is attractive.'
- b. ti-š ?i-n tos-ä ti-ka:m-a
 1sg-nom 3sg-gen speaking-noml 1sg-like-Pf
 'I liked his/her manner of speaking'
- c. han-šä galgalä-n ho-ä han-ka:m-a
 1 (du)-nom G-gen go-noml. 1(du)-like-Pf
 'We loved Gelgele's manner of walking.'

Concerning phonological processes, as we have seen in the formation of manner nominals in Table (3) number (2 and 5) above, the glide [w] is inserted between two non-identical vowels where the first is a back vowel and the second suffixing element is also being /-ä/. For ease, the examples are repeated below in (7):

- (7) (a) ku +-ä → ku-w-ä
 sit nomin sit-eqn-nomin
 'manner of sitting'

(b) ho +-ä → ho-w-ä
 walk nomin walk-epn-nomin
 ‘manner of walking’

2.2.2. Abstract Nominals

Abstract Nominals are nominal forms that express the non-concrete qualities of nouns and have a meaning of ‘state’ or ‘condition’ of something (Katamba 1993-49). In Diddessa Mao, abstract nominals are derived from adjectival and nominal bases by adding the suffix /-iyä/ as shown in table 4 and 5 below, respectively.

Table 4: Abstract nominals derived from adjectival bases

No	Adjectival Base	Gloss	Affix	Abstract Nominal	Gloss
1	šeng’ilä	‘light’	-iyä	šeng’il-iyä	‘lightness’
2	se:gä	‘cruel’	-iyä	se:g-iyä	‘cruelty’
3	mank’ä	‘ill’	-iyä	mank’-iyä	‘illness’
4	šafä	‘sharp’	-iyä	šaf-iyä	‘sharpness’
5	ins’ä	‘fearful’	-iyä	ins’-iyä	‘fearfulness’
6	ent’ä	‘male’	-iyä	ent’-iyä	‘maleness’
7	k’o:mä	‘old’	-iyä	k’o:m-iyä	‘oldness’

The following abstract nominals are those derived from nominal bases by adding the same affix /-iyä/. Consider Table (5) below:

Table 5: Abstract nominals derived from nominal bases

No	Nominal Base	Gloss	Affix	Abstract Nominal	Gloss
1	muns'ä	'woman'	-iyä	muns'-iyä	'womanhood'
2	p'ışä	'boy'	-iyä	p'ış-iyä	'boyhood'
3	kanä	'dog'	-iyä	kan-iyä	'dog hood'
4	nikä	'father'	-iyä	nik-iyä	'fatherhood'

As we can notice from Table (4) and (5), abstract nominals are derived from adjectival and nominal bases by suffixing /-iyä/. Since the derived elements are abstract nouns, we can consider the suffix /-iyä/ as an abstract nominalizer morpheme. We can suggest the following word formation rule for such derivation:

$$\mathbf{WFR (2): [x] \left(\begin{array}{c} + \text{adj} \\ + \mathbf{N} \end{array} \right) + \mathbf{N}^{\text{af}}_{[+\text{Abs.}]} \rightarrow \mathbf{N}_{[+\text{Abs.}]}$$

Rule (2) states that non-abstract adjectivals or nominals become abstract nominals with the suffix /-iyä/. That means abstract nominals are derived from non-abstract adjectival or nominal with an affix having the features [+Abs, +Nominal]. In Diddessa Mao, nominals derived from adjectival bases are more productive than that of nominal bases. The occurrences of such derived nominals in sentences are illustrated below:

- (8) a. nik- iyä-š g^ya:y ge:s'-tä
 father-noml-nom many good foc:cop
 'Fatherhood is very good'
- b. hu:p'-iyä-š g^ya:y s'eg-tä
 steal-noml-nom many bad foc:cop
 'Theft /thiefness/ is very bad'
- c. ġukurä-š še:g-iyä ?i-koD-a
 J-nom cruel-noml 3sg-have-Pf
 'Jukura had cruelty.'

As can be inferred from the data in Table (4) and (5) in the process of derivation of abstract nominal from adjectival and nominal bases there is a phonological process. This phonological process is a vowel change. The vowel [ä], which is found at the end of adjectival and nominal bases assimilated to [i] when an affix /-iyä/ is attached to adjectival or nominal bases.

2.2.3. Action Nominals

In Diddessa Mao action nominals are derived from verbal roots with the suffix /-i/ as in Table (6) below:

Table 6: Action nominals derived from verb roots

No	Verb Root	Gloss	Affix	Action Nominals	Gloss
1	wo:s'-	'ask'	-i	wo:s'-i	'to ask'
2	bok-	'bark'	-i	bok-i	'to bark'
3	ta:s-	'bite'	-i	ta:s-i	'to bite'
4	p'enk'-	'chop'	-i	p'enk'-i	'to chop'
5	pi-	'kill'	-i	pi-y-i	'to kill'
6	gump'-	'touch'	-i	gump'-i	'to touch'
7	ko:š-	'play'	-i	ko:š-i	to play'
8	iš-	'drink'	-i	iš-i	'to drink'
9	bus'-	'wash'	-i	bus'-i	'to wash'
10	s'og-	'collect'	-i	s'og-i	'to collect'
11	kes'-	'untie'	-i	kes'-i	'to untie'
12	kazz-	'insult'	-i	kazz-i	'to insult'

The occurrences of such nominals are shown in the following structures:

- (9) a. t'one-š me:n pi-i ?i-ka:m-a
T. nom buffalo kill-to 3sg-like-Pf
'Tone liked to kill buffalo.'
- b. bultä-š kam p'enk'-i ?i nu:nk'-a
B. nom firewood chop-to 3sg-stand-Pf
'Bulte started to chop firewood.'
- c. k'o:m esä-š puw iš-i ?i-ka:m-a
old man-nom beer drink-to 3sg-like-Pf
'The old man liked to drink beer.'

The word formation rule for the derivation of action nominals can be formulated as follows:

$$\mathbf{WFR (3): V^r + N^{af} [+Act] \rightarrow N [+Act]}$$

Rule (3) reveals that action nominals are formed from verb roots by taking the morpheme /-i/.

2.2.4. Result Nominals

In Diddessa Mao, result nominals are formed by suffixing the nominalizing morpheme /-e/. Consider the data presented in Table (7) below:

Table 7: Result nominals derived from verbal bases

No	Verb Base	Gloss	Affix	Action Nominal	Gloss
1	s'og-	'collect'	-e	s'og-e	'collection'
2	wo:s'-	'ask'	-e	wo:s'-e	'question'
3	k'an-	'make'	-e	k'an-e	'making'
4	?u:p'-	'bury'	-e	?u:p'-e	'grave'
5	s'ol-	'jump'	-e	s'ol-e	'jumping'

Such type of derivation can be handled by the following general rule:

$$\mathbf{WFR (4): V^r + N^{af} [+Res.] \rightarrow N [+Res.]}$$

Rule (4) shows that verb base becomes result nominal by attaching the suffix morpheme /-e/.

2.3 Verbalization

Verbalization is the process of forming verbals by attaching derivational affixes to bases and by reduplicating the roots. In Diddessa Mao, verbs can be derived from verbal, nominal and adjectival bases. As a result, different kinds of verbals such as causatives, passives, statives, and reflexives are formed.

2.3.1 Causatives

Causative verb is a verb with an argument that expresses the cause of the action described by the verb. Causatives convey the notion of one event producing another event or one person causes another person to do something. Diddessa Mao causative verbs are derived from verbal, adjectival and nominal bases.

In Diddessa Mao causatives are said to be derived from verbal roots by suffixing the morpheme /-sisa/ as illustrated in Table (8) below:

Table 8: causatives derived from verbal roots

No	Verb Root	Gloss	Affix	Causatives	Gloss
1	s'ak-	'break'	-sisa	s'ak-sisa	'cause someone to break something'
2	s'og-	'collect'	-sisa	s'og-sisa	'cause someone to collect something'
3	wo:k'	'fetch'	-sisa	wo:k'-sisa	'cause someone to fetch something'
4	go:l-	'slaughter'	-sisa	go:l-sisa	'cause someone to slaughter'
5	k'of-	'cut'	-sisa	k'of-sisa	'cause someone to cut something'
6	iš-	'drink'	-sisa	iš-sisa	'cause someone to drink something'
7	bus'-	'wash'	-sisa	bus'-sisa	'cause someone to wash something'
8	tos-	'speak'	-sisa	tos-sisa	'cause someone to speak something'
9	hadam-	'work'	-sisa	hadam-sisa	'cause someone to work something'
10	mans'e:š-	'milk'	-sisa	mans'e:š-sisa	'cause someone to milk something'
11	yaf-	'cry'	-sisa	yaf-sisa	'cause someone to cry'

A word formation rule that produces causative verbs can be formulated as in the following:

WFR (5): $V^r + V^{af} [+Caus] \rightarrow V_{[+Caus]}$

Rule (5) reveals that the process of causativization is not category changing, since, the base and the derivatives are both verbs. However, it is subcategory changing as it changes the verb from non-causative to causative.

According to Comrie (1981:168), morphologically causative has a valency one higher than the corresponding non-causative, since, in addition to the arguments of that non-causative predicate, there is also the causer. Hence, syntactically, causative verbs and their non-causative bases have different characteristics. Causative verbs have one more argument than that of the corresponding non-causative bases. This additional argument is the causer. Compare causative and non-causative verbs in the following structures:

(10) a. *ḡukura ?i-n nika ?i-yešk-a*

J. 3sg-gen father 3sg-call -Pf

‘Jukura called his father’

b. *ḡukura ?i-n nika ?i-yešk-i-sis-a*

J. 3sg-gen father 3sg-call- epn-Caus -Pf

‘Jukura made his father called’

In the structure (10 a), /yešk-/ ‘call’ has two noun phrases (subject NP and object NP). Its subcategorization frame is $V [+NP NP]$. This means, /yešk-/ ‘call’ theta mark the subject NP and the object NP. In (10 b) the same verb /yešk-/

‘call’ get an additional argument when it is causativized. Thus the subcategorization frame of /yešk-i-sis-/ ‘cause to call’ becomes V [+NP NP NP], that is, the subject NP, the direct object NP and the indirect object NP.

In Diddessa Mao, causatives can also be derived from adjectival bases as shown in Table (9) below:

Table 9: causatives derived from adjectival bases

No	Adjectival stems	Gloss	Affix	Causatives from Adjectival bases	Gloss
1	kogon-ä	‘wide’	-sisa	kogon-sisa	‘cause someone to make something wide’
2	s’uk’-ä	‘fat’	-sisa	s’uk’-sisa	‘cause someone to make something fat’
3	kangil-ä	‘dry’	-sisa	kangil-sisa	‘cause someone to make something dry’
4	?am-ä	‘narrow’	-sisa	?am-sisa	‘cause someone to make something narrow’
5	k’awun-ä	‘short’	-sisa	k’awun-sisa	‘cause someone to make something short’

In such derivation, the final vowel /ä/ at the end of the adjectival stem is deleted when the suffix morpheme added to it.

The derivation of causatives from adjectival stems can be represented by the following word formation rule:

WFR (6): [X]_[+A] +V^{af} → V_[Caus]

Rule (6) states that, causative verb is formed from adjectival stems by affixing the morpheme /-sisa/.

In a similar way, Diddessa Mao causatives can also be derived from nominal bases. Consider the following data in table (10) below:

Table 10: Causatives derived from nominal bases

No	Nominal Bases	Gloss	Affix	Causatives from Nominal Bases	Gloss
1	ke:w-ä	'wound'	-sisa	ke:w-sisa	'make wound'
2	kiš-ä	'pus'	-sisa	kiš-sisa	'discharge pus'
3	kes-ä	'swell'	-sisa	kes-sisa	'cause something to swell'

As adjectivals and nominals can be considered as having the same syntactic feature of [+N], it may be possible to formulate the following word formation rule for causatives derived from adjectival and nominal bases together by leaving WFR (6):

WFR (7): $X_{[+N]} + V^{af}_{[+Caus]} \rightarrow V_{[+Caus]}$

Rule (7) states that suffixing /-sis-a/ to an adjectival or nominal base 'X' creates a causative verb. In this case, causativization can bring about category change, that is, adjectivals and nominals are changed to verbals as in Table (9) and (10) shown above.

2.3.2 Passives

Passive verbs in Diddessa Mao are derived from transitive verb roots by suffixing the morpheme /-ek’-/. Consider Table (11) below:

Table 11: Passivized verbs derived from transitive verb roots/stems

No	Transtive verb root/stem	Gloss	Active perfective	Passive verb stem	Gloss
1	p’enk’-	‘chop’	p’enk’a	p’enk-ek’-a	‘be chopped’
2	bus’-	‘wash’	bus’a	bus’-ek’-a	‘be washed’
3	kaš-	‘close’	kaša	kaš-ek’-a	‘be closed’
4	nom-	‘change’	noma	nom-ek’-a	‘be changed’
5	s’ak-	‘break’	s’aka	s’ak-ek’-a	‘be broken’
6	k’of-	‘cut’	k’ofa	k’of-ek’-a	‘be cut’
7	t’uš-	‘tie’	t’uša	t’uš-ek’-a	‘be tied’
8	Iš-	‘drink’	iša	iš-ek’-a	‘be drunk’

On the bases of the above facts, we can formulate a passive word formation rule as in below:

$$\mathbf{WFR (8): V^t \left(\begin{array}{c} + \text{transitive} \\ + \text{active} \end{array} \right) + V^{af} [+PASS] \rightarrow V [+passive]}$$

WFR (8) states that the passive verb is formed from verb roots by adding the morpheme /-ek’-/.

Consider the following Diddessa Mao passive constructions in sentences given below:

- (11) a. ?ečč k'unsä-š ?i-kaš-ek'-a
 def- door-nom 3sg-close-PASS -pf
 'The door was closed.'
- b. ?ečč šak'ä-š ?i-t'uš-ek'-a
 def-goat-nom – 3sg-tie-PASS-pf
 'The goat was tied.'
- c. ma:ngä-š ?i-mi-ek'-a
 mango-nom 3sg-eat-PASS- Pf
 'Mango was eaten.'
- d. ?ečč kwagš-š ?i-s'ak-ek'-a
 def. pot-nom 3sg-break-PASS-Pf
 'The pot was broken.'

In each of the above four sentences such as /kaša/ 'closed', /t'uša/ 'tied', /miya/ 'ate' and /s'aka/ 'broke' are transitives. In such constructions a subject is a patient or recipient of an action expressed by the verb.

2.3.3. Reflexives

Reflexives are verbal stems that refer to actions performed to one's own benefit, or simply, the subject and the object relate to the same entity. In Diddessa Mao reflexives are often indicated by the morpheme /-inke/ suffixed to verb roots.

Such verbal stems can also be formed from two other bases: from causative verbal bases and from intensive verbal stems. The following table indicates reflexives from verbal roots:

Table 12: Reflexives derived from Verbal roots.

No	Verb Root	Gloss	Affix	Reflexives from verb Root	Gloss
1	mar-	'catch'	-inke	mar-inke	'catch for one self'
2	k'of-	'cut'	-inke	k'of-inke	'cut for one self'
3	yešk-	'call'	-inke	yešk-inke	'call for oneself'
4	s'og-	'collect'	-inke	s'og-inke	'collect for one self'
5	šan-	'buy'	-inke	šan-inke	'buy for oneself'

The reflexive marker /-inke/ does not change its form for person, gender or number. In the reflexive form of a verb, subject agreement is marked by clitic pronouns. For instance, look at the following structures for /mar-/ 'catch':

- (12) a. hi-na šolākā hi-mar-inke
 2sg-for partridge 2sg-catch-refl.
 'You catch (a) partridge for yourself.'
- b. ti-na šolākā ti-mar-inke
 1sg-for partridge catch-refl.
 'I catch (a) partridge for myself.'
- c. haw-na šolākā haw-mar-inke
 2(du)- for partridge 2(du)-catch-refl.
 'You catch (a) partridge for yourself.'

d. ?iku-na šoläkä ?iku mar-inke

3(du)-for partridge 3(du) catch-refl.

‘They catch (a) partridge for themselves.’

e. ?i-na šoläkä ?i-mar-inke

3sg-for partridge 3sg-catch-refl.

‘She/he catches (a) partridge for herself/himself.’

Below, Table (13) shows the formation of reflexives from causative verbal stems:

Table 13: Reflexives from causative verbal stems

No	Causative Verbal Stems	Gloss	Affix	Reflexives from Causative Verbal Stems	Gloss
1	kar-sis-a	‘make boil’	-inke	kar-sis-inke	‘make boil for oneself’
2	kangal-sis-a	‘make dry’	-inke	kangal-sis-inke	‘make dry for oneself’
3	s’ak-sis-a	‘make break’	-inke	s’ak-sis-inke	‘make break for oneself’
4	hal-sis-a	‘make sleep’	-inke	hal-sis-inke	‘make sleep for oneself’
5	k’of-sis-a	‘make cut’	-inke	k’of-sis-inke	‘make cut for oneself’

In a similar way to reflexive formed from simple verb roots, reflexive from causative verbal stem does not change its form for person, gender or number. That means that the reflexive marker /-inke/ does not change its form for agreement since agreement is usually indicated by reduced pronouns which always come as prefixes. Here are some sentential examples for /-kar/ ‘boil’:

(13) a. ti-na bun ti-kar-sis-inke

2sg-for coffee 2sg- boil-caus-refl.

‘You made coffee boil for yourself.’

b. ham-na bun ham-kar-sis-inke

1pl for coffee 1pl- caus-boil- refl.

‘We made coffee boil for ourselves.’

c. haw-na bun haw-kar-sis-inke

2(du)-for coffee 2(du) caus-refl.

‘You made coffee boil for you.’

To form reflexives in Diddessa Mao, it is also common to attach the reflexive suffix /-inke/ to intensive verbal stems. Intensive verbal stems in this variety of Mao are formed by the reduplication of the verb root to express the intensity of an action as we will see in chapter 4. Consider the following data:

Table 14: Reflexives from intensive verbal stems

No	Intensive Verbal Stems	Gloss	Affix	Reflexives from Intensive Verbal Stems	Gloss
1	k’ofk’of-	‘cut into pieces’	-inke	k’ofk’of-inke	‘cut into pieces for one self
2	marmar-	‘hold repeatedly’	-inke	marmar-inke	‘hold repeatedly for one self
3	s’oks’ok-	‘lick repeatedly’	-inke	s’oks’ok-inke	‘lick repeatedly for one self
4	yeškyešk-	‘call repeatedly’	-inke	yeškyešk-inke	‘call repeatedly for oneself
5	šank’ilšank’il-	‘sell repeatedly’	-inke	šank’ilšank’il-inke	‘sell repeatedly for one self’
6	šanšan-	‘buy repeatedly’	-inke	šanšan-inke	‘buy repeatedly for oneself’
7	waswas-	‘take repeatedly’	-inke	waswas-inke	‘take repeatedly for oneself’
8	šilšil-	‘clean repeatedly’	-inke	šilšil-inke	‘clean repeatedly for oneself’
9	p’enk’p’enk’	‘chop repeatedly’	-inke	p’enk’p’enk’-inke	‘chop repeatedly for oneself’
10	s’aks’ak-	‘break into pieces’	-inke	s’aks’ak- inke	‘break into pieces for oneself

The occurrences of the above kind of reflexives from intensive verbal stems are as follows:

(14) a. ti-na ?i:nsä ti-k'ofk'of-inke

1sg-for wood 1sg-cut cut refl.

'I cut (a) wood into pieces for myself.'

b ham-na ?i:nsä ham-k'ofk'of-inke

1pl-for wood 1pl- cut cut-refl.

We cut (a) wood into pieces for ourselves.

c. ?i-na ?i:nsä ?i-k'ofk'of-inke

3sg-for wood 3sg-cut cut-refl

'He/ She cut (a) wood into pieces for himself/ herself.

d. ?iku-na ?i:nsä ?iku-k'ofk'of-inke

3(du)-for wood 3(du)- cut cut-refl.

They cut (a) wood into pieces for themselves.

In general, the following rule may capture the processes of reflexives derived from verbal roots, causative verbal stems, and middles in Diddessa Mao.

$$\mathbf{WFR (9):[x]} \left(\begin{array}{c} +V^I \\ +\mathbf{CausV^S} \\ +\mathbf{InteV^S}/+\mathbf{middles} \end{array} \right) + \mathbf{V}^{af}_{[+Refl]} \rightarrow \mathbf{V}_{[+Refl]}$$

Rule (9) states verbal roots, causative verbal stems and middles or intensive verbal stems can be reflexivized when the affix /-inke/ suffixed to them.

2.3.4. Statives

In Diddessa mao, such verbs are derived from adjectives by adding the suffix /-inke/ as illustrated in the Table (15) below.

Table 15: Statives derived from adjective bases

No	Adjectives	Gloss	Affix	Statives	Gloss
1	ša:lā	‘thin’	-inke	ša:l-inke	‘become thin’
2	zankā	‘red’	-inke	zank-inke	‘become red’
3	t’išinā	‘black’	-inke	t’išin-inke	‘become black’
4	kos’ā	‘long’	-inke	kos’-inke	‘become long’
5	kogonā	‘wide’	-inke	kogon-inke	‘become wide’

A middle reflexive affix /-inke/ is homophones with the stative formative morpheme /-inke/. Let us see the following sentential examples:

(15) a. ti ša:l-inke

1sg thin-stat

‘I become thin.’

b. ha-n-zank-inke

1-du red-stat.

‘We become red.’

c. ha-m t’išin-inke

1-pl black-stat

‘We become black.’

The following rule may capture the processes show here:

WFR (10): Adj + Adj^{af} [+stat] → V [+stat]

Rule (10) shows that statives are formed from adjectives by suffixing morpheme /-inke/.

2.4 Adjectivization

Adjectivization is the process of forming new derived adjectives from different lexical categories. In Diddessa Mao, adjectivals can be formed from nominals with the suffix /- itä /. Let us consider the following data:

Table 16: Adjectival derived from nominal bases

No	Nominals	Gloss	Affix	Adjectivals Derived from Nominals	Gloss
1	wegä	‘mountain’	-itä	weg-itä	‘mountainous’
2	ans’ä	‘gold’	-itä	ans’-itä	‘golden’
3	?as’a	‘water’	-itä	?as’-itä	‘watery’
4	imbut’ä	‘rain’	-itä	imbut’-itä	‘rainy’
5	bedä	‘salt’	-itä	bed-itä	‘salty’
6	šowä	‘rock’	-itä	šow-itä	‘rocky’

The Derivation of Adjectivals from nominal bases can be shown by the word formation rule presented below:

WFR (11): N^b + A^{af}[+Adj] → A

Rule (11) refers that nominal bases become adjectivals by suffixing the adjectivizer morpheme /-itä/. Consider the following data:

- (16) a. k' es' weg-itä
country mountain -suff.
'(A) mountainous country.'
- b. kat ans' -itä
bird gold-suff.
'(A) golden bird.'
- c. imbut' -itä gizä
rain -suff season
'(A) rainy season'

Semantically, the suffix /-itä/ in Diddessa Mao is similar to the Amharic adjectivaizer suffix /-amma/as in the words /täraramma/, /wärk'amma/, etc. Therefore, they express the quantity of the noun to which they are suffixed. Diddessa Mao adjectivals, like nominals, end with the vowel [ä].

CHAPTER THREE: COMPOUNDING

3.1. Introduction

In chapter two above, we have seen the process of word formation by means of derivation. In this chapter, we shall see the process of word formation through compounding. Compounding is defined as a process of forming new words by combining different lexical categories (Bauer 1983:28). In a similar way, Matthews (1991:82) defines compounding as “a process by which a compound lexeme is derived from two or more simple lexemes”. Radford (1997:499) defines “a compound word as word built up out of two (or more) other words”. However, it is not the case that every two words combine to form a compound form. Rather, every language follows certain rules by which it forms its compound (Selkirk, 1984:14). In this chapter, the researcher describes the rules or the combinatorial possibilities of lexical compounds and the characteristics which distinguish them from higher forms such as phrases, clauses, or sentences in a variety of Mao under investigation.

Different linguists grouped compounds of a language into different classes by using various methods of classification. For instance, as has been cited in Bauer (1983:201-202) scholars like Marchand (1969) classify compounds by the form classes of the items that make up the compound. Others like Hatcher (1960) and Warren (1978) choose to use semantic classes. Zepic (1970) sub-classifies compounds on the bases of the linking element. On the other hand, Lees (1960) classifies them based on the underlying syntactic functions. Others

like Adams (1973) and Jespersen (1942) use a mixture of the above methods. The usual way of classifying compounds is by the function they play in the sentence such as nouns, verbs, adjectives etc. (Bauer, 1983:201). Among the criteria the scholars use for classifying compounds, the semantic criterion seems to be the best because all compounds refer to single units of reference. Hence, in this study the researcher follows the usual way of classifying compounds, that is, by the function they play in sentences as nouns, verbs, adjectives, etc. following Bauer (1983).

3.2. Compound Nominals

The vast majority of compounds in Diddessa Mao are nominals. They can be formed by combining nominal + nominal and verbal + nominal. The followings are such nominal compounds containing constituents which belong to nominal + nominal and verbal + nominal.

3.2.1 Nominal + Nominal Compounds

As we will see in this section such nominal compounds contain constituents which belong to the same word-class Nominal + Nominal. The Nominal + Nominal pattern has a more frequent occurrence in Diddessa Mao compound nominal formation. Consider the examples below:

- (17) a. keDä + mun's ä → kedmuns'ä
house woman 'wife' literally 'house woman'
- b. keDä + esä → keDesä
house man 'hasband' literally 'house man'
- c. Šint'ä + muns'ä → Šint'imuns'a
nose woman 'first wife'

When two Diddessa Mao lexical items combine together to form lexical compounds, certain phonological modifications may take place, on the constituents of a compound. Mostly, the modification includes stem-final vowel deletion of the first member of a compound as we can see from the data presented in (17 a-c) above. From the data one can infer that, the first member of a compound unit deletes its final vowel and incorporates itself into the second constituent thereby making a single phonological unit. Here are some more examples:

- (18) a. tokä + ?akä → tok?akä
head eating 'headache'
- b. ka:lä + kwagä → ka:lkwagä
porridge pot 'porridge pot'
- c. šuwä + keDä → šuwkeDä
graas house 'grass-roofed house'

d. ?afä + s'otä → ?afs'ota
 eye strength 'shameless'

The other phonological process as observed in (17 c) is vowel change. When the final vowel /ä/ of the first constituent gets deleted because of the above phonological reason, the impermissible clusters of consonants occur. Thus, in such contexts the vowel /i/ replaces /ä/ to make the clusters of consonants permissible. Consider the following compounds:

- (19) a. šint'ä + muns'ä → šint'imunsä
 nose woman 'first wife'
- b. kindä + šuwä → kindišuwä
 flour stone 'millstone'
- c. suns'ä + mank'a → suns'imank'ä
 back ill 'backache/pain'
- d. ?aldä + keDä → ?aldikeDä
 knowledge house 'school'
- e. t'išinä + kinsä → tišinkinsä
 black charcoal 'charcoal black'

As shown in (19 a-e) above, the epenthesis vowel [i] is inserted between the impermissible clusters instead of /ä/.

When we consider the level and type of the constituents of Diddessa Mao morphology, that is, whether the bases of compounds are roots, stems or words, all the data that the researcher collected show that compounds are formed from simple words as can be illustrated below:

- (20) a. keDä + esä → keDesä
house man 'husband'
- b. tilä + šwilä → tilšwilä
stomach clean 'clean-hearted'
- c. numbu + t'ent'a → numbut'ent'ä
two finger 'two fingered'

The data presented in (20 a-c) indicate that in Diddessa Mao simple words can be used to form lexical compounds.

The other point about the morphology of Diddessa Mao compounding is the position of inflectional affixes like, for example, number morphemes which are attached to the head of a compound as in (21) below:

- (21) a. keD-muns'-olä 'wives'
house-woman-pl
- b. ?ald-i-keD-olä 'schools'
knowledge-eqn-house-pl

In Diddessa Mao, it is not possible to attach inflectional elements to one of the members of the compound, because the member constituents cannot behave independently but as a compound as a whole. Here the above forms indicate that the inflectional element is attached to the head of a compound. In other words, in Diddessa Mao, inflectional affixes do not appear with the complement (non-head) of a compound noun. The plural suffix /-olä/ is attached to the non-head constituent of a compound noun as in /*keD-olä-muns'ä/ the result become unacceptable. This indicates that, each constituent member cannot function as an independent element; it is rather the whole compound which operates as a single lexical item with respect to inflections.

The other characteristic of compounding is its semantics. Semantically, all forms of compounds considered in this study refer to a single unit of reference. The semantics of compounds in Diddessa Mao are in most cases related to the sum total of the semantics of their constituent members. Consider the following examples:

- (22) a. te:za + wanzibä → te:zwanzibä
 three finger 'fork'
- b. kemä + ?afä → kem?afä
 night eye 'battery'
- c. ?awä + to:kä → ?awto:kä
 God head 'sun'

- d. ?a:wä + kamä → ?a:wkamä
 God fire 'lightening'
- e. ?umbut'ä + šafä → ?umbut'šafä
 rain temper 'thunder'
- f. ?i:mä + kasä → ?i:mkasä
 ox hoe 'ploughshare'

As we can observe from the examples in (22 a-f) above, the meanings of these compounds are semantically related with the sum total of their constituent parts. In fact, in rare instance, the semantics of some compounds are different from the sum total of the constituent members as in the following:

- (23) a. kamä + k'ons'ä → kamk'ons'ä
 fire forehead 'ant'

It is very difficult to infer the meaning /kamäk'ons'ä / 'ant' from the meanings of its constituent members.

If we consider the syntactic characteristics of compounding in Diddessa Mao, it belongs to one of the major word-classes. Thus, what we have considered as compounds in Diddessa Mao are similar to simple lexical forms as they belong to certain syntactic categories.

c. ?i-n-šak'ä

3sg-gen goat

'His/her goat'.

When nominals indicating certain parts of the body combine with other nominals, they form compounds that indicate names of diseases. Consider the following examples:

- (26) a. tokä + ?akä → tok?akä
head eating 'headache'
- b. suns'ä + mank'ä → suns'imank'a
back pain 'backache/pain'
- c. tilä + ta:sä → tilta:sä
stomach bite 'stomachache'
- d. ?a:fä + mank'ä → ?a:fmank'ä
eye pain 'eyepain'
- e. ?a:s'ä + mank'ä → ?a:s'mank'ä
tooth pain 'tooth pain'

The other nominal compounds are formed by combining nominals referring to locations or places where activities take place. Consider the following data:

- (27) a. gwa:nä + keDä → gwa:nkeDä
 pray house 'church' literally 'pray house'
- b. ?aldä + keDä → ?aldikeDä
 knowledge house 'school' literally 'knowledge house'
- c. yolä + kes'ä → yolkes'ä
 fighting land 'battle field' literally 'fighting land'

The above type of compounds can be treated as locatives. The other way of locative compound formation is when a nominal referring to a container and another one referring to a thing contained in it are combined to form a locative compound as in the following examples:

- (28) a. dok'ä + is'ä → dok'is'ä
 dough container 'dough container'
- b. wa:rä + sa:t'inä → wa:rsa:t'inä
 cloth box 'cloth box'
- c. ha:s'ä + kwagä → ha:s'ä + kwagä
 water pot 'water pot'
- d. wa:kä + sa:ns'ä → wa:k:sa:ns'ä
 chicken bed 'loft/ perch'

The examples in (28 a–d) show, a nominal referring to a container and another nominal referring to a thing contained in it. Both nominals combine to form a locative compound nominal where the first nominal is located in the second.

The other Nominal + Nominal compound structure in Diddessa Mao consists of an object (material) and another object (material) from where the first object is made. Consider the following example:

(29) a. šuwä + kedä → šuwkedä
 grass house ‘grass-roofed house’

In sum, compound nominals in Diddessa Mao can be captured by the following word formation rule:

WFR (12): N+N→N

Rule (12) states that compound nominals in Diddessa Mao are formed from the combinations of two or more nominals.

Nominal + Nominal in Diddessa Mao is the largest subgrouping of compounds. In this subgrouping, it is possible to isolate many types of semantic relationships and different syntactic patterns. The majority of compounds in this class are endocentric. Hence, the head, or the meaning of the compound word is predictable from the component parts and is the hyponym of the grammatical head. As Bauer (1983:30) puts a compound is said to be a hyponym of a grammatical head when its meaning is capable of being inferred

from the head of that compound. In endocentric compounds, the head element mostly appears as the right-hand most constituent of the word. The right-hand constituent is the one whose syntactic categories such as nominals, verbals, adjectivals etc. percolate to the entire compound word that means, the head determines the category of the entire compound as presented in the following examples:

- (30) a. [ʔaldä]_N + [keDä]_N → [ʔaldikeDä]_N
 knowledge house ‘school’
- b. [kindä]_N + [šowä]_N → [kindišowä]_N
 flour stone ‘millstone’
- c. [warä]_N + [šifä]_N + [makinä]_N → [waršifmakinä]_N
 cloth sewing machine ‘sewing machine’

The head is underlined in the examples given in (30 a-c) above, the two constituent bases are members of the Nominal + Nominal + (Nominal) pattern and the resultant compound is again nominal. Thus, /ʔaldikeDa/ ‘knowledge house (school)’ is a kind of /keDä/ ‘house’, /kindišowä/ ‘millstone’ is a kind of /šowä/ ‘stone’ and /waršifmakinä/ ‘sewing machine’ is a kind of /makinä/ ‘machine’. The first word in each case functions as a modifier of the head which specifies the meaning of the head precisely.

Other than endocentric compounds, there are also a significant number of exocentric compounds in Dissessa Mao. Exocentric compounds are headless compounds which do not contain an element that functions as the semantic head (Katamba 1993:319). Consider the following examples below:

- (31) a. $\text{ʔa:wä} + \text{to:kä} \rightarrow \text{ʔa:wto:kä}$
 God head ‘sun’
- b. $\text{ʔa:wä} + \text{kamä} \rightarrow \text{ʔa:wkamä}$
 God fire ‘lightening’
- c. $\text{ʔa:wä} + \text{kozzä} \rightarrow \text{ʔa:wkozzä}$
 God roof ‘sky’

An /ʔa:wto:kä/ which literally means “God head” is not a kind of head. It is rather the ‘sun’. Similarly, /ʔa:wkamä/ ‘God fire’ is not a kind fire but a ‘lightening’

From a syntactic point of view, however, exocentric compounds are not headless. Rather, they are generated by the rule in [12] $N+N \rightarrow N$ that generates regular endocentric compounds since they have the structures:

$[[\text{ʔa:wä}]_N + [\text{to:kä}]_N]_N$ and $[[\text{ʔa:wä}]_N + [\text{kamä}]_N]_N$. They obey the right-hand rule (RHR) in the sense that the right most word determines the category of the compound.

3.2.2 Verbal + Nominal Compounds

Verbal + nominal in this variety refer to someone who does whatever is designated by the verb. Thus, they describe doers of actions expressed by verbs or have a meaning of one who performs an action. They are formed from the combination of action verbs + nominals. These compounds have the feature (+animate). In Diddessa Mao, such compounds are formed by attaching nouns /-esä/ ‘man’ or /-muns’ä/ ‘woman’ to action verb roots to express the doer of the action is masculine or feminine respectively.¹ The data presented in Table (17) below illustrate the formation of these compounds.

Table 17: Nominal compounds formed from verbal roots by attaching noun /-esä/ ‘man’.

No	Verb Root	Gloss	Affix	Compound Nominal	Gloss
1	huzz-	‘farm’	-esä	huzz-esä	‘farming man’
2	iš-	‘drink’	-esä	iš-esä	‘one who drinks’
3	šokum-	‘rob’	-esä	šokum-esä	‘robbing man’
4	hi:ns-	‘dig’	-esä	hi:ns-esä	‘digging man’
5	hezz-	‘hit’	-esä	hezz-esä	‘hitting man’
6	go:l-	‘slaughter’	-esä	go:l-esä	‘butcher man’
7	pi-	‘kill’	-esä	piy-esä	‘killing man’
8	hu:p’ -	‘steal’	-esä	hu:p’ -esä	‘one who steals’

¹ There are also other lexical elements that marks gender, for instance, /p’išä/ ‘boy’ /nafalt’ä/ or /k’uk’ä/ ‘girl’. When these lexemes attached to action verb roots they also are able to form compound agentive nominals.

Compound nominals in Tables (17) above are nominals that express masculine agents as the noun /-esä/ is specified as masculine which means, when it stands independently, ‘man’ as mentioned above. Their usages in sentences are: illustrated in (32.a – e) below: ²

- (32) a. ?i-n nikä huzz-esä
 3sg- gen. father farm man²
 ‘His/her father is (a) farming man (farmer).’
- b. ġukura-š how-esä
 J-nom. go-man
 ‘Jukura is (a) traveling man (traveler).’
- c. kan?o:sa-š go:l-esä
 K-nom slaughter-man
 ‘Kenose is (a) butcher.’
- d. šula- š hi:ns-esä
 Shula-nom dig-man
 ‘Shula is (a) digging man (digger).’
- e. t’one-š šokum-esä
 Tone-nom rob-man
 ‘Tone is (a) robber.’

² In such constructions the copular verb is indicated by zero morphemes (∅); in other structures /-ya/ ‘be:prs’ is used.

The following table shows the formation of compound nominals formed from verb root by attaching the noun /-muns'ä/ 'woman' to identify feminine agent.

Consider the data presented in Table (18) below:

Table 18: Compound nominals formed from verbal roots with the combination of noun /-muns'ä/ 'woman'.

No	Verb Root	Gloss	Affix	Agentive Nominal	Gloss
1	šan-	'buy'	-muns'ä	šan-muns'ä	buying woman
2	s'ak-	'break'	-muns'ä	s'ak-muns'ä	'breaking woman'
3	še:š-	'milk'	-muns'ä	še:š-muns'ä	'milking woman'
4	yos-	'sing'	-muns'ä	yos-muns'ä	'singing woman'
5	ka:m-	'love'	-muns'ä	ka:m-muns'ä	'loving woman'
6	koš-	'play'	-muns'ä	koš-muns'ä	'playing woman'
7	yol-	'campaign'	-muns'ä	yol-muns'ä	'campaigning woman'
8	ʔumš-	'create'	-muns'ä	ʔumš-i-muns'ä	'creating woman'

As we can see from the data presented in Table (17) and (18) above, in Diddessa Mao such compound nominals are formed through the combination of noun /-esä/ 'man' or /-muns'ä/ 'woman' with action verb roots.

The compound nominals formed by combining /-muns'ä/ 'woman' to action verb roots are feminine in gender. The following structures show the occurrence of such compound nominals in sentences (33 a-c) below.

- (33) a. ?i- n nokä huzz-i-muns'ä
 3sg-gen mother farm-epn-woman
 'His/her mother is (a) farming woman (farmer).'³
- b. galgale-š ye:s'-muns'ä
 G-nom run woman
 'Gelgele is (a) running woman (runner).'
- c. bulte-š še:š-muns'ä
 B-nom milk woman
 'Bulte is (a) milker.'

Based on the data presented in Table (17) and (18) the formation of compound nominals can be represented by the following word formation rule:

WFR (13): V^r + N → N_[+Ag]

Rule (13) indicates that compound nominals formed through the combinations of verb roots to noun /-esä/ 'man' to express masculine agent, and /-muns'ä/ 'woman' to show feminine agent.

As can be seen from the above data, the nouns /-esä/ and /-muns'ä/ are combined to verb roots to form compound nouns (with the meaning 'someone who does whatever is designated by the verb'). This process is very productive

³ In Diddessa Mao gender is not marked in pronouns.

in Diddessa Mao compound nominal formation. A process is said to be productive if it is very general, i.e. affects a vast number of forms and creates very many words (Katamba 1993:69). In this sense, the combination of noun /-esä/ and /-muns'ä/ to verb roots in Diddessa Mao are very productive, since an overwhelming majority of action verbs can be turned into compound nominals by combining these nouns.

In the process of the formation of such type of compound nominals (verbals + nominals) in Diddessa Mao there are phonological processes. One of the phonological processes is an insertion of the epenthetic vowel [i] as in the following examples:

- (34)
- | | |
|------------------------|-------------------------------|
| a. /huzz- + muns'ä/ | → [huzz- i -muns'ä] |
| farm woman | 'farming woman (farmer)' |
| b. /hi:ns'- + muns'ä/ | → [hi:ns'- i -muns'ä] |
| dig woman | 'digging woman (digger)' |
| c. /hezz- + muns'ä/ | → [hezz- i -muns'ä] |
| hit woman | 'hitting woman (hitter)' |
| d. /ʔumš- + muns'ä/ | → [ʔumš- i -muns'ä] |
| create woman | 'creating woman (creator)' |
| e. /nabbabd- + muns'ä/ | → [nabbabd- i -muns'ä] |
| read woman | 'reading woman (reader)' |

The vowel [i] seems to be inserted to avoid triplets of consonants found between verb roots and the noun /muns'ä/. The other phonological process is the glide [y] which is inserted between two non-identical vowels where the first is a high front vowel as in example (35).

- (35) /pi- + esä/ → [pi-y-esä]
 kill man kill-e_{pn}-man
 'killer'

The glide [w] is also inserted for the same reason as for [y]. It is inserted, however, when the stem final vowel is a back vowel as in the following:

- (36) /ho- + esä/ → [ho-w-esä]
 go man go-e_{pn}-man
 'traveler'

3.3 Compound Adjectivals

Compound adjectivals are not as productive as compound nominals discussed above. There are, however, a few examples of such compounds formed by a combination of different categories.

3.3.1 Nominal + Adjectival compounds

In this type of compounding, nominals can be combined with adjectivals and the resultant compound will be an adjectival compound. Consider the following data:

- (37) a. tilä + šuwilä → tilšuwilä
stomach clean 'clean-hearted'
- b. ?afä + ?andä → ?af?andä
eye deficient 'blind'
- c. ?afä + s'otä → ?afs'otä
eye strong 'shameless'

3.3.2 Numeral + Nominal Compounds

Compound adjectives can be formed from numerals and nouns. Consider the following examples below:

- (38) a. te:zä + tugä → te:ztugä
three foot 'three footed'
- b. te:zä + wa:lä → te:zwa:lä
three ear 'three eared'

c. mes's'ä + ?afä → mess'-i-?afä
 four eye 'four eyed'

d. numbu + t'ent'ä → numbut'ent'ä
 two finger 'two fingered'

3.3.3 Adjectival + Nominal Compounds

In such type of compounds, nominals qualify adjective in terms of degree or intensity. The data presented below illustrate this fact.

- (39) a. t'išinä + kinsä → t'išinkinsä
 black charcoal 'charcoal black'
- b. ka:wä + ma:ns'ä → ka:wma:ns'ä
 white milk 'milkwhite'
- c. s'otä + ka:mä → s'otka:mä
 strong wood 'strong'

3.3.4 Adjectival + Adjectival compounds

In Diddessa Mao, in very rare cases two adjectives can combine together to form a compound adjective in which the second qualifies the first. As only one example is given in (40 a) below:

(40) a. Za:nkitä + ges'itä → za:nkitges'itä
 red pretty 'pretty-red'

The compound adjectives presented so far follow the rule (14).

WFR (14): $\left(\begin{array}{l} \mathbf{N+A} \\ \mathbf{A+A} \\ \mathbf{A+N} \\ \mathbf{Qunt +N} \end{array} \right) \rightarrow \mathbf{A}$

Rule (14) states that compound adjectives can be formed by combining nominal with adjectival, adjectival with another adjectival, adjectival with nominal or quantifier with nominal.

3.4 Compound Adpositionals

In Diddessa Mao, such compounds are not very common. Here are a few examples:

(41) a. na:na + do:lo → na: ndolo
 here down 'down words'

b. eša + na:na → ešana:na
 towards here 'towards here'

CHAPTER FOUR: REDUPLICATION

4.1 Introduction

In chapters two and three, we have seen the process of word formation through derivation and compounding. In this chapter, we shall see the process of Diddessa Mao word formation by means of reduplication. Reduplication is a process whereby an affix is realized by phonological material borrowed from the base (Katamba 1993:180). This borrowing or repetition of the base can be complete or partial. In complete reduplication the entire word is copped while in partial reduplication, some part of the word is copped. As Katamba (1993:81-82) states fully or partially reduplicated words are formed to serve the following:

- (1) In verbs, reduplication often indicates continuation, frequency or repetition of an event or action. The repetition involves the same or different participants.
- (2) Noun reduplication may express the meanings “every X” and “all X”
- (3) Often reduplication has an augmentative meaning. It signals an increase in size, frequency or intensity.
- (4) Conversely, reduplication may have a diminutive effect.

In this study, the term reduplication is restricted to situations where the repeated part of the word serves some derivational or inflectional purpose. In

this section, I shall present the common functions served by reduplication in Diddessa Mao.

4.2 Intensive/ Iterative

Intensive or iterative verbal stems in Diddessa Mao are formed by the reduplication of the verb root. Consider the following data in Table (19) below:

Table 19: Intensive/ iterative

No	Verb root	Gloss	Intensive/ iterative	Gloss
1	ya:p-	'to cry'	ya:pya:p-	'cry repeatedly'
2	yes'-	'to run'	yes'yes'-	'run repeatedly'
3	int'-	'to see'	int'int'-	'see repeatedly'
4	k'of-	'to cut'	k'ofk'of-	'cut into pieces'
5	kos-	'to rest'	koskos-	'rest repeatedly'
6	s'ak-	'to break	s'aks'ak-	'break into pieces'
7	gump'-	'to touch'	gump'gump'- ⁴	'touch repeatedly'

Depending on the above data, we can formulate the following word formation rule to represent the above verb derivation:

$$\mathbf{WFR (16): [C_1V_1 C_2]_{VR} \rightarrow [C_1V_1C_2 C_1V_1 C_2]_{V \text{ Stem}}}$$

[+inte/ iter]

⁴ This is phonetically realized as [gumgump'-].

Rule (16) illustrates that verb root becomes an intensive or iterative stem by reduplicating the former. The derived verb expresses the same action expressed by the verb root but performed repeatedly. This process does not affect the subcategorization property of the verb. But, as they express repeated or intensified actions their effect is only on their semantics. Consider the following structures:

(42) a. galgale- š keD ?i- šwil-a

G. nom. house 3sg. clean-pf.

‘Galgale cleaned the house.’

b. galgale- š keD ?i- šwi:lšwi:l-a

G. nom. house 3sg. clean repeatedly- pf.

‘Galgale cleaned the house repeatedly.’

c. ġukura- š ki:m ?i- wos-a

J. nom. money 3sg. take-pf.

‘Jukura took the money.’

d. ġukura- š ki:m ?i- woswos-a

J. nom. money 3sg. take repeatedly-pf.

‘Jukura took the money repeatedly.’

e) bulte- š kam ?i- p’enk’-a

B. nom. wood 3sg. chop- pf.

‘Bulte chopped the wood.’

f. bulte- š kam ?i- p'enk'p'enk'-a

B. nom. wood 3sg. chop repeatedly- pf.

'Bulte chopped the wood repeatedly.'

As can be observed from the examples above, intensive/iterative verbal stems are derived by total reduplication.

4.3 Adverbials

In Diddessa Mao, it is possible to form adverbials by means of reduplicating nouns that refer to time as presented in Table (20) below:

Table 20: Adverbials

No	Nominals	Gloss	Adverbials	Gloss
1	ansä	'month'	ansansat	'monthly'
2	p'os'ä	'morning'	p'os'pos'at	'every morning'
3	?awä	'day'	?aw?awat	'daily'
4	wagä	'year'	wagwagat	'yearly'

For such adverbs, the following rule may be proposed:

WFR (17): [X+X+at] [+time adverb] → [**X**] [+Adverbias]

As can be observed from the data in Table (20) above, adverbials are derived by total reduplication with the suffix /-at/at the end of the reduplicated form.

CHAPTER FIVE: CONCLUSION

This study has attempted to present word formation processes in Diddessa Mao, the variety of Northern Mao of the Omotic family. The formation of words in the variety is possible through derivation, compounding and reduplication. The study has presented data on the various kinds of word formation processes such as nominalization, verbalization, adjectivization, compounding and reduplication and the necessary word formation rules have been proposed. Some phonological, morphological, syntactic and semantic features of the derivatives resulted from word formation processes have been also identified.

We have seen the formation of different kinds of derived nominals namely: manner, abstract, action and result nominals formed by attaching derivational affixes. Manner nominals are formed by suffixing /-ä/ to the verb roots. Abstract nominals are derived from adjectival and nominal bases by adding suffix /-iyä/. Action nominals are derived by suffixing /-i/ to verb roots. Result nominals are formed by suffixing /-e/ to verb bases. Derived nominals of the same kind are derived by adding the same suffix, whose distribution is regular and easy to consider.

In the process of verbalization we have seen different kinds of verb derivation such as, causatives, passives, statives and reflexives. Causatives are derived from verb roots, adjectivals and nominal bases by suffixing the morpheme /-sisa/. Passives are derived from transitive verb roots by suffixing /-ek'-/.

Reflexives are formed by suffixing morpheme /-inke/ to simple verb roots, causative verbal stems and intensive verbal stems. Statives are derived from adjectives by suffixing /-inke/. The reflexive affix /-inke/ is homophones with the stative /-inke/.

In the discussion of adjectival derivation, this study has investigated that Diddessa Mao adjectivals are formed from nominals by suffixing /-itä/.

The various possible compound patterns of Diddessa Mao are described in chapter three of this thesis. Compound nominals are formed from verbal with nominal and nominal with another nominal. Compound adjectivals are formed by a combination of a nominal with another nominal, nominal with adjectival, adjectival with another adjectival, adjectival with nominal or number with nominal. Compound adpositions are formed from two adpositions.

In chapter four, we have seen reduplication processes. In Diddessa Mao, intensive verbal stems are formed by the complete reduplication of the verb root and adverbials are derived by complete reduplication of nouns that refer to time with the suffix /-at/.

Finally, the researcher believes that, the findings of this study would be of value to any one who is interested in conducting further study in the same area. By any means, this research would not be complete on its own, for it still needs further investigation.

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