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KAMISEE OROMO PHONOLOGY

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Lists of abbreviations

2	Second person
Ø	Zero morpheme
ABS	Abstract
ABL	Ablative
AMH	Amharic
AUX	Auxiliary
C	Consonant
CAU	Causative
Co	Syllable coda
CON	Conjunction
DAT	Dative
DEF	Definite
DIM	Diminutive
Ejc	Ejective
ENG	English
EPN	Epenthetic
F	Feminine
FOC	Focus
GEN	Genitive
IMP	Imperative
INF	Infinitive
IPV	Imperfective
INST	Instrumental
JUS	Jussive
M	Masculine
NOM	Nominative
N	Nucleus
NEG	Negative
On	Syllable onset
ORD	Ordinal
PL	Plural
PRV	Perfective
Rh	Syllable rhyme
SG	Singular
STV	Stative
Syll	Syllable
V	Vowel
Vd	Voiced
V1	Voiceless
1PL	First person plural
1SG	First person singular
3SF	Third person feminine
3SM	Third person masculine
ˊ	High pitch/primary stress
ˋ	Low pitch/secondary stress
ˆ	Rise-fall
ˇ	Fall-rise

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Abstract

This study has been conducted on Kamisee phonology. The work is the first description on the phonology of this dialect. The primary aim of the study is to describe different phonological aspects of the dialect according to methods in descriptive linguistics. The research treats some neglected topics such as stress and intonation, and argues that the dialect is not tonal.

The study is divided into six chapters. The first chapter is about the brief account of the work. The second chapter deals with the phoneme inventory, the consonant and the vowel phonemes of the dialect and their distribution. The third chapter investigates the different phonological processes. The fourth chapter treats the phonotactics and the syllable structure of the dialect. The fifth chapter addresses the suprasegmental features, and the last chapter comprises a brief summary and the conclusion of the study.

1 Introduction

1.1 The People

The Oromo comprise a considerable number in Africa. Scholars witness this view as: "The Oromo probably comprise the largest single tribal group in Africa. " (Bender et al 1976:130). The Oromo also live outside Ethiopia in neighboring countries mainly in Kenya and Somalia. Bender says, "The people are divided into over 200 clans. Main groups are: Arusi, Borena, Eastern, Guji, Wellega, Rayya, Tulema or Shewa and Wello" (Bender 1976:12).

The Oromo people inhabited "a cruciform area extending from Wello in the north to Northern Kenya in the South, and from Wellega in the west to Harar in the east, with Addis Ababa in the intersection of the two axes" Gragg (1776:166). According to the Ethiopian 2007 Population Census Oromo[1] is currently spoken by more than twenty seven million speakers in Ethiopia.

The Kamisee Oromo live in the Wello zone (Oromiya Zone of the Amhara administrative region), most of them are farmers. Kamisee is bordered in the north by the Southern Wello zone, in the east by the Afar region, in the west by Northern Shewa (of Amhara region) and in south by Northern Shewa (of Amhara region). The people have intensive contact with the Semitic language speaking people (Amhara) and the Cushitic language speaking people (Afar). The speakers of the dialect are estimated to be more than one million.

1.2 The Language

In terms of the area it covers and the number of the speakers, Oromo is one of the biggest languages spoken in Ethiopia. The language belongs to the Lowland East Cushitic and is divided into a number of dialects.

Scholars have different views on the dialectal variations of the language. Gragg (1976:173) categorizes Oromo into three big groups: "Western (including Wellega), eastern (especially Harar) and southern (e.g., Borena), with the large transitional area in

[1] The word Oromo is used to refer to both the people and the language.

the centre (Shewa)." Bender et al (1976:130), on the other hand, recognize some eight dialects in Oromo: "Mecha (western), Tulema (central), Wello, Rayya (both northern), Eastern, Arusi, Guji and Borena (the last three southern)."
If we take a look at each scholar's view, we will see only slight differences. Some scholars divide the dialects into bigger geographical locations, while the others categorize them specifically.

The Kamisee Oromo is one of the northern dialects spoken in Wello. The present study depicts that the dialect is lexically similar to Tulema Oromo as has been proposed by Bender et al (ibid). Though the dialect has lexically considerable similarity with the central dialect (Tulama), it has remarkable phonological features which distinguish it from the other dialects.

1.3 Statement of the Problem

The Oromo phonology is a neglected area compared to other works done on the language. So far there are only three works on the phonology of the language: Waqo (1981), Binyam (1988), Kebede (1994) which deal with the Mecha, the Rayya and the Baatee (Wello) Oromo phonology respectively. These works themselves were conducted almost between 30 and 15 years ago, and show wider gaps and refutable findings.

The Kamisee Oromo phonology has not been described yet, and this thesis is the first descriptive phonological work on the dialect. Besides this, there are unsettled issues of the suprasegmental features in the description of the Oromo grammar which also need to be treated in this study. Thus, the present study will address the problems stated above and related issues.

1.4 Objectives of the Study

The general objective of the study is to describe the different phonological aspects of the dialect. The study has been conducted with the following specific objectives in focus:

- To identify the phoneme inventory of the dialect,
- To treat the phonotactics and the syllable structure of the variety,
- To investigate the phonological processes taking place in the dialect, and
- To describe the suprasegmental features of the variety.

1.5 Review of Related Literature

Relatively much study has been conducted on Oromo. However, the phonological part has not been satisfactorily studied. Though this is the fact, some works contribute directly or indirectly to the effectiveness of the study. I will selectively focus on the phonological works which directly contribute to the study, and briefly summarize them based on their chronological order.

Some Preliminary Observations on the Borena Dialect of Galla (1957) is a brief study conducted by Andrzejewski. In this work the scholar briefly discusses the segmental phonemes, their distribution and their phonological features in the Borana dialect of Oromo.

The Role of Tone in the Borena Dialect of Galla (1966) is an article written by Andrzejewski. The scholar claims that the Borena dialect of Oromo is tonal, and overviews the tonal aspects in the dialect. This work gives me insight into what scholars treat as tone and the absence of such features in the present study.

Oromo of Wellega (1976) by Gragg provides a general overview of the grammatical aspects of Wellega Oromo. In his article Gragg overviews the sound systems, the morphology, and the syntax of the variety, including a historical sketch. Concerning the phonological aspects, Gragg highlights the phoneme inventory, the suprasegmental features and the morphophonemics of the dialect. Gragg argues that Oromo is a stress language as: “The use of word level pitch and stress pattern is a characteristic of all Oromo dialects.” He recognizes two pitch levels: high and low and three stress patterns: “primary, secondary and tertiary.”

Two Cushitic Languages (1976) is described by Mulugeta, Bender and Stinson. With regard to Oromo, they pinpoint the phonology, the major word classes and the syntax of the language. In the discussion of the phonological aspects, they mainly focus on the phoneme inventory and their distribution, with little consideration of the phonotactics of the language. These researchers seem to claim that Oromo has diphthongs. They say, "Sequence of two vowels occur e.g. *feu*,' to saddle', *mariu*, 'to advise' etc." This shows that they did not recognize the glottal stop in this words, because the words are synchronically pronounced as: *feʔuu*, 'to saddle', *mariʔuu*, 'to advise'.

The Phonology of Mecha Oromo (1981) is an M.A thesis written by Waqo Tola. In this study Waqo treats the segmental phonemes, the phonotactics and the syllable structure, the suprasegmentals and the morphophonemics of the Mecha variety. Waqo argues that the Mecha dialect is a stress language. He claims that the stress is mainly marked by pitch and has three patterns: "primary, secondary and unstressed."

Long vowels in Oromo (1988) by Aberra Nefa deals with the Oromo long vowels. He discusses the long vowels of all Oromo dialects: their distribution, their grammatical features, and the phonological processes they show. This study supports the present study explaining that vowels undergo length in different grammatical processes.

The Phonology of Rayya Oromo (1988) is a senior paper written by Binyam Abebe. In this work Binyam treats the major phonological aspects of Rayya Oromo such as the segmental phonemes, the syllable structure and the distribution of the phonemes, the superasegmental features and the phonological processes. Benyam claims that this dialect has been influenced by the Semitic languages; for instance, it has a seven vowel system unlike the other Oromo dialects.

A Contribution to the Dialectology of Oromo: Consonantal suffix conjugation after the glide *w, j* (1994) is an article written by Kebede Hordofa. In this article Kebede discusses the conjugation of consonant suffixes after the two glides, *w, j* in Oromo. The study depicts the influence of the glide on consonantal suffixes and the

concomitant assimilation in the process across the major dialects of Oromo spoken in Ethiopia and Kenya. This process also takes place in the Kamisee dialect of Oromo.

Baatee (Wello) Oromo Phonology (1994) is studied by Kebede Hordofa. This thesis is about palatalization of "alveodental" consonants of Baatee Oromo (one of the northern dialects). Kebede approaches the study theoretically, but he provides a considerable description to develop the theories. Kebede's study throws light on the palatalization of segments in the present study.

Some points in Oromo Orthography (1998) is an article written by Askale Lema. In this article Askale refutes the previous works which recognize the Oromo alphabet to range from 29 to 32, and finally she comes up with 33 Oromo letters. Askale drops the glottal stop, *ʔ* and claims that Oromo has 33 consonant phonemes, but I argue that this dialect has 34 phonemes including the glottal stop. Some writers consider this sound as a vestigial sound, may be because it is represented in the present Oromo writing system as (') which ,I hope , they confuse the phoneme just as a punctuation mark , and not the phoneme by its own right. But I argue that this sound is a full-fledged phoneme and no less important than the other phonemes. I also make extensive use of this phoneme in the subsequent descriptions like any other consonant segment in the dialect.

Linguistic variables as an introduction of one's home area: A case from Oromo (1998) is written by Kebede Hordofa. In this article Kebede analyzes the cross-dialectal variations of some linguistic variables in Oromo phonological processes.

The present study is different from the previous works in its scope and type. As mentioned earlier the aim of this work is not to bridge the gap of the previous findings; rather it is the first descriptive work on the dialect. As regards the scope of the study, the other works almost do not treat the suprasegmental aspects, especially stress and intonation. The present study, on the other hand, exerts a considerable effort to describe the aspects of stress and intonation of the dialect, at least to pave the way towards these features.

1.6 Scope of the Study

In this thesis I treat the Kimisee phonology: the phoneme inventory, the phonological processes, the phonotactics and the syllable structure and the superasegmental features. Though some of the findings I deal with in this variety hold true for some other Oromo dialects, too, I do not treat them in this thesis.

1.7 Research Methodology

To conduct the study, I elicited data from native speakers of the dialect. The elicitation mainly focuses on words and phrases to analyze the phonological processes and the stress, and sentences to describe the patterns of intonation.

The gathered data have been transcribed phonemically and only when necessary phonetically so that a reader can see the underlying transcription. The data is analyzed in line with the methods of descriptive linguistics, and some experimental methods or laboratory illustration by using the software praat has been employed to describe the patterns of the intonation.

1.8 Significance of the Study

Kamisee phonology has not been studied and the present study would be the first phonological descriptive work on the dialect. The study has the following significance:

- Enhances the development of the Oromo writing system by facilitating the standardization currently on process.
- Facilitates consistency of descriptive works on the dialect.
- It might be a reference for Oromo course books and grammar writers.
- It will be a stepping stone for other researchers who have interest in the area.

2 The Phoneme Inventory

Under this section, the consonant and the vowel phonemes, their distribution and their basic features and allophones of the phonemes of the dialect are discussed.

2.1 Consonants

The consonant phonemes of the dialect are given in the following table.

		Labial	**Dental**	**Alveolar**	**Palatal**	**Velar**	**Glottal**
Stop	Vd	b	d		ɟ	g	
	Vl	p	t		c	k	ʔ
	Ejc	p’	t’		c’	k’	
Implosive				ɗ			
Fricative	Vd	v		z	ʒ		
	Vl	f		s	ʃ		h
	Ejc			s’			
Nasal		m		n	ɲ		
Lateral				l			
Tap/trill				r			
Glide		w			j		

Table 1: Consonant phonemes

The dialect has twenty nine consonant phonemes. Five of them */v, p, z, s’, ʒ/* are loan segments and used only in loan words.

In the above chart labial includes bilabials */p, b, m, p, p’/* labiodentals/*v, f/* and the labiovelar approximant */w/*, and palatal includes palatals */c, ɟ, c’ ɲ, j/* and postalveolars /ʒ, ʃ/. I arranged the phonemes this way for the sake of the economy of phonemes. In this dialect */d/* and /t/ are dental, but I use them without the dental diacritics because there are no other alveolar equivalent sounds which contrast with this phonemes.

The phoneme tap/trill */r/* is a flap when it is not geminated as in

ʔafur 'four'

torban 'week'

But it is a trill when it is geminated as in:

harree 'donkey'

sirrii 'right;

hadurree 'cat'

The consonant phonemes are given in minimal pairs and near minimal pairs as follows.

/p'/ c'op'se	'I/he poured.'	*/b/ ʔobse*	'He/I tolerated'
/f/ farra	'enemy'	*/w/ warra*	'parent'
/m/ mana	'house'	*/ n/ nama*	'person'
/t/ tuuluu	'to gather'	*/d/ duuluu*	'marching'
/r/ raafuu	'cabbage'	*/l/ laafuu*	'to become weak'
/d/ diige	'He/I deconstructed.'	*/d/ dʲige*	'He /I suffered from bleeding.'
/s/ sooruu	'feeding'	*/ʃ/ ʃooruu*	'moving in a circled manner.'
/c'/ c'ubbuu	'sin'	*/j/ jabbuu*	'thick'
/c/ maccii	'intoxication'	*/ʄ/ maʄii*	'milestone'
/ɲ/ ɲaata	'food'	*/ n/ naafa*	'lame'
/g/ garaa	'abdomen'	*/k/ karaa*	'street'
/k'/ k'eensa	'nail'	*/k/ keessa*	'inside'
/h/ hafe	'He was absent.'	*/ʔ/ ʔafe*	'He made (bed etc.)'

It is difficult to show the loan segments */p, v, ʒ, s', z/* using minimal pairs because their occurrence is rare and restricted to loan words in the dialect. I claim that these segments are phonemes because they occur in different positions in words (see 2.1.1). I will take one example word for each segment and show the segments as follow.

/p/ poolisii	'police'
/z/ zajitii	'oil'
/ʒ/ televiʒiinii	'television'
/s'/ s'ahaj	'personal name'
/v/ vaajrasii	'virus'

2.1.1 The Distribution of the Consonant Phonemes and Their Allophones

2.1.1.1 Stops

There are seven sops in this dialect: two bilabials */p, b/,* two dentals */d, t/,* two velars */g, k/* and one glottal */ʔ/*. All stops except */p/* and /ʔ/ occur word initially, medially and finally, and have an unreleased[2] allophone. */p/* and */ʔ/* occur word initially and medially.

a) Bilabials

/p/ is a voiceless bilabial stop which occurs word initially and medially.

poolisii 'police'

ʔispoortii 'sport'

/b/ is a voiced bilabial stop and has the following allophones.

[b] a released voiced bilabial stop which occurs word initially and medially

bilbila 'phone'

[bˀ] an unreleased voiced bilabial stop which occurs word finally

haddubˀ 'falling'

[β] a voiced bilabial fricative which occurs intervocally

/ rooba/ ⟶ *[rooβa]* 'rain'

b) Dentals

/d/ is a voiced dental stop and has the following allophones.

[d] a released voiced dental stop which occurs word initially and medially

diida 'outside'

[dˀ] an unreleased voiced dental stop which occurs word finally.

dududˀ 'running'

[2] Such idiophone occurrences are always expressed by adding other verbs such as ɟeɗ- , 'say' ,goɗ- 'make' ,etc. For example *gugugˀ goɗe ,* 'He knocked.'

/t/ is a voiceless dental stop and has the following allophones.

[t] a released voiceless dental stop which occurs word initially and medially

tuuta 'set'

[t̚] an unreleased voiceless dental stop which occurs word finally

saddeet̚ 'eight'

d) Velars

/k/ is a voiceless velar stop and has the following allophones.

[k] a released voiceless velar stop which occurs word initially and medially

keessa 'inside'

beekumsa 'knowledge'

[k̚] an unreleased voiceless velar stop which occurs word finally

mokok̚ 'well-cooked'

[x] a voiceless velar fricative which occurs intervocally

/beekaa/ → *[beexaa]* 'educated/ knowledgeable'

/g/ is a voiced velar stop and has the following allophones.

[g] a released voiced velar stop which occurs word initially and medially

goguu 'to become dry'

[g̚] an unreleased voiced velar stop which occurs word finally

gugug̚ 'the sound of knocking'

[ɤ] a voiced velar fricative which occurs intervocally.

/laga/ → *[laɤa]* 'river'

e) Glottal

/ʔ/ is a voiceless glottal stop and occurs word initially and medially.

ʔadii 'white'

saʔa 'cow'

2.1.1.2 Ejectives

There are five ejective sounds in this dialect: the bilabial */p'/*, the dental */t'/,* the alveolar */s'/,* the palatal */c'/* and the velar */k'/.* Except */s'/* and */p'/* all ejectives occur word initially, medially and finally and have an unreleased allophone, like stops. */s'/* occurs word initially and medially, while */p'/* occurs word medially and finally.

/p'/ is a voiceless bilabial ejective stop and has the following allophones.

[p'] a released voiceless bilabial ejective stop which occurs word medially

lapp'ee 'chest'

[p'˺] an unreleased voiceless bilabial ejective stop which occurs word finally

lip'˺ 'looking at a glance'

/t'/ is a voiceless dental ejective stop and has the following allophones.

[t'] a released voiceless dental ejective stop which occurs word initially and medially

t'uut'uu 'to smoke'

[t'˺] an unreleased voiceless dental ejective stop which occurs word finally

mut'ut'˺ 'completely finished'

/s'/ is a voiceless alveolar ejective fricative and occurs word initially and medially.

s'ahaj[3] 'personal name'

nas'anat 'personal name'

/c'/ is a voiceless palatal ejective affricate and has the following allophones.

[c'] a released voiceless palatal ejective affricate which occurs word initially and medially

c'acc'abaa 'pieces'

[c'˺] an unreleased voiceless palatal ejective affricate which occurs word finally

foc'oc'˺ 'liking of liquids'

/k'/ is a voiceless velar ejective stop and has the following allophones.

[k'] a released voiceless velar ejective stop which occurs word initially and medially

bak'ak'aa 'cracked'

k'abuu 'to hold'

---

[3] Vowels are not borrowed like consonants ,and the uneducated people mostly use the nearest vowel of the dialect for a borrowed word ,as */a/* instead of */ə/*. The word *s'əhaj* has been borrowed from Amharic but the vowel */ə/* has not been borrowed unlike the consonant segments.

[k’ˀ] an unreleased voiceless velar ejective stop which occurs word finally

bak’ˀ ‘falling’

2.1.1.3 Implosive

There is one voiced alveolar implosive phoneme /ɗ/ and occurs word initially and medially.

ɗaɗaa ‘butter’

2.1.1.4 Fricatives

The dialect has seven fricative phonemes: the labiodentals /f, v/, the alveolars /s, z/, the postalveolars /ʃ, ʒ/ and the glottal /h/. /f, s, ʃ/ occur word initially, medially and finally. /v, z, h/ occur word initially and medially, but /ʒ/ occurs only word medially.

a) Labiodentals

/f/ is a voiceless labiodental fricative and occurs word initially, medially and finally.

fuunfaccuu ‘ to smell’

maaliif ‘why?’

/v/ is a voiced labiodental fricative and occurs word initially and medially.

juunivarsiitii ‘university’

vaajrasii ‘virus’

b) Alveolars

/s/ is a voiceless alveolar fricative and occurs word initially, medially and finally.

sossobuu ‘to comfort’

kamis ‘Thursday’

/z/ is a voiced alveolar fricative and occurs word initially and medially.

zajitii (AMH) ‘oil’

gaazii (ENG) ‘gas’

c) Postalveolar

/ʃ/ is a voiceless post alveolar fricative and occurs word initially, medially and finally.

ʃakkii 'doubt'

gaʃʃe 'He made enter.'

baʃ 'puring'

/ʒ/ is a voiced post alveolar fricative and occurs word medially.

televiiʒiinii 'television'

d) Glottal

/h/ is a voiceless glottal fricative and occurs word initially and medially.

haaɗa 'mother'

Ɉahaa 'six'

2.1.1.5 Affricates

In this dialect there are two palatal affricates /c, ɟ /. Affricates are related to stops and included under stops in the IPA chart of the dialect. /ɟ/ occurs word initially, medially and finally, while /c/ is restricted to word medial position.

/c/ is a voiceless palatal affricate and occurs word medially.

maccii 'intoxication'

/ɟ/ is a voiced palatal affricate and has the following allophones.

[ɟ] a released voiced palatal affricate which occurs word initially and medially

Ɉaamaa 'blind'

kabaɉa 'respect'

[ɟˀ] an unreleased voiced alveolar affricate which occurs word finally

faɉaɟˀ 'to become dizzy'

2.1.1.6 Nasals

This dialect has three nasal consonants: the bilabial /m/, the alveolar /n/ and the palatal /ɲ/. /m/ and /n/ occur word initially, medially and finally. /ɲ/ occurs word initially and medially, but occurs word finally very rarely in informal idiophones expressions, e.g., in *haɲ,* 'expressing the action of biting.'

/m/ is a voiced bilabial nasal and occurs word initially, medially and finally.

mamuu 'hesitating'

kam 'which'

/n/ is a voiced alveolar nasal and has the following allophones.

[n] a voiced alveolar nasal which occurs word initially, medially and finally

naannoo ' surrounding/state'

ʃan 'five'

[ɱ] a voiced labiodental nasal which occurs before the voiceless labiodental fricative /f/

/danfa/ ⟶ *[daɱfa]* 'hot water'

[m] a voiced bilabial nasal which occurs before the voiced bilabial stop /b/.

/sanbata/ ⟶ *[sambata]* 'Sunday'

[ɲ] a voiced palatal nasal which occurs before the palatal sounds /ɟ, c'/

/leenc'a/ ⟶ *[leeɲc'a]* 'lion'

/leenɟii/ ⟶ *[leeɲɟii]* 'training'

/ɲ/ is a voiced palatal nasal and occurs word initially, medially and finally.

fuɲɲaan 'nose'

ɲaata 'food'

haɲ 'biting (informal)'

2.1.1.7 Glides

There are two glides in the Kamisee dialect of Oromo: the labiovelar /w/ and the palatal /j/. Glides occur word initially and medially. /j/ occurs word finally only in emotional idiophone expressions such as ʔaj, 'regretting', but /w/ does not occur word finally.

/j/ is a voiced palatal approximant and occurs word initially, medially and finally.

jabbuu 'thick'

fajjaa 'healthy'

ʔaj 'expression of regret'

/w/ is a voiced labiovelar approximant and occurs word initially and medially.

waamuu 'to call'

k'awwee 'gun'

To sum up, the sonorants /m, n, r/ and the obstruents /s, f/ occur word finally more frequently than other consonants. Apart from these segments, all the non-loan consonant segments, except */c, w, ʔ, ɗ/*, may rarely occur word finally in idiophone expressions. But as the present study reveals, the majority of the words end in vowels.

2.2 Vowels

The dialect has five vowel phonemes, and each vowel phoneme has long and short contrastive vowels.

i		u
	e o	
	a	

Table 2: vowel chart of the dialect

2.2.1 Short Vowels

/i/ front closed unrounded

ʔilma 'son'

/e/ front mid unrounded

reʔee 'goat'

/a/ central open unrounded

gadda 'mourning'

/o/ back mid rounded

ʔol 'up'

/u/ back closed rounded

ʔulee 'stick'

The short vowels have devoiced or somewhat breathed allophones word or constituent finally and described as follows:

/ʔamma/ ⟶ *[ʔamm^{a}]* 'now'

/miti/ ⟶ *[mit^{i}]* 'not'

/ ʔambo/ ⟶ *[ʔamb^{o}]* 'name of the town'

/dufu/ ⟶ *[duf^{u}]* ‘they will come’

/galte/ ⟶ *[galt^{e}]* ‘She / you (SG) entered/went home.’

2.2.2 Long Vowels

/ii/ *sadii* ‘three’

diida ‘outside’

/ee/ *saree* ‘dog’

seera ‘law’

/aa/ *sangaa* ‘ox’

‘k’aama’ ‘body’

/oo/ *dìpp’oo* ‘narrow’

mooraa ‘compound’

/uu/ *duguu* ‘to drink’

fuula ‘face’

Long vowels have glottalized allophones word or constituent finally (see 3.1.3)

/galuu/ ⟶ *[galuu^{ʔ}]* ‘to enter/ to go home’

/reʔee / ⟶ *[reʔee^{ʔ}]* ‘goat’

/ hoolaa/ ⟶ *[hoolaa^{ʔ}]* ‘sheep’

/furdoo/ ⟶ *[furdoo^{ʔ}]* ‘fat’ (FEM)’

/nama gaarii/ ⟶ [nama gaarii^{ʔ}]

person good ‘good person’

As we see from the above examples, vowels occur word medially and word finally and there is no word which starts with a vowel in this dialect.

3 The Phonological Processes

In this section the different phonological processes such as assimilation, dissimilation, insertion, metathesis, spirantization, etc. segments undergo by influencing each other within a word and/or at word or morpheme boundaries and why they undergo such processes are discussed. As indicated earlier, I use the phonemic transcription to describe different phonological processes and only when necessary the phonetic transcription so that one can see the underlying representations. The processes are discussed as follows:

3.1 Assimilation

It is a phonological process in which a segment becomes similar or identical to another segment in a given environment.

3.1.1 Voicing

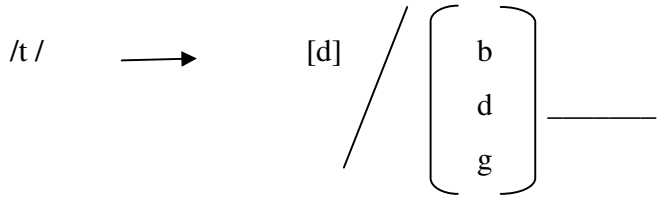
Voicing is a phonological process in which voiceless sounds become voiced being influenced by neighboring voiced segments. In this dialect the voiceless alveolar stop */t/* progressively assimilates to the voiced dental, bilabial and velar stops /b*, d, g*/, and becomes voiced.

/c'ab - t - e/ ⟶ *[c'abde]*
break- 3SF/2SG-PRV 'She was broken.'

/fid - t - u/ ⟶ *[fiddu]*
bring - 2- IPV- PL 'You (PL) will bring.'

/fiig - t - an - Ø/ ⟶ *[fiigdan]*
run - 2 - PL - PRV 'You (PL) ran.'

The process can be shown by the following rule:

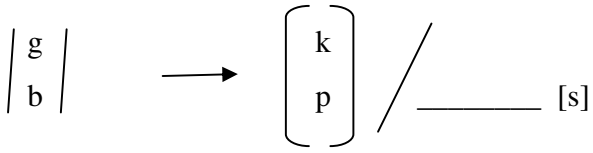


3.1.2 Devoicing

In this phonological process voiced sounds become voiceless because of the influence of neighboring voiceless segments. In this dialect */g/* and */b/* regressively and partially assimilate to the causative marker */s/* and become devoiced.

/Ɉig - s - Ø - e / ⟶ *[Ɉikse]*
fall CAU - 3SM/1SG - PRV 'I/he made fall.'
/c'ab - s - i- n - e/ ⟶ *[c'apsine]*
break - CAU - EPN-1PL - PRV 'We broke.'

The process is captured by the following rule:



3.1.3 Glottalization

It is a phonological process in which non-glottal sounds are glottalized because of the influence of neighboring glottal sounds. As the following data show the voiceless alveolar stop /t/ progressively and totally assimilates to /c'/, and /t'/ and progressively and partially assimilates to /k'/ and /p'/, while it totally and regressively assimilates to /d̚/.

/c'op' - t - e/ ⟶ *[c'op't'e]*
Pour DIM -PRV 'It has been poured.'
/fit' - t - an - Ø/ ⟶ *[fitt'an]*
finish - 2 -PL - PRV 'You (PL) finished.'

/boc' - t - u / ⟶ *[bocc'u]*

draw - 2- IPV-PL 'You (PL) will draw.'

/ɗik' - t - e / ⟶ *[ɗik't'e]*

wash - 2SG/3SF - PRV 'She/you (SG) washed.'

/kaat - ɗ - e / ⟶ *[kaaɗɗe]*

run - 1SG - PRV 'I ran.'

The process could be governed by the following rules:

a) /t/ ⟶ { t' c' } / { p' t' c' k' } _____

b) /t/ ⟶ /ɗ/ / /ɗ/_____

As indicated earlier, long vowels are also glottallized constituent finally. But when they occur before words or morphemes and in genitive constructions they are not glottalized.

a) */bik'iltuu/* ⟶ *[bik'iltuuʔ]* 'seedling'

/saree/ ⟶ *[sareeʔ]* 'dog'

/hoolaa / ⟶ *[hoolaaʔ]* 'sheep'

/raammoo/ ⟶ *[raammooʔ]* 'worm'

/laga buʔ - uu/ ⟶ *[laga buʔuuʔ]*

river descend -INF ' to go to river'

/farda *ʔadii/* ⟶ *[*farda *ʔadiiʔ]*

horse white 'White horse'

b) */buufata bik'iltuu/* ⟶ *[buufata bik'iltuu]*

station seedling-GEN 'the station of seedling'

/ʔeegee saʔaa/ ⟶ *[ʔeegee saʔaa]*

tail cow -GEN 'cow's tail'

/miʔaa k'amadii/ ⟶ *[miʔaa k'amadii]*

wheat taste - GEN ' the taste of wheat'

Example *b* shows that long vowels are not glottalized when they occur before another word (the second and the third examples) and in genitive constructions.

3.1.4 Deglottalization

It is a phonological process in which glottal sounds are deglottalized because of the influence of non-glottal sounds in a given environment. The two glottal sounds */k', p'/* are deglottalized when they occur before the causative marker */s/*.

/bak' - s - Ø - e/ ⟶ *[bakse]*

melt - CAU - 3SM/1SG - PRV 'I/he melted.'

/cop' - s - Ø - an - Ø/ ⟶ *[copsan]*

pour - CAU -3 -PL - PRV 'They poured.'

The process is represented by the following rule.

$$\begin{Bmatrix} k' \\ p' \end{Bmatrix} \longrightarrow \begin{pmatrix} k \\ p \end{pmatrix} \; / \; \underline{\quad\quad} \; [s]$$

3.1.5 Nasal Assimilation

This is a phonological process in which nasal sounds assimilate to sonorants and obstruents. In this dialect the alveolar nasal */n/* undergoes this process. As we observe from the following data, the alveolar nasal */n/* regressively and partially assimilates to */f, ʃ, c' ɟ, b, k, k', g/*. In nasal assimilations the products are nasal sounds throughout, and are all allophones of a given nasal sound (*n* in the present process).

/danfa / ⟶ *[daɱfa]* 'boiled water'

/ʔisaan beek - n- a/ ⟶ *[ʔisaam beekna]*

them know -1PL -IPV 'We know them.'

/ʔisaan ʃakk - i/ ⟶ *[ʔisaaɲ ʃakki]*

them suspect - IMP 'You (SG) suspect them!'

/leenc'a/ ⟶ *[leeɲc'a]* 'lion'

/waan ƙabaa/ ⟶ *[waaɲ ƙabaa]*

thing strong 'strong thing'

/hin - k'ab - Ø - u/ ⟶ *[hiŋk'abu]*

NEG - have -1SG/3SM - NEG-IPV 'He does not/ I do not have.'

/ʔisaan kabaƙ - i / ⟶ *[ʔisaaŋ kabaƙi]*

them respect - IMP ' You (SG) respect them!'

/biʃaan garbaa/ ⟶ *[biʃaaŋ garbaa]*

water sea - GEN 'sea water'

The process in the above examples could be shown by the following rule:

a) /n/ ⟶ (m, ɱ, ɲ, ŋ) / ——— (b, f, ʃ, c', ƙ, g, k, k')

3.1.6 Assimilation of /n/ to Approximants

/n/ assimilates progressively and regressively totally to /l/ and/r/, and regressively and totally to /w/ and /j/.

a) */gargaar - n - e /* ⟶ *[gargaarre]*

help - 1PL - PRV 'We helped.'

/gal - n - a / ⟶ *[galla]*

enter -1PL -IPV 'We enter/ will enter/ go home.'

/Waan laafaa/ ⟶ *[waallaafaa]*

thing soft 'soft thing'

/biʃaan raas - i / ⟶ *[biʃaarraasi]*

water shake - IMP ‘You (SG) shake water!’

/hin - jaad - Ø - u / ⟶ *[hijjaadu]*

NEG - think -1SG/3SM -NEG - IPV ‘I do not/he does not think.’

/hin - warraab - Ø - u/ ⟶ *[hiwwaraabu]*

NEG - fetch - 1SG/3SM- NEG - IPV ‘I/he will not fetch.’

The process could be governed by the following rules.

a) /n/ ⟶ $\begin{bmatrix} l \\ r \end{bmatrix} / \begin{bmatrix} l \\ r \end{bmatrix}$ _____

b) /n/ ⟶ $\begin{bmatrix} l \\ r \\ j \\ w \end{bmatrix}$ _____ $\begin{bmatrix} l \\ r \\ j \\ w \end{bmatrix}$

3.1.7 Assimilation of Stops to the Alveolar Nasal /n/

In this process the two voiced and voiceless alveolar stops */d, t* / regressively and totally assimilate to the alveolar nasal /n/.

/fid - n - e/ ⟶ *[finne]*

bring - 1PL- PRV ‘We brought.’

/kaat -n - a/ ⟶ *[kaanna]*

run - 1PL - IPV ‘We will run.’

The following rule shows the process.

$\begin{vmatrix} t \\ d \end{vmatrix}$ ⟶ [n] / _____ [n]

3.1.8 Vowel Nasalization

It is a phonological process in wchich non-nasal vowels are nasalized when they occur after the nasals /m, n, ɲ/.

/ʔilmoo/	⟶	*[ʔilmõõ]*	'kid'
/summii/	⟶	*[summĩĩ]*	'poison'
/mana/	⟶	*[mãnã]*	'house'
/fuɲɲaan/	⟶	*[fuɲɲããn]*	'nose'

The following rule shows the process.

/v/ ⟶ [ṽ] / { m, n, ɲ } ———

3.1.9 Labialization (Rounding)

In this phonological process the labiovelar approximant /w/ is superimposed onto non-rounded consonants when they occur before the back rounded vowels. In rounding any consonant can regressively assimilate to the back rounded vowels and become rounded.

/fuula /	⟶	*[f^{w}uula]*	'face'
/bofa/	⟶	*[b^{w}ofa]*	'snake'
/suuta /	⟶	*[s^{w}uuta]*	'slowly'
/hoolaa/	⟶	*[h^{w}oolaa]*	'sheep (SIG)'
/torba/	⟶	*[t^{w}orba]*	'week'

The process could be captured by the following rule:

/C/ ⟶ [C^{w}] ——— / { o, u }

3.1.10 Palatalization

Palatalization is a phonological process in which non-palatal sounds are palatalized because of the influence of adjacent or neighboring palatal sounds. It also could be the superimposition of palatal approximants onto non-palatal sounds as a secondary articulation (Lass, 1989:169). In the following examples a voiced palatal approximant */j/* is superimposed onto the consonants preceding the long /*i*/ and */e*/. We view this process as palatalization because these two vowels are formed in the palatal region, and impose their approximant manner, which surfaces as a secondary articulation of /j/.

a) */deeme - Ø - e /* ⟶ *[dʲeeme]*
walk - 1SG/3SM -PRV 'He /I went.'

b) */diida/* ⟶ *[dʲiida]* 'outside'

Kebede (1994:34) argues that in the palatalization process triggered by the causative suffixes there is *i* before -*s* and-sis/-siis which palatalizes /t, d, t'/. But the synchronic fact does not show the claim because if the segment had underlyingly been there, it could have realized itself somewhere. I would argue that *i* is probably historically deleted but the palatalizing trace is remained.

We have evidence from other particles such as - *itti* and -*irra.* Griefenow-Mewis (2001) confuses the underlyingly -*itti* and -*irra* as four different morphemes: *itti- tti -irra,* and -*rra.* But we have underlyingly -*itti and* -*irra* and -*rra* and -*tti* occur after the deletion of *i.*

Likewise, the *i* of the causatives, which must have been occurred as -*is, -isis/-isiis* has been deleted and could not get the chance to surface in different forms, like the above morphemes, because it is always suffixed onto the verbs and can not occur independently. Thus, it is the trace of *i* which palatalizes the alveolar sounds. This is because without any palatal sound in a given environment there could not be any palatalization (Lass, 1989:169). Let us consider the following examples:

/kut - siis - Ø - e/ ⟶ *[kuccisiise]*
cut -CAU -1SG/3SM -PRV 'He/I made cut.'

/fid - siis - n - e/ ⟶ *[ficcisiisne]*

bring - CAU -1PL -PRV ‘We made bring.’

/fit’ - siis - t - e/ ⟶ *[ficc’isiiste]*

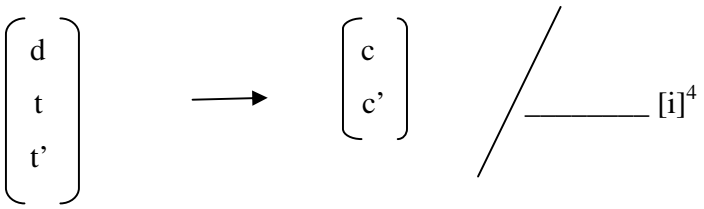
finish - CAU -2SG/3SF- PRV ‘She/you made finish.’

Palatalization is blocked by gemination. See the following example.

/gadd -i -siis - t - e/ ⟶ *[gaddisiiste]*

disappoint - EPN-CAU -3SF/2SG-PRV ‘She/you(SG) disappointed…’

The process is captured by the following rule:



3.1.11 Vowel Raising

In this phonological process a vowel becomes higher from its original vowel space. *a* is raised to *o* and *e* in state verbs when somebody else or something undergoes a change of state, or causes somebody or something to undergo such a change of state. The conditioning environments for this process are *w* (the rounding feature), which raises *a* to *o*, and the trace of the segment *i* of the causative marker-*s*[5] which raises *a* to *e.* If the stem ends in a stative marker *-aw* and the object itself undergoes a change of a state, *a* raises to *o*, but in both examples (a and b) if the change of a state is caused by another object, *a* of the last syllable rises to *e*. In the following examples, *w* and *t* assimilate to *s* and form geminate *ss*.

a) /haɗaaw -t - e/ ⟶ *[haɗoote]*

sour - DIM - PRV ‘It became sour.’

[4] According to the present analysis *[i]* is the trace of the diachronically deleted segment */i/* as argued above.

[5] See the palatalization which is influenced by the trace of */i/ (3.1.10)*

b) */moofaw -s - e/* ⟶ *[moofesse]*

be old - CAU - PRV 'It became old.'

/fagaat - s - -e/ ⟶ *[fageesse]*

be far - CAU -1SG/3SM - PRV 'He /I made far.'

Vowel raising may also be conditioned by the voiced palatal approximant /j/ in the following verbs with stem final /h/ and /ʔ/. In this dialect this process seems far from clear because the stem final segments are the glottals /h, ʔ/. But in the other Oromo dialects (Macha, Tulema, etc.) the stem final segment is the palatal approximant /j/. From this fact we conclude that the stem final segment is underlyingly /j/ which raises *a* to *e*. Consider the following examples.

/gah - n - e/ ⟶ *[geeŋŋe]*

arrive - 1PL - PRV 'We arrived.'

/kaah - t - e/ ⟶ *[keesse]*

put - 3SF/2SG - PRV 'She/ you (SG) put.'

/taaʔ - n - e/ ⟶ *[teeŋŋe]*

sit - 1PL - PRV 'We sat.'

The vowel raising process could be summarized by the following rule:

$$/a/ \longrightarrow \begin{pmatrix} o \\ e \end{pmatrix} \Big/ \_\_\_\_ \begin{pmatrix} w \\ i \\ j \end{pmatrix}$$

In the second example given above the softening process also takes place (see3.9)

3.2 Length Dissimilation

When derivational suffixes such as *-aw, - (o)ot ,- sis /- siis and* -s are attached to a root or a stem ending with a syllable with a long or a short vowel, the suffixes will have opposite vowel length with roots.

/fiig[6] *- sis - Ø - e /* ⟶ *[fiigsise]*

run - CAU- 3SM/1SG - PRV ‘He/I made run.’

/mur - siis - e/ ⟶ *[mursiise]*

cut - CAU - PRV ‘He made cut.’

/nama - oota/ ⟶ *[namoota]*

person - PL ‘persons’

/hoolaa - ota/ ⟶ *[hoolota]*

sheep - pL sheep (PL)

/moof - aw -/ ⟶ *[moofaw-]*

old - STV ‘to become old’

/milk - aw-/ ⟶ *[milkaaw]*

lucky - STV ‘to become lucky’

3.3 Spirantization

Is a phonological process in which stops are fricativized intervocally. In this dialect, */b, g, k/* are frecativized intervocally.

/beek - Ø - a/ ⟶ *[beexa]*

know - 1SG/3SM-IPV ‘He knows/ I know.’

/fiig - uu/ ⟶ *[fiiɤuu]*

run - INF ‘to run’

/c’abaa/ ⟶ *[c’a βaa] ‘broken’*

The following rule shows the process:

$$\begin{bmatrix} b \\ g \\ k \end{bmatrix} \longrightarrow \begin{bmatrix} \beta \\ ɤ \\ x \end{bmatrix} \; / \; [v] \_\_\_\_ [v]$$

Spirantization is blocked by gemination.

/gubbaa/ ⟶ *[gubbaa]* ‘above’

[6] f*iig*- ,’ run’ is synonym with the verb *kaat*- ‘run’.

3.4 Metathesis

It is a phonological process in which segments interchange their position within a word. As we observe from the following examples, there is also the deletion of *a* and *u* in the first and the second examples respectively and the insertion[7] of *a* in the last two examples.

/sagal - affaa/	⟶	*[salgaffaa]*
nine ORD		'nineth'
/ʔafur - affaa/	⟶	*[ʔarfaffaa]*
four ORD		'fourth'
/darb - t - e/	⟶	*[dabarte]*
Pass- 2SG/3SF -PRV		'She/you passed.'
/ʔarg - t - an - Ø/	⟶	*[ʔagartan]*
see - 2 - PL - PRV		'You (PL) saw.'

.

3.5 Insertion

In this process an underlyingly non-existing segment is inserted before or between or after segments. In this dialect the epenthetic segments */i/* and */a/* are inserted to adjust the non-permissible distribution of consonant clusters. As we observe from the following examples *i* is epenthetic vowel. But *a* is optionally inserted when the segments undergo metathesis (see 3.4)

a)

/fayy - i - n - e/	⟶	*[fayyine]*
heal - EPN- 1PL -PRV		'We recovered.'
/c'ab -s - i - t - e/	⟶	*[c'absite]*
break - CAU- EPN-2SG/3SF - PRV		'She/you broke.'
/kolf - i - t - a/	⟶	*[kolfita / kofalta]*
laugh - EPN- 2SG - IPV		'You will laugh.'
/darb - i - t - e/	⟶	*[darbite /dabarte]*
pass - EPN- 2SG/3SF - PRV		'She passed.'

[7] When the words do not undergo metathesis, the epenthetic vowel is *i* (see 3.5)

A non-permissible consonant cluster in loan words also confirms the phonotactics of the language by inserting the epenthetic vowel /*i*/ as shown in example *b* below. /*i*/ is inserted in between /*j*/ and /*t*/ in the first example, and at the beginning and at the end of the word in the second example because no consonant cluster is allowed word initially and word finally. The final long */i/* in the examples is not an epenthetic vowel; it is because most nouns in this dialect end in long vowels.

b) /*zajt*/ (AMH) ⟶ [zajitii] 'oil'

/*sport*/ (ENG) ⟶ [ʔispoortii] 'sport'

3.6 Free Variation

It is a phonological process in which the occurrence of different segments in the same environment is non- contrastive. In the following examples the contrast between /h/ and /ʔ/ in the first and the third examples and the contrast between /w/ and /h/ in the second example is suspended. That is, the segments are free variants in these words.

hantuuta /ʔantuuta 'mouse'

moow - /mooh- 'win'

ʔadurree/ hadurree *'cat'*

3.7 Deletion

Deletion is a phonological process in which phonological units are lost in affixation, at word or morpheme boundary, etc. In this dialect there are different grammatical conditions under which segments are lost. Both consonants and vowels are deleted at word and morpheme boundaries in this dialect. Consonants are deleted in casual speech, while vowels are deleted when two different vowels at word and morpheme boundaries occur together one of the vowels is deleted because there is no diphthong in this dialect.

3.7.1 Deletion of /h/ and /ʔ/ at Word and Morpheme Boundaries

/h/ and /ʔ/ are deleted at word or morpheme boundaries and most of the time a connected speech is formed.

/ʔiʃii - n haa ɗuf - t -u/ ⟶ *[ʔiʃiinaa ɗuftu]*
she - NOM JUS come -3SF - JUS- IPV 'Let her come.'

/farda ʔadii/ ⟶ *[fard adii]*
'horse white' 'white horse'

/ʔan ʔotuu/ ⟶ *[ʔan otuu]*
'I while' 'while I …'

3.7.2 Deletion of *i* at Morpheme Boundary

When a morpheme which starts with *i* (except the definite markers -*icca* and -*itti*) is suffixed to a word which ends in any vowel, *i* is deleted from the morphemes.

/laga itti/ ⟶ *[lagatti]*
river at 'at a river'

/ʔeegee itti/ ⟶ *[ʔeegeetti]*
tail to 'to tail'

/ ʔambo immoo/ ⟶ *[ʔambommoo]*
ambo but 'but Ambo (name of the town)'

/diim -tuu illee/ ⟶ *[diimtuullee]*
red - F even 'even red (F)'

3.7.3 Deletion of *ƭi* at Morpheme boundary

ƭi is deleted in perfect constructions from the auxiliary *ƭir-*, and a contracted speech is formed because the auxiliary *ƭir-* is encliticised onto the preceding verb after the deletion.

/gal - Ø - e ƭir - Ø -a/ ⟶ *[galeera]*
enter - 1SG/3SM- PRV AUX- 1SG/3SM -PRV 'I have / he has entered.'

/beek - n - e ƭir - n - a/ ⟶ *[beekneerra]*
know 1PL - PRV AUX -1PL - PRV 'We have known.'

3.7.4 Deletion of /a/ before Nominative Case Markers and Numeral Nominal Modifiers

This process seems to occur partly because of morpheme boundary effect and partly due to phonotactic restriction. In the first and the third examples under *a, /a/* is deleted because of morpheme boundary effect[8]. But in the second example */a/* is deleted because no two different vowels occur together. But in example *b /a/* is deleted in a fast or a casual speech only, and in a formal speech it is seldom deleted.

a) */nama - ni/* → *[namni]*
person - NOM 'person'
/farda - i/ → *[fardi]*
horse NOM 'horse'
/lafa - ti/ → *[lafti]*
ground - NOM 'earth/ground'

b) */nama takka/* → *[namtakka]*
person one 'one person'
/muka ʔafur/ → *[mukafur]*
item four 'four items'

3.7.5 Deletion of Vowels at Word Boundary

When suffixes which begin with *u*, *o, a* and the definite markers *-icca* and *-itti* are attached to words which end in any vowel (s), the final vowels are deleted from the words. Vowels are deleted here because there is no diphthong in this dialect (see 3.7).

/mana -uma/ → *[manuma]*
house - FOC 'house itself'
/ʔiɟoollee - ummaa/ → *[ʔiɟoollummaa]*
child - ABS 'childhood'
/Saree -oota/ → *[saroota]*
dog - PL 'dogs'
/ɟabbii -oota/ → *[ɟabboota]*

[8] Morpheme boundary effect means an effect of a morpheme boundary on the phonological processes, that is, just because of the morpheme boundary effect some phonological processes take place (Carr, 2008: 103). In this case vowels are deleted before nominative case markers.

calf - PL		'calves'
/bik'ltuu - oota/	→	*[bik'iltoota]*
seedling - PL		'seedlings'
/gaarii - ummaa/	→	*[gaarummaa]*
good - ABS		'goodness'
/farda -icca/	→	*[fardicca]*
horse - DEF- M		'the horse'
/gaangoo - ittii/	→	*[gaangittii]*
mule - DEF -F		'the female mule'
/bik'iltuu - ittii/	→	*[biki'ltittii]*
seedling - DIM		'the little seedling'
/takka - affaa/	→	*[takkaffaa]*
one - ORD		'first'
/Jahaa - affaa/	→	*[Jahaffaa]*
six - ORD		'sixth'
/sadii- affaa/	→	*[sadaffaa]*
three - ORD		'third'

Note that there is length dissimilation of vowels of the root and the plural markers in the above examples (see 3.2)

3.7.6 Deletion of *i* from the Coordinating Conjunction *fi* 'and'

i is deleted from coordinating conjunction *fi* ,'and' in a fast or a causal speech. The following examples reveal that the deletion of *i* takes place, and when the second word begins with */ f/* a connected speech is formed with a fake gemination of *f*.

/harka- fi	*miila/*	→	*[harkaaf miila]*
hand and	leg		'hand and leg'
/garaa - fi	*fuula/*	→	*[garaaffuula]*
abdomen and face			'abdoomen and face'
/harree - fi	*farda/*	→	*[harreeffarda]*
donkey and	horse		'donkey and horse'

3.7.7 Deletion of /ɗ/ and /w/ at Stem Final

When a suffix which begins with a consonant segment is attached to a stem or a root with final *ɗ* and *w,* which are preceded by long vowels, these two consonant sounds are deleted from this position.

/fuuɗ - t - e/ ⟶ *[fuute]*
pick -2SG/3SF - PRV 'You (SG) /she picked.'

/maccaaw - t - e/ ⟶ *[maccoote]*
be intoxicated - 2SG/3SF - PRV 'She become intoxicated.'

The other process taking place in these examples is vowel raising: *a* is raised to *o*. (3.1.11)

3. 8 Reduplication

Reduplication is a phonological process in which segments from a root are repeated for some grammatical purposes such as to show number, repetition or intensification of an action. Reduplication is a morphological process which has phonological significance; because when we deal with reduplication we analyze which units are reduplicated, why and in what way (Carr 2008:147). In this process the first consonants are usually geminated except */ʔ/* and */h/,* and the first syllables of the reduplicated words have short vowels.

/diimaa/ ⟶ *[diddiimaa]*
red 'red things'

/haf-/ ⟶ *[hahaf-]*
be absent 'was repeatedly absent'

/ɗeeraa/ ⟶ *[ɗaɗɗeeraa]*
long 'long things'

/boow - Ø - e/ ⟶ *[babboowe]*
weep -1SG/3SM- PRV 'He/I repeatedly wept.'

/beek -t - a/ ⟶ *[babbeekta]*
know - 2SG -IPV 'You will know/know different things.'

/ɗeeraa/ ⟶ *[ɗaɗɗeeraa]*
long 'different long things'

/lol - Ø - e/ ⟶ *[lallole]*

fight -1SG/3SM- PRV 'He repeatedly fought.'

The vowel lowering process also takes place in the above examples. Vowel lowering is a phonological process in which high vowels are lowered from their original vowel space. */e/* and */o/* are lowered to /a/ here. Unlike the other processes, there is no external conditioning environment; rather this process is a part of reduplication.

Words which begin with back consonants, velars and glottals */k, k', g, ʔ, h/* are exceptions to the above processes, i.e., there is no vowel lowering if a word begins with one of the segments. Consider the following reduplicated examples.

[kekkeesse] 'She repeatedly put some thing.'

[goggoge] 'It became highly dry.'

3.9 Softening

It is a phonological process in which sequences of less sonorous segments soften into more sonorous segments. In this dialect a sequence of glottal sounds */h, ʔ/* plus the voiceless alveolar stop */ t/* softens into *ss*[9] in the following state verbs. In softening there is no conditioning environment in which a segment influences another segment like other phonological processes; rather a given sequences of segments result in another sequence of segments to ease pronunciation.

/taaʔ -t -e/ ⟶ *[teesse]*

sit -3SF/2SG -PRV 'She/you (SG) sat.'

/gah -t -an - Ø/ ⟶ *[geessan]*

arrive -2- PL - PRV 'You (PL) arrived.'

/dah -t - u / ⟶ *[deessu]*

give birth - 2 - IPV- PL 'You (PL) will give birth' (for females).

The vowel raising process also takes place in the above examples (see3.1.11)

[9] Here sequences of a stop plus a fricative and a stop plus another stop soften into a geminate fricative which is more sonorous.

3.10 Strengthening

In this phonological process a sonorant is substituted by an obstruent. In this dialect I recorded the process in one word *ɗaw-* 'hit', when the person marker suffixes /t/ and /n/ are attached to this stem, the consonant cluster 'kt' is formed.

/ɗaw - t - e/ ⟶ *[ɗokte]*

hit - 2SG/3SF - PRV 'she/you (SG) hit.'

/ɗaw - n - a/ ⟶ *[ɗokna]*

hit -1PL - IPV 'We will hit.'

ɗaw -t - an - Ø ⟶ *[ɗoktan]*

hit - 2 - PL- PRV 'you (PL) hit.'

The vowel raising process also takes place in the above process because of the influence of the stem final *w* (see 3.1.11).

4 Phonotactics and the Syllable Structure

4.1 Phonotactics

The distribution of phonemes in the dialect has the following restrictions.

1. Word initial and final consonant clusters are not permissible. This corroborates with Waqo's (1981:34) finding regarding the Mecha dialect.
2. Not more than two consonants are allowed within a cluster.
3. */h, ʔ, w, d/* do not occur word finally[10].
4. */c/* does not occur word initially and finally.
5. */h/* does not form a cluster with any consonant.
6. */h/* and */ʔ/* are always not geminated.
7. /p'/ does not occur word initially.
8. There is no word which begins with a vowel in this dialect because the glottal stop */ ʔ/* precedes vowels.
9. Unless /ɲ/ and /c/ occur word initially and finally they are pronounced geminated in most cases.
10. No two different vowels occur together, and the dialect has no diphthongs.
11. */l, r, j, ɲ, ʃ, w /*[11] are not combined with any consonant as a second member of a cluster Habte (2003:19); while */d, c, ʔ, ɗ, ʃ/* do not constitute the first element in a cluster.
12. Syllable onset is mandatory in this dialect.
13. There is no branching coda or onset in the Kamisee Oromo.
14. */n, m, l, r, s, f/* are the frequently word finally occurring consonants.
15. Only vowels are syllable nucleus and consonants hold onset and coda positions.

[10] This rule does not take loan segments into consideration because their frequency is rare and less significant. The distribution I discussed under chapter two suffices to constrain the distribution of the loan segments.

[11] This rule may be violated in metathesis.

4.2 The Syllable Structure

As discussed under the phonotactics, the syllable onset is obligatory. Based on this fact there are four types of syllables (CV, CVV, CVC, and CVVC). Waqo (1981:37) also recognizes four syllable types in Mecha Oromo. In the following transcription the dot (.) between two syllables represents the syllable boundary and the underlined syllables are the example syllables under their respective syllable types.

1. CV	*nama*	*(na.ma)*	'two
	ʔamma	*(ʔam.ma)*	'now'
	takka	*(tak.ka)*	'one
2. CVV	*hoolaa*	*(hoo.laa)*	'sheep'
	ʔeeboo	*(ʔee.boo)*	'spear'
	mooraa	*(moo.raa)*	'compound/ campus'
3. CVC	*ʃan*	*(ʃan)*	'five'
	gadda	*(gad.da)*	'mourning'
	farda	*(far.da)*	'horse'
4. CVVC	*beekumsa*	*(beek.um.sa)*	'knowledge'
	keessummaa	*(kees.sum.maa)*	'gust'
	biʃaan	*(bi.ʃaan)*	'water'

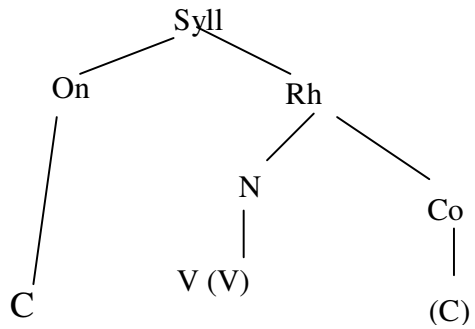
4.3 Syllabification

The syllabification pattern in this dialect is simple. Geminated consonants or clusters are split up because of the restriction of the distributions with in a syllable; that is, onset and coda are not branching. If there are consonant clusters with in a word (medially) they are split, and the first consonant becomes the coda of the preceding syllable, while the second consonant occupies the onset position of the succeeding syllable.

ʄilba	*(ʄil.ba)*	CVC.CV	'knee'
harka	*(har.ka)*	CVC.CV	'hand'
leenc'a	*(leen.c'a)*	CVVC.CV	'lion'
hatattama	*(ha.tat.ta.ma)*	CV.CVC.CV.CV	'quickly'
dargaggeessa	*(dar.gag.gees.sa)*	CVC.CVC.CVVC.CV	'youth'

The above syllabification process is done for the sake of the syllable well-formed ness. For instance, if we analyze dargaggeessa, 'youth' as darg.aggee.ssa, we would get CVCC.VCCVV.CCV, which is not permissible in this dialect, because syllable onset is obligatory and no branching coda or nucleus is permissible. As a result, the syllables become ill-formed.

The general syllable template in the dialect can be illustrated as follow.



The structure reveals that the onset is obligatory; the nucleus vowel could be long or short, and the coda is optional.

5 Aspects of Suprasegmental Features

Suprasegmentals are branch of phonology which study phonological features above segments. Under this section the main aspects of surasegmental features such as gemination, vowel length, pitch, stress and intonation are discussed. Because the area is less established in Oromo in general and untouched in this variety, in particular, I will treat the typical features of the aspects of the suprasegmental features.

5 .1 Gemination

Gemination is the occurrence of identical consonant segments together. Gemination in the Kamisee Oromo is phonemic. Let us consider the following examples.

bade	'he disappeared'.
badde	'she disappeared.'
gubaa	'something which burns'
gubbaa	'above'

There are two types of gemination in this dialect: lexical and grammatical.

5.1.1 Lexical Gemination

This is the gemination consonants inherently have within a given word. This is called **true geminate** (Carr 2008:61).

gadda 'mourning'

dìbba 'hundred'

harree 'donkey'

5.1.2 Grammatical Gemination

It is a type of gemination which occurs in the following grammatical processes.

5.1.2.1 Assimilation

The following geminations are as a result of the assimilation of the alveolar nasal */n/* to other consonants.

/har - n - a/ ⟶ *[harra]*
clean- 1PL - IPR ‘We will clean (some thing).’

/gal - n - e/ ⟶ *[galle]*
enter - 1PL - PRV ‘We entered /went home.’

/waan meek’a/ ⟶ *[waammeek’a]*
thing how many ‘How many things?’

Similar to the above gemination process, in the particle *gadi,* ‘down’ the terminal *i* is deleted from the particle and the *d o*f the particle productively assimilates to an initial consonant of any succeeding word, except the glottals */ʔ, h/*[12]

/gadi sik’ - Ø -a/ ⟶ *[gassik’a]*
down move - 3SM - IPV ‘ He will move down.’

/gadi nak’ - i/ ⟶ *[gannak’i]*
down pour - IMP ‘You (SG) pour it down!’

/gadi dîis - n -e/ ⟶ *[gaddîisne]*
down leave - 1PL-PRV ‘We released.’

5.1.2.2 Gemination in Contracted forms

In this dialect the suffix *-itti* is deleted in sentences, and the first consonant of a word following the suffix is geminated. I call this process **compensatory gemination**, because a geminated consonant is in compensation to the lost suffix. Thus, the geminates *dd and kk* in the following examples are the result of the deletion of the suffix and the concomitant gemination.

[12] The reason behind this exception is that these two segments are inherently not geminated.

/na - itti - duf - Ø - e/	⟶	*[naddufe]*
me to come - 3SM - PRV		'He came to me'.
/ʔisa - itti kenn - i/	⟶	*[ʔisakkenni]*
he to give - IMP		'You (SG) give it to him.'

5.1.2.3 Gemination of *m* in Ordinal numbers Formation

When an ordinal number marker *-affaa* is attached to numerals with a stem final[13] or a word final *m,* the final *m* is geminated.

/lama - affaa/	⟶	*[lammaffaa]*
two - ORD		'second'
/digdam - affaa/	⟶	*[digdammaffaa]*
twenty - ORD		'twentieth
/soddom - affaa/	⟶	*[soddommaffaa]*
thirty - ORD		'thirteenth'

All the germination types treated so far at words or morpheme boundaries are called **fake geminates** (Carr 2008:61)

Gemination also takes place in reduplication process discussed earlier (see 3.8)

5.2 Vowel Length

Vowel length is a relatively longer duration taken during vowel production. It could be duration of time taken to produce a vowel or a time taken by a listener to hear these sounds (Cruttenden, 1986:2)

Length in the Kamisee dialect is quantitative. In this thesis long vowels are transcribed by writing two identical vowels together as *aa,oo,* etc.. Under this section my prime focus is not long vowels; rather it is vowel length (why vowels undergo length). Like gemination there are two types of length: lexical and grammatical length.

[13] *Stem final* is an unfortunate term here because strictly speaking *m* in the numeral *lama,* 'two' is not stem final but the terminal *a* is deleted and *m* is geminated, that is why I said stem final to identify this from the word final *m* e.g., in *digdam*, 'twenty.'

5.2.1 Lexical Length

This is a type of length vowels inherently have in a given word.

reʔee	'goat'
hoolaa	'sheep'
ʔadii	'white'
bikiltuu	'seedling'
furdoo	' fat (F)'
duula	'battle'

5.2.2 Grammatical Length

It is a vowel lengthening process in which originally short vowels become long in different grammatical processes discussed below. In this grammatical length vowels mainly undergo length due to the shift of the stress[14], i.e., when the following grammatical processes are marked by stress, the vowel in the last syllable is lengthened. Here vowels undergo length not to mark the grammatical process but to accommodate the stress shift, because only long vowels are stressed word finally. If a word ends in a consonant, long *i* is inserted.

5.2.2.1 Vowel Length in Genitive Constructions

Genitive constructions are marked by the stress shift from the preceding syllables to the ultimate syllable, and the terminal vowel is lengthened to bear the shifted stress.

Nouns			**Genitive constructions**	
/bófà/	*'snake'*	→	*[bòfáa]*	*'of a snake'*
/gánnà/	'summer'	→	*[gànnáa]*	'of summer'
/kàmís/	'Thursday'	→	*[kamìsíi]*	'of Thursday'
/ʔìsáan/	'they'	→	*[ʔiàaníi]*	'theirs'
/bìlbíla/	'phone'		*[bilbàláa]*	'of phone'

[14] In the processes subsequently discussed the stress always shifts to the final syllable.

5.2.2.2 Vowel Length in Cases

When genitive, dative, ablative and instrumental cases are marked by the shift of the stress, the final short vowels become long for the same reason argued above. In the following examples the *dative* and the *instrumental* markers are *f* and *n* respectively. The base for these cases in these examples is the *genitive* case, and the vowels are not part of the case markers in these two cases.

Noun			**Cases**
/fárdà/	'horse'	⟶	[*fàrdáa*] (GEN) 'of a horse'
/ʔámbò/	'ambo'	⟶	[*ʔàmbóo*] (ABL) 'from Ambo'
/námà/	'person'	⟶	[*nàmáa- f]* (DAT*)* 'for a person'
/míilà/	'leg'	⟶	[*mìiláa - n*] (INST) 'with a leg.'

5.2.2.3 Vowel Length before the Conjunction *fi,* 'and'

The stem final short vowels become lengthened before the conjunction *fi,* 'and'. This is because of the influence of the conjunction *fi*, 'and'. This conjunction is always encliticised onto the preceding noun by shifting the stress to the ultimate syllable; concomitantly the lengthening of the final vowel takes place because of the influence of the stress. Consider the following examples[15].

/fárdà -fi harree/ ⟶ *[fàrdáafi harree]*
horse - CON donkey 'horse and donkey'
/tákkà- fi lama/ ⟶ *[tàkkáafi lama]*
one - CON two 'one and two'
/ʔàfúr - fi lama/ - ⟶ *[ʔafùríifi lama]*
four - CON two 'four and two'

5.2.2.4 Compensatory Length

It is a process in which a root or a stem final consonant is deleted and the short vowel of the ultimate syllable becomes long. This process takes place when a suffix which begins with a consonant attaches to roots or stems ending in *w, ʔ,* and *h.*

[15] In these examples I marked the stress of only the words preceding the conjunction because onlythese words are important for the stress shift and the lengthening of the terminal vowels of the preceding words.

/ɗaw - t - e/	⟶	*[ɗoote]*
win - 2SG /3SF - PRV		'You (SG) /she hit.'
/bah - n - a/	⟶	*[baana]*
go out - 1PL - IPV		'We will go out'.
/buʔ -t - an - Ø/	⟶	*[buutan]*
get - off -2 - PL - PRV		'You (PL) have gone off.'

In the above process the vowel raising process also takes place (see 3.1.11)

5.3 Stress

Stress is a suprasegmental feature which makes syllables of a given word pronounced with different prominence. The stressed units are distinguished from the unstressed ones based on how they are perceived (Katamba 1989), and how prominent they are uttered relative to the other units (Mohanan and Singh 1995:9). Stress is mainly based on pitch, length and loudness (Roach 1983:73). In some languages stress is mainly marked by pitch than by duration (Carr 2008:36).

Languages vary in their patterns of the tress. Yip (2002:256), discusses the category of languages based on the stress types as:

> There are three possible subtypes. The most common two are (1) languages with stress fixed at or near one end of the two, where near means no more than two syllables away from the end (e.g. antepenultimate) and (2) languages with binary alternating patterns across the word. The third type is languages with lexical stress.

Stress in the Kamisee dialect is almost dynamic because any syllable can receive stress based on length of vowels or pitch, in which the influence of the pitch pattern outweighs[16]. In this dialect stress is phonetic in that there is no lexical contrast by making use of stress, and it could be predicable from the environment of the utterance.

[16] The primary stress and the high pith and the secondary stress and the low pitch always co-occur, except when the non- ultimate syllable has a long vowel, and the ultimate syllable has a short vowel. In this case the stress falls on this non-ultimate syllable with long vowels, but which does not have a high pitch.

There are three degrees of stress in the Kamisee Oromo: primary, secondary and weak (unstressed). Waqo (1981:44) and Gragg (1976:175) found the same stress patterns in the Mecha dialect.

5.3.1 Word Stress

As discussed above, stress in this dialect is mainly based on pitch than on duration. This also holds true for the Mecha dialect of Oromo (Waqo 1981:44). In this analysis the primary stress is designated by a high pitch "´", while the secondary stress is marked by a low pitch "`" and the unstressed one is unmarked .The stress drop in this dialect is not based on the class category of the words (noun, verb, etc.); rather it is based on the type of a given syllable across class categories. The general pattern of the stress is discussed as follow:

1) Monosyllabic words are usually stressed.

kám	'which'
ʃán	'five'
kée	'yours'

2) Disyllabic words which end in short vowels have a primary stress on the penultimate syllable and a secondary stress on the ultimate syllable, whatever the length of the vowel of a preceding syllable.

námà	'person'
lágà	'river'
súutà	*'slowely'*
hàadà	*'mother'*

3) A polysyllabic word without long vowels has the primary stress on the penultimate syllable and the secondary stress on the antepenultimate syllable.

sànbáta	'sunday'
fincíla	'strike'
hìrríba	'sleeping'
hatàttáma	'rush'
dagàggáma	'sporadically'
bìlbíla	'phone'
gàlgála	'evening'

4) Words which end in long vowels have a primary stress on the ultimate syllable and a secondary tress on the penultimate syllable, if there is no other syllable with a long vowel. But if there is another non-penultimate syllable with a long vowel, the secondary stress falls on it and the penultimate syllable will be unstressed.

hobombolèetíi	'hurricanes'
ʔàdíi	'white'
sàngáa	'ox'
dargàggóo	'youth'
gàarummáa	'goodness'
hòoláa	'sheep'
mòotummáa	'government'

5) Words which end in consonants have a primary stress on the ultimate syllable and a secondary stress on the penultimate syllable, if all syllables have short vowels. But if there is any another syllable with long vowels it receives the primary stress and the ultimate syllable receives the secondary stress.

dìgdám	'twenty'
kàmís	'Thursday'
bìʃaán	'water'
ʔìsáan	'they'
kùɗán	'ten'
Ɉáatàm	'sixty'
torbáatàm	'seventy

7. The following open mono syllabic words are unstressed.

tu	'focus' marker'
nu	'us'
na	'me'
si	'you'

8. Affixes do not bring about the shift of the stress because the fall of the stress is decided after affixation based on the type of the syllable of a given word: whether it has long or short vowel (s) or whether the syllable is the ultimate or the penultimate, etc.

/bálḍ - ina/	→	*[bàldǐna]*
wide - ABS		'width'
/hòoláa -ota/	→	*[hóolòta]*
sheep - PL		'sheep (PL)'
/sàreée-oota/	→	*[sàróota]*
dog - PL		'dogs'
/ʔìlmóo - illee/	→	*[ʔilmòollée]*
kid - even		'even kid'
/kutànnáa - ḍaan/	→	*[kutannàadáan*]
determination with		'with a determination'
/fíig- uu/	→	*[fìigúu]*
run - INF		'to run'
/námà -uma/	→	*[nàmúma]*
person-FOC		' person itself'
/maràatúu- uma/	→	*[maráatùma]*
mad - FOC		'mad himself/herself'

In the above processes one may claim that affixes shift the stress pattern of roots after the affixation. But for me that is not the case. I have already argued that stress placement in this dialect is dependent more on the type of the syllable than on the grammatical category of the words. Thus, the above words become complex after affixation and the stress assignment would be implemented according to the patterns discussed so far. Here the grammatical role of the affixation has no influence, because the complex words forget that grammatical influence and act as any word in isolation to receive the stress placement. If we consider the plural marker *-o(o)ta* ,which could be long or short based on the dissimilation rule (see3.2), the morpheme does not influence the stress drop inherently.

The same holds true for prepositions and postpositions.

/ʔámbò -ìrràa/ ⟶ *[ʔambòrráa]*
Ambo from 'from Ambo'
/gádì - bùʔúu/ ⟶ *[gabbùʔúu]*
down to descend ' to descend down'
/námà -ìmmóo/ ⟶ *[namàmmóo]*
person but 'but a person'

9. The other remarkable prefix in the stress pattern is *hin-*. It is used as a focus and a negation marker in Kamisee Oromo. This prefix is claimed to have a high tone when it is the focus marker and a low tone when used as a negation marker (Habte, 2003:40). But the present finding is different from this. The suffix *hin-* is stressed only in intonation phrases because the expression in which it is used is within the domain of sentence prosody, the intonation, and the fall of the stress on this particle is decided by the accentual function of the intonation based on whether it is focused or not. This is called **contrastive focus,** i.e., the important element in a given discourse is uttered with extra emphases and becomes more prominent than other expressions. A good evidence comes from appeal to the phonological processes taking place in these two different expressions: when *hin-* is used as a negative or a focus marker. In both cases, unless the expression is focused[17], *h* is deleted from the morpheme as in the following example *a,* and is not deleted when it is focused in both cases as given in example *b.*

a) */gammaccuu-n hin - ɗuf - Ø -a/* ⟶ *[gammaccuu ninɗufa]*
gemechu -NOM NEG-come-3SM- IPV 'Gemech will come.'
/gammaccuu-n hin- ɗuf - Ø -u/ ⟶ *[gammaccuu ninɗufu]*
gemechu -NOM NEG-come-3SM- NEG-IPV 'Gemechu will not come.'

b) */gammaccuu -n hin - ɗuf - Ø -a/* ⟶ *[gammaccuun hinɗufa]*
gemechu -NOM NEG-come-3SM - IPV 'Gemech will come.'
/gammaccuu-n hin- ɗuf - Ø -u/ ⟶ *[gammaccuun hinɗufu]*
gemechu -NOM NEG-come-3SM- NEG-IPV 'Gemechu will not come.'

[17] **Focused** here means not to say that the morpheme *hin-* is used to mark focus; rather it is to say when it is emphasized due to some emotional reasons such as anger, for contrastive focus , etc.

One may ask a question how to distinguish these two expressions. The answer is the context gives us clue: the aspectual vowel and the discontinuous morphemes[18] vary in both cases: *hinɗufu*, 'he will not come', and hin*ɗufa,* 'he will come'; *hinɗufe*,'he came', and hinɗufne[19] 'he did not come', etc.

Thus, this would give us the impression that *hin-* in both negative and positive expressions could be focused, and appeal to pitch difference to distinguish one from the other is less practical than investigating the patterns of intonation which affect the accent[20] in the discourse.

10. I recorded a coordinating conjunction *fi*, 'and' which affects the placement of the stress. Here the primary stress on the preceding syllables of words which occur before this conjunction is shifted to the ultimate syllable to ease surface pronunciation by bridging the pause formed by this conjunction. Because the pause is covered by the stress shift and the vowel length, the conjunction is always encliticized onto the preceding word. Consider the following examples:

/ʔárbà - fi leénc'à/	⟶	*[ʔàrbáafi léenc'à]*
elephant - CON lion		'elephant and lion'
/márgà -fi báalà/	⟶	*[màrgáafi báalà]*
grass - CON leaf		'grass and leaf'

5.3.2 Stress Patterns in Larger units

Compounds, personal names, and names we use for respect have prominence on their constituent final units. In all the following examples, the words written in boldface are prominent than their counter parts.

a) Compounds

mana barumsaa	⟶	*mana* ***barumsaa***
house education		'school'

[18] Discontinuous morphemes are those which are interfered by other units. A good example is a negative morpheme (*hin…n, hin…u).*

[19] *Hinɗufne* could be used for all persons ,irrespective of number and gender and distinguished based on the subject of a given sentence.

[20] Accent shows here the tonic (the prominent syllable) in the intonation phrase.

dura *taaʔaa* ⟶ *dura* ***taaʔaa***

in front of sitter ‘leader’

b) Personal names

tolaa ***gammaccuu*** ‘Tola Gemechu’

c’aalaa ***hundee*** ‘Chaalaa Hunde’

c) Professional Names

barsiisaa ***gammaachuu***

teacher **gemechu** ‘Teacher Gemechu’

doktoor ***bultii***

doctor bulti ‘Doctor Bulti’

d) Respect Names

ʔobbo ***c’aalaa***

mister caalaa ‘Mister Chala’

ʔaadde ***c’aaltuu***

madam chaltu ‘Madam Chaltu’

5.4 Tone and Pitch Accent

Under this section I will briefly discuss notions of tone and pitch accent and finally argue that the dialect is not tonal.

5.4.1 Tone

Tone is the contrastive pitch pattern at word level. Pitch is the center of analysis in suprasegmental phonology, and utilized in tone, intonation and stress. Tone and intonation mainly rely on pitch patterns. But the domain of the pitch pattern varies in these suprasegmental features. Tone differs from intonation in that “tone… concerns the pitch patterns of words” (Cruttenden 1986:8). Hirst and Di Cristo (ed.) (1998), explain that tone is lexical as:

> Tone is formally represented in the lexicon of the tone language as a sequence of tonal segments (H and L for example), together with language specific rules specifying how the tones are to be associated to the segments or syllables of the words.

Tone has tremendous importance in tonal languages no less important than consonants and vowels; hence scholars refer to tonal contrasts as toneme, analogous to phoneme. Gussenhoven (2004:26) explains the importance of tone as: "All languages use vowels and consonants in the representation of their words, and a large number, referred to as 'tone languages' also employ tone for this purpose."

Tone is the pitch variation on smaller units, usually a word and it plays crucial roles in bringing about meaning change or to mark different grammatical functions such as aspect, tense, pronouns, gender, etc. Thus, the function of tone could be lexical, which brings about meaning change on the same strings of segments by changing the pitch alone, or it could be grammatical tone, in which the tone is used to mark different grammatical functions like segmental morphemes in non- tonal languages.

5.4.2 Pitch Accent

Pitch accent languages are languages in which pitch has limited distributions and contrastive functions. McCawely (1987), as cited in Habte (2003:30) defines pitch accent as follows:

> Pitch accent languages are those in which there is one pitch change per word. They have a single syllable that is associated with a particular pitch (can be low though it is usually high). Unlike tonal languages, they can't have equally prominent adjacent syllables; and unlike intonational languages, their prominent syllables are determined idiosyncratically for a word rather than at larger phrasal levels.

By and large, pitch accent languages are those in which pitch has limited distribution and functions because the high and low pitch can not dynamically alternate as in tonal languages.

But the difference between the two (tonal and pitch accent languages) is not clear-cut and scholars argue that they do not have fundamental difference. Yip (2002:4) argues their similarity as:

> There is no absolute division between accent languages and tone languages, just a continuum from accent to tone as the number and denseness of tones increase, and they are free to move around.

After arguing that there is subtler difference between the two, Yip concluded that "accentual languages are subclasses of tone languages" (ibid).

5.4.3 Tone in the Present Study

The mere fact that words of a language are pronounced with different pitch patterns does not guarantee that the language is tonal, because there are possibilities that the pitch variation may be used in tone, intonation pitch accent and even in stress.

Different writers (such as Undrzejewski 1966, Owens 1985, Habte 2003) claim that Oromo is tonal language. I do not argue against these all claims that Oromo is not tonal, because the study I am conducting is dialect specific. But at least I argue Habte's claim does not fit into the tonal analysis.

Habte under took his study on 'Tone Analysis in Oromo', following the foot steps of the pioneers who claim that Oromo is a tonal language. But the procedure he follows is not promising to conclude that Oromo is tonal language. For one thing, Habte concludes that the pitch is employed in tone, but in this thesis I argue that at least the Kamisee Oromo is a stress language which mainly employs pitch. The other serious methodology problem in Habte's analysis is that he mixes up different units of utterances, mainly words and sentences. Let us see the following examples taken from Habte (2003: 35)

Minimal pairs

dúfá ‘ arrival’ vs *dúfà* ‘He comes/ I come.’

dúgáa ‘drunkard’ vs *dùgáa* ‘You (PL) drink!’

In the first example the item on the left side is a word, and the one on the right side is a sentence, as glossed above. But this is not advisable in tone analysis, because we cannot compare a sentence with a word, nor nouns with verbs, etc. In the second example, on the other hand, the two expressions are different. The first word is a verb which is derived from the verb root *dug*-, ‘to drink’, and the second one is an imperative derived from the same verb root, but it is impossible to compare a sentence and a word.

The third problem of Habte’s analysis in the thesis is that he does not consider the lexical semantics. He analyzes the following words as:

gógáa ‘dry’ vs *gògáa* ‘skin’

As a native speaker I do not see any pitch difference between the two words. But they are homophones and distinguished in a given environment of a communication, and not by their pitch variation.

The misleading situation in different studies of the claim that Oromo is a tonal language, I hope, stems from the fact that words in the language (at least in this dialect) are pronounced with audible pitch difference which is less subtle to analyze as tone. I argue, in this study, that the pitch is mainly used to mark stress and intonation, and the dialect is not tonal.

I personally consulted specialists in tone, Professor Motingea and Professor, Kutsch Lojenga, and they came to the conclusion that the language has no clear pitch variation as a tonal language.

When I started to analyze the dialect as tonal as per the other’s claim, I faced the problem that a word class, say, nouns, with the same syllable type have the same pitch pattern, and later verbs with the same syllable types with nouns also fitted into the same pitch pattern, etc. Finally I came to learn that the pitch I was dealing with was not tone; rather it was stress which drops based on the syllable type, and not based on the class categories of words.

I would like to quote what Professor Kutsch Lojenga said, after attempting to analyze the pitches as tone: "The whole utterance (words, sentences, etc.) acts as a single prosodic unit and it is impossible to identify the pitch variation on words especially in sentences." She concluded this way after observing that words with a similar syllable type across word classes and different sentences act similarly, which better fit into my present analysis of the use of pitch to mark stress and intonation.

I finally recommend that tone should be further experimentally investigated in Oromo in general to reconcile the different arguments among the scholars, and to properly describe the grammar of the language.

5.5 Intonation

Intonation is a suprasegmental feature in which a pitch variation is utilized in larger units. Roach (1983:112) explains the difficulty of defining intonation as: "No definition is completely satisfactory but any attempt at a definition must recognize that the pitch of the voice plays most important part." The difficulty in dealing with intonation lies in factors such as what typically characterizes intonation or not and which parts of suprasegmental features are treated within the domain of the intonation. The other problem of defining intonation is failing to identify to what extent the interplay of linguistic and paralinguistic factors affect it.

The linguistic importance of intonation is immense no less than segmental features to convey different messages. In stress-intonation languages speakers could convey different messages by using a single linguistic unit under different circumstances by making use of intonation.

5.5.1 Forms of Intonation

It always sounds monotonous to employ a similar pitch pattern to deliver a speech or to communicate. Besides this, it is less practical to convey different messages by making use of a single or limited pitch patterns. Thus, "speakers are said to select from a choice

of tones [Pitch patterns] according to how they want utterance to be heard" A speaker is driven by the need arisen based on either the pragmatic speech act or the emotion in the immediate environments of communication, because "in situations where strong feelings are to be expressed it is usual to make use of extra pitch height" (Roach 1983: 114).

In the light of the above discussion, we could see different forms of intonation in different expressions. Let us begin with a one word utterance *ɗugaa*, 'true'. By utilizing intonation alone, this utterance could convey, at least, three different messages.

1) *ɗugaa*, 'true' uttered with fall-rise intonation shows search for *ʔeejjeen* ,'yes' or *lakki,* 'no' response.

ɗu ˬ gaa 'true'

Here the speaker requests the interlocutor for further explanation of a conversation at issue. It seems as if the speaker says "are you sure?"

2. *ɗugaa*, 'true' pronounced with the falling intonation shows neutral or unemphasized response to something true.

ɗu ˏ gaa, 'true'

In this pattern the response gives the speaker the impression that the interlocutor has completed the conversation and has nothing to add.

3) ɗugaa, 'true' uttered with rise-fall intonation shows strong assertion, and if necessary it is followed with further explanation.

ɗu ˆ gaa 'true'

In this intonation pattern the speaker always gives further explanation why he /she says true.

In the first pattern the speaker gives turn to the interlocutor to continue to speak, in third pattern on the other hand, it is the speaker himself/herself who continues. Thus, intonation has the discourse function letting the people communicate without interrupting and overlapping a conversation.

Habte (2003:35) confuses the above utterance, which is dictated by the pragmatic speech act, with another utterance *ɗugaa* (IMP) 'you (PL) drink! Habte argues that the word *ɗugaa,*' true' is a single unit and could have different meanings only by pitch variation, and treats the expressions as minimal sets. The following examples are taken from Habte's analysis.

ɗùgáa 'truth'

ɗúgáa 'drunkard'

ɗúgàa 'you (PL) drink!'

Without going into the details of the pitch movement on the given utterance, *ɗùgáa,* 'true', one could automatically reject the claim of the utterances as a minimal pair because we should never mix up different lexical categories such as, a noun and a verb, etc. and different levels of utterance to analyze tone. The utterance *ɗugaa,* 'true' does not have its own inherent tone as a part of its lexical entry; rather the necessary pitch pattern or intonation is selected idiosyncratically based on the immediate environment of the communication as analyzed earlier.

5.5.2 The Functions of Intonation

Under this section the grammatical variations of a given utterance by using different intonation patterns will be discussed. As the area is untouched in this dialect, I will deal with the typical aspects of the discourse functions of the intonation at least to lay ground for further investigation. Intonation has the following major discourse functions in the Kamisee dialect. To see the patterns of the variation I used the machine analysis. In the analysis I am less interested in the phonetic details; rather I just observe the falling and the rising patterns and briefly give the phonological analysis of each pattern.

1) Unemphasized declaratives are pronounced with a falling intonation.

Tolaan bara ˌtaaɗa

'Tola is a student.'

Fardi sun gur ˌraacca

'That horse is black.'

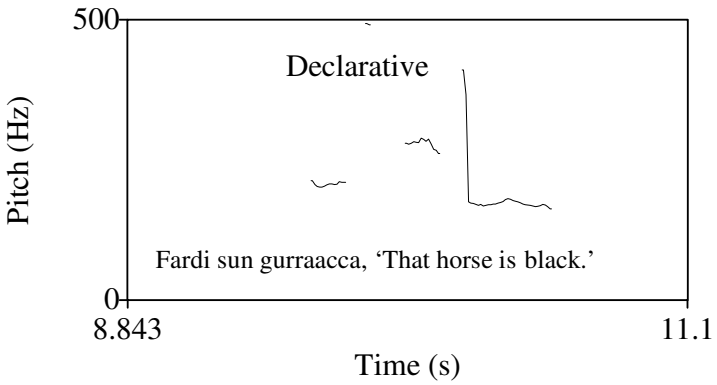


Figure 1. F_0 curve for the declarative *Fardi sun gurrraacca,* 'That horse is black.'

We observe that the above pitch graph has two breaks. The first one is created by the voiceless sound *s,* while the second one is created by the pause after *fardi sun*,'that horse.' The pitch falls on the tonic syllable[21] *raac* and the tail[22] *ca* continues flat because the pitch reached the lowest limit on the tonic syllable.

2) Unemphasized yes/no questions are uttered with a falling-raising intonation with final lengthening. I repeat the above examples as follow so that one could clearly see the difference between the declarative and the yes/no question.

Tolaan barataa ˬ ɗaa?

'Is Tola a student?'

Fardi sun gurraac ˬ caa?

'Is that horse black?'

Intalli sun barattuu ˬ ɗaa?

'Is that girl a student?'

[21] A tonic syllable is a prominent and important syllable in a given intonation phrase.
[22] A tail is any syllable that follows the tonic syllable.

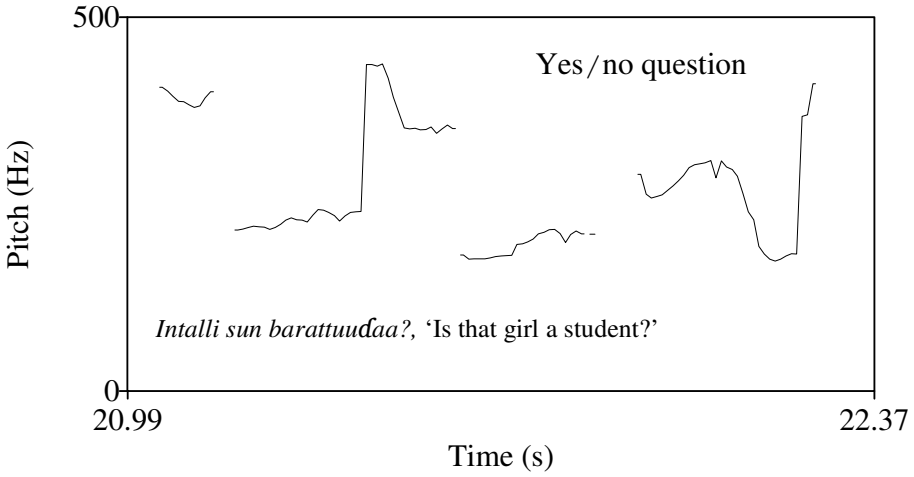


Figure 2. F_0 curve for the yes/no question *Intalli sun barattuudaa?,*'Is that girl a student?'

The tonic syllable is the last unit and is not followed by any tail, thus, the pitch falls and rises strait up on the last tonic syllable *daa* without turning left or right.

3) Unemphasized Wh-questions are uttered with a rising intonation.

Eessa ˌdeemta?

'Where will you go / are you going?'

Maal bar ˌbaadda?

'What do you want?'

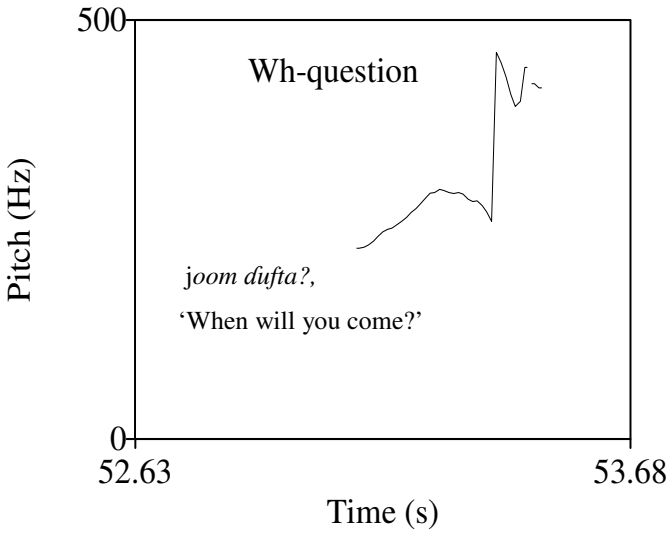


Figure 3. F_0 curve for the Wh- question j*oom dufta?,* 'When will you come?'

The tonic syllable of the above intonation unit is the syllable *duf.* It is pronounced with rising intonation, and what looks like a fall after the rising pitch is the following unstressed tail,*ta* because of the influence of a pause at the end of this utterance.

4. WH- questions which show repetition or boredom or when the speaker is confused are pronounced with a falling intonation.

Maaliif boos ˌsaa?

'Why do you cry?'

joom duf ˌtaa?

'When will you come?'

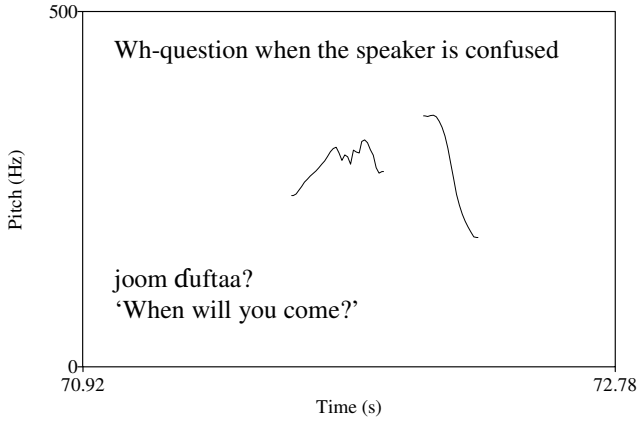


Figure 4. F_0 curve for the Wh-question when the speaker is confused, joom *ɗuftaa?* 'When will you come?'

The break we observe from the graph is caused by a voiceless labiodental fricative /f/. The fall is sharp and there is no side ward movement because the tonic syllable is not followed by any tail, i.e., the tonic syllable is the last unit because of the final lengthening as a result of the stress shift to the final syllable.

5. Unemphasized imperatives are pronounced with falling intonation

   ˋ*deemi*

   'You (SG) go!

   ˋ*fiigaa* 'you (PL) run!'

6. Unadorned imperatives or commands are pronounced with fall-rise intonation. I will repeat the above examples to make the process clear.

   ʔacci ˇ*deemi* 'you (SG) go there!'

   fii ˇ*gaa* 'you (PL) run!'

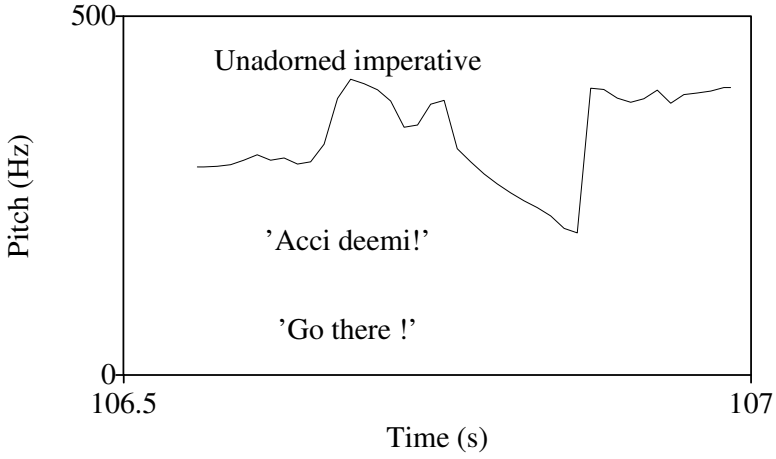


Figure5. F_0 curve for the unadorned imperative ʔ*acci deemi* , 'Go there!'

The graph shows the fall- rise pitch on the tonic syllable, *dee.* This tonic syllable is followed by a tail, *mi* which continues left ward because the pitch reached its maximum limit on the tonic syllable.

6) Choice or alternative questions are uttered with falling intonation

Caalaa moo Galaan ˌɟaalatta

'Chala or Galan do you like ?'

Hardɗa moo bor ˌɗufta

'Will you come today or tomorrow?'

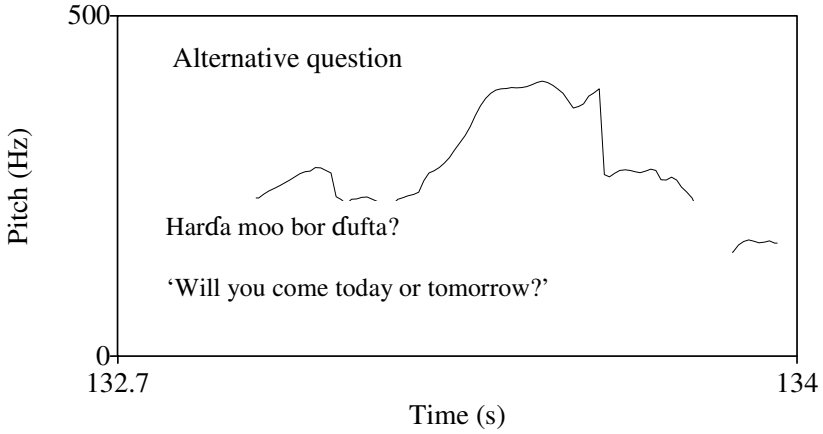


Figure 6. F_0 curve for the alternative question *Harɗa moo bor ɗufta?,'*Will you come today or tomorrow?'

As we observe from the graph the fall of the pitch is gradual. It starts on the tonic syllable *ɗuf* and continues down being carried by the tail, *ta*. The reason behind such gradual fall, unlike the previous patterns we saw, is that this pattern is almost uttered with neutral emotion, just for search of information.

7) Question tags are uttered with rising intonation.

Hundeen barataaɗa , mi ˌtii?

'Hunde is a student, isn't he?'

Bultiin guraacca , mi ˌtii?

'Bulti is black, isn't he?'

Ɉaalannen nama gaariiɗa, mi ˌtii?

'Jalene is a good person, isn't she?'

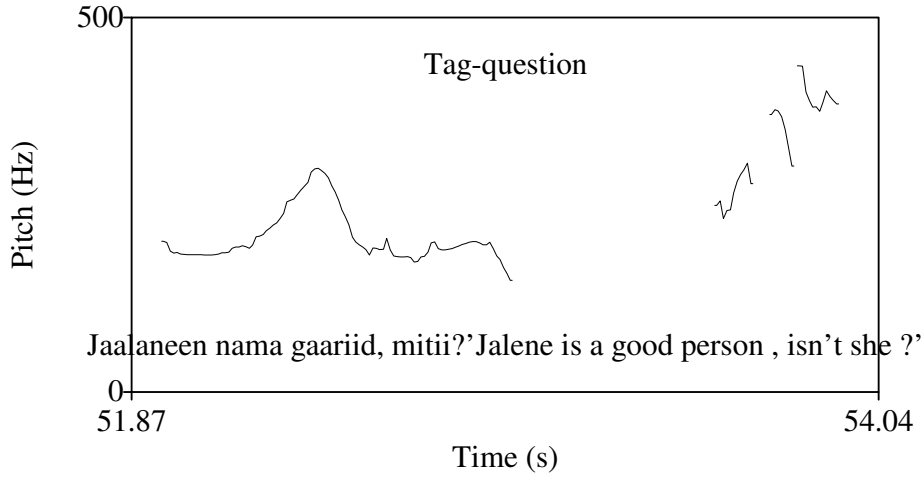


Figure 7. F_0 curve for the tag- question *Jaalanneen nama gaariida, miti?,* 'Jalene is a good person, isn't she?'

Here the graph has different breaks. The first break is the pauses created by the first utterance, while the subsequent breaks are formed by the intervening voiceless sounds and the nature of the utterance that the speaker speaks with doubt, and waits for confirmation at the same time.

8) Unfinished utterances are pronounced with rising intonation. The final lengthening before pause takes place in this pattern when the dependent and the independent clauses[23] are delimited from each other by the shift of the tonic syllable to the final syllable as in the following examples in which *me* becomes *mee.*

Mana barumsaa dee ˌmee…

'Having gone to school...'

Laak'anaŋaac ˌcaa…

'While eating…'

[23] Here I said dependent and independent clauses because the missing clauses in all the above unfinished utterances (dependent clauses) are the independent clauses

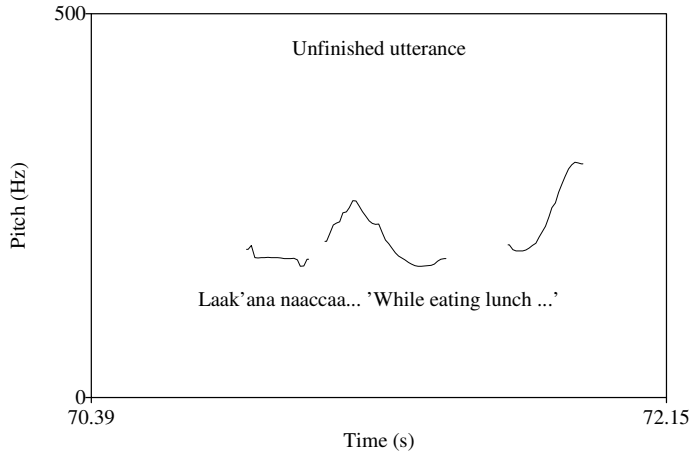


Figure 8. F_0 curve for the unfinished utterance *Laak'na ɲaaccaa…,'* While eating lunch…'

In the above graph the tonic syllable comes at the end and the graph shows the rise of pitch straight up because there is no other unit which further carries the rising pitch.

9) Request is pronounced with falling intonation.

bifaan naa kenni ˌmee

'Please give me water.'

Mee na ˌwaami

'Please call me.'

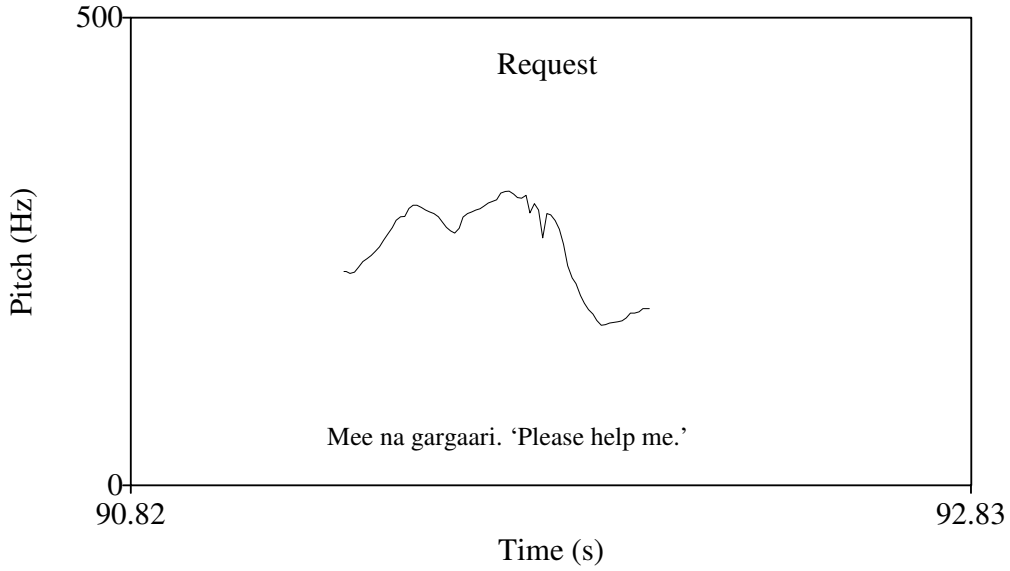


Figure 9. F_0 curve for the request *Mee na gargaari*,' Please help me.'

The pitch falls on the tonic syllable *gaa* and the horizontal left ward movement after the fall is the pitch movement on the tail, *ri,* when the tonic syllable reaches the lowest possible fall.

Generally speaking intonation in this dialect plays a crucial role in discourse. It is not a matter of choice to employ either syntactic representation or different intonational patterns to convey different utterances as in languages like English; rather the use of intonation is the only means to drive one utterance from the other, for instance, interrogative from declarative.

In English one may say "Is she coming?" or by pronouncing the declarative with the rising intonation it is possible to ask questions, as "She is coming?" The choice is up to the speaker whichever to use, though there are variations from dialect to dialect. In this dialect on the other hand, there is no way to ask such a question without appeal to intonation to mark different utterances as discussed above.

6 Summary and Conclusion

The study on the Kamisee dialect begins with phoneme inventory and treats the major phonological aspects. The core findings of the study will be summarized as follows.

1. The dialect has thirty- four phonemes: twenty- nine consonants and five vowels.
2. Different phonological processes such as voicing, devoicing, palatalization, nasal assimilation metathesis, etc. that consonants undergo take place both at word and morpheme boundaries. Consonant gemination blocks some of the phonological processes, e.g., spirantization and palatalization.
3. The phonological processes take place contiguously and non-contiguous processes seem to be rare in the dialect.
4. The common phonological process in this dialect is assimilation in which sonorants play the pivotal role.
5. Vowels involve in different phonological processes such as deletion, insertion, vowel raising, vowel lowering, etc.
6. The syllable onset is obligatory, and there is no branching coda and onset.
7. The dialect has four syllable types: CV, CVC, CVV, and CVVC.
8. There are two types of gemination in this dialect: lexical gemination, that consonants inherently have and grammatical gemination, which occurs as a result of different grammatical processes such as assimilation, affixation, etc. Likewise vowels also have inherent lexical length and grammatical length. Vowels undergo length mostly being influenced by the shift of the stress in genitive constructions and in some case systems such as nominative, ablative, dative and instrumental.
9. Kamisee Oromo is a stress language with a dynamic placement of the stress based on the pitch movement and the vowel length. The ultimate syllable is stressed only if it ends in long vowels.
10. The Kamisee dialect is not tonal and the pitch is utilized only to mark stress and intonation.

11. The discourse function of the intonation has been discussed. By using the same string of words we can convey different messages by using different patterns of intonation. Declaratives, wh-questions when the speaker is bored, unemphsezed imperative, alternative questions and request are pronounced with falling intonation; unemphasized wh-questions, tag-questions and unfinished utterances are pronounced with rising intonation, while yes or no questions and unadorned imperatives are pronounced with falling- rising intonation.
12. The use of intonation in this dialect has tremendous importance in discourse, and without using it we may not convey the intended messages appropriately.

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Appendix1

Lists of words used in the study

ʔafur	‘four’
torban	‘week’
harree	‘donkey’
sirrii	‘right;
hadurree	‘cat’
poolisii	‘police’
zajitii	‘oil’
televiʒiinii	‘television’
c’op’se	‘I/he poured.’
farra	‘enemy’
mana	‘house’
tuuluu	‘gathering’
raafuu	‘cabbage’
sooruu	‘feeding’
maccii	‘intoxication’
k’eensa	‘nail’
warra	‘parent’
laafuu	‘becoming weak’
duuluu	‘marching’
nama	‘person’
jabbuu	‘thick’
maɟii	‘milestone’
naafa	‘lame’
karaa	‘street’
keessa	‘inside’
c’ubbuu	‘sin’
ɲaata	‘food’
garaa	‘abdomen’

poolisii	‘police’
zajitii	‘oil’
televiʒiinii	‘television’
s’ahaj	‘personal name’
vaajirasii	‘cut’
dududˀ	‘running’
bilbila	‘phone’
haddubˀ	‘falling’
rooba	‘rain’
diida	‘outside’
poolisii	‘police’
ʔispoortii	‘sport’
keessa	‘inside’
beekumsa	‘knowledge’
mokokˀ	‘ripping’
beekaa	‘intelligent’
goguu	‘to become dry’
gugugˀ	‘the sound of knocking’
laga	‘river’
ʔadii	‘white’
saʔa	‘caw’
lapp’ee	‘chest’
lip’ˀ	‘looking at a glance’
t’uut’uu	‘smoking’
mut’ut’	‘completely finished’
s’ahaj	‘personal name’
nes’anet	‘personal name’
c’acc’abaa	‘pieces’
foc’oc’ˀ	‘liking of liquids’
bak’ak’aa	‘cracked’

k’abuu ‘holding’
bak’ ‘falling’
ɗaɗaa ‘butter’
fuunfaccuu ‘to smell’
maaliif ‘why?’
televiiʒiinii ‘television’
juunivarsiitii ‘university’
vaajirasii ‘viruses’
sossobuu ‘comforting’
kamis ‘Thursday’
zajitii ‘oil’
haaɗa ‘mother’
ƚahaa ‘six’
televiiʒiinii ‘television
gaʃʃe ‘He made enter.’
baʃ ‘pouring’
haaɗa ‘mother’
ƚahaa ‘six’
maccii ‘intoxication’
ƚaamaa ‘blind’
kabaƚa ‘respect’
fajaƚ’ ‘became dizzy’
mamuu ‘hesitating’
kam ‘which’
naannoo ‘surrounding’
ʃan ‘five’
danfa ‘boiled’
sanbata ‘Sunday’
fuŋŋaan ‘nose’
ŋaata ‘food’
haŋ ‘biting (informal)’
jabbuu ‘thick’
fajjaa ‘healthy’
ʔaj ‘expression of regret’
waamuu ‘calling’
k’awwee ‘gun’
ʔilma ‘son’
reʔee ‘goat’
gadda ‘mourning’
ʔol ‘up’
ʔulee ‘stick’
ʔamma ‘now’
sadii ‘three’
saree ‘dog’
sangaa ‘ox’
dipp’oo ‘narrow’
furdoo ‘fat’
reʔee ‘goat’
hoolaa ‘sheep’
ʔad_ii ‘white’
bik’iltuu ‘seedling’
raammoo ‘worm’
ʔilmoo ‘kid’
summii ‘poison’
fuula ‘face’
loon ‘cattle’
suuta ‘slowly’
lama ‘two’
digdam ‘twenty’
soddom ‘thirty’

Appendix 2

List of Sentences Used in the Analysis of the Intonation

Tolaan barataaɗa.	‘Tola is a student.’
Fardi sun guɽraacca	‘That horse is black.’
Tolaan barataaɗaa?	‘Is Tola a student?’
Fardi sun gurraaccaa?	‘Is that horse black?’
Intalli sun barattuuɗaa?	‘Is that girl a student?’
Eessa deemta?	‘Where will you go / are you going?’
Maal bar baadda	‘What do you want?’
Maaliif boossaa?	‘Why do you cry?’
joom ɗuftaa?	‘When will you come?’
deemi!	‘You (SG) go!
ʔacci deemi!	‘you (SG) go there!’
fiigaa!	‘you (PL) run’
Caalaa moo Galaan ɟaalatta?	‘Chala or Galan do you like?’
Harɗa moo bor ɗufta?	‘Will you come today or tomorrow?’
Hundeen barataaɗa, mitii?	‘Hunde is a student, isn’t he?’
Bultiin guraacca, mitii?	‘Bulti is black, isn’t he?’
biʃaan naa kenni mee.	‘Please, give me water.’
Mee na waami.	‘Please call me.’