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The School of Graduate Studies**

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Communication**

Department of Linguistics: Documentary Linguistics and Culture

Phonology, Morphology and Syntax of Ganta

By

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Phonology, Morphology and Syntax of Ganta

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This is to certify that the Dissertation prepared by Sintayehu Semu entitled *Phonology, Morphology and Syntax of Ganta*, PhD programme submitted in partial Fulfillment of the Requirements for the Doctor of Philosophy Degree in Documentary Linguistics and Culture complies with the regulation of the University and meets the accepted standards with respect to originality and quality.

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Abstract

This project was concerned with the phonology, morphology and syntax of endangered language, Ganta. Thus, the investigation was aimed at documentation and description of the distributional properties of sound systems, inflectional and derivational strategies of words, and also the order of morphological elements and their relationships in a sentence. To this end, the total documentation part of the project comprised one hour and two minute video text, for which ELAN software was used to annotate linguistic features. The description and distribution of phonological shapes were expressed by consonant and vowel phonemes in which an exceptional Omotic language sequence of consonant-consonant is observed. Phonological and morphophonological processes of the language were discussed in detail. Next to the sound systems, word inflections and derivations were analysed on nouns, verbs and adjectives. Here, Ganta nouns are inflected for number, gender, definiteness and case. Other than inflectional processes, morphological affixes are used to derive nouns into other forms of nouns. Like nouns, verbs also express inflection, by which tense, aspect, mode/modality and mood formations are expressed in Ganta. The issue of negation and subject agreement markings were discussed after inflection strategies of verbs. The processes of verb derivations were described by causative, passive, reciprocal, iterative, incho-ative and infinitive marking affixes. The semantic classification of adjectives were treated before sections of adjective inflection and derivation. Morphology of adverbs that are used to express place, direction, time, manner and frequency were described before interjection and ideophone sections. The syntactic structures, in which noun, verb, and postpositional phrases of Ganta are firstly treated before clause structures. Word order, focus, copula and predicative morphology of the language are described under section of clause structures. Next to this section, complex sentence structures including complement, adverbial clause, relative clause and coordination were also presented in the last section, next to the summary and conclusion of the project.

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Andinet Seenna	-Ochole	Kaabire Seenna	-Ochole
Abebe Abesha	-Ochole	Tul?a Tukko	-Bonke

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List of morpheme structures

Conceptual categories of morpheme structures are listed in their alphabet as follow:

Form	gloss	Allomorph/variant	function
-(y)aff-	OPT	-	optative
-a	ACC	-aa, -u, -o	third person singular accusative case
-a	VH	-u	vowel harmony
-á	ADESS	-áá	adessive
-a	IND	-o	indicative
-á	FREQ	-	frequentative
-á	INESS	-ga	inessive
-áade	POSS	issá	possessive
-ade	PROS	-	prospective
-ána	JUSS:1PL	-ínno	jussive first person plural
-ána	JUSS:1SG	-	jussive first person singular
-and-	POSB	-	possibility
-ántftja	AGNML	-	agent noun nominalizer
-áwo	JUSS:2SG	-	jussive second person singular
-áyese	JUSS:3MS	-	jussive third person masculine
-áyi	IMPER:2SG	-áyo, -áwo, -u	imperative second person singular
-áyisi	JUSS:3FM	-	jussive third person feminine
-áyisu	JUSS:3PL	-	jussive third person plural
-áyto	IMPER:2PL	-íte, -áyito	imperative second person plural
-áyto	JUSS:2PL	-	jussive second person plural
-bá?a-	NEG	-aa, -?á, -ukkáa, -ontt(e)-, -aáre, -dopp-, -baár(e), -bá(á), -aye, -ya, -dukk-, -dokk-	negation
-d-	PERF	-tt-	perfective
-e	PRES:CONT.DEC	-ee	present continuous and declarative
-e	CONT	-ee, -ttá, -tto, -kka, -á	continuous/continuative
-é	MID	-	middle
-ee-	PA	-nne, jin	past tense
-ga	ALLA	-ko	allative
-ga	ALLA:ILLA	-	allative illative
-ga	ILLA	-	illative
-i	3FM:NOM	-	third person feminine nominative
-i	NOM	-y	third person masculine nominative
-i	EP	-	epenthetic vowel
-í	CONV	-i, -íí	converb
-i-	3FM	-si-, -á, -yisi, -yisí, -ú, -nn-, -ysi	third person feminine
-s'-	PL	-as'-, -aas'-, -tj', -tte, -dd-, -dč	plural
		-idč, -i, -u	

-iti-	2PL	-yiti -yítéé, -yitó, -ité, -yti(i), -yato, -ytto, -uyti	second person plural
-k-	FOC	-t(t)-, -kk-, -wa(a), -ya(a), -ba, -mma, -kko, -tte, -tʃtʃe, -ma, -máá, -mma	focus
-kk-	DIR	-	directional
-kke	MANN	-te, -tstso	manner
-kko	COP:FOC	-kkoo, -tte, -ma	copular focus
-kkó	COND	-	conditional
-ma	ASS	-má, -bá(á)	assertive
-mmu	DUR	-mmuu, -re	durative
-n-	IMPERF	-ʃʃ(i)-	imperfective
-kk-	REFL	-	reflexive
-nna	PERLA	-	perlative
-nna	SUPERES	-	superessive
-nna	INST	-nnaa	instrument
-nna	INST:PERLA	-	instrumental perlative
-nna	INST:SUPERES	-	instrumental superessive
-nne	CO	woy-, -ʃin, -ne	coordination
-nne	INCL	-kka(a)	inclusive
-ó	VOC	-é, -á, -ú	vocative
-o	NML	-e, -u, -i	nominalizer
-ó-	SUBJ	-óó	subjunctive
-oda	INFI	-odaa, -á, -kka, -kká	infinitive
-oni-	2SG	-ne(e), -ni-, -one, -eni, -wo(ó), -ayo	second person singular
-ons'-	DUL:DEF	-ens', -ns'	dual and definiteness
-osi-	3MS	-ose(e), -se, -yesé, -yese, -ese, -s-, -y-, -é, -si	third person masculine
-oyi-	SUBM	-yi-, -eyi-	subject marker
-φa	COMPR	-	comparative
-φa	ELA	-	elative
-φa	ABL	-φu	ablative case/origin marker
-φa	ABL:ELLA	-	ablative elative
-r-	POLT	-	polite
-ra	COM	-ri-	comitative
ʃina	PA:HAB	-ʃini(i)	past habitual
so	PLNML	-se	place nominalizer
so	LOC	-ná	locative
-ssi	DAT	-ssu, -issi, -ussu, -ro	dative
-t-	INCH	-tt-, -et-, -ot-, -é, -ó	inchoative
-ttam-	FUT	-ttom-/tton-, -ade-, -m-, -mu-	future tense
-te	1SG	-oti-, -ti-, -ná, -mma, -eti-,	first person singular

-tt-	3FM.SG:DEF	-ote, -ete-, -na(a) -att-	third person singular feminine definiteness
-u	3PL:ACC	-	third person plural accusative
-ú-	PLPER	-	pluperfect
-u-	3PL	-u-, -ysu, -etó, -ettó, -suyi-, -yisu, -ysuyi	third person plural
-untsts	ORD	-	ordinal marker
á	ABNML	-	abstract noun nominalizer
-untté			
-unu-	1PL	-nnó(á), -uná, -nuyi-, -yinu, -ynu, -ína, -yanu, -ini, -yini, -oyinu, -aynu	first person plural
-s-	CAUS	-ss-, -f-, -ff-, -tftf-, -us-, -uss-, -tsts-, -atsts-, -utsts-, -h-	causative
-utsts-	INTEN	-urutsts-, -utftf-	intensive
-utt-	PASS	-t-, -tt-	passive
-utt-	RECP	bé, -ga	reciprocal
-z-	3MS:SG.PL:DEF	-az-	third person singular masculine and plural (feminine and masculine) definiteness

Abbreviations

Gloss	name	
'	High tone	3FM:NOM .PL Third person feminine nominative and plural
[]	Phonetic representation	3FM:NOM.FOC Third person feminine singular nominative and focus
()	Bracket	3FM.SG:DEF Third person singular feminine definiteness
{ }	Curly bracket	3MS Third person masculine
//	Phonemic	3MS:ACC Third person singular masculine accusative
/	Slash	3MS:NOM Third person singular masculine nominative
	Pause	3MS(3FM):NOM Third person singular masculine or feminine nominative
<	Derived from	3MS:ACC.FOC Third person singular masculine and focus
~	Absence of a break	3MS:SG.PL:DEF Third person singular masculine, and plural definiteness
~	Nearly happen	3PL Third person plural
=	Equivalent	3PL:ACC Third person plural and accusative
1PL	First person plural	ABL Ablative
1SG	First person Singular	
2PL	Second person plural	
2PL:POSS	Second person plural possessive	
2SG	Second person singular	
3FM	Third person feminine	
3FM:NOM	Third person singular feminine nominative	

ABL:ELA	Ablative elative		singular
ABNML	Abstract noun nominalizer	IMPERF	Imperfective
ACC	Accusative	INCH	Inchoative
ADESS	Adessive	INCL	Inclusive
Adj	Adjective	INESS	Inessive
AdjP	Adjective phrase	INFI	Infinitive
Adv	Adverb	INST	Instrument
AdvP	Adverb phrase	INST:PERLA	Instrumental perlative
Adv-V	Adverb-Verb	INST:SUPERES	Instrumental superessive
AGNML	Agent noun nominalizer	INTEN	Intensive
ALLA	Allative	JUSS	Jussive
ALLA:ILLA	Allative illative	JUSS:1PL	Jussive first person plural
ASS	Assertive	JUSS:2PL	Jussive second person plural
CAUS	Causative	JUSS:1SG	Jussive first person singular
CO	Coordinator	JUSS:2SG	Jussive second person singular
COM	Comitative	JUSS:3FM	Jussive third person feminine
COM:CO	Comitative coordination	JUSS:3MS	Jussive third person masculine
COMPR	Comparative	JUSS:3PL	Jussive third person plural
COMPR-Adj	Comparative-Adjective	LOC	Locative
COND	Conditional	lit	Literally
CONT	Continuous/Continuative	M	Modifier
CONV	Converb	MANN	Manner
COP:FOC	Copular focus	MANN:POT	Manner potential
DAT	Dative	MED	Medial
DEF	Definite	MID	Middle
DEF:3MS	Definite third person masculine	M-N	Modifier-Noun
DEF:3FM	Definite third person feminine	N	Noun
DIR	Directional	NEG	Negation
DIST	Distal	NML	Nominalizer
DUL:DEF	Dual and definiteness	NOM	Nominative
DUR	Durative	NP	Noun phrase
ELLA	Ellative	O	Object
EP	Epenthetic vowel	OPT	Optative
EXPER	Experiential perfect	ORD	Ordinal marker
FM	Feminine	O-S-V	Object-Subject-Verb
FOC	Focus	P	Preposition
FREQ	Frequentative	PA	Past tense
FUT	Future tense	PA:HAB	Past Habitual
IDEO	Ideophone	PASS	Passive
ILLA	Illative	PER	Perfect
IMPERF	Imperative	PERF	Perfective
IMPER:2PL	Imperative second person plural	PERLA	Perlative
IMPER:2SG	Imperative second person	PL	Plural

PL ₁	Plural one
P L ₂	Plural two
PLNML	Place nominalizer
PLPER	Pluperfect
POLT	Polite
POSB	Possibility
POSS	Possessive
PP	Postposition
PP-V	Postposition-Verb
PRES	Present tense
PRES:CONT.DEC	Present continuous and declarative
PRES:CONT.DEC.FOC	Present continuous declarative and focus
PROS	Prospective
PROX	Proximal
QW	Question word
QW-S-V	Question word-Subject-Verb
RECP	Reciprocal
RED	Reduplication
REFL	Reflexive
REC:MED	Recognitional medial
REL	Relative clause
S	Subject
SIMU	Simultaneous
S-O-V	Subject-Object-Verb
St	Standard comparison
STM	Stem modification
SUBESS	Subessive
SUBJ	Subjunctive
SUBM	Subject marker
SUPERES	Superessive
SUPL	Suppletion
S-V-QW	Subject-Verb-Question word
V	Verb
V	Vowel
V ₁	First vowel
V ₂	Second vowel
V-Adv	Verb-Adverb
VH	Vowel harmony
VL	Vowel length
VOC	Vocative
VP	Verb phrase
YNQ	Yes/No question

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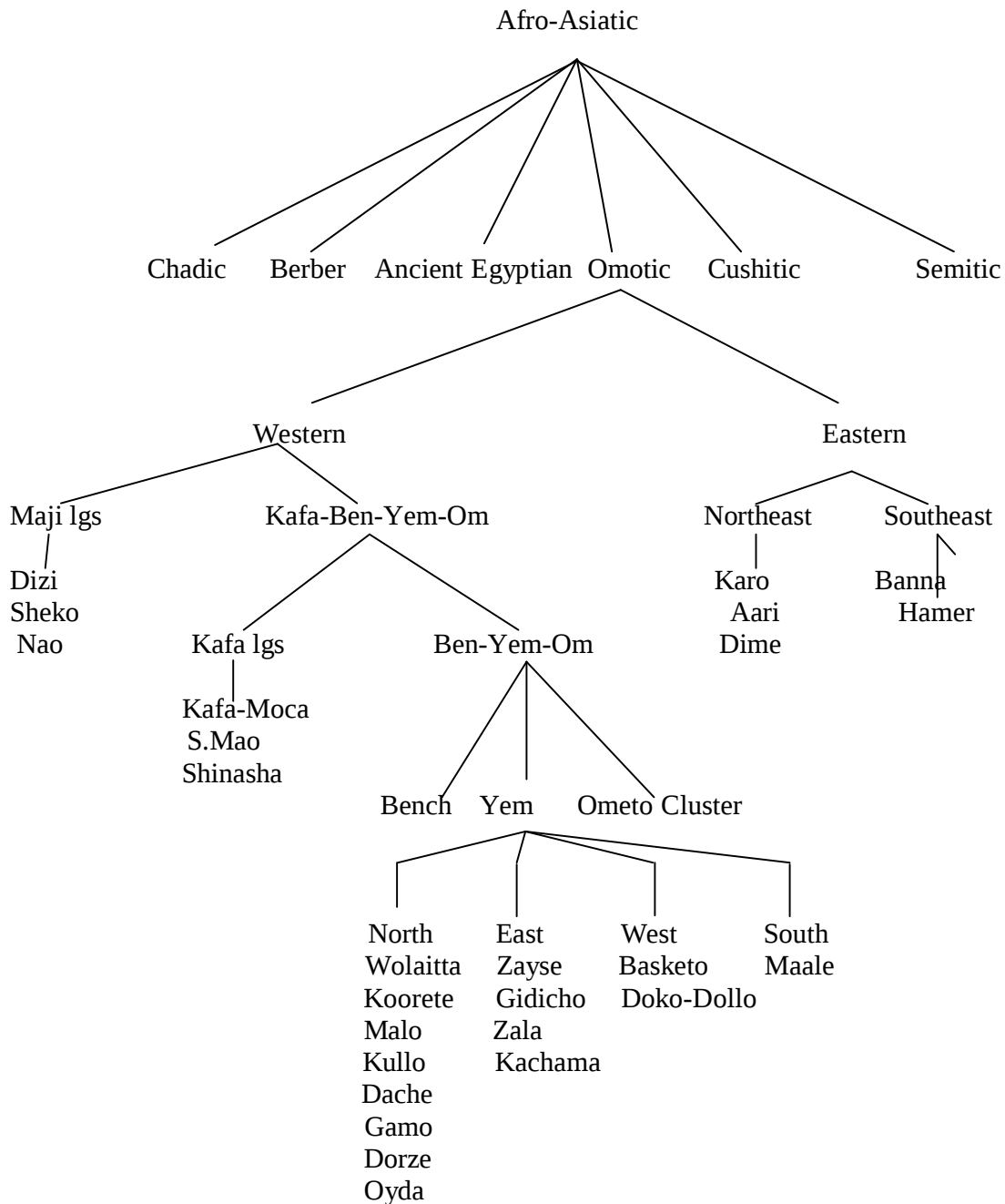
1 Introduction

The concept of language endangerment has drawn increasing attention since the 1990s, especially since Krauss (1992, cited in Mufwene 2003). The literature has been augmented by works of Crystal (2000), Evan (2008), Mufwene and Vigouroux (2008), and others. In Ethiopia, following the opening of the program for Language Documentation and Culture in the Department of Linguistics, an increasing number of linguists and researchers have been conducting on documentation projects so as to preserve endangered languages. However, languages have dramatically been in state of losing its linguistic features as a result of different factors (see 1.10 below). Among them, Ganta is one of the endangered languages in Ethiopia. It is the traditional language of an agrarian people in South West Ethiopia. According to Selamawit (2004), the language is approximately spoken by 12,789 people who live in five kebeles¹, roughly at latitude of 6°02'N and longitude of 37°34'E. The government lumped this community into Gamo tribes in 1994. However, their language is unintelligible to Ganta people. Even if the situation needs intelligibility test, the researcher comments it for further investigation. Therefore, the project focuses on the documentation and description of phonology, morphology and syntactic aspects of Ganta through recording of texts of rituals, ceremonies and procedural activities comprehensively involved in the life of the Ganta people. Greetings, spontaneous talks, uncontrolled exclamations, directives and utterances become another source of data and were collected using audio and video recordings. The documented materials were properly annotated. The linguistic analysis was done in line with Payne (1997, 2005), Hirut (2004), Kroger (2006), Mulugeta (2008), Dixon (2010), Hellenthal (2010), and others. The researcher speaks Ganta as mother tongue.

¹ Type of political administrations in Ethiopia which are smaller than districts

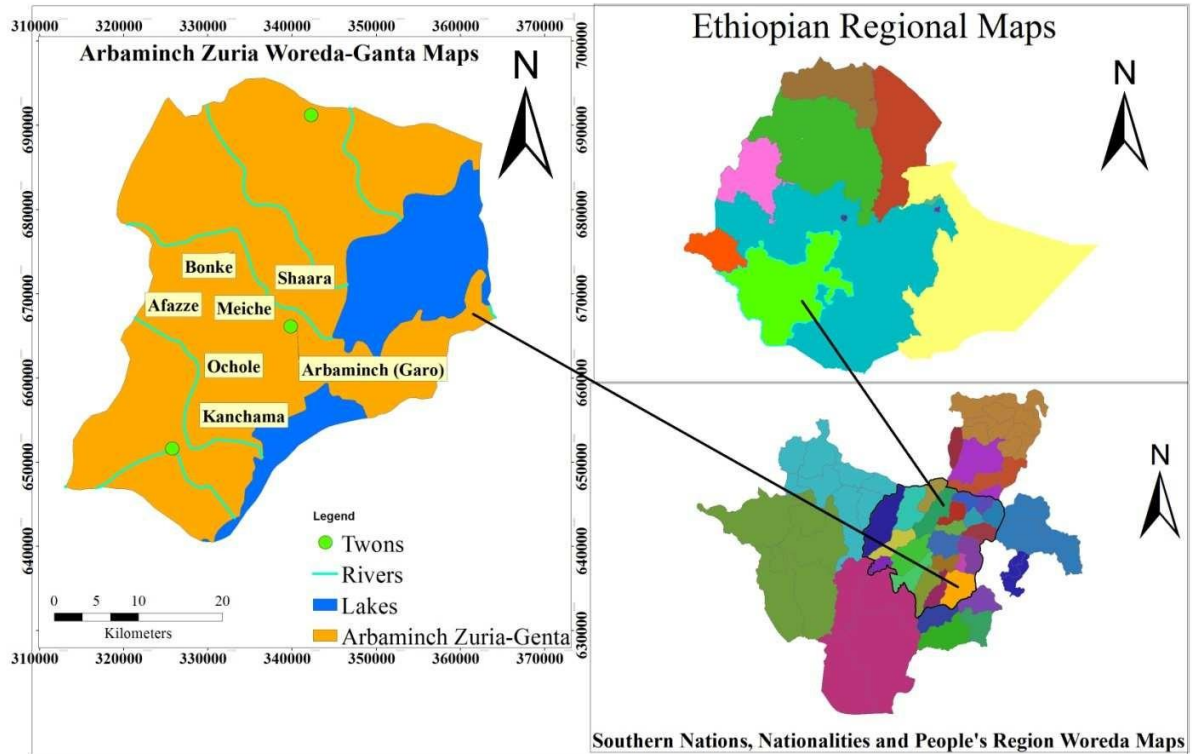
1.1 Omotic language classification

Omoto is a linguistic group under the Omotic language families that comprise several language divisions (Hirut 2005:160). The Omoto cluster contains different language categories. As Fleming (1976, cited in Azeb, 1996:112) states, this cluster includes four linguistic sub-branches namely North, East, West and South, as illustrated in the tree diagram (1). Omoto cluster (based on Fleming, 1976, cited in Azeb, 1996:112)



1.2 Geographic location

In the Arbaminch vicinity woreda map, five Ganta kebeles including Shara kebele in which Ganta is commonly spoken are found near to Arbaminch town. Arbaminch is also situated on Ganta soil, in Meiche (see the map below).



Source: Ethiopian Mapping Agency (Modified by Achenafi Teklay)

1.3 People, life and culture

As it has been seen on the map above, Ganta is located in the Sothern Nations, Nationalities and Peoples Region of Ethiopia, in Gamo Gofa zone, close to two Ethiopian rift valley lakes, to the South-West of Abaya and to the North-West of Chamo. The territory and boundary of Ganta goes up to Koyra (Koorete) people, beyond Nech Sar National Park, through two edges of lake Abaya and Chamo. These two sides of the lakes are considered as Ganta Lake by surrounding societies. Ganta is approximately found at around five hundred five kilometers (505 km) away from Addis Ababa. The native people of Ganta live mainly at six areas (kebeles); Meiche, Kanchama, Bonke, Ochole, Afazze and Shaara. These areas vary in distance of 5 to 30 kilometers. Meiche is found 10 kilometers west of the rapidly growing town of Arbaminch. Kanchama and Ochole are located in the South-West of Arbaminch town. They are 11 to 15 kilometers away from Arbaminch town respectively. Bonke village is located at 20 kilometers of the town, west of Meiche village. Afaze is located at 30 kilometers distance in the South-West of the town Arbaminch after Bonke Village. Shara is found at 5 kilometers north of the town Arbaminch.

Before 1964, the present Arbaminch town (formerly known as *Garó*) was under practical traditional rule of Meiche. The title of the ruler was *Garó kaati* (king of *Garó*). Still, the ideal king has been nominated in the name of *Garó*. But, the practice is not functional. The name *Garó* for today's Arbaminch was given by Ganta people, which means "easy life".

The name Ganta means 'warrior' or 'group' in the language of Ganta. The people speak the language Ganta or Gantatstso or Gantate. Therefore, for this research, the word Ganta stands for the language of the people and for the antonym of the people.

The Ganta people have agrarian way of life which is based on mixed agricultural production. But in the former times, two Ganta kebeles, Meiche and Kanchama, had been in semi-pastoralist activity. Weaving is an economic source for most Ochole kebele. Kanchama and Ochole kebeles are located in the low land hot climate areas. They cultivate maize, banana and sweet potato. The high land kebeles Bonke, part of Meiche and Afazze cultivate 'teff', sorghum, sweet potato, tuber potato, barely, maize, 'enset' (false banana), onion, garlic and other minor vegetables.

Most of the Ganta people believe in God. Some of them are followers of orthodox and protestant church ideologies. Still others are atheists. Above all beliefs, protestant doctrine has put its pressure on the people's original customs, cultures and traditions. The three well-known protestant churches namely 'K'alehiwot', 'Mekaneyesus' and 'Hawaryat' use Amharic and Gamo languages for their doctrine preaching.

Ganta people celebrate cultural practices in different situations and contexts. For example, at the time of harvesting, at the king or local leader coronation, at the 'Maskale' (New Year) celebration, at the house building, at the weeding, at the funeral ceremony, etc. In other parts of Ethiopian, 'Maskale' is the celebration for the 'foundation of True Cross'. But, in Ganta, it is celebrating for welcoming New Year.

The Ganta people have had a traditional ruling system which to some extent looks like the modern political ruling strategy. The people have one traditional king by the name 'kaati' (king). This king traditionally nominates delegates at five kebeles. They are called 'maagas'² by the people. They act as state leaders in their own kebele. They

² Local traditional leaders in each kebeles of Ganta

control everything because they are traditionally believed to have strong powers which protect against natural disasters (like famine, disease, and drought) and death. For example, if someone is sick, s/he will be taken to maagas home. The maagas pray to their traditional 'god' to recover the patient. In each kebele, maagas have different roles. 'Gademaaga' (leader of land) works on the issues of earth. Production of crops and cattle rearing are covered by him. 'Toora maaga' (leader of spear) is concerned about war.

'Oge maaga' (leader of road) acts as a diplomat. Conflicts arising between kebeles are solved through Oge maaga. He has the right to discuss and protect people from external problems. The king's and people's ideas are transferred through him to surrounding communities. 'Ira maaga' (leader of rain) prays for rain during the cultivation season. However, all these traditional ruling systems and habits are performed only rarely in recent times. The demise might be caused by the dominance of Christianity and by the influence of modernity.

Not every clan can be nominated as a king or maaga in Ganta culture. There are selected clans which have the right to do this. The coronation ceremony is celebrated by the community. But king clan cannot be maaga and maaga clan also cannot be king. Commonly known Ganta clans are *zulési*, *kállí*, *boótfu*, *ármali*, *óytfu*, *máltfífi*, *wósu*, *máylli*, *búyllu*, *ʔinnʔi*, *mástti*, *káftti*, *daári*, *maállí*, and *gáduru*.

Ganta performs exogamy. Marriage in the same clan is strictly forbidden. The reason is that relationship in the same clan is assumed as brother or sister. Polygamy is possible for males, but not for females.

The Ganta people are surrounded by different ethnic groups. From North to South-West of the Ganta, Gamo tribes and Gamo speakers are neighbouring communities. In the southern side, Zayse tribes are located. Eastern direction is boarded by Koorete and Guji communities, away from Abaya and Chamo rift valley lakes and Nech-Sar National Park. These surrounding people differ in culture and language from that of Ganta. In most cases, the Ganta people are able to understand their neighbors, but not vice versa.

1.4 Why Ganta is endangered?

The level of Ganta endangerment is discussed in line with Krauss (1992: 4, cited in Crystal 2000: 20) and Wurm (1998: 192, cited in Crystal 2000: 21) ideas (see in 1.10). Ganta is an endangered language as result of many factors. Natural and manmade factors have been affecting the language. Linguistic practitioners that have served as oral library to preserve their language and culture for the coming generation of Ganta have been declining because of natural process, death. On the other hand, the rate of acquisition by children has been limited. The new generation of Ganta has not given due attention for their culture and language because of modernity and dominant languages. In the recent time, youngsters are attracted to other country's culture or language so as to practice.

Cultural assimilation is observed as another factor. One culture is influenced by a dominant culture, and be found to lose its character as result of its members adopting new behavior and mores (Crystal, 2000: 78). Crystal's idea is applicable to Ganta culture. This dominance is resulted from demographic submission in Ganta. Large numbers of surrounding people arrive in the community's territory and swamp the indigenous society. This process is mainly observed by case of marriage, religion, and occupation. For example, males of Ganta people may marry from surrounding communities who have different cultural and linguistic backgrounds. On the other hand, the land of Ganta is fertile

when comparing with others. As a result of this, surrounding communities have come for daily labor work. In turn these people filter their culture and language on the existing Ganta people. Most Ganta are followers of Christianity as mentioned above. Religions have had their influence on the culture and language of Ganta. In the Orthodox Church, the Bible is written in Amharic, and preaching is in Amharic with translation into Gamo but not in Ganta. In the same way, in the protestant church, the Bible is written in Amharic and is being preached by Gamo or Amharic. Furthermore, some of protestant churches Bibles have been appearing in Gamo language orthography. Any traditional or cultural or ritual practice of the people is strictly forbidden in the doctrine of protestant churches. So that people have abandoned their original customs and languages by now. A few atheists of the Ganta could still practice their customs, traditions, and culture though they are under pressure of the religious followers.

Geographical proximity has had its influence on the language of Ganta. Urbanization has produced the rapidly growing Arbaminch town as magnet to attract surrounding rural communities. Due to better means of transportation and communication, the Ganta people have easier access to other communities. Arbaminch town is established within the territory of the Ganta. This establishment has invited different dominant languages like Amharic and Gamo that have highly threatened the existence of Ganta. Both languages are used as language of media in the town and in the Ganta kebeles. In shoppings, schools, stations, offices and media, Amharic and Gamo languages are dominantly spoken. The Ganta elders speak Ganta as colloquial language. It is spoken in the family but not for the “serious” things in life like work, money, science and technology. Different languages such as Guji, Zayse, Koorete, Bayso, Oyda, Gofa, Wolaytta, Dawuro and others are means of communications in the town.

Particularly, the dominance of Gamo language is strongly affecting the existence of Ganta. The reason is that it is treated as mother tongue in all elementary schools. From grade 1- 4, all school subjects are taught by this language for Ganta children. From grade 5-12, Gamo language is also taught as a subject. Adult education manuals and guidebooks are written in this language and it is also serving as instructional language for the Ganta adult learners.

The centralization of power resulted in an inevitable loss of autonomy for the language and people of Ganta. Central power is been exercised by mainly Gamo tribes. At the local level of power, decisions have been implemented by these groups. As a result of this, it seems that the Ganta people are no longer in control of their own identity and language.

Even if Ganta morphology and lexical variations were respectively conducted by Selemawit (2004) and Hirut (2005), continual shift of language practices and cultural acts of Ganta is in a rapid change. Therefore, the research is intended to document and describe endangered phonology, morphology and syntactic characteristics of Ganta. To this end, the analyzed data included phonological properties, and also morphological categories, such as morphemes (free or bound), inflections (case, number, gender and tense) and derivations. The open class words or content words (nouns, verbs, adjectives and adverbs) and the closed class words (articles, demonstratives, quantifiers, conjunctions and postpositions) are deeply described in the body of the project.

Interjection and ideophones are also treated. In addition to this, syntactic aspects, such as phrasal categories and clauses (simple or complex) are included so as to determine syntactic structure of the language. The project has further used some acts of corpus materials (procedural activities, rituals and ceremonies) as a source of text data to analyze the mentioned aspects of phonology, morphology and syntax.

1.5 Objectives

The general objectives of the documentation are:

To preserve linguistic aspects of Ganta phonology, morphology and syntax

Specific objectives are:

To analyze phonology, morphology and syntactic features of the language

To document practices of rituals, ceremonies and procedural activities

1.6 Significance of the study

The research outcome will support the Ganta people and their endangered language. It is helpful for further revitalization projects. Furthermore it may facilitate the use of the language of Ganta in schools, churches, offices, in the media, etc. The continued use of the mother tongue may increase the self-esteem of the community. It further gives the community the chance to express their identity and to demand their linguistic right.

The research outcome will provide knowledge, cultural background and linguistic structures of the language and the people's life to linguists, anthropologists, sociologists and other interested parties. In general, descriptive, theoretical and methodological aspects of the research will give good background information to researchers. It will also bridge the gaps that have not yet been filled by recent researchers. By doing so, it will contribute to linguistic typology Africa in general and Ethiopia in particular.

1.7 Scope

The documentation and description project is only be concerned with Ganta and the other types of Gamo people are beyond its scope.

1.8 Literature on language death

... a language is dead is like saying that a person is dead. It could be no other way for languages have no existence without people. A language dies when nobody speaks it any more (Crystal 2000:1).

The above quote expresses that a language stops existing when its speakers no longer interact to each other in that language. Without its speakers, language cannot exist. It is also believed that a language is effectively dead when there is only one speaker left, with no number of the young generation interested in learning it. Crystal further commented that everyone should be concerned to save languages, because language loss is everyone's loss. So that it is all concerned body's responsibility to save and transmit languages to the coming generation.

1.9 Reasons for language death

Languages have always died. As cultures have risen and fallen, so their languages have emerged and disappeared (Crystal 2000: 68). With a significant growth in nation state in the twentieth century, with an associated recognition of official languages, there has been a significant growth in international and global lingua-francae during the same period. These developments have put minority languages under increasing pressure (ibid). The last 500 and more years have been marked as period of dramatic decline of languages

in the world. As evidence in Brazil in 1500 AD 1,175 languages were spoken but in recent years less than 200 languages are alive.

1.9.1 Natural disaster

According to Crystal (2000: 70), 'many languages have become endangered, moribund, or extinct as a result of factors which have had a dramatic effect on the physical wellbeing of their speakers'. Natural disasters like earthquakes, hurricanes, tsunamis, floods, volcanic eruptions, etc, can displace communities from their original environment.

Famine and drought are other chief factors which can hasten emigration and migration. In the Sudan in 1998, the 'UN World Food Programme' pointed out the impact of famine on parts of people in the Sudan. The famine seriously affected the distribution of languages found in several parts of the country (ibid).

As result of colonization, imported diseases killed a number of people in the new world. As Crystal (2000: 70) has pointed out:

*The population of the new world may have been as high as
100 million before European contact. Within 200years
this had dropped to less than 1 million.*

Apart from disease, desertification has its effect on indigenous people's environment. Desertification reduces the availability of land for producing food crops for the local people. As result of this effect, people would move in search for new settlements.

1.9.2 Political situation

It is believed that sociopolitical ambitions have become the immediate cause for the decrease of languages in some parts of the world. Crystal (2000: 75) has stressed that

*... it is the political, rather than the economic, situation in a country
which is the immediate cause of the decimation or disappearance of
a community. ... Pacific and Indian Ocean island communities were
caught up in the invasions and battles of the second World War, with
language endangerment being one of the outcomes.*

When it comes to Africa, most of the governments would see linguistic diversity as a threat to national unity.

1.9.3 Factors which change people's culture

People's culture can be changed because of many factors. Assimilation processes change languages and cultures of a community as result of demographic submersion. The learning of dominant languages has put its impact on indigenous communities. The language of the dominant culture can infiltrate everywhere by pressure of media. Krauss (1992, cited in Crystal 2000: 78) called the role of the media as 'cultural nerve gas'. The reason is that its effect has the power to erode traditional knowledge and practices.

1.9.4 Attitude of speakers

A community can have a negative attitude on its language. This feeling might be introduced by contact of a more dominant culture that can stigmatize the community in such terms as stupid or lazy. The community's language can be termed as ignorant, backward, deformed, and inadequate by its speakers.

Crystal (2000: 84) has stated that indigenous languages are sometimes viewed by their speakers as a sign of backwardness, or as a hindrance to making improvements in social standing. So, such attitudes are then reinforced through the introduction of external practices which penalize the use of the local language.

1.9.5 Deliberate attempt by speakers of one language to crush another language

This action goes with a negative attitude of external language speakers. These speakers might have the idea to spread their own language. Colonial history had had similar experiences at various points. Crystal (2000:86) termed such actions as “language murder” or “linguicide”.

1.9.6 Colonization and globalization

Most linguists have seen colonization with connection to globalization. Cf. Mufwene and Vigouroux (2008: 1):

Languages are affected because colonization and sometimes globalization entail the following: population movements; the spread of the migrants' languages and the ensuing contacts of the latter with those of indigenous, dominated populations; the emergence of new language repertoires and new divisions of labor among the coexistent languages, as well as new dynamics of competition and selection among them; and differential evolution regarding their vitality.

The above quote expresses the effect of colonization and globalization on indigenous people. Mufwene and Vigouroux have observed two different ways of colonization into different trends. The exploitation colonization of Africa has hardly contributed directly to the endangerment or extinction of indigenous African languages. During exploitation colonization of Africa, the European colonizers were no more interested in sharing their languages with the indigenous populations than they were in India. However, exploitation colonization in most of Africa produced new indigenous urban vernaculars, which have remained very African despite extensive lexical borrowings from the European languages (ibid: 4f.)

In the same way, trade colonization did not create any threat to indigenous languages but the dynamics of language coexistence changed after the trade colonization would be replaced by settlement colonization. The linguistic features of Khoisan languages have been caused by the settlement colonization of Southern Africa by both the Bantu population, during their geographical expansion southward, and the Afrikaners (ibid: 3).

Globalization is expressed as the constant cause of the endangerment of indigenous languages around the world. The complex socioeconomic system of the world resulted from process of globalization. Populations of different localities adapt primarily to local socioeconomic and ecological pressure, which affect their culture and language directly.

1.10 Level of language endangerment

Many language activists and concerned organizations have observed that it is problematic to put percentage of endangered languages into absolute figures. In Crystal (2000: 10f.), different figures are observed. Global languages register has estimated up to 10,000 languages, others have put it between 500 to 7,000.

Some scholars have used absolute population figures even if total population makes no sense without useful context of a language. Population size alone is not an accurate indicator of the language situation. It has been pointed out that a language with 500 to 1,000 speakers is believed as less endangered. In the Savannah zone in Africa, a language with 20,000 speakers is considered as endangered. In relation to fluency even a language with millions of speakers may not be safe. In the context of Nigeria, Yoruba,

with 20 million speakers, has been called 'deprived' because of the way it has come to be dominated by English in higher education. In South Africa, Afrikaans has 6 million speakers and in Zimbabwe Ndebele has 1.1 million and Shona has 7 million but professed the same anxiety (ibid).

Comparing levels of endangerment is very difficult due to different language situations around the world. Krauss (1992: 4, cited in Crystal 2000: 20) argued that languages which are no longer being learned as a mother tongue by children are said to be 'moribund'. The reason is that such languages lack intergenerational transmission. Some linguists have leveled language endangerment on dependent factors as rate of acquisition by the children, attitude of the community and level of impact of other dominant languages which may be threaten it. Wurm (1998: 192, cited in Crystal 2000: 21) classified five levels of endangerment:

1. Potentially endangered languages are socially and economically disadvantaged, under pressure from a larger language, and beginning to lose child speakers;
2. Endangered languages have few or no children learning the language, and the youngest good speakers are young adults;
3. Seriously endangered languages have the youngest good speakers age 50 or older;
4. Moribund languages have only a handful of good speakers left, mostly very old;
5. Extinct languages have no speakers left.

A language which is not used at all by people and other public situations has been called 'deprived'. It seems that this language role can be taken over by dominant languages like English. Some languages suffer discourse attrition so much that they end up surviving in just one domain. For example, Ge'ez in Ethiopia has been serving as a language of liturgy (Crystal 2000:21)

As structural point of view states that different aspects of endangered languages show rapid change in code switching, grammatical features affected as inflections and function words from dominant language. In addition, knowledge of vocabulary declines with younger people.

The endangered languages linguistic change is different from 'healthy' languages in extent, range, rate and quality. Situations of contact with other languages can be fostering increased structural diversity (ibid). However, the linguistic features involved have changed hardly at all, but the sociopolitical situation has changed irreversibly.

1.11 Reasons for caring language

Language experts have assured that ethnic language is used for identity expression and international language for intelligibility. They have also attached language with commercial ideology. 'Human capital theory' interprets language as part of resources on which people can draw up in order to increase the value of their potential contribution to productivity. A cost- benefit analysis of the consequences of being multilingual would bring to light a wide range of benefits for individuals, both financial and non-financial. An economy influences a language or a language exercises a strong influence on the economy (Crystal 2000: 24). Domains in which languages play important economic roles are tourism (diversity), arts and local manufacturing industries.

It is also believed that local languages promote community cohesion and vitality, foster pride in a culture and give a community self-confidence.

1.11.1 People need diversity

The concept of human 'ecology' in a holistic sense is explained in the literatures as 'cultural or biological' domain that brought a community into mutually reinforcing relationship. The distinctive features of human ecology accordingly attempt to link the structure and organization of human community to interactions with its localized environment.

In the human ecology, the strongest ecosystems are those which are diverse. In the world of languages, we can have different linguistic aspects in general. In line with this, monolingual people can historically be multilingual in the sense that their language will contain loan-words reflecting the history of its contact with other cultures (Crystal 2000: 33). English, for example, has borrowed huge numbers of words from over several hundred languages, and hundreds of languages have in turn borrowed huge numbers of English words. In case of English, an Anglo-Saxon word 'kingly' co-exists with a French word 'royal' and a Latin word 'regal'. Such processes generate diversity to lexicon.

Increasing uniformity holds dangers for the long term survival of species (ibid). Thus, preservation of linguistic diversity is essential for language that lies at the heart of what it means to be human.

1.11.2 Languages express identity

Language can have the power to express its speaker's cultural and ethnic background. A community's way of life including rituals, music, painting, craft, etc. would be narrated by spoken or written languages. Crystal (2000: 40) has stated:

Language ... is not only an element of culture itself; it is the basis for all cultural activities. Language is the primary index, or symbol, or register of identity.

In support of the above quote, Dixon (1997: 135, cited in Crystal 2000: 40) has added:

Language is the emblem of its speakers.

The theme of the above quotes clearly suggests that language is a mirror of a community's historical activities and it also has power to tell a community's origin.

1.11.3 Languages are repositories of history

The roles of spoken or written languages become critical to transmit development of multiple cultures of a given community to another community. If language transmission breaks down, through language death, there is a serious loss of inherited knowledge (Crystal 2000: 34). For individual speakers, it is a significant loss, because their personal history has gone.

Native language is like a natural resource which cannot be replaced once it removed from the earth (ibid).

Words and idioms that contain our history can provide us clues about the earlier states of mind of its speakers, and kinds of cultural contact the speakers had. So that words and idioms become part of the evidence of social history. Steiner (1967: 131, cited in Crystal 2000: 35) has stressed that 'everything forgets, but not a language'.

A language encapsulates its speakers' history. It is the archive of history (Emerson 1844, cited in Crystal 2000: 41). It is true that a language could tell us in spoken or in written mode about origins and developments of a nation.

To know about our ancestry, a language should exist. Linguists have strongly argued that 'once a language is lost, the links with our past are gone'. Hoorde (1998: 8,

cited in Crystal 2000: 41) has added that when you lose your language...you exclude yourself from your past’.

Human existence including knowledge content of gods, kings, accounts of victories and defeats, stories of legends and heroes would be transmitted to generation through language (Crystal 2000: 41). Thus, preserving linguistic practices of a community must be underlined.

1.11.4 Languages contribute to the sum of human knowledge

Humanity gains so much from each fresh expression of itself in a language. The world is a ‘mosaic’ of visions. ‘With each language that disappears, a piece of that mosaic is lost’ (Crystal 2000: 45). One story does not make a world view. The world view gradually emerges through the accumulation of many sources such as myths and legends, traditions, practices and heritage. In support of this idea, the following proverbs from two different countries are quoted (Crystal 2000: 44):

With each newly learned language you acquire a new soul (Slovakia).

A man who knows two languages is worth two men (France).

In the same manner Emerson (1860, cited in Crystal 2000: 44) explains:

As many languages as he has, as many friends, as many arts and trades, so many times is he a man.

The theme tells that there is much to be learned and enjoyed in practicing other languages. Emerson also adds:

No man should travel until he has learned the language of the country he visits. Otherwise he voluntarily makes himself a great baby, so helpless and so ridiculous.

This message further expresses that being monolingual could create a situation difficult and a man could be disadvantaged.

1.11.5 Languages are interesting in themselves

The more languages we study, the fuller our picture of the human linguistic options will be (Crystal 2000: 55). Knowing any aspects of language structures like phonology, grammar, vocabulary and discourse will be made an advantageous.

1.12 Concept of phonology, morphology and syntax

Phonology is a sub field of linguistics which deals with sound systems of language, aiming at expressing the distinctive patterns of sound that found in the language and also to conclude general natures of sound systems. Phonologists study the sound systems of language in different grammatical categories or properties of morphology, as in describing the characteristics of words.

According to Akmajian and others (2001) morphology is defined as the sub field of linguistics that studies the internal structure of words and the relationships among words. Crystal (2008) adds that morphology is the branch of grammar which studies the structure or form of words, primarily through the use of the morpheme construct.

Linguists in most cases group words as simple and complex. Words that seem to be no way to analyze or break it down are said to be simple. Complex words are made up by different building blocks of morphemes (Akmajian and others, 2001). In addition to these groupings, words are also categorized into two classes namely open and closed. The open class words belong to the major part of speech classes (nouns, verbs, adjectives and adverbs). The closed class words are grammatical or functional classes such as articles, demonstratives, quantifiers, conjunctions and prepositions.

Syntax is dealing with how words combine to form sentences (Payne 2006). It is also pointed out that syntax is the part of grammar that represents a speaker's knowledge of sentences and their structures (Fromkin & others 2007). Furthermore, Lieber (2009) expressed that syntax is concerned with identifying the rules that allow us to combine words into phrases and phrases into sentences.

The rules of syntax combine words into phrases and phrases into sentences. They also specify the correct word order for a language and the grammatical relations within sentences, such as subject and direct object (Fromkin & others 2007).

Syntactic categories include both phrasal categories such as NP, VP, AdjP, PP, AdvP as well as lexical categories such as noun (N), verb (V), preposition (P), adjective (Adj), and adverb (Adv). Each lexical category has a corresponding phrasal category (ibid: 168). An important role of the syntax is to describe the relationship between the meaning of a particular group of words and the agreement of those words (ibid: 160).

Syntacticians are concerned with phrase structure and movement rules, and rules concerning the interpretation of anaphors and pronouns. Case marking serves to identify the syntactic function of an NP in a sentence. Inflectional markers like tense and aspect-affixes identify clauses of certain types, for example, finite or infinitive, conditional or subjunctive. Person and number markers often figure in agreement between adjectives and the nouns they modify, or between verbs and their subjects or objectives (Lieber 2009).

1.13 Review works on Ganta

Ometo is a language group under the Omotic language family comprising several related language dialects (Hirut 2005). These belong to four sub-branches. As Fleming (1976, cited in Hirut, 2005:161) stated that North Ometo (Wolaitta, Gamo, Gofa, Dawuro, Dorze and Oyda), South Ometo (Maale), East Ometo (Zayse, Zergulle, Korette, Haro, Ganjule and Kachama) and West Ometo (Chara, Doko, Dollo, Bsketo). Ganta is little known and less studied language as a result of many factors. One of the most challenging factors has related to linguists' controversial naming of the language and genetic classification. Once up on a time Ganta was named after one of Ganta localities. For example, Fleming (1976, cited in Azeb 1996) named after one of the village names Kachama (correct spelling is Kanchama) where Ganta is spoken, and classified with Zayse, Zargulla and Koyra (Koreete). The Fleming's genetical classification was right by the time, except for naming problem. But, the classification had stayed without any challenge until 1994, the time in which Gamo politicians blindly lumped Ganta people to the Gamo people without any studied linguistic and cultural bases that the two peoples had in common. Following such wrong political action, Ganta speaking children were imposed to learn Gamo as their mother tongue even if the language is unintelligible to Ganta people. Gamo has been expanding at the expense of Ganta. In addition, another subsequent work of Bender (2000) was appeared with self contradicting ideas, by which Ganta was categorized under place names, and also under dialect. Bender listed Ganta together with the other places where Northwest Ometo family is spoken as "...C'enc'a (Dorze village), Gofa: Bayo, Boroda, Marta, Uba, Zhazhi; Bsk: Dokko, Dollo, Angila, Mashira, Usnu, Balta or Belts'a, Dafa, Dita, Ganta, Kamba, Ocollo" (2000: 7). While reviewing the works of Siebert and Hoeft (1994, cited in Bender 2000: 46), Bender contradictorily categorized Ganta under a dialect of Southeast

Ometo family and asserted that “there is said to be a dialect known as Ganta.” In the same way, Siebert and Hoeft also repeated the mistake of Fleming and used the term Kachama instead of Ganta to express similarity of Ganta with the other languages Gat’ame, Harro and Haruro. Surprisingly, the works of Bender and Fleming had stayed unchallenged until Selamawit (2004), Hirut (2005) and Wondimu (2010) came up with their convincing works, in which the right name Ganta was given instead of village name Kachama, and genetically classified under Eastern Ometo groups together with Zayse, Zargulla, Koyra (Koreete) and Haro.

As it has been observed, Ganta is neither protected nor recognized because of inconsistent linguistic studies, blind political decision and Gamo dominance. In addition to that missionary involvement, geographical proximity, cultural assimilation, globalization and modernity are the other factors that contribute to the loss of Ganta. Therefore, the aim of this project is to document and describe endangered phonology, morphology and syntactic aspects of Ganta by using texts (rituals, ceremonies and procedural activities) as source of data.

1.14 Details of the Project

1.12.1 Ethical aspects of the project

Ethical aspects are a very sensitive issue in humanities research methodologies. Because of this, the researcher handled ethical issues according to the people’s social and political contexts. The norms, values and ethics of Ganta are clear for the researcher as native speaker of the language or as insider of the research.

Having consent letters from different concerned bodies was the first step and very important to run the project with the Ganta people. For field work, the researcher had a permission letter from local and administrative bodies. For this, a support letter was taken from the department of linguistics, Addis Ababa University. The letter made a smooth way for the next consent letters. Having this letter, the researcher went to zonal administrative bodies so as to get another supportive letter to the local political offices of the five kebeles. The reason is that these offices needed consent or supportive letter from higher political bodies. So the researcher presented the letter which was written by zonal bodies to these offices. At the five kebeles of Ganta, there are traditionally nominated tribal leaders called maagas. These maagas agreed with the researcher about the project work; how or why or when the researcher would do what. Generally, the researcher would come to agreement in this chained way to smoothen the project work.

As it has been said, the Ganta people are an agrarian people. Their life is mainly based on agricultural products and cattle rearing. The field work trip should be out of their cultivation, plantation and harvest time. The convenient time for researcher’s consultants would be from September to January. At this time consultants would be free. Consultants and the researcher would talk more about the project’s nature, duration of field work, incentives, about data collecting materials, trainings and dissemination of final work of the project. This programme was intended to clarify about the whole nature of the project.

Every step in this project was done in collaboration with the language speaker. Some workshops were given for consultants. This program aims to train consultants so that they would help me in audio and video recordings. Most people of the Ganta do not have an idea about audio and video recordings. For this reason the

researcher would ask them for permission before recording. Some of them did not want to be photographed or some of them over acted at the time of recording. Later the researcher gave them opportunity to listen to the whole recordings. The researcher intended to work with 12 fluent speakers. All these speakers were not selected by the researcher. The consultants and the people of Ganta recruited them because the people knew them very well in their villages. Each of these speakers was taken from five scattered kebeles of Ganta: Ochole, Afazze, Kanchama, Meiche, and Bonke. In addition, 1 fluent speaker was also taken from Shaara kebele. They were selected according to their ages, sex and education. Most of them were adult and farmers because they knew more things about the language. And they helped the researcher in telling rituals, ceremonies and procedural activities that have been on the verge of disappearing by now. The remaining speakers were professionals and educated people because they helped the researcher by giving similar data as that of adults did. All these speakers agreed with the researcher about incentive, time of work per day, week or month. Publication or dissemination of project outcomes was consulted with them. In the following table, the names of consultants are presented according to their age, sex, kebele and professions.

No	Name	Age	Sex	Kebele	Profession
1.	Bartto Baalla	53	Male	Kanchama	Teacher
2.	Kuzaye Kuwa	60	Male	Kanchama	Farmer
3.	Kaabba Kaasa	57	Male	Ochole	Farmer
4.	Abebe Abesha	48	Male	Ochole	Farmer
5.	Bekele Olibo	47	Male	Bonke	Farmer
6.	Kom ?e Kotta	42	Male	Bonke	Government worker
7.	Tul?a Tukko	36	Male	Afazze	Accountant
8.	Tujaare Osha	56	Male	Meiche	Farmer
9.	Mekonnin Buuke	70	Male	Meiche	Farmer
10.	Negga Markile	45	Male	Shaara	Government worker
11.	K'emedē Mazo	75	Female	Ochole	House wife
12.	Seekko Shinnale	54	Male	Ochole	Farmer

Generally, the researcher created his field work in collaborative spirit. Consultants and fluent speakers of Ganta and the researcher worked together in agreeing with project plans. This agreement was inspired the Ganta people's positive attitude to document and preserve their language for the coming generation. In turn, this attitude helped the researcher to accomplish his project work time.

1.14.2 Collected materials

The project outcomes include a corpus of materials such as digital audio and video recordings, different texts that express the people's life comprehensively. The corpus has contained everyday speech. Such speech includes greetings, spontaneous talks, uncontrolled exclamations that could be acted for surprise or crying. Directives and utterances took place in the social context and in the natural settings. These events mostly happen in the local market and meeting situations like: local bars, restaurant, and other meeting places. The interviews of people in the market or in the ritual places were important too. Conversations of the people in the course of working, walking, enjoying and in a time of traditional meeting discussions were collected.

New Year celebration is another rite among the Ganta people. This celebration has practiced is held at the market places by singing different cultural songs. On the 28th of

every September, “The Finding of the True Cross” celebration takes place at national level in Ethiopia. Following this celebration, the Ganta people celebrate their traditional New Year. The name of celebration is called *soofe*. The event happens for three weeks at all market days, namely on Sunday, Tuesday and Thursday. At each of these market days, the people come out and celebrate by singing and dancing. Some of the speeches and rites made at the event are recorded for linguistic analysis.

Names of animals (wild and domestic), trees, places, food items, parts of the body and cultural counting of days and months are helpful to describe linguistic features. With the help of the corpus, different linguistic features of Ganta were analyzed. The analyzed linguistic features include aspects of phonology, morphology and syntax, and they were annotated and analyzed by language technologies such as ELAN. The actual work of this project would be preserved for further revitalization work and for coming generation of Ganta.

Therefore, the expected project outcome included comprehensive documentation and description of Ganta phonology, morphology and syntactic aspects that have been practiced in day to day life of the people.

1.14.3 Documentation methods

Qualitative methods of data gathering techniques were applied. Particularly, ethnographic approach of data collection was applied in this project plan. Multimedia documentation methods including audio and video recordings were the researcher’s field work instruments. Audio recording was used to capture dynamic aspects of the language, Gants and the video recording was used to capture one hour and two minute recordings of events that were done at real social contexts and settings. Non-verbal communications such as facial expressions, gestures and body postures and movements were also captured by the video recording. The images of places, people, and consultants were taken for linguistic explanation. The field notes were important methodology in the course of linguistic field work. Notes of utterances, discussions, and comments, social meetings of the society and discussions with consultants became supportive input to the project. To start the project, first video and audio materials were tested. Cables, connectors, and adaptors were checked. Sample recording under range of condition was taken to check their quality. Such recording was transferred to researcher’s laptop computer and he would be sure how to use the relevant processing of software and how to burn CD-ROM or DVD backup copies of data. Then, the researcher would conduct linguistic analysis including transcription, translation and annotation with help of different softwares. Before getting annotation with the ELAN, the recorded video texts were edited by Corel Videostudio Pro X4 software. Thereafter, texts were imported to the ELAN for segmentation before they got broken down into words and morphemes for analysis, and for free and phonemic translation. The free translation was done in English.

The data collection was based on different native speakers of Ganta. In the course of data collection time; the researcher worked with male and female native speakers and with speakers of different ages, classes, or professions. Furthermore, the researcher payed special attention to specialized knowledge of people who might know animals, plants and traditional medicines of the people.

In the first session in the field, the researcher explained to his informants the purpose of the project and how to work in each session. Informants were also trained about the actual work of the project. Next, the researcher got a grip on the morphological properties such as morphemes (free, bound), inflections (case, number, gender, tense) and

derivations including the open class words or content words (nouns, verbs, adjectives, adverbs, interjections and ideophones) and the closed class words (articles, demonstratives, quantifiers, conjunctions and prepositions). Types of sentences (phrases, clauses and complex clause) were transcribed. The researcher also started with word lists of body parts, natural surroundings, names of animals (domestic and wild) and places.

The researcher data organization was started at database of lexical items as soon as possible. The researcher started transcribing of items side-by-side in a table on the same page of his field notes. The field notes were taken for later corrections and cross-references. Each session of notes started with the date, time and place and speaker. For interlinear glossing, conventions of Leipzig Glossing Rules (2004) were used for morpheme-by-morpheme glosses so as to give grammatical and semantic information about the properties of words or parts of words. In the body of the work, segmented morphemes are separated by hyphens in the example and in the gloss parts. Grammatical morphemes are rendered by the abbreviated category labels of upper case printed letters. Semi-colon is used for unsegmentable object-language element that clearly distinguishes two meanings or grammatical properties. But, for an object-language element that expresses more than two meanings or grammatical properties by rendering itself into several abbreviations were separated by semi-colon and period. Free Unicode, IPA fonts, were used in the transcription system. In the body of the work, phonemic transcription was used rather than phonetic counterpart. Lengthening of sounds are indicated by doubling the grapheme not by the triangle colon (:). For the consonant and vowel phoneme distributions and descriptions, the researcher used slashes // to enclose phonemes. To distinguish allophone from phoneme, square bracket [] was used for allophones. In the same manner, for minimal pairs and phonological or morphophonological illustrations, the square bracket was also used for phonemically transcribed situations. Other than square bracket, curly bracket {} was used to enclose underlying morphemes in Ganta.

After field work session, the researcher had made backup copies of his recordings as soon as possible. This could be done by two different backups on the external hard drives; DVD or CD. The recordings were also labeled by same numbering system. Meta data management was important activity in the linguistic project. The project metadata was included information about the researcher, the Ganta (language), the place of the Ganta people where recordings were made, and other general information about the items the researcher was depositing.

The item metadata was contained about individual recordings or items in the project. Participant metadata was contained the people of Ganta, the consultants' names, other names, social status, ages, occupations, education, marital status, language, background, and comments. Generally, the field data was organized around 'tracks' or 'episodes' within a recording.

Archiving raw field data was the project plan. The researcher was archived raw data because of two reasons. First original field notes could get lost when the researcher was come back. Second, archiving would allow Ganta people, linguists, and other interested parties about find out, what has been done on the language. The researcher intended to put some of the documented materials' hard copies in the local school's library and in the department of linguistics even if there is no right place in the country to deposit recorded materials.

Generally, the work flow of the project was done in the following way. In the first place audio materials were imported to audacity and then to ELAN for annotation and free translation. In the same way video materials were changed to MPEG4 and imported to ELAN.

1.14.4 Project work plan

The project was planned for 36 months. The field trip planning went with convenient time of the Ganta people. Each year was planned in different phases of the work in which the researcher was conducted. The actual work was started in September 1/2013 and ended in September 1/2016. The first phase of the project plan was writing of background information. At this time different theoretical and methodological aspects of linguistic books and works were consulted. By consulting other works of documentation projects, the researcher started writing of the documentation methods and backgrounds, and linguistic theories from September 1/2013-December 30/2013. Then, the discussed information was given to the researcher's supervisor in the department for constructive comment. The given feedback by the supervisor was corrected in January 1/2014-15/2014. Following correction of comments, the plan was to prepare equipments for the field trips. The researcher bought, collected and checked data gathering multimedia and field note taking notebooks from January 16/2014-February 30/2014. These materials included audio and video recordings, lap-top, digital still camera, and hard external discs.

Following equipment collection, trainings were given to consultants and assistant camera man so as to familiarize them with multimedia materials. The researcher trained consultants and one assistant camera man on March 1/2014-5/2014. After this session, the researcher went to the field so as to collect data for eight weeks, total of fifty six days. The first phase field trip took place in the first two weeks from March 6/2014-20/2014, it was for data of phonological and morphological characteristics such as morphemes (free, bound), inflections (case, number, gender, tense) and derivations including the open class words or content words (nouns, verbs, adjectives, adverbs, interjections and ideophones) and the closed class words (articles, demonstratives, quantifiers, conjunctions and postpositions).

Starting from March 21/2014-February 30/2015, the researcher started coding and analyzing of collected data by different software ELAN, which was discussed under documentation methodology above.

For three weeks, from March 1/2015-21/2015, types of sentences (phrases, clauses and complex clauses) along with parts of sentences (declarative, interrogative, imperative and exclamation) have gathered. During this field trip and after it, the researcher immediately started coding and analyzing of the collected data. This was held from March 22/2015-September 30/2015. Linguistic analysis including transcription, translation and annotation were implemented by language technologies. Free and phonemic translation was used by ELAN. The free translation was done in English.

Finally, in the last three weeks from October 1/2015- October 15/2015, the third field trip took place for remedial works. This trip was implemented by consulting the projects actual plan and recorded materials so far. Pre-analyzed materials and documents were consulted carefully so as to check unrecorded or undocumented phonology, morphology and syntactic features in line with the project Plan.

Totally, the field works took three trips. But ritual of New Year celebration in the market will happen after September 28th every year among the Ganta people at three consecutive market places. The researcher went to record the celebration in the last week from October 7/2015-15/2015. This time goes with remedial field trip. Recording

of procedural activities took place from October 15/2015-December 30/2015. My project metadata included information about the researcher, the Ganta (language under study), the place of the Ganta people where recordings were made, and other general information about the items the researcher was depositing.

Metadata recording followed in each field trip phases and in every single work time seriously. Actually documented material and analyzed works were checked from January 1/2016-May 22/2016. Then, it was submitted to the supervisor for feedback on May 23/2016. The correction of comments and submission for the department was done on October 11/2017. On January 1/2018-15/2018, the researcher prepared himself for defense and presentation of actual work. From February 1/2018-May 20/2018 the presentation and defense comments would be corrected. On the June 1/2018 archiving would take place in local school libraries and at the department of linguistics in Addis Ababa University.

2. Phonology

This chapter is concerned with the description and distribution of 26 consonant, and 5 short and 5 long vowel phonemes in Ganta. It reviews currently available data on consonant phoneme types in Ganta and other Omotic language literatures, and at the same time, discusses some specific types of consonant phonemes not discussed anywhere else. In addition to the sound systems, this section also describes phonotactics, word syllable structures, phonological processes, morphophonological rules and tone systems of Ganta. For such discussions, Selamawit's (2004) unpublished study has served as a starting point for the presentation of data in this work. Selammawit has identified a set of 27 consonant phonemes in Ganta. However, some of the previously identified consonant phonemes **p**, **ɿ** (**dɿ**) and **dz** are asserted as allophones of different phonemes and others like glottalized bilabial ejective **p'** are rejected in this study. For instance, as in other Omotic languages Koorete/Koré (Bender, 2000; Binyam, 2008), Zayse (Bender, 2000; Bausi et.al, 2014), Haro (Bender, 2000; Hirut, 2004), Sheko (Aklilu, 1988; Hellenthal, 2010), Benchnoon (Bender, 2000), Aroid (Bender, 2000), Kefa/South Gonga (Fleming, 1976), Dawro (Alebachew, 2010), Gamo (Taylor, 1994), Wolaitta (Bender, 2000), Malé/Maale (Bender, 2000; Azeb, 2001) and Mao (Bender 2000; Baye, 2006), the voiceless bilabial stop **/p/** was previously recognized by as regular phoneme in the Ganta language. But, this study has asserted the phoneme as an allophone of the voiceless bilabial fricative **/ɸ/**. The phoneme **ɸ** is realized as **[pp]** when it occurs in word-medial positions, and as a voiceless interdental fricative **[f]** in loan words and after liquids in word-medial positions (for more discussion see section 2.7 below). As in Ganta, the phoneme **ɸ** also occurs in Sheko (Aklilu, 1988; Hellenthal, 2010). Furthermore, Selamawit (2004) has also considered consonant sounds **ɿ/dɿ** and **dz** as independent phonemes. But, both of them are recognized in this study as allophones of **/ɿ/** and **/z/** respectively. The former **/ɿ/** is realized the shape **[dɿdɿ]** at word-medial position after alveolar nasal **n** and liquid **r**, whereas the latter **/z/** is realized as **[dzdz]** between vowels **i—o**, or **o—o**. It also has the same form after the glide **y**, alveolar nasal **n** and liquid **r** at word-medial positions (see section 2.7). In fact **[dz]** is a regular consonant phoneme in some other Omotic languages such as, Sheko (Aklilu, 1988; Hellenthal, 2010), Benchnoon (Bender, 2000), Yem/Kefoid (Fleming, 1976), Dizi (Allan, 1976) and Mao (Bender, 2000; Baye, 2006).

The bilabial ejective **/p'/**, which is common in many other Omotic languages Sheko, Benchnoon, Yem/Kefoid, Dizi, Haro, Mao, Malo and Dawro was wrongly included as distinctive phoneme in Ganta. But in the present analysis, the sound has not been indicted in Ganta phonemic inventory. In this case, Ganta shares the same characteristic with that South Omotic languages, Aroid because the sound is also absent in Aari/Aroid. To the contrary, the voiceless bilabial implosive **/ɸ/** is identified as regular phoneme in this study in Ganta.

As in some Nilo-Saharan languages Nera (Thompson, 1976) and Anywa (Lusted, 1976) and other Omotic languages Sheko (Aklilu 1988; Hellenthal 2010), Yem/Kefoid (Fleming, 1976), Aroid (Bender, 2000), Hamar (Lydall, 1976), Dime (Mulugeta, 2008), Zayse and Zargulla (Bausi, et. al., 2014), the velar nasal **/ŋ/** is recently asserted as regular consonant phoneme in Ganta.

Apart from phoneme identification, the study has also modified the manner of articulation of some phonemes in Ganta. For example, in the Selamawit's (2004) work, /s/ was considered as alveolar fricative. But, this study has asserted it as alveolar affricate.

To large extent, noticing of nasal plosion may not be clear in Ganta even if such process frequently occurs in languages like Sheko (Aklilu 1988; Hellenenthal 2010). But in the case of Ganta, the nasal plosion has rarely observed in ideophone constructions as in ʔ^hiya 'call for cow'.

2.1 Consonant phonemes

In the following chart, consonants are listed according to their phonetic features, where the rows and columns respectively use for manner and place of articulation.

Revised consonant phoneme chart

		Bilabial	Alveolar	Postalveolar	Retroflex	Velar	Glottal
Stops	Voiceless		t			k	ʔ
	Voiced	b	d			g	
	Implosive	ɓ	ɗ				
	Ejective					k'	
Nasals	Voiced	m	n			ŋ	
Fricatives	Voiceless	ɸ	s	ʃ			h
	Voiced		z	ʒ			
Affricates	Voiceless		ts	tʃ			
	Ejective		s'	tʃ'			
Glide		w		y			
Liquids	lateral		l				
					r		

Note: For affricates and double articulations of **ts** and **dz** (which are represented by two symbols joined by a tie bar), the non-joined equivalent phonemes, **ts** and **dz**, are respectively used throughout in the body of the work. (**ts**=**ts**, and **dz** =**dz**) For postalveolar ejective, symbol tʃ'/tʃ' is used to represent the phoneme in Ganta. For postalveolar glide, grapheme y is also used instead of j.

2.2 Description of Ganta consonants

In this section, Ganta consonant phonemes are expressed phonemically and phonetically according to the manner of articulation in citation words from example (1) to (26). Ganta word structures rarely permit consonants at the word-final position, except for some situations. For example, the variant of nominative case marker y will occur at the final position of the nouns after vowels so as to mark for nominative case, as in **tá-y** 'I', or **máydo-y** 'an ox'. Some ideophone constructions can also end in consonant sounds in Ganta as in **kíft** 'uses to assert suddenly heard news like death in conversation', or 'uses to drive goats, hens, etc'. But, any word in Ganta can begin with consonants or vowels.

- (1) /t/ voiceless bilabial stop
tamá [tamá] 'fire'

tolkkó [tolkkó] ‘hyena’
 tuúmo [tuúmo] ‘garlic’
 háta [háta] ‘short’
 úte [úte] ‘sitting (down)’
 metó [metó] ‘problem’

(2) /k/ voiceless velar stop

kirbbé [k^hirbbé] ‘traditional dance of girls’
 kiíta [k^hiíta] ‘message’
 kóntʃʃe [kóntʃʃe] ‘fork’
 mákko [mákko] ‘act of preparing’
 makkálʔa [makkálʔa] ‘miracle’
 túkke [túkke] ‘coffee’

Note: As in Hirut’s (2004) Haro, the Ganta voiceless velar consonant **k** also expresses aspiration [k^h] at word-initial positions when a high front vowel /i/ or /ii/ immediately follows the sound.

(3) /ʔ/ glottal stop

ʔeeló [ʔeeló] ‘interest’
 ʔéeya [ʔéeya] ‘foolish’
 ʔeehá [ʔeehá] ‘love’
 háyʔo [háyʔo] ‘death’
 álʔo [álʔo] ‘expensive’
 kúnʔa [kúnʔa] ‘narrow’

(4) /b/ voiced bilabial stop

bólla [bólla] ‘father-in-law’
 bookó [bookó] ‘digging’
 bóto [bóto] ‘forgetting’
 dubbúfa [dubbúfa] ‘place where old people meet to discuss community’s issue’
 árbba [árbba] ‘Friday’
 abbá [abbá] ‘lake’

(5) /d/ voiced alveolar stop

duuláta [duuláta] ‘discussion’
 doró [doró] ‘sheep’
 dúre [dúre] ‘rich’
 gáde [gáde] ‘land’
 órde [órde] ‘fat’
 árdo [árdo] ‘living/existence’

(6) /g/ voiced velar stop

giíga [giíga] ‘agreement/concord’
 ginddá [ginddá] ‘beyond’
 gawó [gawó] ‘stomach’
 órge [órge] ‘uncastrated sheep or goat’
 bógge [bógge] ‘short (of cloth)’
 sugó [sugó] ‘anus’

(7) /ɸ/ voiceless bilabial implosive

ɸédďa [ɸédďa] ‘type of grass’

- ǽló** [ǽló] ‘sperm’
ǽílloso [ǽílloso] ‘bird species’
k'áǽ [k'áǽ] ‘stick with which fire is taken from stove’
áǽǽ [áǽǽ] ‘silly, non-sense’
ʔúǽǽ [ʔúǽǽ] ‘very narrow container or house’
- (8) /**d**/ voiced alveolar implosive
- ǽatté** [ǽatté] ‘back’
ǽabó [ǽabó] ‘leave’
ǽántstsi [ǽántstsi] ‘breast’
moóǽ [moóǽ] ‘fat’
wóǽ [wóǽ] ‘killing’
biráǽǽ [biráǽǽ] ‘finger’
- (9) /**k**/ velar ejective
- k'íta** [k'íta] ‘dirty, not tidy’
k'idě [k'idě] ‘teasing, mocking’
k'ára [k'ára] ‘active, sharp’
woók'a [woók'a] ‘rotten’
mak'k'ó [mak'k'ó] ‘persuading’
líik'o [líik'o] ‘soft’
- (10) /**m**/ voiced bilabial nasal
- máydo** [máydo] ‘an ox’
máŋk'k'o [máŋk'k'o] ‘poor’
maátstsi [maátstsi] ‘milk’
ʔaámuk'a [ʔaámuk'a] ‘very weak in physical appearance’
kamó [kamó] ‘musk’
dummá [dummá] ‘isolate/different’
- (11) /**n**/ voiced alveolar nasal
- nertʃtǽ** [nertʃtǽ] ‘breakfast’
náǽ [náǽ] ‘narrating’
narffé (Amharic) [narffé] ‘needle’
dénbba [dénbba] ‘field’
labbána [labbána] ‘exhaustion’
áno [áno] ‘heavy’
- (12) /**ŋ**/ voiced velar nasal
- áŋgussu** [áŋgussu] ‘elder’
báŋga [báŋga] ‘barely’
s'óŋge [s'óŋge] ‘act of throwing spear’
záŋge [záŋge] ‘branch of tree’
gáŋgo [gáŋgo] ‘exile’
dúŋga [dúŋga] ‘old piece of cloth’

Note: **ŋ** doesn't come at word-initial position in Ganta.

- (13) /**ɸ**/ voiceless bilabial fricative
- ɸoté** [ɸoté] ‘vagina’
ɸok'ó [ɸok'ó] ‘peel’
ɸogólo [ɸogólo] ‘sweat’

- koΦá [koΦá] ‘basket (of dung)’
kaΦó [kaΦó] ‘bird’
- (14) /s/ voiceless alveolar fricative
síye [síye] ‘hearing’
sinó [sinó] ‘face, fore head’
silá [silá] ‘summer’
awóssu [awóssu] ‘uncle’
awóstto [awóstto] ‘aunt’
miísi [miísi] ‘cow’
- (15) /ʃ/ voiceless postalveolar fricative
ʃimpullá [ʃimpullá] ‘spleen’
ʃíʃi [ʃíʃi] ‘stool’
ʃoófu [ʃoófu] ‘snake’
míʃʃi [míʃʃi] ‘satisfaction’
úʃʃu [úʃʃu] ‘drink’
biʃé [biʃé] ‘traditional art’
- (16) /h/ voiceless glottal fricative
háta [háta] ‘short’
hará [hará] ‘different/another’
hollá [hollá] ‘hole’
maahé [maahé] ‘serval’
méhe [méhe] ‘cattle/money’
biláhe [biláhe] ‘noon/midday’
- (17) /z/ voiced alveolar fricative
zigíne [zigíne] ‘last time’
zímbbere [zímbbere] ‘last year’
záʔa [záʔa] ‘crack’
ɸazzó [ɸazzó] ‘tall/long’
bázo [bázo] ‘God’
hazó [hazó] ‘bird species’
- (18) /ʒ/ voiced postalveolar fricative
ʒiʔó [ʒiʔó] ‘orphan’
ʒiluk'á [ʒiluk'á] ‘green’
ʒiló [ʒiló] ‘anger’
ʒuúʃʃe [ʒuúʃʃe] ‘wondering’
moʒóle [moʒóle] ‘type of disease’
kuúʒa [kuúʒa] ‘shadow’
- (19) /s'/ voiceless alveolar ejective
s'índdo [s'índdo] ‘erecting’
s'óre [s'óre] ‘drought’
s'ála [s'ála] ‘strong/active’
waás'a [waás'a] ‘pair’
mars's'á [mars's'á] ‘skirt, edge of cloth’
baás'a [baás'a] ‘mustache’
- (20) /ts/ voiceless alveolar affricate
tsiítso [tsiítso] ‘act of cutting tree (technical word)’

- tsotsó** [tsotsó] ‘roach’
tsátse [tsátse] ‘standing up in line (technical word)’
suútsu [suútsu] ‘blood’
itsínke [itsínke] ‘hair’
méntstso [méntstso] ‘breaking’
- (21) **/tʃ/** voiceless postalveolar affricate
tʃiitʃé [tʃiitʃé] ‘bird species’
tʃántʃa [tʃántʃa] ‘dried leaf of ‘enset’/false banana’
tʃéntʃe [tʃéntʃe] ‘fifty cents’
maátʃtʃo [maátʃtʃo] ‘woman/wife’
mítʃtʃa [mítʃtʃa] ‘burning’
bóntʃtʃo [bóntʃtʃo] ‘respection’
- (22) **/tʃ/** postalveolar ejective
tʃiitá [tʃiitá] ‘early morning’
tʃeemó [tʃeemó] ‘night’
tʃolólo [tʃolólo] ‘gray’
gatʃúnna [gatʃúnna] ‘newly delivered woman or cow’
matʃára [matʃára] ‘skirt/edge’
bóntʃtʃo [bóntʃtʃo] ‘leaf’
- (23) **/w/** bilabial glide
wóra [wóra] ‘forest’
woggá [woggá] ‘Sunday’
watstsé [watstsé] ‘water’
gawó [gawó] ‘stomach’
yewó [yewó] ‘coming’
sawó [sawó] ‘pleasant smell/odour’
- (24) **/y/** postalveolar glide
yeeφó [yeeφó] ‘crying’
yewó [yewó] ‘coming’
yoóga [yoóga] ‘infant/young’
gaayá [gaayá] ‘market’
beyó [beyó] ‘looking’
oóye [oóye] ‘grass’
- (25) **/l/** alveolar liquid (lateral)
laáφa [laáφa] ‘easy/light’
lágge [lágge] ‘friend’
lánk'k'e [lánk'k'e] ‘side of something/lateral’
k'olé [k'olé] ‘leather’
óla [óla] ‘war’
kállo [kállo] ‘bare’
- (26) **/r/** retroflex
hará [hará] ‘different/another’
kúkkuro [kúkkuro] ‘vibrating/shivering’
múrmuro [múrmuro] ‘reverse/being in opposite position’
horó [horó] ‘gorge’
toorá [toorá] ‘spear’

gurá [gurá] ‘umbilical cord’

Minimal Pairs

(27) [ɸ] [b]

ɸála [ɸála] ‘miracle’

bála [bála] ‘mistake’

(28) [β] [b]

βinnó [βinnó] ‘hookey’

binnó [binnó] ‘let it be warm’

(29) [β] [ɸ]

βóle [βóle] ‘name of game like hockey’

ɸóle [ɸóle] ‘sole’

(30) [t] [d]

túŋa [túŋa] ‘let be great’

dúŋa [dúŋa] ‘piece of old cloth’

tinʔó [tinʔó] ‘stove stone on which kittle or pot stay for cooking’

dinʔó [dinʔó] ‘backside of house’

(31) [d] [dʔ]

dóntstso [dóntstso] ‘cause to harm’

dʔóntstso [dʔóntstso] ‘cause someone to be childless’

(32) [k] [g]

káɸa [káɸa] ‘act of watching/keeping’

gáɸa [gáɸa] ‘hunger’

(33) [k] [kʔ]

kótʃa [kótʃa] ‘man made hole on the tree (to climb)’

kʔótʃa [kʔótʃa] ‘rust’

kára [kára] ‘crop (which is immediately grown in the harvested land)’

kʔára [kʔára] ‘active/sharp’

(34) [m] [n]

gammá [gammá] ‘unconscious mind’

ganná [ganná] ‘shoulder’

(35) [n] [ŋ]

kʔane (Amharic) [kʔane] ‘date’

kʔaŋe [kʔaŋe] ‘reporting (of sad issue)’

(36) [s] [ʃ]

soóge [soóge] ‘salt’

ʃoóge [ʃoóge] ‘piece of food (which is left after dinning)’

(37) [s] [z]

súle [súle] ‘down (ward)’

zúle [zúle] ‘symptom of disease (of stomach)’

súntsu [súntsu] ‘name’

zúntsu [zúntsu] ‘crawling’

(38) [z] [ʒ]

zaáre [zaáre] ‘neck’

ʒaáre [ʒaáre] ‘motive/interest/voracious’

(39) [t] [ts]

- tiítta** [tiítta] ‘center of road or something’
tsiíttsa [tsiíttsa] ‘disease (of cattle)’
 (40) [s] [ts]
 boóssso [boóssso] ‘respecting’
 boótsso [boótsso] ‘causing to be white’
 kaassé [kaassé] ‘playing/game’
 kaatstsé [kaatstsé] ‘testicle’
 (41) [s'] [ts]
 s'úns'o [s'úns'o] ‘absorbing’
 s'úntso [s'úntso] ‘making something to be narrow’
 (42) [ʃ] [tʃ]
 miiǰǰé [miiǰǰé] ‘property/money’
 miitǰǰé [miitǰǰé] ‘laughing’
 (43) [ʃ] [tʃ]
 ǰamó [ǰamó] ‘buying’
 tǰamó [tǰamó] ‘bitter’
 (44) [ts] [tʃ]
 maáttsso [maáttsso] ‘milking’
 maátǰǰo [maátǰǰo] ‘woman/wife’
 áttsi [áttsi] ‘man’
 átǰǰi [átǰǰi] ‘tooth’
 (45) [tʃ] [tʃ]
 tǰaátǰo [tǰaátǰo] ‘harvesting’
 tǰ'aátǰo [tǰ'aátǰo] ‘roasting’
 (46) [s'] [tʃ]
 s'óntsu [s'óntsu] ‘act of throwing (e.g. spear)’
 tǰ'óntǰu [tǰ'óntǰu] ‘munching/eating’
 (47) [ʃ] [ʒ]
 ǰalá [ǰalá] ‘wool (of ‘enset’/false banana)’
 ǰalá [ǰalá] ‘milk (water part)’
 (48) [s] [s']
 súntsu [súntsu] ‘name’
 s'úntsu [s'úntsu] ‘narrow’
 (49) [ʔ] [h]
 ʔála [ʔála] ‘big ‘enset’/false banana’
 hála [hála] ‘mistake’
 (50) [g] [k']
 guúle [guúle] ‘cloud’
 k'uúle [k'uúle] ‘dinning material(of ceramic)’
 (51) [l] [r]
 doló [doló] ‘cassava’
 doró [doró] ‘sheep’
 (52) [w] [y]
 watǰǰé [watǰǰé] ‘guessing or predicting of price (of cattle)’
 yatǰǰé [yatǰǰé] ‘standing in a line side by side (of funeral)’
 sayó [sayó] ‘divorced woman’

sawó [sawó] ‘good/pleasant smell’

2.3 The distribution of consonant phonemes

In this section, distributions of Ganta consonant phonemes such as oral stops, nasal stops, fricatives, affricates, and approximants are presented in the tables (53), (54), (55), (56) and in (57) respectively. Their distribution is observed in word-initial, in word-medial, and in word-final positions. Consonant gemination is also observed in the tables.

(53)

Oral stops

Sound	Word-initial	Word-medial	Word-final	Gemination
/t/	túke [túke] ‘foot/leg’	máta [máta] ‘near’	-	hátte [hátte] ‘now’
/k/	katǵé [katǵé] ‘horn’	okálé [okálé] ‘carrying material’	-	túkke [túkke] ‘coffee’
/b/	baadé [baadé] ‘mouth’	daábura [daábura] ‘weak’	-	wóbbe [wóbbe] ‘not straight’
/d/	darbbé [darbbé] ‘drum’	boodó [boodó] ‘weaver’	-	wóddo [wóddo] ‘false’
/g/	gawó [gawó] ‘stomach’	ogé [ogé] ‘road’	-	wógga [wógga] ‘Sunday’
/β/	βló [βló] ‘sperm’	k’íβo [k’íβo] ‘blinking’	-	harββé [harββé] ‘trap’
/d̪/	d̪átte [d̪átte] ‘back’	moodé [moodé] ‘diarrhea’	-	móddfo [móddfo] ‘fat’
/ʔ/	ʔúmbbe [ʔúmbbe] ‘falling’	háʔo [háʔo] ‘death’	-	-
/k/	k’ulbbá [k’ulbbá] ‘pool’	k’oók’e [k’oók’e] ‘blind’	-	ork’k’á [ork’k’á] ‘mud’

When oral stops occur at the word-initial position, they are followed by short or long vowels. In the word-medial position, they occur before and after vowels. Ganta oral stops do not frequently occur at the word-final position. But, in the interjection construction, some oral stops can occur at the end of the construction. For example, interjection that uses for expressing surprise ends in geminated **tt** at its final position, as in **kíftt!** in Ganta. Except the glottal ʔ, all oral stops are geminated.

(54)

Nasal stops

Sound	Word-initial	Word-medial	Word-final	Gemination
/m/	meennó [meennó] ‘buffalo’	tǵámó [tǵámó] ‘bitter’	-	ʔúmma [ʔúmma] ‘head’
/n/	nárffe (Amharic) [nárffe] ‘needle’	labbána [labbána] ‘exhaustion’	-	ganná [ganná] ‘meninges’
/ŋ/	-	s’óŋe [s’óŋe] ‘throwing spear’	-	ʒaŋgé [ʒaŋgé] ‘branch (of tree)’

The nasal stops **m** and **n** occur at word-initial and word-medial positions. The velar nasal **ŋ** occurs only at the word-medial position but not at the word-initial position.

(55)

Fricatives

Sound	Word-initial	Word-medial	Word-final	Gemination
/ɸ/	ɸoté [ɸoté] 'vagina'	kaɸó [kaɸó] 'bird'	-	-
/s/	súntsu [úntsu] 'name'	kaysó [kaysó] 'thief'	-	k'áysse [k'áysse] 'isolating'
/ʃ/	ʃíʃí [ʃíʃí] 'stool'	góʃo [góʃo] 'tilling'	-	míʃʃí [míʃʃí] 'satisfaction'
/h/	horó [horó] 'gorge'	mihána [mihána] 'weaving instrument'	-	-
/z/	zaɓá [zaɓá] 'stretcher'	boóza [boóza] 'lazy'	-	mózze [mózze] 'sorghum'
/ʒ/	ʒángare [ʒángare] 'ladder'	muúʒo [muúʒo] 'diffusing'	-	gánʒʒe [gánʒʒe] 'stomach'

As can be seen in the above, all fricative phonemes can occur in word-initial, and in word-medial positions, but not in word-final position. Except for the phonemes **h** and **ɸ**, all fricatives also occur in gemination. If the phoneme **ɸ** occurs in gemination, the bilabial **p** is realized, as in **izuppu** 'six' (for more see phonological processes below).

(56)

Affricates

Sound	Word-initial	Word-medial	Word-final	Gemination
/s'/	s'oólintte [s'oólintte] 'star'	mís'e [mís'e] 'observation'	-	ɸíns's'e [ɸíns's'e] 'act of running'
/ts/	tsotsó [tsotsó] 'roach'	súntsu [súntsu] 'name'	-	áttsi [áttsi] 'a man'
/tʃ/	tʃántʃa [tʃántʃa] 'dried leaf'	mitʃó [mitʃó] 'sister'	-	mítʃtʃa [mítʃtʃa] 'sad'
/tʃ'/	tʃ'eemó [tʃ'eemó] 'night'	marátʃ'e [marátʃ'e] 'intestine'	-	bóntʃtʃo [bóntʃtʃo] 'leaf'

Affricates **ts**, **tʃ**, and **tʃ'** are found in word-initial, and in word-medial positions, but not in word-final position. And they also undergo gemination.

(57)

Approximants

Sound	Word-initial	Word-medial	Word-final	Gemination
/w/	wórbba [wórbba] ‘serval (wild cat)’	gawó [gawó] ‘stomach’	-	-
/y/	yewó [yewó] ‘coming’	beyó [beyó] ‘looking’	-	?eeyyá [?eeyyá] ‘foolish’
/l/	laále [laále] ‘thin’	moóle [moóle] ‘straight’	-	woylló [woylló] ‘sexual intercourse’
/r/	-	garé [garé] ‘cheap’	-	-

y and **l** occur at word-initial and word-medial positions. **w** appears at word-initial and word-medial positions. It does not occur in gemination. **r** does neither occur at word-initial position nor in gemination.

As it has been observed in Ganta word formation, most word structures do not end in consonants. Rather, they end in vowels. But, some ideophone constructions may end in **l** and **r**. For example, ideophones **wúrr** ‘used to call cat’ and **?ilíl** ‘act of producing sound (of women), particularly, in the funeral ceremony when men performs cultural mourning’ are ended in **l** and **r** in Ganta.

Consonant gemination

Ganta morphophonemic gemination occurs most frequently in post sonorant environment. As can be seen in the above tables, except for voiced velar nasal **ŋ** and bilabial glide **w**, consonant gemination occurs after **m**, **n**, **l**, **r**, and **y**. After short and long vowels, consonant gemination is also evident, as presented in the table (58) below.

(58)

Short vowels	Gemination of consonants	Long vowels	Gemination of consonants
/i/	míttsi [míttsi] ‘tree/wood’	/ii/	miitftfé [miitftfé] ‘laughing’
/e/	gemmbé [gemmbé] ‘cheating in work’	/ee/	keetstsé [keetstsé] ‘house’
/a/	mátftfo [mátftfo] ‘sexual intercourse’	/aa/	maátftfo [maátftfo] ‘a woman/wife’
/u/	túkke [túkke] ‘coffee’	/uu/	suúttsu [suúttsu] ‘blood’
/o/	hollá [hollá] ‘hole’	/oo/	doóttsu [doóttsu] ‘neighbor’

Contrastive consonant length

Prolonging a consonant sound in Ganta will produce a distinctive word. Therefore, consonant length is phonemic in Ganta. See contrastive length of consonants in (59).

- (59) a. túke [túke] ‘foot/leg’
túkke [túkke] ‘coffee’
b. kolé [kolé] ‘leather’
kollé [kollé] ‘scarf like cloth which is made by weavers’
c. tamá [tamá] ‘fire’
tammá [tammá] ‘ten times’

Consonant gemination occurs in verb derivational processes when morphological affixes those begin initially with vowel segments come to suffix verb roots in Ganta. For example, in the converb, middle, infinitive and pluperfect formations, the final consonant segment of verb roots respectively occur in gemination in (60a-d).

- (60) a. s'eél- 'look/see' s'eéll-í look/see-CONV [s'eéllí] '...having looked/seen, ...'
- b. út- 'sit' útt-é dere [útté dere] sit-MID people '... sat down people...'
- c. gák- 'arrive' Zays-á gákk-oda [Zaysá gákkoda] Zayse-ADESS arrive-INFI 'Up to Zayse...'
- d. maák'- 'be' maák'k'-u [maák'k'u] be-PLPER '...having been, ...'

2.4 Vowel phonemes

In the following chart, Ganta short and long vowel phonemes are presented.

(61)

	Short vowels				Long vowels		
	Front	Central	Back		Front	Central	Back
High	i		u	High	ii		uu
Mid	e		o	Mid	ee		oo
Low		a		Low		aa	

2.4.1 Distribution of Ganta short and long vowel phonemes

In the first section, distributions of short and long vowels are respectively presented. Following distribution of vowels, contrastive vowel length is presented before description of short and long vowel minimal pairs.

Distribution of short vowels

Ganta vowel phonemes are observed in a word-initial, in a word-medial, and in a word-final positions. Distribution of Ganta short vowels are presented in the following part.

(62) /i/ high front unrounded vowel

word-initial

ibó [ibó] 'door'

ilé [ilé] 'sound instrument (of horn)'

word-medial

mítʃtʃa [mítʃtʃa] 'sad'

liíko [liíko] 'soft'

miíffe [miíffe] ‘material/property/money’

word-final

míssi [míssi] ‘cow’

átstsi [átstsi] ‘man’

átʃtʃi [átʃtʃi] ‘tooth’

(63) /e/ mid front unrounded vowel

word-initial

éra [éra] ‘wise’

ési [ési] ‘he’

word-medial

k'esé [k'esé] ‘elbow’

béyo [béyo] ‘seeing’

k'eerá [k'eerá] ‘Saturday’

word-final

kúnʔe [kúnʔe] ‘narrow’

ʃóʔe [ʃóʔe] ‘morninig’

hátte [hátte] ‘now’

(64) /a/ low central unrounded vowel

word-initial

aʔá [aʔá] ‘above/sky’

áno [áno] ‘heavy’

adõ [adõ] ‘big’

word-medial

báytstsi [báytstsi] ‘splitting’

dátte [dátte] ‘back’

láytstsi [láytstsi] ‘year’

word-final

gáʔa [gáʔa] ‘hunger’

záʔa [záʔa] ‘crack’

ʔúmma [ʔúmma] ‘head’

wogggá [wogggá] ‘Sunday’

(65) /u/ high back rounded vowel

word-initial

úʃʃu [úʃʃu] ‘drinking’

úte [úte] ‘sitting’

word-medial

súttsu [súttsu] ‘blood’

gúta [gúta] ‘tomorrow’

word-final

gámmʔu [gámmʔu] ‘later’

gúyttsu [gúyttsu] ‘bitting’

láppu [láppu] ‘seven’

izúppu [izúppu] ‘six’

(66) /o/ mid back rounded vowel

word-initial

óta [óta] ‘pot’

óla	[óla]	‘war’
órgge	[órgge]	‘uncastrated sheep or goat’
word-medial		
bóne	[bóne]	‘winter’
bónk'k'a	[bónk'k'a]	‘kidnapping/looting’
word-final		
babbó	[babbó]	‘frightful’
wóylo	[wóylo]	‘sexual intercourse’
gawó	[gawó]	‘stomach’

Distribution of long vowels

Ganta frequently exhibits vowel length in a word-initial and in a word-medial positions. In a word-final position, vowel length is not frequently observed. In some speech contexts, for example, for assertion and in a response for call, mid-front vowel length is observed, as in **ʔeeʔéé/ʔéé** ‘sure’, and as in **yéé** ‘yes’ respectively. A low-back vowel length is also expressed in assertive speech situations, as in **báá** ‘is that/sure/really’. The other vowels can be prolonged in attentive speech situations when they occur at the end of word final positions in Ganta. The same situation can also be seen in interjection and in ideophone constructions (see chapter 7). Look at the other descriptions below.

(67) /ii/

word-initial

íiso	[íiso]	‘her house’
íita	[íita]	‘bad’

word-medial

miisi	[miisi]	‘cow’
miitʃfě	[miitʃfě]	‘laughing’
miifje	[miifje]	‘material/money’
giira	[giira]	‘tax’

(68) /ee/

word-initial

éeso	[éeso]	‘his house’
eelé	[eelé]	‘collected water/pool’

word-medial

meerá	[meerá]	‘hough’
geéma	[geéma]	‘hidden (for place)’
ʔeeyyá	[ʔeeyyá]	‘foolish’
yeeφó	[yeeφó]	‘crying’
keetstsé	[keetstsé]	‘house’
deemó	[deemó]	‘eyelash’
tʃeemó	[tʃeemó]	‘night’
teéra	[teéra]	‘rape’
deéra	[deéra]	‘edge (of land)’

(69) /aa/

word-initial

áala	[áala]	‘what’
áamma	[áamma]	‘what’

word-medial

maátʃtʃo	[maátʃtʃo]	‘woman/wife’
gaayá	[gaayá]	‘market’
laále	[laále]	‘thin’
gaáte	[gaáte]	‘servant’
gaále	[gaále]	‘camel’
kaatstsé	[kaatstsé]	‘testicle’
gaára	[gaára]	‘fate’

(70) /uu/

word-initial

úúso	[úúso]	‘their house’
------	--------	---------------

word-medial

suúttsu	[suúttsu]	‘blood’
duúlata	[duúlata]	‘discussion’
guúle	[guúle]	‘cloud’
buúra	[buúra]	‘common cold’

(71) /oo/

word-initial

oótso	[oótso]	‘work/job’
oóde	[oóde]	‘who’
oóratstsi	[oóratstsi]	‘new’
oóʃʃu	[oóʃʃu]	‘quarrel/dispute’

word-medial

ʃoóʃu	[ʃoóʃu]	‘snake’
boóttsu	[boóttsu]	‘white’
boóza	[boóza]	‘lazy’
boobbé	[boobbé]	‘potato’
boóra	[boóra]	‘bread (traditional)’
goóba	[goóba]	‘intelligent’
goodó	[goodó]	‘chasing’
moóle	[moóle]	‘straight’

Contrastive vowel length

In Ganta, like consonants, vowel length is unpredictable distinctive feature. Each vowel phoneme exhibits contrastive vowel length so as to express meaning difference in the speech context. Look at it in the following descriptions.

(72) /i/ contrasts with /ii/

íso	[íso]	‘she’
ííso	[ííso]	‘her house/home’

(73) /e/ contrasts with /ee/

demó	[demó]	‘finding’
deemó	[deemó]	‘eyelash’

(74) /a/ contrasts with /aa/

máttsi	[máttsi]	‘honey bee’
maáttsi	[maáttsi]	‘milk’

(75) /u/ contrasts with /uu/

búlo [búlo] ‘type of vegetation’
 buúlo [buúlo] ‘digging of soil (it is act of a bull by its horn or forehead when it wants to defend another bull)’

- (76) /o/ contrasts with /oo/
 dódo [dódo] ‘able to eat or speak (for patient)’
 doódo [doódo] ‘being neighborhood’

Minimal pairs

Ganta vowel phonemes express minimal pairs with short and long vowels.

Minimal pair in short vowels

- (77) [i] [e]
 íra [íra] ‘rain’
 éra [éra] ‘wise’
 (78) [e] [a]
 éra [éra] ‘wise’
 ára [ára] ‘butter’
 (79) [i] [a]
 íra [íra] ‘rain’
 ára [ára] ‘butter’
 (80) [a] [u]
 gará [gará] ‘tree species’
 gurá [gurá] ‘placenta’
 (81) [o] [u]
 góde [góde] ‘toward there (horizontal)’
 gúde [gúde] ‘miracle’

Minimal pairs in long vowel

- (82) [ii] [ee]
 tiíra [tiíra] ‘become dark’
 teéra [teéra] ‘rape’
 (83) [ee] [aa]
 keetstsé [keetstsé] ‘house’
 kaatstsé [kaatstsé] ‘testicle’
 (84) [ii] [aa]
 giíra [giíra] ‘tax’
 gaára [gaára] ‘fate’
 (85) [uu] [aa]
 guúle [guúle] ‘cloud’
 gaále [gaále] ‘camel’
 (86) [uu] [oo]
 múuso [múuso] ‘cause to eat’
 móoso [móoso] ‘in need of something (nostalgia)’

2.5 Phonotactics

In this section, Ganta sequential restrictions such as consonant-consonant and vowel-consonant combinations are presented.

2.5.1 Consonant-consonant sequence and co-occurrence restriction

The phonemes **ŋ** and **r** do not occur at word-initial position in Ganta. But they can occur in word-medial positions. In this section, consonant-consonant sequences including stop-consonant, nasal-consonant, glide-consonant, liquid-consonant, fricative-stop, and affricate-consonant sequence occurrences are described.

2.5.1.1 Stop-consonant sequence

Consonant-consonant sequence at the beginning position of word does not frequently occur in most Omotic languages. However, the case is expressed in Ganta when some word structures form suspected sequences of stop-liquid patterns at their initial position. For such reason, not all, but some oral stops **t**, **b**, **g**, **k** and **ɸ** occur in pre-consonantal positions, at the beginning of word in Ganta. Some patterns are observed before liquids here. For other sequences, still it needs further investigation. For time being, look at the following in (87).

- (87) a. **tlíma** ‘last stage of land ploughing strategy before cultivation’ -before liquid
brá ‘infront/before/previously’ -before liquid
gró ‘mouse’ -before liquid
k’lítʃa ‘mocking/teasing/jocking’ -before liquid
k’ró ‘unpleasant taste of something, residue of drinks’ -before liquid
ɸló ‘sperm’ -before liquid
ɸriɸítsti ‘butterfly’ -before liquid

On the other hand, the other consonants, except for liquids, never occur in sequence with oral stops like stop-nasal, stop-fricative, stop-affricate and stop-glide combination. In addition to such sequences, stop-liquid sequences never work for the other oral stops like **k**, **d**, **ɗ** and **ʔ** in Ganta. The reason is that they rarely occur in pre-consonantal positions in word structures. On the contrary, all oral stops can occur in post-consonantal positions, particularly after nasals, liquids, and glides in word-medial positions, as in (88).

- (88) a. **tuntá** ‘soft part of ‘enset’’ -after nasal
kuŋké ‘nose’ -after nasal
boŋk’k’á ‘kidnapping’ -after nasal
gondálle ‘shield’ -after nasal
 b. **árbbá** ‘Friday’ -after liquid
gálʔa ‘calf’ -after liquid
órgge ‘uncastrated sheep or goat’ -after liquid
k’irɸik’irɸe ‘ankle’ -after liquid
 c. **mayɗé** ‘rope type’ -after glide
káwʔe ‘food’ -after glide

2.5.1.2 Nasal-consonant sequence

In most cases, nasals occur pre-consonantal in word-medial positions particularly before oral stops, fricatives and affricates, as in (89). Bilabial nasal **m** and alveolar nasal **n** can interchangeably occur before bilabial sounds **b** or **ɸ**, as in (89a). But, the bilabial nasal rarely occurs before most consonants, except for bilabial sounds **b**, **ɸ** and glottal stop **ʔ** in Ganta. Like the bilabial nasal, the velar nasal **ŋ** occurs before certain consonants. Its occurrence is restricted before the velar consonants in Ganta, as in (89c). But from the two nasals **m** and **ŋ**, the alveolar nasal **n** can frequently occur before distinct consonants in Ganta. Look at examples in (89) below.

- (89)
- | | | | |
|----|----------------------------------|--------------------------------|--------------------------------|
| a. | dé m bba/dén b ba | ‘field’ | -before stop |
| | gó m ɸa/gón b ɸa | ‘body structure’ | -before stop |
| b. | ut u mmʔá | ‘food type (of ‘enset’) | -before stop |
| c. | dén ŋ kere | ‘name of river’ | -before stop |
| | kón ŋ k'a | ‘not straight’ | -before stop |
| d. | gánde | ‘axe’ | -before stop |
| | gínddá | ‘latter’ | -before stop |
| | tuntá | ‘internal soft part of ‘enset’ | -before stop |
| e. | dénso | ‘raising/elevating’ | -before fricative |
| | wóns's'aɸa | ‘penis’ | -before fricative |
| | íns'e | ‘yelping’ | -before fricative |
| f. | ín ŋ fo/ínt ŋ tʃfo | ‘winning’ | -before fricative or affricate |
| | dón z za/dón z dza | ‘adult’ | -before fricative or affricate |
| g. | bá l ínt ŋ tʃfo | ‘testicle’ | -before affricate |
| | bón ŋ tʃfo | ‘respecting’ | -before affricate |
| | bón ŋ tʃtʃfo | ‘leaf’ | -before affricate |

ɸ, **d'** and **h** are not attested in post-nasal positions in Ganta.

2.5.1.3 Consonant-nasal sequence

In contrast, nasals can occur word-medial in post-liquid positions, as in (90).

- (90)
- | | | | |
|----|----------------------------|-----------------|---------------|
| a. | gár m ma | ‘lion’ | -after liquid |
| | kór n ise (Amharic) | ‘celling’ | -after liquid |
| | gal m ma | ‘tree species’ | -after liquid |
| | kól m e | ‘meninges bone’ | -after liquid |

2.5.1.4 Glide-consonant sequence

In Ganta, like nasals, glides occur word-medial in pre-consonantal position. Stops, nasals, fricatives, affricates, and liquids can occur in post-glide position, as in (91). But consonant-glide sequences are rarely observed in Ganta.

- (91)
- | | | | |
|----|-----------------|----------------|-------------------|
| a. | béy ta | ‘mark/sign’ | -before oral stop |
| | máy do | ‘an ox’ | -before oral stop |
| | káw ʔe | ‘food’ | -before oral stop |
| | áw ʔe | ‘yelping’ | -before oral stop |
| b. | báw ndde | ‘ten birr’ | -before nasal |
| | máy ne | ‘boundary’ | -before nasal |
| | káy mme | ‘searching’ | -before nasal |
| c. | káy so | ‘act of theft’ | -before fricative |

móyso	‘accompanying someone’	-before fricative
d. gúyttsu	‘hitting’	-before affricate
e. gayllé	‘rib bone’	-before liquid
áylle	‘slave’	-before liquid

2.5.1.5 Liquid-consonant sequence

In this sequence, liquids occur before other consonants in word-medial position. When segments occur after one another, the sonority sequence is kept constant. Segments have an increasing sonority counting from nucleus towards the boundary of the syllable.

- (92) a. k'írɸik'írɸe ‘ankle’ -before oral stop
kárdik'a ‘complex’ -before oral stop
arɖdá ‘life/existence’ -before oral stop
árɸba ‘Friday’ -before oral stop
wórbba ‘tiger’ -before oral stop
wolk'k'á ‘power’ -before oral stop
balggó ‘summer’ -before oral stop
gálʔa ‘calf’ -before oral stop
dúrk'a ‘big stick (used for security in the night)’ -before oral stop
galmá ‘tree species’ -before nasal stop
b. kóls'e ‘protruding’ -before fricative
kólzza ‘unprincipled’ -before fricative
k'ílɸe ‘preparation of garden for cultivation’ -before fricative
c. k'irtʃo ‘thin stick (used for punishment)’ -before affricate

The liquids are attested before implosive and voiced oral stops, nasal stop, fricatives, and affricates. The sequence of liquid-liquid (r-l or l-r) is not attested in Ganta. But, the sequence of other consonant-liquid is observed in a word-medial position as in (87). There is no way for liquid-glide sequences in Ganta.

Alveolar implosive **ɖ** rarely occurs in pre and post-consonantal positions. However, it occurs in post-alveolar glide **y** in non-sense proper naming strategies in Ganta, as in **Toyɖé**. It frequently occurs in pre and post-vowel position (See vowel sequences below).

Bilabial implosive **ɸ** may not occur after stops, nasals, fricatives, affricates, and glides in Ganta. It occurs after retroflex **r**, as in **k'írɸik'írɸe** ‘ankle’.

2.5.1.6 Fricative-stop sequence

Fricative-stop sequence occurs in some of mono-morphemic words, as in (93).

- (93) a. miskáte ‘genital organ’
kifté ‘dwarf’
bíʃte ‘urinating’
túʃte ‘grass species’
gozdá ‘traditionally made ring’
déʒgere ‘being cool/calm’

The reverse sequence, stop-fricative, is also possible in a word-medial position in Ganta, as in (94).

- (94) a. ménso ‘section of ploughed land’

kúnsa ‘pregnant (of cow, sheep, goat)’
 mánsa ‘male (of dog, cat, donkey, mule, horse)’

Fricative-glide sequence is possible at word-initial position in some words before liquid as in **ʒló** ‘**anger**’.

Except for nasal stop-fricative sequence, as in (94a), the other oral stop-fricative sequence is not possible in Ganta word structure as it has been expressed in (87). In addition, fricative-fricative sequence is not also permitted in Ganta word structures.

2.5.1.7 Consonant-affricate sequence

Consonant-affricate sequence is possible at word-medial position. In most cases, alveolar nasal **n** and approximants (except bilabial **w**) occur in pre-affricate positions. The other consonants may not occur before affricates. On the contrary, affricate-consonant sequence is rare in Ganta. However, in some word structures, affricate-liquid and affricate-stop sequences are possible at word-initial positions as in **s’lo** ‘**bird type**’ and **s’ḥá** ‘**muscle of leg**’. In the name giving strategy, some non-sense words can also be produced by affricate-liquid sequence in Ganta. For example, in the naming strategy of a **dog** as in **tʃló**. In (95), we can see consonant-affricate sequences in word-medial positions.

- (95) a. gáltʃtʃi ‘monkey’ -after liquid
 dáltʃtʃó ‘grass species’ -after liquid
 kárttsi ‘black’ -after liquid
 mórttsímóllo ‘chameleon’ -after liquid
 martʃtʃé ‘debating’ -after liquid
 b. gúyttsu ‘hitting’ -after glide
 báyttsi ‘split of wood’ -after glide
 méytʃtʃi ‘biting’ -after glide
 c. dánťtʃó ‘belt like cloth (of woman)’ -after nasal
 ďánttsi ‘breast’ -after nasal
 ménttsso ‘breaking’ -after nasal
 amánttsso (Amharic) ‘causing to believe’ -after nasal
 ťťntťá ‘wise/active/skillful’ -after nasal

In the above examples (95a-c), in addition to affricate-consonant sequence, we can also see possible occurrences of consonants before geminated consonants in Ganta.

2.5.1.8 Consonant-consonant-consonant sequence

Three consonant clusters never occur in Ganta word structures as **yʃk**, **ytʃť** or **ntťť**. If three of them may come together as result of morphophonemic process, either the initial or the medial segment will delete itself because of phonotactic reasons in Ganta (see verb derivation in section (5.2)).

2.5.1.9 Consonant-high tone long vowel-consonant sequence

Sequence of bilabial nasal-high tone long vowel-glottal fricative, as in **maáh-** rarely occurs in Ganta word structures. Since, between **m** and **h**, Ganta permits short high tone vowel, as in **máh-** ‘**cause to turn**’. Similarly, between glottal stop and geminated fricative consonants, as in **ʔéss-** long high tone vowel is also restricted to occur in Ganta word structure. For such case, the normal word structure allows sequence of **ʔéss-** ‘**cause to stand**’.

2.5.2 Restriction on vowel-consonant sequence

In this section, vowel-consonant sequence restriction is discussed with some consonant segments.

2.5.2.1 Vowel initial occurrence restriction with *ʔ*

iʔ, **aʔ**, **eʔ**, and **oʔ** sequences are restricted do not occur at word-initial position. The same principle is also observed in Sheko (Hellenthal 2010: 68). In word-medial and word-final positions, the sequence is allowed. The following sequences are possible, as in (96).

- (96) a. ʔiiʔo ‘shouting’
maáʔí ‘after wearing’
maaʔó ‘cloth’
ganʔá ‘insulting’
meʔó ‘let it be broken’
uúʔo ‘crowing (of cock)’
múʔo ‘germinating’
k’oóʔe ‘feeling or sign of disease (of stomach)’

2.5.2.2 Vowel initial occurrence restriction with *d*

High front **i** and mid-front **e** with voiced implosive **ɗ** (**idɗ** and **edɗ**) is not permitted at the beginning of a word. But the combination is possible in word-medial and word-final positions, as in (97)

- (97) a. míde ‘twisting’
méɗo ‘creature’
medɗí ‘after creating’
moodě ‘diarrhea’

With other vowels it is possible, as in (98).

- (98) a. adó ‘big’
úɗɗá ‘very narrow in physical surface’
óɗɗoro ‘lazy’

2.5.2.3 Vowel initial occurrence restriction with *β*

iβ and **eβ** sequences are rare in Ganta at word-initial positions. But the reverse sequence is possible, as in **βédɗa** ‘grass species’. With the other vowels, the sequence is permitted in word-initial position, as in (99)

- (99) a. áββa ‘non-sense’
úββa ‘narrow (of house or material)’
oββá ‘place name where big stones are naturally collected’

2.5.2.4 Vowel initial occurrence restriction with sibilants

In vowel-affricate sibilant combinations, sequences with **ts**, **tʃ** and **tʃʼ** are possible. Look at examples in (100a-c).

- (100) a. otstsé ‘unfarmed land/virgin’
etstseré ‘lizard’
itsó ‘plea’
áttsi ‘man’

- b. ótʃtʃu ‘tree species’
 ʔetʃé ‘rabbit’
 itʃtʃé ‘hitting’
 atʃtʃé ‘tooth’
 utʃtʃé ‘clearing dung’
 c. itʃtʃĩ ‘after hitting’
 utʃtʃĩ ‘after cleaning’
 etʃére ‘rat’
 átʃe ‘sand’
 ótʃtʃa ‘mouse’

Vowel-affricate sibilant combinations in word-initial position are restricted to **idz**, **adz**, and **udz**. The sound **dz** is suspected as allophone of phoneme **z** (see for detail phonological rule below). Rare combinations can be observed in place and person naming strategies with **idz** and **udz**, as in **ídzzuntsa** ‘place name’ and **údzdzo** ‘person name’. See examples for possible combinations in (101).

- (101) a. edzzó ‘circle type playing material (of children)’
 odzzodzó ‘horizon of mountain’

The vice versa sequence is possible in a word-final positions for **dzi** and **dza** but not for **dzu** sequence in (102).

- (102) a. háyzzdzi ‘three’
 dóndzzda ‘adult’

Vowel-fricative sibilant sequence is possible for all fricatives, except for voiced alveolar ejective **s** and for voiced post-alveolar **ʒ**. The sequence is restricted to **is**, **us**, **aʒ** and **uʒ**. With other vowels the sequence is possible as in (103a) and (103b).

- (103) a. as'sá ‘energy/power’
 es'á (Amharic) ‘chance’
 ós's'oda ‘to punish’
 b. izé ‘making fine in constructing or building something, e.g. house’
 eéʒʒo ‘let be resembling in behavior’
 óʒge ‘huge in appearance’

The vice versa sequence is possible. For example, **s'i** and **s'u** can be realized as in **s'ĩk'k'o** ‘bad smell’ and in **suússu** ‘burning’. Similar manner is also restricted to vowel-fricative **aʒ** and **uʒ** sequences. Non-sense naming can be given, as in **ázi** ‘tribe name’ and **uʒgé** ‘proper name’. The vice versa sequences are permitted in (104).

- (104) a. ʒáŋgare ‘ladder’
 ʒuuʃʃé ‘vagabond’
 kuúʒa ‘shadow’

2.5.2.5 Vowel-nasal sequence: vowel initial occurrence with velar nasal ŋ

Vowel-nasal combination is restricted for **ĩŋ** and **eŋ** sequences in mono-morphemic word. But the sequence is permitted in imperative constructions when a word segment **m** assimilates to **ŋ** before the imperative marker, as in (105).

- (105) a. imó ‘giving’ **ĩŋ**-áy [ĩŋáyɪ]
 give-IMPER:2SG
 ‘give!’
 b. ʔeemó ‘taking’ ʔeen-áy [ʔeenáyɪ]
 take-IMPER:2SG

‘take!’

oŋ is sequenced in rare case in Amharic word **óŋotʃtʃa** ‘little ‘ijera’’, as in [óŋotʃtʃa]

2.5.2.6 Vowel-glide sequence restriction

iw, **ew**, **uw**, **ow**, **iy**, **ey**, and **uy** sequence is not permitted in word-initial position in Ganta speech context. But some sequences are possible with other vowels as in (106) below.

- (106) a. **awá** ‘sun’
 áytsi ‘catching’
 oydé ‘bench’

In vowel-glide sequence, **ew**, **ew**, **ey**, and **uy** are observed in a word-medial position but not in a word-initial position, as in (107)

- (107) a. **ʔewó** ‘bringing’
 méyʃtʃi ‘biting’
 néy ‘you’
 gúytsu ‘hitting’

Normally, Ganta employs vowel-glide sequence rather than vowel-vowel sequences so as to form diphthong like constructions, as in (108).

- (108) a. **miye** ‘eating’
 síye ‘hearing’
 méyʃtʃi ‘biting’
 báytsi ‘split of wood or land’
 báyso ‘selling’
 káyso ‘stealing/thefting’
 waáye ‘challenge/difficult’
 gúytsu ‘hitting’
 gawó ‘stomach’
 káwʔe ‘food’

In contrast, in a glide-vowel sequence, a high front vowel **i** and mid front vowel **e** are not directly followed by bilabial glide **w** in a word-initial position as **wi** and **we**. But, **i** occurs after **w** as result of a morphophonological process in converb construction, as in (109).

- (109) a. **gawó** ‘stomach’ **gaw-í** [gawí]
 stomach-CONV
 ‘having been pregnant’
 b. **awá** ‘sun’ **aw-í** [awí]
 sun-CONV
 ‘having been sunnier’

Mid-front vowel **e** exhibits pre-bilabial glide **w** when both of them occur in word-medial position, as in **yewó** ‘coming’. But, in word-final position, **e** occurs after another consonant segment not directly after **w**. The glottal **ʔ** occurs between **e** and **w** so as to preserve the language structure of Ganta, as in **káwʔe** ‘food’ and **ʔáwʔe** ‘yelping’. But, long vowels like **aa**, **ii**, **oo** and **uu** rarely occur before **w** in word-medial position in Ganta.

The other vowels **a(a)**, **o**, and **u** are immediately occurred after **w** in mono-morphemic words. Look at the following examples in (110).

- (110) a. **waáye** ‘challenge/difficult’
waayé ‘ear’
wánna (Amharic) ‘capital (of money)’
 b. **wóntta** ‘date/day’
wórbba ‘serval’
wóga ‘tradition/culture’
wotstsé ‘running’
wóbbe ‘not straight’
 c. **wúrdda** ‘case/reason’
wurtʃtʃé ‘bamboo branch’
wudúra ‘daughter’
wútstse ‘bringing down’
wúrkka ‘dispute’

As it has been observed, a high front vowel **i** is restricted to occur before post-alveolar glide **y** in word-initial position. But in mono-morphemic words it comes before **y** in word-medial position, as in **m-íy-e** ‘**eating**’. In the morphophonemic process **i** also occurs after **y**, as in (111).

- (111) a. **ís-i** hám-a-kk-oyi-de
 she-NOM go-IND-FOC-SUBM-PERF
 ‘She went.’

In word-initial position, **e(e)**, **a**, **o(o)** and **u(u)** are frequently preceded by **y**. Look at the data below.

- (112) a. **yeeǾó** ‘crying’
yéttsi ‘song’
yegála ‘delivering cow’
yewó ‘coming’
yéda ‘free’
 b. **yántʃtʃo** ‘ostrich’
yáʃʃi ‘shy’
 c. **yoóga** ‘infant/young’
 d. **yuúʃʃe** ‘wondering’

Note: in a word **yuúʃʃe** ‘**vagabond**’ the phoneme initial segment **y** can be interchangeably used in Ganta. **y** can replace **ʒ** in dialectical variation, however, pronounced strangely.

2.5.2.7 Long high tone vowel-glide sequence

Long a high tone vowel sequence before bilabial glide, as in **aáw** is not permitted in Ganta word structure. But, the short high tone vowel sequence is possible before the glide as **áw**.

2.5.2.8 Vowel-liquid sequence restriction

Like some other consonants, combination of lateral **l** with vowels or vice versa is possible in Ganta. Compare the examples in (113a) and (113b) below.

- (113) a. **liiǾó** ‘head’
léǾa ‘gap/pause’

	láale	‘thin’
	lúkko	‘hen’
	looddó	‘type of disease (of pancreas)’
b.	ilé	‘sound instrument (of horn)’
	allá	‘on the ground’
	eeló	‘interest’
	ulé	‘tree species’
	ulúka	‘type of food (of maize)’
	ólo	‘dropping’
	óla	‘war’

Combination of retroflex **r** with vowels or vowel after **r** is not allowed in a word-initial position in Ganta because **r** does not appear in a word-initial position. However, vowel with **r** or sequence of **r** after any vowel is possible, as in (114).

(114)	a.	íra	‘rain’
		éra	‘wise’
		árbba	‘Friday’
		urk'k'á	‘mud’
		órdde	‘fat’
		órgge	‘uncastrated sheep or goat’

2.5.2.9 Long high tone vowel-consonant-consonant sequence

Long high tone vowel never occurs before two distinct consonant sounds in Ganta as **aáys** or **aárts**. To occur with different consonant sounds, the long high tone vowel reduces itself into its corresponding short high tone vowel as **áys** or **árts**, particularly, when word structures undergo morphophonemic process.

2.6 Word syllable structure

In this section, syllable structures of nouns are discussed. Verb syllable structures are presented under verb morphology (see chapter five).

(115)	a.	V.CV	a.ɸá	‘sky’
		VC.CV	órde	‘fat’
		VC.CV.CV	árgube	‘tobacco smoking material (small one)’
(116)	b.	CV.CV	balé	‘thresholds’
			hazó	‘bird species’
		CVV.CV	kaáti	‘king’
		CVC.CV	goyná	‘tail’
			kónk'a	‘not straight/corrugated’
		CV.CV.CV	higíʃa	‘evil spirit’
			bagáde	‘lake’
			háʔuzo	‘bird species’
			miʃíro	‘prince’
		CVC.CV.CV	gazgázo	‘ant species’
			górduma	‘small fox’
			górmote	‘evil eye’
			záyzare	‘sieve’

CVC.CVC.CV k'óltʃante 'belching'
 CVV.CVC.CV s'oolinte 'star'
 CV.CVC.CV bobólʔa 'tree species'
 CVC.CV.CVC.CV k'írɓik'írɓe 'ankle'

Ganta nouns have two or three syllables. Some of them have four syllables. Numbers, quantifiers, and adverbs have two or three syllables. Morphemes that are used for derivational or inflectional processes contain one or two syllable structures. Compounds can have many syllables, as in (117)

- (117)
- | | | | |
|----|------------------|----------------|-----------------------------------|
| a. | CVC.CV.CVV.CV | wólʔa-ʃooʃu | ‘snake (green in color)’ |
| | | wólʔa | ‘disease of ‘enset’/false banana’ |
| | | ʃooʃu | ‘snake’ |
| | CV.CV.CV.VC.CV | ziʔó-ʃaatʃtʃa | ‘vegetation species’ |
| | | ziʔó | ‘orphan’ |
| | | ʃaatʃtʃǎ | ‘let it be long live’ |
| | CVC.CV.CVV.CV | máydo-siide | ‘mushroom species’ |
| | | máydo | ‘an ox’ |
| | | siide (Gamo) | ‘nose’ |
| | CVC.CCV.CV.VC.CV | tólkko-ʔuuttsu | ‘vegetation species’ |
| | | tólkko | ‘hyena’ |
| | | ʔuuttsu | “enset”/false banana’ |

Pronouns have one vowel or consonant with vowel; mostly it consists of one syllable in Ganta (see pronouns in chapter 2).

Word length

In Ganta, some words consist of polysyllabic as in (118)

- (118) a. CV.CV.CVC.CV sí's'anátstsi 'larynx'
CV.CV.CVC.CV fóru'fóddā 'unwanted grass (weed)'

2.7 Phonological processes

In this section, common phonological processes such as change of /ɸ/ to [f] or [p], affricate realization of the fricative /z/, affricate realization of the fricative /ʒ/, homorganic nasal assimilation, fortition (process of sound strengthening), lenition (weakening of overall sounds), affricate-affricate merging, assimilation of implosive /ɖ/ to liquid and vowel reduction, replacement of stop to glide and vowel reduction, sibilant harmony, assimilation of bilabial fricative to affricate, change of /i/ to /y/ and /w/ to /y/ are described.

2.7.1 Change of /ϕ/ to [f] or [p]

As it has been stated under section 2, the phoneme Φ occurs at word-initial, or word-medial positions. But, in some constructions, the phoneme is realized as [f] and [p]. First, let us see the occurrence of / Φ / in (119), and for [f] and [p] constructions, look at examples (120) and (121) respectively.

- | In word-initial | In word-medial |
|------------------------------|-----------------------------|
| (119) a. Φ atʃʃá 'wide' | b. ka Φ ó 'bird' |
| Φ ogólo 'sweat' | ga Φ é 'straw of crop' |

Φoté	‘vagina’	gáΦa	‘hunger’
Φólo	‘achievement’	wonsáΦa	‘penis’
Φúnssa	‘rough flour for barely (porridge)’	s'Φá	‘muscle of leg’
Φúltto	‘stream of water’		
ΦriΦíttsi	‘butterfly’		

In loan word, or in word-medial position, /Φ/ will be voiceless interdental fricative [f] when it follows liquids (**l** or **r**), as in (120). The rule will have the form: /Φ/→[f]/liquids—#.

- (120) a. gorfina ‘lung’
narffé (Amharic) ‘needle’
kúlfe (Amharic) ‘key’

The allophone **p** is realized as in geminated form at word-medial position after bilabial or alveolar nasal consonants, or after a high back or a low back long vowel, as in (121).

- (121) a. Jimppulá ‘omasum’
Jemppó/Jenppó ‘life’
gómppa/gónppa ‘structure of body’
sómppé ‘torch/light of fire’
izúppu ‘six’
laáppu ‘seven’

The allophone **p** doesn’t contrast with the sounds such as **Φ** or **f** and form near minimal pairs. When one pronounce **Φála** ‘miracle’ as [Φála], [pála], or [fála], she or he is uttering the same word, however differently pronounced. As can be seen, phoneme **Φ** will be the underlying form of the sound in Ganta because it is distributed or articulated in the largest environments than that of **p** or **f**. In the previous study (Selamawit 2004), the sound **p** was recognized as phoneme. But, in this study the fact shows that **p** or **f** is allophone of **Φ** in Ganta. The reason is that they are not independent phonemes and do not belong to other phonemes. Therefore, allophones [Φ], [p] and [f] are the realizations of the same phoneme /Φ/ in Ganta or they are three actualizations of the same phoneme.

2.7.2 Affricate realization of the fricative /z/

The phoneme **z** occurs at word-initial and word-medial positions. But in some cases, it occurs as **dz** at word-medial position illustrated in (123) and (124). First, let us see /z/ distributions in (122a) and (122b).

- (122) a. zoʔó [zoʔó] ‘red’
zaáre [zaáre] ‘neck’
zógga [zógga] ‘bridge’
zallá [zallá] ‘secret room, which made from bamboo tree’
zébba [zébba] ‘short wooden handle of plough’
zággo [zággo] ‘making partition’
záʔa [záʔa] ‘crack’
zaddá [zaddá] ‘rib bone’
zolddó [zolddó] ‘spherical shape’
zoddó [zoddó] ‘wild animal (cat family)’
b. azállá [azállá] ‘inactive/weak’
gazgázo [gazgázo] ‘ant species’
boóza [boóza] ‘lazy’

gúza	[gúza]	‘stem of ‘enset’/false banana’
góza	[góza]	‘glory’
hazó	[hazó]	‘bird species’
moózo	[moózo]	‘guest/strange’
gazé	[gazé]	‘walking in mass line’
uúze	[uúze]	‘selfish’
záyzare	[záyzare]	‘sieve’
φízʔo	[φízʔo]	‘animal species’

But in some environments, /z/ is realized as geminated voiced alveolar affricate [dzdz], between a high front vowel **i** and a mid-back vowel **o** as shown in (123a), and between mid-back vowel **o** as presente in (123b). [dz] never occurs at a word-initial position.

- (123) a. φid**dzdz**ó [φid**dzdz**ó] ‘short (traditional cloth)’
 b. od**dzdz**ó**dz**o [od**dzdz**ó**dz**o] ‘horizon of mountain’

The two rules would have the form: /z/ → [dzdz]/i—o } /z/ → [dzdz]/ } } —o
 /z/ → [dzdz]/o—o }

The allophone **dzdz** also occurs in post-consonantal position, especially after glide **y**, nasal **n** and liquid **r**. Normally, in Ganta, affricates occur after a consonant, but not before a consonant. Look at examples in (124).

- (124) a. háy**dzdz**i [háy**dzdz**i] ‘three’
 dó**nddz**za [dó**nddz**za] ‘adult’
 der**dzdz**ó [der**dzdz**ó] ‘divorced man or woman’
 má**rdzdz**e (Amharic) [má**rdzdz**e] ‘poison’
 kar**dzdz**é [kar**dzdz**é] ‘new house’

Based on the analysis, one can infer **z** as the underlying phoneme and **dzdz** as allophone of **z**. Since the fact expresses that phoneme **z** is distributed in the largest environments than **dzdz**. Furthermore, the substitution of one for the other doesn’t create a minimal pair and change meaning of a word, though it might be strangely pronounced as in **derdzdzó** [derzzó] ~ [derdzdzó] ‘divorced man or woman’. Both of them also share non-distinctive feature, **z** is voiced fricative and **dz** is also voiced alveolar affricate.

2.7.3 Affricate realization of fricative /ʒ/

Phoneme /ʒ/ occurs in word-initial and word-medial positions, as in (125a) and (125b) respectively.

- (125) a. ʒiítʃʃi [ʒiítʃʃi] ‘ring’
 ʒiílmálle [ʒiílmálle] ‘rotation’
 ʒímppo [ʒímppo] ‘ring like material that can be put on the spear stick’
 ʒíkko [ʒíkko] ‘type of traditional vaccination by which poisoned blood is let out’
 ʒáʃʃe [ʒáʃʃe] ‘circulating/running’
 ʒogé [ʒogé] ‘tall thin wood used for ‘teff’ trashing or house building’
 b. kuúʒa [kuúʒa] ‘shadow’
 muúʒo [muúʒo] ‘diffusing’
 déʒgere [déʒgere] ‘being cool/calm’

But in word-medial position, after alveolar nasal **n** and liquid **r**, /ʒ/ is realized as geminated allophone [dʒdʒ], as in (126)

/ʒ/ → [dʒdʒ]/# $\left\{ \begin{array}{l} \text{n} \\ \text{r} \end{array} \right\} \text{---\#}$

- (126) a. gándʒdʒe [gándʒdʒe] ‘stomach’
 mórdʒdʒola [mórdʒdʒola] ‘mushroom species’
 térdʒdʒe [térdʒdʒe] ‘standing strongly in a place or position while doing something’
 gúrdʒdʒe [gúrdʒdʒe] ‘tree species’

Phoneme /ʒ/ and allophone [dʒ] can occur together in a mono-morphemic words. In this case, /ʒ/ appears in a word-initial position whereas allophone [dʒ] occurs in the word-medial position in geminated form following **n** or **r**. Allophone [dʒ] never occurs at a word-initial position. See examples in (127).

- (127) a. ʒándʒdʒo (Amharic) [ʒándʒdʒo] ‘name of spice’
 ʒíndʒdʒe [ʒíndʒdʒe] ‘upsetting/tempering’

Substituting [ʒ] for the [dʒ] may sound or look strange, but the replacement will not bring the meaning change in speech context, as in gánʒʒe [gánʒʒe] ~ [gándʒdʒe] ‘stomach’

2.7.4 Homorganic nasal assimilation

As result of homorganic nasal rule, a bilabial nasal **m** becomes alveolar nasal **n** before one of the causative marking allomorph [tsts]. In other words, the bilabial nasal partially assimilates to the causative allomorph in order to make Ganta word pronounceable. The reason is that Ganta word structures do not permit pattern of **mtsts** in word-medial position. Therefore, when Ganta word morphology brings **m** and [tsts] together in the word-medial position, the homorganic nasal rule immediately changes the **m** to a **n** so as to make the place of articulation of the **n** similar to the following marker, as in (128). The formulated rule would have the form: /m/ → [n]/—tsts.

- | Verb root | m change in the construction | | |
|---------------|--|------------|----------------|
| (128) a. kúm- | adǒ kotʃtʃe | naáʔ-í | kún-tsts-í |
| ‘embracing’ | big container (of porridge) | press-CONV | fill-CAUS-CONV |
| | ‘...having gently filled a big container, ...’ | | |

In the same process, the bilabial **m** also appears as velar **ŋ** before infinitive marker **-oda**. Here, the place of articulation of the velar nasal is assimilated to the place of the articulation of the following mid back rounded vowel segment, as in /m/ → [ŋ]/—oda. Look at the example in (129).

- | Verb root | m change in the construction | | |
|---------------|--------------------------------------|---------|--------------------------|
| (129) a. hám- | nú yettsi dǎw-í-kko | hán-oda | hí-n-e |
| ‘go’ | our song lose-CONV-COP:FOC | go-INFI | say-IMPERF-PRES:CONT:DEC |
| | ‘...our song is going to be lost...’ | | |

2.7.5 Fortition

The rule of fortition (process of sound strengthening) changes a voiceless bilabial fricative [ɸ] to the geminated voiceless velar [kk] before prospective (**-ade-**), passive (**-utt-**) and middle (**-é**) markers. The situation makes strong overall sound of the bilabial

fricative by changing it to the velar counterpart, as in $[\phi] \rightarrow [kk]/\text{---ade/utt/é}$. Look at examples in (130a-c) blow

- Verb root ϕ change in the construction**
- (130) a. yeé ϕ - nú-y háy?-u-y-nne íti yeé**kk**-ade-s-a
 ‘cry’ our-NOM die-PLPER-CI-INCL you cry-PROS-3MS-ACC
 béé-ttá-k-ini-n-e
 see-CONT-FOC-1PL-IMPERF-PRES-CONT:DEC
 ‘...we are asserting that you will cry for us even if we die.’
- b. áy ϕ - damoóza míy-oda geed-á-nna áy**k**-utt-í bá?a
 ‘catch’ salary(Amharic) eat-INFI back-INESS-INSTcatch-PASS-CONV NEG
 ‘...it is not to get salary beyond....’
- c. ?é ϕ bé ?é**kk**-é biráta
 ‘take’ his take-MID rifle
 ‘...his taken rifle,...’

On the other hand, the rule of fortition also changes a voiceless geminated alveolar affricate **[tsts]** to a voiceless degeminated stop **[t]** before a middle marker **-é** in the inchoative construction, as in $[tsts] \rightarrow [t]/\text{---é}$. The rule is motivated by the need to strengthen the whole sound of **[tsts]** by changing it to the **[t]**. In the process, another rule deletes a final vowel of an adjectival word when the middle marker suffixes to a stem that ends in **ttsu**, as $[u] \rightarrow \phi/tsts\text{---é}$. The formulated rule expresses that **u** is deleted when it occurs between a **tsts** and an **é**. The reason is that sequence of diverse vowels **ttsu****é** are not allowed in Ganta word structures. Look at example in (131).

- | | | |
|--------------------------|-------------------|---------|
| Adjective | inchoative | |
| (131) a. boó ttsu | boót-é | [boóté] |
| ‘white’ | white-MID | |
| | ‘become white’ | |

2.7.6 Lenition

Contrary to the fortition (process of sound strengthening), Ganta also expresses lenition (weakening of overall sounds). This process has realized when a voiceless glottal fricative **[h]** appears as an approximant **[y]** before a causative allomorph **[-ss-]**. The formulated rule may have the form: $/h/ \rightarrow [y]/\text{---ss}$. The situation has happened so as to make a word structure pronounceable in Ganta. The reason is that Ganta speakers may face difficulty to articulate a sequence **hss** in the word structure. In the process, a new rule deletes a final vowel of a word when the vowel occurs between **y** and **ss**, as $e \rightarrow \emptyset/y\text{---ss}$. For instance, in (93), the final vowel **e** of the citation word **biláhe** ‘midday’ is deleted when the causative allomorph suffixed to it.

- | | | |
|-----------------|-----------------------|------------|
| Adverb | causative | |
| (132) a. biláhe | biláy-ss-í | [biláyssi] |
| ‘midday’ | mid-day-CAUS-CONV | |
| | ‘caused to be midday’ | |

Glottalization assimilation of **[ts]** to **[s']** is also another phonological process of lenition in Ganta. In this case, a voiceless geminated alveolar **[tsts]** has assimilated to glottalized geminated alveolar ejective **[s's']** before an infinitive marker **-oda** and negative marker **-a?a** as in rule $/tsts/ \rightarrow s's'/\text{---oda/a?a}$. Here, the value of the voicing feature goes from [-voice] to [-voice] as result of glottalization to the [-voice] feature of

the final consonant segment, as in derivation of **yétsts-** ‘sing’/yétsts + oda/aʔa→ [yé’s’s’oda]/[yé’s’s’aʔa] ‘to sing/not to sing’. In other words, the infinitive and negative markers assimilate to the preceding segment **ts**. Look at the example in (133).

Verb root	infinitive	
(133) a. yétsts- ‘sing’	yé’s’s’-oda sing-INFI ‘to sing’	[yé’s’s’oda]
b. íti yettsi yé’s’s’-aʔa hí-d-íí your song sing-NEG say-PERF-CONV ‘...having said not to sing your song, ...’		

In the same way as in example (133), the voiceless geminated alveolar sibilant [**ts**] also glottalizes to a voiceless plain (degeminated) alveolar ejective [**s’**] before the infinitive marker, as in (134). [ts]→ [s’]/—oda.

Verb root	infinitive	
(134) a. mítsts- ‘collect (of fire wood)’	mís’-oda collect (of fire wood)-INFI ‘to collect (of fire wood)’	[mís’oda]

2.7.7 Affricate-affricate merging

Affricate merging occurs when morphological affixes attach themselves to final roots of verb segments in Ganta. In (135a-b), root of voiceless alveolar affricate [**ts**] merges to [**ts**] before an imperative **-áy** and converb **-í** markers. For instance, if voiceless alveolar affricate does not merge before the markers, the whole structure of the constructed word will not give meaningful sense for the speaker of Ganta. In the same way with that of affricate segment, the other non-affricate segments can also express sound merging before morphological affixes in Ganta. Therefore, such process is analyzed as process of “gemination” or as “consonant prolonging” throughout in the body of the work. The following example is illustrated for convenience (for detail information see verb derivation in chapter 5). Look at example. [ts]→ [ts]/—áy/í.

Verb root	imperative	
(135) a. oóts- ‘do’	oóts-áy do-IMPER ‘you do !’	[oótsáyí]
b. k’áre iita-z-a dǎw-us-í oóts-í previous bad-M3S:SG.PL:DEF-ACC lose-CAUS-CONV do-CONV ‘...having done finishing the previous bad (thing), ...’		

2.7.8 Assimilation of implosive /d/ to liquid and vowel reduction

The voiced alveolar implosive **ɖ** that occurs at the end of verb root appears as liquid **r** before underlying causative {-s-}. In this case, **ɖ** of the stop has totally assimilated to the causative marker, in forming **r**. The formulated rule will have the form: /d/→ [r]/—{-s-}. In other words, the causative marker conditions the final segment **ɖ** that precedes to be **r**. The reason is that patterns like **ɖs** are not permitted in Ganta. After such assimilation process, another rule changes the underlying causative morpheme {-s-} to its causative allomorph [**ts**] due to sibilant harmony. A segment reduction rule also reduces the long vowel **aá** to the corresponding shorter one **á** before **r** in the causative construction, as rule /aá/→ [á]/—[r]. The reason has occurred so as to preserve normal

word structure in Ganta. Since, a combination of low central long vowel with distinct consonant clusters like **baártsts** may not be permitted in word-medial position. Look at the example in (136).

Verb root	causative
(136) a. baáɖ-	bár-tsts- [bártsts]
‘take food to mouth (by hand)’	take food to mouth (by hand)-CAUS
	‘cause to take food to mouth (by hand)’

2.7.9 Replacement of stop to glide and vowel reduction

Glottal stop **ʔ** is replaced by the postalveolar glide **y** in the causative construction. In the suffixation process, the causative morpheme {-s-} comes to the preceding glottal stop and then glide replaces the stop. If **ʔ** is not replaced to the **y**, a word structure will end in an impossible sequence **ʔs** in Ganta. Ganta speakers may face difficulty in pronouncing such arrangement. Therefore, the case has occurred so as to make the word structure pronounceable. Thereafter, a phonological rule reduces a high tone long vowel **aá** to its corresponding shorter one **á** before the glide. The reason is that a combination of high tone long vowel with distinct consonant clusters in word-medial position as **maáy**s may be not possible word structure. Look at the rules: /ʔ/ → [y], and /aá/ → [á]/—[y] respectively in (137).

Verb root	causative
(137) a. maáʔ-	máy-s- [máys]
‘dress/wear’	dress/wear-CAUS-
	‘cause to dress/wear’

2.7.10 Sibilant harmony

Sibilants assimilate to the place of preceding sibilants and other consonant segments. The following table contains both fricative and affricate Ganta sibilants.

	alveolar	postalveolar
Voiced fricatives	z	ʒ
Voiceless fricatives	s	ʃ
Ejective affricates	s'	tʃ'
Voiceless affricates	ts	tʃ

As in other Omotic languages like Sheko (Aklilu 1988; Hellenthal 2010), Ganta also expresses sibilant harmony in the verb derivation strategy. In the process, a voiceless alveolar sibilant {-s-} that uses for causative formation has conditioned the final verb root sibilants /ʒ/ and /tʃ'/ to [-ʃ-] and [-tʃ-] respectively, as rule: /ʒ/ → [-ʃ-]/—{-s-} and /tʃ'/ → [-tʃ-]/—{-s-}. Thereafter, a rule of progressive assimilation totally transmits the voiced and ejective phonetic features of segment /ʒ/ and /tʃ'/ to the voiceless alveolar sibilant {-s-}, in forming the causative allomorph [ʃ] and [tʃ] due to sibilant harmony. Therefore, it is for this reason that the voiced sound of /ʒ/ and ejective sound of /tʃ'/ exist no longer in their places in the causative construction. In other words, a sequence [ʒʃ] and [tʃʃ] are not permitted in Ganta word structure. Look at the following examples in (138a-b) that are illustrated for structural gap (for more see causative constructions in section (5.2.1)).

Verb root	causative
(138) a. geéʒ-	tá geéʃ-í maáʔ-ana
‘purify’	my purify-CAUS-CONV wear/dress-1SG

b. dítf-
‘grow’

‘... Shall I dress after purifying?’
dítf-tf-í
grow-CAUS-CONV
‘Having caused grow’

Sibilant harmony also occurs when a verb root begins with a sibilant segment and ends in voiced velar segment /g/ in Ganta. For example, verb roots **ʃóg-** ‘wash’ and **tʃaág-** ‘bray’ begin with fricative /ʃ/ and affricate /tʃ/ sibilants respectively and both of them end in voiced velar [g]. In the causative formation, their voiced final segment totally assimilates to [ʃ] when the underlying causative morpheme {-s-} suffixes to them as /g/ → [-ʃ-]/—{-s-}, and, at the same time, the underlying causative morpheme partially assimilates to the other causative allomorph [-f-] as a result of sibilant harmony as /ʃóg-s-/ → [ʃóf-s-] → [ʃóf-f-] ‘cause to wash’ and /tʃaág-s-/ → [tʃaáf-s-] → [tʃaáf-f-] ‘cause to bray’.

2. 7. 11 Fricativization and sibilant deletion

In the causative formation, the voiceless velar ejective /k'/ of a verb root has changed to the other voiceless fricative causative allomorph [-h-] when the underlying causative marking sibilant {-s-} suffixes to it, as rule: /k'/ → [h]/—{-s-}. In the process, the front fricative causative consonant {-s-} causes the middle consonant /k'/ to be back consonant. The reason is that [h] is a back consonant and because of this the middle consonant /k'/ has totally assimilated to the back [h]. As result of such total progressive assimilation, the segment /k'/ exists no longer before the allomorph [h]. The reason is that a pattern **k'h** violates phonotactic rules in Ganta. After such assimilation rule, a new rule reduces a high tone long vowel to the corresponding shorter one in the causative construction. The rule of vowel reduction will have the form: **aá**→**á**/—[h]. The situation has happened so as to ensure phonotactic restriction in Ganta because a pattern of long vowel with high tone before glottal fricative as **maáh** does not frequently occur in Ganta word-medial position. Finally, after assimilation and vowel reduction processes, the underlying causative morpheme {-s-} gets deleted in the construction as rule: {-s-} → ∅. See the following example in (139a-b).

Verb root	causative	
(139) a. maák' - ‘be/become’	má-h- be/become-CAUS- ‘cause to be/become’	[máh]
b. bará nú k'aala-z-a	méllo	
simply our language-3MS:SG.PL:DEF	valueless	
má-h-u-dukk-ite		
be-CAUS-PLPER-NEG-2PL		
‘...simply, you do not make our language valueless.’		

2.7.12 Assimilation of bilabial fricative to affricate and vowel insertion

The final verb root of bilabial fricative /ɸ/ at the end of the verb root appears as a voiceless affricate sibilant [ts] before an allomorph of causative marker [utsts]. The case has occurred as a result of phonotactic reasons in order to make a word structure permissible. In the process, the underlying causative morpheme {-s-} assimilates to the preceding consonant /ɸ/, in forming [ts]. Thus, the formulated rule would be: /ɸ/→[ts]/—{-s-}. After that, the underlying causative morpheme assimilates to the other

causative allomorph [tsts] of affricate sibilant because of sibilant harmony, and, at the same time, a segment addition rule inserts [u] before the allomorph, in forming [utsts]. The rule would have the form: $\emptyset \rightarrow [u]/\text{---}[tsts]$. This rule specifies that **u** has inserted so as to separate root segment **ts** of the verb and the causative marking allomorph **tsts** when both of them come one after the other. See the following illustration in (140a-c) below.

- | Verb root | causative | |
|---|--------------------|----------------------------|
| (140) a. áyϕ- | áyts-utsts- | [áytsutsts] |
| ‘catching’ | catch-CAUS- | |
| | ‘cause to catch’ | |
| b. siráate | mesimére | deréza |
| siráate (Amharic) | mesimére (Amharic) | deré-z-a |
| custom | line | people 3MS:SG.PL:DEF-ACC |
| áyts-utsts-ee-s-i | bahíle (Amharic) | mere (Amharic)-kko |
| catch-CAUS-PA-3MS-NOM | culture | leader-COP:FOC |
| ‘...it was cultural leaders that cooled down the people....’ | | |
| c. é-ga-ϕa | bizzó-y-nne | áyts-utsts-í-báari-jína |
| his-ALLA-ABL | one-NOM-INCL | catch-CAUS-CONV-NEG-PA:HAB |
| ‘...having been not even a single song has saved from it....’ | | |

2.7.13 Change of /i/ to /y/

The high front vowel /i/ changes to postalveolar glide /y/ when two distinct vowel phonemes come together in some Ganta speech situations. For example, the name of grandmother of paternal and maternal are formed from two different nouns in Ganta. The name of paternal grandmother is formed by combination of two nouns **ádda** ‘father’ and **índdo** ‘mother’. To the contrary, the name of maternal grandmother is formed by complete reduplication process of noun **índdo** ‘mother’. But, in the formation of the two names, their second component initial high front vowel /i/ of **índdo** ‘mother’ changes to /y/ when each of the formed compound nouns pronounced as a single word, as in /ádda+índdo/→[áddaynddo] ‘grandmother(paternal)’ and /índdo+índdo/→[índdoynddo] ‘grandmother (maternal)’.

Similarly, the nominative morpheme {i} also changes to the other variant of the nominative marker [y] when suffixes to distinct phonemes of terminal vowels of nouns, as in /máyo+i/→[máydoy] ‘an ox’ and /s'éga+i/→[s'égay] ‘a goat’. The reason is that two distinct vowel phonemes do not occur one after another in Ganta.

2.7.14 Change of /w/ to /y/

The bilabial glide of initial segment /w/ of an interrogative focus **-wa** has changed to the postalveolar glide /y/ in some speech contexts in Ganta, as in /óode+wa/→[óodeya] ‘WHO IS IT?’ and /ísi+wa/→[ísiya] ‘IS IT SHE?’

2.8 Morphophonological rules

In this section, morphophonological processes like deletion of terminal vowel, stop assimilation, subtraction, vowel reduction, sibilant assimilation and terminal vowel deletion, fricativization of affricate and glide deletion, glottalization, affricate to affricate

assimilation, fricativization, vowel harmony, epenthesis, consonant insertion, passive insertion, plural insertion, vowel length as morphophonological process, passive insertion and vowel lengthening, continuative insertion and vowel lengthening, and reduplication systems of Ganta are presented in detail.

2.8.1 Deletion of terminal vowel

Terminal vowel deletion is very common in inflectional and derivational processes. Here some examples are given for structural gaps based on former and latter processes. The detail examples are given under chapter 4 and 5. For instance, in (141a), suffixation of plural marker conditions deletion of terminal vowel **ó** in Ganta. In the process, a high tone of the terminal vowel of singular noun appears before the segment /i/ of plural morpheme. Similarly, the final vowel of nouns **mihuráne** ‘educated people’, **tǃĩma** ‘old’ and **gillesebe** ‘individual’ are deleted and replaced by the plural marker in text (141b). See examples in (141) below

- | | |
|--|--|
| <p>Singular</p> <p>(141) a. doró
‘sheep’</p> | <p>plural</p> <p>dor-idě
sheep-PL
‘sheep’</p> |
| <p>b. mihurán (Amharic)-idě ager (Amharic) tǃĩm-idě taawak’i (Amharic)
educated person-PL country/local old-PL known
gilleseb (Amharic)-idě udá -z-u-k-ote
personality-PL all-3MS:SG.PL:DEF-ACC-FOC-1SG
haásaʔ-us-a-m-e
speak-CAUS-IND-FUT-PRES:CONT.DEC
I will talk to all scholars, olds and known individuals....’</p> | |

In the definiteness formation, terminal vowel /i/ of a noun **géri** ‘people’ is deleted when definite marker -(a)z- comes to suffix with the noun. Look at the situation in (142).

- (142) a. óh-utt-o-kko haymánote (Amharic)-ga yé-s-e
talk-PASS-IND-COP:FOC religion-ALLA exist-3MS-PRES:CONT.DEC
gér-az-i dík’ar-e-ra-ʔá
people-3MS:SG.PL:DEF-NOM neglect-PRES:CONT.DEC-POLT-NEG
‘If it is talked, the believers do not ignore....’

Terminal vowels of cardinal numbers can also be deleted when suffixing with frequentative marker -**á** in Ganta. For example, in (143), the final vowel /u/ of cardinal number **támmu** ‘ten’ is deleted before the marker.

- (143) a. tá saḫara-ga gidd-áá **támm-á-nne**
my village(Amharic)-INESS inside-INESS ten-FREQ-INCL
‘In my village around ten groups have slaughtered. ...’

2.8.2 Stop assimilation

Stop and bilabial fricative assimilation is very common in Ganta word derivation. In this section, the stop assimilation rule is analyzed here for convenience. But, the latter rule is described in chapter 5 (see section (5.2.1)). The stop assimilation frequently occurs in Ganta when verb roots undergo causative derivation. For instance, the suffixation of

the underlying causative morpheme {-s-} to the stop segment /k/ at the end of a verb root expresses the situation. In the process, subsequent rules can be applied before the stop segment gets assimilation. In the first rule, the voiceless stop sound at the end of verb root has totally assimilates to [s] before the underlying causative sibilant {-s-} that follows it due to sibilant harmony in Ganta, as /k/→[s]/—{-s-}. The reason is that except for liquids, the other consonants never immediately appear after stops in sequence **ks** in Ganta word structure. The following example (144) is illustrated for convenience (for more see stop deletion in section (5.2.1)).

Verb root	causative
(144) a. toók-	toós-s-
‘carry’	carry-CAUS-
	‘cause to carry’

2.8.3 Subtraction

2.8.3.1 Subtraction of the focus marker -k(k)-

Focus marker is subtracted in the process of interrogative formation in Ganta (for detail see interrogative construction in section (5.5.3)). In the process, person markers delete or gain segments in the interrogative formations. For example, in (145a), first person singular marker deletes its initial segment **o** from **-oti-** and in (145b), segment **s** is added to the third person singular feminine marker **-i-**, forming **-si-**. Two examples in (145a) and (145b) are given for convenience.

Statement	interrogative
(145) a. hám-a-k-oti-d-e	hám-a-ti-d-e
go-IND-FOC-1SG-PERF-PRES:CONT.DEC	go-IND-1SG-PERF-PRES:CONT.DEC
‘I went.’	‘Did I go?’
b. wós'-a-kk-i-ttam-e	wós'-a-si-ttam-e
run-IND-FOC-3FM-FUT-PRES:CONT.DEC	run-IND-3FM-FUT- PRES:CONT.DEC
‘She will run.’	‘Will she run?’

2.8.3.2 Subtraction of hí- ‘say’ and contraction

A verb root **hí-** ‘say’ is ‘suppletive’ verb and used to express nearest future action ‘**is going to**’ and continuation ‘**is saying**’ respectively, in (146a) and (146b), in the same speech contexts. It is also used for copulative expression (see more in predicative morphology in section (8.2.4)). In the rapid speech context, Ganta speakers drop the verb root in the declarative sentences. Imperfective marking element **-n-** and present continuous and declarative marker **-e** are together attached to **hí-** ‘say’ so as to occur contraction process by attaching themselves with the preceding main verb. A terminal vowel **-e** of a person marker segment is changed into a high front vowel **i** in the main verb while occurring suffixation with series of markers **-n-** and **-e**, as in (146).

Unsubtracted	Subtracted
(146) a. hán-oda-k-ose hí-n-e	a. hán-oda-k-ose-n-e
go-INFI-FOC-3MS say-IMPERF-PRES:CONT.DEC	go-INFI-FOC-3MSIMPERF-PRES:CONT.DEC
‘He is going to go.’	‘he is going to go.’
b. áamma-se hí-n-e	b. áamma-se-n-e
what-3MS say-IMPERF-PRES:CONT.DEC	what-3MS-IMPERF-PRES:CONT.DEC
‘What is he saying?’	‘What is he saying?’

The subtraction of two initial segments /n/ and /a/ of masculine word **naʔá** ‘boy’ have expressed and suffixed to the preceding nouns when the nouns act as possessive modifiers in Ganta. In the process, the final high tone of the word also shifts to the final vowel /á/ of the subtracted segment. For example, a proper name **Yélʔa** occurs before word **naʔá** ‘boy’ to act as possessor and the word **naʔa** ‘boy’ will be possessed as /Yélʔa + naʔá /→[Yélʔaná] ‘son of Yélʔa’. For more, look at example in the text (147) below.

- (147) a k'áre géI-í-ǂǂ-i wó-y-ga-nna
 previous enter/get in-CONV-IMPERF-CONV up-3MS-ALLA-DIR
 yéé-s-e-s-i **Ankko-ná Saló**
 come-3MS-PRES:CONT.DEC-3MS-NOM Ankko-boy Saló
 woloóle-k-oyi-n-e Bonke-y há-y-ga-nna
 IDEO-FOC-SUBM-IMPERF-PRES:CONT.DEC Bonke-NOM this-3MS-ALLA-INST
 Meytǂǂe-y yéé-s-e-s-i **Kaaza-ná Yelʔá**
 Meiche-3MS come-3MS-PRES:CONT.DEC-3MS-NOM Kaaza boy Yelʔá
 woloóle-k-oyi-n-e há-y-ga-nna
 IDEO-FOC-SUBM-IMPERF-PRES:CONT.DEC this-3MS-ALLA-INST
 yéé-s-e-s-i há-y-ga-nna
 come-3MS-PRES:CONT.DEC-3MS-NOM this-3MS-ALLA-INST
 yéé-s-e yéé-s-e-s-i **Intǂǂa-ná**
 come-3MS-PRES:CONT.DEC come-3MS-PRES:CONT.DEC-3MS-NOM Inchcha-boy
Kaará woloóle-k-oyi-n-e yéé-kk-a-nna
 Kaará IDEO-FOC-SUBM-IMPERF-PRES:CONT.DEC down-DIR-ACC-INST
 yéé-s-e-s-i **Márdzdzo-ná Abbá**
 come-3MS-PRES:CONT.DEC-3MS-NOM Márdzdzo-boy Abbá
 woloóle-k-oyi-n-e Kanchama-NOM
 IDEO-FOC-SUBM-IMPERF-PRES:CONT.DEC Kantǂama-y
 ‘In the previous, when entering someone who was coming from upward Bonke sung ‘wollólle’ by respecting Ankko's son Saló. From here, Meiche also sung ‘wollólle’ by respecting Kaaza's son Yelʔa. ...from here someone who was coming from here sung ‘wollólle’ by respecting...Inchcha's son Kaará. Someone who was coming from down Kanchama sung ‘wollólle’ by respecting Márdzdzo's son Abbá....’

2.8.3.3 Subtraction of person and case markers

As it has been observed in section 6.1, some special quantifiers like **ʔeeré-s-i** ‘a few/little/small’ take series of markers, third person singular masculine marker **-s** and nominative case marker **-i**, at their final positions to occur in citation form and to derive themselves into nominal counterparts in Ganta. To the contrary, the others **udá** ‘all’, **lagó** ‘many’, etc. do not take those markers for their citation forms, or for their nominal formations. But, in the modifying strategy, those markers undergo subtraction process before head word in Ganta. In the situation, a high tone of the citation form quantifier shifts to forward on the head word and overlaps with the previous tone of the head. Look at example in (148).

- | Citation quantifier | quantifier before head word |
|---------------------|-----------------------------|
| (148) a. ʔeeré-s-i | ʔeere bíra |
| little-3MS-NOM | little money |
| ‘little (one)’ | ‘little money’ |

2.8.4 Vowel reduction, sibilant assimilation, and terminal vowel deletion

In this case, a verb root that has similar form with corresponding noun stem exhibits morphophonemic changes. During suffixation of infinitive marker [-kka], long vowel of the verb root is reduced to a corresponding short vowel. The final high tone of the noun stem is copied and rested on the last segment of infinitive marker when it is deleted in the process; otherwise the tonal vowel of the verb root is reduced and placed before assimilated sibilants in the infinitive stem. Furthermore, the final sibilant segments of the verb roots are assimilated to the place of articulation. For example, in (149a) and (149b), the final segment of geminated affricates /tsts/ and /tʃtʃ/ of the verb roots are assimilated to non-geminated fricatives [s] and [ʃ] respectively. The case has happened due to the occurrence of infinitive marker [-kka] (which conditions assimilation of /tsts/ to [s] or /tʃtʃ/ to [ʃ]). The reason is that affricate-stop (tsts-kk or tʃtʃ-kk) sequence is not permitted in Ganta. Let us see examples in (149) as follow.

	Noun stem	verb root	infinitive formation
(149) a.	keetstsé ‘house’	keetsts- ‘build’	ke-s-kká [keskká] ‘to build’
b.	gaatʃtʃé ‘grinding’	gaatʃtʃ- ‘grind’	ga-ʃ-kká [gaʃkká] ‘to grind’
	miitʃtʃé ‘laughing’	miitʃtʃ- ‘laugh’	mi-ʃ-kká [miʃkká] ‘to laugh’
	biitʃtʃi ‘urine’	biitʃtʃ- ‘urinate’	bí-ʃ-kka [bíʃkka] ‘to urinate’
	buútʃtʃu ‘clearing forest’	buútʃtʃ- ‘clear forest’	bú-ʃ-ka [búʃkka] ‘to clear forest’

Vowel reduction, deletion and sibilant assimilation is also possible with non-cognate verbs and nouns. The segment reduction is occurred on the nominal stems rather than verbal roots. In example (150a), the verb root is different from the corresponding nominal **waatstsé** ‘water’, but the infinitive formation with marker [-kka] has occurred with subtracted segments of nominal stem. As can be observed, the first two initial segments, glide-short vowel **wa-** sequence is subtracted from the noun **waatstsé** ‘water’ and the remaining geminated affricate sibilant /tsts/ of the noun is assimilated to non-geminated voiceless fricative [s] before [-kka] so as to preserve the structure of language. The high tone final vowel of the noun stem is shifted and rested on the infinitive marker.

	Noun stem	verb root	infinitive formation
(150) a.	waatstsé ‘water’	kít- ‘fetch’	wa-s-kká [waskká] ‘to fetch’

Reduction of vowel and sibilant is also possible in the infinitive formation with marker [-kka]. In example (151), the first two initial segments **ka-** might be reduced from noun stem **kaassé** ‘playing’ or from verb root **kaaʔ-** ‘play’ in order to attach itself with sibilant -s- (which is also reduced from middle of the noun segments -ss-). The high tone of terminal vowel -é of the cognate nominal segment is again appeared on the infinitive morpheme [-kká].

	Noun stem	verb root	infinitive formation
(151) a.	kaassé ‘playing’	kaaʔ- ‘play’	ka-s-kká [kaskká] ‘to play’

2.8.5 Fricativization of affricate and glide deletion

In the process, the sound of postalveolar ejective /tʃ/ at the end of verb root appears as a voiceless postalveolar sibilant [ʃ], as in (152). The case has occurred when the infinitive marker suffixes to the root of the verb. The assimilation rule can be

formulated as: /tʃ/→[ʃ]/—[kka]. In this case, a rule of fortition changes the affricate sound to the fricative sound so as to ensure phonotactic restriction. The reason is that a pattern **tʃkka** is not allowed in a word structure. After such process, a new phonological rule deletes postalveolar glide /y/ before the assimilated segment [ʃ] in the infinitive construction, as in rule: /y/→Ø/—ʃ. The case has happened for phonological reason because Ganta word patterns do not tolerate three different consonant clusters like **yʃkka** in word structures. The series of rules can be have the form: **óyʃkka**→**óyʃkka**/→**óØʃkka** [óʃkka]

Verb root	infinitive	
(152) a. óyʃ- ‘ask’	óʃ-kka ask-INFI ‘to ask’	[óʃkka]

2.8.6 Glottalization assimilation

As in Sheko (Aklilu 1988; Hellenthal 2010) and Yemsa (Zaugg-Coretti 2010), glottalization also occurs in Ganta when morphological affixes attach to verb roots. But, in case of Ganta, it frequently occurs in verb stems that have similar roots with nouns. Geminated voiceless affricate sibilant /tsts/ has glottalized to the corresponding geminated affricate ejective [s's'] when a prototypical infinitive marker **-oda** suffixes to it. In the process, a terminal vowel of nominal is replaced by the infinitive marker. For this reason, a high tone of the terminal vowel has shifted to the second segment of the word in the infinitive construction. Look at the example below in (153). The rule of glottalization assimilation would have the form: /tsts/→[s's']/—oda

Noun stem	verb root	infinitive formation	
(153) a. keetstsé ‘house’	keétsts- ‘build’	keés's'-oda house-INFI ‘to build house’	[keés's'oda]

The verb root final sibilant segment /tsts/ has also glottalized to [s's'] before converb marker, as in (154).

Noun stem	verb root	converb formation	
(154) a. keetstsé ‘house’	keétsts- ‘build’	keés's'-í house-CONV ‘after building house’	[keés's'í]

Glottalization assimilation also occurs before causative allomorph [-uss-]. In this case, geminated sibilant /tsts/ has changed to non-geminated [s'] in (155).

Noun stem	verb root	causative formation	
(155) a. yéttsi ‘song’	yétts- ‘sing’	yés'-uss- sing-CAUS- ‘cause to sing’	[yés'uss-]
b. míttsi ‘tree/wood’	mítts- ‘collect wood’	mís'-uss- collect wood-CAUS- ‘cause to collect fire wood’	[mí s'uss-]

2.8.7 Affricate to affricate assimilation

Affricate-affricate assimilation is also possible in the infinitive and converb constructions with verbs that have similar roots with the nouns in Ganta. Geminated

voiceless affricate /tʃtʃ/ has assimilated to the corresponding geminated ejective [tʃtʃ] before infinitive and converb markers respectively, as in (156a) and (156b).

Noun stem	verb root	infinitive formation
(156) a. biítʃtʃi ‘urine’	biítʃtʃ- ‘urinate’	biítʃtʃ-oda [biítʃtʃoda] urine-INFI ‘to urinate’
Noun stem	verb root	converb formation
b. biítʃtʃi ‘urine’	biítʃtʃ- ‘urinate’	biítʃtʃ-i [biítʃtʃi] urine-CONV ‘after urinating’

2.8.8 Fricativization

In the Infinitive formation, voiceless affricate sibilant /tsts/ has changed to non-geminated voiceless fricative sibilant [s] before an infinitive marking variant [-kka]. The process has occurred with a verb root that has similar form with a noun in (157).

Noun stem	verb root	infinitive formation
(157) a. yéttsi ‘song’	yétsts- ‘sing’	yé-s-kka [yéskka] song-INFI ‘to sing’
b. míttsi ‘tree/wood’	mítsts- ‘collect wood’	mí-s-kka [mískka] collect wood -INFI ‘to collect fire wood’

2.8.9 Vowel harmony

Vowel harmony in Ganta occurs when a suffix **-ssi** attaches to a word final vowel /o/ of nouns in the dative construction. In the process, a high front final vowel /i/ of the suffix **-ssi** is changed to a high back vowel [u], /i/ → [u], as in (158).

- (158) a. /doró-ssi/ → [doróssu]
sheep-DAT
‘for sheep’
b. /mánydo-ssi/ → [mánydossu]
mánydo-DAT
‘for ox’

Mid back rounded final vowel /o/ of words can also be changed to a high front vowel [i] when the suffix **-ssi** comes to attach with the words in the dative constructions in Ganta, as in (159).

- (159) a. /bíʃʃo-ssi/ → [bíʃʃissi]
bíʃʃo-DAT
‘for girl’
b. /maátʃtʃo-ssi/ → [maátʃtʃissi]
maátʃtʃo-DAT
‘for wife/woman/female’

Vowel harmony can also be observed in Ganta when some negated verbs like **ér-aʔa** ‘not know’ occurs with other preceding verb stems so as to form negative construction. In the combination, the converb marker **-í** of the preceding verb is changed to /é/ before the negated verb as in /dagg-í+ér-aʔa-se/ → [dagg-é-ér-aʔa-se] →

[dǎggéeraʔáse] ‘he has never stopped.’ In the following text (160), let us see the harmonized forms.

- (160) a. Muns'aaze-y ásse goóba-kko dǎgg-é-ér-aʔá-se
 Muns'aaze-NOM again intelligent-COP:FOC leave-CONV-know-NEG-3SG
 ‘Munsaaaze is again intelligent. He has never stopped.’
 b. darbbé-ra-y-nne deé-ts-ts-í dǒll-é-ér-aʔá-se
 dram-COM-NOM-INCL meet-CAUS-CONV jump-CON-know-NEG-3MS
 ‘...he has never jumped in relation to dram....’

2.8.10 Epenthesis

Segment insertion rules are motivated by the need to preserve word structures when morphophonemic processes take place on the word stems. Insertion of vowel and consonant segments are discussed in this section.

2.8.10.1 Vowel insertion

Phonological rule inserts a vowel [i] before a consonant sound when a word begins with consonant segment. For instance, in (161), Ganta speakers insert the [i] at the beginning of loan words that begin with /s/ or /r/ so as to adjust words to structures. As a rule, the process will have the form: $\phi \rightarrow [i]/\#$ —. Look at the following example.

Word	i-insertion	
(161)a. /sport/ (English)	[i-spórtte]	[ispórtte]
‘sport’	EP-sport (English)	
	‘sport’	
b. /report/ (English)	[i-ripórtte]	[iripórtte]
‘report’	EP-report (English)	
	‘report’	

Vowel insertion can also occurs when demonstrative words suffix with allative case marker **-ga** so as to indicate directions like here, or there.

Word	i-insertion	
(162) a. /há-y-ga/	[há-y-i-ga]	[háyiga]
this-3MS-ALLA	this-3MS-EP-ALLA	
‘here’	‘here’	
b. /só-y-ga/	[só-y-i-ga]	[sóyiga]
that-3MS-ALL	that-3MS-EP-ALLA	
‘there’	‘there’	

2.8.11 Consonant insertion

2.8.11.1 Glide insertion between vowels

Like Sheko (Hellenthal 2010: 96), Ganta does not allow a sequence of two different vowels. Basically, underlying sequences of $V_1 V_2$ occurs as vowel-glide or glide-vowel pattern. Therefore, to preserve language structure of Ganta, especially post-alveolar glide **y** occurs between two different vowels. For instance, in (163a-b), the verb root **sí-** ‘hear’ takes glide **-y-** before nominal and infinitival markers and in (163c), the verb root **yé-** ‘come’ suffixes with glide **-w-** before infinitive **-oda**. Look at the following examples in (163).

- (163) a. /sí-y-e/ [sí-y-e] [síye]

- hear-**y**-NML
‘hearing’
b. /sí-**y**-oda/ [sí-**y**-oda] [síyoda]
hear-**y**-INFI
‘to hear’
c. /yé-**w**-oda/ [yé-**w**-oda] [yéwoda]
come-**w**-INFI
‘to come’

2.8.12 Passive insertion

Passive marker **t(t)** inserts itself after a few words and verb roots. The case occurs only with some of the following words (164a-d) to maintain their word structures when morphophonemic process takes place in Ganta. In the normal passive constructions, passive marker frequently occurs with verb roots but not with citation words like these in Ganta (see for more passive construction under section 5.2.2). In (164a-c), the marker has occurred after the citation form words and before an imperative marker **-áy** and in (164d), it occurs after a verb root and before another passive marking variant **-utt-**. Look at examples in (164).

Words	t(t)-insertion	
(164) a. /háls's'o/ ‘slide’	[háls's'o- t -áy]	[háls's'otáy]
	slide-PASS-IMPER:2SG ‘be slide!’	
b. /ʃené/ ‘upsetting’	[ʃené- t -áy]	[ʃenétáy]
	upset-PASS-IMPER:2SG ‘be upset!’	
c. /ámo/ ‘need/interest’	[ámo- tt -áy]	[ámottáy]
	need/interest-PASS-IMPER:2SG ‘be needed!’	
d. /hí-/ ‘say’	[hí- t -utt-]	[hítutt-]
	say-PASS ₁ -PASS ₂ - ‘to be said’	

2.8.13 Plural insertion

Plural marker **d** occurs on the demonstrative words before series of markers like nominative and location in (165a), and before dual number and definite marker **[-ens'-]** in (165b). See below.

Demonstrative word	plural insertion	
(165) a. /ye/ MED	[yé- d -i-ga]	[yé d iga]
	MED-PL-NOM-ALLA ‘down there’	
b. /ye/ MED	[yé- d -ens'-i]	[yé d ens'i]
	MED-PL-DUL:DEF-NOM ‘The two down ones’	

2.8.14 Vowel length as morphophonological process

Vowel length is used here as morphophonological process in Ganta. The case occurs when place nominalizer **-so** suffixes with possessive personal pronouns so as to construct possession. In this process, only the segments of high tone vowels of possessive pronouns are prolonged. Look at the examples below in (166).

	Possessive pronoun	possessive	
(166) a.	/tá-/ 'I'	[tá-á-so] 'my house/home'	[tááso]
b.	/é-/ 'he'	[é-é-so] 'his house/home'	[ééso]
c.	/í-/ 'she'	[í-í-so] 'her house/home'	[ííso]
d.	/né-/ 'you'	[né-é-so] 'your house/home'	[nééso]
e.	/ú-/ 'they'	[ú-ú-so] 'their house/home'	[úúso]
f.	/nú-/ 'we'	[nú-ú-so] 'our house/home'	[núúso]

The case does not work for second person plural possessive personal pronoun **íti- 'you (PL)'**. In the possessive formation with the place nominalizer, the optional subject case personal pronoun **ítin- 'you'** or its possessive form **íti- 'your'** has used with the place nominalizer. Like, other possessive personal pronouns, it does not show vowel length in Ganta, as in (167).

	Pronoun	possessive	possessive
(167) a.	íti- 'you'	ítin-so you-PLNML 'your house/home'	íti-so you-PLNML 'your house/home'

In dative construction, some possessive personal pronouns also express vowel length with its second segment of high tone vowels, as in (168).

	Possessive pronoun	dative	
(168) a.	/tá-/ 'I'	[tá-á-ro] 'for me'	[tááro]
b.	/né-/ 'you'	[né-é-ro] 'for you'	[nééro]
c.	/nú-/ 'we'	[nú-ú-ro] 'for us'	[núúro]

The other possessive personal pronouns do not show vowel length with their possessive segments as in (168). Instead, their subject case personal pronouns has agreed with the dative marker **-ro**. In the construction, they add vowel segments like [i] and [u] between their segments and dative marker **-ro**. The case has occurred when all third person subject case pronouns **ís- 'she'**, **és- 'he'**, and **úsi- 'they'** involve in the construction of dative case in Ganta. Look at examples in (169).

	Pronoun	dative	
(169) a.	/ís-/ 'she'	[ís-i-ro] 'for her'	[ísiro]
b.	/és-/	[és-u-ro]	[ésuro]

	‘he’	‘for him’	
c.	/ús-/	[ús- u -ro]	[úsuro]
	‘they’	‘for them’	

But, second person plural possessive pronoun **íti-** ‘**you (PL)**’ directly suffixes with the dative marker **-ro** without any segment addition as in (170).

	Possessive pronoun	dative	
(170) a.	/íti-/	[íti-ro]	[ítiro]
	‘you (PL)’	‘for you (PL)’	

As it has been observed in the above examples (166) and (168), the segments of possessive personal pronouns express vowel prolonging when morphological affixes **-so** and **-ro** suffix onto them in Ganta. The case cannot always work when allative case marker **-ga** that begins with a voiced velar sound suffixes onto the stem of the personal pronouns, as in (171).

	Possessive pronoun	with allative marker -ga	
(171) a.	/tá-/	[tá-ga]	[tága]
	‘I’	‘toward me’	
b.	/é-/	[é-ga]	[éga]
	‘he’	‘toward him’	
c.	/í-/	[í-ga]	[íga]
	‘she’	‘toward her’	
d.	/né-/	[né-ga]	[néga]
	‘you’	‘toward you’	
e.	/nú-/	[nú-ga]	[núga]
	‘we’	‘toward us’	
f.	/íti-/	[íti-ga]	[ítiga]
	‘you (PL)’	‘toward you’	
g.	/ú-/	[ú-ga]	[úga]
	‘they’	‘toward them’	

But, if the other variant of the allative marker **-ko** that begins with a voiceless velar sound suffixes onto the possessive personal pronouns, the vowel segments of the possessive personal pronouns that directly suffix with the marker will express length change. The case occurs on the all vowel segments, except for second person plural pronoun **íti-** ‘**you (PL)**’. In the process, the second person plural possessive pronoun does not express vowel lengthening when suffixing with the marker, as in (172f). Compare example (171) with (172).

	Possessive pronoun	with allative marker -ko	
(172) a.	/tá-/	[tá- á -ko]	[tááko]
	‘I’	‘toward me’	
b.	/é-/	[é- é -ko]	[ééko]
	‘he’	‘toward him’	
c.	/í-/	[í- í -ko]	[ííko]
	‘she’	‘toward her’	
d.	/né-/	[né- é -ko]	[nééko]
	‘you’	‘toward you’	
e.	/nú-/	[nú- ú -ko]	[núúko]
	‘we’	‘toward us’	

f. /íti-/	[íti-ko]	[ítiko]
‘you (PL)’	‘toward you’	
g. /ú-/	[ú-ú-ko]	[úúko]
‘they’	‘toward them’	

2.8.15 Passive insertion and vowel length

A rule of phonology inserts a passive marker [-t(t)-] between vowel sounds. The case happens when verb roots that end in vowel sounds undergo suffixation with a morphological affix that begins with vowel sound in Ganta. For instance, in (173), the marker is glossed as **PASS₁** and has inserted after vowel sounds of verb roots, and before the other passive (**PASS₂**) marker **-utt-** so as to preserve normal word structures. The reason is that the two distinct vowel sounds never occur together in Ganta word structures. The “passive insertion” rule would have the form: $\phi \rightarrow [t(t)]/v_1-v_2$. Therefore, the insertion rule is applied to separate two distinct vowel sounds in Ganta. After the insertion rule, another rule prolongs the root vowels of the verb before the inserted passive marker so as to adjust an actual word with a meaningful structure. If the rule of phonology fails prolonging of the vowel sounds in the construction, the structure of the word would end in non-sense words as **bétutt**, **yétutt** and **sítutt**. Such sequences of phonemes violate phonotactic constraints of Ganta. See the following example in (173).

Verb root	Passive	
(173) a. /bé-/	[bé-é-t-utt-]	[béétutt-]
‘see/look’	see/look-é-PASS ₁ -PASS ₂	
	‘be seen/looked’	
b. /yé-/	[yé-é-t-utt-]	[yéétutt-]
‘come’	come-é-PASS ₁ -PASS ₂	
	‘become’	
c. /sí-/	[sí-í-t-utt-]	[síítutt-]
‘listen’	listen-í-PASS ₁ -PASS ₂	
	‘be listened’	

2.8.16 Continuative insertion and vowel length

A continuative marker **-tta** inserts itself after verb roots that end in vowel sounds when aspect or tense constructions occur with verb roots in Ganta. Thereafter, as in (173), a rule of phonology also prolongs the sound of the verb root high tone vowels before the continuative marker. In (174), the marker occurs before focus marker **-kk-** in the future tense construction.

Verb root	future tense	
(174) a. /bé-/	[bé-é-tta-kk-i-ttam-e]	[bééttakkittame]
‘see/look’	see/look-é-CONT-3FM-FUT-PRES:CONT.DEC	
	‘She will see/look.’	
b. /yé-/	[yé-é-tta-kk-i-ttam-e]	[yééttakkittame]
‘come’	come-é-CONT-3FM-FUT-PRES:CONT.DEC	
	‘She will come.’	
c. /sí-/	[sí-í-tta-kk-i-ttam-e]	[sííttakkittame]
‘listen’	listen-í-CONT-3FM-FUT-PRES:CONT.DEC	
	‘She will listen.’	

A vowel prolonging cannot always be expressed after a verb root that ends in a vowel sound and before the continuative marker in Ganta. For example, in (175), the

continuative marker insertion does not affect the final vowel sound of the verb root **hí-** ‘say’ in Ganta. From such construction, one can understand that vowel length is non-redundant and distinctive feature in Ganta. Compare example (174) with (175).

Verb root	future tense	
(175) a. /hí-/ ‘say’	[hí- tt a-kk-i-ttam-e] say-CONT-3FM-FUT-PRES:CONT.DEC ‘She will say.’	[hí tt akkittame]

2.8.17 Reduplication

2.8.17.1 Complete reduplication

Ganta expresses complete reduplication process in one of the plural formation strategies. In the process, each reduplicated components suffixes by nominative marker **y** (for more see number in chapter 3). See some examples below in (176).

Singular	Plural
(176) a. máyo ‘an ox’	máydo-y máydo-y ox-NOM ox-NOM ‘oxen/group of oxen’
b. kaná ‘a dog’	kaná-y kaná-y dog-NOM dog-NOM ‘dogs/collection of dogs’

Adjectives also exhibit complete reduplication so as to change itself into nominal categories in Ganta, as in (177).

Adjective	Plural
(177) a. órdde ‘big’	órdde órdde big big ‘big ones’
b. φazzó ‘tall’	φazzó φazzó tall tall ‘tall ones’
c. háta ‘short’	háta háta short short ‘short ones’

Complete reduplication is also expressed in the iterative formation (see detail information in verb derivation (5.2.4)). In this case, the reduplicated components are suffixed by converb marker. For convenience, some examples are given here in (178).

Verb root	iterative
(178) a. úf- ‘drink’	úf-í úf-í drink-CONV drink-CONV ‘drink repeatedly’
b. oóts- ‘work’	oóts-ts-í oóts-ts-í work-CL-CONV work-CL-CONV ‘work repeatedly’

Complete reduplication is also expressed in adverb of frequency in Ganta (for detail information see chapter six, adverb of frequency (6.3.5)).

2.9 Tone

The types of prosodic systems are discussed in some other Omotic languages as in Dizi, Bench, Zayse, Gamo, Aari, Wolaitta and Koorete. The following chart (179) is taken from Azeb (1996: 113) and shows the type of prosodic systems in the above languages. Azeb further explained that numbers 3 and 6, next to Dizi and Bench below are presented respectively to show a number of distinctive lexical tone types.

<u>Tone</u>	<u>Tonal-accent</u>	<u>Accent</u>	<u>Tone and stress</u>
(179) Dizi (3)	Zayse	Aari	Koorete
Bench (6)	Gamo		

Wolaitta had been grouped under stress language since works of Adams, and Yitbarek (1983, cited in Azeb, 1996: 113). Later, Azeb grouped Wolaitta under tonal-accent along with Zayse and Gamo.

However, the aim of this section is only to express distribution of tones and their roles in Ganta. It is not aimed to decide whether Ganta is tonal or not. Grouping of Ganta under one of the prosodic systems will need further investigation. Therefore, in this part, firstly, tone distributions of nouns, pronouns, indefinite pronoun, pronoun and head word, adjectives, interjection and ideophone are described. The second part consists of tone and affixation by the data of nominal inflections and derivations. In the third section, tone of verbs are investigated. Tones of noun phrase, adjectival phrase, and postpositional phrase are analyzed in the fourth section. In the fifth part, compounding and place of tone is discussed. Finally, the role of tone in Ganta is reported.

For the analysis, the researcher has used Azeb's (1996) approach to analyze the distributions of Ganta tones. The high tone is marked with acute accent, and the low tone is not marked.

2.9.1 Tone in nouns

Ganta simple nouns are grouped into two categories: (180) those which have high tone on the final mora (180a-c), and (181) those which have high tone on the penultimate mora (181a-c).

(180)	a. aḫá/saló	‘sky’	sabbá	‘adolescent’
	moló	‘fish’	k'olé	‘skin’
	woló	‘pumpkin’	addá	‘father’
	ibó	‘door’	doró	‘sheep’
	oydé	‘bench’		
	kaná	‘dog’		
	gawó	‘stomach’		
	b. maaʔó	‘cloth’		
	ʃaató	‘baby/boy’		
	gaatʃé	‘teff’ (food type)		
	gaayá	‘market’		
	tʃuutʃtʃé	‘louse’		
	c. gatʃúnna	‘newly delivered woman/cow’		
(181)	a. kútʃe	‘hand’		
	máŋk'k'o	‘poor’		
	ʔák'o	‘wealth’		
	ʔálʔo	‘expensive’		

b. aáɸe	‘eye’
boóra	‘traditional bread’
s'aáro	‘small pot’
díilla	‘flour’
laáppu	‘seven’
c. wozíns'e	‘fly’
bráɸɸe	‘finger’
itsínke	‘hair’
ins'áre	‘tongue’
allálle	‘problem’
gormóte	‘evil eye’

Trisyllabic nouns are marked for high tone on the antepenultimate mora as in

(182).

(182) a. aáɸunttsu ‘tear’

2.9.2 Tone in pronouns

Subject case pronouns mark for high tone on the first vowels.

- (183)a. 1SG tá-/tán-
 2SG né-/nén-
 3MS és-
 3FM ís-
 1PL nú-/nún-
 2PL íti-/ítin-
 3PL ús-

2.9.3 Tone in indefinite pronoun

One of the indefinite pronoun formation strategies is expressed by the combination of the two different nouns in Ganta. In this case, the high tone rests on the both first and second components, as in (184).

(184) a. dogáli maállí (both nouns are tribe names)

‘everyone/everybody’

b. wóbbari dookámi (both nouns are place names, which are named after existing people)

‘everyone/everybody’

2.9.4 Tone in pronoun and head word

In the possessive formation, the high tone also occurs on the modifying possessive personal pronouns in Ganta, as in (185).

(185) a. tá maydo

my ox
 ‘my ox’

b. íti kana
 you (PL) dog
 ‘your (PL) dog’

c. nú lukko

we hen
 ‘our hen’

2.9.5 Tone in adjectives

Adjectives, like nouns, take high tone on the penultimate mora (177), and on the ultimate mora (186).

- (186) a. háta ‘short’
 káymma ‘youth’
 b. goóba ‘intelligent’
 tʃaállá ‘old’ (of age)
 ííta ‘bad’
 boóttsu ‘white’
 laále ‘thin’
 (187) a. adó ‘big’
 ɸazzó ‘long’
 zoʔó ‘red’
 (188) b. kaaló ‘younger’

2.9.5 Tone in interjection

In the interjection construction, high tone occurs on the modifying and modified words in Ganta. See below.

- (189) a. tá báz-ó
 my God-VOC
 ‘my God !’
 b. tá ánjjá
 my chance
 ‘my chance!’

2.9.6 Tone in ideophone

Mono-morphemic ideophones take high tone on the ultimate and penultimate mora in Ganta, as in (190a) and (190b) respectively.

- (190) a. moomée ‘echoing sound, foolish or non-sense (for man)’
 waaháá ‘ordering oxen while ploughing land’
 b. ʔáfí ‘driving calf’
 káysi ‘driving cow’

As one of the plural formation strategies (3.1.1), some of Ganta ideophones also express complete reduplication strategy when someone uses the ideophones so as to call domestic animals toward him or her. In this situation, a high tone rests on the both first and second components of reduplicated words, as in (191).

- (191) a. hátʃí hátʃí ‘calling for dog’
 nétʃí nétʃí ‘calling for donkey/mule/horse’
 bíʔe bíʔe ‘calling for goat’

2.9.1 Tone and affixation

In this section, high tone can be seen on the nominal inflections and nominal derivations.

2.9.1.1 Tone in nominal inflections

Definite markers, **-(a)z-** for third person singular masculine and plural (feminine and masculine), and **-(a)tt-** for third person singular feminine, are not affected by high tone in Ganta. For third person singular masculine and plural (feminine and masculine) definite marker, third person singular feminine nominative case **-i** is attached to the marker **-(a)z-**. Whereas for accusative definiteness, third person singular masculine accusative case **-a** is attached to the marker **-(a)z-**. In the same way, for nominative third person singular feminine definiteness, the case **-i** is also attached to marker **-(a)tt-**, but in the accusative third person singular feminine definite, case **-o** is attached to the marker **-(a)tt-**. Look at these examples below (192)

High tone is rested on the first vowel of stem words in the definite nominative and accusative sex referents. In the definite nominative and accusative feminine, the citation form final high tone **-ó** in **mitfó** ‘sister’ is shifted back and attached with first vowel **-í**.

(192) a.	<u>Citation form</u>	<u>Indf.Nom</u>	<u>Def. nom</u>		<u>Def.acc</u>	
	mitfó ‘sister’	mitfó	<u>MS</u>	<u>FM</u>	<u>MS</u>	<u>FM</u>
	s'éga ‘goat’	s'éga	-	mítʃ -att-i	-	mítʃ -att-o
	lúkko ‘hen’	lúkko	s'ég-az-i	s'ég-att-i	s'ég-az-a	s'ég-att-o
	kaná ‘dog’	kaná	lúkko-z-i	lúkk-att-i	lúkko-z-a	lúkk-att-o
			kaná-z-i	kaná-tt-i	kaná-z-a	kaná-tt-o

In the same way, definite markers do not bring shift of high tone on the words that have long vowels. High tone is marked on the penultimate mora. In the construction, third person singular feminine definiteness **-(a)tt-** replaces the final vowel of citation form nouns, as in (193).

(193) b.	<u>Citation form</u>	<u>Indf.nom</u>	<u>Def. nom</u>		<u>Def.acc</u>	
	ʃuúro	ʃuúro	<u>MAS</u>	<u>FEM</u>	<u>MAS</u>	<u>FEM</u>
	miísi	miísi	ʃuúro-z-i	ʃuúr-att-i	ʃuúro-z-a	ʃuúr-att-o
			-	miís-att-i	-	miís-att-o

2.9.1.2 Tone in nominal derivations

Nominal derivation does not change a high tone pattern of the base noun. The suffixes **-tettsi**, **-untté**, **-ántʃtʃa** and **-áade** derive ‘abstract’ or agentive nominal. These derivational processes cause a shift of the high tone of the original noun. In the suffixation process, the derivational suffixes **-untté**, **-ántʃtʃa** and **-áade** either replace or overlap the final vowels of the base nouns, as in (194b-d). Look at examples in (194).

(194) a. **-tettsi** suffixes

ítʃe-tettsi	‘brotherhood’	< ítʃe	‘like brother’
lágge-tettsi	‘friendship’	< lágge	‘like friend’
gutá-tettsi	‘neighborhood’	< gutá	‘like neighbor’
addá-tettsi	‘fatherhood’	< addá	‘like father’

b. **-untté** suffixes

ʃaátuntté	‘childhood’	< ʃaató	‘child, baby, boy’
ʔeéuntté	‘foolishness’	< ʔeeyá	‘foolish’
boózuntté	‘laziness’	< boóza	‘lazy’

c. **-ántʃtʃa** suffixes

hargántʃtʃa	‘patient’	< hargé	‘disease’
goʃʃántʃtʃa	‘farmer’	< goʃʃé	‘farming’
zalʔántʃtʃa	‘merchant’	< zalʔé	‘good’

mootántʃʃa	‘accusant’	< moóto	‘accusation’
d. -áade suffixes			
kattʃáade	‘having horn’	< katʃé	‘horn’
wozináade	‘smart’	< woziná	‘heart’
zawáade	‘owner of home’	< zawá	‘home’
s'égaade	‘owner of goat’	< s'éga	‘goat’

2.9.1.3 Tone in case markers

Some case marking suffixes do not shift high tone. This process can be seen in the instrumental and in the perlocative case constructions. Both of them are marked by the same marker **-nna**. Similarly, inessive case **-á** does also not shift high tone in Ganta. See the illustration below (195).

(195) Instrumental case -nna

a. k'úlfe (Amharic)	‘key’	k'úlfenna	‘with key’
kóntʃe	‘fork’	kóntʃenna	‘with fork’

Perlocative case -nna

a. gaayá	‘market’	gaayánna	‘through market’
Bónke	‘place name’	Bonkenna	‘through bonke’

Inessive case -á

a. kiise	‘pocket’	kiísá	‘in pocket’
s'aáro	‘small pot’	s'aará	‘in small pot’

Other bound case marking affixes like **-ɸa**, **-ga**, and **-ra** are not marked for tone in Ganta. The high tone rests on the penultimate mora of a noun. The root word is not affected by the suffixation of these markers. But, the suffixation process of marker **-ɸa** changes the final vowel of the noun to **a**, as in (196).

(196) a. ʃoóre	‘river’
ʃoór-a-ɸa	‘from river’
ʃoóre-ga	‘toward/in river’
ʃoóre-ra	‘with river’

2.9.2 Tone in verb

2.9.2.1 Tone on infinitive verbs

In the course of suffixation process, every verb can be attached to at least one suffix. Similar property is observed in some Omotic languages like Wolaitta (Azeb, 1996: 122). Verbs, in Ganta, suffix infinitival marker **-oda**. Lexical verbs show high tone on the different vowels as in (197a), (197b), and (197c). Tone is rested on the penultimate mora of lexical verb in (197a). In (197b) and (197c), the high tone is marked on the penultimate mora. In (196d), it is marked on the final vowel of a word. But in the infinitivization process, the high tone is shifted back and rested on the long vowel. In all cases, the infinitival verb is not attracted the high tone on its vowel.

(197) a. dóʔo	‘open’	dóʔ-oda	‘to open’
m-íy-e	‘eat’	m-íy-oda	‘to eat’
b. káre	‘cutting tree branch’	kár-oda	‘to cut tree branch’
káyso	‘steal’	káys-oda	‘to steal’
c. k'aátʃe	‘scratch’	k'aátʃ-oda	‘to scratch’
d. miitʃʃé	‘laugh’	miitʃʃ-oda	‘to laugh’

2.9.2.1 Tone in verb inflection

In this section, a high tone is discussed on the inflections of aspect, person, and number. It is marked on the first vowel of the root verb and the marked vowel expresses prolonging in the perfective and imperfective constructions. Let us see it in (198).

(198) a. **perfective**

b. **imperfective**

yéetta-k-oti-d-e	‘I came.’	yéé-tta-k-oti-n-e	‘I am coming.’
yéé-tta-k-oni-d-e	‘You came.’	yéé-tta-k-oni-n-e	‘You are coming.’
yéé-tta-k-osi-d-e	‘He came.’	yéé-tta-k-osi-n-e	‘He is coming.’
yéé-tta-kk-i-d-e	‘She came.’	yéé-tta-kk-i-n-e	‘She is coming.’
yéé-tta-k-unu-d-e	‘We came.’	yéé-tta-k-unu-n-e	‘We are coming.’
yéé-tta-kk-u-d-e	‘They came.’	yéé-tta-kk-u-n-e	‘They are coming.’
yéé-tta-k-iti-d-e	‘You(Pl) came.’	yéé-tta-k-iti-n-e	‘You (Pl) are coming.’

Tone marking in the future/intentional form is observed differently in the imperative and jussive subjects of Ganta. This situation is presented in the paradigm (199). From future/intentional inflection, only first person plural form is chosen. In the same way, first person singular and plural forms are discussed in the jussive mood. In Ganta, imperative mood is applied by second person singular and second person plural forms only.

(199) a. **infinitive**

Future/intentional

Imperative

Jussive

wódoda ‘to kill’	wóǀ-a-k-unu-ttam-e	SG	PL	SG	PL
kaá?oda ‘to play’	kaá?-a-k-unu-ttam-e	wóǀ-áyi	wóǀ-áyto	wóǀ-ána	wóǀ-ínno
wós's'oda ‘to run’	wós's'-a-k-unu-ttam-e	kaá?-áyi	kaá?-áyto	kaa?-ána	kaá?-ínno
		wós's'-áyi	wós's'-áyto	wós's'-ána	wós's'-ínno

Inflection of the verb for negation also results in different tone patterns. This information is expressed in (200).

(200) a. **perfective negation**

b. **imperfective negation**

wóǀ-í-bá?a-te	‘I did not kill’	wóǀ-a?á-te	‘I will not kill’
wóǀ-í-bá?a-ne	‘you did not kill’	wóǀ-a?á-ne	‘you will not kill’
wóǀ-í-bá?a-se	‘he did not kill’	wóǀ-a?á-se	‘he will not kill’
wóǀ-í-bá?a-ysi	‘she did not kill’	wóǀ-a?á-ysi	‘she will not kill’
wóǀ-í-bá?a-ynu	‘we did not kill’	wóǀ-a?á-ynu	‘we will not kill’
wóǀ-í-bá?a-ysu	‘they did not kill’	wóǀ-a?á-ysu	‘they will not kill’
wóǀ-í-bá?a-yti	‘you (PL) did not kill’	wóǀ-a?á-yti	‘you (PL) will not kill’

2.9.2.2 Tone and verb derivation

High tone is not marked on the causative marking allomorph [-us-] and passive marker -utt- in Ganta, as in (201a-b).

(201) a. dísk-us-a-k-oti-d-e	‘I made him sleep’
wóǀ-us-a-k-osi-ttam-e	‘he will make someone kill’
b. wóǀ-utt-o-k-osi-d-e	‘it was killed’
ǰám-utt-o-k-osi-d-e	‘it was bought’

2.9.3 Tone in phrases

2.9.3.1 Tone in noun phrase

When nouns go with modifiers, the high tone can be affected in Ganta. When we utter numerals, the high tone is marked on the last vowel of the numerals, like **bizzó** ‘one’. But, for the other synonym word **s'ónʔo/s'óto** ‘one’, the high tone is marked on the first vowel. Similarly, for numerals ‘two’, ‘three’, ‘four’, ‘eight’ and ‘ten’, the high tone is also marked on the first vowel, as in (202).

- (202) a. námʔu ‘two’
 háydzdzi ‘three’
 óyddu ‘four’
 lánkutʃe ‘eight’
 támmu ‘ten’

Numerals like ‘six’ and ‘seven’ show the high tone on their penultimate vowel, as in (203).

- (203) a. izúppu ‘six’
 c. laáppu ‘seven’

Numerals, ‘five’ and ‘nine’ take the high tone on the first and second vowels, as in (204a) and (204b) respectively.

- (204) a. ítʃtʃítʃi ‘five’
 b. tántsíndde ‘nine’

Numerals beyond ‘ten’ are formed by a combination of **támm-** ‘ten’ with marker **-á**, as in **támm-á** ‘ten times’, or optionally by **támm-á-nne** ‘ten times and’. In this case, marker **-á** is used to mark for iterative or frequentative notion as ‘times’ whereas marker **-nne** is used to serve as inclusive conjunction. The lower numerals that are used for combination process are: **bizzó** ‘one’, **námʔu** ‘two’, **háydzdzi** ‘three’, **óyddu** ‘four’, and **ítʃtʃítʃi** ‘five’. In this combination, the high tone is rested on the numeral ten and frequentative morpheme. The lower numerals are not marked for the high tone (205a). If combination with inclusive marker **-nne** is expressed, high tone will be rested on the numeral ten, frequentative marker and also on the all lower numerals, as in (205b).

- (205) a. támm-á bizzo ‘eleven’
 támm-á námʔu ‘twelve’
 támm-á háydzdzi ‘thirteen’
 támm-á óyddu ‘fourteen’
 b. támm-á-nne bizzo ‘eleven’
 támm-á-nne námʔu ‘twelve’
 támm-á-nne háydzdzi ‘thirteen’
 támm-á-nne óyddu ‘fourteen’

In quantified noun phrases, the head noun loses its high tone as in (206) below. In this case, all lower numerals take high tone on the first vowels.

- (206) a. námʔu s'egi ‘two goats’ (s'égi ‘goats’)
 támmu wolidě ‘ten pumpkins’ (wolidě ‘pumpkins’)
 s'ík'k'e doridě ‘a few sheep’ (doridě ‘sheep’)

2.9.3.2 Tone in adjectival phrase

Adjectival phrase has the same tone patterns as noun phrases. Here, modifier is marked for the high tone but not the head word (207).

- (207) a. kárttsi miisi ‘black cow’ (miísi ‘cow’)
 zoʔó boobbe ‘red potato’ (boobbé ‘potato’)

Numerals attract high tone in adjectival phrases, but adjectives, and head words lose the high tone, as in (208).

- (208) a. námʔu karttsi miisasi ‘two black cows’
 ítʃtʃítʃi zoʔo boobbide ‘five red potatoes’

In the demonstrative construction, the high tone cannot be rested on simple demonstrative words, as in **so** ‘that’, and **ha** ‘this’. But in the complex demonstratives, the high tone rests on the demonstrative words, as in **só-y-ga** ‘over there’ and **há-y-ga** ‘here’. Similarly, when demonstrative occurs with head noun, it is the noun, but not the demonstrative that takes the high tone, as in **so máydo** ‘that ox’ and **ha s'éga** ‘this goat’ (for more information, see in chapter 6 and chapter 8 under phrase structure). But, in the focused speech situation, the high tone of the head nouns shift to the demonstrative words so as to express focusing strategy in Ganta. In this case, the head noun remains unmarked for the high tone. Look at the following in (209).

- (209) a. há maydo
 this:FOC ox
 ‘THIS ox’
 b. só s'ega
 that:FOC goat
 ‘THAT goat’

High tone also occurs on the demonstrative words, and also on the suffixed focus marker **-ba** when the focus marker suffixes on the stems of the demonstrative words so as to express pointing strategy in Ganta, as in (210).

- (210) a. há-bá
 this-FOC
 ‘HERE you are.’
 b. só-bá
 that-FOC
 ‘THAT you are.’

But, the high tone drops on the demonstrative words when direction marker **-na** suffixes onto the stems of the demonstrative words. In this case, the high tone rests on the direction marker, as in (211).

- (211) a. há-ná
 this-DIR
 ‘toward here’
 b. só-ná
 that-DIR
 ‘toward there’

2.9.3.3 Tone in Postpositional phrase

In Ganta, there are a few independent postpositions. They take high tone on the final vowels, as in (212).

- (212) a. gallá/aǫá ‘at/on/above’
 oommó ‘under’
 giddá ‘in’
 millá ‘beside’

Postpositions can drop the high tone when they occur with nouns in Ganta, as in (213).

- (213) a. oydé oommo
bench under
‘under the bench’
b. fútʃtʃu galla
stone at/on/above
‘on the stone’
c. ʔúmma aɸa
head at/on/above
‘on the head’

2.9.3.4 Tone and compounding

The majority of compounds in Ganta are nominals that are formed by combination of nouns with nouns and adjectives with nouns. The high tone is placed on the first component of the compound noun. This situation is similar with that of adjectival modifiers in the noun phrases. Each component has the high tone on the first and final vowels before the combination process takes place, as in (214).

- (214) a. kaɸó keetstse ‘nest’
kaɸó ‘bird’
keetstse ‘house’
b. addá itʃe ‘uncle’
addá ‘father’
itʃe ‘brother’
c. adǒ gilʔa ‘thumb’
adǒ ‘big’
gilʔa ‘finger’

2.9.4 The role of tone in Ganta

The role of tone is asserted by different linguists. For example, Bird (1998: 9) states that “...tone functions to distinguish lexical items. However, tone also has grammatical uses”. The role of tone in Ganta has also two functions: (1) to serve as a grammatical role (215), and (2) to give lexical or semantic information (217). The application of high tonal vowel like -á on some words expresses adessive and inessive cases in Ganta. Here, the high tone vowel -á functions as a morpheme to identify the two cases in the context of conversations. Base words may or may not end in high tone vowel segments as -á or -a. Sometimes placement of high tone coincides with grammatical functions in Ganta, as in (215b).

- | | | | |
|---------------------------|------------------|----------------------|---------------------|
| (215) a. Base word | gloss | adessive case | gloss |
| ʔúmma | ‘head’ | ʔummá | ‘on head’ |
| bállá | ‘branch of tree’ | ballá | ‘on branch of tree’ |
| b. Base word | gloss | adessive case | gloss |
| ganná | ‘meninges’ | ganná | ‘on meninges’ |
| goyná | ‘tail’ | goyná | ‘on tail’ |
| zawá | ‘home’ | zawá | ‘in home’ |
| c. Base word | gloss | inessive case | gloss |

	óta	‘pot’	otá	‘in pot’
	The high tone shift expresses grammatical function in Ganta in (216).			
(216) a.	maaʔó	‘cloth’		
	maáʔo	‘act of dressing’		
b.	boótstsu	‘white’		
	bootstsó	‘let it be white or clear’		
c.	ʔálʔo	‘expensive’		
	ʔalʔó	‘let it be expensive’		
d.	háta	‘short’		
	hatá	‘let it be short’		

According to Duanmu (2004: 897), “lexical tone is a pitch contour that can distinguish word meanings”. High tone also changes semantic information of the Ganta language. In the following examples, let us see the lexical role of high tone in Ganta (217).

(217) a.	káʔo	‘watching or guarding’
	kaʔó	‘bird’
b.	ítʃtʃe	‘to sleep’
	itʃtʃé	‘to hit’
c.	gaayá	‘market’
	gaáya	‘traditional material for smoking tobacco’
d.	ádda	‘sure’
	addá	‘father’
e.	gúta	‘tomorrow’
	gutá	‘neighborhood’
f.	gánde	‘axe’
	gandé	‘type of disease (of cattle)’

As it has been observed in the above illustrations, the distribution of high tone is presented for convenience by some structures of conceptual categories in Ganta. Other than the above illustrations, the distribution of high tone can also be presented by the other word structures, for which the examples have not yet given in the above section. Therefore, in addition to the above examples, one can observe by chance the distribution of high tone on the other linguistic constructions throughout in the body of the recent work in Ganta.

2.10 Summery of phonology

Systems of Ganta consonant phonemes are treated according to their place and manner of articulations in this chapter. Their distributions at word initial, medial and final positions are discussed phonemically and phonetically in detail. Among them, the velar nasal /ŋ/ and retroflex liquid /ɾ/ have never occurred at word-initial positions in Ganta. But in word-final positions, almost all consonants may not occur. Ganta words begin with consonant or vowel phonemes, but they may end in vowel phonemes. The characteristic of consonant gemination, except for palatal /ɲ/, liquid /ɾ/, glottal /h/, bilabial /ɸ/ and glottal /ʔ/, are discussed in this section. If the bilabial fricative /ɸ/ gets gemination, it will be geminated as the voiceless bilabial stop [pp] in word-medial positions. Minimal pairs and contrastive consonant length have also discussed under consonant section. As consonants, vowels are also described according to the position of tongue and their place

of articulation in Ganta. Short and long minimal pairs and vowel length are presented after vowel phoneme descriptions in this section. As in most Omotic languages, two distinct vowels never occur one after another in Ganta words. Instead, glide /y/ comes before or after vowels. Word syllable structures are described before phonotactic sections in this chapter.

Under phonotactic section, consonant-consonant and vowel-consonant restrictions are treated, where sequences of some oral stops /t/, /b/, /g/ and /k'/ with liquids are observed at word-initial positions. But, the other stops /k/, /d/, /d/ and /ʔ/ never even occur before liquids and other consonants. All of them can occur after consonants, but among them, the voiced alveolar implosive /d/ rarely occurs after most consonants but it occurs after certain consonant segments like /b/ and /y/ as in **bdó** 'cooked food' and **moydó** 'lip'. The voiceless bilabial implosive /p/ never occurs after stops, nasals, fricatives, affricates and glides in Ganta. In this section, impossible occurrence of three consonant sequences is observed in Ganta. But, consonant before geminated consonant is possible. Apart from restriction of consonant-consonant sequences, restrictions of vowel with consonant patterns are also discussed in this section. For example, sequences like **iʔ**, **eʔ**, **oʔ**, **id**, **ip**, **ep**, **idz**, **adz**, **udz**, **is'**, **us'**, **iw**, **ew**, **uw**, **ow**, **iy**, **ey** and **uy** are not permitted at word-initial positions in Ganta. To the contrary, consonant with vowel sequence is also restricted to sequences like **ri**, **ra**, **re**, **ro** and **ru** at word-initial positions.

Under section of phonological processes, rule of phonology expresses assimilation, strengthening, weakening, gemination, replacement, harmony and reduction in different environments. Ganta expresses allophonic (phonetic) and phonemic assimilations, where the first "allophonic assimilations are produced when the assimilant (the segment resulting from the assimilation) is not a separate phoneme in a particular language or lect" (Pavlik 2009: 5). The process can be realized in Ganta when phonemes, /ɸ/, /z/ and /ʒ/ assimilate to their corresponding allophones. In this case, the bilabial fricative /ɸ/ assimilates to [pp] in word-medial positions, and to interdental [f] in loan and in some other Ganta words. The voiced alveolar and post-alveolar fricatives, /z/ and /ʒ/, change to their corresponding voiced alveolar and post-alveolar affricates, /dzdz/ and /dʒdʒ/ respectively in word-medial positions.

The second type of "phonemic assimilations are those processes which result in the formation of a new phoneme" (Pavlik 2009: 5), which means change of phoneme to another phoneme in Ganta. For example, the alveolar nasal /n/ assimilates to the velar nasal /ŋ/ before segments /k/, /g/ and /k'/, whereas the bilabial /m/ also assimilates to the nasal /n/ before causative marker **-tsts-**, and to the velar nasal /ŋ/ before morphological affixes that begin with vowel segments such as **-oda**, **-í**, **-us**, **áy**, etc. Apart from nasals, voiced alveolar implosive /d/ changes to retroflex liquid /r/ before the causative marker **-tsts-** in Ganta. The bilabial fricative /ɸ/ can be changed to the affricate /ts/ before suffix **-utsts-**. Other than assimilation rule, phonological rule of strengthening changes the bilabial fricative /ɸ/ to the velar /k/ and the voiceless alveolar affricate /ts/ to the voiceless alveolar stop /t/ before morphological affixes that begin with vowel segments. To the contrary, rule of weakening changes the voiceless glottal fricative /h/ to approximant /y/ before causative marker in Ganta. The velar ejective /k'/ also assimilates to the voiceless glottal fricative /h/ in the causative construction.

As in many other Omotic languages, rule of glottalization has also observed in Ganta, where the voiceless alveolar affricate /ts/ has changed to the affricate ejective /s'/ when vowel initial segments of morphological suffixes come to attach it. Other than

glottalization, phoneme replacement is also observed when the glottal stop /ʔ/ replaces approximant /y/ before the causative morpheme {-s-}. As in vowels, Ganta also expresses consonant harmony, in which morpheme {-s-} is changed to the voiceless post-alveolar fricative /ʃ/ when it attaches with the segment of voiced post-alveolar fricative /ʒ/ in the causative construction. Rule of phonology also reduces long sounds to the shorter ones. For example, low open central long vowel /aa/ is reduced to its shorter counterpart /a/ when inflectional and derivational markers come to the stems, or roots of words in Ganta.

In this chapter, morphophonological processes of Ganta are discussed after section of phonological processes. Vowel deletion, reduction, prolonging and harmony are prevalently expressed in Ganta when morphological affixes come to attach word stems, or roots. For example, terminal vowel deletion is observed when inflectional suffixes like **-idé**, **-í**, **-(a)z-**, **-á**, etc. attach to the stems of words to express plural, definite and frequentative constructions respectively. In the process of vowel reduction, it is the medial long vowels that frequently express the situation when a stem of word suffixes to morphological suffixes as in plural formation of noun **faató** ‘boy’ → **jáwi** ‘boys’. To the contrary, for the vowel prolonging, it is a segment insertion or suffixation that conditions the process. For example, the insertion of passive **-(t)t-** and continuative **-ttá**, and suffixation of pronoun dative **-ro** and allative **-ko** trigger root of vowel segments to be prolonged in Ganta as in (218a-d)

- (218) a. **síi-t-utt-** ‘to be listened’
 b. **yéé-ttá-kk-i-n-e** ‘She is coming.’
 c. **táá-ro** ‘for me’
 d. **íi-ko** ‘toward her’

As in vowel prolonging, vowel harmony can also be observed when suffixes like **-ssi** come to attach with noun stems to express dative constructions in changing the segment’s final high front vowel /i/ to high close back /u/ as in **máydo** ‘an ox’ → **mádo-ssu** ‘for ox’.

Segment reduction is also realized in this section when Ganta expresses mood, phrase, and etc. formations. For example, in the interrogative formation, the focus marker **-(k)k-** subtracts from declarative counterpart as **hám-a-kk-i-ttam-e** ‘She will go.’ → **hám-a-ysi-ttam-e** ‘Will she go?’ Here, the form of person marker **-i-** of the declarative construction has changed to the other form **-ysi-** in the interrogative clause. Contrary to the segment subtraction, Ganta also expresses segment addition, where consonant /y/ or /w/ and other conceptual category markers of passive **-(t)t-**, plural **-(d)d-**, continuative **-ttá** can be added before other morphological affixes. For example, consonant /w/ and the passive **-(t)t-** can respectively be added before infinitive and other passive (PASS₂) markers as in **yé-w-oda** ‘to come’ and **síi-t-utt-** ‘to be listened’. As consonant sounds, vowel segment /i/ also occurs before suffixes and loan words in Ganta. For instance, the /i/ is added before inclusive conjunction **-nne** and after inserted glide /y/, and also before a loan word ‘sport’ respectively as in /**addá+y+i+nne**/ → [**addáyinne**] ‘including father’ and /**i+sport**/ → [**isportte**] ‘sport’.

Morphophonemic processes of fricativization and assimilation are frequently realized in this section in Ganta. For the former case, the affricate sound /ts/ changes to the [s], and similarly, the other affricates /tʃ/ or /tʃ/ also change to [ʃ] when the variant of infinitive **-kka** suffixes to the root of verbs in Ganta. But, for the latter process, still the affricate sound /ts/ changes to the other affricate ejective /s'/ before the other infinitive

marker **-oda**. The second type of the change is also called glottalization in most Omotic languages. Apart from fricativization and glottalization, reduplication process is also observed in the plural and plural nominal formations in Ganta. For example, citation form adjectives express complete reduplication to form plural nominals in Ganta as in **adó** ‘big’ → **adó ado** ‘big ones’.

At the end of this chapter, tone systems are treated, where marking of Ganta high and low tones in words, phrases and affixes are realized in detail. Grammatical and semantic tone systems are also discussed at the end of this section.

3 Noun

In this section, Ganta noun morphology is discussed with respect to noun inflection and derivation. In addition, types of nouns are listed below.

3.1 Noun inflection

In this section, number, gender, definiteness and cases are discussed as a noun inflection in Ganta.

3.1.1 Number

According to Crystal (2008: 335), number refers to “a grammatical category used for analysis of word classes displaying such contrast as singular, plural, dual, trial, paucal, etc.” Some linguists comment on the difficultness of analyzing number in different languages. Lyons (1968: 283, cited in Corbett 2000: 1) asserts that “the analysis of the category of number in particular languages may be a very complex matter.” However, the number system of Ganta is not as such complex as other languages. Numbers like singularity, duality and plurality are discussed on different conceptual categories like on nouns, verbal nouns, adjectives, demonstratives and in the clause constructions. Number with proper noun, gender and with vocative case is also analyzed in this section.

3.1.1.1 Number on nouns

3.1.1.1.1 Singularity

According to Corbett (2000: 4), singularity refers to “one real world entity”. In Ganta, singular nouns do not show different forms. They are unmarked for singularity. Let us look at the example (1) below.

Singularity	gloss
(1) a. máydo	‘ox’
miísi	‘cow’
doró	‘sheep’
bakúlo	‘mule’
s'éga	‘goat’
míttsi	‘tree’
fuútʃʃu	‘stone’
haré	‘donkey’
lúkkko	‘hen’
áde	‘man’
maátʃʃo	‘woman’
naʔá	‘boy’
kaná	‘dog’
óta	‘pot’
tolkkó	‘hyena’

Singularity can also be marked by a cardinal number: **bizzó/s'óto/ s'ónʔo** ‘one’. The terminal vowel **o** of the cardinal number occurs deletion when comes before singular nouns. Instead, a vowel **-i** has replaced in the position. In the construction, the high tone

of **bizzó** has shifted to the back and rested on the second segment of the word, as in (2a). See the illustration below.

- (2) a. bízz-i s'ega
 one goat
 'one goat'
 b. s'ót-i jaato
 one baby
 'one baby'
 c. s'ón?-i jaato
 one baby
 'one baby'

As it has been observed in the above section, singularity is expressed by citation form of object (accusative) nouns. However, numbers more than one mostly use morphological markers and word reduplication for its formation in Ganta. For first strategy, a suspected underlying plural morpheme {-s'-} appears in distinct phonetic forms of allomorphs in different environments. The morpheme may have such shapes as [-s'-], [-(a)as'-], [-tʃ'-], [-(e)ns'-], [-ons'-], [-tté-], [-(d)d-], and [-(i)dé-] after nouns, adjectives, demonstratives and directional words. Among them, [-(e)ns'-] and [-ons'-] are used to mark for dual numbers and also, at the same time, dual definiteness in Ganta. For indefinite dual numbers, there has been no clear marking strategy in Ganta. In addition to the above allomorphs (plural and dual), nominative marker **-i** and its accusative counterpart **u** are also used to mark for numbers. Still, Ganta uses another morphophonological process such as reduplication for numbering system of nouns and adjectives. Therefore, in the following sections, the numbering systems of conceptual categories are discussed in detail.

3.1.1.1.2 Duality

In the dual numbering system, the plural morpheme {-s'-} may appear as the allomorph [-(e)ns'-] after dual and definite singular nouns and demonstrative words to express definite duality. See example below.

Singular	gloss	Dual	gloss
(3) a. doró	'sheep'	doró-ns'-	'the two sheep'
kaφó	'bird'	kaφó-ns'-	'the two birds'
máydo	'ox'	máydo-ns'-	'the two oxen'
mírɡgo	'young ox'	mírɡgo-ns'-	'the two young oxen'
yé-d-a	'that (down) one'	yé-d-ens'-	'that the two (down) ones'

On the contrary to the above (3), the morpheme {-s'-} might be changed to the allomorph [-ons'-] when suffixes to citation nouns that end in terminal vowels **a**, **e**, **i** and **u**. Thereafter, a deletion rule deletes the final vowels for the reason that Ganta word structures do not permit two different vowel sequences **raons'**, **reons'**, **sions'**, **tʃtʃuons'** and **?aons'** in the word structures. Thus, the rule deletes those vowels when the vowels find themselves between consonants, and dual and definiteness marker [-ons'-]. After the deletion rule, a high tone of the terminal vowels has shifted to the backward position on the second vowel segments in the definite dual constructions as in (4b) and (4e). Look at the examples in (4) and (5).

Singular	gloss	Dual	gloss	
(4) a. wudúra	‘a daughter’	wudúr-ons’-	‘the two daughters’	
b. deré	‘a society’	dér-ons’-	‘the two societies’	
c. míisi	‘a cow’	míis-ons’-	‘the two cows’	
d. fútʃfʉ	‘a stone’	fútʃfʉ-ons’-	‘the two stones’	
e. naʔá	‘a child/boy’	náʔ-ons’-	‘the two children/boys’	
(5) a. nún-a	wódf-íi-s-i	tamaáre	fǎw-id- ons ’-u-máá	ha
we-ACC	kill-CONV-3MS-NOM	student	child-PL-DUL:DEF-ACC-FOC	this
nú	gant-i	fǎw- ons ’-u-máá		
our	ganta-PL	child-DUL:DEF-ACC-FOC		
‘...it is those our educated boys that killed us...these our Ganta boys...’				

3.1.1.1.3 Plurality

The underlying plural morpheme {-s-} appears as the allomorph [-s-] after a terminal vowel /a/ of citation nouns and adjectives in order to mark for more than two indefinite numbers. But, more than two definite numbers use definite markers **-(a)z-** and **-(a)tt-** in Ganta (for more see section 3.1.3 definiteness). For this illustration, look at (6)

Singular	gloss	Dual	gloss
(6) a. naʔá	‘child/boy’	naʔa-s’-	‘children/boys’
bólla	‘father-in-law’	bólla-s’-	‘father-in-law’
kórmma (Amharic)	‘bull’	kórmma-s’-	‘bulls’
tʃíma	‘old’	tʃíma-s’-	‘old ones’
índda	‘female’	índda-s’-	‘females’

All vowel sounds, at the end of citation nouns and proper names condition the underlying plural morpheme {-s-} to the corresponding allomorph **[-(a)as’-]**. Here, a segment addition rule inserts an **(a)a** before the underlying morpheme so as to preserve word structures. The reason is that if the vowel **(a)a** does not insert before the morpheme, the word structures will end in impossible sequences. After insertion rule, a phonological rule deletes the terminal vowels before the plural allomorph and after consonant segments that precede the final vowels in (7a-b). The reason is that Ganta word structures do not permit sequences of two different vowel sounds. But, in (7c), the terminal vowel /a/ of proper names may or may not delete because it might agree or overlap with the initial vowel segment of the allomorph in the construction. Look at the examples in (7) and (9).

Singular	Plural	gloss
(7) a. ítʃe	ítʃ-as’-	‘brothers’
áde	ád-as’-	‘men/males’
miisi	miis-as’-	‘cows’
mítʃo	mítʃ-as’-	‘sisters’
lúkkó	lúkk-as’-	‘hens’
bíʃʃo	bíʃʃ-as’-	‘girls’
doóttsu	doótts-as’-	‘neighbors’
b. dookkó	doókk-aas’-	‘Dookkó and others’
foottalé	foóttal-aas’-	‘Shoottálé and others’
kaarinné	kaarinn-aas’-	‘Kaarinné and others’
dónjati	dónjat-aas’-	‘Dónjati and others’

c. daanná	daanná-as'-	‘Daanna and others’
kaabbúra	kaabbúra-as'-	‘Kaabbúra and others’
laakká	laakká-as'-	‘Laakká and others’
ditʃtʃǎ	ditʃtʃǎ-as'-	‘Ditʃtʃǎ and others’
bunná	bunná-as'-	‘Bunná and others’

- (8) a. lóʔo átsts-u-kko hí-s-e-s-i ʔébul-aas'-i
good man-ACC-COP:FOC say-3MS-PRES:CONT.DEC-3MS-NOM mister-PL-NOM
tesʔaye tʃuʔa-as'-i hí-nn-u bezabih latʃ'-aas'-i hí-nn-u
tesfaye chufa-PL-NOM say-3FM-PLPER bezabih latʃ'-PL-NOM say-3FM-PLPER
‘...a man who is the good man... Mistrs Xs...those who called by name Tesfaye Chufa,
Bezabih Lacho and others,...’

A vowel /o/ sound that follows voiceless affricate sound /tʃtʃ/ of some especial nouns like **maátʃtʃo** ‘wife/woman/female’ has deleted when the underlying plural morpheme {-s'-} suffixes to the noun. The first rule deletes the vowel /o/ that follows the voiceless postalveolar affricate. For convenience, the rule can be called an “o-deletion”, as in formulated rule: $o \rightarrow \emptyset / tʃ - s'$. The rule tells that /o/ has deleted when it occurs between sound /tʃtʃ/ and {s'}. The second rule has applied on the penultimate segment /tʃtʃ/ after vowel deletion process. The applied rule has progressively assimilated the phonetic feature of the segment to the following plural allomorph [-s'-], resulting in glottalized sibilant [-tʃ'] because of sibilant harmony in Ganta. After that, the geminated segment /tʃtʃ/ of the noun gets deleted in the plural formation, as in **maá-tʃ'-i** ‘wives/women/females’. The reason has occurred so as to adjust permitted phonetic feature in the plural construction. The reason is that sequence **tʃtʃs'** is not allowed in Ganta word structure. From the rule one can understand that **tʃtʃ** has totally assimilated to the **tʃ'** when it occurs before **s'**. Furthermore, look at the following illustration in (9).

- (9) a. hátte ha maá-tʃ'-u-ʔa hátte hará dere maá-tʃ'-az-i
now this wife-PL-ACC-ABL now another people wife-PL-3MS:SG.PL:DEF-NOM
‘...Now, from these women, do the other country women more beautiful?’

In some limited data, the other plural marker [-tté] has suffixed to some especial nouns like **doró** ‘sheep’ when marking for plural, as in **dor-tté** ‘sheep’ in Ganta. Thereafter, for the phonological reason, a new rule deletes the terminal vowel /o/ of the noun. The rule deletes when the vowel occurs between **r** and **tte**. The formulated rule would be: $o \rightarrow \emptyset / r - tte$. The reason is that sequence **rotte** may not be permitted in Ganta word. In the plural stem, a high tone of the singular terminal vowel has rested on the final segment of the plural allomorph, as in **dor-tté** ‘sheep’.

Some of Ganta nouns express plural number with allomorph [-(i)ǎé]. In the process, the terminal vowels **i**, **a**, **e**, **o** and **u** of nouns undergo deletion when they occur between penultimate segments **tsts**, **n**, **ll**, **kk**, **r** and **g**, and allomorph [-(i)ǎé] in Ganta. The reason is that segment arrangements like **ttsiidé**, **naidé**, **tstseidé**, **lloidé**, **kkoidé**, **roidé**, **goidé** and **tstsuidé** are not allowed in word structures. Therefore, it is for this reason that the terminal vowels get deleted before the allomorph [-(i)ǎé] in the plural noun stems, as in (10). In the process, a high tone shifts to the second segments of the plural nouns. See in (10).

Singular	gloss	Plural	gloss
(10) a. mítstsi	‘tree/wood’	mítstsi-dě	‘trees/woods’
diítstsi	‘traditional music instrument’	diítstsi-dě	‘traditional music instrument’
mátstsi	‘bee’	mátstsi-dě	‘bees’
kaná	‘dog’	kán-idě	‘dogs’
keetstse	‘house’	keétstsi-idě	‘houses’
oolló	‘horse’	oóll-idě	‘horses’
tolkkó	‘hyena’	tóllk-idě	‘hyenas’
juúro	‘cat’	juúr-idě	‘cats’
mírggo	‘young ox’	mírgg-idě	‘young oxen’
doóttsu	‘neighbor’	doótstsi-idě	‘neighbors’

- b. jáw-**idě**-z-i dén-tsts-í mihurán (Amharic)-**idě**
 child-PL-3MS:SG.PL:DEF-NOM raise-CAUS-CONV educated person-PL
 ager (Amharic) tǝm-**idě** taawak’i (Amharic) gilleseb (Amharic)-**idě**
 country/local old-PL known personality-PL
 uddá-z-u-k-ote
 all-3MS:SG.PL:DEF-ACC-FOC-1SG

‘...having made children wakeup, I...all scholars, olds, known individuals...’

Interestingly, some especial Ganta nouns express plural number marker **i** when the nouns occur in the subject position. In the process, a high tone of a singular noun shifts to the second segment of the noun in the plural stem, as in (11b).

Singular	gloss	Plural	gloss
(11) a. s’éga	‘goat’	s’ég-i	‘goats’
b. saabbá	‘adolescent’	saább-i	‘adolescents’
c. wudúra	‘daughter’	wudúr-i	‘daughters’

If the above nouns (11) occur in the object position or in the position of predicate, the plural marker **-i** will change itself to the marker **-u** in the plural construction. As in (11b), the high tone also shifts to the second segment of the syllable in the plural stem in (12b). Compare example (12) with (13)

Singular	gloss	Plural	gloss
(12) a. s’éga	‘goat’	s’ég-u	‘goats’
b. saabbá	‘adolescent’	saább-u	‘adolescents’
c. wudúra	‘daughter’	wudúr-u	‘daughters’

In the predicate position, the plural marker **-u** is followed by the copular focus **-kko**, as in (13).

- (13) a. só-y tá s’eg-**u**-kko
 that-NOM my goat-PL-COP:FOC
 ‘Those are my goats.’
 b. dookkó-ssu nám?u saább-**u**-kko yé-s-í-s-a
 dookkó-DAT two adolescent-PL-COP:FOC exist-3MS-CONV-3MS-ACC
 ‘Dookkó has two adolescents.’
 d. só-ns’-i wudúr-**u**-kko
 that-DUL:DEF-NOM daughter-PL-COP:FOC
 ‘Those two are daughters.’

As in (11), (12) and (13), a noun **faató** ‘**child/boy/son**’ expresses plural number by the markers **-i** and **-u** when the noun occurs in the subject and object (predicate) positions respectively. In the numbering system, morphophonemic rule orderings have applied when those markers suffix with the word. The first rule deletes the final segment when the **i** or **u** suffixes to the word. The reason is that combinations of two different vowel sounds like **oi** are not permitted at the end of the word structure. The rule that shows the process will be: $o \rightarrow \emptyset/t-i(u)$. The rule specifies that the plural marker **i(u)** has resulted from an “o-deletion”. The **o** deletion has occurred when **o** is between **t** and **i(u)**. After this process, an entire segment change rule has affected only part of the word segment. In this case, a penultimate segment **t** after which the first rule deleted the vowel **o** has changed to an approximant segment **w** in the plural stem of the word as **ǰáw-i(u)** ‘**children/boys/sons**’. Such process is called lenition in many linguistic literatures. In the process, the feature of **t** has changed to the approximant **w** when the plural marker **i(u)** suffixes to the word. The rule would be: $t \rightarrow w/-i(u)$. The rule tells us that **t** has changed to the **w** when **t** occurs before **i(u)**. Thereafter, another rule also changes an entire vowel segment for phonotactic reason before recently changed approximant. The process has changed a long vowel **aa** to the its corresponding short counterpart **a** when the plural marker **i(u)** suffixes to the word stem. The rule may have the form: $aa \rightarrow a/\text{f}-w$. The rule shows that **aa** has shortened when it occurs between **f** and **w**. After those subsequently occurred phonological rules of deletion and feature changes, a tone rule has also shifted and replaced the high tone of the terminal vowel **ó** to the backward on the segment of the reduced vowel in the plural stem as **ǰáw-i(u)** ‘**children/boys/sons**’. Look at another example in illustration (14)

- (14) a. geéda-ǰa nú **ǰáw-i** k'áre nú k'aala-y áamma-wa hí-d-í
 latter-ABL our child-PL previous our word-NOM what-FOC say-PERF-CONV
 hí-s-e-nn-i-ga áanna-yinu wúd-o-m-ee
 say-3MS-PRES:CONT.DEC-NOM-ALLA where-1PL drop-IND-FUT-PRES:CONT.DEC
 ‘...if latter our children ask for us about our previous language, where will we be?’
 b. Siirá-ǰa yéé-ǰǰí mákina-ga tán-aa yáwu(Amharic) nú **ǰáw-u** mákin-ga
 Siirá-ABL come-IMPERF car-ALLA I-ACC that is our child-PL car-ALLA
 yéé-s-u
 come-3MS-ACC
 ‘...while coming from Siirá in the car...me..that is, while coming by our children’s car,...’

As plural formation with **i** or **u**, the singular noun **faató** ‘**child/boy/son**’ also expresses morphophonological changes with its entire segments as reduction of long vowel /**aa**/ to shorter counterpart /**a**/, change of /**t**/ to /**w**/ and deletion of terminal vowel /**o**/ when suffixing with other number markers definite dual [**-ons**’-] and plural [**-(i)ǰé**] in Ganta. In the process, the plural allomorph [**-(i)ǰé**] can occur before the definite dual marker [**-ons**’-]. Look at example in the following illustration (15)

- (15) a. **ǰáw-idé-z-i** dén-tsts-í deré-y uddá-tte
 child-PL-3MS:SG.PL:DEF-NOM raise-CAUS-CONV people-NOM all-COP:FOC
 bé kaasse kaá?-í bé-na k’óntǰǰ-us-í bée-ro ér-utt-í
 their playing play-CONV their-1SG expose-CAUS-CONV their-DAT know-PASS-CONV
 yé-n-e nún-a wóǰ-íí-s-i tamaáre
 exist-IMPERF-PRES:CONT.DEC we-ACC kill-CONV-3MS -NOM student (Amharic)
ǰáw-id-ons’-u-máá ha nú Gant-i **ǰáw-ons**’-u-máá Gant-i

child-PL-DEF:DUL-ACC-FOC this our Ganta-PL child-DEF:DUL-ACC-FOC Ganta-PL
ǰáw-i tamaáre **ǰáw-idé-kko** dúme wóǰ -íi-s-i

child-PL student (Amharic) child-PL-COP:FOC after all kill-CONV-3MS-NOM

hí-d-í hí-s-e-s-kko háys's'e

say-PERF-CONV say-3MS-PRES:CONT.DEC-3MS-COP:FOC listening (doubtfully)

táá-ro waayé-ga hí-d-íi-s-i

my-DAT ear-ALLA say-PERF-CONV-3MS-NOM

‘...the children having raised that all people have been known after practicing their culture, they known for themselves. It is those educated boys that have killed us. These our Ganta boys. I heard when someone says, "after all it is Ganta the educated boys that killed us."’

The other plural formation strategy is realized by irregular nouns. Some nouns semantically remain plural and they do not take plural marker, as in (16). Look at the following example (16).

Singular plural gloss

(16) a. deré deré ‘people’

b. gáyddi gáyddi ‘cattle’

(17) a. desséte (Amharic) gállá útt-é **deré deré-kko** hátte bé-na adǒ
 island on sit-MID people people-COP:FOC now their-1SG big

hi-d-í ér-us-á yé-s-ee-s-i

say-PERF-CONV know-CAUS-CONT exist-3MS-PA-3MS-NO

‘People...it is people that have been on island are now advertising themselves as big ones...’

In Ganta, mass nouns do not take plural marker even if their quantity is measured, as in (18).

(18) a. támmu ota maatstsi
 ten pot milk

‘ten pots of milk’

b. óyddu k'ons's'a sooge
 four sack salt

‘four sacks of salt’

c. háydzdzi kontaale gaatfe
 three sack (Amharic) ‘teff’

‘three sacks of ‘teff’

When numerals or quantifiers occur before nouns, they may or may not take plural marker in Ganta, as in (19).

(19) a. támmu atstsi
 ten man

‘ten men’

b. lagó miisi
 many cow

‘many cows’

c. laáppu miis-as'-i
 seven cow-PL-NOM

‘seven cows’

d. lagó s'eg-i
 many goat-PL

- ‘many goats’
 e. ʔeer-é gáyddi
 few-MID cattle
 ‘A few cattle’

Body parts do not take plural markers in Ganta, even if they are modified by quantifiers, numerals. Look at in (20).

- (20) a. námʔu waaye sí-y-aʔá
 two ear listen-CI-NEG
 ‘Two ears do not listen.’
 b. és-u-ro kútʃe-y oótsts-aʔá
 he-ACC-DAT hand-NOM work/job-NEG
 ‘His hands are not working.’

Plural formation in Ganta has also occurred by a complete reduplication process of singular nouns. The two components of the reduplicated nouns suffix with the other nominative case *y* in the plural construction, as in (21). In this formation, a high tone occurs on the two components of the reduplicated words.

- | | Singular | plural | gloss |
|---------|-----------------|---------------------|-------------------------|
| (21) a. | deré | deré-y deré-y | ‘collection of society’ |
| b. | ʔétʃere | ʔétʃere-y ʔétʃere-y | ‘collection of rats’ |
| c. | kaná | kaná-y kaná-y | ‘collection of dogs’ |

Two of the above mentioned plural marking allomorphs can occur one after the other so as to express plural constructions, i.e. allomorph [-**idě**] (PL₁) occurs after the other plural allomorph [-**as**'] (PL₂) without any meaning change. But, the other plural markers **-i** and **-u** cannot occur before [-**idě**]. See the examples below (22).

- | | Singular | Plural₁ | Plural₂ |
|---------|-----------------|---------------------------|--------------------------------------|
| (22) a. | áde | ád-as'-i | ád-as'-idě |
| | ‘a man’ | man-PL ₁ -NOM | man-PL ₁ -PL ₂ |
| | | ‘men’ | ‘men’ |
| b. | máydo | máyd-as'-i | máyd-as'-idě |
| | ‘an ox’ | ox-PL ₁ -NOM | ox-PL ₁ -PL ₂ |
| | | ‘oxen’ | ‘oxen’ |

3.1.1.2 Number on adjectives

When dual and plural markers suffix to citation form adjectives, the process will result in derived noun formation in Ganta. As it has been observed in the above (section 3.1.1.1.1), the dual allomorphs [-**(e)ns**'] and [-**ons**'] have marked for dual definite nouns. But, here, in addition to dual definite noun marking, they also use to derive citation adjectives to nominal counterparts. In the same way, the other plural marking allomorphs [-**s**'], [-**(a)as**'] and [-**(i)đě**] use to mark for indefinite plurals unless suffix with definiteness markers in Ganta (for definiteness see section 3.1.3) and to derive nouns from citation adjectives. Furthermore, a process of complete reduplication also expresses the same situation as that of dual and plural markers when applies on the citation adjectives, and uses to derive indefinite nominal counterparts. Look at examples in (23).

- | | Citation Adjective | Derived nouns with dual marker | Derived nouns with plural marker | Derived nouns with reduplication |
|---------|---------------------------|---------------------------------------|---|---|
| (23) a. | ɸazzó ‘tall’ | ɸazzó-ns'- ‘the two tall ones’ | ɸazz-idě ‘tall ones’ | ɸazzó ɸazzo ‘tall ones’ |
| b. | háta ‘short’ | hát-ons'- ‘the two short ones’ | hát-idě ‘short ones’ | háta háta ‘black ones’ |

- c. adǒ ‘big’ adǒ-ns- ‘the two big ones’ ad-idě ‘big ones’ adǒ adǒ ‘big ones’
 d. tǵima ‘old’ tǵim-ons- ‘the two old ones’ tǵima-s- ‘old ones’ tǵima tǵima ‘old ones’

3.1.1.3 Number on demonstratives and directional words

Demonstratives and directional words can be marked for number in Ganta. In the process, the number marking allomorph [-**dd**-] after a glide or high front unrounded vowel, as in (24).

- (24) a. há-y ámma-wa
 this-NOM what-FOC
 ‘What is this?’
 b. há-y-dd-i ámma-wa
 this-NOM-PL-NOM what-FOC
 ‘What are these?’
 c. wó-y buúkkulo miis-u-kko
 up-NOM buukkulo cow-ACC-COP:FOC
 ‘The above one is Buúkkulo’s cow.’
 d. wó-y-dd-i buúkkulo miis-as'-u-kko
 up-NOM-PL-NOM buúkkulo cow-PL-ACC-COP:FOC
 ‘The above ones are Buúkkulo’s cows.’

In the illustration (25), let us see the construction of [-**dd**-]

- (25) a. hii-**dd**-ó mál-í-s-idě -kko
 MED- PL-VOC like-CONV-3MS-PL-COP:FOC
 ‘...it is like those.’
 b. hii-**dd**-az-a jīḫaáne(Amharic) hí-d-í
 MED-PL-3MS:SG.PL:DEF-ACC cover say-PERF-CONV
 hará-so nú hán-e-s-a maák'-o-kko
 other-PLNMLwe go-PRES:CONT.DEC-3MS-ACC be-IND-COP:FOC
 higge(Amharic) méngistte (Amharic)-z-a
 law government-3MS:SG.PL:DEF-ACC
 k'aarrana (Amharic)-k-unu-n-e
 oppose-FOC-1PL-IMPERF-PRES:CONT.DEC
 ‘if we go beyond these by using them as cover, we will violate the constitution.’
 c. baahíle(Amharic)-y nám?u-so-kko káppal(Amharic)-utt-e
 culture-NOM two-PLNML-COP:FOC divide-PASS-PRES:CONT.DEC
 há-y-**dd**-az-i t'ek'aámi (Amharic) baahile (Amharic)
 this-3MS-PL-3MS:SG.PL:DEF-NOM useful culture
 ‘Culture divided into two...these are useful cultures.’

Apart from demonstrative and directional words, the number marker [-**dd**-] also occurs in the verb and adverb stems after nominative marker *y* in Ganta. In the construction, the marker can occur before the other number marker [-**idě**-] as in (26).

- (26) a. tá-y úúkk-é-y-**dd**-az-a
 I-NOM call-MID-NOM-PL-3MS:SG.PL:DEF-ACC
 wóndde-y-**dd**-**idě**-z-i úúkk-í-ntto
 before-NOM-PL₁-PL₂-3MS:SG.PL:DEF-NOM call-CONV-CONT
 úúkk-í-ntto-kko ḫéyḫ-oda dándda?-í-d-e
 call-CONV-CONT-COP:FOC stay-INFI capable-CONV-PERF-PRES:CONT.DEC
 ‘...those whom I called, the former ones...were able to stay while calling.’

3.1.1.4 Number and vocative case

Plural allomorphs [-as'-] and [-idě] directly occur on the noun roots before vocative case marker. The vocative case is marked by vowel **ó** following the plural marker [-as'-], and -é after the other plural marker [-idě]. Compare the following examples in (27a-b) and (27c-d) below.

- (27) a. índ-as'-ó
female-PL-VOC
'you females !'
b. náʔ-as'-ó
boy-PL-VOC
'you boys !'
c. saább-idě-é
adolescent-PL-VOC
'you adolescents (for boys) !'
d. átsts-idě-é
man-PL-VOC
'you men !'

3.1.1.5 Number and gender

Plural allomorphs [-idě] and [-s'-] are used on the derived verbal stems after masculine and feminine gender markers to express number. Allomorph [-idě] is used with singular third person masculine gender whereas [-s'-] is used with singular third person feminine counterpart, as in (28).

- (28) a. hát-é-s-idě
short-MID-3MS-PL
'short ones (masculine)'
b. φázz-é-s-idě
tall-MID-3MS-PL
'something that become tall (masculine)'
c. mín-é-nn-s'-i
strong-MID-3FM-PL-NOM
'strengthened ones (feminine)'
d. ad-é-nn-s'-i
big-MID-3FM-PL-NOM
'something that become big (feminine)'

Similarly, on the nominalized stems plural morphemes can be used to express distinct genders, masculine and feminine, as in (29).

- (29) a. háyʔ-é-s-idě
die-MID-3MS-PL
'dead ones (males)'
b. dísk-é-nn-s'-i
sleep-MID-3FM-PL-NOM
'sleeping ones (females)'

3.1.2 Gender

Ganta employs two gender marking systems, with lexical and gender marking suffixes. Gender marking morphemes also employ two strategies so as to mark gender in

Ganta. The first strategy is employed with definiteness marking inflectional elements **-(a)z-** and **-(a)tt-**. Definiteness marking **-(a)z-** is used to mark third person singular masculine and plural (feminine and masculine) nouns. The latter marking **-(a)tt-** is used only to mark for third person singular feminine gender in Ganta. The second strategy is applied by markers **-s-** and **-nn-**. The former one is used to mark for third person singular masculine and the latter one is used to mark for third person singular feminine gender. Therefore, in this section, gender references are discussed on different word classes like on nouns, verbs, adjectives, demonstratives, and in the clause constructions. Gender is also treated together with vocative case, definiteness, proper name, and with nominative case. Furthermore, gender mismatch in lexical gender formation and in interjection construction is observed in Ganta.

3.1.2.1 Lexical gender

Nouns in Ganta make a two way gender distinction as feminine and masculine. According to Selemawit (2004), Ganta has different lexical items to distinguish the sex of the referent. These lexical items distinguish kinship groups and others.

Lexical items used to distinguish masculine and feminine kinship terms

Masculine	gloss	feminine	gloss
(30) a. áde	‘man/male’	maátʃtʃo	‘wife’
addá	‘father’	índdo	‘mother’
naʔá	‘boy’	bíʃʃo	‘girl’
ítʃe	‘brother’	mítʃo	‘sister’
bólla	‘father-in-law’	bólloto	‘mother-in-law’
saabbá	‘adolescent’	wudúra	‘daughter’

In the following examples, lexical items are used to distinguish male and female animals.

Masculine	gloss	feminine	gloss
(31) a. mírggo	‘young ox’	ʔúzze	‘young cow’
máyido	‘ox’	miísi	‘cow’
gaálume	‘young male cock, monkey’	ʔúzze	‘young female cock, monkey’
mánttsa	‘male dog families and male pack animals’	mátʃaro	‘female dog families and female pack animals’
goommá	‘baboon’	índda	‘female monkey’
órgge	‘male goat and sheep’	ʔúzze	‘female goat and sheep’

3.1.2.2 Lexical gender as modifier

In Ganta, nouns like **áde** ‘man/male’ and **índda** ‘female’ occur before animate nouns to express maleness and femaleness sex referents to the modified nouns. Selemawit (2004: 38) has tried to describe gender marker adjectives as ‘**adde**’ and ‘**matʃtʃo**’. However, her analysis seemed to miss data to interpret exactly sex distinction modifiers in this case. The nouns, ‘**adde**’ and ‘**matʃtʃo**’ are not regularly used to distinguish gender. The Ganta speakers use **áde** for any male animates and **índda** for any female animates to modify being maleness and being femaleness respectively. Look at the examples in (32).

Masculine	gloss	feminine	gloss
(32) a. áde lukko	‘cock’	índda lukko	‘hen’
áde ʃuuro	‘male cat’	índda ʃuuro	‘female cat’

Pronouns in Ganta show gender references (33).

	Masculine	gloss	feminine	gloss
(33)a.	é	‘he’	í	‘she’

3.1.2.3 Gender marker on noun

Except for lexical genders, other noun groups also occur with inflectional gender based definiteness markings, **-(a)z-** and **-(a)tt-** in Ganta. The suffix **-(a)z-** is used to mark for definite singular masculine and plural (masculine or feminine) genders on the nouns. But, the morpheme **-(a)tt-** is only used to mark for singular feminine definiteness. Compare examples in (34a-b) and (34c-d) below.

- (34)a. máydo-z-a
ox-3MS:SG.PL:DEF-ACC
‘the ox’
- b. kaná-idě-z-a
dog-PL-3MS:SG.PL:DEF-ACC
‘the dogs (masculine)’
- c. hár-att-o
donkey-3FM.SG:DEF-ACC
‘the donkey (feminine)’
- d. lúkk-att-o
hen-3FM.SG:DEF-ACC
‘the hen’

Note: Gender markers can also be observed on verbal and proper nouns.

3.1.2.4 The gender markers {-s-} and {-nn-}

Apart from inflectional definiteness gender markings **-(a)z-** and **-(a)tt-**, Ganta has also distinct gender marking morphemes. Marker **-s-** is used to mark for third person singular masculine gender referents whereas marker **-nn-** is used to mark for third person singular feminine counterpart. Both of them are not inflected to nouns, pronouns, and proper nouns. However, they occur with verbs, verbal nominals, demonstratives, adjectives and clauses. In most cases, they have involved in conceptual category change, derivational process rather than sex distinguishing role. Such dual roles of the gender markers are not very common in most related Omotic languages like Koorete (Binyam, 2008) and Haro (Hirut, 2004). The case might be strange for Ganta. In this case, masculine gender marker **-s-** plays a more vital role than that of feminine gender marker **-nn-**. For example, the masculine gender marker changes verbal concepts into nominal, participial, and adjectival notions. It also derives attributive demonstratives and adjectives to corresponding nominal parts. Furthermore, it is also used for clause formation. In complement and relative clauses, together with other linguistic elements, it acts as complementizer and relativizer respectively. In the present or past participle, it occurs on the verb stem between tense and nominative case markers so as to form participle clause. With converb marker and imperfective aspect, third person masculine marker uses to express temporal sequences in Ganta. In this process, the feminine gender marker **-nn-** can also be participated. In irrealis construction, with copular verb **maák’- ‘become’** and **hí- ‘say’**, the masculine gender marker **-s-** occurs without any referential role. In the clause, it doesn’t matter whether a subject of the clause is masculine or feminine. Interestingly, the morpheme agrees with both of them in the verb stem. In the following, let us see the role of **-s-** and **-nn-** one by one on different conceptual categories.

Unlike masculine marker **-s-**, feminine marker **-nn-** is suffixed by the marker of third person singular feminine accusative case **-o**. In both constructions, the gender markers **-s-** and **-nn-** are used to express dual functions, where the masculine gender marker is used to express male gender and also big sized objectives in the space. To the contrary, the feminine marker is used to express female sex and small sized objectives in Ganta. Compare the two examples below.

- (39) a. só-y-s-a
that-NOM-3MS-ACC
'that one (the known boy or big thing)
b. só-nn-o
that-3FM-3ACC
'that one (the known girl or small thing)

3.1.2.8 Gender marker in clause

The roles of third person singular masculine and feminine gender markers are discussed in detail in chapter 8 (see complex sentence structures). The following examples are given for convenience. The third person singular masculine gender marker **-s-** occurs in complement clause before subject complementizer accusative case **-a**. It has suffixed after tense and before accusative marker in the copular verb **maák-** 'be/become' in the complement clause.

- (40) a. naʔá-y kaysó-kko (main clause)
boy-NOM thief-COP:FOC
'A boy is a thief.'
b. naʔá-y kaysó maák'k'-ee-s-a
boy-NOM thief become-PA-3MS-ACC
éra-k-oti-n-e (complement clause)
know-FOC-1SG-IMPERF-PRES:CONT.DEC
'I know that a boy is a thief.'

When we compare the main and complement clauses in (40a) and in (40b) above, the predicative nominal **kaysó** 'thief' is attached by copular focus **-kko** so as to function as verbal complement in (40a). But in the complement clause (40b), copular verb **maák-** 'be/become' occurs with tense, person and case markers after predicate nominal **kaysó** 'thief' to fulfill complementation. And the clause has ended in a complex verb stem.

In the relative clause construction, the feminine gender marker **-s-** occurs after tense and before relativizing nominative case. In the following example (41), the information in square brackets is the relative clause and out of the square is main clause.

- (41) a. [doró ʃǎŋ-ee-nn-i] bíǰf-att-i háta-kko
sheep buy-PA-3FM-NOM girl-3FM.SG:DEF-NOM short-COP:FOC
'The girl who bought a sheep was short.'

In the participle clause formation, the masculine gender marker **-s-** occurs together with tense and participle complementizer nominative case in Ganta, as in (42).

- (42) a. tán-i háʔ-ee-s-i tolkkó seél-a-k-oyi-d-e
I-NOM die-PA-3MS-NOM hyena look-IND-FOC-SUBM-PERF-PRES:CONT.DEC
'I looked at the dead hyena.'

In the simultaneous clause, third person masculine and feminine gender markers **-s-** and **-nn-** respectively occur without referential role (as default gender) for the purpose

of simultaneous clause formation in Ganta. In the following examples (43a) and (43b), let us see the occurrence of these morphemes.

- (43) a. tán-i útt-u-s-u ís-i badallá-kko
 I-NOM sit-PLPER-3MS-ACC she-NOM maize-COP:FOC
 gaátʃ-i-ʃʃ-e
 grind-CONV-IMPERF-PRES:CONT.DEC
 ‘While I was sitting, she was grinding maize.’
 b. jaató-y yeékk-ee-nn-i-ga ínndo-y k'odě-kko
 boy/child-NOM cry-PA-3FM-NOM-ALLA mother-NOM porridge-COP:FOC
 kátsts-i-ʃʃ-e
 prepare-CONV-IMPERF-PRES:CONT.DEC
 ‘When a child was crying, mother was preparing porridge.’

In example (43b), the feminine gender marker **-nn-** also occurs after tense and before nominative case preceding an allative case marker so as form simultaneous clause construction. It occurs in the verb stem after tense and before nominative case, which also occurs before the allative case marker.

In conditional clause, the third person masculine gender marker **-s-** occurs in copular verb stems **maák'** ‘**be/become**’, and **hí-** ‘**say**’ between converb (or perfective aspect) and accusative case marker to form the clause. See the following example in (44).

- (44) a. tán-i nén-a maák'k'-í-s-a-kko mákina-kko
 I-NOM you-ACC become-CONV-3MS-ACC-COP:FOC car (Amharic)-COP:FOC
 ʃám-a-ʃʃ-e
 buy-IND-IMPERF-PRES:CONT.DEC
 ‘If I were you, I would buy a car.’
 b. tán-i nēŋ-kke hí-d-e-s-a-kko
 I-NOM you-MANN say-PERF-PRES:CONT.DEC-3MS-ACC-COP:FOC
 túŋa-kko árdd-a-ʃʃ-e
 Addis Ababa-COP:FOC exist/live-IND-IMPERF-PRES:CONT.DEC
 ‘If I were you, I would live in Addis Ababa.’

3.1.2.9 Gender and vocative case

In addressing strategy, Ganta gender distinctions are observed by occurrence of tonal terminal vowels. Masculine lexical terms and third person singular masculine proper nouns use vowel **-é**, **-ó** and **-á** in addressing strategies. When such vocative marking vowels suffix to the citation form lexical gender and proper nouns, their final vowels will get deleted before the vocative markers. For example, the suffixation of vocative **-é** to the citation words, conditions the deletion of vowels **e** and **a** that occur after penultimate segment **d(d)** and **l** in examples (45b), (45c) and (45h). In the same way, the vocative **-ó** attachment to the lexical gender and proper nouns also triggers deletion of terminal vowels **á**, **u** and **o** when the vowels occur after segments **ʔ**, **ss** and **gg** in the constructions (45a), (45d) and (45g) respectively. Finally, the vocative **-á** replaces or overlaps a terminal high tone vowel **-á** when penultimate segments **ʃ** and **r** precede the terminal vowel in the vocative construction in (45e) and (45f).

Lexical gender		vocative construction	
(45) a.	naʔá ‘boy’	naʔ-ó ‘you boy’	
b.	addá ‘father’	add-é ‘you father’	
c.	áde ‘man/male’	ád-é ‘you man/male’	

d. awóssu ‘uncle’ awóss-ó ‘you uncle’

Proper name

vocative construction

e. dubbuḥǎ	‘person name (of male)’	dubbuḥ-á	‘you Dubbuḥǎ’
f. kaaburá	‘person name (of male)’	kaabur-á	‘you Kaaburá’
g. balggó	‘person name (of male)’	balgg-ó	‘you Balggó’
h. gidoolé	‘person name (of male)’	gidool-é	‘you Gidoolé’

But for Amharic proper names, masculine proper names employ phonological adaptation. For example, as in **Bekele** and **Ayele**, medial and final vowels are changed into another vowel as **Bakalá** and **Ayalá** respectively. The final vowel takes a high tone for addressing purpose.

The phonological adaptation is not always employed as in third person masculine name **Amare** ‘**Amharic proper name**’. This proper name remains as it is except for final tonal vowel, which is marked for tone for addressing purpose, as in **Amaré**.

But, for third person singular feminine addressing, a high tone vowel -é has used on proper names and lexical gender nouns. In the situation, the final vowels **o** and **e** of the proper names and lexical genders undergo deletion when the addressing strategies take place in Ganta as in (46a) and (46b) respectively.

Proper name

vocative construction

(46) a. dubbuḥó	‘person name (of female)’	dubbuḥ-é	‘you Dubbuḥé’
kaaburó	‘person name (of female)’	kaabur-é	‘you Kaaburé’
balggetstsó	‘person name (of female)’	balggetsts-é	‘you Balggetstsé’

Lexical gender

vocative construction

b. bíḥfo	‘girl’	bíḥf-é	‘you girl’
índdo	‘mother’	índd-é	‘you mother’
maátṣṭfo	‘woman/wife’	maátṣṭf-é	‘you woman/wife’
awóstte	‘aunt’	awóstt-é	‘you aunt’

In third person feminine addressing, some Amharic proper names also employ phonological adaptation, but the final vowels will not be changed into usual addressing vowel -é. In this case, the addressing vowel occurs as -ú. For example, in **S'edaale** ‘**Amharic proper name of female**’, the first vowel and vocative markers change to **S'adaalú**.

Gender and pronoun is another issue in linguistic systems of Ganta. The case is exhaustively discussed under subject agreement marking (see gender marking in (5.7.3)).

3.1.2.10 Reverse occurrence of gender markings in lexical gender formation

In Ganta, some lexical gender marking items are formed nearly with similar segments, except for their citation form vowels. For example, an item **ítṣ-** can be the root for the English equivalent word ‘**brother**’ or ‘**sister**’. When we add a citation form vowel -e in its final position, we can have ‘**ítṣe**’ ‘**brother**’. But when we add segments **m-** and **-o**, at the beginning and final position of it respectively, as **m-itṣ-o** [**mitṣó**], we can have the word which expresses lexical feminine ‘**sister**’ in Ganta. In the same process, the other pairs still use its gender marking (or gender based definiteness markers) for their lexical gender formation. For example, the pair **awóssu** ‘**uncle**’ and **awóstto** ‘**aunt**’ are used at the word beginning similar segment sequences **awos-**, but they end in different segments. The former one uses an -s-u sequence and the latter one uses its third person feminine definite marker -(a)tt- and citation form vowel -o, which commonly occurs after feminine lexical genders in Ganta.

On the contrary, some lexical gender pairs are formed by the reverse suffixation of gender sensitive linguistic markers. As it has been expressed, marker **-(a)z-** occurs with nouns and verbal nominals to express singular third person masculine definiteness and also plural (feminine or masculine) definiteness in Ganta. But in the lexical gender formation strategy, the marker occurs as one segment in the third person feminine word. The root segment **aju-** is ended by geminated sibilant-vowel (ss-u) sequence for masculine lexical gender **ájussu** ‘**elder male**’. And the feminine lexical gender is ended with singular third person masculine and plural (feminine or masculine) definiteness marker **-(a)z-** and with vowel combination as **ájuzo** ‘**elder female**’. Similarly, feminine proper name marker **-tsts(i)** is also reversely used on the word root **bar-** so as to mark for masculine lexical gender in **bárttsi** ‘**younger (of male)**’. Here, its feminine counterpart is formed only by attaching its citation form with the feminine gender marking vowel **-o** at the end position, as in **baró** ‘**younger (of female)**’.

3.1.2.11 Gender reverse in interjection

Gender reverse happens in Ganta when one expresses his/her emotive feelings. For example, in (47), feminine sex reference is used in a surprise reflecting interjection. In this case, third person singular feminine definiteness **-(a)tt-** has suffixed to a word stem **báz-** ‘**God**’ before the vocative case marker. Here, the occurrence of feminine definiteness is used not to feminize God. In Ganta, God is assumed by masculine gender referent. But, in surprise situation, people use the feminine gender marker to call for God, though the speech context matters, as in (48) and (49) below.

- (47)a. wóy tá báz-att-é
 IDEO I God-3FM.SG:DEF-VOC
 ‘Oh! My God!’

Feminine definiteness marking **-(a)tt-** is also used with pleasure expressing words so as to express love, as in (48). In the following illustration, the words **kaná** ‘**dog**’ and **jútftfu** ‘**stone**’ are pragmatically used to refer to ‘**second person**’ and ‘**strength of someone or something**’ respectively. In the process, the final vowel of the word **jútftfu** ‘**stone**’ is deleted and replaced by the feminine definiteness.

- (48)a. kaná jútftf-att-i
 dog stone-3FM.SG:DEF-NOM
 ‘You the strong/wonderful/brave!’

In the same manner, third person singular feminine definiteness marking **-tt-** is further used with a word **addá** ‘**father**’ in anger reflecting speech situation, particularly, in disputing speech context. The case is used on the masculine word to give the feminine notion so as to express being smallness or disregard rather than closeness or love, as in (49).

- (49)a. íti addá-tt-o
 you(PL) father-3FM.SG:DEF-ACC
 ‘The father of you!’
 b. addá-tt-i kínsálle
 father-3FM.SG:DEF-NOM head
 ‘The head of your father!’

3.1.2.12 Gender and definiteness

As it has been said so far, definite markers, **-(a)z-** and **-(a)tt-** are used to identify sex referents in Ganta. The marker **-(a)z-** is used to identify third person singular

masculine and plural (feminine or masculine) definite entities, as in (50) whereas marker **-(a)tt-** is used to indicate third person singular feminine definiteness. In the suffixation process, marker **-att-** replaces citation vowels of masculine nouns at the final position in (51a-c). But, in (51d), the masculine noun **kaná** ‘dog’ is suffixed with marker **-(a)tt-**. Compare the following examples.

- | | Masculine | gloss |
|---------|------------------|---------------------|
| (50) a. | haré-z- | ‘the male donkey’ |
| b. | lúkkó-z- | ‘the cock’ |
| c. | fuúro-z- | ‘the male cat’ |
| d. | kaná-z- | ‘the male dog’ |
| | Feminine | gloss |
| (51) a. | har-att- | ‘the female donkey’ |
| b. | lúkk-att- | ‘the hen’ |
| c. | fúur-att- | ‘the female cat’ |
| d. | kaná-tt- | ‘the bitch’ |

3.1.2.13 Gender and proper name

Interestingly, Ganta personal proper names take gender marking elements at the end position. Masculine proper names end in a high tonal vowel **-á** whereas feminine proper names mostly end in high tone **-ó**. Sometimes, the vowel **-ó** is used to change masculine proper names into feminine proper names by replacing terminal vowels of the masculine ones. Compare the following examples in (52).

- | | Masculine proper names | Feminine proper names |
|---------|-------------------------------|------------------------------|
| (52) a. | kábburá | kábburó |
| b. | dubbuḟá | dubbuḟó |
| c. | duulatá | duulató |
| d. | boolumá | boolumó |
| e. | kántuḟá | kántuḟó |

Kinds of masculine proper names can be understood semantically in speech context of Ganta. They end in different high tone vowels, **-á**, **-é** and **-ó** as in (53).

Masculine proper names

- (53) a. s'eemá
b. kálbbé
c. bárté
d. areeró
e. doogisó

Masculine proper names are changed into feminine counterparts by occurrence of causative marking allomorphs **-(e)tsts-** in place of masculine proper final vowels. These markers are also attached with the other feminine proper name marking vowel **-ó** at the end position. See the following in (54).

- | | Masculine proper names | Feminine proper names |
|---------|-------------------------------|------------------------------|
| (54) a. | bálggó | bálgg-etsts-ó |
| b. | dánná | dánn-etsts-ó |
| c. | maagá | maag-etsts-ó |
| d. | otoró | otor-tsts-ó |

Ganta society employs gender referring strategies in domestic animals by giving name for them. For example, male and female cattle have different naming systems. Like

feminine personal proper names, female domestic animal (cow) uses high tone vowel -ó at the end position of its given name. But, the name of male domestic animals can end in other tonal vowels, -é and -ó. Compare examples in (55).

Names of oxen	Names of cows
(55) a. báylé	bulákkó
b. sálφφé	sunkaló
c. oybé	?aφelló
d. búllé	?árbbo
e. suúbbó	bunddó
f. ?ázddó	daámiró
g. wántʃtʃó	warák'ó

3.1.2.14 Gender and nominative case

In Ganta, masculine proper names take nominative case -y whereas the feminine proper names take marker -i as nominative case in place of its gender marking tonal vowel -ó. In this case, the high tone of ó shifts to the backward on the second vowels. Look at the examples in (56) and (57) respectively.

Masculine proper names	Nominative masculine proper names
(56) a. otoró	otoró-y
b. maága	maagá-y
c. balggó	balggó-y
d. daanná	daanná-y
e. kabburá	kabburá-y
f. duulató	duulató-y
Feminine proper names	Nominative feminine proper names
(57) a. otortstsó	otórtsts-i
b. maagetstsó	maágetsts-i
c. balggetstsó	bálggetsts-i
d. daannetstsó	daánnetsts-i
e. kabburó	kábbur-i
f. duulató	duúlat-i

3.1.3 Definiteness

Ganta indefinite nouns remain unmarked. They are identical as citation form nouns that occur as objective (or accusative) case forms. But definite nouns use definite marking morphemes to express definiteness. In this section, definiteness is described on word classes like noun, proper noun, verbal noun, adjective and demonstrative. Pragmatic use of definiteness is also discussed in this section.

3.1.3.1 Indefinite

According to Crystal (2008: 241), the term indefinite “... is used in grammar and semantics to refer to an entity (or class of entities) which is not capable of specific identification”. Indefiniteness in Ganta is usually conveyed through by the use of zero morpheme. See examples below (58).

Indefinite singular nouns	gloss	Indefinite plural nouns	gloss
(58) a. kaná	‘a dog’	kan-idě	‘dogs’
b. juúro	‘a cat’	juúr-idě	‘cats’
c. máydo	‘an ox’	máy-d-as’-	‘oxen’
d. miísi	‘a cow’	miís-as’-	‘cows’
e. haré	‘a donkey’	har-idě	‘donkeys’
f. mítsti	‘a tree’	mítsts-idě	‘trees’
g. naʔá	‘a boy’	naʔá-s’-	‘boys’
h. bíjfo	‘a girl’	bíj-f-as’-	‘girls’

3.1.3.2 Definiteness

Indefinite masculine singular or plural (feminine and masculine) nouns including animate and inanimate nouns suffix with prototype definite marker **-z-**, and with dual and definite markers **-ons’-** and **-ns’-** to express definiteness. When the dual markers suffix to the citation indefinite nouns, their final vowels **a** and **e** delete before the markers, and a high tone of the vowels shift to initial segment of the dual and definite marker **-ons’-**. But, for numbers more than two, the definite marker **-z-** suffixes after plural marker **-idě-** in Ganta. In addition to definiteness marking, the marker **-z-** also pragmatically uses to mark for big sized objects in the space in Ganta. For example, in (59c), (59e), (59f), (59g) and (59j), the marker is simultaneously used to express definiteness and big sized inanimate objects in Ganta. Furthermore, the marker is sensitive to gender specific nouns, where it only uses to mark for third person masculine singular and plural definiteness. In the same way, the third person feminine singular nouns are also sensitive to gender specific terms for definiteness in Ganta. For this reason, a marker **-(a)tt-** uses to mark for third person feminine singular nouns, however, its plural counterpart uses the third person masculine singular and plural definiteness marker **-z-** in the construction. As definiteness marker **-z-**, the singular feminine definiteness marker **-(a)tt-** also pragmatically uses to mark for small sized inanimate objects in the space, and also uses to express being closeness, love and ignorance in Ganta. For definiteness construction of **-(a)tt-**, see examples (61-63), but for pragmatic uses of both **-(a)z-** and **-(a)tt-**, look at section (3.1.3.7). For now, look at definiteness examples of singular, dual and plural numbers with **-z-** in (59).

Indefinite	Singular definite	gloss	Dual definite	gloss	Plural definite	gloss
(59) a. naʔá	naʔá-z-	‘the boy’	naʔ-óns’-	‘the two boys’	naʔá-s’-idě-z-	‘the boys’
b. bak’úlo	bak’úlo-z-	‘the mule’	bak’úlo-ns’-	‘the two mules’	bak’úl-idě-z-	‘the boys’
c. kaná	kaná-z-	‘the dog’	kan-óns’-	‘the two dogs’	kan-idě-z-	‘the dogs’
d. óta	óta-z-	‘the pot’	ót-ons’-	‘the two pots’	ót-idě-z-	‘the pots’
e. s’éga	s’éga-z-	‘the goat’	s’ég-ons’-	‘the two goats’	s’ég-idě-z-	‘the goats’
f. goné	goné-z-	‘the neck’	gon-óns’-	‘the two necks’	gon-idě-z-	‘the necks’
g. keetstsé	keetstsé-z-	‘the house’	keetsts-óns’-	‘the two houses’	keetsts-idě-z-	‘the houses’
h. ogé	ogé-z-	‘the road’	og-óns’-	‘the two roads’	og-idě-z-	‘the roads’
i. haré	haré-z-	‘the donkey’	har-óns’-	‘the two donkeys’	har-idě-z-	‘the donkeys’
j. doró	doró-z-	‘the sheep’	doró-ns’-	‘the two sheep’	dor-idě-z-	‘the sheep’
k. ibó	ibó-z-	‘the door’	ibó-ns’-	‘the two doors’	ib-idě-z-	‘the doors’
l. juúro	juúro-z-	‘the cat’	juúro-ns’-	‘the two cats’	juúr-idě-z-	‘the cats’

Alternatively, some nouns also suffix with the definite marker **-az-** in Ganta. In the process, vowel sounds **i** and **u** that occur at the end of the nouns change the prototype definite marker **z** to the **-az-**. For this situation, a segment addition rule is applied so as to

maintain phonological rules. The rule adds an **a** after the vowels **i** and **u**, as $\phi \rightarrow a/i(u)$ —**z**. After such process, a new rule deletes the vowel segments **i** and **u** when the definite marker is suffixed to them. The deletion of **i(u)** can be formulated as: $i(u) \rightarrow \phi/—az$. The rule tells us that vowel **i(u)** is deleted when they occur between consonant segments and **az**. The reason is that segment patterns like **tstsi****az**, **tʃtʃu****az** and **ssu****az** are not allowed in Ganta. Particularly, different vowel sequences. But, when dual and definiteness marker **-ons'**- suffixes to indefinite singular nouns, their final vowels get deleted before the marker **-ons'**-, as in (60). Look at example in (60).

Indefinite	Singular definite	gloss	Dual definite	gloss
(60) a. míttsi	mítsts-az-	‘the trees/woods’	mítsts-ons'-	‘the two trees/woods’
d. máttsi	mátsts-az-	‘the bees’	mátsts-ons'-	‘the two bees’
e. bárttsi	bártsts-az-	‘the youngers (of male)’	bártsts-ons'-	‘the two youngers (of male)’
f. ʃútʃʃu	ʃútʃʃ-az-	‘the stones’	ʃútʃʃ-ons'-	‘the two stones’
g. doóttsu	doótsts-az-	‘the neighbors’	doótsts-ons'-	‘the two neighbors’
h. ʔuúttsu	ʔuútsts-az-	‘the false bananas’	ʔuútsts-ons'-	‘the two false bananas’
i. áɲussu	áɲuss-az-	‘the elders (of male)’	áɲuss-ons'-	‘the two elders (of male)’

In the same way with the marker **-z-**, prototype definiteness **-tt-** appears after citation nouns that end in vowel **a** to express feminine definiteness. But, when the dual and definiteness marker **-ons'**- suffixes to the citation nouns, their final vowel **a** deletes before the marker **-ons'**-, as in (61).

Indefinite	definite	gloss	Dual definite	gloss
(61) a. s'éga	s'éga-tt-	‘the goat’	s'ég-ons'-	‘the two goats’
b. índda	índda-tt-	‘the female/woman’	índd-ons'-	‘the two females/women’
c. kaná	kaná-tt-	‘the bitch’	kan-óns'-	‘the two bitches’
d. bólla	bólla-tt-	‘the mother-in-law’	bóll-ons'-	‘the two mothers-in-law’

The final vowels **e**, **i**, **o** and **u** of some indefinite nouns have deleted and replaced by a vowel **a** when the definite **-tt-** suffixes to the vowels. Thereafter, morphophonemic process forms the other variant **-att-** as definiteness marker. In the construction, a high tone of terminal vowel shifts to the backward on the second vowel of the noun in the definite stem, as in (62a). See example (62) below.

Indefinite	Singular definite	gloss	Dual definite	gloss	Plural definite	gloss
(62) a. haré	hár-att-	‘the donkey (female)’	hár-ons'-	‘the two donkeys(female)’	hár-idě-z-	‘the donkeys (female)’
b. miísi	miís-att-	‘the cow’	miís-ons'-	‘the two cows’	miís-as'-az-	‘the cow’
c. bíjfo	bíjʃ-att-	‘the girl’	bíjfo-ns'-	‘the two girls’	bíjʃ-as'-az-	‘the girls’
d. lúkkó	lúkk-att-	‘the hen’	lúkkó-ns'-	‘the two hens’	lúkk-as'-az-	‘the hens’
e. doró	dor-att-	‘the sheep (female)’	doró-ns'-	‘the two sheep (female)’	dor-ttē-z-	‘the sheep (female)’
f. juúro	juúr-att-	‘the cat (female)’	juúro-ns'-	‘the two cats (female)’	juúr-idě-z-	‘the cats (female)’
g. doóttsu	doótsts-att-	‘the neighbor (female)’	doótsts-ons'-	‘the two neighbors (female)’	doótsts-idě-z-	‘the neighbors (female)’

As it has been said, definiteness **-(a)z-** occurs both on singular and plural (masculine) definite nouns. The case is different for singular feminine definiteness **-(a)tt-**, which is only used to mark for definiteness on singular feminine nouns. Similarly, in (63c-d), the definite marker **-z-** is suffixed on the final vowels of singular nouns. In the plural definiteness formation, marker **-(a)z-** occurs directly on the stem of nouns in

(63a-c), but in (63d), it comes after plural allomorph [-idě]. Look at the following examples in (63).

Singular definiteness

- (63) a. bíjǝ-att-
girl-3FM.SG:DEF
'the girl'
b. miís-att-
cow-3FM.SG:DEF
'the cow'
c. máydo-z-
ox-3MS:SG.PL:DEF
'the ox'
d. haré-z-
donkey-3MS:SG.PL:DEF
'the donkey'

Plural definiteness

- bíjǝ-as'-az-
girl-PL-3MS:SG.PL:DEF
'the girls'
miís-as'-az-
cow-PL-3MS:SG.PL:DEF
'the cows'
máyd-as'-az
ox-PL-3MS:SG.PL:DEF
'the oxen'
hár-idě-z-
donkey-PL-3MS:SG.PL:DEF
'the donkeys'

In Ganta, body parts use definite markers optionally.

- (64) a. túke-y táá-ro hántt-aʔá
foot-NOM I-DAT walk-NEG
'My foot doesn't walk.'
b. túke-z-i táá-ro hántt-aʔá
foot-3MS:SG.PL:DEF-NOM I-DAT walk-NEG
'The foot doesn't walk for me.'
c. kútǝ-y áykk-aʔá
hand-NOM catch-NEG
'Hand doesn't catch.'
d. kútǝ-att-i áykk-a-ʔá
hand-3FM.SG:DEF-NOM catch-NEG
'The hand doesn't catch.'

3.1.3.3 Definiteness affixed to place names

Proper nouns like **kammá** 'traditional title name' or **Gurbhá** 'place name' do not take definiteness in Ganta. But in a special case, place names can take definite marker. If a person is originated or comes from another place or country, definiteness can be used with place names but not with personal proper names. Then, the person is called by the name of his/her origin. In (65b), the definite marker replaces the final vowel of the noun.

- (65) a. bóŋke-z-ó
place name-3MS:SG.PL:DEF-VOC
'you the Bónke'
b. bóŋk-att-é
place name-3FM.SG:DEF-VOC
'you the Bónke'

Definiteness can be used with clan names. In this case, a person is called with his/her tribe.

- (66) a. óyǝf-az-ó
tribe name-3MS:SG.PL:DEF-VOC
'you the óyǝfo (masculine)'

plea-3FM.SG:DEF
 ‘the plea’

- c. k'aár-att-
 ape-3FM.SG:DEF
 ‘the ape’

In contrast, third person singular feminine definiteness **-(a)tt-** is used to express closeness or love in Ganta society (for more information see in the above, Gender reverse in interjection (3.1.2.11)). The other definiteness marker **-(a)z-** is pragmatically used to express physically big or huge things, as in (71).

- (71) a. háŋ-i táá-ro oyde-z-a ʔeéw-áyi
 go-CONV I-DAT bench-3MS:SG.PL:DEF-ACC bring-IMPER:2SG
 ‘Go and bring me the big bench.’
 b. só-y-a s'eéll-áyi maátʃtʃo-z-a
 that-NOM-ACC look-IMPER:2SG wife/woman-3MS:SG.PL:DEF-ACC
 ‘Look at that big woman !’

3.1.4 Case

The word case is termed as another grammatical category that may affect nouns or whole noun phrases. According to its function, linguists grouped cases into different categories. For example, Blake (2004) and Anderson (2006) divided cases into four major categories such as grammatical or logical cases, notional or local cases, exterior or non interior cases, and interior cases. Comitative case is assumed as another case and it is treated after all of them. Therefore, in line with such classifications, Ganta case categories are discussed as follows.

3.1.4.1 Grammatical or logical cases

These cases include nominative, accusative, lexical genitive and dative. In this division, pronominal genitive is not discussed. Because it is treated in chapter four (see possessive personal pronouns in section (4.1.4)).

3.1.4.1.1 Nominative case

Nominative case has two forms **-i** and **-y** in Ganta. Both of them are sex sensitive cases, for which **-i** is used to mark for third person singular feminine gender kinship nouns when the form **-y** contrarily marks for the third person singular masculine counterparts. For example, in (72), **-y** is suffixed onto male sex referent nouns whereas **-i** suffixes onto lexically female sex referent nouns. Compare examples in (72).

Noun with-i	gloss	Noun with-y	gloss
(72) a. miís-i	‘cow’	máydo-y	‘ox’
b. maátʃtʃ-i	‘wife/woman/female’	áde-y	‘husband/man/male’
c. bíff-i	‘girl’	naʔá-y	‘child/boy’
d. bóllot-i	‘mother-in-law’	bólla-y	‘father-in-law’

Some lexical items that are used to distinguish kinship groups will suffix with the reverse nominative marker; the marker **-y** suffixes onto female sex referent nouns as **índdo-y** ‘**mother**’ whereas the marker **-i** occurs onto maleness expressing kinship word **áwoss-i** ‘**uncle**’. In the suffixation process, the marker **-i** replaces the final vowel **u** of the word **áwossu** as **áwoss-i** ‘**uncle**’.

The two cases **-i** and **-y** suffix to animate and inanimate nouns when the nouns occur in subject position. The suffixation strategy is determined by the form of terminal

vowels. If nouns end in terminal vowels **a**, **e** and **o**, the nominative case **y** will directly suffix to the vowels. Look at the example in (73).

	Citation noun	noun with -y	gloss
(73) a.	kaná	kaná-y	‘dog’
b.	zawá	zawá-y	‘home’
c.	gáde	gáde-y	‘land’
d.	ogé	ogé-y	‘road’
e.	doró	doró-y	‘sheep’
f.	tolkkó	tolkkó-y	‘hyena’

If nouns end in vowel **i** and **u**, the nominative case **-i** will either replace or overlap the terminal vowels. See in (74) below

	Citation noun	noun with -i	gloss
(74) a.	mítstsi	mítstsi-i	‘tree/wood’
b.	yétstsi	yétstsi-i	‘song’
c.	mátstsi	mátstsi-i	‘bee’
d.	maátstsi	maátstsi-i	‘milk’
e.	doótstsu	doótstsi-i	‘neighbor’
f.	ǰútǰfu	ǰútǰfi-i	‘stone’

The nominative marker **-i** occurs after definiteness marker **-(a)z-**, as in (75).

- (75) a. máydo-z-i
ox-3MS:SG.PL:DEF-NOM
‘the ox’
- b. naʔá-z-i
child/boy-3MS:SG.PL:DEF-NOM
‘the child/boy’
- c. bíǰf-as'-az-i
girl-PL-3MS:SG.PL:DEF-NOM
‘the girls’
- d. ínnd-as'-az-i
mother-PL-3MS:SG.PL:DEF-NOM
‘the mother’

The nominative case **-i** also obligatorily occurs after definiteness **-(a)tt-**. See in (76) below

- (76) a. bíǰf-att-i
girl-3FM.SG.PL:DEF-NOM
‘the girls’
- b. maátǰf-att-i
wife-3FM.SG.PL:DEF-NOM
‘the wife/woman/female’
- c. miís-att-i
cow-3FM.SG.PL:DEF-NOM
‘the cow’
- d. wudúra-tt-i
daughter-3FM.SG.PL:DEF-NOM
‘the daughter’

In the case of plural number formation, some nouns are motivated by the need to suffix with the nominative case **-i** in Ganta (for more see Number on nouns in section (3.1.1.1)). To the contrary, singular nouns suffix with the other nominative marker **-y**. In the plural construction, the terminal vowel of the word is replaced by the nominative marker **-i**. The following example (77) is presented for structure gap.

Singular nouns	gloss	plural nouns	gloss
(77) a. wudúra-y	‘a daughter’	wudúr-i	‘daughters’
b. s'éga-y	‘a goat’	s'ég-i	‘goats’

In the noun derivation, the nominative case **-i** is used to change verbal nouns to abstract, agent and patient constructions. For such constructions, see sections in (3.2.1), (3.2.5) and (3.2.6) respectively. In the same way, the case is also used in the participle construction (for more information visit section (8.3.5)). But, the nominative **-y** is used to change adjectival words into nominal counterparts (see in section (3.2.3)). The following example (78) is presented for convenience.

Adjective	gloss	Derived noun	gloss
(78) a. φazzó	‘long’	φazzó-y	‘the tall one’
b. háta	‘short’	háta-y	‘the short one’

The two forms **-i** and **-y** occur one after another in the stem of demonstrative and directional words when the words phonetically get described in Ganta. Look at the following example in (79).

- (79) a. [só-y-i-ga]
that-3MS:NOM-3FM:NOM-ALLA
‘there’
b. [há-y-i-ga]
this-NOM-NOM-ALLA
‘here’
c. [wó-y-i-ga]
up-NOM-NOM-ALLA
‘above (there)’

Furthermore, both cases **-i** and **-y** also occur with personal pronouns in Ganta (see for more in section (4.1.2)).

3.1.4.1.2 Accusative case

Ganta accusative case occurs in two strategies. The first strategy is employed by zero morpheme and the second one is expressed by morphemes **-a**, **-o** and **-u**. As in nominative case, the accusative case markers are gender referents. For this reason, morpheme **-a** (or **u**) is used to mark for third person singular masculine object case whereas marker **-o** is contrarily used to mark for third person singular feminine counterpart. Uninflected object nouns do not mark for accusative. The reason is that Ganta nouns occur in citation form in object position. Nouns that are inflected for definiteness, dative, etc take accusative case in Ganta. In the following illustration, object nouns like **bíjfo** ‘girl’, **máydo** ‘ox’, **gaayá** ‘market’ and **badallá** ‘maize’ are not marked for accusative case, as in (80).

- (80) a. abebe so bíjfo ha-ná ?uúkk-áy
abebe that girl this-DIR call-IMPER:2SG
‘Abebe call that girl here.’
b. nén-i máydo fǎŋ-í ?eéw-áy

you-NOM ox buy-CONV bring-IMPER:2SG
 ‘You buy and bring an ox.’

c. tán-i gúta-kko gaayá hám-a-m-e
 I-NOM tomorrow-COP:FOC market go-IND-FUT-PRES:CONT.DEC
 ‘I will go to the market tomorrow.’

d. inddo-y badallá jám-a-kk-oyi-d-e
 mother-NOM maize buy-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘Mother bought maize.’

As it has been said, nouns that are marked for definiteness take accusative case markers **-a** and **-o** after definiteness markers. For this reason, the definiteness marker **-(a)z-** takes the accusative case **-a** whereas the definite marker **-(a)tt-** takes the other accusative case **-o**. Compare the following examples in (81a-b) and (81c-d).

(81) a. inddo-y bé kaná-z-a ʔeéh-a-kk-oyi-n-e
 mother-NOM her dog-3MS:SG.PL:DEF-ACC love-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘Mother loves her dog.’

b. bíj-att-o gaayá-z-a áytsts-áy
 girl-3FM.SG:DEF-ACC market-3MS:SG.PL:DEF-ACC send-IMPER:2SG
 ‘Send the girl to the market !’

c. doolló-y lúkk-att-o báys-a-kk-oyi-d-e
 doollo-NOM hen-3FM.SG:DEF-ACC sell-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘Doollo sold the hen.’

d. tolkkó-y hár-att-o wóɗ-a-kk-oyi-d-e
 hyena-NOM donkey-3FM.SG:DEF-ACC kill-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘A hyena killed the donkey.’

Morpheme **-u** is used to mark for accusative case in the simultaneous clause. See in (82) below.

(82) a. tán-i hán-u-s-u
 I-NOM go-PLPER-3MS-ACC
 ‘While I was going’

b. nén-i útt-u-s-u-kk-i hám-a-m-e
 you-NOM sit-PLPER-3MS-ACC-FOC-3FM go-IND-FUT-PRES:CONT.DEC
 ‘She will go while you are sitting.’

Accusative markers can involve in clause constructions. Simultaneous, concessive and free relative clauses are used accusative case markers for their constructions in Ganta. For more information, see in sections (8.3.2.3), (8.3.2.4) and (8.3.3.2) respectively. In the same way with the nominative case markers, the accusative case markers also involve in noun derivation (see Instrument nominalization in section (3.2.4)). Demonstrative words and personal pronouns also suffix with the markers **-a** and **-o** (for sure visit sections (6.2) and (4.1.3) respectively).

3.1.4.1.3 Lexical genitive

In the previous study (Selemawit 2004), a marker **-s** was identified as genitive marker. However, this study attests geminated sibilant marker **-ssi/-ssu** and their variants **-issi/-ussu** as marker of dative case (see dative case below). See the example of the previous work below (83).

Selemawit (2004:49)

(83) a. kawʔe-s ‘of food’
 b. doro-s ‘of sheep’

- c. mitstsi-s ‘of wood’
- d. ollo-s ‘of horse’

In the above example the inflected marker **-s** does not properly refer to entities to which it has been attached. Furthermore, the glosses: ‘of food’, ‘of sheep’...have not given close meaning of the inflected words. Thus, the analyzed data hasn’t shown possessive relation in Ganta.

In Ganta, morpheme **issa** occurs following nouns to express possessive relations as ‘**of material/property/money**’. Compare the example in (84).

- (84) a. dorga issa ‘Dorga’s (name of man) material’
 b. bakúlo issa ‘mule’s material’
 c. miísi issa ‘cow’s material’
 d. lúkkó issa ‘hen’s material’
 e. átstsi issa ‘man’s material’

Illustration

- a. ha zawá-y dorga issa-kko
 this home-NOM dorga POSS-COP:FOC
 ‘This is Dorga’s home.’
 b. ha máata-y bak’úlo issa-kko
 this grass-NOM mule POSS-COP:FOC
 ‘This is mule’s grass.’

In Ganta, marker **-áade** is used to express possessive relationship. It might be derived from **áde** ‘**male/man/husband**’. When it occurs with a modifying noun, the citation form vowels are replaced by it as in (85a-b). Lexical gender **inddó** ‘**mother**’ also occurs together with nouns to express ownership, as in (85c-d). See the examples below

Nouns	gloss	Possessed nouns	gloss
(85) a. gáde	‘farm land’	gád-áade	‘owner of farm land’
b. gáydi	‘cattle’	gáy-d-áade	‘owner of cattle’
c. zawá	‘home’	zawá-inddó	‘owner/mother of home’
d. fǎwu	‘children’	fǎwu-inddó	‘owner/mother of children’

In Ganta, a noun that precedes the other noun takes the role of possessor and the following noun is the possessed one. Look at the following (86).

- (86) a. kaḥó keetstse ‘nest of bird’
 b. doró atfo ‘meat of sheep’
 c. tolkkó waaye ‘ear of hyena’
 d. naʔá maaʔo ‘cloth of boy’
 e. máydo katʃe ‘horn of ox’

3.1.4.1.4 Dative case

Ganta dative case is marked by two markers **-ssi** and **-ssu** after different environments. The former marker directly suffixes to a noun after ultimate vowels **a** and **e** to express an indirect object relationship in Ganta whereas the latter one occurs after final vowels **o** and **u** when the final vowel **o** is preceded by consonants, except for postalveolar sibilants. Compare examples (87a) and (87b).

	Noun	gloss	Dative	gloss
(87) a.	naʔá	‘boy’	naʔá-ssi	‘to boy’
	addá	‘father’	addá-ssi	‘to father’
	áde	‘man’	áde-ssi	‘to man’
	gáde	‘land’	gáde-ssi	‘to land’
b.	doró	‘sheep’	doró-ssu	‘to sheep’
	maaʔó	‘cloth’	maaʔó-ssu	‘to cloth’
	jaató	‘child’	jaató-ssu	‘to child’
	doóttsu	‘neighbor’	doóttsu-ssu	‘to neighbor’
	boóttsu	‘white’	boóttsu-ssu	‘to white’

If the final vowel **o** is preceded by posalveolar sibilants, the dative form will take the form **-issi**. In the process, the allomorph might be specified by the change of the final vowel **o** to **i** before the dative marker **-ssi** when the marker suffixes to the ultimate vowel **o**. Thereafter, a phonological rule deletes the ultimate vowel when the dative marker **-issi** occurs with stems that end in **ʃfo** and **tʃtʃfo**. The rule is “o-deletion” as **o** → **∅**/postalveolar sibilants—**issi**. The rule tells us that **o** is deleted when it occurs between the postalveolar sibilants and the dative marker **-issi**. Look at the example (88).

	Noun	gloss	Dative	gloss
(88) a.	bíʃfo	‘girl’	bíʃf-issi	‘to girl’
b.	maátʃtʃfo	‘wife/woman/female’	maátʃtʃf-issi	‘to wife/woman/female’

If alveolar sibilants are followed by a final vowel **i**, the dative marker will have the form **-ussu**. In the same way as in (88), the allomorph might be formed by a change of the **i** to **u** before the other dative marker **ssu** when it attaches to the words that end in vowel **i** in Ganta. After that, a phonological rule also deletes the vowel **i** when the formed allomorph suffixes to stems that end in **ttsi** and **si**. The rule is “i-deletion” as **i** → **∅**/alveolar sibilants—**ussu**. The vowel **i** is deleted after sibilant segments and before the dative allomorph. The reason is that two distinct vowel segments do not occur in Ganta word structures as **ttsiussu** and **siussu**. Look at example (89).

	Noun	gloss	Dative	gloss
(89) a.	míttsi	‘tree/wood’	mítts-ussu	‘to tree/wood’
	yéttsi	‘song’	yétts-ussu	‘to song’
	máttsi	‘bee’	mátts-ussu	‘to bee’
	miísi	‘cow’	miís-ussu	‘to cow’

3.1.4.2 Notional or local cases

Notional or local cases include instrumental, locative, perlativ and superessive. The first three are presented in this section. The last one, superessive case, is presented in section (3.1.5).

3.1.4.2.1 Instrumental case

Instrumental case refers to the “semantic case of the inanimate entity casually involved in a verb’s action” (Crystal 2008: 248). It expresses such a notion as ‘**by means of**’. In Ganta, the marker **-nna** is used as instrumental case marker. See illustrations (90) below.

- (90) a. ís-i k’odě kóntʃe-nna múu-tta-kk-i-d-e
she-NOM porridge fork-INST eat-CONT-FOC-3FM-PERF-PRES:CONT.DEC
‘She was eating porridge with a fork.’
b. kalʔót-i ibó k’úlfe-nna dóʔ-a-kk-i-d-e
kalʔót-NOM door key(Amharic)-INST open-IND-FOC-3FM-PERF-PRES:CONT.DEC

‘Kalʔóte opened a door with a key.’

- c. dookkó-y s'íta-nna-kko háyʔ-í-d-e
 dookkó-NOM bullet(Amharic)-INST-COP:FOC die-CONV-PERF-PRES:CONT.DEC
 ‘Dookkó was killed by a bullet.’

3.1.4.2.2 Locative case

In Ganta, the idea of location of an entity or action is expressed by place (or location) nominalizer marker **-so**. Look at the following illustrations (91).

- (91) a. tán-i tamaare-so háma-a-k-oti-d-e
 I-NOM student (Amharic)-PLNML go-IND-FOC-1SG-PERF-PRES:CONT.DEC
 ‘I went to school (place where learning takes place).’
 b. deré-y boosá-so-kko yé-n-e
 people-NOM grave-PLNML-COP:FOC exist-IMPERF-PRES:CONT-PRES:CONT.DEC
 ‘People have been in place where burial takes place (grave).’

3.1.4.2.3 Perlocative case

Like superessive case (in section 3.1.5), this case is expressed by instrumental case, **-nna** to tell us ‘path’. See the example (92)

- (92) a. gaayá-nna
 market-INST:PERLA
 ‘through market’
 b. katamá (Amharic)-nna
 town-INST:PERLA
 ‘through town’
 c. bóŋke-nna
 bóŋke-INST:PERLA
 ‘through Bonke (name of place)’

3.1.4.3 Exterior or non interior cases

Exterior or non interior cases include adessive, ablative and allative.

3.1.4.3.1 Adessive case

Adessive case is expressed by high tone (´) which rests on the terminal vowel **a** of nouns. See the table below.

	Nouns	gloss	Adessive	gloss
(93) a	ʔúmma	‘head’	ʔúmm-á	‘on head’
b	bállá	‘branch of tree’	báll-á	‘on branch of tree’
c	gállá	‘body’	gáll-á	‘on body’
d	gánna	‘meninges’	gánn-á	‘on meninges’
e	kúnʔa	‘narrow (place)’	kúnʔ-á	‘on narrow (place)’
f	goyná	‘tail’	goyn-á	‘on tail’

3.1.4.3.2 Ablative case

In the previous study (Selamawit 2004:53), morpheme **-ppa** was identified as ablative case marker, however, the present study has identified **{-ɸa}** as the ablative case marker. The reason is that Ganta native speakers not always use voiceless bilabial stop /p/ or geminated /pp/ in their speech even if they are used it in variable environments. Instead, bilabial fricative /ɸ/ is mostly used. Therefore, the morpheme **-ɸa** is identified for ablative case in Ganta. Compare the two examples below in (94) and (95) respectively.

Selamawit (2004 :53)

- (94) a. és-i konso-ppa yéé-tta-k-osi-d-e

he-NOM konso-ABL come-CONT-FOC-3MS-PERF-PRES:CONT.DEC
 ‘He came from Konso.’

b. nún-i tamaáre-so-ppa yéé-tta-k-unu-d-e
 we-NOM student-PLNML-ABL come-CONT-FOC-1PL-PERF-PRES:CONT.DEC
 ‘We came from school.’

(95) a. és-i túŋa-ḥa-kko hán-í-d-e
 he-NOM addis ababa-ABL-COP:FOC go-CONV-PERF-PRES:CONT.DEC
 ‘He went from Addis Ababa.’

b. bíra-z-i zawá-ḥa-kko
 money (Amharic)-3MS:SG.PL:DEF-NOM home-ABL-COP:FOC
 béntt-í-d-e
 find-CONV-PERF-PRES:CONT.DEC
 ‘The money is found from home.’

3.1.4.3.3 Allative case

Allative case is expressed by marker **-ko**, as in (96).

(96) a. fuútʃtʃ-u-ko
 stone-ACC-ALLA
 ‘to(ward) stone’

b. mítsts-u-ko
 tree-ACC-ALLA
 ‘to(ward) tree’

c. keétsts-u-ko
 house-ACC-ALLA
 ‘to(ward) house’

3.1.4.4 Interior cases

These cases include inessive, elative and illative.

3.1.4.4.1 Inessive case

Morpheme **-á** is used to mark for inessive case and attached to nouns in Ganta. All final vowels **e** and **o** of nouns are replaced by **-á**. Look at example (97).

	Nouns	gloss	Inessive	gloss
(97) a.	saas'ine (Amharic)	‘box’	saas'in-á	‘in the box’
b.	kiíse (Amharic)	‘pocket’	kiís-á	‘in the pocket’
c.	s'aáro	‘small pot’	s'aár-á	‘in the small pot’

As in adessive case, high tone (´) is either rested or overlapped on the terminal vowel of nouns in order to show inessive case in Ganta. See the table below (98).

(98)

	Nouns	gloss	Inessive	gloss
a	óta	‘pot’	ót-á	‘in pot’
b	zawá	‘home’	zaw-á	‘in home’
c	ʃimpullá	‘spleen’	ʃimpull-á	‘in spleen’
d	dúŋa	‘pieces of old cloth’	dún-á	‘in pieces of old cloth’
e	kótʃa	‘hole’ (man made hole of tree)	kótʃ-á	‘in hole’ (man made hole of tree)
f	gooḥína	‘lung’	gooḥin-á	‘in lung’

Allative case marker **-ga** is optionally used to mark for inessive case in some speech contexts in Ganta. If someone thinks of movement, the notion of the marker will be used to point out direction, as in allative function. Semantically, in this situation, the

marker has an equivalent function with the English word ‘**toward in**’. Since, the meaning of the marker is determined by the speech contexts (also see in (101) below).

Nouns	gloss	Inessive	gloss
(99) a. saas'ine (Amharic)	‘box’	saas'ine-ga	‘in the box’
b. kiíse (Amharic)	‘pocket’	kiíse-ga	‘in the pocket’
c. saáro	‘small pot’	s'aáro-ga	‘in the small pot’
d. óta	‘pot’	óta-ga	‘in the pot’
e. hollá	‘hole’	hollá-ga	‘in the hole’

Illustration

- a. joóf-i hollá-ga-kko árdde
 snake-NOM hole-INESS-COP:FOC live-PRES:CONT.DEC
 ‘Snake lives in the hole.’
- b. nén-i ha bíra kiíse-ga gádd-áyi
 you-NOM this money pocket-INESS put-IMPER:2SG
 ‘Please, put this money in the pocket.’

Occurrence of inessive case is also discussed on locational nouns/postpositions (see in section 3.1.5 below).

3.1.4.4 2 Elative case

In Ganta, ablative case is suffixed onto inessive case so as to express elative case. Here we can see “hierarchy” of cases according to Blake (2004: 154). See the examples below (100).

- (100) a. ót-á-φa
 pot-INESS-ABL:ELA
 ‘from in the pot’
- b. kiís-á-φa
 pocket-INESS-ABL:ELA
 ‘from in the pocket’
- c. saas'in-á-φa
 box-INESS-ABL:ELA
 ‘from in the box’
- d. zaw-á-φa
 home-INESS-ABL:ELA
 ‘from in the home’

3.1.4.4 3 Illative case

Allative marker **-ga** is also attached to cardinal numbers in Ganta to express illative case.

- (101) a. nám?u-ga
 two-ALLA:ILLA
 ‘into two’
- b. óyddu-ga
 four-ALLA:ILLA
 ‘into four’
- c. támmu-ga
 ten-ALLA:ILLA
 ‘into ten’

3.1.4.5 The other cases: Comitative case

Comitative case expresses the meaning which is equivalent to ‘**along with**’ or ‘**accompanied by**’. This case is also called “sociative” case by Blake (2004: 154). Marker **-ra** is the only comitative marker in Ganta. See the illustrations (102) below

- (102) a. tán-i doóllo-ra gaayá hám-a-k-oti-d-e
 I-NOM doóllo-COM market go-IND-FOC-1SG-PERF-PRES:CONT.DEC
 ‘I went to the market with Doóllo.’
 b. kaábur-i bé lagge-ra-kko ítftj-í-de
 kaabure-NOM her friend-COM-COP:FOC sleep-CONV-PERF-PRES :CONT.DEC
 ‘Kaábure slept with her friend.’

As it has been observed, some Ganta cases use identical linguistic forms for their constructions. For example, marker **-nna** has polysemic property and uses to express different cases such as instrumental ‘with’, superessive ‘above’ and perlativ ‘through’ in the speech contexts. In the same way with **-nna**, a marker **-ga** has also polysemic property and marks for illative, allative and inessive cases so as to express their corresponding meanings ‘into’, ‘towards (the exterior)’ and ‘in(side)’ respectively. Apart from **-ga**, morpheme **-á** is also used to mark for inessive ‘in(side)’ and adessive ‘at’ cases in Ganta. Furthermore, morpheme **-fa** is used to mark for ablative ‘from (the exterior of)’ and elative ‘from (the inside of)’ in the speech contexts. In the following table, one can see the case types and their corresponding markers as a summary.

Case category	Case	Case marker
Grammatical/logical case	Nominative	-y , -i
	Accusative	-a, -o, -u
	Dative	-ssi/-ssu/-issi/-ussu, -ro
Notional/local case	Instrumental	-nna
	Locative	-so
	Superessive	-nna
	Perlativ	-nna
Exterior/non interior case	Adessive	-á
	Ablative	-fa
	Allative	-ko, -ga
Interior case	Inessive	-á, -ga
	Elative	-fa
	Illative	-ga
Other case	comitative	-ra

3.1.5 Case and locational nouns

According to Dryer (2007: 83), locational nouns are called “postpositions” or “subclass of nouns”. The reason is that, these nouns lost their nominal characteristics as result of grammaticization. There are classes of locational nouns which occur as suffixation with some cases due to their grammaticization. When locational nouns and other nouns occur together, the case marking morpheme will suffix to the locational noun in Ganta. In example (103) and (104), one can see the occurrence of the locational nouns. In example (105) and (106), superessive and inessive case markers are realized on the locational nouns.

Locational nouns **aḥá** ‘sky/above’ and **gálla** ‘on’ occur after nouns and are sometimes used as postpositions. In the process, their high tones might shift to the preceding nouns so as to overlap with the preceding high tones, as in (106).

- (103) a. s'araḥé aḥa
 table (Amharic) above
 ‘on the table’
 b. oyde galla
 bench on
 ‘on the bench’
 c. oolló aḥa
 horse above
 ‘on the horse back’
 d. bak'úlo galla
 mule on
 ‘on the mule back’

The locational noun **oommó** ‘under’ also occurs after nouns as postposition. In the same way as in (101), a high tone of the locational noun might shift to the preceding nouns so as to overlap with the preceding noun high tones’. See the examples in (104) below.

Nouns	gloss	Locational noun	gloss
(104) a. s'araḥé (Amharic)	‘table’	s'araḥé oommo	‘under table’
b. túke	‘leg’	túke oommo	‘under leg’
c. álga (Amharic)	‘bed’	álga oommo	‘under bed’
d. míttsi	‘tree’	míttsi oommo	‘under tree’

3.1.5.1 Superessive case

Superessive case uses instrumental case **-nna** on the locational nouns **gálla** ‘on’ and **aḥá** ‘sky/above’. Therefore, instrumental case **-nna** is attached to these nouns to express superessive case in Ganta. See the example (105)

- (105) a. ʔúmma aḥa-nna
 head above-INST:SUPERES
 ‘above head’
 b. keetstse aḥa-nna
 house above-INST:SUPERES
 ‘above house’
 c. míttsi galla-nna
 tree on-INST:SUPERES
 ‘above tree’

3.1.5.2 Inessive case

Locational noun **giddó** ‘inside/middle’ is preceded by nouns and suffixed by marker **-á** so as to express inessive case. In the construction, the final vowel of the locational noun is either replaced or overlapped with the marker **-á**. Look at the example below (106).

Nouns	gloss	Inessive	gloss
(106)a. saas'ine (Amharic)	'box'	saas'ine gidd-á	'in the box'
b. kiise (Amharic)	'pocket'	kiise gidd-á	'in the pocket'
c. s'aáro	'small pot'	s'aáro gidd-á	'in the small pot'
d. óta	'pot'	óta gidd-á	'in the pot'
e. hollá	'hole'	hollá gidd-á	'in the hole'

3.2 Noun derivation

Ganta nouns can be derived from nouns, verbs, and adjectives by derivational markers. In this section, the process of abstract noun derivation including nominalization of verb, adjective, instrument, agent, patient, place and manner are discussed. Furthermore, similar nouns and verb roots, compound nouns, noun reduplication and noun as modifier are separately treated in Ganta.

3.2.1 Abstract noun derivation

Ganta abstract nouns are formed when marker **-tetstsi** suffixes to the citation non-abstract nouns in Ganta. Look at the following examples in (107), which are taken and improved from Selamawit (2004: 56).

Non-abstract noun	gloss	Abstract noun	gloss
(107)a. ítfe	'brother'	ítfe-tetstsi	'brotherhood'
b. mitfó	'sister'	mitfó-tetstsi	'sisterhood'
c. lágge	'friend'	lágge-tetstsi	'friendship'
d. gutá	'neighbor'	gutá-tetstsi	'neighborhood'
e. ?ayllé	'slave'	?ayllé-tetstsi	'slavehood'
f. índdo	'mother'	índdo-tetstsi	'motherhood'

The marker **-untté** is a newly identified one and is also used to derive abstract nouns from citation non-abstract nouns. In the suffixation process, the morpheme replaces terminal vowels of the citation form of non-abstract nouns in Ganta. Look at the following in (108).

Non-abstract noun	gloss	Abstract noun	gloss
(108)a. jaató	'child/baby'	jaat-untté	'childhood'
b. lágge	'friend'	lágg-untté	'friendship'
c. dábbó	'relative'	dább-untté	'relationship'
d. mitfó	'sister'	mitf-untté	'sisterhood'

3.2.2 Verb nominalization

Ganta verbal nouns are normally citation form verbs that have formed when nominalizing vowels **-e**, **-o**, **-u** and **-i** suffix to the roots of verbs in Ganta. In the following example (109), we can see the attachment of these vowels on the verb roots.

Verb root	gloss	Derived nominal	Gloss
(109)a. ítftf-	'sleep'	ítftf-e	'sleeping'
b. út-	'sit'	út-e	'sitting'
c. háyi?-	'die'	háyi?-o	'death'
d. s'eél-	'see/observe'	s'eél-o	'seeing/observing'
e. góf-	'till'	góf-o	'tilling'
f. úf-	'drink'	úf-u	'drinking'

g.míʃ- ‘satisfy’ míʃʃ-i ‘satisfying’

As it has been observed, some verb roots undergo gemination process during verbal noun formation. For example, in (109f-g), the final consonant segment ʃ in **úʃ-** ‘drink’ and **míʃ-** ‘satisfy’ are involved in morphophonemic process of gemination.

3.2.3 Adjective nominalization

Ganta citation adjectives are derived into nouns by the suffixation of nominative case marker **-y**. The derived noun tells us the quality which the adjective holds. See the following examples in (110).

	Citation adjective	gloss	Derived nominal	gloss
(110)a.	ɸazzó	‘tall’	ɸazzó-y	‘the tall one’
	b.háta	‘short’	háta-y	‘the short one’
	c.iíta	‘bad’	iíta-y	‘the bad one’
	d.moózo	‘strange’	moózo-y	‘the strange one’
	e.tʃíma	‘old’	tʃíma-y	‘the old one’
	f.zoʔó	‘red’	zoʔó-y	‘the red one’
	g.s’iigó	‘hard’	s’iigó-y	‘the hard one’
	h.goóba	‘intelligent’	goóba-y	‘the intelligent one’

Like abstract noun formation, citation adjectives also suffix with the marker **-tetstsi** so as to transform adjectives into abstract nominal concepts, as in (111). In the same way, marker **-untté** is also used on the citation adjective words so as to derive adjectives into corresponding abstract nouns. Look at the both examples in (111) and (112) respectively. Examples in (111) are adapted from Selamawit (2004:57).

	Citation adjective	gloss	Derived abstract noun	gloss
(111)a.	ʔeéya	‘foolish’	ʔeéya-tetstsi	‘foolishness’
	b.láale	‘thin’	láale-tetstsi	‘thinness’
	c.iíta	‘bad’	iíta-tetstsi	‘badness’
	d.adõ	‘big’	adõ-tetstsi	‘bigness’
	e.tiiró	‘dark’	tiiró-tetstsi	‘darkness’

When the marker **-untté** suffixes to the citation adjectives, the final vowels of the citation terms are deleted during corresponding abstract noun formation as in (112).

	Citation adjective	gloss	Derived nominal	gloss
(112)a.	moózo	‘strange’	moóz-untté	‘strangeness’
	b.goóba	‘intelligent’	goób-untté	‘intelligentness’
	c.tʃíma	‘old’	tʃím-untté	‘oldness’
	d.ɸazzó	‘tall’	ɸazzó-untté	‘tallness’
	e.boóza	‘lazy’	boóz-untté	‘laziness’

3.2.4 Instrument nominalization

Ganta instrumental nouns are formed by the series occurrences of morphemes on a verb root. Markers that mark for tense **-e-** or **-ee-**, third person singular masculine **-s-**, and accusative case **-a** are involved for the derivation process. Look at the following examples in (113).

- (113)a. wóɖ-e-s-a
kill-PRES:CONT.DEC-3MS-ACC
‘An instrument used for killing’

- b. ϕ átsts-ee-s-a
cure-PA-3MS-ACC
'An instrument used for curing'
- c. kít-e-s-a
fetch-PRES:CONT.DEC-3MS-ACC
'An instrument used for fetching'

3.2.5 Agent nominalization

Ganta agentive nouns are derived from verb roots by marker **-ántʃtʃa**. In the process of agentive noun formation, some verbs undergo final consonant gemination. In (114e), consonant **ʃ** is geminated. The following example is adapted from Selamawit (2004: 60).

Verb root	gloss	Derived agentive noun	gloss
(114)a. wóɗ-	'kill'	wóɗ-ántʃtʃa	'killer'
a. oótsts-	'work'	oótsts-ántʃtʃa	'worker'
b. káɸ-	'keep'	káɸ-ántʃtʃa	'keeper'
c. zálʔ-	'trade'	zálʔ-ántʃtʃa	'trader'
d. góʃ-	'till'	góʃʃ-ántʃtʃa	'tiller'

Agent nominalization also occurs on the verb stem with addition of tense, third person masculine or feminine gender marking and nominative case. Prospective aspect marker **-ade-**, which is glossed as 'PROS' is also involved in the process and directly occurs after a verb stem before singular third person markers so as to express the future intention. In the nominalization process, morphophonological processes like final vowel deletion and segment changes occur. Final vowels of all verbal nouns are deleted and replaced by agent nominalizing elements. In example (115a), the final segments **-tsts-** and **-u** of a verb stem **gúyttsu** 'hitting' are assimilated and deleted respectively. Segment **-tsts-** is assimilated to alveolar stop **-d** before tense marker whereas final segment **-u** is deleted and replaced by the agent nominalizers. In (115c), nasal segment **m** of the word **hamó** 'going' is changed to the velar nasal **ŋ** before the prospective aspect marker **-ade-**, as in **háŋ-ade-s-i**. In this process, the final tone of the verbal nouns are shifted back and placed on the first vowel of agentive noun when their final tonal vowel is undergoing deletion, as in (115c-d).

Verbal noun	Derived agent noun
(115)a. gúyttsu 'hitting'	gúyd-ee-s-i hit-PA-3MS-NOM 'one who hit someone'
b. wóɗo 'killing'	wóɗ-ee-nn-i kill-PA-3FM-NOM 'one who killed someone'
c. hamó 'going'	háŋ-ade-s-i go-PROS-3MS-NOM 'one who will go'
d. yewó 'coming'	yéw-ade-nn-i come-PROS-3FM-NOM 'one who will come'

Look at the illustrations

- (116)a. bártte gúyd-ee-s-i dubbuǵǵá-kko
 barte hit-PA-3MS-NOM dubbuǵǵá-COP:FOC
 ‘One who hit Bártte was Dubbuǵǵá.’
 b. dookkó wóǵ-ade-s-i harggé-kko
 dookko kill-PROS-3MS-NOM disease-COP:FOC
 ‘It is a disease that will kill Dookkó.’

3.2.6 Patient nominalization

Patient nominalization occurs in a similar process of agent nominalization, except for passive marker involvement. Passive marker has directly suffixed to a verb stem before a series of linguistic elements like tense, third person singular, and nominative case markers, as in (117).

- (117)a. oótsts-utt-e-s-i
 work-PASS-PRES:CONT.DEC-3MS-NOM
 ‘something that will be done’

- a. wós'-utt-ee-s-i
 drink-PASS-PA-3MS-NOM
 ‘something that was run’

In the clause, let us see agent and patient nominalizations together in (118).

- (118)a. ǵǵǵ-ee-s-u-ra ǵǵǵ-utt-ee-s-u-ra gaayá-kko
 buy-PA-3MS-ACC-COM buy-PASS-PA-3MS-ACC-COM market-COP:FOC
 yé-n-e
 exist-IMPERF-PRES:CONT.DEC
 ‘Something which was bought and the buyer is in the market.’
 b. wóǵ-ee-s-u-ra wóǵ-utt-ee-s-u-ra
 kill-PA-3MS-ACC-COM kill-PAS-PA-3MS-COM
 ǵǵǵ-a-kk-oyi-d-e
 miss-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘Someone who was killed and the killer have missed.’

3.2.7 Place nominalization

Place nominalization occurs in Ganta when place or location nominalizer **-so** suffixes to the words of citation and verbal nouns. In example (119), marker **-so** with noun stem is described.

- (119) a. tamaáre-so
 student (Amharic)-PLNML
 ‘Place where student is learning (school).’
 b. boosá-so
 grave-PLNML
 ‘Place where dead body is burying.’
 c. mítsts-u-so
 tree/wood-ACC-PLNML
 ‘Place where fire wood is available.’

In (120), place nominalization can also be formed on the stems of verbal nominals.

- (120) a. út-e-so

- sit-NML-PLNML
 ‘Sitting place’
 b. dísko-so
 sleep-PLNML
 ‘Sleeping place’

In the clause construction, we can also see the occurrence of place nominalization in Ganta, as in (121).

- (121) a. tán-i ís-i-ra yétsts-u-so-kko
 I-NOM she-NOM-COM song-ACC-PLNML-COP:FOC
 deétt-i-d-e
 meet-CONV-PERF-PRES:CONT.DEC
 ‘I met with her at a place where someone is singing.’
 b. és-i biillá-so-kko hám-a-m-e
 he-NOM local drink-PLNML-COP:FOC go-IND-FUT-PRES:CONT.DEC
 ‘He will go to a place where drinking is taking place.’

3.2.8 Manner nominalization

Manner nominalization occurs on the verb roots with the involvement of middle, third person singular masculine and manner markers. The verb **hí-** ‘say’ (with series of suffixed markers perfective, converb, and copular focus) is obligatorily involved in the construction after nominalized manner in Ganta, as in (122).

- (122) a. ís-i háy?-é-s-kke hí-d-í-kko
 she-NOM die-MID-3MS-MANN say-PERF-CONV-COP:FOC
 ítʃtʃ-e
 sleep-PRES:CONT.DEC
 ‘She sleeps as if she died’
 b. naʔá-z-i útt-é-s-kke
 boy-3MS:SG.PL:DEF-NOM sit-MID-3MS-MANN
 hí-d-í-kko ʔeéʔ-e
 say-PERF-CONV-COP:FOC stand-PRES:CONT.DEC
 ‘The boy stands up as if he sat down.’

Manner nominalization also occurs on the citation noun stems with **-tstso**, **-kke** and **-te**. Morpheme **-kke** is also described under manner adverbs in chapter 6 (see manner adverbs). Here, it is presented for convenience in (123a-d).

- (123) a. és-i zayse-tstso-kko óh-utt-e
 he-NOM zayse-MANN-COP:FOC speak-PASS-PRES:CONT.DEC
 ‘He is speaking like Zayse.’
 b. ís-i ganta-tstso kaassé
 she-NOM ganta-MANN play
 ér-a-k-oyi-n-e
 know-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘She knows how to play like Ganta.’
 c. ǰáw-az-i bé addá-kke goóba-kko
 children-3MS.PL:DEF-NOM their father-MANN intelligent-COP:FOC
 ‘The children are intelligent like their father.’
 d. ís-i aʔillá-z-a bé índdo-te-kk-i

she-NOM cloth-3MS:SG.PL:DEF-ACC her mother-MANN-FOC-3FM
 maá?-í-d-e
 wear-CONV-PERF-PRES :CONT.DEC
 ‘She is dressing (cloth) like her mother.’

3.2.9 Similar nouns and verb roots

In some Omotic languages, occurrence of similar nouns and verb roots are common. Like Sheko (Hellenthal 2010), Ganta also illustrates similar nouns and its corresponding verb roots. Nouns that end in vowel **-a** are listed under (124a), those ending in **-e** are presented in (124b), those ending in **-i** are listed in (124c), those ending in **-u** are listed in (124d) and those ending in **-o** are finally listed under (124e) :

	Nouns	gloss	verb roots	gloss
(124) a.	gaayá	‘market’	gaay-	‘sell and buy’
	ʔíja	‘keeping crop from wild animal’	ʔij-	‘keep/wait/drive’
	billá	‘local drink’	bill-	‘brew’
	kátstsa	‘food/crop’	katsts-	‘prepare/cook’
	díra/dírssa	‘kraal’	dir-/dirss-	‘prepare (kraal to animal)’
	kellá	‘terracing’	kell-	‘make terrace’
	haasáʔa	‘speech’	haasaʔ-	‘speak’
	tʃaátʃa	‘roasting’	tʃaatʃ-	‘roast’
	woósa	‘begging’	woos-	‘pray’
b.	hargé	‘disease’	harg-	‘sick’
	úte	‘sitting’	ut-	‘sit’
	túkke	‘coffee’	tukk-	‘plant’
	zalʔé	‘trade’	zalʔ-	‘making business’
	keetstsé	‘house’	keetsts-	‘build house’
	wotstsé	‘running’	wotsts-	‘run’
	waáye	‘problem/challenge’	waay-	‘suffer/challenge’
	goʃʃé	‘farm land’	goʃʃ-	‘till/plough’
	óhe	‘issue/talking/speaking’	oh-	‘talk/speak’
	nertʃtʃé	‘breakfast’	nertʃtʃ-	‘eat breakfast’
	harββé	‘trap’	harββ-	‘trap’
	gaatʃé	‘teff’	gaatʃ-	‘grind’
	káwʔe	‘food’	kawʔ-	‘cook/prepare’
	oóye	‘grass’	ooy-	‘cut grass’
	hoóde	‘wild grass’	hood-	‘weed’
c.	míʃʃi	‘satisfaction’	miʃʃ-	‘satisfy’
	diitstsi	‘traditional musical instrument’	diitsts-	‘play’
	mitstsi	‘tree/wood’	mitsts-	‘collect fire wood’
	maatstsi	‘milk’	maatsts-	‘milk cow’
	ʃíʃi	‘stool’	ʃiiʃ-	‘defecate’
	yétstsi	‘song’	yetsts-	‘sing’
	bítʃtʃi	‘urine’	bitʃtʃ-	‘urinate’

d.	buútʃʃu	‘clearing forest for cultivation’	buútʃʃ-	‘up root’
	goóʃʃu	‘crazy’	goóʃʃ-	‘be crazy’
	úʃʃu	‘drink’	uʃ-	‘drink’
	tʃútʃʃu	‘saliva’	tʃútʃʃ-	‘spit’
e.	gawó	‘belly/stomach’	gaw-	‘pregnant’
	maátʃʃo	‘wife/woman’	maatʃʃ-	‘making sexual intercourse’
	ibó	‘door’	ib-	‘shut’
	metó	‘problem/challenge’	met-	‘suffer/challenge’
	bábbo	‘fear/fright’	babb-	‘fear/fright’
	yeeφó	‘crying’	yeeφ-	‘cry’
	azázo	‘order/instruction’	azaz-	‘instruct/obey’
	bidó	‘food’	bid-	‘eat’
	moóto	‘sue’	moot-	‘accuse’
	háyʔo	‘death’	hayʔ-	‘die’
	wódó	‘killing’	wod-	‘kill’
	ziló	‘anger’	zil-	‘anger’
	oótso	‘work/job’	oots-	‘work/do’
	dísko	‘sleeping’	disk-	‘sleep’

3.2.10 Compound nouns

Compound nouns end in vowels **-a**, **-e**, **-i**, **-u** and **-o**. Examples are given in (125a-e) respectively.

- (125) a. doró lak'k'a ‘kid’ (of sheep) (doró ‘sheep’ lak'k'á ‘kid’)
 índdo adda ‘grandfather (of female)’ (índdo ‘mother’ addá ‘father’)
 joóʃu maata ‘disease (of bone)’ (joóʃu ‘snake’ maata ‘grass’)
 ziʔó jaatʃʃa ‘vegetation species’ (ziʔó ‘orphan’ jaatʃʃá ‘let live long’)
- b. s'égi uge ‘mushroom species’ (s'ég-i goat-PL ‘goats’ úge (Gamo) ‘floor of house’)
 mandára oge ‘high way’ (mandára ‘traveler’ ogé ‘road’)
 máydo siide ‘mushroom species’ (máydo ‘an ox’ siide (Gamo) ‘nose’)
 kaφó keetstse ‘nest’ (kaφó ‘bird’ keetstse ‘house’)
 káwʔe keetstse ‘restaurant’ (káwʔe ‘food’ keetstse ‘house’)
 bíʃʃʃi keetstse ‘toilet’ (bíʃʃʃi ‘urine’ keetstse ‘house’)
- c. kaná atʃʃʃi ‘tree species’ (kaná ‘dog’ atʃʃʃi ‘tooth’)
- d. wólʔa joóʃu ‘snake species’ (wólʔa ‘disease of’ ‘enset’/false banana’ joóʃu ‘snake’)
 tolkkó uutstsu ‘vegetation species’ (tolkkó ‘hyena’ uutstsu ‘enset’/false banana’)
- e. s'égi dokko ‘tree species’ (s'ég-i goat-PL ‘goats’ dokko ‘cabbage’)
 sobbó bolloto ‘tree species’ (sobbó ‘tree species’ bólloto ‘in-law’)
 maáti mas'o ‘payment (of traditional vaccination)’ (maáti (Gamo) ‘grass’ máso ‘collecting’)
 bázo medo ‘genital organ’ (bázo ‘God’ médo ‘creature’)
 mek'ó kayso ‘grass hopper species’ (mek'ó ‘milk’ kaysó ‘thief’)
 addá inddo ‘grandmother (paternal)’ (addá ‘father’ inddo ‘mother’)
 lúkko jaato ‘chicken’ (lúkko ‘hen’ jaató ‘child/baby’)

3.2.10.1 Compounding for indefinite pronoun formation

Indefinite pronouns are formed by the combination of two different nouns. For example, **ʔúmma** ‘head’ is preceded by some nouns so as to express indefinite pronoun. In the formation, the high tone of the word drops when the word follows the preceding nouns, as in (126).

- (126) a. áttsi ʔumma
man head
‘everyone’
b. gáde ʔumma
land head
‘everyone/everywhere’
c. deré ʔumma
society head
‘everyone/anyone/many people’

Combination with **máyne** ‘boundary’ is also used to form indefinite pronouns like in (127). As in (126), the high tone of the word **máyne** drops after preceding nouns in the construction.

- (127) a. saká mayne
soil boundary
‘everywhere/everyone’
b. saló mayne
sky boundary
‘everywhere/everyone’

3.2.11 Noun reduplication

In Ganta, noun reduplication is used to derive compound nouns and adverbs. Kinship nouns terms **addá** ‘father’, **índdo** ‘mother’, **bíffo** ‘girl’, **naʔá** ‘boy’ and **faató** ‘child/son’ are employed in the reduplication process so as to form other compound kinship nouns. The second components of reduplicated nouns do not take high tone. Because of this, one cannot observe high tone on the second components. In example (128), let us see compound noun derivation.

	Noun	reduplicated noun
(128) a.	addá ‘father’	addá adda father father ‘grandfather (of male)’
b.	índdo ‘mother’	índdo inddo mother mother ‘grandmother’
c.	bíffo ‘girl’	bíffì bíffo girl girl ‘grand daughter (of female)’
d.	naʔá ‘boy’	naʔá naʔa boy boy ‘grand son (of male)’
e.	faató ‘child’	faató faato child/son child/son ‘child of one’s child’

Complete reduplication can be used to derive frequential adverbs in Ganta, as in (129).

- (129) a. woggá woggá wogga
 ‘Sunda Sunday Sunday
 ‘every Sunday’
 b. wóntta wóntta wontta
 ‘day’ day day
 ‘daily’
 c. láyttsi láyttsi layttsi
 ‘year’ year year
 ‘every year’

Testing or feeling of something, for example, smelling of unpleasant or pleasant odour can be expressed by reduplicated nouns in Ganta, in (130).

- (130) a. tán-a ofá ofá-k-osi-n-e
 I-ACC dung dung-FOC-3MS-IMPERF-PRES:CONT.DEC
 ‘I feel dung smelling.’
 b. gáde-y maáhe maahe-kk-oyi-n-e
 land-NOM serval serval-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘Surrounding smells like serval odour.’
 c. ha watstsé-y soóge soóge-kk-oyi-n-e
 this water-NOM salt salt-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘This water tests like salt.’

3.2.12 Noun as modifier

In Ganta, when two nouns occur one after another, the preceding noun modifies the following noun. The case is evident in compounding. For example, an item **foófu** is equivalent with English meaning ‘snake’. But, it is used as head noun following different modifying nouns that are used to express species of snakes, in (131).

- (131) a. wól?a foofu
 disease (of ‘enset’) snake
 ‘snake species with green color’
 b. zárgge foofu
 tree species snake
 ‘snake species with metallic color’
 c. káttsa foofu
 food snake
 ‘snake species with black color’

Similarly, a word **aaǝe** ‘eye’ occurs with different modifying nouns, which determine the meaning of modified noun, **aaǝe** ‘eye’, as in (132).

- (132) a. káttsa aaǝe
 food eye
 ‘cereal’
 b. áttsi aaǝe
 man eye
 ‘evil eye’

4 Pronoun

Pronouns are used to replace nouns so as to make a sentence less cumbersome and less repetitive. According to its function, linguists classify pronouns into many types such as personal pronoun, reflexive pronoun, demonstrative pronoun, relative pronoun, interrogative pronoun, and indefinite pronoun. In this section, personal, reflexive and indefinite pronouns are treated. Case systems are also described in relation to pronouns. Demonstrative and others (relative clause or question words) are presented in other sections. Demonstratives are treated in chapter six (see nominal and verbal modifiers). For relative pronoun or question word, consult ‘wh-/content question’ in chapter five.

4.1 Personal pronoun

In this section, personal pronouns including subject and object ones and their possessive counterparts are treated independently or together with different case systems. Nominative case is treated on subject personal pronouns whereas accusative case is described on object personal pronouns. Cases that include dative, allative, and inessive are described on the possessive personal pronouns. Reflexive pronouns with logophor **bé** (**his/her/their**) and with other markers are discussed in this section. Furthermore, the occurrence of case with possessive personal pronouns and locational nouns are treated before indefinite pronouns formation in Ganta.

4.1.1 Subject, object and possessive personal pronouns

In the following table, one can see the basic forms of subject, object and possessive personal pronouns in Ganta.

(1)

Person	Subject pronoun	Gloss	Object pronoun	Gloss	Possessive pronoun	Gloss
1SG	tán-	‘I’	tán-	‘me’	tá	‘my’
2PL	nén-	‘you’	nén-	‘you’	né	‘your’
3SG	ís-	‘she’	ís-	‘her’	í	‘here’
3SG	és-	‘he’	és-	‘him’	é	‘his’
1PL	nún-	‘we’	nún-	‘us’	nú	‘our’
2PL	ítin-	‘you’ (2 nd person PL)	ítin-	‘you’ (2 nd person PL)	íti	‘your’ (2 nd person PL)
3PL	ús-	‘they’	ús-	‘them’	ú	‘their’

As shown in the above table, all basic forms of subject, object and possessive pronouns are presented. Among them, the former two forms are presented with a hyphen (-) so as to indicate the other remaining linguistic elements. For this reason, they are motivated by the need to suffix with nominative and accusative case markers when they occur in positions of subject and object in the clause. But, the latter form is not hyphenated for the reason that it does not suffix with any morpheme whenever expressing possessive notion.

4.1.2 Nominative case in pronoun

In a subject position, Ganta subject pronouns optionally suffix with nominative case **i** and with its other counterpart **y** in the clause. On the other hand, the nominative case **y** suffixes directly with the first person singular and plural subjective pronouns including second person singular counterpart in Ganta. Compare examples in the following table (2).

(2)

Person	Pronoun with nominative case i	Pronoun with nominative case y	gloss
1SG	tán-i	tá-y	‘I’
2SG	nén-i	né-y	‘you’
3SG	ís-i	-	‘she’
3SG	és-i	-	‘he’
1PL	nún-i	nú-y	‘we’
2PL	íti/ítin-i	-	‘you’ (2 nd person PL)
3PL	ús-i/úsun-i	-	‘they’

Illustrations of nominative pronouns

- a. nú-y ye-s-é hollá hollá-φa há-y-ga
 we-NOM exist-3MS-MID place place-ABL this-NOM-ALLA
 jííj-f-i
 collect-CAUS-CONV
 ‘...having caused us to gather here from where we have been,...’
- b. ús-i bé issa óh-ade-mmu
 they-NOM their property talk PROS DUR
 ‘...until they tell us their own, ...’
- c. massara (Amharic) tá-y tá aaφe-nna-kko há-y-ga-φa
 gun/rifle I-NOM my eye-INST-COP:FOC this-NOM-ALLA-ABL
 ím-utt-u-s-u bée-d-e
 give-PASS-3MS-PLPER look-PERF-PRES:CONT.DEC
 ‘...I saw with my eye when a gun was being given from here.’

4.1.3 Accusative case in pronoun

Ganta has three distinct forms of accusative cases as **-a**, **-o** and **-u**. Except for third person singular feminine sensitive object case marker **-o**, all object pronouns take the accusative case **-a** in the clause. In this situation, we can realize that the feminine gender sensitive case **-o** is motivated by the need to suffix to its corresponding third person object pronoun. Interestingly, the **-o** also is restrictedly used together with the third person singular feminine sensitive definiteness marker when the construction occurs in the object position (see Definiteness on noun in section (3.1.3.2)). The other accusative case **-u** occurs with both the third person singular and plural object pronouns in Ganta. Look at the following table in (3).

(3)

Person	Pronoun with accusative -a	Pronoun with accusative -o	Pronoun with accusative -u	gloss
1SG	tán-a	-	-	‘me’

2SG	nén-a	-	-	‘you’
3SG	-	ís-o	-	‘her’
3SG	és-a	-	és-u	‘him’
1PL	nún-a	-	-	‘us’
2PL	ítin-a	-	-	‘you’ (2 nd person PL)
3PL	úsun-a	-	ús-u	‘them’

Illustration for accusative case

- a. nén-a-máá kóyro tamaár (Amharic)-í-s-i gant-u-ga-ḥa
 you-ACC-FOC first student-CONV-3MS-NOM ganta-VH-ALLA-AB
 nén-a-máá jina
 you-ACC-FOC PA:HAB
 ‘...it were you that firstly educated from Gants...it were you.’
- b. ítin-a-má wóḍ-í gád-íí-s-a
 you-ACC-FOC kill-CONV put-CONV-3MS-ACC
 ‘...it were you who had been killed.’

4.1.4 Possessive pronouns/pronominal genitives

Possessive personal pronouns obligatorily occur before an independent item or noun so as to express possession relationship. An item **issa** ‘of property/material/money/thing’ occurs after possessive pronouns to express possession relationship, as in (4).

- (4) a. tá issa ‘my property or thing’
 b. né issa ‘your property or thing’
 c. í issa ‘her property or thing’
 d. é issa ‘his property or thing’
 e. nú issa ‘our property or thing’
 f. íti issa ‘your (2nd Person PL) property or thing’
 g. ú issa ‘their property or thing’

Possessive personal pronouns that are followed by possessed nouns in Ganta.

Look at the adapted example from (Selamawit 2004: 50), as in (5).

- (5) a. tá lukko ‘my hen’
 b. né lukko ‘your hen’
 c. í lukko ‘her hen’
 d. é lukko ‘his hen’
 e. nú lukko ‘our hen’
 f. íti lukko ‘your (2nd person PL) hen’
 g. ú lukko ‘their hen’

Illustrations for possessive personal pronouns

- a. íti íti kaasse kaá?-a?á hí-d-íí
 you you playing play-NEG say-PERF-CONV
 ‘Having said that, you would not practice your custom (playing), ...’
- b. nú woga nú dere-tetstsi ee ér-us-oda
 our culture our people-MANN IDEO know-CAUS-INFI
 ‘...To introduce our culture and our identity, ...’

Different case systems like dative, allative, and inessive occur with possessive personal pronouns in Ganta. In the following section, such descriptions are presented in detail.

4.1.5 Dative case in pronoun

Ganta personal pronouns take different markers than that of nouns in the indirect object of a verb. Marker **-ro** occurs with all first and second possessive personal pronouns rather than object counterparts for dative construction. In the process, final vowels of stems are prolonged, as in (6a-c). This case does not work for second person plural as in (6d). Similarly, plural and singular third person personal pronouns do not occur with a prolonged vowel when attaching with **-ro** (see examples in (7) below). Let us compare examples in (6) and (7).

	Possessive pronoun	gloss	Dative	gloss
(6) a.	tá	‘my’	tá-á-ro	‘for me’
b.	né	‘your’	né-é-ro	‘for you’
c.	nú	‘our’	nú-ú-ro	‘for us’
d.	íti	‘your’	íti-ro	‘for you’

For third person masculine and plural pronouns, dative marker **-ro** has attached onto one of accusative case markers **-u-** whereas for singular third person feminine, it has suffixed onto nominative case **-i-**. Compare examples in (7a-b) and (7c) respectively.

	Pronoun	gloss	Dative	gloss
(7) a.	és-u-	‘him’	és-u-ro	‘for him’
b.	ús-u-	‘them’	ús-u-ro	‘for them’
c.	ís-i-	‘she’	ís-i-ro	‘for her’

Look at illustrations in the text

- a. s'oóss-i és-u-ro hátte-y-nne buddeena bé-ss-o
 God-NOM he-3MS-ACC-DAT now-NOM-INCL food (of 't'ef) see-CAUS-IND
 ‘...Let God give best of life to him.
- b. ús-u-ro ?umma-y waáki
 they-ACC-DAT head/hair-NOM how
 hí-d-í-s-a-kk-oyi-nn-e
 say-PERF-CONV-3MS-ACC-FOC-SUBM-PA-PRES:CONT.DEC
 ‘...For them, how was hair style?’
- c. íti-ro dó?-utt-ó íti-ro dó?-utt-ó íti-ro
 you-DAT open-PASS-SUBJ you-DAT open-PASS-SUBJ you-DAT
 dó?-utt-ó
 open-PASS-SUBJ
 ‘...Let be opened for you...let be opened for you...let be opened for you...’

Possessor and beneficiary can occur together in Ganta. In this case, the possessive personal pronoun stands for the possessing role before the beneficiary noun (possessed noun) on which the variant of the dative case marker **-ssi/-ussu** is attached. Look at examples in (8) below.

- (8) a. tá kana-ssi atfó-k-ote fãŋ-í-d-e
 I dog-DAT meat-FOC-1SG buy-CONV-PERF-PRES:CONT.DEC
 ‘I bought meat for my dog.’
- b. és-i bé keetsts-ussu fútftfu-kko fííf-f-e

he-NOM his house-DAT stone-COP:FOC collect-CAUS-PRES:CONT.DEC
 ‘He is collecting stone for his house.’

4.1.6 Allative case in pronoun

The two allative markers **-ga** and **-ko** can optionally suffix to the possessive pronouns in order to express movement toward someone. In the suffixation process, except for second person plural possessive pronoun **íti**, the final vowel of the other possessive pronoun stems express prolonging when the marker **-ko** suffixes to them, as in (9).

(9)

Possessive pronoun	Gloss	Allative		gloss
tá	‘my’	tá-ga	tá-á-ko	‘toward me’
né	‘your’	né-ga	né-é-ko	‘toward you’
í	‘her’	í-ga	í-í-ko	‘toward her’
é	‘his’	é-ga	é-é-ko	‘toward him’
nú	‘our’	nú-ga	nú-ú-ko	‘toward us’
íti	‘your -2 nd PL’	íti-ga	íti-ko	‘toward them’
ú	‘their’	ú-ga	ú-ú-ko	‘toward you’ (2 nd PL)

Illustration

- a. nén-i tá-ga wós's'-áyi
 you-NOM my-ALLA run-IMPER:2SG
 ‘You run toward me !’
 uteéle-y ú-ú-ko-kko haŋ-í-d-e
 uteéle-NOM their-ALLA-COP:FOC go-CONV-PERF-PRES:CONT.DEC
 ‘Uteéle was gone toward them.’

4.1.7 Inessive case in pronoun

Morpheme **-ga** is also attached to possessive pronouns in order to indicate inessive case. Let us see the examples in the table and in the illustration respectively (10).

Possessive Pronoun	gloss	Inessive	gloss
tá	‘my’	tá-ga	‘in my’
né	‘your’	né-ga	‘in your’
í	‘her’	í-ga	‘in her’
é	‘his’	é-ga	‘in his’
nú	‘our’	nú-ga	‘in our’
íti	‘your’ (2 nd PL)	íti-ga	‘in your’ (2 nd PL)
ú	‘their’ (3 rd PL)	ú-ga	‘in their’

Illustration

- a. né metó-z-i tá-ga-kko
 your problem-3MS:SG.PL:DEF-NOM my-INESS-COP:FOC
 yé-n-e
 exist-IMPERF-PRES:CONT.DEC
 ‘Your problem is in my mind.’

The following table shows summary of cases in Ganta personal pronouns (11).

Per son	Nomin ative	Gloss	Accus ative	Gloss	Dative	Gloss	Allative		Gloss	Inessive	Gloss
1SG	tán-i/ tá-y	‘I’	tán-a	‘me’	tá-ro	‘for me’	táá-ko	tá-ga	‘toward me’	tá-ga	‘in me’
2PL	nén-i/né-y	‘you’	nén-a	‘you’	né-ro	‘for you’	née-ko	né-ga	‘toward you’	né-ga	‘in you’
3SG	ís-i	‘she’	ís-o	‘her’	ísi-ro	‘for her’	íí-ko	í-ga	‘toward her’	í-ga	‘in her’
3SG	és-i	‘he’	és-a	‘him’	ésu-ro	‘for him’	ée-ko	é-ga	‘toward him’	é-ga	‘in him’
1PL	nún-i/nú-y	‘we’	nún-a	‘us’	nú-ro	‘for us’	núú-ko	nú-ga	‘toward us’	nú-ga	‘in us’
2PL	ítin-i	‘you’	ítin-a	‘you’	íti-ro	‘for you’	íti-ko	íti-ga	‘toward you’	íti-ga	‘in you’
3PL	ús-i	‘they’	úsn-a	‘them’	ús-ro	‘for them’	úú-ko	ú-ga	‘toward them’	ú-ga	‘in them’

4.1.8 Possessive personal pronouns with locational nouns

As it has been observed above (in sections (4.1.5), (4.1.6) and (4.1.7)), cases like dative, allative and inessive are suffixed to possessive personal pronouns in Ganta. But, with the occurrence of locational nouns (postpositions) together with personal possessive pronouns, some cases undergo suffixation with the locational nouns in the clause rather than possessive personal pronouns. Such a process occurs with the inessive case -á. Let us see examples in the table (12) and below table.

(12)

Possessive Pronoun	Gloss	Possessive pronoun, locational noun and inessive case	Gloss
tá	‘my’	tá gidd-á	‘in my inside’
né	‘your’	né gidd-á	‘in your inside’
í	‘her’	í gidd-á	‘in her inside’
é	‘his’	é gidd-á	‘in his inside’
nú	‘our’	nú gidd-á	‘in our inside’
íti	‘your’	íti gidd-á	‘in your inside’ (2 nd PL)
ú	‘their’	ú gidd-á	‘in their inside’

Illustrations

- abebe ha óh-e né gidd-á k'ott-áy
abebe this talk/issue-NML your inside-INESS hide-IMPER:2SG
‘Abebe, hide this issue in your inside (mind).’
- tá mill-á zalbáte-y yé-s-a-kko
my side-ALL belt-NOM exist-3MS-ACC-COP:FOC
‘I do have belt in my side.’
- és-i bíra-z-a
he-NOM money(Amharic)-3MS:SG.PL:DEF-ACC
ú gall-á-kko áytsts-í-d-e
their on-INESS-COP:FOC send-CONV-PERF-PRES:CONT.DEC
‘I sent the money on/with them.’

4.1.9 Reflexive pronouns

Ganta reflexive pronouns are formed by the combination of a possessive pronoun and the independent word **ʔúmma** which has the English meaning of ‘**head**’. In the construction process, the lexeme **ʔúmma** ‘**head**’ directly suffixes the dative marker **-ssi**. The possessive pronouns precede the suffixed stem and occur independently. Look at the following examples in (13).

- (13) a. tá ʔúmma-ssi
my head-DAT
‘myself’
b. né ʔúmma-ssi
your head-DAT
‘yourself’
c. é ʔúmma-ssi
his head-DAT
‘himself’
d. í ʔúmma-ssi
her head-DAT
‘herself’
e. nú ʔúmma-ssi
our head-DAT
‘ourselves’
f. íti ʔúmma-ssi
your (PL) head-DAT
‘yourselves’
g. ú ʔúmma-ssi
their head-DAT
‘themselves’

Illustration

- a. tán-i tá ʔúmma-ssi gaayá háŋ-í-báʔa-te
I-NOM my head-DAT market go-CONV-NEG-1SG
‘I didn’t go to the market I myself.’
b. nén-i né ʔúmma-ssi ha oótso oótsts-áy
you-NOM your head-DAT this work/job work/do-IMPER:2SG
‘You do this job for yourself!’

First and second person possessive pronouns also take the marker **-(ŋ)kk-** to express reflexive pronouns in Ganta. In the construction, the marker has directly attached to the possessive pronoun before feminine gender sensitive accusative case **-o**, as in (14).

- (14) a. tá-ŋkk-o
my-REFL-ACC
‘myself’
b. né-ŋkk-o
your-REFL-ACC
‘yourself’
c. nú-ŋkk-o
our-REFL-ACC
‘ourselves’

- d. íti-ηkk-o
 your (PL)-CI-REFL-3FM:ACC
 ‘yourselves’

4.1.10 Reflexive pronoun and logophor **bé**

But, in the case of third person singular and plural possessive pronouns, logophor **bé** stands for them and attaches itself to the reflexive marker **-(η)kk-** so as to recapitulate the meaning of third person pronouns. In this case, third person singular feminine (3FM) and plural (3PL) pronouns take different case forms. Singular feminine takes nominative case **-i** so as to express overlapping information, gender and case. The situation is also similar for third person plural, but it takes accusative case **-u**. Like first and second person possessive pronouns as in (14), third person masculine (3MS) takes the third person singular feminine accusative case **-o** after reflexive marker, at the end position. Compare examples in (14) with (15).

- (15) a. bé-ηkk-o
 his-REFL-3FM:ACC
 ‘himself’
 b. bé-ηkk-i
 her-REFL-3FM:NOM
 ‘herself’
 c. bé-ηkk-u
 their-REFL-3PL:ACC
 ‘themselves’

Illustration

- a. bé-ηkk-i mástoote-ga s'eéll-e
 her-REFL-3FM:NOM mirror (Amharic)-INESS look-PRES:CONT.DEC
 ‘She looks herself at the mirror.’
 b. úsun-i bé-ηkk-u ?eéh-e
 they-NOM their-REFL-3PL:ACC love-PRES:CONT.DEC
 ‘They like/love themselves.’

Dative case **[-ri-]** attaches to logophor **bé** so as to express reflexive construction as in (16).

- (16) a. bíra-z-a bé-ri-k-ose
 money-3MS:SG.PL:DEF-ACC his-DAT--FOC-3MS
 ?ékk-í-d-e
 take-CONV-PERF-PRES:CONT.DEC
 ‘He took the money for himself.’
 b. úsun-i béé-ro ganta bá?a
 they-NOM their-DAT ganta NEG
 ‘They are not in Ganta for themselves.’
 c. ís-i béé-ro úf-a?á
 she-NOM her-DAT drink-NEG
 ‘She doesn’t drink for herself.’

Allative case **-ko** or **-ga** is also attached to logophor **bé** to express reflexive pronoun in (17).

- (17) a. ís-i béé-ko-kko na?á-z-a
 she-NOM her-ALLA-COP:FOC boy-3MS:SG.PL:DEF-ACC

- gá?-í-d-e
call-CONV-PERF-PRES:CONT.DEC
'She called the boy toward her (herself).'
- b. úsun-i bé-ga-kko ʃaató-z-a
they-NOM them-ALLA-COP:FOC child-3MS:SG.PL:DEF-ACC
gá?-a-m-e
call-IND-FUT-PRES:CONT.DEC
'They will call the child toward them (themselves).'

4.1.11 Logophor bé with case and nominalizer

As can be observed, logophor **bé** is used to repeat the meaning of third person pronouns (**he**, **she**, and **they**). However, in other speech contexts, the logophor depends on a following word or marker so as to give contextual meaning. For example, instrumental case marker **-nna** occurs with the logophor to express English meaning of '**alone**' in Ganta. In this case, focus marker **-k(k)-** attaches onto instrumental case preceding third person marker **-ose**, **-i** and **-u**. Look at the following in (18).

- (18) a. béé-nna-k-ose gaayá hán-í-d-e
his-INST-FOC-3MS market go-CONV-PERF-PRES:CONT.DEC
'He went to the market alone.'
- b. béé-nna-kk-i ítʃtʃ-í-d-e
her-INST-FOC-3FM sleep-CONV-PERF-PRES:CONT.DEC
'She slept alone.'
- c. béé-nna-kk-u yéé-tta-m-e
their-INST-FOC-3PL come-CONT-FUT-PRES:CONT.DEC
'They will come alone.'

In combination with place nominalizer or location marker **-so**, logophor **bé** expresses possessive relationship. Marker **-so** cannot stand on its own in regular speech context. When it occurs with the logophor, it gives us information of place, where someone lives in. See the following in (19).

- (19) a. béé-so-k-ose hán-í-d-e
his-PLNML-FOC-3MS go-CONV-PERF-PRES:CONT.DEC
'He went to his own house.'
- b. béé-so-kk-i yé-s-í-d-e
her-PLNML-FOC-3FM exist-SUPL-CONV-PERF-PRES:CONT.DEC
'She is in her own house.'
- c. béé-so-kk-u út-o-m-e
their-PLNML-FOC-3PL sit-IND-FUT-PERF-PRES:CONT.DEC
'They will sit (down) in their own house.'

4.1.12 Indefinite pronoun

Indefinite pronouns are used to convey the idea of 'all', 'any', 'some' or 'none'. Ganta indefinite pronouns are formed with the help of three strategies. The first strategy is in combination with quantifying adjectives and different linguistic elements. Adjectives like **udá** '**all**', **lagó** '**many**', and **ʔeere-/s'ik'k'e-** '**little/few/a few**' are involved in the formation process. To act as an indefinite pronoun, each of the adjectives uses different linguistic elements. For example, quantifier **udá** '**all**' directly occurs with definiteness marker **-(a)z-** before the nominative case marker **-i**, as in (20).

- (20) a. udá-z-i gaayá-kko
all-3MS:SG.PL:DEF-NOM market-COP:FOC
háŋ-i-d-e
go-CONV-PERF-PERF-PRES:CONT.DEC
'All were going to the market.'
- b. udá-z-i ínnd-as'-u-kko
all-3MS:SG.PL:DEF-NOM woman/female-PL-ACC-COP:FOC
'All are women/females.'

- (21) a. udá hí-d-í zawá-kko yé-n-e
all say-PERF-CONV home-COP:FOC exist-IMPERF-PRES:CONT
'All (of them) are in the home.'
- b. udá hí-d-í-kko háy?-í-d-e
all say-PERF-CONV-COP:FOC die-CONV-PERF-PRES:CONT.DEC
'All (of them) died.'

- (22) a. lág-idě-y harg-ántftja-kko
many-PL-NOM disease-AGNML-COP:FOC
'Many (of them) are sick.'
- b. lág-idě-y wór-á-kko
many-PL-NOM forest-INNESS-COP:FOC
yé-s-a-m-e
exist-3MS-3MS:ACC-FUT-PRES:CONT.DEC
'Many (of them) will be in the forest.'

- (23) a. ʔeér-e-s-idě-y yéé-tta-kk-oyi-d-e
few-3MS-PL-NOM come-CONT-FOC-SUBM-PERF-PRES:CONT.DEC
'A few are coming.'
- b. s'ík'k'e-s-idě-y báʔa zawá
few-3MS-PL-NOM NEG home
'A few of them are not at home.'

- (24) a. álmma/ámma-y(i)-nne hantstsó gaayá báʔa
 what-NOM-INCL today market NEG
 ‘Nothing is in the market today.’
 b. óode-y(i)-nne átsts-u-kko

who-NOM-INCL man-ACC-COP:FOC

‘Anyone is a human being.’

Interrogative pronoun **áala/álmma/ámma** ‘what’ with **átstsi** ‘man’ can also form an indefinite pronoun which is equivalent with the English indefinite pronoun ‘**somebody/someone**’, as in (25).

- (25) a. áala/álmma/ámma átsts-u-kko nén-a
 what man-ACC-COP:FOC you-ACC
 wórg-e-s-i
 want-PRES:CONT.DEC-3MS-NOM
 ‘Someone is looking for you.’

The third strategy of indefinite pronoun formation occurs in compounding. Noun with noun and adjective with noun combinations have involved in the process. In example (26), first and second components of combined nouns are suffixed by variants of nominative case markers, **-i** or **-y**. The formed indefinite pronouns express the same meaning.

- (26) a. wóbbar-i dook’ám-i (both nouns are place names that named after existing people)
 ‘everyone/everybody’
 b. dogál-i maáll-i (both nouns are tribe names)
 ‘everyone/everybody’
 c. allá-y aḥá-y (allá ‘ground’ aḥá ‘sky’)
 ‘everyone/everybody’
 d. dabbó-y allága-y (dabbó ‘relative’ allága ‘non-relative’)
 ‘everyone/everybody’

Illustrations

- a. wóbbar-i dook’ám-i yeéḥo-kko
 wóbbar-NOM dook’ám-NOM crying-COP:FOC
 háṅ-i-d-e
 go-CONV-PERF-PRES:CONT.DEC
 ‘Everyone/everybody went to the funeral.’
b. dabbó-y allága-y és-a
 dabbó-NOM allága-NOM he-ACC
 dík’ar-a-kk-oyi-d-e
 neglect-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘Everyone/everybody neglected him.’

Compounding with head noun **máyne** ‘boundary’ and **?úmma** ‘head’ are also used to form indefinite pronouns. Nouns that precede them act as modifier. In this case, the nominative case marker **-y** suffixes to the second components, however, the construction might be strange in most Omotic languages. Look at construction in (27).

- (27) a. saká máyne-y (saká ‘soil’ máyne ‘boundary’)
 ‘everyone/everybody’
 b. saló máyne-y (saló ‘sky’ máyne ‘boundary’)
 ‘everyone/everybody’
 c. deré ?úmma-y (deré ‘society’ ?úmma ‘head’)
 ‘everyone/everybody’
 d. átstsi ?úmma-y (átstsi ‘man’ ?úmma ‘head’)
 ‘everyone/everybody’

(28) a. ganta wóga-nna udá miiǵfe-ssi bóntʃtʃo-kko
 ganta culture-INST all thing-DAT respect-COP:FOC
 yé-s-í-s-a
 exist-3MS-CONV-3MS-ACC
 ‘Everything has respect in Ganta culture.’

(29) a. ziʔó índdo (ziʔo ‘orphan’ índdo ‘mother’)
 ‘mother of orphan’
 b. ziiǝtǝo índdo (ziiǝtǝo ‘not orphan’ índdo ‘mother’)
 ‘mother of non-orphan’
 c. ziʔó índdo-y ziiǝtǝo índdo-y (ziʔó ‘orphan’ índdo ‘mother’ ziiǝtǝo ‘not orphan’ índdo
 ‘mother’)
 ‘everyone/everybody/anybody’

Ganta has semantically distinguished singular and plural personal pronouns. Each of their number can be understood by their semantic functions. The reason is that there are no morphological affixes that are used to mark for their number. In the following, example (30) is given for convenience.

	Singular pronouns	Plural pronouns
(30) a.	tá 'I'	nú 'we'
b.	né 'you'	iti 'you'
c.	í 'she'	ú 'they'
d.	é 'he'	

Second person plural **íti** ‘**you**’ and third person subject agreement marker **-yisu** are used in Ganta to express politeness or respect. This happens when someone talks to elder or respected traditional leaders. For example, if someone wants ask a question to elders, he/she will use second person possessive plural **íti** ‘**you**’ on the question words, as in (31).

(31) a. álmma-y-íti-n-e
 what-NOM-2PL-IMPERF-PRES:CONT.DEC
 'What are you saying?'
 b. áanna-y-íti yé-n-e
 where-NOM-2PL exist-IMPERF-PRES:CONT.DEC
 'Where are you?'

Similarly, third person plural subject agreement marker **-yisu** suffixes to question words so as to express polite remarks when someone wants to ask for clarification, as in (32).

- (32) a. áyde-yisu háŋ-í-d-e
 when-3PL go-CONV-PERF-PRES:CONT.DEC
 ‘When did they go?’
 b. áanna-yisu háŋ-í-d-e
 where-3PL go-CONV-PERF-PRES:CONT.DEC
 ‘Where did they go?’

For the response, the addressee reacts by saying **yéé** ‘**yes**’ for friends or peer groups, but for elders or for respected people, the response is **yéyítée**. For assertion or to express sympathy **éé** or **ádda** ‘**really/sure/yes**’ is used for friends or peers. For elders, **éé?eyítée** or **ádda-yítée** is used in Ganta. Here, **-yítée** is the subject agreement of second person plural pronoun **íti** ‘**you**’.

5 Verb

Ganta verb shows agglutinative characteristics like Haro (Hirut 2004) and Koorete (Binyam 2008) in the construction of different clauses. In this chapter, syllable structures of Ganta verb roots, verb derivations, verb inflections, and subject agreement markings are presented. Thus, in the first section, Ganta verb roots together with its syllable structures are illustrated. Some morphological changes in the verb stems such as consonant gemination, alteration and stem suppletion are discussed following syllable structures of verbs. In the second section, verb extensions by different derivative suffixes like causative, passive, reciprocal, intensive/iterative, inchoative, and infinitive are discussed in detail. Following verb derivation, Ganta verb inflections are presented. This section includes tense classes, aspectual distinctions, mode/modality categories, mood types, and negating strategies. In the last section, subject agreement markings are discussed in different speech contexts in Ganta.

5.1 Verb roots

Ganta verb roots employ distinct syllable structures. Some syllable structures were identified in the previous study by Selamawit (2004: 61-62). The adapted Selamawit's syllable structures are presented in (1). Here, a syllable structure number one is realized without a vowel. It is non-syllabic nasal in Ganta and other Omotic languages like Haro (Hirut, 2004). But, in some other languages, for example, in Koorete (Binyam, 2008), the syllable **m-** 'eat' occurs with a vowel. The bisyllabic structures are also discussed in (2) below. Compare them in (1) and (2) as follows.

(1)	1.	C	m-	'eat'
	2.	CV	ye-	'come'
			be-	'see/look'
	3.	VC	im-ut-	'give'
				'sit'
	4.	VCC	itʃtʃ-	'lay'
			intʃ-	'win'
	5.	VVC	iir-	'cut by shape'
			ooʃ-	'dispute'
	6.	CVC	yel-	'bear'
			kaɸ-	'watch'
			kar-	'cut (branch of tree)'
	7.	CVVC	yeeɸ-	'cry'
			s'eel-	'see'
			gaatʃ' -	'grind'
			ʃiik'-	'collect'
			geeʒ	'clean'
	8.	CVCC	zalʔ-	'trade'
			bays-	'sell'
			doll-	'jump'

The bisyllabic structures are presented in (2)

- | | | |
|---------------|-----------|--------------------------|
| (2) 1. CV.CVC | dik'ar- | 'hate' |
| 2. VC.VC | ibis'- | 'close' |
| 3. CVC.CVC | dandaʔ- | 'manage' |
| | gulbat- | 'kneel down' |
| | labban- | 'tire' |
| 4. CVVC.CV | biiddo- | 'mock' |
| 5. CVC.VC | mik'ar- | 'insist on' (negatively) |
| 6. CVV.CVC | geedar- | 'boast' (negatively) |
| 7. CVVC.CVCC | βuuβbill- | 'lay' (egg) |

As it has been observed in the syllable structure of Ganta, almost all verb roots are ended in consonants, except for number 2 in (1).

Consonant gemination of verb roots

Some verb roots undertake morphological changes in different stems when they involve derivations. For example, consonant gemination takes place in the infinitive formation, but not in the nominal construction, as in (3).

	Verb root	gloss	Infinitive	gloss	Nominal	gloss
(3)	s'eél-	'look'	s'eéll-oda	'to look'	s'eél-o	'looking'
	ʔuúk-	'call'	ʔuúkk-oda	'to call'	ʔuúk-o	'calling'
	tʃaák'-	'swear'	tʃaák'k'-oda	'to swear'	tʃaák'-o	'swearing'
	kít-	'fetch'	kítt-oda	'to fetch'	kít-e	'fetching'
	dád-	'weave'	dádd-oda	'to weave'	dád-e	'weaving'
	tʃúk-	'cut'	tʃúkk-oda	'to cut'	tʃúk-o	'cutting'

As it has been observed above (3), verb final consonants **l**, **k**, **k'**, **t**, and **d** are geminated when taking the infinitive marker **-oda**. This process might happen as result of morpho-phonological process, assimilation of a verbal suffix with final consonant. The same process was observed in the closely related language Haro (Hirut 2004). Hirut attested gemination of verb final consonants **m** and **g** with few verbs compared to the nominal counterparts in Haro.

Consonant alternation of verb roots

Consonant alternation is discussed in chapter 2 in above (see morphophonological process). But here some examples are also given for structural gaps. Thus, compare examples in (4) and (5) below. In example (4), consonant **-m-** has changed to **-ŋ-** in the infinitive formation. In example (5), voiceless bilabial **-p-** is changed to geminated velar stop **-kk-** before the infinitive morpheme **-oda**.

	Verb root	Infinitive
(4)	hám- 'go'	háŋ- oda 'to go'
	ím- 'give'	íŋ-oda 'to give'

In the same way, an alteration between **-p-** and **-kk-** is also frequently observed in verb roots and its infinitive equivalents (5).

	Verb root	Infinitive
	yeéφ- 'cry'	yeékk- oda 'to cry'
	ʔéφ- 'take'	ʔékk-oda 'to take'

Stem modification

Some Ganta verb roots like **sí-** 'hear' expresses stem 'modifications' in the derivational process. For instance, in (6), the verb root **sí-** 'hear' takes glide **-y-** as a stem

before nominal and infinitival markers. Look at the following examples in (6a) and (6b) respectively.

- a. sí-**y**-e
hear-**y**-NML
'hearing'
- b. sí-**y**-oda
hear-**y**-INFI
'to hear'

But in the causative construction, a high front vowel occurs prolonging before causative marking allomorph [-ss-], as in (7).

- (7) a. sí-**í**-ss-
hear-**í**-CAUS
'cause to hear'

In the passive construction, the verb root **sí-** 'hear' takes three different segments like -**y**-, -**t**-, and -**nt**-, as in (8a-c).

- (8) a. sí-**y**-utt-
hear-**y**-PASS
'be heard'
- b. sí-**t**-utt-
hear-**t**-PASS
'be heard'
- c. sí-**nt**-utt-
hear-**nt**-PASS
'be heard'

Like **sí-** 'hear', a verb root **bé-** 'look' exhibits different conceptual categories by different stem forming segments, as in (9).

- (9) a. bé-**y**-o
look-**y**-NML
'looking'
- b. bé-**y**-oda
look-**y**-INFI
'to look'

For causative formation, **bé-** 'look' takes geminated voiceless fricative [-ss-] as causative marker. Look at the example below in (10).

- (10) a. bé-**ss**-
look-CAUS-
'cause to look'

In the passive construction, segment -**y**- and -**t**- appear before passive marker -**utt**- in Ganta. In the latter case, the final vowel segment of the verb root expresses prolonging before the **t**, as in (11b).

- (11) a. bé-**y**-utt-
look-**y**-PASS-
'be looked'
- b. bé-**é-t**-utt-
look-VL-**t**-PASS
'be looked'

Stem modification on a verb root m- ‘eat’

Interestingly, the verb root **m-** ‘eat’ expresses different stem formation strategies in the same conceptual categories. Particularly, in verbal nominal and infinitival formation, it expresses distinct stems. For example, verbal nominal is expressed by two stem forming segments. The first system uses vowel-glide (**-íy-**) sequence after the verb root of **m-‘eat’** and before nominal marking vowel **-e**. The second strategy occurs with the combination of a long high back vowel and geminated voiceless fricative (**-úu-ss-**) sequence after the verb root and before the other nominal marker **-u**. Compare the following examples below in (12a-b).

- (12) a. **m-íy-e**
eat-**íy**-NML
‘eating’
b. **m-úu-ss-u**
eat-**úu-ss**-NML
‘eating’

Like verb nominal formation, the verb root **m-** ‘eat’ also exhibits two stem formation strategies in the infinitive construction. Vowel-glide (**-íy-**) sequence suffixes to the verb root for the basic infinitive morpheme **-oda** in the first system. The second strategy uses vowel-fricative (**-ús-**) sequence after the verb root and before the other infinitive marker **-kka**. Look at the examples in (13a-b).

- (13) a. **m-íy-oda**
eat-**íy**-INFI
‘to eat’
b. **m-ús-kka**
eat-**ús**-INFI
‘to eat’

For causative formation, the verb root also uses a high tone long high back vowel **-úu-** after the verb root and before causative morpheme **[-s-]** in Ganta, as in (14).

- (14) a. **m-úu-s-**
eat-**úu**-CAUS-
‘cause to eat’

In the past participle, the long high tone high back vowel **-úu-** is used directly after the verb root and before perfective marker **-d-**, which precedes present continuous and declarative marker **-e-** in the construction. See below in (15).

- (15) a. **m-úu-d-e-s-i**
eat-**úu**-PERF-PRES:CONT.DEC-3MS-NOM
‘a one who eaten’

Like past participle formation, in the continuative aspect construction, the verb root takes the high tone long high back vowel **-úu-** immediately. The differences in the two constructions are structures. Present continuous and declarative marking segment **-e** is deleted and replaced by converb marking **-í-** before continuative marker **-tta** in the continuative construction, as in (16).

- (16) a. **m-úu-d-í-tta**
eat-**úu**-PERF-CONV-CONT
‘while eating’

Stem modification on existential verb root yé- ‘exist’

Syllabic structure of existential verb root **yé-** ‘**exist**’ and another verb root **yé-** ‘**come**’ are identical in form. Both of them also have a high tone vowel at the final segment. Furthermore, their role is identified in the syntactic functions. Now, for time being, stem modification of the existential verb is described here (for modification strategy of **yé-** ‘**come**’ see below in (20)). The existential verb stem expresses distinct segment structures in the nominal, continuative, and in the infinitive formations in Ganta. In the verbal nominal construction, geminated voiceless fricative with high tone low back vowel **-á** that marks for continuative is applied, as in (17).

- (17) a. **yé-ss-á**
 exist-**ss**-CONT
 ‘existence’

In the continuative aspect formation, imperfective marker, and present continuous and declarative morpheme, **-n-** and **-e** are directly attached with the verb root, as in (18).

- (18) a. **és-i** **só-y-ga-kko** **yé-n-e**
 he-NOM that-NOM-ALLA-COP:FOC exist-IMPERF-PRES:CONT.DEC
 ‘He is over there.’

Most conceptual categories, including infinitive, use voiceless alveolar fricative **s** after the verb root. In the example (19a) and (19b), let us see infinitive and perfective aspect constructions respectively.

- (19) a. **yé-s-oda**
 exist-**s**-INFI
 ‘to exist/live’
 b. **yé-s-a-k-osi-d-e**
 exist-**s**-IND-FOC-3MS-PERF-PRES:CONT.DEC
 ‘He is in existence/he is alive.’

Stem modification on a verb root yé- ‘come’

Distinct stem structures are observed in the tense (or aspect) constructions for the verb stem **yé-** ‘**come**’ with respect to another functional forms, infinitive and passive. The final vowel expresses prolonging before continuative marker **-tta** in the tense or aspect constructions, as in (20a-b). In another derivational process, the verb root uses glide (**-w-**) sequence, as in (20c-d). In the process, tone may or may not be rested on the root segment of the verb. Compare the examples in (20a-b) and (20c-d) below.

- (20) a. **yé-é-tta-k-oti-ttam-e**
 come-**ttá**-FOC-1SG-FUT-PRES:CONT.DEC
 ‘I will come.’
 b. **yé-é-tta-k-osi-d-e**
 come-**ttá**-FOC-3MS-PERF-PRES:CONT.DEC
 ‘He came.’
 c. **yé-w-oda**
 come-**w**-INFI
 ‘to come’
 d. **yé-w-utt-**
 come-**w**-PASS-
 ‘become’

In (20a) above, we can observe that the verb root **yé-** ‘**come**’ ends in a short vowel **e**. But in the tense or aspect construction, its internal vowel quality is changed into

long vowel, **ee** as in **yé-é-**. Front-mid vowel becomes long vowel. As linguists reported, such process is observed when some languages undergo a lexeme formation process. Lieber (2009: 79) further explains that “some languages, however, have means of lexeme formation that involve changing...of an internal vowel or consonant of a base, root, or stem”. In the case of (20c-d) and even in the above other examples, we can also see different stem forms for different paradigm formations. The case occurs with some reasons. Therefore, in the body of this research, a word stem modification is glossed as ‘STM’ whenever stem internal change might be occurred.

Verb root with optional segments

Some especial verb roots alternatively use either bilabial or velar nasals as their final segments when morphological affixes occur following them. For example, segment **m** appears before markers of indicative, causative and passive respectively, whereas the velar segment **ŋ** happens before mid back vowel of infinitive marking segment and also before high tone vowel segments of imperative and converb markers in Ganta. Look at

Verb root	before indicative	before causative	before passive
(21) a. kám- ‘cover’	kám -a-kk-i-ttam-e cover-IND-FOC-3FM-FUT-PRES:CONT.DEC ‘she will cover.’	kám -us- cover-CAUS- ‘cause to cover’	kám -utt- cover-PASS- ‘be covered’

the forms of each segment in example (21a) and (21b).

Verb root	before infinitive	before imperative	before converb
b. káŋ- ‘cover’	káŋ -oda cover-INFI ‘to cover’	káŋ -áy cover-IMPER ‘cover!’	káŋ -í cover-CONV ‘after covering’

Segment **ŋ** can replace **m** and the vice versa process is also possible even if **m** expresses gemination when replacing the segment **ŋ**. Compare (22a-b) with (21a-b).

Verb root	before indicative	before causative	before passive
(22) a. káŋ- ‘cover’	káŋ -a-kk-i-ttam-e cover-IND-FOC-3FM-FUT-PRES:CONT.DEC ‘She will cover.’	káŋ -us- cover-CAUS- ‘cause to cover’	káŋ -utt- cover-PASS- ‘be covered’
Verb root	before infinitive	before imperative	before converb
b. kám- ‘cover’	kámm -oda cover-INFI ‘to cover’	kámm -áyí cover-IMPER ‘cover!’	kámm -í cover-CONV ‘after covering’

In the same way with that of nasal segments, non-nasal consonants also express their optional final segments of verb roots before morphological markers in Ganta. The situation is expressed by voiced bilabial or velar stop segments. For instance, the bilabial segment **b** occurs before indicative, causative and passive markers, whereas the velar one occurs as geminated form **gg** before high tone vowel segments of imperative, converb and middle markers, as in (23). Compare illustrations in (23a) and (23b).

Verb root	before indicative	before causative	before passive
(23) a. dǎb- ‘leave’	dǎb -a-kk-i-ttam-e leave-IND-FOC-3FM-FUT-PRES:CONT.DEC ‘she will leave.’	dǎb -us- leave-CAUS- ‘cause to leave’	dǎb -utt- leave-PASS- ‘be left’

Verb root	before imperative	before converb	before middle
b. ďǎgg- 'leave'	ďǎgg- áyi leave-IMPER 'leave!'	ďǎgg- í leave-CONV 'after leaving'	ďǎgg- é leave-MID 'left'

Segment **b** and segment **gg** can replace each other before infinitive marker **-oda**. But in this case, the bilabial segment occurs as geminated form **bb** like the velar counterpart before the other morphological markers in Ganta. See examples in (24a) and (24b) below.

Before infinitive

- (24) a. **ďǎbb-**oda b. **ďǎgg-**oda
 leave-INFI leave-INFI
 'to leave' 'to leave'

Verb root alteration in causative construction

Interestingly, some Ganta verb roots like **háy?**- 'die', **yé-** 'exist/live', **yé-** 'come', and **hám-** 'go' use semantically different verb roots for their causative formation. For example, a causative form of a verb **háy?**- 'die' is expressed by a verb root of **wód-** 'kill'. The existence verb **yé-** 'exist/live' is expressed by a verb **árd-** 'live/exist'. In the same manner, the motion verb roots of **yé-** 'come' and **hám-** 'go' causative structures are expressed by **ʔéé-** 'bring' and by **ʔém-** 'take' respectively. Let us see the following examples in (25).

- | Verb root | Causative stem |
|--------------------------------|--|
| (25) a. háy? -
'die' | wód- us-
kill-CAUS-
'cause to die/kill' |
| b. yé-
'exist/live' | árd- us-
live/exist-CAUS-
'cause to live/exist' |
| c. yé-
'come' | ʔéé- w-us-
bring-CI-CAUS-
'cause to come/bring' |
| d. hám
'go' | ʔém- us-
take-CAUS-
'cause to go/take' |

In some speech contexts, particularly in debating like utterances, a verb root **gád-** 'put' can be used in the causative construction instead of existence verb **yé-** 'exist/live', as in (26).

- | Verb root | Causative stem |
|----------------------------|--|
| (26) a. yé- 'exist' | gád- us-
put-CAUS-
'cause to exist/put' |

5.2 Verb derivation

In this section, Ganta verb extensions are analyzed by different affixes. Many linguists define and explain the role of morphological affixes by which the verb extension processes take place. For example, Childs (2003: 110) elaborates the process in a way that "verb extensions are derivational suffixes that alter the meaning and often the

argument structure of a verb”. In relation to Childs’s (2003) point of view, causative verb extension in Ganta changes the meaning of the verb and allows the addition of an argument in the person of the cause, but passive and reciprocal verb extensions decrease an argument. The other derivational suffixes like intensive/iterative, infinitive, and inchoative can also play vital roles in Ganta verb derivations. In the following table, we can see the derivational patterns and their corresponding affixes.

Derivational patterns	Affixes
Causative	-s-, -ss-, -us-, -uss-, -(a)tsts-, -utsts-, -f-, and -tf-
Passive	-t-, tt- and -utt-
Reciprocal	-utt-, bé- and -ga
intensive/iterative	-utsts-, -urutsts- and -utftf-
Infinitive	-oda, -kka and -á
Inchoative	-t-, -et-, -ot-, -tt-, -é and -ó

The causative verb extension can be applied with different causative suffixes that are determined by the type of Ganta verb roots. Double causative is also possible and occurs with reduplication like process with suffix **-us-**, not with the other suffixes. Furthermore, this marker can also be attached to the other causative suffixes for the double causative formation.

Passivization mostly occurs onto verb roots in Ganta. The process shares similar marker with that of reciprocal construction. The other constructions like intensive/iterative is also expressed by reduplication process. But, the inchoative verbs are derived from nominal and adjectival classes by using morphological suffixes in Ganta. Therefore, Ganta verb extension analyses are illustrated and presented one by one under each section in the following.

5.2.1 Causative

Causative formation can be expressed by different causative allomorphs, for which morphophonological processes take responsibility for the change of their distinct forms. For this reason, a suspected underlying causative morpheme {-s-} changes itself to the different forms as [-s-], [-ss-], [-us-], [-uss-], [-(a)tsts-], [-utsts-], [-f-], and [-tf-] after phonetically distinct segments of verb roots. Therefore, distributions of the allomorphs are described after final segments of transitive and intransitive verb roots in Ganta.

The suffixation process of the intransitive verb roots with the causative allomorphs results in paradigm shifts in Ganta. In this case, the intransitive verb root can be changed into transitive verb stem, but the transitive verb root does not undergo any change. Such phenomenon was firstly asserted in Ganta by Selamawit (2004: 91-92) even if her analysis goes beyond the fact. Similarly, in the related languages, Koorete (Binyam 2008) and Haro (Hirut 2004), the role of causativization was also realized in the transitive and intransitive verb roots.

Selamawit (2004: 91) identified **-uso** as causative marker in Ganta even if it has not been attested as causative marker in this study. Look at the following data from Selamawit (27).

Verb root	gloss	Causative	gloss
(27) a. wod-	‘kill’	wod-uso	‘cause someone to kill’
b. ham-	‘go’	ham-uso	‘cause someone to go’

c. er- ‘know’ er-uso ‘cause someone to know’

As it has been observed in the above examples (8a-c), the marker **-uso** is used to mark for the causative strategy. A vowel **o** is attached as part of the marker segment in the final position. However, in the study, the vowel **o** is not attested as part of the causative marker segment. Rather, it is a nominalizer for some verb roots in Ganta. Therefore, marker **-us-** is recognized as one of the causative marking allomorphs.

For the causativization strategy, except for certain forms of gerundive or nominalized verbs, the analyzed data include root forms of the transitive and intransitive verbs. Since, the causativization system does not apply with the citation verb forms. The reason is that terminal vowels of the verb stems are highly motivated by the phonological rule of deletion when the underlying causative morpheme {-s-} comes to suffix it. The data also include complex clause structures, in which the causative allomorphs may be expressed together with series of other affixes. Thus, in this section, the function of the allomorph [-us-] and the other allomorphs are analyzed on the transitive and intransitive verb roots.

5.2.1.1 Causativization of transitive verb

Transitive verb causativization with [-s-]

A verb root final segment of bilabial nasal takes the allomorph [-s-] as causative marker. In the process, phonological rule motivates feature-adding rule that adds an entire segment of the causative stem. In this case, long high tone vowel **úu** is inserted before the causative allomorph and after final segment of the verb root. Here, the segment modification rule is applied so as to preserve the causative structure of the word in Ganta. Since, Ganta word structure may not occur as sequence **ms**. See in (28) below.

	Verb root	gloss	causative stem	gloss
(28) a.	m-	‘eat’	m-úu-s-	‘cause to eat’

Apart from bilabial nasal, glottal sound **ʔ** that occurs at the end of the verb root also conditions the allomorph [-s-] as causative marker. But, in this process, another rule changes the final segment of the glottal sound to the postalveolar glide **y**. Since, the sequence **ʔs** is not permitted in Ganta word structures. Still, a new rule also reduces a segment quantity of the verb root. In this case, long vowel **aá** that occurs at the medial position of the verb root is reduced to the short vowel **á** in the causative stem. The case might be happened as result of phonotactic reason, for which the sequence of long high tone vowel before consonant cluster is not easily allowed in medial position of the word, as in **m-aá-y-s-** ‘cause to dress/wear’. Look at the example in (29).

	Verb root	gloss	causative stem	gloss
(29) a.	maáʔ-	‘dress/wear’	máy-s-	‘cause to dress/wear’

Change of glottal stop **ʔ** to glide and shortening of long high tone vowel to the corresponding shorter vowel in Ganta are phonemic because the morphophonological processes are not always predictable by rules. In the above (29) case, the glottal change rule is an assimilation rule and vowel shortening rule is a segment reduction rule. But, in the following illustration (30), the morphophonological rules do not work as they are expressed in (29). Here, the suffixation of underlying causative morpheme {-s-} does not change the form of the glottal stop, as in (30a-c) and shorten a vowel length as usual, as in (30a). Instead, the glottal stop simply takes the other causative allomorphs like [-uss-] or [-us-] for causative formation. In the following example (30), one can observe different forms of the causative allomorphs after the glottal sound in Ganta. Furthermore,

the same condition is also observed onto intransitive verb roots; see intransitive verb causativization in section (5.2.1.2). For now, compare the examples in (29) and (30).

	Verb root stem	gloss	Causative	gloss
(30) a.	ʔoóʔ-	‘shout (of ox)’	ʔoóʔ-uss-	‘cause to shout (of ox)’
b.	góʔ-	‘benefit’	góʔ-us-	‘cause to benefit’
c.	gáʔ-	‘call’	gáʔ-us-	‘cause to call’

The suffixation of the underlying causative morpheme {-s-} conditions the sound of voiceless velar stop **k** and velar ejective **k'** that occur at the end of the verb roots to be /s/ before the causative allomorph as [-s-]. Look at example (31) below.

	Verb root	gloss	Causative stem	gloss
(31) a.	toók-	‘carry’	toós-s-	‘cause to carry’
b.	doók'-	‘make (rope)’	doós-s-	‘cause to make (rope)’

Change of the velar sounds to /s/ (or total assimilation of the velar sounds) after being conditioned by the underlying causative morpheme are phonemic in Ganta. Because, such morphophonological processes are not predictable by rules. In the following illustration (32), such morphophonological processes are not expressed as they are expressed in the example (31). The reason might be influenced by the occurrence of the distinct segment forms in word structures. If initial or medial (or both) segments of the verb roots may express form change, the forms of the final velar stops (**k** or **k'**) of the verb roots do not change to /s/ and the causative allomorph [-s-] will not occur as the causative marker. Instead, the velar sounds simply take the other causative allomorph [-us-] without any form change in the causative construction in Ganta. For example, in (32a), a verb root only differs in its initial segment from example (31a). But, the other verb roots that are illustrated in (32b-f) differ in initial or medial (or both) segments of the verb roots even the final segment of them is still similar with that of (31a-b). Compare (31) with (32)

	Verb root	gloss	Causative stem	gloss
(32) a.	boók-	‘dig’	boók-us-	‘cause to dig’
b.	búk-	‘thresh’	búk-us-	‘cause to thresh’
c.	duúk'-	‘fetch’	duúk'-us-	‘cause to fetch’
d.	tuúk'-	‘support’	tuúk'-us-	‘cause to support’
e.	ḑéék'-	‘kick’	ḑéék'-us-	‘cause to kick’
f.	bák'-	‘slap’	bák'-us-	‘cause to slap’

Similarly, as the voiceless velar **k** and velar ejective **k'** in (31), the underlying causative morpheme {-s-} conditions the glottal stop **ʔ** of the verb root segment to /s/ before the causative allomorph [-s-]. Here, a rule of total assimilation changes the glottal sound before the underlying causative morpheme. The reason is that sequence **ʔs** is not allowed in Ganta word structures. Still, another phonological rule reduces long high tone vowel **éé** to the short high tone vowel **é** in the causativization process in (33a). The vowel reduction process has happened for the reason that Ganta word structures may not permit long high tone vowel between glottal stop and geminated sibilant, as in **ʔ-éé-s**. Now, look at the examples in (33).

	Verb root	gloss	Causative stem	gloss
(33) a.	ʔééʔ-	‘stand’	ʔés-s-	‘cause to stand’
b.	kaáʔ-	‘play’	kaás-s-	‘cause to play’
c.	ḑuúʔ-	‘explode’	ḑuús-s-	‘cause to explode’

As in (33), the final segment of the verb root **ʔ** does not express feature change before the underlying causative morpheme {-s-} that follows to it in (34). Here, simply, the other causative allomorphs [-uss-], [-us-] and [-atsts-] suffix to the verb root **ʔ** without conditioning the form change of the segment. The case might be happened as result of initial or medial (or both) segment changes of the verb roots in form even if the final segment remains stable. Look at the example in (34).

Verb root	gloss	causative stem	Gloss
(34) a. ʔoóʔ-	‘shout (of ox)’	ʔoóʔ-uss-	‘cause to shout (of ox)’
gáʔ-	‘call’	gáʔ-us-	‘cause to call’
góʔ-	‘benefit’	góʔ-us-	‘cause to benefit’
múʔ-	‘germinate’	múʔ-atsts-	‘cause to germinate’

Of the non glottal stop, the final segment **g** of the transitive verb root is also conditioned to the /s/ when the underlying causative morpheme {-s-} suffixes to it. As usual, a phonological rule is also realized in the process when the underlying causative morpheme comes to occur with the final segment of the verb root, where the segment undergoes total assimilation after the causative allomorph. In the process, one can observe “g-assimilation” as formulated rule: /g/ → /s//—s. The voiced velar stop is changed from the verb root because of phonotactic reason. The reason is that sequence of **gss** does not allow in Ganta word structures. See below in (35).

Verb root	gloss	Causative stem	gloss
(35) a. bó g -	‘kidnap’	bós-s-	‘cause to kidnap’
b. dǒ g -	‘munch	dǒs-s-	‘cause to munch’

If initial and medial segment of the verb root expresses form change, the voiced velar stop that occurs at the end of the verb roots may not always be conditioned by the underlying causative morpheme. Instead, the segment takes the other causative allomorph [-us-] or [-uss-], as in (36). Compare (35) with (36)

Verb root	gloss	Causative stem	gloss
(36) a. já g -	‘divide’	jág-us-	‘cause to divide’
gó g -	‘run (of water)’	góg-uss-	‘cause to run (of water)’
gi g -	‘agree’	giig-uss-	‘cause to agree’

Apart from stops, bilabial fricative **ɸ** that occurs at the end of a verb root also conditions the form of itself when the underlying causative morpheme {-s-} suffixes to the segment in Ganta. In this process, morphophonemic rule assimilates the final segment of the verb root to the /s/. Such rule is happened as result of phonotactic reasons, for which the sequence of **ɸss** is not tolerated in Ganta word structures. The formulated rule will have the form: /ɸ/ → /s//—s and the rule tells us that **ɸ** changes itself when it finds between **u** and **ss**. Look at the example in (37).

Verb root	gloss	Causative stem	gloss
(37) a. tú ɸ -	‘plant’	tús-s-	‘cause to plant’

As in (35), the form of the allomorph may not be only determined by the final segment of the verb roots, but also the phonetic property of the initial or medial (or both) segments of the verb root may affect the situation. If one can change the initial or medial (or both) segments of the verb root, the segment **ɸ** does not condition the phonetic form of the underlying causative morpheme, rather it directly suffixes with the other causative allomorphs [-us-] and [-utsts-]. In the process, the bilabial fricative **ɸ** changes itself to

the voiceless velar stop **k** as an optional segment before the causative allomorph, as in (38a-b). Compare (37) with (38)

	Verb root	gloss	Causative stem	gloss
(38) a.	lúϕ-	‘pierce’	lúϕ-us-/lúk-us-	‘cause to pierce’
b.	ʔéϕ-	‘take’	ʔéϕ-us-/ʔék-us-	‘cause to take’
c.	káϕ-	‘wait/keep’	káϕ-us-	‘cause to wait/keep’
d.	áyϕ-	‘catch’	áyts-ts-utsts-	‘cause to catch’

But in another situation, the segment **ϕ** can also be conditioned to the form /s/ when the underlying causative morpheme suffixes to it. The case might be expressed when a verb root occurs with a postalveolar glide **y** at its initial position and with long vowel **eé** in its medial position. In the process, segment **ϕ** occurs assimilation when it finds itself between **eé** and **s**. The reason is that the sequence **ϕss** is not permitted in a word structure of Ganta. For this reason, the causative marker occurs with its similar segment /s/, as in (39). See below.

	Verb root	gloss	Causative stem	gloss
(39) a.	yeéϕ-	‘cry’	yeés-s-	‘cause to cry’

As usual, if the initial and medial segments of the verb root occur form change, the form of the causative allomorph will be different, and the segment **ϕ** simply takes the allomorph [-us-], as in (40). Compare (40) with (39)

	Verb root	gloss	Causative stem	gloss
(40) a.	ʔuúϕ-	‘dislike’	ʔuúϕ-us-	‘cause to dislike’

Transitive verb causativization with [-ss-]

The vowel sound that occurs at the end of transitive verb root can also condition the underlying causative morpheme to the causative allomorph [-ss-], as in (41).

	Verb root	gloss	Causative stem	gloss
(41) a.	bé-	‘look/observe’	bé-ss-	‘cause to look/observe’

Transitive verb causativization with [-us-]

In Ganta, the underlying causative morpheme {-s-} is changed to the allomorph [-us-] after stops, fricatives, affricates and liquids. The allomorph might be resulted from an addition rule of vowel **u**. If vowel **u** does not occur with **s**, the causative structure would end in consonant-consonant sequences that never permitted in the end of some word structures of Ganta. Thus, the rule can be formulated as “u-addition”, as $\emptyset \rightarrow /u/ -s$. Look at the following example in (42).

	Verb root	gloss	Causative stem	gloss
(42) a.	dǎb-	‘leave/drop’	dǎb-us-	‘cause to leave/drop’
	goód-	‘chase’	goód-us-	‘cause to chase’
	wóɖ-	‘kill’	wóɖ-us-	‘cause to kill’
	ʔúɖ-	‘push’	ʔúɖ-us-	‘cause to push’
	boók-	‘dig’	boók-us-	‘cause to dig’
	gárϕ-	‘coat (paint)’	gárϕ-us-	‘cause to coat (paint)’
	báys-	‘sell’	báys-us-	‘cause to sell’
	gójf-	‘till/farm’	gójf-us-	‘cause to till/farm’
	gótʃf-	‘pull’	gótʃf-us-	‘cause to pull’
	gaátʃf-	‘grind’	gaátʃf-us-	‘cause to grind’
	yél-	‘deliver’ (giving birth to baby)	yél-us-	‘cause to deliver’
	kár-	‘cut’ (branch of tree)	kár-us-	‘cause to cut’

múr- 'protect'

múr-us- 'cause to protect'

Some transitive verb roots that end in bilabial nasal take the causative allomorph [-us-] in two forms. In the first strategy, the allomorph occurs without affecting the final segment of the verb root, as in (43a). In the second situation, the segment of the verb roots undergoes velar nasal assimilation, as in (43b). Compare the following examples below (43).

	Verb root	gloss	Causative stem	gloss
(43) a.	dém-	'find'	dém-us-	'cause to find'
	kám-	'cover'	kám-us-	'cause to cover'
b.	dém-	'find'	déŋ-us-	'cause to find'
	kám-	'cover'	káŋ-us-	'cause to cover'

Transitive verb causativization with [-uss-]

After stops, sibilant and liquid, the underlying causative morpheme {-s-} is changed to the allomorph [-uss-]. From the previous allomorph [-us-], as in (42) and (43), this one differs only by having geminated sibilant as its final segment. Now let us see the distribution of the allomorph [-uss-] in (44a).

	Verb root	gloss	Causative stem	gloss
(44) a.	dád-	'weave'	dád-uss-	'cause to weave'
	gúyd-	'hit'	gúyd-uss-	'cause to hit'
	béntt-	'obtain'	béntt-uss-	'cause to obtain'
	ítʃtʃ-	'lay (putdown)'	ítʃtʃ-uss-	'cause to lay (put down)'
	ʔúl-	'collect'	ʔúl-uss-	'cause to collect'

But in the rapid speech context, allomorph [-us-] can be used instead of [-uss-] to express causative formation in Ganta, as in (45).

	Verb root	gloss	Causative stem	gloss
(45) a.	dád-	'weave'	dád-us-	'cause to weave'
	ʔúl-	'collect'	ʔúl-us-	'cause to collect'

Transitive verb causativization with [-tsts-]

Transitive verb roots that end in alveolar nasal, liquid and vowels condition the underlying morpheme {-s-} to the allomorph [-tsts-] as causative marker in Ganta. But, in example (46b), the allomorph [-tsts-] occurs after citation forms of verbal nouns that end in nominalizing vowels. Look at examples in (46a) and (46b) below.

	Verb root	gloss	Causative stem	gloss
(46) a.	labbán-	'exhaust/tire'	labbán-tsts-	'cause to exhaust/tire'
	dík'ár-	'ignore'	dík'ár-tsts-	'cause to ignore'
	daábur-	'weak/tire'	daábur-tsts-	'cause to weak/tire'
	Verbal nouns	gloss	Causative stem	gloss
b.	ámo	'interest/zeal'	ámo-tsts-	'cause to interest/zeal'
	yeellá	'humiliate'	yeellá-tsts-	'cause to humiliate'

The above rule that is formulated for the occurrence of causative allomorph [-tsts-], as in (46a), has seemed to be nonpredictable after liquids. The reason is that some transitive verb roots that end in liquids do not condition the allomorph [-tsts-] as causative marker. Instead, the other causative allomorph [-us-] is used for causativization process in Ganta, as in (47). Such case might be expressed as result of phonetic properties

of initial and medial segments of the verb roots, as in the case of allomorph [-s-] in the above. Compare the examples in (46a) with (47)

	Verb root	gloss	Causative stem	gloss
(47) a.	háyr-	‘throw’	háyr-us-	‘cause to throw’
	gór-	‘uproot’	gór-us-	‘cause to uproot’

Other than alveolar nasal, liquid and vowels, segments of voiceless and voiced stops also condition the underlying causative morpheme {-s-} to the causative allomorph [-ts-]. Thereafter, final stops are motivated by the morphophonemic processes, in which the segments’ feature assimilation is realized on the some transitive verb roots. In this respect, alveolar stops (**t**, **d** and **ɖ**) and velar stop **k** undergo feature change as result of their phonetic feature total assimilation to the following underlying causative morpheme. The reason is that Ganta does not tolerate sequence **ttsts**, **ddtsts**, **ɖtsts**, and **ktsts** in its word structures. For this reason, stops occur total assimilation when they find themselves between vowels (alveolar nasal) and **tsts**. In the examples (48a), (48b) and (48c), one can respectively see the process in which the segments’ phonetic features exist as a form of /ts/ before the allomorph [-ts-].

	Verb root	gloss	Causative stem	gloss
(48) a.	deét-	‘meet’	deéts-ts-	‘cause to meet’
b.	déndd-	‘stand’	déntts-ts-	‘cause to stand’
	wúɖ-	‘step down’	wúts-ts-	‘cause to step down’
c.	gák-	‘arrive/reach’	gáts-ts-	‘cause to arrive/reach’

In addition to feature assimilation, the final segments of the verb roots undergo assimilation when the underlying causative morpheme suffixed to them. In the suffixation process, the bilabial nasal /**m**/ that occurs at the end of the verb changes to /**n**/ before [-**tsts**]. Thereafter, homorganic nasal rule changes the phonetic feature of the bilabial nasal **m** to the alveolar one **n** before the allomorph [-**tsts**]. The formulated rule will have the form: /m/ → /n/—tsts, as in (49).

	Verb root	gloss	Causative stem	gloss
(49) a.	udúm-	‘embrace’	udún-tsts-	‘cause to embrace’
	dám-	‘suck (breast)’	dán-tsts-	‘cause to suck’
	geém-	‘hide’	geén-tsts-	‘cause to hide’

But, in example (50), the manner of articulation assimilation changes a voiced alveolar implosive **ɖ** that occurs at the end of the verb root to liquid **r** before the causative allomorph [-**tsts**]. The process is observed when the underlying causative morpheme suffixes to the implosive segment. In the process, another phonological rule reduces the verb root’s long high tone vowel **aa** to the shorter one as **á** in the causative stem before consonant cluster **rtsts**. The reason is that Ganta does not allow long vowel with high tone between **b** and **rtsts**. Look at the example below.

	Verb root	gloss	Causative stem	gloss
(50) a.	baáɖ-	‘take in (food)’	baár-tsts-	‘cause to take in (food)’

Apart from feature deletion and assimilation, segment addition is observed in the causative verb stem. In this case, phonological rule adds the two initial segments **ur** of the iterative marker **-urutsts-** after final segment of verb root and before the causative allomorph [-**tsts**]. In this respect, the segment is added not to express the iterative notion, but it is only added to preserve the causative structure of the verb stem. The reason is that

Ganta might not have the sequence **ddtsts** in a word structure. This is the case in example (51). See below.

Verb root	gloss	Causative stem	gloss
(51) a. ʔúmbb-	‘fall’	ʔúmbb- ur -tsts-	‘cause to fall’

Transitive verb causativization with [-atsts-]

The underlying causative morpheme {-s-} is assimilated to the corresponding allomorph [-atsts-] after voiced bilabial **b** and velar **g** stops, as in (52). In the process, phonological rule motivates feature adding rule by which vowel “a-addition” is occurred so as to maintain permitted word structures in Ganta. The reason is that Ganta does not allow stop-affricate sequences, except for certain reasons, as in **dtsts**, **gtsts**, and **ddtsts** in some speech contexts. Thus, the rule will be formulated as: {-s-} → [-atsts-]/[voiced stops] —. See in (52).

Verb root	gloss	Causative stem	gloss
(52) a. goód-	‘chase’	goód-atsts-	‘cause to chase’
giíg-	‘agree’	giíg-atsts-	‘cause to agree’
s’índd-	‘erect’	s’índd-atsts-	‘cause to erect’
beég-	‘wake up’	beég-atsts-	‘cause to wake up’

But in some speech contexts, the other causative allomorphs [-us-] and [-uss-] can also be used with the above transitive verb roots in Ganta, as in (53a) and (53b) respectively.

Verb root	gloss	Causative stem	gloss
(53) a. goód-	‘chase’	goód-us-	‘cause to chase’
b. giíg-	‘agree’	giíg-uss-	‘cause to agree’

Transitive verb causativization with [-utsts-]

The underlying causative morpheme {-s-} is changed to the allomorph [-utsts-] when suffixing with the segment of the bilabial fricative **ɸ**. Thereafter, another rule totally assimilates the final segment **ɸ** of the verb root to a segment /tsts/ before the allomorph. The case is happened so as to make the causative verb structure easily pronounceable. Thus, the rule can be formulated as: /ɸ/ → /tsts//—[-utsts-]. The rule specifies that **tsts** is assimilated when occurs between **y** and **utsts**. Look at the example in (54).

Verb root	gloss	Causative stem	gloss
(54) a. áyɸ-	‘catch’	áy tsts -utsts-	‘cause to catch’

Transitive verb causativization with [-f-]

The underlying causative morpheme {-s-} is changed to the allomorph [-f-] after segment of the postalveolar sibilant of the final verb root, in which sibilant harmony is expressed in Ganta. The reason is that phonological rule has made the sound of **s** more similar with the segment **f** by spreading the phonetic feature. Here, the segment is total assimilated to the phonetic feature of the underlying causative morpheme in Ganta. Thus, the rule will be formulated as: {-s-} → [-f-]/[f]—. Let us see the example in (55).

Verb root	gloss	Causative stem	gloss
(55) a. úf-	‘drink’	úf-f-	‘cause to drink’
míf-	‘satisfy’	míf-f-	‘cause to satisfy’

But the formulated rule seems to be nonpredictable, as in (55). The reason is that some transitive verb roots take the other causative allomorph [-us-] after the segment of the postalveolar sibilant *ʃ*, as in (56). Now compare (55) with (56).

	Verb root	gloss	Causative stem	gloss
(56) a.	góʃ-	‘till/farm’	góʃ-us-	‘cause to till/farm’
	tíʃ-	‘coat/paint’	tíʃ-us-	‘cause to coat/paint’
	gíʃ-	‘divide’	gíʃ-us-	‘cause to divide’
	náʃʃ-	‘narrate’	náʃʃ-us-	‘cause to narrate’
	tʃáʃ-	‘swear off’	tʃáʃ-us-	‘cause to swear off’

The voiced postalveolar sibilant /*ʒ*/ conditions the underlying causative morpheme {-s-} to the other causative allomorph [-*ʃ*-], where phonological rule of sibilant harmony is applied. The rule has the form: {-s-} → [-*ʃ*-]/*ʒ*—. Then, the second rule also assimilates the final segment /*ʒ*/ of the verb roots to /*ʃ*/ before the causative allomorph. Therefore, for this reason, the assimilated causative allomorph lastly occurs after the assimilated segment of the verb roots in Ganta. Look at the examples in (57).

	Verb root	gloss	Causative stem	gloss
(57) a.	giíʒ-	‘discharge (pus)’	giíʃ-ʃ-	‘cause to discharge (pus)’
	geéʒ-	‘purify’	geéʃ-ʃ-	‘cause to purify’
	muúʒ-	‘diffuse’	muúʃ-ʃ-	‘cause to diffuse’
	kaáʒ-	‘make sex’	kaáʃ-ʃ-	‘cause to make sex’

Like sibilant feature assimilation, as in (57), stop segment assimilation is occurred when the underlying morpheme {-s-} comes to the final segments of the verb roots. In this case, segments of velar stops, *g* and *k* are motivated for the process when they appear between vowel and sibilant [-*ʃ*-]. See the process in (58).

	Verb root	gloss	Causative stem	gloss
(58) a.	ʃóg-	‘wash’	ʃóf-ʃ-	‘cause to wash’
	ʃíik’-	‘gather’	ʃííf-ʃ-	‘cause to gather’

As it has been observed in the above analysis, the conditioning strategy of the final stops of the transitive verb roots might be determined by the phonetic property of the initial or medial (or both) segments of the verb roots in Ganta. If initial or medial segments of the verb roots are sequenced with the postalveolar sibilant *ʃ* and with short vowel *o* or long vowel *ii* respectively, as in (58), stops *g* and *k* will condition the underlying causative morpheme {-s-} to the allomorph [-*ʃ*-], where rule of sibilant harmony has expressed. Thereafter, stops have totally assimilated to *ʃ* before the causative allomorph for phonotactic reason as in (58). If not, they can occur with the other causative allomorphs [-uss-] and [-us-] in (59a-d). But, for the other allomorph [-s-], stops also assimilate to *s* as in (59e), and also see in (31) and (37) in the above. Now, compare example (58) with (59).

	Verb root	gloss	Causative stem	gloss
(59) a.	ʃág-	‘divide’	ʃág-us-	‘cause to divide’
	b.giíg-	‘agree’	giíg-uss-	‘cause to agree’
	c.đeék’-	‘kick’	đeék’-us-	‘cause to kick’
	d.bák’-	‘slap’	bák’-us-	‘cause to slap’
	e.dǒg-	‘munch’	dǒ-ss-	‘cause to munch’

Transitive verb causativization with [-(tʃ)tʃ/-]

Other than allomorph [-f-], the underlying causative morpheme {-s-} appears in the form of [-tʃ-] when verb roots **ʔ**, **m** and **tʃ** contact with it. In the process, such segments express morphophonological process, in which segment assimilation is realized. For instance, in (60a), the case is observed when the final segment **ʔ** totally assimilates to **tʃ** before the causative allomorph [-tʃ-] and after long high tone vowel **aá**. The rule might be: $ʔ \rightarrow tʃ/-tʃ$. The reason is that the sequence of **aáʔtʃtʃ** is not possible in a Ganta word structure. In the same way the verb root segment assimilation is observed in example (60b). In this situation, phonetic feature of postalveolar ejective **tʃ** is totally assimilated to **tʃ** before the causative allomorph. This is the reason why the segment feature assimilates itself between a **y** and **tʃ** so as to maintain the sequence **ytʃtʃtʃ** possible. For the convenience, the rule would be: $tʃ \rightarrow tʃ/y-tʃ$. But in (60c), another rule is applied on the segment **m** of the bilabial nasal so as to change it to **ŋ** before the following causative allomorph [-tʃtʃ-]. The case is happened for the phonotactic reason in which **oómtʃtʃ** sequencing is impossible in Ganta word structure. The rule would be: $m \rightarrow \eta/oo-tʃtʃ$. Look at examples in (60a), (60b) and (60c) respectively.

	Verb root	gloss	Causative stem	gloss
(60) a.	laáʔ-	‘kiss’	laátʃ-tʃ-	‘cause to kiss’
b.	méytʃ-	‘bite’	méytʃ-tʃ-	‘cause to bite’
c.	tʃoóm-	‘munch’	tʃoón-tʃtʃ-	‘cause to munch’

Look at the following illustrative sentence constructions (61).

- (61) a. tán-i chubaro maaʔó ʃóf-ʃ-a-k-oti-d-e
I-NOM chubaro cloth wash-CAUS-IND-FOC-SUBM-PERF-PRES:CONT.DEC
‘I caused Chubaro to wash cloth.’
- b. addá-y ís-o ʃuŋkúrte tús-s-a-kk-oyi-d-e
father-NOM she-ACC onion plant-CAUS-IND-FOC-SUBM-PERF-PRES:CONT.DEC
‘Father caused her to plant onion.’
- c. ís-i és-a bíra gújj-us-a-kk-i-d-e
she-NOM he-ACC money add-CAUS-IND-FOC-3FM-PERF-PRES:CONT.DEC
‘She caused him to add money.’
- d. nún-i ʃagála laátʃ-tʃ-a-k-unu-d-e
we-NOM cheek kiss-CAUS-IND-FOC-2PL-PERF-PRES:CONT.DEC
‘We made them kiss cheek.’
- e. ís-i gálʔa dānts-ts-a-kk-i-d-e
she-NOM calf suck-CAUS-IND-FOC-3FM-PERF-PRES:CONT.DEC
‘She caused calf to suck.’

5.2.1.2 Causativization of intransitive verb

Intransitive verb causativization with [-s-]

As it has observed in the above section (5.2.1.1), causativization of transitive verbs is marked by the phonetically distinct allomorphs. The distribution of such allomorphs may or may not be determined by the phonetic properties of the final segments of the verb roots, on which morphophonemic rules such as assimilation, deletion and insertion are observed. Furthermore, initial or medial (or both) segments of the verb roots may also affect the form of the causative allomorphs in Ganta. In the same manner, each of those causative allomorphs can also occur with the final segments of intransitive verb roots; however, the conditioning environment may determine its phonetic forms. For instance, the form of [-s-] appears after bilabial nasal **m** and long high tone vowel **úu** in the transitive verb root, as in **m-úu-s-** ‘cause to eat’. But in this

section, the segment *s* of intransitive verb root is responsible for the conditioning strategy of the allomorph in Ganta, as in (62). See below.

	Verb root	gloss	Causative stem	gloss
(61) a.	kés-	‘get out’	kés-s-	‘cause to get out’

Like some transitive verb segments, the intransitive verb roots that end in *eéʔ*, *aáʔ*, *uúg*, and *eéɸ* express total assimilation of a stop and fricative when suffixing with the underlying causative morpheme {-s-}. Here, one can observe phonological rule that assimilates velar stops (*ʔ* and *g*) and bilabial fricative *ɸ* to *s*. The situation occurs when segments (*ʔ*, *g* and *ɸ*) find themselves between long vowels and sibilant {-s-}. Thereafter, the causative allomorph directly occurs after assimilated segments of the verb roots in Ganta. But in (62b), still the rule is also applied so as to reduce phonetic feature of the verb root. Here, long vowel *eé* of the verb root is reduced to the short vowel *é* in the causative verb stem. Look at the following examples in (62).

	Verb root	gloss	Causative stem	gloss
(62) a.	kaáʔ-	‘play’	kaás-s-	‘cause to play’
b.	ʔeéʔ-	‘stand up’	ʔés-s-	‘cause to stand up’
c.	s'uúg-	‘burn’	suús-s-	‘cause to burn’
d.	yeéɸ-	‘cry’	yeés-s-	‘cause to cry’

If the initial and medial segments of the verb roots are changed with other segments, the velar stop *g* will totally assimilates to *ɟ* when the causative morpheme {-s-} suffixes to the final segment of the verb root. Here, the next consecutive phonological process has occurred in changing the causative morpheme {-s-} to [-ɟ-], for which distant assimilation or sibilant harmony is applied, as in (63a). The postalveolar *tʃ* in *tʃ'aág-* ‘bray’ has triggered the change. But, in (63b), the allomorph [-atsts-] directly suffixes onto the segment. Compare example (63a) with (63b) below.

	Verb root	gloss	Causative stem	gloss
(63) a.	tʃ'aág-	‘bray’	tʃ'aáf-ɟ-	‘cause to bray’
b.	s'oóg-	‘jump’	s'oóg-atsts-	‘cause to jump’

In example (64), the final segment of intransitive verb root also undergoes phonetic feature change. In this situation, a voiced alveolar sibilant *z* of the verb root segment has totally assimilated to *s* when the underlying causative morpheme {-s-} suffixes to it. Here, phonological rule of sibilant harmony is expressed. See the example below.

	Verb root	gloss	Causative stem	gloss
(64) a.	deéz-	‘sigh’	deés-s-	‘cause to sigh’

The causative morpheme {-s-} takes the form [-ss-] after a vowel segment of the intransitive verb root, as in (65). Look at the example below.

	Verb root	gloss	Causative stem	gloss
(65) a.	sí-	‘listen’	sí-ss-	‘cause to listen’

Intransitive verb causativization with [-us-]

Like final segments of transitive verb roots, the consonant sounds that occur at the end of intransitive verb roots condition the underlying causative morpheme {-s-} to the causative allomorph [-us-], as in (66).

Verb root	gloss	Causative stem	gloss
(66) a. <i>disk-</i>	‘sleep’	<i>dísk-us-</i>	‘cause to sleep’
<i>ʔeéh-</i>	‘love’	<i>ʔeéh-us-</i>	‘cause to love’
<i>káφ-</i>	‘watch’	<i>káφ-us-</i>	‘cause to watch’
<i>mít-</i>	‘swallow’	<i>mít-us-</i>	‘cause to swallow’
<i>φéntt-</i>	‘boil’	<i>φéntt-us-</i>	‘cause to boil’
<i>k'óltʃʃántt-</i>	‘belch’	<i>k'óltʃʃántt-us-</i>	‘cause to belch’
<i>hántt-</i>	‘walk’	<i>hántt-us-</i>	‘cause to walk’
<i>díf-</i>	‘sneeze’	<i>díf-us-</i>	‘cause to sneeze’

Intransitive verb causativization with [-uss-]

The underlying causative morpheme {-s-} is also changed to the allomorph [-uss-] after final stops and sibilant of intransitive verb roots in Ganta. See below (67).

Verb root	gloss	Causative stem	gloss
(67) a. <i>goóg-</i>	‘rotate/revolve’	<i>goóg-uss-</i>	‘cause to rotate/revolve’
<i>óh-</i>	‘speak’	<i>óh-uss-</i>	‘cause to speak’
<i>út-</i>	‘sit down’	<i>út-uss-</i>	‘cause to sit down’
<i>íntʃʃ-</i>	‘win’	<i>íntʃʃ-uss-</i>	‘cause to win’

Intransitive verb causativization with [-tsts-]

The liquid sounds at the end of intransitive verb roots condition the underlying causative morpheme that follows to be geminated sibilant [-tsts-], as in (68a). But in (68b), the allomorph appears after citation form verb stems that occur in citation forms. Compare the following examples in (68a) and (68b) below.

Verb root	gloss	Causative stem	gloss
(68) a. <i>ótor-</i>	‘boast/brag’	<i>ótor-tsts-</i>	‘cause to boast/brag’
<i>ánddur-</i>	‘roll’	<i>ánddur-tsts-</i>	‘cause to roll’
<i>miik'ár-</i>	‘insist’	<i>miik'ár-tsts-</i>	‘cause to insist’
<i>adár-</i>	‘gallop’	<i>adár-tsts-</i>	‘cause to gallop’
<i>gél-</i>	‘get in/enter’	<i>gél-tsts-</i>	‘cause to get in/enter’
b. <i>ziló</i>	‘upset’	<i>ziló-tsts-</i>	‘cause to upset’
<i>ʃené</i>	‘temper’	<i>ʃené-tsts-</i>	‘cause to temper’
<i>háls's'o</i>	‘slide’	<i>háls's'o-tsts-</i>	‘cause to slide’

As it has been observed in the transitive causativization, similar morphophonemic rules are also realized on the some intransitive verb roots, where segment assimilation is expressed as result of causative morpheme {-s-} suffixation onto the verb roots. For example, in (69), velar stop (t)t has assimilated to **ts** before the causative morpheme, as a rule: (t)t → ts/—s. Thereafter, the causative morpheme has also changed to the allomorph of sibilant [-ts-] after the assimilated segments in the causative constructions, as in (69). The reason is that the sequences **ots** and **ntts** are not permissible in Ganta word structures. See the example below.

Verb root	gloss	Causative stem	gloss
(69) a. <i>laámot-</i>	‘pine/gush’	<i>laámots-ts-</i>	‘cause to pine/gush’
<i>k'óltʃʃántt-</i>	‘belch’	<i>k'óltʃʃántts-ts-</i>	‘cause to belch’

Intransitive verb causativization with [-atsts-]

Interestingly, causative allomorph [-atsts-] also appears after stops, sibilants and liquid sounds of intransitive verb roots in Ganta. But in the case of transitive verb

causativization, the allomorph is conditioned by the final segments of stop sounds. Look at the following examples in (70a), (70b) and (70c).

Verb root	gloss	Causative stem	gloss
(70) a. s'oóg-	'jump'	s'oóg-atsts-	'cause to jump'
múʔ-	'germinate'	múʔ-atsts-	'cause to germinate'
φéntt-	'boil'	φéntt-atsts-	'cause to boil'
ʃoód-	'slide'	ʃoód-atsts-	'cause to slide'
bínn-	'warm'	bínn-atsts-	'cause to warm'
b. wótsts-	'run'	wós'-atsts-	'cause to run'
mítʃf-	'warm (very hot)'	mítʃf-atsts-	'cause to warm (very hot)'
c. döll-	'jump'	döll-atsts-	'cause to jump'

The rule that is formulated for the occurrence of causative allomorph [-atsts-] seems to be unpredictable after liquids in Ganta. The reason is that some intransitive verb roots that end in liquids may not condition the allomorph as causative marker in (71) as it is shown in (70c). Rather, the allomorph [-us-] is used for causative marking, as in (71).

Verb root	gloss	Causative stem	gloss
(71) a. yél-	'bear/deliver (a baby)'	yél-us-	'cause to bear/deliver (a baby)'
biíll-	'brew'	biíll-us-	'cause to brew'
wóyll-	'make sex'	wóyll-us-	'cause to make sex'
gáyr-	'boast'	gáyr-us-	'cause to boast'

Similarly, the occurrence of the allomorph [-atsts-] also seems to be unpredictable after alveolar sibilant s'. Because, the conditioning rule of s' is not predictable as it is expressed in (70b). Therefore, the situation is observed when a verb root **mís'** - 'observe' undergoes causativization process with the other allomorph [-uss-], as in **mís'-uss-** 'cause to observe'.

Intransitive verb causativization with [-f-]

Like some transitive verb roots, a sibilant sound that occurs at the end of intransitive verb roots conditions the underlying causative morpheme {-s-} that follows to be similar with that of its environment. This process is referred to as sibilant harmony. In the process, the underlying causative morpheme is totally assimilated to the preceding verb root segment ʃ in Ganta. Let us see the following (72).

Verb root	gloss	Causative stem	gloss
(72) a. oóf-	'quarrel'	oóf-ʃ-	'cause to quarrel'
φéyʃ-	'stay up (at day)'	φéyʃ-ʃ-	'cause to stay up (at day)'
tʃoóf-	'vomit'	tʃoóf-ʃ-	'cause to vomit'

On the contrary, some intransitive verb roots consisting the postalveolar ʃ may not take the allomorph [-ʃ-] as causative marker. Instead, allomorph [-us-] is suffixed, as in (73).

Verb root	gloss	Causative stem	gloss
(73) a. díʃ-	'sneeze'	díʃ-us-	'cause to sneeze'
líʃ-	'kick'	líʃ-us-	'cause to kick'

As the final segment ʒ of transitive verb roots, the intransitive counterpart totally assimilates to ʃ before the causative morpheme, as in a rule: ʒ → ʃ / — s. Then, the causative morpheme also assimilates to ʃ in Ganta. Here, phonological rule of sibilant harmony is expressed, as in (74).

	Verb root	gloss	Causative stem	gloss
(74) a.	zuúʒ-	‘wander’	zuúʃ-f-	‘cause to wander’

Stop assimilation is also evident in the causativization process of intransitive verbs in Ganta. In this case, voiceless alveolar **t** and voiced velar **g** segments assimilate themselves when they appear between a short or long high tone vowel. In (75a), the **t** seems to assimilate to **ʃ**, and it is not clear why the causative allomorph is realized as [-ʃ-] rather than the alveolar [-s-] after the assimilated segment. In the second example (75b), the alveolar causative morpheme has changed to a postalveolar [-ʃ-] due to sibilant harmony. Here, the next phonological process is total assimilation of **g** to **ʃ** before the causative allomorph, as in (75).

	Verb root	gloss	Causative stem	gloss
(75) a.	át-	‘remain’	áʃ-f-	‘cause to remain’
b.	tʃaág-	‘bray’	tʃaáʃ-f-	‘cause to bray’

Intransitive verb causativization with [-tʃ-]

The underlying causative morpheme {-s-} is also changed to the allomorph [-tʃ-] when suffixing with postalveolar ejective **tʃ**. The case is also sibilant harmony. In this case, the final segment of intransitive verb root is totally assimilated to **tʃ** before the suffixing causative morpheme, as in (76).

	Verb root	gloss	Causative stem	gloss
(76) a.	miítʃ-	‘laugh’	miítʃ-tʃ-	‘cause to laugh’
	dítʃ-	‘grow’	dítʃ-tʃ-	‘cause to grow’

Intransitive verb causativization without causative marker

The voiceless sound of velar stop **k** undergoes assimilation as result of morphophonological process, in which it has changed to **h** before the underlying causative morpheme {-s-}. This is a process of fricativization or partial assimilation, **k**→**h**/—**s**. Subsequently, the second rule of phonology has deleted the causative morpheme. For such reason one cannot observe the presence of the causative marker in the causative stem in Ganta. In the process, long high tone vowel **aá** is also reduced to the shorter one **á** in the causative stem in (77a). The reduction has occurred for phonotactic reason because the occurrence of long high tone vowel between nasal **m** and glottal **h** is not permitted in Ganta.

	Verb root	gloss	Causative	gloss
(77) a.	maák'-	‘turn’	má-h-	‘cause to turn’
b.	ák'-	‘stay (all over night)’	á-h-	‘cause to stay (all over the night)’

Intransitive verb causativization with distinct verb roots

As it has been observed in the causativization process of intransitive verbs, the causative allomorphs suffix onto verb syllables of their own roots or stems in Ganta. Interestingly, such strategy may not work for some intransitive verb roots as **árdd-/yé-** ‘exist’, **háʔ-** ‘die’, **hám-** ‘go’, and **yé-** ‘come’. The reason is that verbs like these use other semantically different transitive verb roots for their causative strategy, in other words, transitive verb roots are responsible for the causativization strategy of the intransitive counterparts. For such reason, the transitive verb roots that are found under causative stem suffix with the causative allomorph [-us-]. For instance, in (78a), the allomorph is suffixed onto transitive verb root **gád-** ‘put’ so as to causativize the verb root **árdd-/yé-** ‘exist/live’. In the same way, the causativization system of intransitive

verb **háy?**- ‘die’ is also expressed onto segment of verb **wódf**- ‘kill’ in (78b). Still, the other intransitive verb roots **hám**- ‘go’, and **yé**- ‘come’ express their causativization strategy onto verb segments of **áytsts**- ‘send’ and **ʔeé**- ‘bring’, as in (78c) and (78d) respectively. Reason for such kind of constructions may need further pragmatic investigation. For time being, let us see the situation in the following example (78).

	Verb root	gloss	Causative stem	gloss
(78) a.	árdd-	‘exist/live’	gád-us-	‘cause to exist/live’
	yé-	‘exist/live’	gád-us-	‘cause to exist/live’
b.	háy?	‘die’	wódf-us-	‘cause to die’
c.	hám-	‘go’	áytsts-us-	‘cause to come’
d.	yé-	‘come’	ʔeé-w-us-	‘cause to come’

Look at the following illustrations for the causativization of intransitive verbs

- (79) a. tán-i ís-o yeés-s-a-k-oti-d-e
I-NOM she-ACC cry-CAUS-IND-FOC-1SG-PERF-PRES:CONT.DEC
‘I made her cry.’
- b. astamaáre-z-i ís-o
teacher (Amharic)-3MS:SG.PL:DEF-NOM she-ACC
óh-uss-a-k-osi-d-e
speak-CAUS-IND-FOC-3MS-PERF-PRES:CONT.DEC
‘The teacher made her speak.’
- c. bíjǝ-att-i ʃaató-z-a káwuʔe
girl-3FM.SG:DEF-NOM boy-3MS:SG.PL:DEF-ACC food
míf-ǝ-a-kk-i-d-e
satisfy-CAUS-IND-FOC-3FM-PERF-PRES:CONT.DEC
‘The girl made the boy satisfy.’
- d. és-i tán-a miǝǝ-ǝ-a-k-osi-d-e
he-NOM I-ACC laugh-CAUS-IND-FOC-3MS-PERF-PRES:CONT.DEC
‘He made me laugh.’
- e. és-i tán-a miǝkkar-tsts-a-kk-oyi-d-e
he-NOM I-ACC insist-CAUS-IND-FOC-SUBM-PERF-PRES:CONT.DEC
‘He caused me to insist on.’
- f. és-i tán-a wós-atsts-a-k-osi-d-e
he-NOM I-ACC run-CAUS-IND-FOC-3MS-PERF-PRES:CONT.DEC
‘He made me run.’

According to Payne (1997: 176), “causative is a linguistic expression that contains in semantic/logical structure a predicate of a cause, one argument of which is a predicate expressing an effect”. In relation to Payne’s explanation, Ganta causative constructions are involved in similar situations. In the above illustration (79a), for example, **yeeǝó** ‘funeral’ is direct object of the verb and **yeés-s**- ‘cause to cry’ is the cause to be performed by the causee, **iso** ‘her’. Nominative argument **táni** ‘I’ is the causer of the derived causative verb, **yeés-s**- ‘cause to cry’.

5.2.1.3 Double Causativization

Like Koorete (Binyam 2008), Ganta uses double causativization. This happens when the causative allomorph [-us-] is attached to a stem which is already marked with one of the causative allomorphs including [-us-]. When the morpheme occurs with the similar causative allomorph [-us-], as in (80a), the process seems to be reduplication. But

with the other allomorphs, it simply suffixes onto them in Ganta. Look at and compare the following examples (80).

	Verb root	gloss	causative stem	gloss	double causative stem	gloss
(80) a.	wóǵ-	‘kill’	wóǵ-us-	‘cause to kill’	wóǵ-us-us-	‘cause to cause kill’
b.	m-	‘eat’	m-úu-s-	‘cause to eat’	m-úu-s-us-	‘cause to cause eat’
c.	túk-	‘plant’	tús-s-	‘cause to plant’	tús-s-us-	‘cause to cause plant’
d.	úǵ-	‘drink’	úǵ-f-	‘cause to drink’	úǵ-f-us-	‘cause to cause drink’
e.	óh-	‘speak’	óh-uss-	‘cause to speak’	óh-uss-us-	‘cause to cause speak’
f.	ǵóg-	‘wash’	ǵóf-f-	‘cause to wash’	ǵóf-f-us-	‘cause to cause wash’
g.	laáǵ-	‘kiss’	laátǵ-tǵ-	‘cause to kiss’	laátǵ-tǵ-us-	‘cause to cause kiss’
h.	ǵám-	‘suck’	ǵán-tsts-	‘cause to suck’	ǵán-tsts-us-	‘cause to cause suck’
i.	labbán-	‘tire’	labbán-tsts-	‘cause to tire’	labbán-tsts-us-	‘cause to cause tire’

As it has been observed in the above data (80a-i), that the double causativization process occurs in already causativized verb stems. Intransitive verb roots are changed into transitive verb stems by the process of causativization. Therefore, like Sheko (Hellenthal 2010), double causative formation can also be applied in the transitive and intransitive verb roots in Ganta.

In the above data (80a), the double causativization process occurs by repetition of the causative allomorph [-us-]. The construction **wóǵ-us-** ‘cause to kill’ is changed into **wóǵ-us-us-** ‘cause to cause kill’. Part of the causativized stem is only reduplicated in Ganta. Such property indicates morphological process what Lieber (2009: 86) called it as “partial reduplication”.

Payne (2006: 258) states that “all causative constructions increase semantic valence, in that they add one participant (a causer) to a scene”. In relation to Payne’s idea, Mous (2012: 404) also shares the same idea in which he elaborates that “the number of causative morphemes in a verb stem reflects the number of agents in the state of affairs”. Thus, Ganta causative constructions explicitly support these two outlooks. As the analyzed examples express in the following illustrations (81), the causativization process in Ganta introduces a new participant that can serve as the subject of the causativized verb stem.

Mous (2012: 404) asserts similar experience in a Cushitic language, Konso, in which “the double causative increases the indirectness of the influence of the extra causer on the state of affairs”. Similarly, in the case of double causative construction in Ganta, the causer acts as subject, but causee and material/thing to be affected are functioning as object of the derived verb stems. The causee functions as indirect object and the material/thing that is involved in the action is expected to be the object. For example, in the following illustration (81e) below, the nominative subject **ési** ‘he’ is the causer. **Maaǵó** ‘cloth’ is the material to be performed and acts as direct object. The accusative pronoun, **iso** ‘she’, acts as causee of the action and is the indirect object and extra cause taker of the causativized verb of **ǵóf-f-us-** ‘cause to cause wash’. Look at the following illustrations for double causative formations (81).

(81) a.	tán-i	és-u-nna	maahé
	I-NOM	he-ACC-INST	serval
	wóǵ- us-us -a-k-unu-d-e		
	kill-CAUS-CAUS-IND-FOC-1PL-PERF-PRES:CONT.DEC		

- ‘Having caused him, we made him kill serval.’
- b. ís-i és-a káwʔe
 she-NOM he-ACC food
 m-úu-**s-us**-a-kk-i-ttam-e
 eat-STM-CAUS-CAUS-IND-FOC-3FM-FUT-PRES:CONT.DEC
 ‘Having caused him, she will have made him eat food.’
- c. kambbo-y és-a túkke
 kambbo-NOM he-ACC coffee
 tús-**s-us**-a-k-oyi-ttam-e
 plant-CAUS-CAUS-IND-FOC-SUBM-FUT-PRES:CONT.DEC
 ‘Having caused him, Kambbo will have made him plant coffee.’
- d. tán-i ís-o
 I-NOM she-ACC
 óh-**uss-us**-a-k-oyi-ttam-e
 speak-CAUS-CAUS-IND-FOC-SUBM-FUT-PRES:CONT.DEC
 ‘Having caused her, I will have made her speak.’
- e. és-i ís-o maaʔó
 he-NOM she-ACC cloth
 jóf-**f-us**-a-k-oyi-d-e
 wash-CAUS-CAUS-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘Having caused her, he made her wash cloth.’

5.2.2 Passive

As it has been observed in the verb derivation, Ganta passive and inchoative constructions are expressed by the same markers. In addition to marker **-utt-**, passive construction uses some inchoative markers **-t-** and **-tt-** for its formation. Since, marker **-utt-** is mostly used in the passive and reciprocal stems after consonant sounds in Ganta (for reciprocal see in (5.2.3)). But, the marker does not use to mark for inchoative construction. The two markers **-t-** and **-tt-** occur after citation nouns, verbs and adjectives for the inchoative construction. In the passive formation, they appear after terminal vowels of citation verbs. Furthermore, the marker **-tt-** also occurs after some added consonant segments so as to express the passive construction. Because of such distributions, it seems to be difficult so as to understand and decide an underlying form of the markers in the passive and inchoative constructions. Therefore, further investigation will be important so as to ensure the underlying form of the markers. But, in the present analysis, the markers are simply used to mark for passive and inchoative formations (for inchoative construction, see section (5.2.5)). In the following example (82), markers **-t-** and **-tt-** are used after final vowels of citation verbs so as to express passive formation.

	Verb root	gloss	Passive	gloss
(82) a.	yeelá	‘humiliation’	yeellá-t-	‘be humiliated’
	jené	‘upsetting’	jené-t-	‘be upset’
	hals's'ó	‘sliding’	hals's'ó-t-	‘be slid’
b.	ámo	‘interesting’	ámo-tt-	‘be interested’

Sense verb roots that end in vowels take marker **-tt-** after added consonant segment so as to express passive formation. In this case, consonant **n** is automatically added before the marker so as to preserve word structures in Ganta. The formulated rule would be:

ø→n/—tt. The reason is that sequence **étt** and **ítt** may not be permitted in word structures. Now, look at the example in (83).

	Verb root	gloss	Passive	gloss
(83) a.	bé-	‘see/look/appear’	bé-n-tt-	‘be seen/looked/appeared’
	sí-	‘listen’	sí-n-tt-	‘be listened’

Even if marker **-uto** was identified in the previous study by Selamawit as a passive marker, the recent data suggests another marker for passive construction in Ganta. Let us see the previous data from Selamawit (2004: 93) as in (84) below.

	Verb root	gloss	Passive	gloss
(84) a.	ye	‘cry’	yeφ-uto	‘be cried’
b.	ʔeeh-	‘love’	ʔeeh-uto	‘be loved’

The marker **-uto** was analyzed in the above data (84a-b) to mark for passive stems. Unlike the above data, the present data description suggest morpheme **-utt-** as passive marking element. As we can see, this marker is formed by the combination of one vowel **u** and geminated consonant **tt**, but in the above data (84), the vowel **o** is attached as part of passive marker **-uto**. The consonant is not geminated. As it has presently observed, vowel **o** is not part of the passive marker. As the fact informs, the vowel **o** is suffixed to a verb root in Ganta to undergo process of nominalization (see examples in (85) below).

The passive marker **-utt-** can be added or comes before different paradigm markings in a verb stem. It can be infixes before indicative and other conceptual category marking affix. Let us see the following example (85).

	Verb root	gloss	Passivized indicative	gloss
(85) a.	dóʔ-	‘open’	dóʔ-utt-o	‘be opened’
b.	hántt-	‘walk’	hántt-utt-o	‘be walked’
c.	yeéφ-	‘cry’	yeéφ-utt-o	‘be cried’

Passive construction can take place together with optional agent receiver nouns and instrumental marking affix **-nna**. In passive construction, “the patient is promoted and becomes the subject, but the agent is demoted to become an optional argument” Kroeger (2005: 272). Look at the following (86).

(86) a.	és-i	tolkkó	wóɖ-a-k-osi-d-e	(Active)
	he-NOM	hyena	kill-IND-FOC-3MS-PERF-PRES:CONT.DEC	
			‘He killed hyena.’	
b.	tolkkó-y	és-u-nna-kko		
	hyena-NOM	he-ACC-INST-COP:FOC		
		wóɖ-utt-í-d-e		(Passive)
		kill-PASS-CONV-PERF-PRES:CONT.DEC		
		‘Hyena was killed by him.’		
c.	tolkkó-y	wóɖ-utt-o-k-oyi-d-e		(Passive)
	hyena-NOM	kill-PASS-IND-FOC-SUBM-PERF-PRES:CONT.DEC		
		‘Hyena was killed.’		

In the active sentence construction (86a), nominative pronoun **ési** ‘he’ is the agent that is functioning as subject of the active verb **wóɖ-a-k-osi-d-e** ‘killed’. Action receiver **tolkkó** ‘hyena’ occurs as direct object of the active verb, but in the passive construction (86b), the action receiver or patient **tolkkó** ‘hyena’ becomes the subject of the passivized verb **wóɖ-utt-í-d-e** ‘was killed’. Accusative pronoun **ésu** ‘him’ becomes an optional

argument including instrument marking case **-nna** ‘by’ in the stem of the accusative pronoun **és-u-nna** ‘by him’. In the (86c), still patient **tolkkó** ‘hyena’ becomes subject of the passivized verb. Optional agent is not stated and the verb becomes intransitive. Here, the statement tells us only the death of hyena but it does not tell us the killer or action performer. It is believed that such kind of evidences are led linguists like Kroeger (2005: 273) and Savà (2005: 207) to come up with the conclusion of passivization as process of valence decreasing or detransitivizing construction.

Like in the Cushitic language Konso (Mous 2012), Ganta passivization can also occur in intransitive verbs. In this case, the agent cannot be promoted. See this example as in (87).

Verb root	gloss	Passivization/intransitive	gloss
(87) a. áytsts-	‘send’	áyts-ts-utt-	‘be sent’
yeéφ-	‘cry’	yeéφ-utt-	‘be cried’
hám-	‘go’	hám-utt-	‘be gone’

The form of regular Ganta passive marker **-utt-** mostly occurs after final segments of consonant verb roots. Since, in most cases, it does not directly occur after citation verbs that end in nominalizing vowels. The reason is that the nominalizing vowels undergo deletion process when the marker comes to suffix with them. Look at the example in (88) below.

Verb root	gloss	Passivization	gloss
(88) a. úte	‘sitting’	út-utt-	‘be sat’
báyso	‘selling’	báys-utt-	‘be sold’
dóʔo	‘opening’	dóʔ-utt-	‘be opened’

Some verb roots that end in vowel segments do not directly take passive marker. For the situation, postalveolar glide **y** that marks sometimes for a third person singular masculine (3MS) in the stems of demonstrative words (see section (6.2)) will be added after vowels and before the marker in Ganta. The reason is that the two different vowel sounds can occur together in Ganta. In other word, diphthong like constructions has not frequently observed in Ganta word structures as **eutt** and **iutt**. This is the reason for the glide insertion before the marker, as in (89).

Verb root	gloss	Passivization	gloss
(89) a. bé-	‘see/look’	bé-y-utt-	‘to be seen/looked’
sí	‘listen’	sí-y-utt-	‘to be listened to’

Like postalveolar glide **y**, the alveolar sibilant **s** that also marks for default gender (3MS) adds itself after a vowel segment and before the passive marker **-utt-** in Ganta. For instance, the case is realized when an existential verb root **yé-** ‘exist/live’ expresses the passivization process, as in (90).

Verb root	gloss	Passivization	gloss
(90) a. yé-	‘exist/live’	yé-s-utt-	‘to be existed/lived’

The two segments **y** and **s** can interchangeably be inserted after a vowel segment of a verb root and before the passive marker. Interestingly, such segment insertion rule can sometimes be determined by a semantic function of a passivized verb structure in Ganta. For instance, segment **y** is inserted after a vowel segment of **hí-** ‘say’ when the semantic function of the passivized stem expresses a notion of English equivalent ‘**be said**’. But, if the passivized stem expresses a semantic notion of ‘**be done**’, the segment of the verb root adds alveolar sibilant **s** after it and before the passive marker. Here, the **s**

insertion might be strange in Ganta when compared to other Omotic languages, Haro (Hirut, 2004) and Koorete (Binyam, 2008), and used for the purpose of clause formation rather than gender. Now compare the following examples in (91a) and (91b) below.

	Verb root	gloss	Passivization	gloss
(91) a.	hí-	‘say’	hí-y-utt-	‘to be said’
b.	hí-	‘do’	hí-s-utt-	‘to be done’

Like vowel segments, some verb roots of consonant segments like **m-** ‘eat’ do not directly suffix with the passive marker. For this reason, rule of segment addition is applied on the root of the verb so as to preserve the passivized structure. Since, sequence **mutt** is not allowed in Ganta word structure. Thus, the rule inserts combined segments **íy** after the verb root and before the marker, as in (92). See below.

	Verb root	gloss	Passivization	gloss
(92) a.	m-	‘eat’	m-íy-utt-	‘to be eaten’

5.2.3 Reciprocal

“Reciprocity in Ganta can be expressed by using a passive verb stem and the reciprocal pronoun, **wola** ‘each other’ when this pronoun occurs before the verb” (Selamawit 2004: 94). But, the present data report this conclusion in different manner. Selamawit’s analysis shows a toneless reciprocal pronoun **wola** ‘each other’ as reciprocal marking item which has no literary meaning in Ganta. In the present data, the reciprocal pronoun expresses semantic distinctions when it is accented on the vowels with high tone (´). When the high tone rests on the first vowel, it gives the information of reciprocal pronoun as **wóla** ‘each other’. But when the marking occurs on the final vowel, the item **wolá** signals a name of tree ‘oak’. Therefore, Ganta reciprocal construction undertakes the reciprocal pronoun with a high tone, **wóla** ‘each other’ but not the latter strategy. On the other hand, reciprocity in Ganta cannot be expressed by using passive stems, rather it occurs independently on a verb root together with series of suffixes like nominalizer, focus, person and tense or aspect. See the following example (93).

- (93) a. ús-i wóla ʔeéh-utt-o-k-u-n-e
they-NOM each other love-REC-IND-FOC-3PL-IMPERF-PRES:CONT.DEC
‘They love each other.’
b. ús-i wóla s’eél-utt-o-k-u-d-e
they-NOM each other see-REC-IND-FOC-3PL-PERF- PRES:CONT.DEC
‘They visited each other.’

(Taken and improved from Selamawit 2004: 94)

The fact tells in most Omotic languages that one marker can be used to derive more than one verbal character. For example, similar marker is used to derive passive, reciprocal, and reflexive or medial verb stems in Maale, Wolaitta, and Haro (Azeb 2010). In the same manner, Ganta passive marker **-utt-** is also used to express reciprocal verb extensions in Ganta. In the following example (94), we can see reciprocal derivations.

Verb root	gloss	Reciprocal derivation	gloss
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(94) a.	oóf-	‘quarrel’	oóf-utt-	‘quarrel with each other’
	búk-	‘hit’	búk-utt-	‘hit with each other’
	?eéh-	‘love’	?eéh-utt-	‘love with each other’
	gán?-	‘insult’	gán?-utt-	‘insult each other’
	óh-	‘speak/talk’	óh-utt-	‘talk with each other’
	zór-	‘discuss’	zór-utt-	‘discuss with each other’

Previously, marker **-ut^s** was identified by Selamawit (2005) as causative reciprocal. But, this marker is not realized in the present analysis. In addition to this, Ganta has never expressed causative reciprocal with morphological affixes in the derived reciprocal stems. But the causative reciprocal construction can be expressed by using reciprocal pronoun **wóla** ‘each other’ when causative derivation is on the verb root. The following examples (95) illustrate causative reciprocal structures of Ganta.

- (95) a. ís-i úsun-a wóla
 she-NOM they-ACC each other
 wóǵ-us-a-kk-i-d-e
 kill-CAUS-IND-FOC-3FM-PERF-PRES:CONT.DEC
 ‘She caused them to kill each other.’
- b. és-i ǵáw-az-a wóla
 he-NOM children-3MS:SG.PL:DEF-ACC each other
 oóf-ǵ-a-k-oyi-d-e
 quarrel-CAUS-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘He caused the children to quarrel each other.’

Like Haro (Hirut 2004), Ganta takes locational noun **giddó** ‘inside’ along with **wóla** ‘each other’ to express reciprocal information. In the process, noun **giddó** occurs in combination with **wóla** and the final vowels of them change into **i** and **á** respectively. But, the latter tonal vowel **á** is used to mark inessive case. See the following (96).

- (96) a. úsun-i wóligiddá
 they-NOM inside each other
 ?eéh-utt-o-k-u-n-e
 love-REC-IND-FOC-2PL-IMPERF-PRES:CONT.DEC
 ‘They love (inside) each other.’
- b. ǵáw-i wóligiddá
 child-PL inside each other
 oóf-utt-o-k-oyi-n-e
 quarrel-REC-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘Children quarrel (inside) each other.’

In the recent data, two elements **bé** ‘his/her/their’ and **-ga** are identified as reciprocal affix. Item **bé** is prefixed to inessive marker **-ga** and to item **giddó** ‘inside’. When **bé** is attached with **-ga** or **giddó** ‘inside’, the formation can be as in **béga** and **bégiddá**, ‘inside each other or inside oneself’. In the latter process, inessive case marker **-á** occurs in final position in place of tonal vowel **ó**. The augmented marker **bégiddá** ‘inside each other’ can also be attached with the variant of inessive case marker **-ga**. In this case, the other inessive case marker **-á** is changed into tonal vowel **ó** before marker **-ga** and become **bégiddóga** ‘inside each other or inside oneself’. The reciprocal item **wóla** ‘each other’ also occurs with the inessive marker **-ga** and become **wóliga**

‘**inside each other**’. In this case, the final vowel of **wóla** is changed into vowel **i**. Let us see each example in (97) below.

- (97) a. *ǰáw-i* *béga*
 child-PL inside each other
 ʔeéh-utt-o-k-oyi-n-e
 love-REC-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘Children love (inside) each other.’
- b. *úsun-i* *bégiddá*
 they-NOM inside each other
 séél-utt-o-k-oyi-n-e
 see-REC-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘They visit (inside) each other.’
- c. *úsun-i* *bégiddóga*
 they-NOM inside each other
 s'eél-utt-o-k-u-n-e
 see-REC-IND-FOC-2PL-IMPERF-PRES:CONT.DEC
 ‘They visit (inside) each other.’
- d. *ǰáw-i* *wóliga*
 child-PL inside each other
 ʔeéh-utt-o-k-oyi-n-e
 love-REC-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘Children love (inside) each other.’
- e. *ǰáw-i* *wóligiddóga*
 child-PL inside each other
 ʔeéh-utt-o-k-oyi-n-e
 love-REC-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘Children love (inside) each other.’

Reciprocal construction can be expressed in the reciprocal negative verb stem constructions as in (98).

- (98) a. *deré-y* *béga /bégiddá /bégiddóga* *giíg-utt-aʔá*
 society-NOM inside each other agree-REC-NEG
 ‘People do not agree (inside) each other.’
- b. *astamaár-idē-y* *wóliga/wóligiddá/wóligiddóga* *zór-utt-aʔá*
 teacher (Amharic)-PL-NOM inside each other discuss-REC-NEG
 ‘Teachers do not discuss (inside) each other.’

5.2.4 Intensive/Iterative

Intensive construction is expressed by the one of the causative marking allomorphs, for which the underlying morpheme {-s-} is appeared as [-**utsts**-] after final sound **ɸ** of bilabial fricative in a verb **áyɸ-** ‘**catch**’. In the causativization process, the final segment changes itself to a geminated sibilant **tsts** before the allomorph so as to make itself more similar with the following marker, as in **áytsts-utsts-** ‘**cause to catch**’(see under causative construction in example (35)). But, in the intensive construction, the segment **ɸ** does not change itself to the other phonetic feature. Rather, it simply takes the allomorph, as in **áyɸ-utsts-** ‘**catch repeatedly**’. From such understanding, one may guess that Ganta intensive formation can be expressed by the allomorph of the underlying causative morpheme {-s-}; however, further investigation is

suggested to identify an underlying form of the intensive morpheme. But for the time being, the intensive construction is described by the causative allomorph, thinking of sibilant *s* as underlying morpheme.

In addition to marker [-**utsts**-], the other intensive marker [-**urutsts**-] directly suffixes to the final consonants of verb roots. The former one is used in a rapid speech context, whereas the latter one is formed by adding an element **ur** on the initial segment of the former one and used in the slow speech context in Ganta. These examples are given below in (99a) and (99b) respectively.

Verb root	gloss	Intensive	gloss
(99) a. wód-	‘kill’	wód-utsts-	‘kill repeatedly’
tʃúk-	‘cut’	tʃúk-utsts-	‘cut repeatedly’
góʃ-	‘farm’	góʃ-utsts-	‘farm repeatedly’
bé-	‘look’	bé-utsts-	‘look repeatedly’
dísk-	‘sleep’	dísk-utsts-	‘sleep repeatedly’
b. ʔéɸ-	‘break’	ʔéɸ-urutsts-	‘break repeatedly’
báyʔ-	‘split’	báyʔ-urutsts-	‘split repeatedly’
dól-	‘jump’	dól-urutsts-	‘jump repeatedly’

Verb roots that end in postalveolar sibilants **tʃtʃ** and **tʃ** take allomorph [-**utʃtʃ**-] as intensive marker. Here, a process of sibilant harmony is expressed in Ganta. Look at the following examples in (100a) and (100b) respectively.

Verb root	gloss	Intensive	gloss
(100) a. bóntʃtʃ-	‘respect’	bóntʃtʃ-utʃtʃ-	‘respect repeatedly’
bótʃtʃ-	‘touch’	bótʃtʃ-utʃtʃ-	‘touch repeatedly’
b. ítʃ-	‘hit’	ítʃ-utʃtʃ-	‘hit repeatedly’

Intensity is also expressed by reduplication process, in which verb roots express complete reduplication for the construction in Ganta. Both the first and second components of reduplicated verb roots end in the converb marker *í*. Look at the following examples in (101).

Verb root	gloss	intensive	gloss
(101) a. úʃ-	‘drink’	úʃ-í úʃ-i	‘drink repeatedly’
ʃír-	‘turn’	ʃír-í ʃír-i	‘turn repeatedly’
ítʃtʃ-	‘sleep’	ítʃtʃ-í ítʃtʃ-i	‘sleep repeatedly’
káɸ-	‘wait’	káɸ-í káɸ-i	‘wait repeatedly’

Illustrations

- b. és-i uddá wode úʃ-í úʃ-i-kko
 he-NOM all time drink-CONV drink-CONV-COP:FOC
 yée-n-e
 come-IMPERF-PRES:CONT.DEC
 ‘All time, he drinks repeatedly.’

- c. úsun-i gaammó-z-a ʃír-í ʃír-i-kko
 they-NOM lion-3MS:SG.PL:DEF-ACC again-CONV again-CONV-COP:FOC
 ítʃtʃ-í-d-e
 hit-CONV-PERF-PRES:CONT.DEC
 ‘They hit the lion (again and again) repeatedly.’

- d. tamaáre-y kás's'-í kas's'-i
 student(Amharic)-NOM rest-CONV rest-CONV

tamaár-oda-kko wórg-e
 learn(Amharic)-INFI-COP:FOC need-PRES:CONT.DEC
 ‘Student needs repeated rest to learn.’

5.2.5 Inchoative

As Mous (2012: 410) states that “the inchoative or inceptive, derivations are denominal or deadjectival verbalizers”. In the same process, inchoative deriving markers suffix to noun and adjective classes to derive them into verbal equivalents in Ganta. For this reason, the inchoative markers **-t-**, **-et-**, **-ot-** and **-tt-**, middle marker **-é** and subjunctive marker **-ó** are suffixed onto nouns and adjectives. The latter two markers **-é** and **-ó** are restricted to occur directly with the citation nouns that occur as form of objective (or accusative) nouns, ending in terminal vowels. However, both of them including the variants **-t-**, **-et-**, **-ot-** and **-tt-** also agree with the adjectives. In the case of inchoativization process, the forms of inchoative markers are not only determined by the properties of the final vowels of the citation nouns, but also affected by the preceding segments of the terminal vowels. For instance, nouns those end in **e** and **o** preceding consonant segments **b**, **t**, **d** and **g** suffix the marker **-t-**. Look at the examples in (102).

Noun	gloss	Inchoative	gloss
(102)a. dábbo	‘relative’	dábbo-t-	‘become relative’
áde	‘man/male/husband’	áde-t-	‘become man/male/husband’
jaató	‘child/boy’	jaáto-t-	‘become child/boy’
lágge	‘friend’	lágge-t-	‘become friend’

If a penultimate segment is different from the above ones, the form of the inchoative marker would be **-et-**. In this process, two phonological rules are expressed, in which the first rule changes terminal vowel **o** of the citation nouns to **e** before the marker **-t-** in forming **-et-**, whereas the second one, in (103a), assimilates a penultimate segment **tʃtʃ** that precedes the terminal vowel to the postalveolar ejective **tʃʼ** before the inchoative allomorph. In this case, the geminated segment has reduced to the degeminated **tʃʼ**. Still, a new rule shifts a high tone to the back on the second segment of the syllable from terminal vowel in (103c). Look at the example in (103).

Noun	gloss	Inchoative	gloss
(103)a. maátʃtʃo	‘woman/female/wife’	maátʃʼ-et-	‘become woman/female/wife’
b. háyʔo	‘death’	háyʔ-et-	‘become dead’
c. bíʃʃó	‘girl’	bíʃʃ-et-	‘become girl’

As in (102) and (103), citation nouns that end in vowels **i** and **a** following penultimate segments **t**, **g**, **b**, **ʔ** and **n** also take the inchoative marker **-et-**. In this process, vowels of the citation nouns have also changed to **e** when suffixing with the morpheme **-t-** so as to form the allomorph **-et-**. Thereafter, a new rule is motivated by the need to change a penultimate segment of a noun to another segment feature. For instance, in the case of (104a), a segment of voiceless alveolar stop **t** is totally assimilated to a voiceless glottal **ʔ** before the inchoative marker. Still, in the same syllable, a long vowel **aá** that precedes the voiceless alveolar **t** is reduced to its shorter one **á** in the inchoative stem. Such processes have expressed so as to maintain phonotactic restriction in Ganta. A pattern like **kaátiet** is not permitted in Ganta. On the other hand, a high tone of terminal vowel has shifted to the back and rested on the second segment of nouns in the inchoative stem, as in (104c-e), Look at the example in (104).

Noun	gloss	Inchoative	gloss
(104)a. kaáti	‘king’	káʔ-et-	‘become king’
b. maága	‘traditional leader’	maág-et-	‘become traditional leader’
c. sabbá	‘adolescent’	sább-et-	‘become adolescent’
d. naʔá	‘boy/son’	náʔ-et-	‘become boy/son’
e. daanná	‘judge’	daánn-et-	‘become judge’

If a final vowel **a** of a citation noun is preceded by a geminated segment **ll**, the inchoative marker would have the form of **-ot-** in Ganta, as in (105).

Noun	gloss	Inchoative	gloss
(105) a. bólla	‘son-in-law’	bóll-ot-	‘become son-in-law’

Citation vowels that ended in **o** and **a** following a segment **r** will take the inchoative marker **-tt-**. Thereafter, phonological rule deletes the vowels between an **r** and a **tt**. The reason is that sequences **rott** and **ratt** may not be possible in Ganta. Therefore, the possible sequences will have the form **rtt** in the word structures. On the other hand, as result of such deletion process, a high tone shifts to the back position from a terminal vowel and rested on the second segment of the syllable in the inchoative stem, as in (106a).

Noun	gloss	Inchoative	gloss
(106)a. mífiró	‘prince’	mífir-tt-	‘become prince’
b. wudúra	‘daughter’	wudúr-tt-	‘become daughter’

A terminal vowel **u** that occurs at the end of citation nouns following segment **ss** also takes the inchoative marker **-tt-**. Subsequently, morphophonemic rule deletes the vowel after the segment and before the marker. After that, another rule reduces the geminated segment **ss** to its degeminated counterpart **s** in the inchoative stems. Since, sequence of geminated cluster consonants **sstt** is not possible in Ganta. Therefore, the final sequence will be **stt** in the inchoative stems. See the following example in (107).

Noun	gloss	Inchoative	gloss
(107)a. anússu	‘elder brother’	anús-tt-	‘become elder brother’
b. awóssu	‘uncle’	awós-tt-	‘become uncle’

As final vowels of citation nouns, terminal vowels of citation adjectives also take the form of inchoative marker **-t-** if they are preceded by some consonants in Ganta. For example, adjectives that end in vowels **a**, **e** and **o** following consonant segments **r** and **d** take the marker **-t-**, as in (108).

Adjective	gloss	Inchoative	gloss
(108)a. hará	‘other’	hará-t-	‘become other’
dúre	‘rich’	dúre-t-	‘become rich’
wordó	‘false’	wordó-t-	‘become false’

Citation adjectives that end in terminal vowels **a** and **o** change to **e** when the inchoative marker **-t-** suffixes to them, and the form of yielding inchoative marker will be **-et-** when after consonants **m**, **ʔ**, **k**, and **k'**. Then, the terminal vowels are deleted and before the inchoative marker. Thereafter, another rule shifts a high tone to the backward and rests it on the second segment of the syllables, as in (109c-d). See below in (109).

Adjective	gloss	Inchoative	gloss
(109) a. tʃíma	‘old’	tʃím-et-	‘become old’
b. lóʔo	‘good/well’	lóʔ-et-	‘become good/well’
c. malʔó	‘sweet’	málʔ-et-	‘become sweet’
d. ʃaykó	‘simple (for load)’	ʃayk-et-	‘become simple (for load)’
e. máŋk'k'o	‘poor’	máŋk'k'-et-	‘become poor’

Other than inchoative markers, adjectives also use middle marker **-é** so as to occur as verbal counterparts. In the process, morphophonemic rule deletes terminal vowels of citation form of adjectives when suffixation process occurs with the marker **-é**. The situation occurs so as to maintain phonotactic rules. The reason is that combinations of two different vowels are not possible in Ganta word syllable. For example, sequences **ie**, **ue**, **oe** and **ae** are not permitted. Therefore, the rule would be: $v \rightarrow \emptyset / -v$. Thereafter, a feature changing rule is also applied on the penultimate segments of the syllable. For example, in (110a) and (110b), the occurrence of inchoative marker **-é** causes the nearest geminated segment **tsts** to be assimilated to a degeminated **t** before the marker. The reason is that sequence **tstsé** is not possible. The rule may have the form: $tsts \rightarrow t / -é$. But in (110c), morphophonemic process not only deletes the terminal vowels, but also affects a penultimate segment of the syllable. For this reason, an adjective segment **tsts** and **i** are consecutively deleted before the morpheme **-é**. Thereafter, still, another rule affects antepenultimate segment of the syllable, in which a segment **r** assimilates to an alveolar implosive **ɖ** before the **-é**. The reason is that Ganta word structure may not permit a pattern **rtstsié** at the end of a word. Therefore, if Ganta consonant cluster **rtsts** together with different vowel sequence **ié** occurs at the end of a word, deletion process of medial hetro-syllabic segments **tstsi** and feature assimilation of **r** will automatically be expressed so as to maintain a word structure. After that, the inchoative marker suffixes to the segment of assimilated alveolar implosive in Ganta. Look at the following examples in (110).

Adjective	gloss	Inchoative	gloss
(110) a. oóratstsi	‘new’	oórat-é	‘became new’
b. boóttstu	‘white’	boót-é	‘became white’
c. kártstsi	‘black’	káɖ-é	‘became black’
d. ɸazzó	‘long’	ɸazz-é	‘became long’
e. móddó	‘fat’	móɖɖ-é	‘became fat’
f. háta	‘short’	hát-é	‘became short’

Marker **-ó** also suffixed to adjective word classes in Ganta so as to derive it to verbal concepts. In the construction, the final vowels of citation forms of adjectives are deleted and replaced by subjunctive marking suffix, as in (111).

Adjective	gloss	Inchoative	gloss
(111) a. moóle	‘straight’	moól-ó	‘let it be straight’
b. iíta	‘bad’	iít-ó	‘let it be bad’
c. laále	‘thin’	laál-ó	‘let it be thin’
d. órdde	‘big’	órd-ó	‘let it be big’

Copular verb root **maák'**- ‘**be/become**’ also expresses inchoative notion in the statement construction as (112).

(112) a. és-i	kaáti	maák'-o-k-osi-d-e
he-NOM	king	become-IND-FOC-3MS-PERF-PRES:CONT.DEC

- ‘He became a king.’
 b. ís-i tʃíma maák'-o-k-i-d-e
 she-NOM old become-IND-FOC-3FM-PERF-PRES:CONT.DEC
 ‘She became an old woman.’

5.2.6 Infinitive

Infinitive construction is expressed by suppletive affixes **-oda**, **-kka** and **-á** in Ganta. Each of these markers occurs in different conditioning environments. For example, the marker **-oda** occurs after final consonants of verb roots, but not after citation verbs that occur as gerundive or nominalized forms. The reason is that if the marker is suffixed with the citation verbs, most terminal vowels of the verbs will be deleted as result of morphophonemic rules. Therefore, this might be the reason why marker **-oda** frequently suffixed to verb roots that end in consonant segments in Ganta. In the following example (113), let us see the constructions.

Verb root	gloss	Infinitive	gloss
(113)a. méʔ-	‘break’	méʔ-oda	‘to break’
yél-	‘deliver/bear (a baby)’	yél-oda	‘to deliver/bear (a baby)’
háyr-	‘throw’	háyr-oda	‘to throw’
dík'ár-	‘ignore’	dík'ár-oda	‘to ignore’
ʔúl-	‘collect’	ʔúl-oda	‘to collect’
dóll-	‘jump’	dóll-oda	‘to jump’
adár-	‘gallop’	adár-oda	‘to gallop’
góʃ-	‘till/farm’	góʃ-oda	‘to till/farm’
úʃ-	‘drink’	úʃ-oda	‘to drink’
hántt-	‘walk’	hántt-oda	‘to walk’

In the infinitival construction, final segments of verb roots express morphophonemic rules such as gemination, assimilation and segment addition before the marker **-oda**. For instance, consonant prolonging is expressed before the marker so as to ensure phonotactic constraints in the infinitive word structure in Ganta. In this case, the value of the phonetic feature of the marker causes the verb segments to be geminated, or to be stronger than the previous one. Let us see in (114).

Verb root	gloss	Infinitive	gloss
(114)a. út-	‘sit’	útt-oda	‘to sit’
gúyd-	‘hit’	gúydd-oda	‘to hit’
dád-	‘weave’	dadd-oda	‘to weave’
góg-	‘run (for water)’	gógg-oda	‘to run (for water)’
zíg-	‘shake’	zigg-oda	‘to shake’
búk-	‘thresh’	búkk-oda	‘to thresh’
dítʃ-	‘grow’	dítʃʃ-oda	‘to grow’
miítʃ-	‘laugh’	miítʃʃ-oda	‘to laugh’
s'eel-	‘see/observe’	s'eéll-oda	‘to see/to observe’

In addition to segment prolonging, segment feature change is also expressed in the infinitive stem in Ganta. Here, the final segments of the verb roots express different phonetic features before the marker. The phonetic feature of the marker changes the segments so as to maintain phonological rules. For this reason, **m** changes to **ŋ** before the **-oda**. Look at examples in (115).

Verb root	gloss	Infinitive	gloss
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(115)a. há m -	‘go’	há ŋ -oda	‘to go’
í m -	‘give’	í ŋ -oda	‘to give’
ďá m -	‘suck’	ďá ŋ -oda	‘to suck’
dé m -	‘find’	dé ŋ -oda	‘to find’
ká m -	‘cover’	ká ŋ -oda	‘to cover’

In the same way with **m**, a voiceless bilabial fricative **ɸ** also changes to a voiceless geminated velar **kk** before the morpheme **-oda**. In other words, the situation is called fortition, in which a weak sound becomes strong. In this case, the bilabial fricative **ɸ** is strengthened by occurring as a geminated voiceless velar **kk** following the marker **-oda**, or the fricative sound is changed to the stop in Ganta. See below (116).

Verb root	gloss	Infinitive	gloss
(116)a. ʔé ɸ -	‘take’	ʔé kk -oda	‘to take’
áy ɸ -	‘catch’	áy kk -oda	‘to catch’
yeé ɸ -	‘cry’	yeé kk -oda	‘to cry’
tú ɸ -	‘plant’	tú kk -oda	‘to plant’
dú ɸ -	‘taste (of pepper)’	dú kk -oda	‘to taste (of pepper)’

But, the above rule seems to be unpredictable. For example, some verb roots that end in bilabial fricative **ɸ** remain unchanged before the infinitive marker as presented in (116). Rather, the infinitive marker is suffixed following **ɸ**, as in (117).

Verb root	gloss	Infinitive	gloss
(117)a. ká ɸ -	‘wait/keep’	ká ɸ -oda	‘to wait/keep’
gú ɸ -	‘flow (of solid)’	gú ɸ -oda	‘to flow (of solid)’
dá ɸ -	‘pull’	dá ɸ -oda	‘to pull’

Segment feature addition is also prevalent in the infinitive construction. The segment insertion rule is applied so as to abide by phonotactic constraints, or to separate verb roots from the infinitive marker in Ganta. If the marker directly occurs with the verb roots in Ganta, the sequence will break phonotactic rules. Therefore, for this reason segments **w**, **y** and **s** insert themselves before the infinitive marker in the infinitive stem, as in (118). But, the segment **s** is used here as a hiatus.

Verb root	gloss	Infinitive	gloss
(118)a. yé-	‘come’	yé- w -oda	‘to come’
bé-	‘see/look’	bé- y -oda	‘to see/look’
sí-	‘listen’	sí- y -oda	‘to listen’
hí-	‘say’	hí- y -oda	‘to say’
hí-	‘do’	hí- s -oda	‘to do’
yé-	‘exist/live’	yé- s -oda	‘to exist/live’

The passive marker **t(t)** is affixed to verb roots and appeared before infinitive marker **-oda** just to express infinitive forms of passives in Ganta, as in (119).

Verb root	gloss	Infinitive	gloss
(119)a. ámo	‘interest’	ámo- tt -oda	‘to be interested’
hals's'ó	‘sliding’	hals's'ó- t -oda	‘to be slid’
yeellá	‘humiliation’	yeellá- t -oda	‘to be humiliated’
jené	‘upsetting’	jené- t -oda	‘to be upset’

An element **íy** is also inserted before the infinitive marker **-oda** and after a verb root **m**-‘eat’ so as to express infinitive construction. Look at the example in (120).

Verb root	gloss	Infinitive	gloss
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(120)a. m- ‘eat’ m-íy-oda ‘to eat’

In addition to the above construction, the verb root **m-** ‘eat’ also occurs with another element (for this look at the example in (137)).

Other than the marker **-oda**, Ganta infinitive construction can also be expressed by the morpheme **-kka**. The marker is not only used to derive an infinitive form of a verb, but also used to express a continuative aspect of the verb. Therefore, for this reason, the infinitive or continuative notion of the marker is determined by the occurrence of motional and existential verb categories in the speech context. When the motion verb is used as a main verb in the clause, the function of the marker will express the notion of the infinitive in Ganta. For example, if the motion verbs **hám-** ‘go’, **yé-** ‘come’ and **ʔeé-** ‘bring’ are used as a main verb in the clause, the derived verb will express the notion of purpose, as in (121).

(121) a. úʃ-kka-kk-i háŋ-í-d-e
 drink-INFI-FOC-3FM go-CONV-PERF-PRES:CONT.DEC
 ‘She went to drink.’

In the above example, the verb **úʃ-** ‘drink’ is suffixed with the marker **-kka** and used to express the infinitive notion. The second verb **háŋ-** ‘go’ is used as the main verb of the clause. But, if the infinitivized verb is accompanied by an existential verb **yé-/árdd-** ‘exist/live’, the function of the marker **-kka** is used to express continuative notion, as in (122)

(122) a. úʃ-kka-kk-i yé-s-í-d-e
 drink-INFI-FOC-3FM exist/live-3MS-CONV-PERF-PRES:CONT.DEC
 ‘She is drinking.’

Based on the above semantic function of the marker **-kka**, one can understand how to use Ganta verbs in the infinitive or continuative constructions. Therefore, in this section, the emphasis is given on the infinitive construction. For the continuative construction, see section (5.3.2) below.

Contrary to the marker **-oda**, marker **-kka** suffixes onto citation nouns and verbs, and it can also be suffixed to verb roots like **-oda**. In the suffixation process, morphophonemic rules of deletion, assimilation, feature addition and reduction will be expressed on the citation nouns and verbs in Ganta. For instance, in (123a-e), the rule ordering is expressed so as to ensure possible segment arrangements before the marker **-kka**. The first rule deletes all terminal vowels of citation forms, as in rule: $v \rightarrow \emptyset / -kka$. The reason is that the marker may not attach itself onto vowel segments at the word final position as **ékka**, **ukka** and **ikka** in Ganta. For such reason, in (123a-b), a high tone of the terminal vowel **é** immediately rests on the final segment of the marker. After deletion rule, assimilation rule conditions geminated sibilant **tsts** of the penultimate segment of the citation forms to a degeminated sibilant **s** before the marker, as a rule: $tsts \rightarrow s / -kka$. Thereafter, in (105a-c), a segment reduction rule reduces second segments of long vowels **ee**, **aa** and **uú** respectively to their shorter counterparts as **e**, **a** and **ú**. Since, long vowel may not occur with the assimilated sibilant **s** and with the marker **-kka**, as in **eeskka**, **aaskka** and **uúskka**, in Ganta word structure. Look at the examples in (123).

	Citation noun/verb	gloss	Infinitive	gloss
(123)	a. keetstsé	‘house’	kes-kká	‘to build house’
	b. waatstsé	‘water’	was-kká	‘to fetch water’
	c. yétstsi	‘song’	yés-kka	‘to sing’
	d. mítstsi	‘wood’	mís-kka	‘to collect fire wood’

As usual, in the infinitive construction, the suffixation of the marker **-kka** to the citation nouns or verbs causes terminal vowel **e** deletion in Ganta. Thereafter, phonetic features of penultimate segments of citation verbs **t**, **g** and **k'** appear as alveolar sibilant **s** before the **-kka**. In most linguistic literature, such process is referred to as lenition, by which stop sounds are changed to fricative. The reason is that sequences **tkka**, **gkka**, and **k'kka** are not possible in Ganta word structures. After sound change, a reduction rule reduces second segments, **oó** and **uú**, of citation verbs to its corresponding shorter ones, **ó** and **ú**, as in (124c-d). See in (124) below

	Citation noun/verb	gloss	Infinitive	gloss
(124)	a. kíte	‘fetching’	kís-kka	‘to fetch’
	b. góge	‘running(for water)’	kís-kka	‘to run (for water)’
	c. doók'e	‘making rope’	dós-kka	‘to do something’
	d. dúúʔe	‘exploding’	dūs-kka	‘to explode’

In the infinitive formation process, the suffixation process of the marker **-kka** to the citation forms of sense verbs also deletes terminal vowels **o** and **e**. After deletion of the vowels **o** and **e**, a rule of phonology replaces the approximant **y** to the alveolar sibilant **s** before the marker. Thus, the rule would have the form: $y \rightarrow s/-kka$. The case might be occurred so as to maintain word structure of the infinitive construction. The reason is that sequence **ykka** is not allowed in Ganta word structure. Look at the example in (125).

	Citation noun/verb	gloss	Infinitive	gloss
(125)	a. béyo	‘seeing/looking’	bés-kka	‘to see/look’
	b. síye	‘listening’	sís-kka	‘to listen’
	c. híye	‘saying’	hís-kka	‘to say’

The sound of alveolar ejective **tʃ'** that occurs preceding terminal vowels is changed to a postalveolar sibilant **ʃ** before the marker **-kka**, as in rule: $tʃ' \rightarrow ʃ/-kka$. The case is happened so as to ensure possible phonetic rules in Ganta word structures. The reason is that structures like **ʃkka** are possible in Ganta word structures, but **tʃ'kka** are not allowed. It is for this reason that the rule changes postalveolar ejective to the voiceless postalveolar fricative before the marker. Thereafter, in (126b), a deletion rule replaces a second segment **y** of a citation verb in the infinitive construction. The situation has occurred when the segment finds itself between an initial segment **ó** and **ʃ**. The reason is that such combination is not allowed in Ganta word structure. On the other hand, a segment reduction rule reduces second segments of citation verb vowels **íí** and **áá** to its shorter counterparts as **í** and **á** respectively in the infinitive stems, as in (126c-d). The case is happened for phonological reason in the infinitive word structures. Long vowel segments may not permitted in Ganta infinitive stems. Let us see in (126).

Citation noun/verb	gloss	Infinitive	gloss
(126)a. dítfó	‘growing’	díf-kka	‘to fetch’
b. óytfe	‘asking’	óf-kka	‘to ask’
c. miítfo	‘laughing’	míf-kka	‘to laugh’
d. biítfe	‘urinating’	bíf-kka	‘to urinate’
e. gaátfo	‘grinding’	gáf-kka	‘to grind’

After deletion of terminal vowel **e** of citation verbs, a process of lenition is also expressed in the infinitive derivation, in which penultimate segments of citation verb stops **m**, **g** and **ʔ** are replaced by the postalveolar sibilant **ʃ** before the marker **-kka**. Even if the process phonologically seems to be implausible, the reason might be occurred to ensure phonotactic rules in word sequences like **mkka**, **gkka** and **ʔkka** in Ganta. Contrary to such sequences, there are citation word examples with nasal (a stop) followed by geminated consonant structures as in **démbba** ‘field’ and **dénddo** ‘standing up’ in Ganta. Here, as it has been observed, the nasal segments **m** and **n** have occurred before voiced geminated bilabial and alveolar stops **bb** and **dd** in the structures. Therefore, one can understand that nasals (or stops) might frequently occur before voiced geminated stops rather than voiceless counterparts in Ganta. In the infinitive construction, in (126a-c), second segments of citation verb vowels **oó** and **aa** are reduced to shorter ones, **ó** and **á**, in the infinitive construction. See below.

Citation noun/verb	gloss	Infinitive	gloss
(127)a. tʃóome	‘chewing’	tʃóf-kka	‘to chew’
tʃááge	‘braying’	tʃáf-kka	‘to bray’
laáʔe	‘kissing’	láʃ-kka	‘to kiss’
síʔe	‘defecating’	ʃíʃ-kka	‘to defecate’
ʃóge	‘washing’	ʃóf-kka	‘to wash’
zíge	‘shaking’	zíf-kka	‘to shake’

Sibilant to sibilant change is expressed in the infinitive derivation in Ganta. The situation occurs when deletion of terminal vowels **e** and **o** are taking place in the infinitive derivation. In this case, voiced sibilant **ʒ** undergoes devoicing and has changed to the voiceless sibilant **ʃ** after deletion of final vowels of citation forms. Before the infinitive marker **-kka**, the rule would have the form: **ʒ** → **ʃ**/—**kka**. The reason has occurred for phonotactic the reasons in Ganta. Subsequently, second vowel segments of citation verbs **ii**, **ee**, **uu** and **aa** have been shortened in the infinitive stems as **í**, **é**, **ú** and **á** respectively. Look at the example in (128).

Citation noun/verb	gloss	Infinitive	gloss
(128)a. giíʒe	‘discharging (of pus)’	gíf-kka	‘to discharge (of pus)’
b. geéʒe	‘pure’	géʃ-kka	‘to purify’
c. muúʒo	‘diffusing’	múʃ-kka	‘to diffuse’

Some citation verbs or nouns cannot be derived into infinitive verb forms by the marker **-kka** in Ganta. Instead, the other infinitive marker **-oda** is used. In the construction, the initial vowel segment of the marker **-oda** may overlap or replace a terminal vowel **o** of the citation form nouns or verbs in Ganta. Look at example in (129) below.

Citation noun/verb	gloss	Infinitive with -oda	gloss
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(129)a. dík'áro	'ignoring/ignorance'	dík'ár-oda	'to ignore'
b. daáburo	'exhausting/tiring'	daábur-oda	'to exhaust/try'
c. labbáno	'tiring'	labbán-oda	'to tire'
d. anddúro	'rolling'	anddúr-oda	'to roll'
e. φéntto	'boiling'	φéntt-oda	'to boil'

Unlike marker **-kka**, the other infinitive marker **-á** occurs onto final segments of verb roots in Ganta. Since, it cannot derive infinitive verbs from citation nouns and verbs like marker **-kka**. For such reason, it simply expresses the notion of infinitive construction by attaching itself with a final segment of verb root as that of **-oda**. But, in the course of suffixation process, the morpheme can also express an infinitive and continuative notions like marker **-kka**. The reason is that the semantic information for the infinitive and continuative function of the marker is determined by the usage of existential and motional verbs in the speech situation. For example, if a clause uses an existential verb **yé-/árdd-** 'exist/live' as a main verb of the clause, the function of the marker will be continuative, as in (130). Here, look at the construction below.

(130)a. ís-i	út-á-kko	yé-n-e
she-NOM	sit-CONT-COP:FOC	exist/live-IMPERF-PRES:CONT.DEC
'She is sitting.'		

If the main verb of the clause use motional verbs **hám-** 'go', **yé-** 'come' and **ʔéé-** 'bring', the notion of the marker will express infinitive, as in (131).

(131)a. ís-i	út-á-kko	hám-e
she-NOM	sit-CONT-COP:FOC	go-PRES:CONT.DEC
'She is going to sit.'		

In the following example (132), the morpheme **-á** is suffixed onto final segments of verb roots so as to express infinitive notions.

Verb root	gloss	Infinitive	gloss
(132)a. túφ-	'plant'	túφ-á	'to plant'
tʃaág-	'bray'	tʃaág-á	'to bray'
hám-	'go'	hám-á	'to go'
laáʔ-	'kiss'	laáʔ-á	'to kiss'
ʃíʔ-	'defecate'	ʃíʔ-á	'to defecate'
dád-	'weave'	dád-á	'to weave'
úʃ-	'drink'	úʃ-á	'to drink'
kít-	'fetch'	kít-á	'to fetch'

In the suffixation process, some verb segments express morphophonemic rules. In this case, geminated voiceless sibilant **tsts** of the final segment of the verb root changes to degeminated affricate sibilant **s'** before the marker **-á**. The rule would be: **tsts** → **s'—á**. See example in (133).

Verb root	gloss	Infinitive	gloss
(133)a. yétsts-	'sing'	yés'-á	'to sing'
mítsts-	'collect (fire wood)'	mís'-á	'to collect (fire wood)'
wótsts-	'run'	wós'-á	'to run'
keétsts-	'house'	keés'-á	'to build'

To the contrary, segment addition rule is observed before the marker **-á**. In this case, the final segment **ts** of the verb root prolonged to **tsts**. See below in (134).

Verb root	gloss	Infinitive	gloss
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(134)a. oóts- ‘work/do’ oótsts-á ‘to work/do’

Postalveolar sibilant merging is also expressed in the infinitive construction. For example, in (135), a final segment *ʃ* of the verb root is merged to geminated form *ʃʃ* before the marker -á. The rule will have the form: *ʃ* → *ʃʃ*/—á. Look at in (135).

Verb root	gloss	Infinitive	gloss
(135)a. góʃ-	‘till/farm’	góʃʃ-á	‘to till/farm’

Rule of segment addition is also observed before the infinitive marker -á and after verb roots. The rule adds approximant *y* after sense verb and before the marker -á. The reason is to maintain the phonotactic rules of the language, i.e. sequence of diverse vowels are not allowed word final in Ganta, as *éá* and *íá*. Therefore, it is for this reason that the approximant is inserted between the verb roots and the marker -á, as in (136).

Verb root	gloss	Infinitive	gloss
(136)a. bé-	‘see/look’	béy-á	‘to see/look’
sí-	‘listen’	síy-á	‘to listen’
hí-	‘say’	híy-á	‘to say’

As it has been realized under stem modification (see chapter 2), a verb root **m-** ‘eat’ expresses different forms in the infinitival stems in Ganta. When it suffixes the infinitive markers -oda, -kka and -á, its stem form become different. For instance, the vowel *í* and approximant *y* appear in combined form together before infinitive markers -oda and -á, as in *m-íy-oda* or *m-íy-á*. But, the vowel *ú* occurs together with *s* before the marker -kka, as in *m-ús-kka*. See examples in (137).

Verb root	gloss	Infinitive	gloss
(137)a. m-	eat’	m-íy-oda	‘to eat’
		m-íy-á	‘to eat’
		m-ús-kka	‘to eat’

Most Ganta verb derivations are applied on both transitive and intransitive verb roots. Still citation forms of nouns, verbs and adjectives are involved in the process by the causative, passive, reciprocal, intensive/iterative, and infinitive marking affixes. Among these markers, the causative marking variants are very large in number and their suffixation strategy is determined by the type of initial or medial or final consonant the verb roots. Allomorph [-us-] is prototypical causative marker. It can be suffixed to most verbal roots and stems. Like other causative markers, its form is determined by the final consonant verb roots.

Double causative construction is also observed in Ganta verb derivations. In this case, the causative allomorph [-us-] occurs after the other causative marking allomorphs so as to express double causation.

As in causativization process, passive construction occurs in both transitive and intransitive verb roots in Ganta. In this process, transitive verb roots can be changed into their intransitive counterparts.

As it has been understood in some literature, most Omotic languages can use similar markers to express same or different constructions. Like Haro (Hirut 2004), Ganta uses marker -utt- to express passive and reciprocal construction. The reciprocal verb extension can also be expressed by other affixes *bé-* and *-ga*.

Intensive/iterative derivation is formed by using two derivational strategies, i.e. morphological affixation [-utsts-], [-urutsts-] and [-utʃtʃ-], and needs complete reduplication of verb roots.

Inchoative derivation involves on the nominal and adjective word classes. Denominalized and deadjectivalized verbalization occurs by using derivational markers and copular verb root **maák'**- 'be/become' in the speech contexts.

Infinitive formation occurs on the verbs and citation form nouns (or verbs) in Ganta. For such formation suppletive affixes **-oda**, **-kka** and **-á** are used in the construction. Some verb roots like **m-** 'eat' shows irregularity in the formation of structures like infinitive, nominal, causative, passive and even in the aspects. Its internal stem expresses morphophonological changes that affect the quality and quantity of stems before those affixes (for more see chapter 2).

5.3 Verb inflection

In the previous section, verb derivations were discussed with causative, passive, reciprocal, intensive, inchoative and infinitive marking affixes in Ganta. In this section, tense, aspect, mode/modality, mood and negation properties are presented.

5.3.1 Tense

Most linguists define tense nearly in the same words. For Lieber (2009: 94), the concept of tense is "the point of an event in relation to another point generally the point at which the speaker is speaking". Lieber relates the act of the speech context together with the point of event. By the same understanding, Payne (1997) associates tense to the time of an event to certain reference point in the time of uttered speech moment. In relation to this view, Comrie (1985: 9) has observed the role of tense in most world languages which "express location in time by means of grammatical categories". The same observation is also reported in most Omotic languages in which tense is used to mark for time references by using time marking lexical categories or by using grammatical affixes. In Koorete (Binyam 2008) present and past tenses are marked by grammatical affixes. In the case of Haro (Hirut 2004), three tense categories, future, present, and past tenses are observed. Like Haro, similar sequences of tenses are realized in Ganta by different tense marking morphemes. In the following section, future, present and past tenses are described.

5.3.1.1 Future tense

Lieber (2009) puts an event time in the future tense after the time of speaking. In the similar manner, an event time is expressed after act of speech context by using distinct future tense marking suffixes like **-m-**, **-ttam-**, **-mu-**, and **-ade-** in Ganta. The form of these markers are determined or changed by the occurrence of copular focus **-kko** and focus **-k(k-)** markers on the word classes. For example, in the illustrations (1a-b), adverb **gúta** 'tomorrow' and object noun **gaayá** 'market' are attached by copular focus **-kko** respectively. In this case, future tense is marked by marker **-m-** that is suffixed to the final position of the verb stem after indicative vowel **a** and before present continuous and declarative marker **e**. In this case, the future tense marking morpheme cannot change itself into distinct form. In (1c), future tense is marked by marker **-ttam-** in the complex verb stem. This marker is held its present form due to the occurrence of focus marker **-k(k-)** in the verb stem.

In (1d), future tense is marked by marker **-mu-** preceding third person masculine (3MS) and accusative case **-a**. As can be observed, the copular focus marker **-kko** is

moved to nominated pronoun **tán-i** ‘I’ so as to change this pronoun into focused pronoun **tán-kko** ‘it is me/I’. In the process, the movement of the copular focus to the subject pronoun changes future marker into **-mu-** in the verb stem in Ganta. Another future marking form is also observed in (1e) and (1f). In the (1e), prospective aspect marking suffix **-ade** is directly attached to a verb root and followed by nominative case **i**. In the (1f) morpheme, **-ade-** also occurs on a verb root before nominative marker **y**. In this process, final consonant **m** of a verb root **hám-** ‘go’ is involved into morphophonological process and changed into **ŋ** before the marker **-ade**, as in **hánŋ-ade-** ‘will go’ in (1e) and (1f). Look at the illustrations below (1).

- (1) a. **tán-i** **gúta-kko** **gaayá hám-a-m-e**
 I-NOM tomorrow-COP:FOC market go-IND-FUT-PRES:CONT.DEC
 ‘Tomorrow, I will go to the market.’
- b. **tán-i** **gúta** **gaayá-kko** **hám-a-m-e**
 I-NOM tomorrow market-COP:FOC go-IND-FUT-PRES:CONT.DEC
 ‘I will go to the market tomorrow.’
- c. **tán-i** **gúta** **gaayá hám-a-k-oti-ttam-e**
 I-NOM tomorrow market go-IND-FOC-1SG-FUT-PRES:CONT.DEC
 ‘I will go to the market tomorrow.’
- d. **tán-kko** **gúta** **gaayá** **hám-a-mu-s-a**
 I-COP:FOC tomorrow market go-IND-FUT-3MS-ACC
 ‘It is me/I that will go to the market tomorrow.’
- e. **tán-kko** **gúta** **gaayá hánŋ-ade-s-i**
 I-COP:FOC tomorrow market go-PROS-3MS-NOM
 ‘It is me/I that will go to the market tomorrow.’
- f. **tán-kko** **gúta** **gaayá hánŋ-ade-y**
 I-COP:FOC tomorrow market go-PROS-NOM
 ‘It is me/I that will go to the market tomorrow.’

5.3.1.2 Present tense

According to Lieber (2009: 94), “in present tense the point in time of speaking and of the event spoken about is the same”. In relation to Lieber’s concept, Ganta present tense is expressed with an existential verb root **yé-** ‘exist’ when series of morphemes continuative marker **-á**, and present continuous and declarative marking marker **-e** attach to it in the clause. In the process, the existential verb **yé-** ‘exist’ expresses stem modification. In this case, alveolar sibilant **s** that marks for masculine gender occurs as a hiatus immediately comes to the verb root before continuative marker **-á**. The high tone of the root vowel shifts to the forward and overlapped on the continuative marker. In the construction, present continuous and declarative marking element **-e** occurs after imperfective marker **-n-** on the existential verb stem. Look at the following illustrations in (2a-b) and (2c-d) below.

- (2) a. **áde-kko** **só-y-ga** **?ee?-á** **ye-s-á**
 man-COP:FOC that-3MS-ALLA stand-CONT exist-3MS-CONT
 ‘A man is standing there.’
- b. **tolkkó-kko** **há-y-ga** **ye-s-á**
 hyena-COP:FOC this-3MS-ALLA exist-3MS-CONT
 ‘A hyena is here.’
- c. **jaató-y** **gáydd-u-ra-kko** **yé-n-e**

child/boy-NOM cattle-ACC-COM-COP:FOC exist-IMPERF-PRES:CONT.DEC
 ‘A boy is with cattle/ A boy is looking after cattle.’

- d. ganta kaát-az-i gaayá-kko gér-u-ra
 ganta king-3MS:SG.PL:DEF-NOM market-COP:FOC people-ACC-COM
 yé-n-e
 exist-IMPERF-PRES:CONT.DEC
 ‘The king of Ganta is in the market with people.’

5.3.1.3 Past tense

In the past tense, the time of situation or event is before the time of uttered discourse. Ganta past tense can be marked by perfective markers **-d-**, **-tt-**, **-ee-** and **-nne** in different contexts. In the following illustrations (3-7), past tense constructions are presented.

Past tense by perfective morpheme -d-

The marker **-d-** occurs after person (or subject) markers that ended in vowel segments and before present continuous and declarative marking element in Ganta. Look at the example in (3).

- (3) a. dookko-y zawá hám-a-kk-oyi-d-e
 dookko-NOM home go-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘Dookko went to home.’
 b. ís-i zawá hám-a-kk-i-d-e
 She-NOM home go-IND-FOC-3FM-PERF-PRES:CONT.DEC
 ‘She went to home.’

If the marker **-d-** occurs after voiceless consonant segments, the phonetic feature of the marker will be changed to a voiceless sound. In this case, voiced alveolar stop **-d-** is changed to a geminated voiceless alveolar **-tt-** after voiceless sibilants so as to make a surrounding environment more similar with that of the preceding segments. For example, in (4a-b), the allomorph of **-d-** occurs after a verb root of alveolar sibilant **s** and before present continuous and declarative marker **-e**, whereas in (4c-d), the form appears after postalveolar sibilant **ʃ** and also before the present continuous and declarative marker **-e**. See below.

- (4) a. áamma-se hí-s-tt-e
 what-3MS say-3MS-PPERF-PRES:CONT.DEC
 ‘What did he do?’
 b. gáltʃʃ-i míttsi aʃa-kko kés-tt-e
 monkey-NOM tree above-COP:FOC climb-PERF-PRES:CONT.DEC
 ‘A monkey climbed on a tree.’
 c. índdo-kko waatstsé úʃ-tt-e-s-i
 mother-COP:FOC water drink-PERF-PRES:CONT.DEC-3MS-NOM
 ‘It was mother who drank water.’
 d. ʃaató-y zawá-kko ʃéʃ-tt-e
 child/boy-NOM home-COP:FOC stay-PERF-PRES:CONT.DEC
 ‘A child/boy stayed at home.’

The marker **-d-** can be used alone or together with converb **-í-** to express past tense. The situation is determined by the movement of copular focus (or focus) markers. In this respect, the movement of copular focus **-kko** and focus **-k(k)-** on the word classes can change sequence of converb with past tense marker. If focusing process occurs on the

adverb or object word classes, the converb **-í** and perfective marker **-d-** occur together on the verb stem as in (5a, 5b, and 5c). As it can be assumed that the presence of converb supports the base to the second marker **-d-** on the main verb stems in Ganta. But the formation cannot give different meaning as first past event or second past event. It simply informs the past notion in Ganta. This case might be different in converb constructions. In the verb focusing case, the only perfective marker **-d-** appears on the verb stem so as to mark past tense in (5d). For these illustrations, look at examples in (5).

- (5) a. tán-i mítsts-u-kko mís'-í-d-e
I-NOM tree/wood-ACC-COP:FOC collect-CONV-PERF-PRES:CONT.DEC
'I collected fire wood.'
- b. tán-i k'ámma-kko míttsi
I-NOM yesterday-COP:FOC tree/wood
mís'-í-d-e
collect-CONV-PERF-PRES:CONT.DEC
'Yesterday, I did collect fire wood.'
- c. tán-i k'ámma mítsts-u-kko
I-NOM yesterday tree/wood-ACC-COP:FOC
mís'-í-d-e
collect-CONV-PERF-PRES:CONT.DEC
'I did collect fire wood yesterday.'
- d. tá-y k'ámma míttsi mís'-a-k-oti-d-e
I-NOM yesterday tree/wood collect-IND-FOC-1SG-PERF-PRES:CONT.DEC
'I collected fire wood yesterday.'

If a subject of a sentence or question word is focused by the one of the markers **-kko**, **-máá** and **-wa** in the clause, the past tense will be marked by a converb marker **-(í)í-**. In the construction, converbs immediately occur after final segment of verb roots and before series of accusative or nominative markers. Compare example (6a-b) with (6c-d).

- (6) a. na?á-kko gaayá hán-í-s-a
boy-COP:FOC market go-CONV-3MS-ACC
'It was a boy who went to the market.'
- b. joófu-kko zawá gél-í-s-a
snake-COP:FOC home enter-CONV-3MS-ACC
'It was a snake that entered home.'
- c. nú fájw-ons'-u-máá wód-íí-s-i... nú woga
we children-DUL:DEF-ACC-FOC kill-CONV-3MS-3FM:NOM we culture
'...It was our boys that killed... our culture.'
- d. há-y-s-a hí-d-íí-s-i óode-wa
this-NOM-3MS-ACC say-PERF-CONV-3MS-3FM:NOM who-FOC
'Who said this one?'

Past tense by morpheme -ee-

Marker **-ee** is suffixed at the final position of a verb root for past tense marking in Ganta. The movement of the other copular focus **-tte** and focus **-t(t)-** markers on the word classes in Ganta. When subjective argument is focused or suffixed by **-tte**, the occurring past marker will be morpheme **-ee**. See in (7a-b).

- (7) a. tán-tte gaayá hán-ee

I-COP:FOC market go-PA
 ‘It was me/I who went to the market.’

- b. tolkkó-tte haré wód-ee
 hyena-COP:FOC donkey kill-PA
 ‘It was a hyena that killed a donkey.’

In the same manner with the above construction (7), subject focusing strategy with the copular focus **-tte** also changes the form of the past tense marker in Ganta. In this case, the main verb of the sentence suffixes with a middle marker **-é** so as to express past notion, as in (8).

- (8) a. naʔá-tte gaayá hán-é
 boy-FOC market go-MID
 ‘It was a boy who went to the market.’
 b. máydo-tte só-y-ga háy?-é
 ox-FOC that-NOM-ALLA die-MID
 ‘It was an ox that died there.’

If copular focus **-tte** and focus **-t(t)-** occurs on the adverb or object word classes, the past form of **-ee-** will not occur on the main verb stem. In this case, converb **-í-** and past tense marker **-nne** occur together on the verb stem. The position of **-ee-** is replaced by the converb and other past tense. The occurrence of the converb cannot bring notion difference as in gerundive (converb) construction rather they favor base to the main verb past tense **-nne** formation. Thus, converb **-í** is immediately attached to the verb root by following morpheme **-nne** as in (9a, 9b, and 9c). Such phenomena cannot be observed when focusing is applied on a verb word class in Ganta. In the verb focusing case, the only past marker **-nne** appears on the complex verb stem after person or subject markers, as in (9d-e). For these illustrations, look at examples in (9).

- (9) a. tán-i gaayá-tte hán-í-nne
 I-NOM market-COP:FOC go-CONV-PA
 ‘I went to market.’
 b. tán-i k'ámma-tte gaayá hán-í-nne
 I-NOM yesterday-COP:FOC market go-CONV-PA
 ‘Yesterday, I did go to market.’
 c. tán-i k'ámma gaayá-tte hán-í-nne
 I-NOM yesterday market-COP:FOC go-CONV-PA
 ‘I went to market yesterday.’
 d. tán-i k'ámma gaayá hám-a-tt-eti-nne
 I-NOM yesterday market go-IND-FOC-1SG-PA
 ‘I went to market yesterday.’
 e. tolkkó-y haré wód-a-tt-eyi-nne
 hyena-NOM donkey kill-IND-FOC-SUBM-PA
 ‘It was a hyena that killed a donkey/a hyena killed a donkey.’

5.3.2 Aspect

In the previous section, future, present and past tenses were discussed. In this part, categories of aspects are presented “with reference to the internal structure of a situation” (Comrie 1976: 6). Like Comrie (Ibid), most linguists share similar views that are related to the concept and function of aspect.

According to Lieber (2009: 94), “aspect is another inflectional category that may be marked on verbs”. It is used to describe “the internal temporal shape of events or states” (Payne 1997: 238). In most languages, aspect marking patterns can be rested on the verb classes. In relation to aspect marking inflections, Payne (ibid:242) reported that “aspect marking frequently is located in various positions in the clause”.

Similar to Payne’s observation, languages like Ganta reflect aspect markings in the augmented verb stems. The Ganta aspectual distinctions are based on semantic distinctions, the way how aspects express the internal durative activity of a situation rather than grammatical information. Thus, in the following section, aspectual categories are analyzed based on their semantic distinctions.

5.3.2.1 Perfective

Ganta perfective aspect is marked by marker **-d-** to express completed actions. Furthermore, it also marks for past tense (see past tense in the above section (5.3.1.3)) and perfect aspect in Ganta (see in example (5.3.2.3)). For information, let us compare the following illustrations in (10).

- (10) a. *és-i míttsi mís'-a-k-oyi-d-e* (**Perfective**)
 he-NOM tree/wood collect-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘He collected fire wood.’
 b. *inddo-y jô?e gaayá hám-a-kk-oyi-d-e* (**Past**)
 mother-NOM morning market go-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘Mother went to market in the morning.’
 c. *tá lágge-y ganta-kko yé-s-í-d-e* (**Perfect**)
 my friend-NOM ganta-COP:FOC exist-3MS-CONV-PERF-PRES:CONT.DEC
 ‘My friend has lived in Ganta.’

As it has been illustrated in (10a), the marker **-d-** occurs next to the last marker of non stative verb **mís'-** ‘collect’ following subject marker **-oyi-** which comes after focus **-k(k)-** to express perfective aspect. In this case, the verb (**mís'-a-k-oyi-d-e** ‘collected’) expresses the wholeness of a situation without any reference to its internal durative structure. The whole event is expressed as one with its beginning, middle and end. There is no division into phases in order to divide the event into different individual stages. In (10b), marker **-d-** appears next to the last marker on the stem of the motion verb **hám-** ‘go’ to express past action. The verb form (**hám-a-kk-oyi-d-e** ‘went’) locates the situation prior with reference to present tense. Finally, in (10c), to the verb **yé-** ‘exist’, marker **-d-** is added after converb **-í-** to express perfect (specifically perfect of persistent) aspect in Ganta. In this case, with the verb **yé-** ‘exist’, the situation refers to a past that is relevant to the present moment. Therefore, one can say that past tense can be supplanted by the aspect (perfective or perfect). The reason is that there is no grammaticalization of aspectual distinctions regarding the form **-d-**. This does not mean that the form **-d-** cannot express the meaning differences that are expressed by past tense and aspect (perfective or perfect). In most speech contexts, as data shows, the marker **-d-** occurs frequently next to the last marker on a verb stem to express perfective meaning rather than past tense and perfect aspect. Therefore, throughout in the body of the present analysis, marker the **-d-** is glossed as perfective aspect marker rather than perfect aspect in Ganta.

5.3.2.2 Imperfective

Payne (1997) and Kroeger (2005) include progressive and habitual aspects as primary types of imperfective aspects. But for precise description, the researcher treats

habitual and continuative (progressive) aspects in separate sections. For the time being, the following illustrations are given in past habitual and continuous constructions to express imperfectivity (11). The present time habitual and different continuative markers are discussed under separate sections below (see under habitual and continuative aspects).

- (11) a. úsun-i gáde-kko góf-í-ǰǰ-e
 they-NOM land-COP:FOC till-CONV-IMPERF-PRES:CONT.DEC
 ‘They were farming.’
- b. nú addá-y útt-ú-s-u tán-i túkke-kko
 we father-NOM sit-PLPER-3MS-ACC I-NOM coffee-COP:FOC
 ǰént-us-í-ǰǰ-e
 boil-CAUS-CONV-IMPERF-PRES:CONT.DEC
 ‘When my father was sitting, I was preparing coffee.’
- c. tán-i ǰaató ǰina kaá?-a-k-oti-d-e
 I-NOM child PA:HAB play-IND-FOC-1SG-PERF-PRES:CONT.DEC
 ‘I used to play with mud when I was a child.’
- d. ís-i ló?o bíǰǰ-i-kko ǰina
 she-NOM good girl-EP-COP:FOC PA:HAB
 ‘She used to be a good girl.’

As can be seen in (11a-b), marker **-ǰǰ-** is used to mark for imperfectivity in the past continuous construction by occurring after the converb which appears immediately after verb roots like **góf-** ‘till/farm’ and **ǰént-** ‘boil’ before present continuous and declarative marker. In (11c-d), an independent item **ǰina** is used to express past habituality though it has no clear meaning.

5.3.2.3 Perfect

Ganta perfect aspect is analyzed in relation to Comrie’s (1976: 56-64) classification of four categories that include perfect of result, experiential perfect, perfect of persistent situation, and perfect of recent past. Thus, in the following section, the four types of perfect aspects are treated one by one in Ganta.

5.3.2.3.1 Perfect of result

Perfective aspect marker **-d-** is also used to mark for perfect of result. It occurs at the end of a verb stem **gák-** ‘arrive’ after series of different morphemes and before present continuous and declarative marker. In (12a-b), the occurrence of marker **-d-** shows persistent of the result of two bodies (the **kaát-** ‘king’ and **deré** ‘society’) arrival. Thus, the notion of such constructions implies that the two bodies are still at the place where they have arrived.

- (12) a. kaát-az-i gák-o-k-oyi-d-e
 king-3MS:SG.PL:DEF-NOM arrive-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘The king has arrived.’
- b. deré-y gák-o-k-oyi-d-e
 people-NOM arrive-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘The people have arrived.’

5.3.2.3.2 Experiential Perfect

Experiential perfect in Ganta is expressed by existential verb **yé-** ‘exist’ when series of markers like converb **-í-**, imperfective **-ǰǰ-**, and present continuous and declarative **-e** suffixes to the root of it. As it has been illustrated in (13a), existential verb is directly

attached by third person masculine (3MS) and then by converb that precedes imperfective aspect marker. Therefore, the sentence ‘**Dookkó-y Túña-kko yé-s-í-ff-e**’ tells us that at the time of speaking **Dookkó** is no longer in Addis.

- (13) a. dookkó-y túña-kko
 dookko-NOM addisababa-COP:FOC
 yé-s-í-ff-e
 live-3MS-CONVIMPERF-PRES:CONT.DEC
 ‘Dookkó had been in Addis Ababa.’

The existential verb **yé-** ‘**exist**’ also takes the perfective marker **-d-** together with the other markers like, converb **-í-**, imperfective **-ff-** and present continuous and declarative **-e**. It occurs before converb marker and after person marker in the series of markers in Ganta, as in (14).

- (14) a. tán-i túña
 I-NOM addis ababa
 yé-s-a-k-oti-d-í-ff-e
 live-3MS-ACC-FOC-1SG-PERF-CONV-IMPERF-PRES:CONT.DEC
 ‘I have been in Addis Ababa.’ Or ‘I have lived in Addis Ababa.’

5.3.2.3.3 Perfect of Persistent Situation

Perfect of persistent situation in Ganta can be expressed by a verb root **gák-** ‘**arrive**’ in (15a) together with stative predicate **ér-** ‘**know**’ which is suffixed with marker **-e**. In the process, the final segment of the verb root deletes and replaces itself by a causative marking allomorph **[-tsts-]** so as to maintain phonological rule before the infinitive marker **-oda**. The reason is that sequence **ktsts** is permitted in Ganta word structure. The notion of the suffixed verb **gáts-ts-oda-k-ote** expresses English equivalent meaning ‘**until I**’ or ‘**up to I**’ rather than its literal meaning ‘**I cause to**’. In (15b), dative construction is also used to express durative information in the time adverb **saáte-ssi-kko** ‘**for hours**’. The main verb **káφ-** ‘**wait**’ takes converb and imperfective marker to express a situation that has started in prior time but still continues up to present moment or at the time of speaking. Look at the examples in (15) bellow.

- (15) a. tán-i és-a támmu layttsi gáts-ts-oda-k-ote ér-e
 I-NOM he-ACC ten year arrive-CAUS-INF-FOC-1SG know-PRES:CONT.DEC
 ‘I have known him until/up to ten years.’
 b. naʔá-y ís-o óyddu saáte-ssi-kko
 boy-NOM she-ACC four hour(Amharic)-DAT-COP:FOC
 káφ-í-ff-e
 wait-CONV-IMPERF-PRES:CONT.DEC
 ‘A boy has been waiting for four hours.’

5.3.2.3.4 Perfect of Recent Past

Perfect of recent past uses focused proximal demonstrative **há-ba** ‘**here you are**’ and temporal adverb **hátte** ‘**now**’ or ‘**just**’ to express very recent past situation that has present relevance. The main verb of the construction **dáw-** ‘**leave/away/lose**’ and **gák-** ‘**arrive**’ are directly suffixed by converb and perfective aspect markers respectively. But, in (16b) the final segment of the verb **gák-** ‘**arrive**’ is geminated before the converb marker so as to maintain phonological rules, as in (16).

- (16) a. kaysó-y há-ba hátte-kko wós's'-í
 thief-NOM here-FOC now/just-COP:FOC run-CONV
 dāw-í-d-e

away-CONV-PERF-PRES:CONT.DEC

‘A thief has just run away.’

- b. há-ba hátte-k-ote gákk-í-d-e
here-FOC now-FOC-1SG arrive-CONV-PERF-PRES:CONT.DEC
‘I have just arrived.’

5.3.2.4 Pluperfect

Pluperfect aspect is called past perfect (Comrie 1976 and Kroeger 2005). This aspect is formed in Ganta by using marker **-ú-** to denote a relationship between prior and later pasts. The first action or past perfect is informed by marker **-ú-** in the focused verb stem of **ítʃtʃ-** ‘**sleep/lay (to place for rest or sleep)**’ and the later past is expressed by marker **-ee-** which comes immediately after a verb **gákk-** ‘**arrive**’ and before nominated person marker. The final consonant of the verb **gákk-** ‘**arrive**’ undergoes gemination when suffixed with marker **-ee-** as in (17).

- (17) a. addá-y ítʃtʃ-ú-kko ís-i gákk-ee-s-i
father-NOM sleep-PLPER-COP:FOC she-NOM arrive-PA-3MS-NOM
‘Father had slept before she arrived.’

5.3.2.5 Completive

The completive aspect expresses the completion of an event (Payne 1997 and Kroeger 2005). In Ganta, completive event is expressed by lexical verb **aál-** ‘**finish**’ when perfective aspect and past tense marking affixes **-d-** and **-nne** occur after causative allomorph **[-tsts-]** on the verb root, as in (18).

- (18) a. nún-i oótso aál-tsts-a-k-unu-d-e
we-NOM work/job finish-CAUS-IND-FOC-PERF-PRES:CONT.DEC
‘We finished working.’
b. deré-y oótso aál-tsts-a-t-eyi-nne
people-NOM work finish-CAUS-IND-FOC-SUBM-PA
‘People finished working.’

5.3.2.6 Inceptive

In Ganta, verbs roots like **áyφ-** ‘**catch**’ or ‘**start**’ or ‘**hold**’, and **átʃtʃ-** ‘**start**’ or ‘**begin**’ are prevalently used to mark for inceptive aspect when perfective aspect and past tense markers **-d-** and **-nne** occurs in these verb stems. The suffixation of these markers to the verb stems inform us about the beginning or starting point of an event, but not the event’s internal situation or final status in Ganta as in (19).

- (19) a. naʔá-y góʃʃe átʃtʃ-a-k-oyi-d-e
boy-NOM farming begin-IND-FOC-SUBM-PERF-PRES:CONT.DEC
‘A boy started farming.’
b. índd-att-i yeeφó átʃtʃ-a-tt-i-nne
woman-3FM.SG:DEF-NOM crying/funeral start-IND-FOC-3FM-PA
‘The woman started crying.’

5.3.2.7 Continuative

Ongoing events can be expressed by different continuous (progressive) markers like **-e**, **-á**, **-tta-** and **-kka** in Ganta. All these markers cannot be applied on the all verb stems of Ganta. Their illustrations are presented in the following sections.

Continuative aspect by marker -e

Present continuous and declarative marking element **-e** is suffixed to verb roots of Ganta so as to express continuative aspect. In (20b), a final segment of verb root **kít-**

‘**fetch**’ expresses gemination before **-e** so as to ensure phonotactic constraints of the word structure.

- (20) a. barttó wóze nén-a ha-ná yéw-áyo!
 barttó please you-ACC this-LOC come-IMPER:2SG
 túkke-k-unu úf-e
 coffee-FOC-1PL drink-PRES:CONT.DEC
 ‘Barttó come here, please ! We are drinking coffee.’
 b. naʔá-y waatstsé-kko kítte-e
 boy-NOM water-COP:FOC fetch-PRES:CONT.DEC
 ‘A boy is fetching water.’

Continuative aspect with series occurrence of markers -n- and -e

Imperfective marking element **-n-** and present continuous and declarative marker **-e** occur one after the other at the final position of focused verb stems so as to mark for continuative aspect in Ganta, as in (21).

- (21) a. tán-i zawá hám-a-k-oti-n-e
 I-NOM home go-IND-FOC-1SG-IMPERF-PRES:CONT.DEC
 ‘I am going to home.’
 b. ís-i ganta-tsts-o
 she-NOM ganta-CAUS-ACC
 tamaár-a-kk-i-n-e
 learn (Amharic)-IND-FOC-3FM-IMPERF-PRES:CONT.DEC
 ‘She is learning Ganta.’

Some irregular verb roots like **yé-** ‘**come**’, **bé-** ‘**see/look/observe**’, **sí-** ‘**listen**’, and **m-** ‘**eat**’ take two continuative markers **-tta** and **-e** together. Marker **-tta** directly occurs after prolonged vowels of the verb stems, whereas present continuative and declarative marker **-e** is suffixed to the final position of a verb following imperfective marker, as in (22).

- (22) a. tán-i gaayá yéé-tta-k-oti-n-e
 I-NOM market come-CONT-FOC-1SG-IMPERF-PRES:CONT.DEC
 ‘I am coming to market.’
 b. né óh-utt-e síi-tta-k-u-n-e
 you talk-PASS-NML listen-CONT-FOC-3PL-IMPERF-PRES:CONT.DEC
 ‘They are listening to your talk.’

Continuative aspect by marker -á

Marker **-á** occurs immediately after verb root or stem to inform progressive situation in Ganta. As it has been informed in section (5.2.6), the continuative notion of the marker is expressed by the existential verb **yé-** ‘**exist/live**’ in the clause, as in (22a-b).

- (23) a. káwuʔe m-iy-á-k-unu yé-n-e zawá gél-áy!
 food eat-STM-CONT-FOC-1PL exist-IMPERF-PRES:CONT.DEC home get-IMPER:2SG
 ‘Get in ! We are eating food.’
 b. nú addá-y dísk-á-kko yé-n-e
 our father-NOM sleep-CONT-COP:FOC exist-IMPERF-PRES:CONT.DEC
 ‘Our father is sleeping.’

Continuative aspect by marker -tta

The morpheme **-tta** occurs in the passivized verb stems after converb and before copular focus marker in Ganta (24).

- (24) a. ibó-z-i dóʔ-utt-í-tta-kko

door-3MS:SG.PL:DEF-NOM open-PASS-CONV-CONT-COP:FOC
 yé-s-í-d-e
 exist-3MS-CONV-PERF-PRES:CONT.DEC
 ‘The door was being opening.’

- b. bíŋŋ-att-i bé galla jóg-utt-í-tta-kko
 girl-3FM.SG:DEF-NOM her body wash-PASS-CONV-CONT-COP:FOC
 yé-s-í-ŋŋ-e
 exist-3MS-CONV-IMPERF-PRES:CONT.DEC
 ‘The girl has/had been washing herself (her body).’

Continuative aspect by marker -kka

In the same way with that of infinitive formation, the marker **-kka** is also used to express continuative construction. For such construction, an existential verb **yé- ‘exist/live’** should obligatorily occur at the postposition of the verb that suffixes with the series of continuative, focus and person markers. Here, the verb **yé- ‘exist/live’** also occurs so as to express the grammatical notion of the preceding verb in the clause. If the verb **yé- ‘exist/live’** replaces its position by the one of the motion verbs **hám- ‘go’**, **yé- ‘come’** and **ʔeé- ‘bring’**, the grammatical notion of the preceding verb that suffixes with the marker will be infinitive (see section (5.2.6) for more information). Thus, the grammatical function of the marker in the clause is determined by the type of the verb that occurs at the postposition of the verb, on which the marker **-kka** is suffixed to. For instance, in (25), the existential verb is occurred at the postposition of the suffixed verb **úŋ- ‘drink’** so as to express the continuative notion of the marker in the clause. See the example below in (25).

- (25) a. deré-y maátstsi úŋ-kka-kko
 people-NOM milk drink-CONT-COP:FOC
 yé-s-a-m-e
 exist-3MS-ACC-FUT-PRES:CONT.DEC
 ‘People will have be drinking milk.’

Just as infinitive construction, phonological process of penultimate segment lenition is also expressed in the continuative construction. Before the process, morphophonemic rule deletes terminal vowels at the end of the citation verbs. Thereafter, phonetic feature of **g, ʔ, m, tʃ** and **ʒ** are changed to a sibilant **ʃ**. In other words, the marker **-kka** is assimilated to the preceding segments of stops and sibilants so as to maintain phonological rules. The reason is that patterns like **gkka, ʔkka, mkka, tʃkka** and **ʒkka** are not permitted in word structures of Ganta. After sibilant assimilation, segment reduction rule is also applied so as to reduce second segments of long high tone vowels **aá, oó, íí, eé** and **uú** to their corresponding high tone short vowels **á, ó, í, é** and **ú** respectively. But, the rule is not applied on the short vowels of second segments, as in (26c). Finally, after all such processes, the continuative marker occurs with the assimilated sibilant at the end of the word structures as **-ʃkka**. Look at the following examples in (26).

	Citation verb	gloss	Continuative	gloss
(26)	a. tʃaáge	‘braying’	tʃáʃ-kka-k-ose yé-n-e	‘it is braying.’
	b. laáʔe	‘kissing’	láʃ-kka-kk-i yé-n-e	‘she is kissing.’
	c. tʃóóme	‘chewing’	tʃóʃ-kka-kk-u yé-s-í-d-e	‘they are chewing.’
	d. gaátʃo	‘grinding’	gáʃ-kka-kk-i yé-n-e	‘she is grinding.’
	e. biítʃe	‘urinating’	bíʃ-kka-k-ose yé-n-e	‘he is urinating.’
	f. zuúʒo	‘wandering’	zúʃ-kka-k-ote yé-n-e	‘I am wandering.’
	g. ʃoge	‘washing’	ʃóʃ-kka-kk-i yé-n-e	‘she is washing.’
	h. ʒíge	‘shaking’	ʒíʃ-kka-k-ose yé-n-e	‘he is shaking.’

As it has been observed that after morphophonemic process of ultimate vowel deletion, some of penultimate segments of citation verbs appear in different phonetic features before the suffixed marker in Ganta. Such feature change is not only determined by the phonetic property of the penultimate segments, but also affected by the phonetic property of the initial segments of the words. For instance, if a word begins with a segment of postalveolar sibilant and end in a terminal vowel following a stop, the penultimate segment will change itself to the postalveolar sibilant ʃ before the marker **-kka**, as in (26a), (26c), (26g) and (26h). To the contrary, if the initial and penultimate segments replace one another in the word structures, phonological rule will not express different feature change before the marker, as in (26d-e). In the same way, in (26b) and (26f), penultimate segments ʔ and ʒ are also changed to the postalveolar sibilant ʃ even if the word structures are initially begun with **l** and **ʒ** respectively. In the former case, the word structure is begun with liquid **l** and ended in citation vowel preceding glottal stop ʔ. In the latter case, the same postalveolar segment ʒ is occurred at the initial and also in penultimate positions of the word.

If the initial segments of the words begin with the stops and end in vowels following the penultimate stops or alveolar sibilants, the phonetic features of the penultimate segments will be an alveolar sibilant s before the marker **-kka**, as in (27a-e).

Contrary to the lenition, phonological process of fortition is also expressed on the some penultimate segments of the citation verbs. In this case, sounds of **tsts**, **k'**, **ʔ**, **g** and **t** appears as alveolar sibilant s (or replaced by s) before the continuative marker **-kka**. Such phonological change occurs so as to maintain phonological rules. The reason is that sequences **ttskka**, **k'kka**, **ʔkka**, **gkka** and **tkka** may not occur in Ganta word structure. After this rule, vowel reduction rule reduces second segments of long high tone vowels **aá**, **oó** and **uú** to the shorter high tone ones **á**, **ó** and **ú** respectively. But, as in (26g-h) above, the case is not also applied on the second segment of short high tone vowels in (27d-e).

	Citation verb	gloss	Continuative	gloss
(27)	a. maáttsi	‘milk’	más-kka-k-ose yé-n-e	‘he is milking.’
	b. doók'e	‘making (rope)’	dós-kka-kk-i yé-n-e	‘she is making (rope).’
	c. dúúʔe	‘exploding’	dūs-kka-kk-u yé-s-í-d-e	‘it is exploding.’
	d. góge	‘running (for water)’	gós-kka-k-ose yé-n-e	‘it is running (for water).’
	e. kíte	‘fetching’	kís-kka-kk-i yé-n-e	‘she is fetching water.’

In the same way with that of infinitive formation (see infinitive above), segment **us** that is glossed as “STM” for stem modification can also be added before the continuative marker **-kka** so as to maintain phonological rule in Ganta. The case is expressed after some verb roots like **út-** ‘sit’, and **m-** ‘eat’. In the continuative case, the

marker occurs with ablative marker, as in (28a) and with copular focus, as in (28b). In the latter case, existential verb **yé-** ‘**exist**’ also occurs in the clause with imperfective and present continuous and declarative marker. Here, the vowel **u** of the STM is marked by a high tone after the verb root **m-** ‘**eat**’. Compare the following examples in (28).

- (28) a. wóze nén-a út-us-kka-φa déndd-áy
 please you-ACC sit-STM-CONT-ABL stand up-IMPER:2SG
 Please, stand up from sitting !’
 b. máydo-y maatá m-ús-kka-kko yé-n-e
 oxen-NOM grass eat-STM-CONT-COP:FOC exist-IMPERF-PRES:CONT.DEC
 ‘An ox is eating grass.’

5.3.2.8 Punctual

Punctual aspect is referred to as “instantaneous” aspect (Payne 1997: 241). The reason is that, it does not have “any duration, not even duration of a very short period” (Comrie 1976: 42). Thus, like other languages, Ganta punctual aspect is marked by perfective **-d-** or imperfective **-ff-** when they suffix to the lexical items **díj-** ‘**sneeze**’, **kúφ-** ‘**cough**’ and **háý?**- ‘**die**’ as in (29).

- (29) a. ís-i díj-a-kk-oyi-d-e
 she-NOM sneeze-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘She sneezed.’
 b. áde-y kúφ-a-k-oyi-ff-e
 man-NOM cough-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘A man has been coughing.’

5.3.2.9 Iterative

Ganta iterative aspect is expressed by combination or by word order of direction pointing word classes such as **há-ηkk-i hí-ηkk-i** ‘**here and there**’ and **súle φúde** ‘**up and down**’. Look at the following illustrations in (30).

- (30) a. metó-y és-a hí-ηkk-i há-ηkk-i
 problem-NOM he-ACC there-NOM here-DIR-NOM
 hí-s-í-kko kaá?-e
 say-3MS-CONV-COP:FOC play-PRES:CONT.DEC
 ‘Life is suffering him here and there.’
 b. máηk'k'o-tetstsi és-a súle φúde hí-s-í-kko
 poor-INCH he-ACC down up do-3MS-CONV-COP:FOC
 kaá?-e
 play-PRES:CONT.DEC
 ‘Being poor made his life up and down.’

Iterative situation also occurs when “a punctual situation takes place so many times in sequence with punctual verbs” (Payne 1997: 241). Similar to this observation, Ganta also expresses the same construction lexically, as in (31).

- (31) a. ís-i díj-a-kk-oyi-n-e
 she-NOM sneeze-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘She is sneezing.’
 b. inddo-y k'úφ-a-kk-oyi-n-e
 mother-NOM cough-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘Mother is coughing.’

5.3.2.10 Habitual

In habitual aspect, present continuous and declarative marking element **-e** is used to express universal truth as in (32).

- (32) a. *és-i tʃeemá tʃeema dísk-a-kk-oyi-n-e*
 he-NOM night night sleep-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘He sleeps every night.’
 b. *átsts-i káwʔo m-úu-n-e*
 man-NOM food eat-STM-IMPERF-PRES:CONT.DEC
 ‘Man eats food.’
 c. *máydo-y s'aágg-e*
 ox-NOM roar-PRES:CONT.DEC
 ‘An ox roars.’
 d. *maátʃtʃ-i ʃaató yél-e*
 woman-NOM child/baby bear-PRES:CONT.DEC
 ‘Woman bears baby.’

5.3.3 Tense-aspect combination

Aspect and tense are concerned with time in different ways in which “tense locates a situation in time with reference to present tense whereas aspect is concerned with the internal durative consistency of the situation” (Comrie 1976: 5). Like some other languages, Ganta involves tense-aspect combinations. In this section, past tense and past perfect combination is presented.

5.3.3.1 Past tense and past perfect

In Ganta, past perfect is constructed by combination of the pluperfect marking element **-u-** and the past tense marker **-ee-** in Ganta. The marker **-u-** informs the primary past tense that determines the tense sequence in the verb stem **dísk-** ‘sleep’. It also expresses the continuing relation of a prior situation whereas marker **-ee-** expresses the secondary past tense in the verb stem **gák-** ‘arrive’, as in (33).

- (33) a. *addá-y dísk-u-kko ís-i gaayá-ɸa*
 father-NOM sleep-PLPER-COP:FOC she-NOM market-ABL
gákk-ee-s-i
 arrive-PA-3MS-NOM
 ‘She arrived from the market after father had slept.’
 b. *tán-i ítʃtʃ-u-kko úsun-i háŋ-ee-s-i*
 I-NOM sleep-PLPER-COP:FOC they-NOM go-PA-3MS-NOM
 ‘I had slept before they went.’

5.4 Mode/Modality

In the previous section, tense-aspect relationship was discussed as part of verb inflection. In Ganta, mode/modality or mood is another morphological inflection together with tense-aspect distinctions. In most linguistic literatures, mode and mood are discussed together as one part of verbal inflection. But linguists like Kroeger (2005) and Payne (1997) classified mode and mood in different categories. For Payne (ibid: 244) “mode describes the speaker’s attitude toward a situation, including the speaker’s belief in its reality, or likelihood”. Contrary to this concept, mood is defined as “an expression of what the speaker is trying to do” (Kroeger: 163). But the role of mood will be

differently described separately in the other section. In this part, morphological affixes of Ganta mode types are analyzed in relation to the theoretical perspectives of Kroeger and Payne.

5.4.1 Subjunctive

Subjunctive mode can be marked by copular focus marker **-kko** and **-ó**. In examples (34a and 34b), the verb stem **maák'**- ‘**be/become**’ suffixes with the series of markers so as to mark for subjunctive clause. The marker **-kko** occurs at the last position in the series of markers by following them. But, in the examples (34c and 34d), marker **-ó** is suffixed to verb roots of **gám?**- ‘**stay/long live**’, and **ánjj**- ‘**bless**’ respectively to reflect subjunctive mode in Ganta.

- (34) a. tán-i dúre maák'k'-í-s-a-kko mákina-k-ote
 I-NOM rich become-CONV-3MS-ACC-COP:FOC car (Amharic)-FOC-1SG
 jám-a-ǰǰ-e
 buy-IND-IMPERF-PRES:CONT.DEC
 ‘If I were a rich, I would buy a car.’
- b. há-nn-i búyge miís-i
 this-3FM-NOM búyge cow-NOM
 maák'k'-í-baáre-s-a-kko, maás's'-aʔá-yisi
 become-CONV-NEG-3MS-ACC-COP:FOC give milk-NEG-3FM
 ‘If this cow hadn’t been for Buyige, it wouldn’t give milk.’
- c. nú maága-z-i ǰémpo-y gám?-ó
 our leader(local)-3MS:SG.PL:DEF-NOM life-NOM stay (long)-SUBJ
 ‘Long live to our leader!’
- d. bázo-y nén-a ánjj-ó
 god-3MS:NOM you-ACC bless-SUBJ
 ‘God bless you !’

5.4.2 Optative

Optative mode can be marked by the morpheme **-(y)ǰǰ-** in Ganta. It can be observed in subjunctive and/or conditional clauses as in (35a) and on the complex verb stem (35b).

- (35) a. tán-i áde gél-í-s-a-kko
 I-NOM husband marry-CONV-3MS-ACC-COP:FOC
 móǰǰ-a-k-oti-(y)ǰǰ-e
 fat-IND-FOC-1SG-OPT-PRES:CONT.DEC
 ‘If I got married, I would be fat.’
- b. hantstsó gaayá hám-a-k-oti-(y)ǰǰ-e
 today market go-IND-FOC-1SG-OPT-PRES:CONT.DEC
 ‘I wish I went to market.’

Optative mode can be expressed by the citation form of the independent item

wóрге ‘**want/wish/need**’ as in (36a) and (36b).

- (36) a. tán-i kaát-i maák'k'-oda-kko wórg-e
 I-NOM king-NOM become-INFI-COP:FOC want-PRES:CONT.DEC
 ‘I want to be a king.’
- b. ís-i astamaáre maák'k'-oda wórg-aʔá-yisi
 She-NOM teacher (Amharic) become-INFI want-NEG-3FM

‘She doesn’t want to be a teacher.’

5.4.3 Potential

Ganta potential mode can be expressed by manner marker **-kke** which is directly followed by person markers as in (37a) and (37b) and by independent item **dándda?** ‘can/be able to’ in (37c) and (37d).

- (37) a. *és-i harák'e úf-aáre-s-kke-k-oyi-n-e*
 he-NOM alcohol drink-NEG-3MS-MANN-FOC-SUBM-IMPERF-PRES:CONT
 ‘He may not drink alcohol.’
- b. *tán-i s'éga fǎŋ-oda dándda?-a-k-oti-n-e*
 I-NOM goat buy-INFI can-IND-FOC-1SG-IMPERF-PRES:CONT.DEC
 ‘I can buy a goat.’
- c. *deré-ssi wolk'k'á-y yé-s-oda*
 society-DAT power-3MS:NOM exist-3MS-INFI
dándda?-a-kk-oyi-n-e
 can-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘People can have power.’

5.4.4 Hypothetical/Imaginary

Hypothetical or imaginary mode in Ganta can be expressed by independent item **s'úm-** ‘suppose/think’ with jussive first person plural marker **-ínno** (38a) and by subjunctive or imaginary conditional clause marker **-kko**, as in (38b).

- (38) a. *áne táá-ro mákina-kko yé-s-í-s-a*
 let us I-DAT car (Amharic)-COP:FOC exist-3MS-CONV-3MS-ACC
hí-d-í s'úm-ínno...
 say-PERF-CONV suppose-JUSS:1PL
 ‘Let us suppose that I had a car...’
- b. *faató-kke ér-í dítfǎf-í-s-a-kko*
 child-MANN know-CONV grow-CONV-3MS-ACC-COP:FOC
nén-a máad-a-k-oni-(y)ǎff-e
 you-ACC help-IND-FOC-2SG-OPT-PRES:CONT.DEC
 ‘If you had grown up as a knowledgeable child, you would help yourself.’

5.4.5 Conditional

The marker **-kko** was previously identified as conditional marker by Selamawit (2004) in Ganta. But, this study has identified the marker consisting a high tone (´) as **-kkó** in the conditional construction. The morpheme **-kkó** marks for real and imaginary conditionals. Compare the following examples in (39).

- (39) a. *nén-i táá-ro bíra ím-o-kkó tán-i s'éga*
 you-NOM I-DAT money give-IND-COND I-NOM goat
fǎm-a-k-oti-ttam-e
 buy-IND-FOC-1SG-FUT-PRES:CONT.DEC
 ‘If you give me money, I will buy a goat.’
- b. *tán-i nén-a maák'k'-í-s-a-kkó keetstsé*
 I-NOM you-ACC become-CONV-3MS-ACC-COND house
keés'-a-k-oti-(y)ǎff-e
 build-IND-FOC-1SG-OPT-PRES:CONT.DEC

‘If I were you, I would build a house.’

- c. *nén-i mákina jáŋ-ee-s-a maák'k'-í-s-a-kkó*
 you-NOM car buy-PA-3MS-ACC become-CONV-3MS-ACC-COND
és-u-nna hám-a-má-ni-(y)aff-e
 he-ACC-INST go-IND-ASS-2SG-OPT-PRES:CONT.DEC
 ‘If you had bought a car, you would have gone by it.’

As can be observed in illustrations (39a-c), marker **-kkó** is used to mark for conditional clause. The verb form in the if clause (39a) is suffixed immediately with marker **-o** which is glossed as (IND) and ended in marker **-kkó**, as **ím-o-kkó** ‘if give’. In the main clause, the future marker **-ttam-** occurs next to the element **-e**, which occurs at the end position of the complex verb stem **jám-** ‘buy’.

In the (39b), unreal conditional clause holds verb root **maák'-** ‘be/become’ that functions as past verb ‘to be’ with converb marker. The if clause marker **-kkó**, occurs at the end position. The main clause verb root **keés'-** ‘build’ is suffixed by series of distinct markers before ending in present continuous and declarative marker **-e**.

In the imaginary clause (39c), verb stem **jám-** ‘buy’ is directly suffixed by the past marker **-ee-**, before masculine gender marking element **-s-**. The verb root **maák'-** ‘be/become’ is immediately suffixed by converb and holds copular focus at the end position. In the main clause, assertive marker **-má-** is occurred in the complex verb stem **hám-** ‘go’. In this clause, instrumentalized pronoun **és-u-nna** ‘by it’ refers to **makina** ‘car’ in the imaginary clause. As it has been informed so far, pronoun **és-** ‘he’ has stood for third person masculine (3MS) pronoun. But in this situation, it is used to mark for inanimate things in Ganta.

5.4.6 Deontic/Obligation

Deontic mode is expressed by independent item **bé-** ‘see/show/display’. This word gets obligatory notion when used in deontic mode constructions in Ganta. The future or present obligation can be marked with present continuous and declarative marker **-e**, on the obligatory word, as in **bé-ss-e** ‘must/has to/have to’ as in (40a). The past obligation can be expressed by the suffixation of converb **-í-** and followed by perfective **-d-** and present continuous and declarative marker **-e** as **bé-ss-í-d-e** ‘must/had to’ in (40b). The complex verb root **oóts-** ‘work’ is directly attached with infinitive marker **-oda-** and ended in copular focus **-kko**, as in (40a and 40b). In the two illustrations, adjective **mín-** ‘strong/hard’ is suffixed with converb **-í-** and its final consonant **n** occurs gemination when suffixing with converb. Let us see the following illustrations (40).

- (40) a. *nén-i mín-n-í oótsts-oda-kko bé-ss-e*
 you-NOM hard-CONV work-INFI-COP:FOC must-CAUS-PRES:CONT.DEC
 ‘You must work hard.’
 b. *nén-i mín-n-í oótsts-oda-kko*
 you-NOM hard-CONV work-INFI-COP:FOC
bé-ss-í-d-e
 must-CAUS-CONV-PERF-PRES:CONT.DEC
 ‘You had to work hard/You had better work hard.’

person subjects” (Payne 1997: 303). This means that an expected subject of an imperative construction is the addressee or hearer, but the reference to the subject is always omitted. Like other languages, Ganta imperative mood is distinct by its verbal suffixes for declarative clause. Ganta imperative clause can be illustrated in two forms as strong and soft (jussive or hortative) as follow.

5.5.2.1 Strong imperative

Like other Omotic languages, Ganta can express strong commands by singular (2SG) and plural (2PL) second persons. Strong command verb marks for number and person in Ganta, as in (43).

- (43) a. *déndd-áy*
stand up-IMPER:2SG
‘Stand up !’
b. *útt-áyo*
sit down-IMPER:2SG
‘Sit down !’
c. *m-íy-áwo*
eat-STM-IMPER:2SG
‘Eat !’
d. *ǰísk-áyto*
sleep-IMPER:2PL
‘Sleep!’
e. *háŋ-áyto*
go-IMPER:2PL
‘Go!’

For second person singular (2SG) addressee, imperative instructions are marked by three affixes, **-áyi**, **-áyo**, and **-áwo** as in (43a), (43b) and (43c). These markers do have the same grammatical functions to address instructions. Imperative marker, **-áyto** is used for second person plural (2PL) addressee in strong instructions (43d) and (43e).

In Ganta, as in many Omotic languages, negative strong commands are formed using a special negative marker, **-dopp-**. In this case, an imperative marker is **-u** for second person singular (2SG) and **-ite** in second person plural (2PL) as in (44a) and (44b) respectively.

- (44) a. *ǰísk-í-dopp-u*
sleep-CONV-NEG-2SG
‘Don’t sleep!’
b. *ǰísk-í-dopp-ite*
sleep-CONV-NEG-2PL
‘Don’t sleep!’

5.5.2.2 Soft imperative/Jussive/Hortative

According to Kroeger (2005: 201), “the imperative form of the verb is marked for person and can even take first or third person agreement markers”. The same situation is observed in Ganta. Soft imperative marks for number, person, and also for gender (in the case of third person masculine (3MS) and feminine (3FM)). But, Kroeger comments the first person forms as “hortative sense” and the third person forms as “optatives”. The case in Ganta seemed to be hortative sense rather than optative. Let us see the illustrations (45).

- (45) a. hántt-ána
walk-JUSS:1SG
'Let me walk !'
b. hántt-inno
walk-JUSS:1PL
'Let us walk !'
c. hántt-áwo
walk-JUSS:2SG
'Let you walk !'
d. hántt-áyto
walk-JUSS:2PL
'Let you (PL) walk!'
e. hántt-áyese
walk-JUSS:3MS
'Let him walk!'
f. hántt-áyisi
walk-JUSS:3FM
'Let her walk !'
g. hántt-áyisu
walk-JUSS:3PL
'Let theme walk !'

Like strong imperative, soft imperative takes negative marker **-dopp-**. In this case, all person, number, and gender markers can have different forms (for this see negative jussive under person markings). Strong commands can be softened by polite marking element **-r-** with second person singular and plural imperative markers **-áwo** and **-áyto** respectively, as in (46). In this construction, item **usá** gives a notion that might be equivalent to English word '**please**'. The change of position for **usá** '**please**' does not bring any meaning difference in the constructions.

- (46) a. tán-a bé-ss-e-r-áwo usá
I-ACC see/look-CAUS-PRES:CONT.DEC-POLT-JUSS:2SG please
'Show me, please !'
b. usá tán-a bé-ss-e-r-áwo
please I-ACC see-CAUS-PRES:CONT.DEC-POLT-JUSS:2SG
'Please, show me !'
c. tán-a bé-ss-e-r-áyto usá
I-ACC see-CAUS-PRES:CONT.DEC-POLT-JUSS:2PL please
'Show me, please !'
d. usá tán-a bé-ss-e-r-áyto
please I-ACC see-CAUS-PRES:CONT.DEC-POLT-JUSS:2PL
'Please, show me !'

5.5.3 Interrogative

Ganta has grammatical means of speech acts to request for information rather than an assertion. Ganta interrogatives can be expressed by '**Yes/No**' and '**Wh-**' question forms.

5.5.3.1 Yes/No questions

Ganta Yes/No questions are employed by the reduction of focus **-k(k)-** and by the change of person marker forms in the interrogative constructions. The occurrence of **-k(k)-** in the interrogative verb makes a clause statement, and the absence changes the statement into Yes/No question forms. Let us see (47).

Statement

- (47) a. káϕ-a-k-oti-ttam-e
wait-IND-FOC-1SG-FUT-PRES:CONT.DEC
'I will wait.'
- b. káϕ-a-kk-i-n-e
wait-IND-FOC-3FM-IMPERF-PRES:CONT.DEC
'She is waiting.'
- c. káϕ-a-kk-u-d-e
wait-IND-FOC-3PL-PERF-PRES:CONT.DEC
'They waited.'

Yes/No question

- a. káϕ-a-ti-ttam-e
wait-IND-1SG-FUT-PRES:CONT.DEC
'Will I wait?'
- b. káϕ-a-ysi-n-e
wait-EP-3FM-IMPERF-PRES:CONT.DEC
'Is she waiting?'
- c. káϕ-a-ysuyi-d-e
wait-IND-3PL-PERF-PRES:CONT.DEC
'Did they wait?'

In the negative statements, negative marker **-kkáa-** replaces the other negative marker **-aʔá-** in the clauses to form Yes/No questions. Let us see the replacement of **-kkáa-** in the Yes/No column (48).

Statement

- (48) a. útt-aʔá-se
sit-NEG-3MS
'He doesn't/won't sit down.'
- b. útt-aʔá-te
sit-NEG-1SG
'I don't/won't sit down.'
- c. útt-aʔá-yinu
sit-NEG-1PL
'We don't/won't sit down.'

Yes/No question

- a. út-ukkáa-se
sit-NEG-3MS
'Doesn't/won't he sit down?'
- b. út-ukkáa-te
sit-NEG-1SG
'Don't/won't I sit down?'
- c. út-ukkáa-yinu
sit-NEG-1PL
'Don't/won't we sit down?'

As it has been observed, the negative marker **-aʔá-** is replaced by its present or future negative counterpart **-ukkáa-** in the Yes/No question constructions. The negation marker **-aʔá-** is used in the present or future intended negation, while the negative marker **-ukkáa-** is used in present or future questions.

The reduction of certain segment **-aʔá-** from past negative marker **-báʔa-** forms past negative Yes/No questions in Ganta. In this case, the final two segments **-ʔa-** are reduced from statement constructions, as in (49).

Statement

- (49) a. wós's'-í-báʔa-te
run-CONV-NEG-1SG
'I didn't run.'
- b. wós's'-í-báʔa-yisi
run-CONV-NEG-3FM
'She didn't run.'
- c. wós's'-í-báʔa-se
run-CONV-NEG-3MS
'He didn't run.'

Yes/No question

- a. wós's'-í-bá-mma
run-CONV-NEG-1SG
'Didn't I run?'
- b. wós's'-í-bá-yisi
run-CONV-NEG-3FM
'Didn't she run?'
- c. wós's'-í-bá-yese
run-CONV-NEG-3MS
'Didn't he run?'

Ganta Yes/No question can also be constructed by possibility marker **-and-**. This marker can only happen to create Yes/No question forms rather than statement construction in Ganta (50).

- (50) a. m-íy-and-é
eat-STM-POSB-3MS
‘Might/may he eat?’
b. m-íy-and-ú
eat-STM-POSB-3FM
‘Might/may she eat?’
c. m-íy-and-ettó
eat-STM-POSB-3PL
‘Might/may they eat?’
d. m-íy-and-iná
eat-STM-POSB-1SG
‘Might/may I eat?’

Yes/No question can be expressed by focus marker **-wa**. The marker is suffixed to the citation form of existential verb **yé-** ‘**exist/live**’ and adjective **lóʔo** ‘**ok/good**’ in (51)

- (51) a. dookkó-y hantstsó zawá yé-s-a-wa
dookkó-NOM today home exist/live-3MS-ACC-FOC
‘Is Dookkó at home today?’
b. hantstsó ɸaátʃe-y yé-s-a-wa
today exam (Gamo)-NOM exist/live-3MS-3MS:ACC-FOC
‘Is there exam today?’
c. nén-i lóʔo-wa
you-NOM ok-FOC
‘Are you ok?’

5.5.3.2 Tag question

The particle **má** is used as assertive “tag” marker in Ganta. It occurs after a clause so as to request for confirmation or disconfirmation of directed issue. If the request is confirmed, an expected response would be **ʔéé/ʔéʔé** ‘**Yes**’. The opposite response for it will be **áyʔé/áyʔáye** ‘**No**’, for disconfirmation. See the example (52).

- (52) a. huúll-í-báʔa-yisi má
offend-CONV-NEG-3FM ASS
‘She didn’t offend, did/didn’t she?’
b. huúll-a-kk-i-ttam-e má
offend-IND-FOC-3FM-FUT-PRES:CONT.DEC ASS
‘She will offend, will/won’t she?’
c. huúll-a-kk-i-d-e má
offend-IND-FOC-3FM-PERF-PRES:CONT.DEC ASS
‘She offended, did/didn’t she?’

5.5.3.3 Wh- questions

In Ganta, Wh- question words can appear at the beginning of the clause or at the end of a clause. The first strategy is called “Wh- fronting” (Kroeger, 2005:205), as in (53).

- (53) a. óode-wa nén-i wórg-e-s-i
who-FOC you-NOM want-PRES:CONT.DEC-3MS-NOM

‘Who are you wanting?’

- b. áala/áamma/álmma nén-i oótsts-e-s-i
 what you-NOM work-PRES:CONT.DEC-3MS-NOM

‘What are you doing?’

- c. áanna-wa ís-i háŋ-ee-s-i
 where-FOC she-NOM go-PA-3MS-NOM

‘Where did she go?’

- d. ánni-wa és-i worg-e-s-i
 which-FOC he-NOM want-PRES:CONT.DEC-3MS-NOM

‘Which one is he wanting?’

- e. áyde-wa nén-i zawá háŋ-ee-s-i
 when-FOC you-NOM home go-PA-3MS-NOM

‘When did you go to home?’

Some Ganta Wh- questions are formed by using different markers. For example, ‘**how**’ is one of the Wh- question forms in English. Its equivalent Wh- question in Ganta is formed by a combination of nominated gender and focus markers on the word root **wáy-** ‘**how**’, in example (54a). But, in example (54b), perfective, converb and focus markers are occurred one after the other on the word root.

- (54) a. wáy-s-i-wa nén-i ha-y-a s'aáφ-ee-s-i
 how-3MS-NOM-FOC you-NOM this-3MS-ACC write-PA-3MS-NOM
 ‘How did you write this one?’

- b. wáy-d-í-wa ítin-i oótsts-ee-s-i
 how-PERF-CONV-FOC you(PL)-NOM work-PA-3MS-NOM
 ‘How did you (PL) do?’

Interestingly, the word root of Wh- question **wáy-** ‘**how**’ changes its semantic notion into the other Wh- question form ‘**why**’ when it occurs only with person marker, as in (55).

- (55) a. wáy-nn-u-wa ís-i yeékk-ee-s-i
 how-3FM-ACC-FOC she-NOM cry-PA-3MS-NOM
 ‘Why did she cry?’

The reason clause Wh- question ‘**why**’ is also formed on the other Wh- question word stem **áala/áamma/álmma** ‘**what**’ by suffixing nominated dative case and focus markers, as in (56).

- (56) a. áala-ssi-wa nén-i útt-ee-s-i
 what-DAT-FOC you-NOM sit-PA-3MS-NOM
 ‘Why did you sit down?’

- b. álmma-ssi-wa nén-i tán-a wórg-ee-s-i
 what-DAT-FOC you-NOM I-ACC want-PA-3MS-NOM
 ‘Why did you want me?’

Wh- questions also occur at the end of a clause in Ganta, as in (57).

- (57) a. nén-i oótsts-e-s-i áala-wa
 you-NOM work-PRES:CONT.DEC-3MS-NOM what-FOC
 ‘What are you doing?’

- b. nén-i háŋ-ee-s-i áanna-wa
 you-NOM go-PA-3MS-NOM where-FOC
 ‘Where did you go?’

- c. nén-i tán-a wórg-ee-s-i áala-ssi-wa
 you-NOM I-ACC want-PA-3MS-NOM why-DAT-FOC
 ‘Why did you want me?’

5.6 Negation

Payne (1997: 282-294) describes negating parts or structures of many world languages. According to Payne’s observation, “a language constituent, clause, lexicon, and morphology can operate negation strategies”. Such language structures are also involved in negation strategies in Ganta. Therefore, in this part, some negating systems are discussed in lexical and morphological categories. Negative of existence is also presented in the last part of this section.

5.6.1 Lexical negation

The lexical negation strategy in Ganta uses **báʔa** ‘not exist/absent’ and **ďáwo** ‘lack/lose’. These items are negative forms of the existence verb **yé-** ‘exist/live’. The two lexical negative items are used in different contexts, as in (58).

- (58) a. tán-i hantstsó zawá báʔa
 I-NOM today home not present
 ‘I will not be at home today.’
 b. ís-i-ro k'aáda-y ďáw-a-kk-oyi-d-e
 she-NOM-DAT chance-NOM loose-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘She didn’t have chance/She lost her luck.’

5.6.2 Morphological negation

Ganta morphological negations, as in most languages, vary according to the speech uttered. For example, it depends on the tense, aspect, and mode operations. In the following table, negative markers are listed in relation to the used speech contexts.

Negation morphemes	Used speech contexts
-ʔá-	Future or present declarative
-kkáa-	Future or present declarative
-dopp-	Soft command (jussive/hortative) or strong command
-báʔa-	Past or present declarative
-aáre-	Future epistemic probability or potential
-baár(e)-	Past epistemic probability or potential
-ontt(e)-	Present or past participle
-bá-	Past question

In the following example (59), let us see the use of the negation markers.

- (59) a. káwʔe m-íy-aʔá-te
 food eat-STM-NEG-1SG
 ‘I do not/will not eat food.’
 b. úʃ-ukkáa-te
 drink-NEG-1SG
 ‘Don’t/won’t I drink?’
 c. déndd-í-dopp-u
 stand-CONV-NEG-2SG
 ‘You should not stand up!’

- d. zawá gél-í-bá?a-se
home get in-CONV-NEG-3MS
'He didn't get in home.'
- e. oótsts-í-baár(e) m-úu-dopp-u
work-CONV-NEG eat-STM-NEG-2SG
'You shouldn't eat unless you work.'
- f. nén-i gó?-ontte átsts-u-kko
you-NOM use-NEG man-ACC-COP:FOC
'You are useless man.'
- g. zawá háŋ-í-bá-wo
home go-CONV-NEG-2SG
'Didn't you go to home?'

5.6.3 Negative of existence

Negative of existence is expressed by **bá?a** 'not exist/absent' or 'none' and **áy?e** 'No' in Ganta. In the following conversations (60a), negative of existence is illustrated by negation **bá?a** 'not exist/absent'. In (60b), **áy?e** 'No' is also used to ensure ignorance. Compare the following conversation (60).

- (60) a. Bártte: néé-ro s'ík'k'e bíra-y yé-s-a-wa?
you-DAT any/little/few money-NOM exist-3MS-ACC-FOC
'Do you have any money?'
Dookkó: bá?a-se
NEG-3MS
'None'
- b. Barte: nén-i ganta hám-a-ni-ttam-e
you-NOM ganta go-IND-2SG-FUT-PRES:CONT.DEC
'Will you go to Ganta?'
Dookko: áy?e
No
'No'

5.7 Subject agreement marking

Subject agreement markers are suffixed to augmented verb stems. This "complex" verb might also hold gender reflecting markers by which third person singular masculine and feminine gender references can be referred. No plural personal categories can refer to sex differences, but number. Plural and singular number information might be reflected in the verb stems. Plural person marking affixes refer to plural numbers whereas singular person markings to singular categories.

Mostly, Ganta verb features are known for its complex nature. The fact is that many morphemes are portmanteau morphemes; the reason that the language has a complex nature. A number of suffixes can be attached to verb stems. As result of this nature, it is impossible to distinguish out only person or number or gender markers in Ganta. Similarly, this complex nature is also prevalent in most Omotic languages. Bender (2000: 15) has asserted the impossibility of picking out even "a single set of person markers in Omotic verb affixes". In this section, attention is given on the subject

agreement. To this end, agreement markers in the paradigms of declarative positives and negatives, interrogatives, imperatives, jussives, and converbs are analyzed.

Before analyzing agreement markers, the noteworthy point is observation of word orders in the declarative affirmative paradigm structures. For analysis, the researcher has used three construction forms: the first one is augmented verb construction; the second form includes object with augmented verbs; and the last form includes optional subject, object, and complex verbs with time adverbs. Sample of these three forms are presented in (1a), (1b), and (1c) respectively below.

- (1) a. hám-a-k-oti-d-e
go-IND-FOC-1SG-PERF-PRES:CONT.DEC
'I went.'
- b. gaayá hám-a-k-oti-d-e
market go-IND-FOC-1SG-PERF-PRES:CONT.DEC
'I went to market.'
- c. tán-i k'ámma gaayá hám-a-k-oti-d-e
I-NOM yesterday market go-IND-FOC-1SG-PERF-PRES:CONT.DEC
'I went to the market yesterday.'

In (1a), the construction only tells us the presence of subject and its role in time. Even if the statement is complete, there is no information about the object. The subject of the sentence suffixed to the verb stem can be understood by the marker **-oti-**. In the second example (1b), there is an additional lexical item **gaayá** 'market' which represents the object of the statement. In this case, there is full information about subject, object and verb itself. In the last example (1c) optional subject **táni** 'I' is included even if the subject the construction is expressed by inflection **-oti-** in the augmented verb stem. Without the subject **táni** 'I', Ganta can address complete information, as in (1a). So, this subject is not very necessary. In the last example (1c) four word classes are presented, there is the subject **táni** 'I', the adverb **k'ámma** 'yesterday', the object **gaayá** 'market', and the complex verb **ham-a-k-oti-d-e** 'went'. Thus, Ganta word order is Subject-Object-Verb (SOV).

5.7.1 Person marking

Ganta person marker occurs in the declarative positive, negative, imperative, jussive, and converb. Let us see the person markings in the declarative affirmative paradigm.

5.7.1.1 Person markings in declarative positive constructions

The form of person markings in the declarative affirmative constructions can be decided by the markers **-k(k)-** or **-t(t)-** involvement. They are assumed to be 'focus markers' in Ganta. These markers can be attached to the adverb, object, and verb classes to express focusing strategy, and person markers obligatorily occurs after them. In this case, person marking suffix forms vary. Both focus markers can replace each other in the sentence constructions. But they never appear together at the same time in the sentence or speech context of Ganta. When they are used in the sentence constructions, different person markers can be observed on the adverb, on the object, and in the verb word classes. In such constructions, vowel **a**, is assumed to be an indicative marker. It can occur during the derivational process before the focus markers in Ganta. Vowel **i** can have lots of roles. It acts as verbalizer, person marker, first past or converb marker. A high tone vowel **í** or converb in combination with the main verb perfective or past marker

-d- or **-nne**, also forms the basis of a second past tense main verb form, which generally indicates a recent past event as in (5) or (6) below.

Person marking with focus -k(k)-

- (2) a. tán-i gámmʔu-k-ote zawá hám-a-m-e
I-NOM later-FOC-1SG home go-IND-FUT-PRES:CONT.DEC
'I will go home later.'
- b. nún-i gámmʔu-k-unu zawá hám-a-m-e
we-NOM later-FOC-1PL home go-IND-FUT-PRES:CONT.DEC
'We will go home later.'
- c. nén-i gámmʔu-k-one zawá hám-a-m-e
you-NOM later-FOC-2SG home go-IND-FUT-PRES:CONT.DEC
'You (SG) will go home later.'
- d. ítín-i gámmʔu-k-iti zawá hám-a-m-e
you-NOM later-FOC-2PL home go-IND-FUT-PRES:CONT.DEC
'You (PL) will go home later.'
- e. és-i gámmʔu-k-ose zawá hám-a-m-e
he-NOM later-FOC-3MS home go-IND-FUT-PRES:CONT.DEC
'He will go home later.'
- f. ís-i gámmʔu-kk-i zawá hám-a-m-e
she-NOM later-FOC-3FM home go-IND-FUT-PRES:CONT.DEC
'She will go home later.'
- g. úsun-i gámmʔu-k-u zawá hám-a-m-e
they-NOM later-FOC-3PL home go-IND-FUT-PRES:CONT.DEC
'They will go home later.'
- (3) a. zawá-k-ote gél-í-d-e
home-FOC-1SG enter-CONV-PERF-PRES:CONT.DEC
'I entered home.'
- b. zawá-k-unu gél-í-d-e
home-FOC-1PL enter-CONV-PERF-PRES:CONT.DEC
'We entered home.'
- c. zawá-k-one gél-í-d-e
home-FOC-2SG enter-CONV-PERF-PRES:CONT.DEC
'You entered home.'
- d. zawá-k-iti gél-í-d-e
home-FOC-2PL enter-CONV-PERF-PRES:CONT.DEC
'You (PL) entered home.'
- e. zawá-k-ose gél-í-d-e
home-FOC-3MS enter-CONV-PERF-PRES:CONT.DEC
'He stayed at home.'
- f. zawá-k-i gél-í-d-e
home-FOC-3FM enter-CONV-PERF-PRES:CONT.DEC
'She entered home.'
- g. zawá-k-u gél-í-d-e
home-FOC-3PL enter-CONV-PERF-PRES:CONT.DEC
'They stayed at home.'

- (4) a. gúta gaayá hám-a-k-oti-ttam-e
tomorrow market go-IND-FOC-1SG-FUT-PRES:CONT.DEC
'I will go to the market tomorrow.'
- b. gúta gaayá hám-a-k-unu-ttam-e
tomorrow market go-IND-FOC-1PL-FUT-PRES:CONT.DEC
'We will go to the market tomorrow.'
- c. gúta gaayá hám-a-k-oni-ttam-e
tomorrow market go-IND-FOC-2SG-FUT-PRES:CONT.DEC
'You will go to the market tomorrow.'
- d. gúta gaayá hám-a-k-iti-ttam-e
tomorrow market go-IND-FOC-2PL-FUT-PRES:CONT.DEC
'You (PL) will go to the market tomorrow.'
- e. gúta gaayá hám-a-k-osi-ttam-e
tomorrow market go-IND-FOC-3MS-FUT-PRES:CONT.DEC
'He will go to the market tomorrow.'
- f. gúta gaayá hám-a-kk-i-ttam-e
tomorrow market go-IND-FOC-3FM-FUT-PRES:CONT.DEC
'She will go to the market tomorrow.'
- g. gúta gaayá hám-a-kk-u-ttam-e
tomorrow market go-IND-FOC-3PL-FUT-PRES:CONT.DEC
'They will go to the market tomorrow.'

Person marking with focus -t(t)-

- (5) a. zimbere-t-ete gad-á hán-í-nne
last year-FOC-1SG farmland-INESS go-CONV-PA
'I went to field last year.'
- b. zimbere-t-unu gad-á hán-í-nne
last year-FOC-1PL farmland-INESS go-CONV-PA
'We went to field last year.'
- c. zimbere-t-ene gad-á hán-í-nne
last year-FOC-2SG farmland-INESS go-CONV-PA
'You went to field last year.'
- d. zimbere-t-iti gad-á hán-í-nne
last year-FOC-2PL farmland-INESS go-CONV-PA
'You (PL) went to field last year.'
- e. zimbere-t-ese gad-á hán-í-nne
last year-FOC-3MS farmland-INESS go-CONV-PA
'He went to field last year.'
- f. zimbere-tt-i gad-á hán-í-nne
last year-FOC-3FM farmland-INESS go-CONV-PA
'She went to field last year.'
- g. zimbere-tt-u gad-á hán-í-nne
last year-FOC-3PL farmland-INESS go-CONV-PA
'They went to field last year.'
- (6) a. gad-á-t-ete hán-í-nne
farmland-INESS-FOC-1SG go-CONV-PA
'I went to field.'

- b. gad-á-t-unu háŋ-í-nne
farmland-INESS-FOC-1PL go-CONV-PA
'We went to field.'
- c. gad-á-t-ene háŋ-í-nne
farmland-INSS-FOC-2SG go-CONV-PA
'You went to field.'
- d. gad-á-t-iti háŋ-í-nne
farmland-INESS-FOC-2PL go-CONV-PA
'You (PL) went to field.'
- e. gad-á-t-ese háŋ-í-nne
farmland-INESS-FOC-3MS go-CONV-PA
'He went to field.'
- f. gad-á-tt-i háŋ-í-nne
farmland-INESS-FOC-3FM go-CONV-PA
'She went to field.'
- g. gad-á-tt-u háŋ-í-nne
farmland-INESS-FOC-3PL go-CONV-PA
'They went to field.'
- (7) a. tán-i gaayá hám-a-t-eti-ttam-e
I-NOM market go-IND-FOC-1SG-FUT-PRES:CONT.DEC
'I will go to the market.'
- b. nún-i gaayá hám-a-t-unu-ttam-e
we-NOM market go-IND-FOC-1PL-FUT-PRES:CONT.DEC
'We will go to the market.'
- c. nén-i gaayá hám-a-t-eni-ttam-e
you-NOM market go-IND-FOC-2SG-FUT-PRES:CONT.DEC
'You will go to the market.'
- d. úsun-i gaayá hám-a-tt-u-ttam-e
they-NOM market go-IND-FOC-2PL-FUT-PRES:CONT.DEC
'They will go to the market.'
- e. és-i gaayá hám-a-t-esi-ttam-e
he-NOM market go-IND-FOC-3MS-FUT-PRES:CONT.DEC
'He will go to the market.'
- f. ís-i gaayá hám-a-tt-i-ttam-e
she-NOM market go-IND-FOC-3FM-FUT-PRES:CONT.DEC
'She will go to the market.'
- g. ítín-i gaayá hám-a-t-iti-ttam-e
they-NOM market go-IND-FOC-3PL-FUT-PRES:CONT.DEC
'You (PL) will go to the market.'

The following table displays person markers of Ganta in the focused declarative affirmative paradigm.

Person	Agreement markers in the focused construction					
	Adverb		Object		Verb	
	focused by -k(k)-	focused by -t(t)-	focused by -k(k)-	focused by -t(t)-	focused by -k(k)-	focused by -t(t)-
1SG	-ote	-ete	-ote	-ete	-oti-	-eti
1PL	-unu	-unu	-unu	-unu	-unu-	-unu
2SG	-one	-ene	-one	-ene	-oni-	-eni
2PL	-iti	-iti	-iti	-iti	-iti-	-iti
3MS	-ose	-ese	-ose	-ese	-osi-	-esi
3FM	-i	-i	-i	-i	-i-	-i
3PL	-u	-u	-u	-u	-u-	-u

As can be observed in the above table, person markers in the focused constructions of adverb, object, and verb indicate different linguistic features in the case of each personal categories. In the case of first person singular (1SG), marker **-ote** is expected person marker when adverb and object word classes are focused by marker **-k(k)-**. In the same focusing process, morpheme, **-oti** is marking first person singular (1SG) in the verb stem. The focus marker **-t(t)-** can also be attached to adverb and object words in order to yield first person singular (1SG) marking element **-ete**. But marker **-t(t)-** involvement in the verb stem, brings another marker **-eti** as first person singular (1SG) marker in Ganta.

In the first person plural (1PL) personal category, identical marker **-unu** is agreed in all focused adverb, object, and verb classes.

Like first person singular (1SG) personal category, second person singular (2SG) expresses different personal marking features. When adverb and object word classes are focused by **-k(k)-**, person marking element can be marker **-one**. This marker can change its final vowel (e) into (i) when focusing process is occurred by **-k(k)-** in the verb stem as **-oni**. Marker **-ene** is appeared as second person singular (2SG) marker as result of focus marker **-t(t)-** involvement on the adverb and object word classes of Ganta. In the same focusing phenomena, verb stem reflects morpheme **-eni** as person marker.

Second person plural (2PL) category agrees with the morpheme **-iti** in all cases. This marker cannot be changed into another form even if adverb, object, and verb word classes are focused by both markers **-k(k)-** or **-t(t)-**. The same invariant featuring is observed in the case of third person feminine (3FM) and plural (3PL). Third person feminine is marked by morpheme **-i** whereas third person plural is agreed with marker **-u**.

Third person masculine (3MS) category is agreed with marker **-ose** when adverb and object word classes are focused by **-k(k)-**. In the same phenomena, marker **-osi** is reflected as third person masculine (3MS) marker in the verb stem. But adverb and object word groups can be focused in sentence construction by marker **-t(t)-**. In this case, marker **-ese** reflects third person masculine agreement. In the same focusing process, marker **-esi** is expected agreement marker in the verb stem.

5.7.1.2 Person markings in declarative negative constructions

Ganta inflectional negation markers include **-aʔá-**, **-báʔa-**, **-dopp-** and **-ontt(e)**. Each of them is used in different speech contexts. The marker **-aʔá-** is used to express

future intentions whereas morpheme **-báʔa-** occurs in the perfective or past actions to inform completed negative notion. The remaining markers **-dopp-** and **-ontt(e)** can appear in the imperative and participle clauses respectively (see participle). Look at the following (8).

- (8) a. tán-i badallá ʃǎŋ-aʔá-te
I-NOM maize buy-NEG-1SG
‘I will not buy maize.’
- b. nún-i badallá ʃǎŋ-aʔá-yinu
we-NOM maize buy-NEG-1PL
‘We will not buy maize.’
- c. nén-i badallá ʃǎŋ-aʔá-ne
you-NOM maize buy-NEG-2SG
‘You will not buy maize.’
- d. ítin-i badallá ʃǎŋ-aʔá-yiti
you-NOM maize buy-NEG-2PL
‘You (PL) will not buy maize.’
- e. és-i badallá ʃǎŋ-aʔá-se
he-NOM maize buy-NEG-3MS
‘He will not buy maize.’
- f. ís-i badallá ʃǎŋ-aʔá-yisi
she-NOM maize buy-NEG-3FM
‘She will not buy maize.’
- g. úsun-i badallá ʃǎŋ-aʔá-yisu
they-NOM maize buy-NEG-3PL
‘They will not buy maize.’
- (9) a. ʃǎŋ-í-báʔa-te
buy-CONV-NEG-1SG
‘I didn’t buy.’
- b. ʃǎŋ-í-báʔa-yinu
buy-CONV-NEG-1PL
‘We didn’t buy.’
- c. ʃǎŋ-í-báʔa-ne
buy-CONV-NEG-2SG
‘You didn’t buy.’
- d. ʃǎŋ-í-báʔa-yiti
buy-CONV-NEG-2PL
‘You (PL) didn’t buy.’
- e. ʃǎŋ-í-báʔa-se
buy-CONV-NEG-3MS
‘He didn’t buy.’
- f. ʃǎŋ-í-báʔa-yisi
buy-CONV-NEG-3FM
‘She didn’t buy.’
- g. ʃǎŋ-í-báʔa-yisu
buy-CONV-NEG-3PL
‘They didn’t buy.’

Summary of person markers in the declarative negative affirmative constructions

Person	Agreement marker in the Negative future and past
1SG	-te-
1PL	-yinu-
2SG	-ne-
2PL	-yiti-
3MS	-se-
3FM	-yisi-
3PL	-yisu-

5.7.1.3 Person markings in Yes-No questions

Change of person markers cannot be signaled in the perfective and imperfective positive interrogative aspects (10).

- (10) a. *ḏisk-a-ti-n-e*
sleep-IND-1SG-IMPERF-PRES:CONT.DEC
‘Do I sleep?/Am I sleeping?’
- b. *ḏisk-a-nuyi-d-e*
sleep-IND-1PL-PERF-PRES:CONT.DEC
‘Did we sleep?’
- c. *ḏisk-a-ni-ttam-e*
sleep-IND-2SG-FUT-PRES:CONT.DEC
‘Will you sleep?’
- d. *ḏisk-a-yiti-ttam-e*
sleep-IND-2PL-FUT-PRES:CONT.DEC
‘Will you (PL) sleep?’
- e. *ḏisk-a-si-ttam-e*
sleep-IND-3MS-FUT-PRES:CONT.DEC
‘Will he sleep?’
- f. *ḏisk-a-yisi-ttam-e*
sleep-IND-3FM-FUT-PRES:CONT.DEC
‘Will she sleep?’
- g. *ḏisk-a-yisu-d-e*
sleep-IND-3PL-PERF-PRES:CONT.DEC
‘Did they sleep?’

In the negative interrogation, different person marking features are observed (11).

- (11) a. *s'eéll-i-bá-mma*
see-CONV-NEG-1SG
‘Didn’t I see?’
- b. *s'eéll-i-bá-yinu*
see-CONV-NEG-1PL
‘Didn’t we see?’
- c. *s'eéll-i-bá-wo*
see-CONV-NEG-2SG
‘Didn’t you see?’

- d. s'eéll-í-bá-yito
see-CONV-NEG-2PL
'Didn't you (PL) see?'
- e. s'eéll-í-bá-yese
see-CONV-NEG-3MS
'Didn't he see?'
- f. s'eéll-í-bá-yisi
see-CONV-NEG-3FM
'Didn't she see?'
- g. s'eéll-í-bá-yisu
see-CONV-NEG-3PL
'Didn't they see?'

Ganta has different person markers in the present or future constructions. The negative marker **-ukkáa-** is used to express future negation in Ganta. Let us see these examples in (12).

- (12) a. hám-ukkáa-te
go-NEG-1SG
'Don't/Won't I go?'
- b. hám-ukkáa-yinu
go-NEG-1PL
'Don't/Won't we go?'
- c. hám-ukkáa-ne
go-NEG-2SG
'Don't/Won't you go?'
- d. hám-ukkáa-yiti
go-NEG-2PL
'Don't/Won't you (PL) go?'
- e. hám-ukkáa-se
go-NEG-3MS
'Don't/Won't he go?'
- f. hám-ukkáa-yisi
go-NEG-3FM
'Don't/Won't she go?'
- g. hám-ukkáa-yisu
go-NEG-3PL
'Don't/Won't they go?'

Summary of person markers in the **Yes-No** or **interrogative** positive, past and future negatives

Person	Agreement markers		
	In the interrogative positive	In the interrogative past negative	In the interrogative future negative
1SG	-ti-	-mma	-te
1PL	-nuyi-	-yinu	-yinu
2SG	-ni-	-wo	-ne
2PL	-yiti-	-yito	-yito
3MS	-si-	-yese	-se

3FM	-yisi-	-yisi	-yisi
3PL	-yisu-	-yisu	-yisu

5.7.1.4 Person markings in content or Wh- questions

In the content or Wh- questions, person marking suffixes are attached on the content or Wh- question words in Ganta. Let us see these examples below in (13).

- (13) a. óode-yisu wórg-í-d-e
who-3PL need/want-CON-PERF-PRES:CONT.DEC
'Who did they need?'
- b. ámma-te médf-o-n-e
what-1SG create-SUBJ-IMPERF-PRES:CONT.DEC
'What do/will I create?'
- c. ámma-yinu yé-s-o-n-e
where-1PL exist/live-3MS-ACC- IMPERF-PRES:CONT.DEC
'Where do/will we live?'
- d. áyde-ne yéé-d-e
when-2SG come-PERF-PRES:CONT.DEC
'When did you come?'
- e. ámmo-yiti wórg-í-d-e
which-2PL need/want-CONV-PERF-PRES:CONT.DEC
'Which one did you need?'
- f. áala-s-i-se ʔuúk-í-d-e
why-NOM-3MS call-CONV-PERF-PRES:CONT.DEC
'Why did he call?'
- g. wáy-d-í-si oótsts-í-d-e
how-PERF-CONV-3FM work-CONV-PERF-PRES:CONT.DEC
'How did she do?'

Summary of person markers in the content or Wh- questions

Person	Agreement markers in Wh-question
1SG	-te
1PL	-yinu
2SG	-ne
2PL	-yiti
3MS	-se
3FM	-si
3PL	-yisu

5.7.1.5 Person markings in imperative constructions

In Ganta, imperative constructions can be marked in the affirmative (14) and negative (15) speech contexts. Look at these examples below.

- (14) a. m-íy-áyi
eat-STM-IMPER:2SG
'eat !'
- b. m-íy-áyo
eat-STM-IMPER:2SG
'eat !'

- c. m-íy-áyito
eat-STM-IMPER:2PL
'eat !'
- (15) a. wós's'-í-dopp-u
run-CONV-NEG-2SG
'Don't run !'
- b. wós's'-í-dopp-ite
run-CONV-2PL
'Don't run (PL) !'

Summary of person markers in the positive and negative imperatives

Person	Agreement marker	
	Positive imperative	Negative imperative
2SG	-áyi/-áyo	-u
2PL	-áyito	-ite

Like most languages in the world, the imperative is restricted to the second person. In the 15a and 15b above, the two optional imperative markers for the singular are used to inform the degree of command information in Ganta. When the marker, **-áyi** is attached to the verb stem, the command nature is somehow stronger than with the usage of **-áyo**. Negative command shows marker **-u** to the second person singular addressee in (15a). The second person plural affirmative command marker is **-áyito** in (14c) and its negative equivalent is **-ite** in (15b).

5.7.1.6 Person markings in jussive constructions

In Ganta, soft command expressions are used with different person markings. Personal markers as **-nnó**, **-yito**, and **-yisu** are marked for first, second, and third person plurals respectively. Marker **-ná** is used to mark for first person singular pronoun. Marker **-wó** occurs to indicate second person singular. Masculine and feminine third person singulars are marked by **-yese** and **-yisi** suffixes respectively. In the following illustrations (16), we can see the explained personal markers in the soft command or jussive paradigms.

- (16) a. báys-a-ná
sell-IND-1SG
'Let me sell !'
- b. báys-i-nnó
sell-EP-1PL
'Let us sell !'
- c. báys-a-wó
sell-IND-2SG
'Let you sell !'
- d. báys-a-yitó
sell-IND-2PL
'Let you (PL) sell !'
- e. báys-a-yesé
sell-IND-3MS
'Let him sell !'

- f. báys-a-yisí
sell-IND-3FM
'Let her sell!'
 - g. báys-a-yisú
sell-IND-3PL
'Let them sell !'
- Negative jussive has different person/subject agreement suffixes (17).
- (17) a. ?ékk-a?á-te
take-NEG-1SG
'Let me not take !'
- b. ?ékk-a?á-yinu
take-NEG-1PL
'Let us not take !'
 - c. ?ékk-a?á-ne
take-NEG-2SG
'Let you not take !'
 - d. ?ékk-a?á-yiti
take-NEG-2PL
'Let you (PL) not take !'
 - e. ?ékk-a?á-se
take-NEG-3MS
'Let him not take !'
 - f. ?ékk-a?á-yisi
take-NEG-3FM
'Let her not take !'
 - g. ?ékk-a?á-yisu
take-NEG-3PL
'Let them not take !'

Jussive paradigm can be expressed in other negative constructions to realize personal markers. In this case, first person singular and plural markers cannot be expressed. The case is that the first person singular and plural agents are acting as instruction giver or they address information to the next information receiver. So, negative marker **-dopp-** cannot be applied on the first person singular and plural agents as in (18).

- (18) a. toókk-í-dopp-uná
carry-CONV-NEG-2SG
'Let you not carry !'
- b. toókk-í-dopp-ité
carry-CONV-NEG-2PL
'Let you (PL) not carry !'
 - c. toókk-í-dopp-é
carry-CONV-NEG-3MS
'Let him not carry !'
 - d. toókk-í-dopp-á
carry-CONV-NEG-3FM
'Let her not carry !'

- e. toókk-í-dopp-etó
 carry-CONV-NEG-3PL
 ‘Let them not carry !’

Summary of jussive positive and negative personal markers

Person	Jussive Agreement Markers		
	jussive positive	By jussive negative (- ʔá-, or -báʔa-)	By jussive negative (-dopp-)
1SG	-ná	-te	-
1PL	-nnó	-yinu	-
2SG	-wó	-ne	-uná
2PL	-yitó	-yiti	-ité
3MS	-yesé	-se	-é
3FM	-yisí	-yisi	-á
3PL	-yisú-	-yisu	-etó

5.7.1.7 Agreement markings in converb constructions

In the converb construction, person markings are obligatorily occurred after focus markers **-k(k)-** and **-t(t)-** on the first action expressing verb stems. In this case, the converb marker immediately occurs on the verb stems before the focus markers. The second action expressing verb stems also occur with converb and with other category marking suffixes, like perfective, and present continuous and declarative and past tense marking suffixes as in (19) and (20).

Examples with focus -k(k)-

- (19) a. túkke úf-í-k-ote zawá hán-í-d-e
 coffee drink-CONV-FOC-1SG home go-CONV-PERF-PRES:CONT.DEC
 ‘Having drunk coffee, I went home.’
- b. túkke úf-í-k-unu zawá hán-í-d-e
 coffee drink-CONV-FOC-1PL home go-CONV-PERF-PRES:CONT.DEC
 ‘Having drunk coffee, we went home.’
- c. túkke úf-í-k-one zawá hán-í-d-e
 coffee drink-CONV-FOC-2SG home go-CONV-PERF-PRES:CONT.DEC
 ‘Having drunk coffee, you went home.’
- d. túkke úf-í-k-iti zawá hán-í-d-e
 coffee drink-CONV-FOC-2PL home go-CONV-PERF-PRES:CONT
 ‘Having drunk coffee, you (PL) went home.’
- e. túkke úf-í-k-ose zawá hán-í-d-e
 coffee drink-CONV-FOC-3MS home go-CONV-PERF-PRES:CONT.DEC
 ‘Having drunk coffee, he went home.’
- f. túkke úf-í-kk-i zawá hán-í-d-e
 coffee drink-CONV-FOC-3FM home go-CONV-PERF-PRES:CONT.DEC
 ‘Having drunk coffee, she went home.’
- g. túkke úf-í-kk-u zawá hán-í-d-e
 coffee drink-CONV-FOC-3PL home go-CONV-PERF-PRES:CONT.DEC
 ‘Having drunk coffee, they went home.’

Examples with focus -t(t)-

- (20) a. túkke úʃ-í-t-ete zawá háŋ-í-nne
 coffee drink-CONV-FOC-1SG home go-CONV-PA
 ‘Having drunk coffee, I went home.’
- b. túkke úʃ-í-t-unu zawá háŋ-í-nne
 coffee drink-CONV-FOC-1PL home go-CONV-PA
 ‘Having drunk coffee, we went home.’
- c. túkke úʃ-í-t-ene zawá háŋ-í-nne
 coffee drink-CONV-FOC-2SG home go-CONV-PA
 ‘Having drunk coffee, you went home.’
- d. túkke úʃ-í-t-iti zawá háŋ-í-nne
 coffee drink-CONV-FOC-2PL home go-CONV-PA
 ‘Having drunk coffee, you (PL) went home.’
- e. túkke úʃ-í-t-ese zawá háŋ-í-nne
 coffee drink-CONV-FOC-3MS home go-CONV-PA
 ‘Having drunk coffee, he went home.’
- f. túkke úʃ-í-tt-i zawá háŋ-í-nne
 coffee drink-CONV-FOC-3FM home go-CONV-PA
 ‘Having drunk coffee, she went home.’
- g. túkke úʃ-í-tt-u zawá háŋ-í-nne
 coffee drink-CONV-FOC-3PL home go-CONV-PA
 ‘Having drunk coffee, they went home.’

Summary of converb constructions

Person	Agreement markers in converb	
	When verb focused by -k(k)-	When verb focused by -t(t)-
1SG	-ote	-ete
1PL	-unu	-unu
2SG	-one	-ene
2PL	-iti	-iti
3MS	-ose	-ese
3FM	-i	-i
3PL	-u	-u

5.7.1.8 Summary of person markings in different paradigms

Summary of different person marking paradigms

Pers on	Agreement markers in different paradigms														
	Declarative Positive & Negative					Interrogative positive & negative			Jussive positive & negative			Command Positive & negative		Converb Construction	
	Positive		Positive		negat ive										
	object/adverb focused -k(k)-	Verb focused by -k(k)-	object/adverb focused by -t(t)-	Verb focused by -t(t)-	Negative by (-ʔá/-báʔa-)	Positive	Past negative	Future Negative	Positive	Negative by (-ʔá/-báʔa-)	Negative by (-dopp-)	Positive	Negative	Verb focused by -k(k)-	Verb focused by -t(t)-
1SG	-ote	-oti-	-ete	-eti-	-te	-ti-	-mma	-te	-ná	-te	-	-	-	-ote-	-ete
1PL	-unu	-unu-	-unu	-unu-	-yinu	nuyi	-yinu	-yinu	-nnó	-yinu	-	-	-	-unu-	-unu
2SG	-one	-oni-	-ene	-eni-	-ne	-ni-	-wo	-ne	-wó	-ne	-uná	-áyí/ -áyo	-u	-one-	-ene
2PL	-iti	-iti-	-iti	-iti-	-yiti	-yiti	-yito	-yito	-yító	-yiti	-ité	-áyito	ite	-iti-	-iti
3MS	-ose	-osi-	-ese	-esi-	-se	-si-	-yese	-se	-yesé	-se	-é	-	-	-ose-	-ese
3FM	-i	-i-	-i	-i-	-yisi	-yisi	-yisi	-yisi	-yísí	-yisi	-á	-	-	-i-	-i
3PL	-u	-u-	-u	-u-	-visu	-visu	-visu	-visu	-visú	-visu	-etó	-	-	-u-	-u

First person singular (1SG)

As shown in the table, person markings are distinct in the different paradigms. First person singular marker **-ote** is identical in the declarative positive and in the converb constructions. This marker always follows the focus marker **-k(k)-** on non-subject constituents in the declarative positive paradigm. In the converb construction, marker **-oti** marks for first person singular when an augmented verb is focused by **-k(k)-** in the declarative positive structure. In this case, the non-subject constituent is marked for focus by **-t(t)-**. The first person singular marker is **-ete-**. This marker also occurs in the converb construction when a verb is focused by **-t(t)-**. When this focus marker is suffixed to a declarative positive verb stem, the form of first person singular marker becomes **-eti**.

First person singular marker **-ti-** occurs in the interrogative positive paradigm. In the negative declarative, future negative interrogative, and in the negative jussive constructions, first person singular is marked by suffix **-te** in Ganta. But in the past negative interrogative paradigm, and in the positive jussive situations, it agrees with suffixes **-mma** and **-ná** respectively. Marker **-ná** can cognate to form **-na** in Koorete (Binyam 2008). In Koorete, it marks for second person singular in both declarative and interrogative paradigms.

First person plural (1PL)

Marker **-unu** reflects first person plural (1PL) markings in the focused declarative positive and focused converb constructions. The other paradigms like negative declarative, past negative interrogative, future negative interrogative, and negative jussive constructions use identical suffix **-yinu** as marker of first person plural. But the two paradigms like positive interrogative and positive jussive situations are marked by suffixes **-nuyi** and **-nnó** respectively. Akin to first person singular, first person plural

agent cannot be expressed in the imperative (negative & positive) and negative jussive when negation marker **-dopp-** is used in the jussive construction.

Second person singular (1SG)

The second person singular has the greatest number of forms. Suffix **-one** marks second person singular when adverb and objective word classes are focused by **-k(k)-** in the declarative positive construction. In the same focusing process, in the converb verb stem, the same person category (2SG) is marked by **-one**. In the declarative positive construction, marker **-oni** is marking for second person singular when verb the is focused by **-t(t)-**. Marker **-ene** becomes identical in the case of declarative positive and in the converb construction. In this case, adverb, object, and verb word classes are focused by **-t(t)-**. Marker **-ni-** agrees with second person singular in the declarative affirmative and in the positive interrogative paradigms. The common morpheme **-ne** is used in the negative declarative, future negative interrogative, and in the jussive negation. Marker **-ne** cognates to accented marker **-né** in Haro (Hirut 2004) and marks for the same personal category. The terminal suffix **-wo** is used to mark for past negative interrogatives and positive jussives in Ganta. But marker **-uná** appears with negative marker, **-dopp-** in the verb stems to mark for second person singular. The terminal suffix **-áyi** is attached to the end of positive imperative constructions so as to address strong command and to mark for second person singular. But marker **-áyo** plays the same role but functions for less strong command in Ganta.

Second person plural (2PL)

In the focused declarative positive and converb construction, suffix **-iti** is marking for second person plural (2PL) categories. Marker **-yiti** occurs in the negative declarative and negative jussive construction to refer second person plural (when negative markers **-ʔá-** and **-báʔa-** are used in the jussive verb stems). This marker also used in the positive interrogative contexts in Ganta. Past negative interrogative, future negative interrogative, and positive jussive paradigms use morpheme **-yitó** in their corresponding verb stems to mark for the second person plural. In the negative marker **-dopp-** verb stem, negative jussive use suffix **-ite** to indicate second person plural. This suffix is also used to mark for second person plural in the negative imperative paradigm in Ganta. But positive command agrees with marker **-áyito**.

Third person masculine (3MS)

In Ganta, third person singular masculine can be marked by eight markers (**-ose**, **-osi**, **-ese**, **-esi**, **-si**, **-se**, **-yese**, and **-é**) in the different paradigms. When adverb and object word classes are focused by marker **-k(k)-** in the declarative positive context, third person masculine can be agreed with marker **-ose**. This marker also reflects the same person category in the converb construction. In the declarative positive paradigm, agreement marker is changed into **-osi-** as result of **-k(k)-** focusing.

Marker **-t(t)-** can undergo focusing process on the adverb, object, and verb word categories. In the case of adverb and object focusing, suffix **-ese** reflects third person masculine in Ganta, but in the case of verb, **-esi** can be agreed in the declarative positive situation. In the converb case, **-ese** is agreed. Marker **-si** can be suffixed to declarative positive and interrogative positive situations, but suffix **-se** occurs in the negative declarative, future negative interrogative, and in the negative jussive construction. Interestingly, suffix **-se** cognates to Koorete (Binyam 2008) and marks for more than two person categories. But in Koorete, suffix **-se** marks for three personal categories as first

person singular (1SG), third person masculine (3MS), and third person plural (3PL). In negative jussive verb stem, morpheme **-se** appears with negative markers (**-ʔá-** and **-báʔa-**). On the other hand, negative jussive verb stem invites accented vowel **-é** when the other negative marker **-dopp-** is used in the verb stem. In the past negative interrogative and positive jussive construction, verb stems can be used another third person masculine marker **-yesé** in Ganta.

Third person feminine (3FM)

Like other personal markers, third person feminine singular can be indicated by different person markings in Ganta. As we have seen in the above table, the vowel marker **-i** is inserted in the declarative (positive and negative), and converb constructions to mark for third person feminine singular. Marker **-yisi** is widely suffixed to the stem of six paradigms to mark for third person feminine as in the negative declarative, positive interrogative, past negative interrogative, and future negative interrogative. In the positive and negative jussives, finally accented marker **-yisí** is used to mark for third person feminine (when negation markers **-ʔá-** and **-báʔa-** are used in the jussive verb stems). The accented marker **-á** is suffixed in the negative jussive verb stem together with negation marker **-dopp-**.

Third person plural (3PL)

Third person plural category agrees with marker **-u** in the declarative (positive and negative), and converb constructions. But in the related language Koré/Koorete (Bender 2000: 78), morpheme **-u** is suffixed to mark for first person singular (1SG). Marker **-yisu** is used in declarative negative, interrogative positive, interrogative past negative, and interrogative future negative to mark for third person plural. But in jussive positive and negative paradigms finally accented marker **-yisú** is used to mark for the corresponding third person plural in Ganta. Marker **-etó** is attached to the verb stems to mark for jussive negative. But in the case of jussive negative, marker **-etó** should suffix onto negation marker **-dopp-**.

5.7.2 Subject marking

All noun phrases and pronouns which occur in the subject position can agree with the subject marker **-oyi-** that glossed as SUBM in the augmented verb stem in Ganta. Look at the following examples in (21).

- (21) a. mítsts-i méntsts-utt-o-k-oyi-d-e
tree-NOM break-PASS-IND-FOC-SUBM-PERF-PRES:CONT.DEC
'A tree/wood was broken.'
- b. máydo-y waatstsé úf-o-kk-oyi-d-e
ox-NOM water drink-IND-FOC-SUBM-PERF-PRES:CONT.DEC
'An ox drank water.'
- c. zawá-y tǽm-a-kk-oyi-d-e
home-NOM old-IND-FOC-SUBM-PERF-PRES:CONT.DEC
'Home became old.'
- d. deré-y gaayá hám-a-k-oyi-n-e
people-NOM market go-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
'people are going to market.'
- e. tán-i hantstsó zawá go-IND-FOC-SUBM-PERF-PRES:CONT.DEC
he-NOM today home hám-a-k-oyi-d-e
'He went to home today.'

- f. bíjff-att-i gaayá hám-a-kk-oyi-d-e
 girl-3FM.SG:DEF-NOM market go-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘The girl went to market.’
- g. abebe-y hantstsó zawá hám-a-kk-oyi-d-e
 abebe-NOM today home go-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘Abebe went to home today.’

As it has seen in the above illustrations (21a, 21b, and 21c) all subjective nouns such as **mítstsi** ‘tree/wood’, **máydo** ‘ox’, and **zawá** ‘home’ are agreed by subject marking element **-oyi-** in the complex verb stems in Ganta. This marker is also agreed with irregular plural subject **deré** ‘societies’ in (21d) and with personal pronoun **és-i** ‘he’ in (21e). In the same case, gender marking lexical words as in (21f) **bíjff-att-i** ‘the girl’ and proper subject noun (21g) **Abebe** ‘name of person’ agree with this marker **-oyi-** in Ganta. Thus, marker **-oyi-** agree with all subject arguments (animate, inanimate, singular or plural persons) in Ganta.

In Ganta, in some cases, subject marking elements do not occur in the verb stems. The case is evident in habitual aspect construction, as in (22).

- (22) a. máydo-y saág-e
 ox-NOM roar-PRES:CONT.DEC
 ‘Ox roars.’
- b. ís-i woggá wogga gaayá-kko hán-e
 she-NOM Sunday Sunday market-COP:FOC go-PRES:CONT.DEC
 ‘She goes to the market every Sunday.’

5.7.3 Gender marking

Gender information can be expressed on the focused adverbs, objects and in the focused or complex verb stems in Ganta. As it has been observed in all illustrations above, different paradigms express third person masculine (3MS) and feminine (3FM) gender class agreements. The third person singular masculine marker suffixes (**-ose**, **-osi**, **-ese**, **-esi**, **-si**, **-se**, **-yesé** and **-é**) in turn inform two things: the first information indicates third person singular subject by which singular number can be understood; and the second one informs gender difference. The same situation is also observed in the third person singular feminine person markers (**-i**, **-yisi**, **-yisí** and **-á**).

Like third person masculine and feminine person markers, the other personal indicators cannot tell us about gender information in Ganta (see person marking summary in the above table under 5.7.1.8). But we can get information for status of subject and number. For example, first person singular (1SG) and second person singular (2SG) markers inform us the singularity of subject and number. Here, we don’t know whether subject is masculine or feminine. In the plural personal markings (first, second, and third plural persons), there is no sex references at all. But the status of subject and plurality of number can be expressed in the focused adverb, object and in focused or complex verbs in Ganta.

6 Nominal and Verbal modifiers

In the previous sub-section, subject agreement markings were discussed. In the following section, the two main functions of adjectives i.e. the nominal and verbal modifiers are examined. In Ganta, nominal modifiers are adjectives that are used to modify co-occurring nouns with in noun phrases whereas verbal modifiers are used to modify verbs and they include some demonstratives (locational and directional) and adverbs.

6.1 Adjectives

In this section, semantically classified adjectives are primarily discussed before treatment of adjective inflections. Adjective derivation from noun and verb is also treated before deadjectival derivation.

6.1.1 Semantically classified adjectives

Linguists generally describe adjectives according to their semantic functions. However, in this study, Ganta adjectives are categorized thereof analyzed in line with Dixon's (2004: 3ff. and 2010: 73-76) semantic based three adjectival classifications. The first classification is labeled as 'large and small' or sometimes 'four core semantic type adjectives' which indicate adjectives of 'dimension, age, value, and colour'. The second category of adjectives is indicative of 'physical property, human propensity, and speed'. The final classification associates semantic types with 'large adjective classes' which include adjectives of difficulty, similarity, qualification, quantification, and ordinals. Thus, Ganta adjectival classes are listed in the following table.

Adjectives of dimension, value, age and colour	Adjectives of physical property, human propensity and speed	Adjectives of difficulty, similarity, qualification and quantification
a. Dimension adõ 'big' s'ík'k'e-s-i /ʔeer-é-s-i 'small/little' ɸazzó 'long/tall' háta 'short' ɸátʃtʃa 'wide' c. Value lóʔo 'good' ííta 'bad' s'illo 'real' moózo 'strange' b. Age oóratstsi 'new'	a. Physical property s'íigo 'hard' líiko 'soft' (for flower) dees'ó 'heavy' húmʔe 'rough' tʃáɸa 'wet' míno 'strong' geéʃʃi 'clean' bínna 'between hot & cold' mítʃtʃa 'hot' balló/tʃamó 'bitter' dook'ó 'sour' malʔo 'sweet' b. Hman propensity	a. Difficulty aáɸa 'easy' waáye 'difficulty' ʃaykó 'simple/light' b. Similarity malá 'like' mal-ónte-s-a 'unlike' hará 'other' dum 'different' c. Qualification ádda 'definite' s'illo 'true' gína 'appropriate' d. Quantification

suffixed by marker **-áade** so as to form its counterpart. See the examples in the (3a) and (3b) respectively.

Noun		Derived adjective	
(3) a.	ér-	‘know/knowledge’	ér-átsts- ‘wise’
b.	itstsínkk-	‘hair’	itstsínkk-áade ‘hairy’

Selamawit (2004: 126) has identified the morpheme **-antʃa** as adjective forming marker in Ganta. But the modified illustrations with high tone marker are presented in (4) bellow.

Noun		Derived adjective	
(4) a.	zallá	‘rock’	zall-ántʃtʃa ‘rocky’
b.	oótsó	‘work’	oóts-átʃtʃa ‘busy’
c.	óhe	‘issue/talk’	óh-ántʃtʃa ‘talkative’

6.1.3.2 Adjective derivation from verb

Ganta adjectives are derived from a verb root by the suffixation of series of suffixes such as passive **-utt-**, present continuous and declarative **-e**, third person masculine **-s-**, and accusative case **-a** markers respectively, as in (5).

Verb root		Derived adjectives	
(5) a.	úʃ-	úʃ-utt-e-s-a	
	‘drink’	drink-PASS-PRES:CONT.DEC-3MS-ACC	‘drinkable’
b.	ʃóg-	ʃóg-utt-e-s-a	
	‘wash’	wash-PASS-PRES:CONT.DEC-3MS-ACC	‘washable’
c.	mís’-	mís’-utt-e-s-a	
	‘observe’	observe-PASS-PRES:CONT.DEC-3MS-ACC	‘observable’
d.	m-	m-íy-utt-e-s-a	
	‘eat’	m-STM-PASS-PRES:CONT.DEC-3MS-ACC	‘edible’

6.1.4 Deadjectival derivation

Deadjectival derivation can be applied when inchoativization process is taking place by affixes as **-t-** and **-ó** in Ganta (see inchoative under verb derivation). But in this section, high tone vowel **-é-** which marks for middle is introduced and analyzed as deadjectivalizing marker. The suffixation of marker **-é-** on the adjective word class forms an intransitive verb. In the process, morphophonemic rule deletes the final vowel of each citation forms and replaced it by **-é-**. Except for (11b), all high tones of citation adjectives are coincided with the middle marker, as in (6).

Adjective		Derived verb	
(6) a.	zoʔó	‘red’	zoʔ-é- ‘thing that became red’
b.	laále	‘thin’	laál-é- ‘thing that became thin’
c.	ɸazzó	‘tall’	ɸazz-é- ‘thing that became tall’
d.	aďó	‘big’	aď-é- ‘thing that became big’
e.	lagó	‘many’	lag-é- ‘thing that became many’

In the deadjectival process, after subsequent deletion of terminal vowel and penultimate segment, the antepenultimate segment **r** of an item **kárttsi** ‘black’ is assimilated to post alveolar sound **ɖ** so as to maintain phonological rule in the derived

stem in (7a). In the same process, geminated affricate sibilant **-tsts-** of the word **boóttsu** ‘white’ has replaced by a voiceless alveolar stop **-t-** before middle marker **-é** in example (7b). Bilabial nasal **m** is also changed to velar **-ŋ-** in the word **tjĩma** ‘old’, as in (7c). See the illustrations in (7).

Adjective		Derived adjective	
(7) a.	kárttsi ‘black’	káɖ-é-	‘thing that became black’
b.	boóttsu ‘white’	boót-é-	‘thing that became white’
c.	tjĩma ‘old’	tjĩŋ-é-	‘thing that became old’

6.2 Demonstratives

Ganta has three deictically contrastive demonstratives as proximal **ha**, medial **ye/ya** or **hi**, and distal **so**. They are modifying co-occurring nouns. See the following examples (8).

	Proximal	Medial	Distal
(8) a.	ha máydo PROX ox ‘This ox’	ye/ya/hi máydo MED ox ‘Nearer ox’	so máydo DIST ox ‘That ox’
b.	ha bíjfo PROX girl ‘This girl’	ye/ya bíjfo MED girl ‘Nearer girl’	so bíjfo DIST girl ‘That girl’
c.	ha zawá PROX home ‘This home’	ye/ya zawá MED home ‘Nearer home’	so zawá DIST home ‘That home’

Ganta demonstratives are inflected for gender and cases (nominative and accusative) respectively. Marker **-nn-** directly occurs on the demonstrative words to express feminine sex reference. In this inflectional process, deictical demonstratives are marked with a high tone in Ganta, as in (9).

- (9) a. há-nn-i oóde-wa
PROX-3FM-NOM who-FOC
‘Who is this girl?’
- b. hí-nn-i né bíjfi-wa
MED-3FM-NOM your girl-FOC
‘Is nearer your girl?’
- c. só-nn-i kaná índd-att-i-kko
DIST-3FM-NOM dog mother-3FM.SG:DEF-NOM-COP:FOC
‘That dog is female.’
- d. só-nn-o ?ékk-áwo
DIST-3FM-ACC take (marry)-EP-IMPER:2SG
‘You marry that girl !’

For masculine sex reference the morpheme **-y-** is attached to the demonstrative words by preceding nominative and accusative cases (10).

- (10) a. hí-y tá na?á-kko
MED-3MS my boy-COP:FOC
‘Nearer is my boy/son.’
- b. só-y-a tán-a-ra ér-us-áy
DIST-3MS-ACC I-ACC-COM know-CAUS-IMPER:2SG

‘Please, introduce that one (boy) with me !’

- c. doóllo há-y-a nén-a-ra ?ékk-í haŋ-áy
doóllo PROX-3MS-ACC you-ACC-COM take-CONV go-IMPER:2SG
‘doóllo, take this one (boy) with you and go !’

6.2.1 Locational demonstrative

Location marker **-ná** and allative case marker **-ga** are suffixed to demonstrative words to express locational demonstratives. In this case, marker **-ná** is directly attached to the demonstrative words. Interestingly, in the suffixation process, the demonstrative words cannot take a high tone, as in (11a-b). But, allative case marker **-ga** occurs in the series of suffixes next to the last occurring copular focus **-kko** in (11c). But in (11d), it occurs at the end position. Look at the following illustrations (11c-d)).

- (11) a. nén-i ha-ná yéw-áy
you-NOM PROX-LOC come-IMPER:2SG
‘You come here !’
b. boón?a so-ná-ɸa táa-ro hoóke ?ékk-í háŋ-áy
boón?a DIST-LOC-ABL my-DAT axe take-CONV go-IMPER:2SG
‘Boón?a, go and take me an axe from there !’
c. tolkkó-y há-nn-i-ga-kko
hey-na-NOM PROX-3FM-NOM-ALLA-COP:FOC
háŋ?-í-d-e
die-CONV-PERF-PRES:CONT.DEC
‘A hyena died here.’
d. nén-i só-y-i-ga útt-áy
you-NOM DIST-3MS:NOM-3FM:NOM-ALLA sit-IMPER:2SG
wóze nén-a
please you-ACC
‘Please, you sit down there !’

6.2.2 Directional demonstrative

Ganta directional demonstratives are expressed on the three deictical words (**ha**, **hi** and **ye**), and on the one directional word (**wo**) by using marker **-kk-**. Horizontal directions (closest horizontal **há-ŋkk-** ‘**toward**’ and farthest horizontal **hí-ŋkk-** ‘**forward**’) take the marker after inserted velar nasal, but vertical directions (upward **wó-kk-** ‘**upward**’ and **yé-kk-** ‘**downward**’) take the marker directly. To express directions, the marker **-kk-** suffixes onto high tone segments of demonstrative and direction words. In the process, accusative case occurs after the marker, preceding and following the copular focus in (12a-b), but nominative case occurs following the marker (112c-d). Look at the following illustrations (12).

- (12) a. so bíŋf-att-i há-ŋkk-u-kko
that girl-3FM.SG:DEF-NOM this-DIR-ACC-COP:FOC
wós'-a-m-e
run-IND-FUT-PRES:CONT.DEC
‘That girl will run toward there.’
b. máyd-as'-i só-kk-u-kko
ox-PL-NOM that-DIR-ACC-COP:FOC
háŋ-í-d-e

- go-CONV-PERF-PRES:CONT.DEC
 ‘Oxen have gone away (forward).’
- c. wó-kk-i ííta bágga-kko
 up-DIR-NOM bad direction-COP:FOC
 ‘Upward is bad direction.’
- d. nén-i gúta yé-kk-i yéw-áy
 you-NOM tomorrow down-DIR-NOM come-IMPER:2SG
 ‘You will come downward tomorrow !’

6.2.3 Manner demonstrative

Manner marking suffix **-kke** occurs at the end of the demonstrative words after gender and nominative case marking suffixes respectively. See the following illustrations (13).

- (13) a. ís-i há-nn-i-kke ííta bá?a
 she-NOM this-3FM-NOM-MANN bad NEG
 ‘She is not as bad as this one (girl).’
- b. és-i só-y-i-kke horógo atsts-u-kko
 he-NOM that-3MS-NOM-MANN kind man-ACC-COP:FOC
 ‘He is as kind as that man.’
- c. dónkka-y há-y-i-kke ná?-et-a bá?a
 dónkka-NOM this-3MS-NOM-MANN boy-INCH-ACC NEG
 ‘Dónkka is not as young as this one (boy).’

Demonstratives that directly suffix feminine marker **-nn-** also occur with dual marker **-ons’-** and accusative case **-u-** respectively before manner marker **-kke**, as in (19a-b). The interesting thing is that numbers more than two cannot be marked on the feminine marker in this case. But masculine marker **-y-** can take dual and more than dual number markings after nominative case. In this case, dual and definite marker **-ons’-** directly comes after more than dual number marker **-dd-** which is glossed as (PL), and before accusative case **-u-**. The manner marker **-kke** occurs at the final position of all these markers in (14c-d). Compare the following examples in (14).

- (14) a. ís-i há-nn-ons’-u-kke φazzó-kko
 she-NOM this-3FM-DUL:DEF-ACC-MANN tall-COP:FOC
 ‘She is as tall as these two (girls).’
- b. tá bíjff-as’-i só-nn-ons’-u-kke goóba-kko
 my girl-PL-NOM that-3FM-DUL:DEF-ACC-MANN intelligent-COP:FOC
 ‘My girls are intelligent like those two (girls).’
- c. nén-i só-y-i-dd-ons’-u-kke wos’s’-áwo
 you-NOM that-3MS-NOM-PL-DUL:DEF-ACC-MANN run-IMPER:2SG
 ‘You run like those two (men)!’
- d. tán-i há-y-i-dd-ons’-u-kke ííta bá?a
 I-NOM his-3MS-NOM-PL-DUL:DEF-ACC-MANN bad NEG
 ‘I am not bad like these two (men).’

6.2.4 Recognitional demonstrative

According to Diessel (1999: 6), demonstratives that are used for recognitional purposes are involved to indicate speaker and hearer shared experience with the familiar referent. In relation to this observation, in Ganta, distance oriented medial **ye** is used to

indicate the speaker's and hearer's familiar information of a situation. In the following speech context (15), the speaker used **ye** to indicate that the listener can identify the information referent based on the specific common experience. Thus, here, medial **ye** is used as English equivalent demonstrative '**that**'. See the example below.

- (15) a. náʔ-ó tán-i **ye** wodé lagó-k-ote
 boy-VOC I-NOM REC:MED time lot/many-FOC-1SG
 úʃ-í-d-e nén-i
 drink-CON-PERF-PRES:CONT.DEC you-NOM
 baáre-s-a-kko **ye** miíʃʃe-y tán-a
 NEG-3MS-CC-COP:FOC REC:MED thing-NOM I-ACC
 bótʃʃ-a-kko-(y)áʃʃ-e
 harm-IND-COP:FOC-OPT-PRES:CONT.DEC
 '...you boy ! In **that** time I drank too much. If you weren't there, **that** thing might harm me.'

6.2.5 Temporal demonstrative

Proximal **ha** and medial **ye** demonstratives modify time adverbs so as to express temporal distance oriented event in the speech context (16).

- (16) a. ha wodé-y iíta-kko
 this time-NOM bad-COP:FOC
 'This time is bad.'
- b. ha láyitstsi gidd-á tán-i lágo oótso-k-ote
 this year inside-INESS I-NOM lot/many work/job-FOC-1SG
 oótsts-a-m-e
 work-IND-FUT-PRES:CONT.DEC
 'This year, I will do many works.'
- c. ha wóntta-y tʃím-as'-u-ssu lóʔo-kko
 this day-NOM old-PL-ACC-DAT good-COP:FOC
 'This day is good for olds (people).'

Like proximal **ha**, in the temporal usage, the medial **ye** is also semantically equivalent to '**that**' when modifying a co-occurring noun (17).

- (17) a. ye wodé tán-i túŋa-kko
 that time I-NOM addis ababa-COP:FOC
 yé-s-í-ʃʃ-e
 exist-3MS-CONV-IMPERF-PRES:CONT.DEC
 'That time I was in Addis Ababa.'
- b. ye láyitstsi táá-ro iíta-kko
 that year I-DAT bad-COP:FOC
 'That year was bad for me.'
- c. ye wóntta-ga és-i ʃaáto-kko
 that time (early)-INESS he-NOM child-COP:FOC
 'That time he was a child.'

Some adverbial time expressions are formed on the proximal stem **ha** and used to express proximity of an event in relation to used speech contexts. As in (18), except for example (18c), the first two constructions (18a) and (18b) are marked by a high tone on the proximal stem in Ganta. Compare examples in (18).

- (18) a. há-tte ‘now’
 b. há-bere ‘this year’
 c. ha-ntstsó ‘today’

As it has been observed in the above (6.2.2), high tone directional stem **wó-** is used to point out upward direction by attaching itself with direction marker **-kk-**. In the same manner, here, it also takes some distinct segments to form distant adverbial time expressions in Ganta, as in (19).

- (19) a. wó-ntta ‘early past time’
 b. wó-ndde ‘before’

6.3 Numerals

In this section Ganta cardinal and ordinal numerals are discussed.

6.3.1 Cardinal numbers

bizzó/sóto/sónnʔo	‘one’
námʔu	‘two’
háydzdzi	‘three’
óyddu	‘four’
ítʃtʃítʃi	‘five’
izúppu	‘six’
laáppu	‘seven’
lájkkutʃe	‘eight’
tántstsíndde	‘nine’
támmu	‘ten’
námʔu támmu	‘twenty’
háydzdzi támmu	‘thirty’
s'eéti	‘hundred’
jáʔa	‘thousand’

Counting numbers after tens are preceded by modifier **támm-** ‘ten’ and joined with marker **-á** which expresses frequentative notion as in **támm-á** ‘ten times’. Inclusive marker **-nne** ‘and’ is occurred after frequentative marker so as to serve as connector as in (20).

- (20) a. támm-á-nne bizzó
 ten-FERQ-INCL one
 ‘Eleven’
 b. támm-á-nne námʔu
 ten-FERQ-INCL two
 ‘Twelve’
 c. námʔu támm-á-nne bizzó
 two ten-FREQ-INCL one
 ‘Twenty one’
 d. háydzdzi támm-á-nne námʔu
 three ten-FREQ-INCL two
 ‘Thirty two’
 e. óyddu támm-á-nne óyddu
 four ten-FREQ-INCL four
 ‘Forty four’

In the long counting systems frequentative **-á** and inclusive conjunction **-nne** ‘**and**’ are respectively used after tens, hundreds, and thousands (21).

- (21) a. námʔu s'eét-á-nne bizzó
two hundred-FREQ-INCL one
‘Two hundred one’
- b. óyddu s'eét-á-nne óyddu
four hundred-FREQ-INCL four
‘Four hundred four’
- c. óyddu s'eét-á-nne námʔu támm-á-nne bizzó
four hundred-FREQ-INCL two ten-FREQ-INCL one
‘Four hundred twenty one’
- d. s'eét-á-nne bizzí támm-á-nne ítʃtʃítʃi
hundred-FREQ-INCL one ten-FREQ-INCL five
‘One hundred five’
- e. ítʃtʃi s'eét-á-nne háydzdzi támm-á-nne námʔu
five hundred-FREQ-INCL three ten-FREQ-INCL two
‘Five hundred thirty two’
- f. jáʔ-á-nne bizzó
thousand-FREQ-INCL one
‘One thousand one’
- g. námʔu jáʔ-á-nne háydzdzi s'eét-á-nne
two thousand-FREQ-INCL three hundred-FREQ-INCL
ítʃtʃi támm-á-nne óyddu
five ten-FREQ-INCL four
‘Two thousand three fourteen’
- h. lánʔutʃe jáʔ-á-nne óyddu s'eét-á-nne tántstsínde
eight thousand-FREQ-INCL four hundred-FREQ-INCL nine
támm-á-nne izúppu
ten-FREQ-INCL six
‘Eight thousand four hundred ninety six’

For cardinal number, **bizzó** ‘**one**’, the final tonal vowel **-ó** is replaced by a vowel **i** when it modifies noun in the speech contexts. In this case, the high tone shifts to the back and rested on the second segment, as in (22).

- (22) a. és-u-ro bízzi bira íŋ-áy
he-ACC-DAT one money give-IMPER:2SG
‘Give to him one birr.’
- b. dookkó-y bízzi miis-u-kko jám-a-m-e
dookkó-NOM one cow-ACC-COP:FOC buy-IND-FUT-PRES:CONT.DEC
‘Dookkó will buy one cow.’

6.3.2 Ordinal numbers

All Ganta ordinal numbers are derived from cardinal equivalents with morpheme **-untstsá** which replaces the final vowels of each cardinal numbers (23). Ganta uses **kóyro** ‘**first/beginning**’ as option instead of **bízz-untstsá** ‘**first**’.

- (23) a. bízz-untstsá ‘first’
námʔ-untstsá ‘second’
háydzdz-untstsá ‘third’

óydd-untstsá	‘fourth’
ítʃtʃtʃ-untstsá	‘fifth’
izúpp-untstsá	‘sixth’
laápp-untstsá	‘seventh’
lájkutʃ-untstsá	‘eighth’
tántstsíndd-untstsá	‘ninth’
támm-untstsá	‘tenth’

Ordinal numbers that are formed after ten take obligatorily frequentative marker -**á** on the cardinal number **támm-** ‘ten’ in one case. On the other hand, it takes inclusive coordination as optionally after frequentative marker. Compare (24a-b) with (24c-d) below

- (24) a. támm-á bizz-untstsá
 ten-FREQ one-ORD
 ‘eleventh’
- b. támm-á námʔ-untstsá
 ten-FREQ two-ORD
 ‘Twelfth’
- c. támm-á-nne bizz-untstsá
 ten-FREQ-INCL one-ORD
 ‘Eleventh’
- d. támm-á-nne námʔ-untstsá
 ten-FREQ-INCL two-ORD
 ‘Twelfth’

Ganta ordinal numbers are inflected for definiteness before nominative or accusative cases in speech context, as in (25).

- (25) a. túŋa-ssi námʔ-untstsá-tt-i bíʃʃi-kko
 túŋa-DAT two-ORD-3FM.SG:DEF:3FM-NOM girl-COP:FOC
 ‘The second child is girl for Tunga.’
- b. óydd-untstsá-z-a táá-ro íŋ-áwo
 four-ORD-3MS.SG.PL:DEF-ACC I-DAT give-IMPER:2SG
 ‘Give (for) me the fourth one.’

6.4 Adverbs

Like other languages, Ganta adverbs also modify verbs, adjectives, or other adverbs. Some adverbs that are formed in relation to demonstrative stems are discussed under section 5.2. In this section, five distinct adverbs such as place, direction, time, manner, and frequency are discussed.

6.4.1 Place Adverb

The following list presents some place adverbs of Ganta as in (26).

(26)

- a. *zawá gidda* ‘in house/home’
giddó ‘in/inside’
áre ‘out’

Some place adverbs are suffixed with the inessive case **-ga**. See the following example (27).

- (27) a. *nén-i* *hán-i* *há-y-a* *óta* *giddó-ga* *gádd-áy*
 you-NOM go-CONV this-3MS-ACC pot inside-INESS put-IMPER:2SG
 ‘You go and put this one into pot!’

Some place adverbs are formed by process of compounding (28).

- (28) a. *áre galla* ‘outside’
áre ‘out’
gálla ‘body/ place’
 b. *allá oommo* ‘underground’
allá ‘ground’
oommó ‘under’

6.4.2 Direction adverb

Marker **-tsts-** indicates semantic notion that is equivalent to English ‘**ward**’ for direction in Ganta when it occurs on the directional items **púde** ‘**up**’, **súle** ‘**down**’, **góde** ‘**forward**’ (horizontal away), and **há-** ‘**toward**’ (horizontal closer). The marker occurs after series of markers **-ŋkk-u-tsts-**, when it involves suffixation with the high tone proximal item **há-** ‘**toward**’, as in (29b). Look at the examples (29).

- (29) a. *púde-tsts-* ‘upward’
súle-tsts- ‘downward’
góde-tsts- ‘forward’ (horizontal away)
 b. *há-ŋkk-u-tsts-* ‘toward’

An independent item **bágga** has the literally distinct meaning ‘**half**’. But in the direction pointing speech context, it combines with other directional adverbs so as to point direction as ‘**toward**’ (30).

- (30) a. *geéde bagga* ‘toward back’
mílle bagga ‘toward behind’
lánke bagga ‘toward side’
gawó/giddó bagga ‘toward in’
karé/áre bágga ‘toward out’
hádursa bágga ‘toward left’
óŋitŋfa bágga ‘toward right’

6.4.3 Time adverbs

The following lists present Ganta time adverbs in (31).

(31) a.	wóndde	‘before certain time’
	gámʔu	‘later’
	káppi	‘after a moment’
	brá	‘before’
	tʃííta	‘early morning’
	tʃíilindo tʃíita	‘very early (morning)’
	ʃóʔe	‘morning’
	biláhe	‘day time’
	siíʔa/gálbba	‘dusk’
	ntʃéema	‘night’
	makákara giddotstu	‘mid-night’
	k’ámma	‘yesterday’
	gúta	‘tomorrow’
	zígine k’amma/zígine bira wode	‘a day before yesterday’
	wodé	‘time/coming year’
	zígine k’ari k’amma	‘two days before yesterday’
	zígine	‘last’
	k’áre/bení	‘previous’
	gúta peyʃi	‘a day after tomorrow’
	zímmbere	‘last year’
	k’ari bere	‘a year before last year’
	billí bilahe	‘mid-day’
	gidá bere/yé-é-s-e laytsti	‘following/coming year’
	láyitsti	‘year’
	áyde	‘when’
	udá wode	‘daily/all day’
	máta	‘soon/quickly’
	wóntta-so	‘in the black and dark night’

Certain Ganta time expressions like dusk, morning and others can be expressed by phrase in relation to animal or other activities (32).

- (32) a. gáyddi gélo gállá/gáyddi gél-u-s-u
cattle get (in) on /cattle get (in)-PLPER-3MS-ACC
‘When cattle are getting in the house.’ (**time used to express dusk**)
- b. gáyddi kés-s-o gállá
cattle get (out)-CAUS-NML on
‘When cattle are getting out (from house).’ (**time used to express late morning**)
- c. lúkko-y oóll-u-s-u
cock-NOM crow-PLPER-3MS-ACC
‘When cock crows.’ (**time used to express dark night**)
- d. kaʔó-y tʃíítʃ-u-s-u
bird-NOM song (of bird)-PLPER-3MS-ACC
‘When bird sings.’ (**time used to express early morning**)

6.3.4 Manner adverb

Manner marker **-kke** is used to express manner adverb when it occurs after series of suffixes, after present continuous and declarative, and third person markers (32a-b). In addition to this process, in the focused speech context the marker is followed by focus and person markers respectively as in (33c).

- (33) a. tán-i óh-e-s-kke oótso-z-a
 I-NOM speak-PRES:CONT.DEC-3MS-MANN work-3MS:SG.PL:DEF-ACC
 oótsts-áy
 work-IMPER:2SG
 ‘Do the work as I tell you!’
- b. ís-i yés's'-ee-s-kke yétsts-az-a kaá?-áyí
 she-NOM sing-PA-3MS-MANN song-3MS:SG.PL:DEF-ACC play-IMPER:2SG
 ‘Play the song as she sung.’
- c. nén-i úf-ee-s-kke-k-ote úf-o-m-e
 you-NOM drink-PA-3MS-MANN-FOC-1SG drink-IND-FUT-PRES:CONT.DEC
 ‘I will drink as you drank.’

Instrumentalizing marker **-nna** is directly suffixed to the citation form verbs by preceding copular focus to express manner adverb in Ganta (34).

- (34) a. és-i léppa-nna-kko mákina íf-e
 he-NOM slow-INST-COP:FOC car (Amharic) drive-PRES:CONT.DEC
 ‘He drives a car slowly.’
- b. tán-i udá wode ?eesó-nna-kko hántt-e
 I-NOM all day quick-INST-COP:FOC walk-PRES:CONT.DEC
 ‘All the time, I will walk quickly.’
- c. gárrma-y busú?a hiillá-nna-kko wód-e
 lion-NOM animal care-INST-COP:FOC kill-PRES:CONT.DEC
 ‘Lion kills an animal carefully.’

6.3.5 Frequential adverb

Most frequential adverbs are formed by complete reduplication of time adverbs as in (35).

Time Adverb		Frequential adverb	
(35) a. hátte	‘now’	hátte hatte	‘now and then’
jó?e	‘morning’	jó?e jo?e	‘every morning’
wóntta	‘day’	wónta wonta	‘every day’
tʃeéma	‘night’	tʃeéma tʃeema	‘every night’
woggá	‘Sunday’	woggá woggá	‘every Sunday’
k'eerá	‘Saturday’	k'eerá k'eera	‘every Saturday’
láytsi	‘year’	láytsi laytsi	‘every year’

Item **udá** ‘all’ occurs with time adverbs so as to form frequential adverb (36).

- (36) a. tán-i udá wode zawá-kko féyʃ-e
 I-NOM all time house/home-COP:FOC stay-PRES:CONT.DEC
 ‘All the time I stay at home.’
- b. udá wóntta ís-i tamaáre-so-kko háŋ-e
 all day she-NOM school-PLNML-COP:FOC go-PRES:CONT.DEC
 ‘She goes to school all day.’

7 Interjection and Ideophone

In the previous chapters, noun, pronoun, verb, adjective and adverb word classes were treated as parts of speech in Ganta. In this chapter, interjection and ideophone are described in two subsections. The first section deals with interjection in different speech contexts. The last section describes ideophones according to their function and formation.

7.1 Interjection

Ameka (1992, 2006, cited in Hellenthal 2010: 245) has classified interjections into three categories, namely “expressive”, “conative”, and “phatic” communication. Hellenthal further explained the use of these interjections. “Expressive” interjection is used to express emotional content of the speaker whereas “conative” is used to get an effect in addressee, based on the speaker’s will. The function of conative can be described by vocatives, etc. The “phatic” interjection is used for building societal interactions by requesting someone’s health or by discussing the weather condition in contexts that are performed in daily greetings.

This study, reflection of the speaker feelings such as surprise, anger, fear, happiness and pain are grouped under expressive interjection. This is displayed in the following sections.

7.1.1 Surprise

The following utterances are used to express suddenly seen or heard surprises. Some utterances are presented in mono-morphemic words and others are presented in phrase or in complex forms

- (1) a. atté! ‘suddenly producing word when looking at something or someone after long time separation’
b. kíftt! ‘is that’
c. óyi tá báz-ó
IDEO my God-VOC
‘Oh! My God!’
d. ha wúfje
this my life
‘Oh! My life/Oh!’
e. wóy tá báz-att-é
IDEO my God-3FM.SG:DEF-VOC
‘Oh! My God/lord!’
f. wóy tán-ó
IDEO I-VOC
‘What am I Oh!’
g. ha gúd-é
this miracle-VOC
‘This miracle/look this miracle!’
h. ha murmúr-ó
this reverse-VOC
‘This miracle!’

- i. wóy tá ánjja
 IDEO my fate
 ‘Oh! my fate!’

7.1.2 Anger

The following illustrations are used when someone is in state of anger. Most of them can be used during disputes or quarrels between people. Some are developed from kinship terms: **índdo** ‘mother’, **addá** ‘father’, and on **maátʃtʃo** ‘wife/woman/female’. For example, in disputing or insulting conversation, if someone insults by calling a name of one’s mother, the situation will show you that he/she is in state of distress. In such situation, kinship words are mostly used to reflect someone’s strong feeling of anger, though **índdo** ‘mother’ with third person singular feminine marking **-tt-** is used to express love or closeness in normal conversations. Compare the illustrations in (2).

- (2) a. íti índd-att-ó
 you (PL) mother-3FM.SG:DEF-VOC
 ‘The mother of you.....!’
- b. íti addá-tt-ó
 you (PL) father-3FM.SG:DEF-VOC
 ‘The father of you.....!’
- c. ha maátʃtʃ-i naʔá-y
 this woman-NOM boy-NOM
 ‘The boy of this woman/female!’
- d. ha maátʃtʃ-i bíʃʃ-i
 this woman-NOM girl-NOM
 ‘The girl of this woman!’
- e. addá-tt-i k’íns’álle/ʔúmma
 father-3FM.SG:DEF-NOM head
 ‘The head of your father.....!’
- f. add-é-z-i k’íns’álle/ʔúmma
 father-VOC-3MS:SG.PL:DEF-NOM head
 ‘The head of your father.....!’
- g. tá-mma-ne hí-n-e
 my-FOC-2SG say-IMPERF-PRES:CONT.DEC
 ‘Are you talking to me?’

Some anger reflecting expressions undergo contraction process in Ganta. For example, in normal case the combination of **áde** ‘man/husband/male’ and **naʔa** ‘boy’ can be formed as **áde naʔa** ‘son of man/husband/male’. But this combination employs a morphophonological process, contraction. For the process, from both words, the final segments occur deletion. From **áde**, the final vowel **-e** and from **naʔa** the final three segments **-aʔa** are deleted. High front vowel **i** and vocative case marker **-ó** are involved in the contracted word so as to maintain phonological rule. Vowel **i** occurs after **ád-** and before **n-**. The vocative marker **-ó** occurs at the end position, as in **ádin-ó** ‘you the son of a man.....!’

7.1.3 Horror/Fear

Some fear reflecting words occur in mono-morphemic forms. The others are in complex forms with their vocative case marker, as in (3).

- (3) a. wóó (suddenly produced sound when looking at something, which is strange)!
- b. báz-ó
God-VOC
'Oh! God!'
- c. gér-ó
people-VOC
'My people!'
- d. wóó tán-a
IDEO I-ACC
'Wóó! I myself!'
- e. tá woziná/sempp-ó
my heart-VOC
'My heart!'
- f. tá marátʃ-é
my intestine-VOC
'My intestine/internal!'
- g. tá add-é
my father-VOC
'My father/God!'
- h. tá índd-é
my mother-VOC
'My mother!'
- i. íʃʃi eró
ok ok
'Ok! I will do!'

7.1.4 Pain

The following expressions can reflect pain, in (4).

- (4) a. wóó!
háʔʔá
- b. wóó tán-a
IDEO I-ACC
'Wóó! I myself!'
- c. tá dǎtte
my back
'My back!'
- d. tán-a tán-a
I-ACC I-ACC
'I myself! I myself!'

7.1.4 Pleasure

Following expressions are used to reflect pleasure in Ganta, in (5).

- (5) a. haʃʃú 'Congra ! I am pleased.'
- b. hawʃʃé 'Yes, it is! (can be expressed by touching heart)'
- c. galáta 'Thanks to God !'
- d. íʃʃi 'Ok !'
- e. semppó 'The last/end!'

- f. galát-utt-ó
thank-PASS-SUBJ
'Let it be blessed!'
- g. s'oóss-i/bázo-y íŋ-ó
God-NOM/God-NOM give-SUBJ
'Let God give (you)!'
- h. s'oóss-i/bázo-y íŋ-ó néé-ro
God-NOM/God-NOM give-SUBJ you-DAT
'Let God give you !'

The word **kaná** 'dog' is used here pragmatically so as to express second person singular pronoun 'you' in (6a-b). Similarly, **ǰútǰtu** 'stone' is used to express the strength of somebody while reflecting pleasure in conversation, in (6b).

- (6) a. kaná goóba-z-i
dog intelligent-3MS:SG.PL:DEF-NOM
'You the brave/intelligent/brilliant one !'
- b. kaná ǰútǰtu-att-i
dog stone-3FM.SG:DEF-NOM
'You the strong/wise one!'

Some words occur contraction in rapid speech context in Ganta. In (7a) and (7b), two expressions are used to express the same feelings. In (7b), from the second person possessive pronoun **né**- 'you', the tonal segment **-é** occurs deletion and the remaining segment **n-** is attached with **-addá** 'father'. The tone of **-é** is shifted forward on the first vowel of contracted word **náddá** 'wonderful/bravo'. Let us compare the two examples below.

- (7) a. há-y-a né addá
this-3MS-ACC you father
'You wonderful/bravo!'
- b. há-y-a náddá
this-3MS-ACC wonderful/bravo
'You wonderful/bravo!'

7.1.5 Vocative

Some of vocative conative interjections are listed in (8) below.

- (8) a. naʔ-ó
boy-VOC
'Oh boy!'
- b. maátǰtǰ-é
wife/woman-VOC
'Oh wife/woman !'
- c. add-é
father-VOC
'Oh father'

Combination of imperative expression and vocative case can be used together so as to express directive functions in Ganta, in (9).

- (9) a. bíjǝ-é déndd-áy
 girl-VOC stand-IMPER:2SG
 ‘You girl, stand up!’
- b. usá índd-é zawá háŋ-e-r-áwo
 please mother-VOC home go-PRES:CONT.DEC-POLT-IMPER:2SG
 ‘Please, mother go home !’

Phatic interjection is expressed in sociolinguistic contexts, particularly, in day to day social interactions. In the following illustrations (10), one can see phatic communications.

- (10) a. wáá-kko
 how-COP:FOC
 ‘How is it?’
- b. loʔó-wa
 good-FOC
 ‘Are you ok/fine?’
- c. arddá-y wáá-kko
 life-NOM how-COP:FOC
 ‘How is life?’
- d. néé-so-y loʔó-wa
 your-PLNML-NOM good-FOC
 ‘Is your family ok?’
- e. loʔ-í-ne ak'-í-d-e
 good-CONV-2SG stay (at night)-CONV-PERF-PRES:CONT.DEC
 ‘How did you spend night?’
- f. loʔ-í-ti φéyǝ-tt-e
 good-CONV-2PL stay-PERF-PRES:CONT.DEC
 ‘How did you spend the day?’
- g. gáde-y ánni-wa hantstsó meeggé
 land-3MS:NOM which-FOC today cold
 ‘Why is it cold today?’
- h. búkk-oda-si-n-e
 rain-INFI-3MS-IMPERF-PRES:CONT.DEC
 ‘Is it going to rain?’

7.2 Ideophones

In Ganta, ideophones represent speech sounds. Particular word classes that contain sound-symbols are used for different purposes. In the first, it functions as intensifiers. In this case, they occur before or after adjectives. The second function is predicative or complementing function.

In speech contexts, sound-symbolic words are used in different forms. Some of them occur in mono-morphemic words. The others occur in reduplicated forms, partial or complete reduplication. Still, others occur in complex forms, with another linguistic element in predicative or complementing function. Therefore, in this section, ideophones are treated according to their role in Ganta.

7.2.1 Intensifying ideophones

- (11) a. tʃílila ʒiluka
 IDEO green
 ‘very green’
 b. mulí muk'k'a
 circular IDEO
 ‘very circular’
 c. leelló/ɸiʃʃá/leeláʃe/muk'áadda bootstsu
 IDEO white
 ‘very white’
 d. suutstsá/seeéka zoʔo
 IDEO red
 ‘very red’
 e. tʃílila/dumʔʔá karttsi
 IDEO black
 ‘very black’
 f. tʃílinddó tʃiita
 IDEO morning
 ‘very morning’
 g. makakára giddotstsu
 IDEO night
 ‘very night/mid-night’

In rapid or attentionless speech context, intensifying ideophones and intensified head words can change their position. In this case, intensifiers occur after heads, as in (12).

- (12) a. ʒiluk'á tʃílila
 green IDEO
 ‘very green’
 b. kárttsi dumʔʔa
 black IDEO
 ‘very black’
 c. zoʔó s'eeek'a
 red IDEO
 ‘very red’

7.2.2 Predicative function of ideophones

In the predicative function, ideophones are suffixed by copular focus marker **-kko**, as in (13).

- (13) a. és-i gappáta-kko
 he-NOM IDEO-COP:FOC
 ‘He is talkative.’
 b. naʔá-z-i tʃoʃʃe-kko
 boy-3MS:SG.PL:DEF-NOM IDEO-COP:FOC
 ‘The boy is inactive/lazy.’
 c. ha boóra-y mekekéra-kko
 this bread-NOM IDEO-COP:FOC
 ‘This bread is hard (to eat).’

- d. í aḥillá-y s'eék'a-kko
 her cloth-NOM IDEO-COP:FOC
 ‘Her cloth is red (very red).’

7.2.3 Complement function of ideophones

In the complement function, ideophones occur before a verb root **hí-** ‘say’ in the imperative construction, as in (14).

- (14) a. s'iníni hí-s-í woóʔ-áy
 IDEO say-3MS-CONV pour-IMPER:2SG
 ‘pour with thin (water in the narrow container or for hand wash)!’
 b. s'olólu hí-s-í woóʔ-áyí
 IDEO say-3MS-CONV pour-IMPER:2SG
 ‘pour as oil like drop (for oil like liquid particles, for gas, oil and for liquid honey)!’
 c. bak'áti hí-dopp-u
 IDEO say-NEG-2SG
 ‘Don’t be very fast, be slowly (for running, walking, eating)!’
 d. ḥártstsi hí-d-í yéw-áy
 IDEO do-PERF-CONV come-IMPER:2SG
 ‘Come quickly (for walking)!’

Segment contraction process occurs with ideophones in the rapid speech situation in Ganta. When the verb root **hí-** ‘say’ occurs contraction process, third person singular masculine marker **-s-** and converb marker **-í** shift their occurrence with ideophones. In the above example (14a) and (14b), the verb root is occurred with person and converb markers. But, in the following examples (15a) and (15b), only the markers occur with ideophones. Compare the following examples with above ones.

- (15) a. s'iníni-s-í woóʔ-áy
 IDEO-3MS-CONV pour-IMPER:2SG
 ‘pour with thin’
 b. s'olólu-s-í woóʔ-áy
 IDEO-3MS-CONV pour-IMPER:2SG
 ‘Pour with oil like mood’

7.2.4 Mono-morphemic ideophones

In the following, let us see mono-morphemic ideophones

- (16) a. moomée ‘echoing sound, foolish or non-sense (for man)’
wúrr ‘calling for cat, producing sound near ear while playing (game of children)’
óykka/tǵíra ‘ordering dog to chase wild animal’
wátstsi ‘driving ox’
waaháa ‘ordering oxen while ploughing land’
háátstso/hááya ‘ordering oxen to turn in the its back while ploughing’
ʔáǵi ‘driving calf’
íǵitti/íǵi ‘driving goat, sheep’
káysi ‘driving cow’
háki ‘driving donkey/mule/horse’
tǵúku ‘driving /chasing hen’
ʔilil ‘act of producing trial sound (of woman), particularly, in the funeral ceremony when man is performing traditional crying’
metǵǵéro ‘talking, shouting, speaking restlessly or nervously (for woman)’
zoóduttsu ‘not flexible, hard, straight forward (for tree or human being)’
honoǵó/horoǵó ‘easily breakable (for tree, ceramic material)’
toroǵó ‘talkative, careless (for woman)’
tondozzó ‘very fat, not active’
tondoltǵǵó/bandultǵǵá/ʔeltǵǵ ‘offensive, advice ignorant, not manageable’
gótǵǵuttsu ‘very weak, inactive, lazy’
ϕodǵó ‘huge, very fat, weak (for woman)’
gaϕǵáta ‘big and fearful person, substance less man’
tonjjolló ‘foolish, inactive, innocent, illiterate (of man)’
tǵǵǵǵ ‘very weak, slow in doing something, not wise or active (of man or woman), flammable wood (particularly in summer, rainy season)’
meeretǵó ‘hidden, secrete, or mysterious part of someone’
sálle ‘stepping slowly or silently so as to escape from something or from somewhere, or to listen to information or secrete issues’
lamátǵi/tǵomódu ‘eating or munching slowly because of health problem (for person, ox, cow, etc)’

7.2.5 Reduplicated ideophones

Some Ganta ideophones occur complete or partial reduplications. In example (17), let us see complete reduplications for calling animal (17a) and for expressing event (17b)

- (17) a. háǵi háǵi ‘calling for dog’
néǵi néǵi ‘calling for donkey/mule/horse’
hááya hááya ‘calling for ox’
lúkku lúkku ‘calling for hen’
bútǵu bútǵu ‘calling for dog kid’

- | | |
|-----------------|--|
| bí?e bí?e | ‘calling for goat’ |
| bátstsi bátstsi | ‘calling for sheep (sometimes sound like ba?a?a can be produced)’ |
| b. kotʃʃukótʃʃu | ‘stepping or walking on the dried leaves in the forest’ |
| waatʃʃí wáatʃʃí | ‘gleaming (for metal, gold, can), humorous person’ |
| ɸantsi ɸántsi | ‘limited occurrence (e.g. hair with little white color and with lot of black color)’ |
| todzdzu tódzdzu | ‘bouncing (for stone or pumpkin)’ |
| kortsu kórtsu | ‘murmuring or quarrelling (for minor dispute)’ |
| wars’i wárs’i/ | |
| zalbu zálbu | ‘running (for python or movement of long thing)’ |
| zoltu zóltu | ‘walking or moving (for tall person)’ |
| lonk’u lonk’u | ‘moving (for thin person or thin tree)’ |
| hortʃu hórʃu | ‘grinding (for rough flour)’ |
- Some ideophones occur partial reduplication with their internal segments in (18).
- (18) a. **todzodzóru** ‘bouncing of big thing e.g. pumpkin, stone, etc’
mekekéra ‘dried wood, hard or strong material, uneatable bread’
mororókku ‘looking or glancing with big eye (look of big person)’
ɸololók’k’u ‘reflecting (for light or torch when passing through forest or masking objects)’
torbóbu/s’orbóbu ‘pouring with thick liquid (from high position, in the pot/hole)’
- First two segments of ideophones are reappeared in the middle of sound-symbolic word formations in Ganta, in (19).
- (19) a. **ɸonddiɸólo** ‘something that cannot die easily, something that is not easy to eat’
kondukoltʃa ‘unfitable (for material), unagreed or ignorant (for person)’
holihók’k’a ‘fearful person’
ʃʃolitʃóʃʃa/ʃʃolitʃók’k’ ‘unwanted mixture of things (especially, for mixture of crop with grass)’
mammáwhu ‘colliding (for stone to stone collision), quarrelling (minor quarrel of mother and father)’
ganddigári ‘walking fast (for person to save himself/herself from falling while walking)’
ɸoɸólʔu ‘lightening (for thunder)’
k’alik’áɸɸa ‘non-sense, substanceless (for person who speaks non-sense issues)’

8 Syntax

Syntax is “the part of grammar that represents a speaker’s knowledge of sentences and their structures” (Fromkin 2007: 159). As a science, it is interested in describing and explaining the order of morphological elements in a sentence and their relationships to each other (Schwekert, 2005: 6). Thus, in this chapter, Ganta phrase, clause, and complex sentence structures are described in detail.

8.1 Phrase Structure

In this part, Ganta noun, verb, and postpositional phrase structures are described.

8.1.1 The noun phrase

In this part, noun phrase structures are discussed together with nouns and noun modifiers like adjective, demonstrative, numeral, genitive (or possessive), and relative clause. Noun phrase with modifying word and with headless relative clause is also treated in this section. Finally, noun phrase structure with comitative coordination is discussed as part of this topic.

8.1.1.1 Noun phrase with adjective as modifier

Ganta adjectives occur before modified heads. The structure of the noun phrase takes the form as: adjective-head noun. Look at the following example in (1) below.

- | | |
|---|---|
| (1) a. ϕ azzó ade
tall man
‘tall man’ | e. boóttsu lukko
white hen
‘white hen’ |
| b. háta naʔa
short boy
‘short boy’ | f. zoʔó maaʔo
red cloth
‘red cloth’ |
| c. lóʔo attsi
good man
‘god man’ | g. míno mittsi
strong tree
‘strong tree’ |
| d. iíta miifje
bad thing/material
‘bad thing’ | h. balló kawuʔe
bitter food
‘bitter food’ |

8.1.1.2 Noun phrase with demonstrative as modifier

Like adjectives demonstrative pronouns occur before head nouns which they modify. Demonstrative-head noun is the phrase structure of this construction. See below in (2).

- | | |
|--|---|
| (2) a. ha máydo
this ox
‘this ox’ | b. so míttsi
that tree
‘that tree’ |
| c. ha keetstse
this house
‘this house’ | d. so maátʃtʃ
that woman/wife
‘that woman/wife’ |

8.1.1.3 Noun phrase with numerals as modifier

Like adjectives and demonstratives, numerals precede modified head nouns to have structure, numeral-head noun. Except cardinal number **bizzó/s'óto/s'ón?o** 'one', all cardinals occur before modified plural nouns. The cardinal **bizzó/s'óto/s'ón?o** 'one' comes before singular nouns. In the modifying process, the final vowel **o** of them changes to vowel **i**. In the process, a high tone of the terminal vowel **bizzó** shifts to the back and rested on the second segment, as in (3a). Compare the rest examples with (3a) below.

- (3) a. **bízzi/ s'óti/s'ón?i** **atstsi**
 one man
 'one man'
- b. **nám?u** **s'eg-i**
 two goat-PL
 'two goats'
- c. **támmu** **mitsts-idè**
 ten tree-PL
 'ten trees'
- d. **s'eéti** **bira**
 hundred birr (Amharic)
 'hundred birr'

As in many languages, Ganta ordinal numbers are formed on the cardinal roots by an order indicating marker **-untstsá**. Since, their terminal vowels undergo morphophonemic process of deletion when suffixing with the marker. In the modifying process, as that of cardinal numbers, ordinal numbers occur before singular or plural nouns in Ganta. Look at examples in (4).

- (4) a. **bízz-untstsá** **atstsi**
 one-ORD man
 'first man'
- b. **óydd-untstsá** **na?a**
 four-ORD boy
 'the fourth boy'
- c. **lápp-untstsá** **ad-as'-i**
 seven-ORDM male-PL-NOM
 'seventh males'
- d. **támm-á-nne** **óydd-unttsa** **keetsts-idè**
 ten-FREQ-INCL four-ORD house-PL
 'fourteenth houses'

8.1.1.4 Noun phrase with genitive (or possessive) as modifier

In Ganta, possessor and possessed nouns are simply juxtaposed. In this case, possessor or modifier occurs before possessed or modified head nouns. The noun phrase construction gives the structure as, possessor noun-possessed noun. See as in (5).

- (5) a. **áde** **dere**
 aman society/country
 'A man's country'
- b. **na?a** **gitstse**
 boy trouser
 'A boy's trouser'

- c. maátʃtʃ-i diggo
wife-NOM bed
'A wife's bed'
- d. doró ʔumma
sheep head
'A Sheep's head'

Complex noun phrases can occur with possessive modifiers which are inflected for definite and nominative case markers by having its two phrasal structures. When a possessor noun is suffixed by third person singular masculine and plural (feminine and masculine) definiteness **-(a)z-** the structure will be: possessor noun-definite-nominative-possessed noun as in (6a). But when third person singular feminine definiteness **-(a)tt-**, occurs after accusative case on the possessing noun, the noun phrase structure takes the form: possessor noun-accusative case-definite-nominative-possessed noun as in (6b-c). Compare the following examples.

- (6) a. áde-z-i dere
man-3MS:SG.PL:DEF-NOM society/country
'The man's country'
- b. bíʃʃ-att-i inddo
girl-3FM.SG:DEF-NOM mother
'The girl's mother'
- c. miís-att-i goyna
cow-3FM.SG:DEF-NOM tail
'The cow's tail'

8.1.1.5 Noun phrase with relative clause as modifier

Relative clause is more discussed under 'complex sentence structure (see below). But for the sake of structural gap, here complex noun phrase with relative clause is illustrated. First, let us compare structural differences between main and relative clauses. In the main clause, as in (7a), a noun **harg-z-i** 'the disease' occurs in subject position and has inflected for definiteness (**-z-**) and nominative (**-i**) case. In object position, pronoun **és-a** 'him' occurs before the main verb **wóɖ-a-k-osi-d-e** 'It is killed'. Here, the main verb is suffixed by series of morphemes indicative (**-a-**), focus (**-k-**), subject marker (**-oyi-**), tense/aspect marker (**-d-**), and by present continuous and declarative marker (**-e**). Above all, the word order in the main clause expresses the form S+O+V. But, in the relative clause, in (7b), the object pronoun **és-a** 'him' occurs in place of the subject **harge-z-i** 'the disease', and the subject **harge-z-i** 'the disease' also occurs after the main verb of the relative clause. Here, the relative verb **wóɖ-ee-s-i** 'thing that killed' occurs between object pronoun **es-a** and subject of the relative clause **harge-z-a**. In the main clause, the subject of the clause is marked by definiteness and nominative case. But, in the relative clause, the subject is also marked by the same definiteness (**-z-**) and by another accusative (**-a**) case. In the relative clause, the verb suffixes with series of markers tense (**-ee-**), masculine gender marker (**-s-**) and nominative case (**-i**). Here, the difference is that the masculine gender marker (**-s-**) and nominative case (**-i**) are newly suffixed onto relative verb stem before tense marker (**-ee-**). As in main clause verb, there is no series of suffixed markers indicative (**-a-**), focus (**-k-**), subject marker (**-oyi-**), and present continuous and declarative marker (**-e**) in the relative clause verb in Ganta. But, there is tense marker (**-ee-**) with different form. Furthermore, the structure of word order

(7) a. hárg-e-z-i és-a
disease-3MS:SG.PL:DEF-NOM he-ACC
wóđ-a-k-oyi-d-e **(Main clause)**
kill-IND-FOC-SUBM-PERF-PRES.CONT:DEC
'The disease killed him.'

- #### 8.1.1.6 Noun phrase with headless relative clause

(8) a. *ʃóg-utt-o-k-osi-d-e*
wash-PASS-IND-FOC-3MS-PERF-PRES.CONT:DEC
'It was washed.'

b. *ʃóg-utt-ee-s-a*
wash-PASS-PA-3MS-ACC
'One (thing) that was washed.'

Like many languages, Ganta allows complex noun phrase with modifier. In this case, adjectives are derived into nominals by nominative case markers, **-i** or **-y**. Because of this process, the derived nominals hold the role of noun phrase by having phrase structure, adjective-nominative case. In the definite construction, nominative case occurs after definiteness markers **-(a)z-** and **-(a)tt-** so as to have phrase structure: adjective-definite-nominative case. Compare (9a-b) with (9c-d) below

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- b. [náʔ-et-az-i] tán-a-ra
 young-INCH-3MS:SG.PL:DEF-NOM I-ACC-COM
 óh-utt-o-k-oyi-d-e
 talk-PASS-IND-SUBM-PERF-PRES:CONT.DEC
 ‘The young (one) talked with me.’
- c. [boótsts-att-i] hám-a-kk-oyi-ttam-e
 white-3FM.SG:DEF-NOM go-IND-FOC-SUBM-FUT:PRES:CONT.DEC
 ‘The white (woman) will go.’

8.1.1.8 Noun phrase with comitative case as coordinator

Ganta allows complex noun phrases by comitative coordination. The comitative case marker **-ra** occurs on the both first and second coordinands. But it comes after vowel **i** in the second coordinand. The noun phrase structure takes the form as, first coordinand-comitative case-second coordinand-comitative case. See the following illustrations (10).

- (10) a. áde-ra maátʃʃi-ra
 man-COM:CO wife-COM:CO
 ‘husband and wife’
- b. naʔá-ra bíʃʃi-ra
 boy-COM:CO girl-COM:CO
 ‘boy and girl’

8.1.2 Verb phrase

Ganta complex verb situations are presented in the different analyses of this study (for more information, see verb derivation, verb inflection, agreement, complementation, verbal predicate). In this section, some examples are given for convenience. Ganta locational demonstratives that are inflected for gender, case (feminine and masculine nominative or accusative), location, focus, and person precede a verb or verb phrase (11).

- (11) a. só-y-ga-k-ote hám-a-m-e
 that-3MS-ALLA-FOC-1SG go-IND-FUT-PRES:CONT.DEC
 ‘I will go there.’
- b. há-y-ga-k-ote úʃ-i-d-e
 this-3MS-ALLA-FOC-1SG drink-CONV-PERF-PRES:CONT.DEC
 ‘I drank here.’

Time adverbs that can be inflected for focus and person also allows verb phrase in Ganta when preceding before a verb (12).

- (12) a. gúta-k-ote hám-a-m-e
 tomorrow-FOC-1SG go-IND-FUT-PRES:CONT.DEC
 ‘I will go tomorrow.’
- b. k’ámma-k-ose háyʔ-i-d-e
 yesterday-FOC-3MS die-CONV-PERF-PRES:CONT.DEC
 ‘He died yesterday.’

Ganta locational demonstratives and time adverbs can occur following a verb in the sentence (see more under word order).

8.1.3 Postpositional phrase

The positions of postpositional words are “...defined in the syntax in terms of their position with respect to the noun phrase” (Dryer 2007: 82). In Ganta, postposition words occurs after object noun phrase preceding a verb. Let us look at the following in (13).

- (13) a. oóye-y máydo sina-kko yé-s-í-d-e
grass-NOM ox front-COP:FOC exist-3MS-CONV-PERF-PRES:CONT.DEC
‘Grass is in front of ox.’
- b. naʔá-y míttsi oommo-kko útt-í-d-e
boy-NOM tree under-COP:FOC sit-CONV-PERF-PRES:CONT.DEC
‘A boy sat down under the tree.’
- c. oydé mill-á
bench behind-ADESS
‘behind bench’
- d. bak’úlo aɸa
mule on
‘on the mule’
- e. keetstsé galla
house on
‘on the house’
- f. fútʃtʃu bagga
stone toward
‘toward the stone’
- g. waayé are
ear around
‘around ear’
- h. ibó geeda
door back
‘beyond the door’
- i. kaná bra
dog before/infront
‘in front of the dog’

8.2 Clause structure

In the above section, phrase structures that include noun, verb, and postposition were discussed whereas in this section, clause structures are treated. The first section treats word order typology under different situations. The second part is aimed to deal with focusing strategies in Ganta. Next to focus, copula construction is deeply described. Finally, predicative morphology is analyzed in terms of non-verbal and verbal counterparts.

8.2.1 Word order

Ganta word order is discussed in main clause, noun phrase, verb phrase, postpositional phrase, comparative, and in question particles and question words. A summary of all discussion is also presented with the respect to word order.

8.2.1.1 Word order in main clause

In this section, subject, object, and verb word order strategies are observed. The first strategy involves identifying the order of subject and verb. In the ordinary main clause, verb follows subject in Ganta. Let us see the following example in (14).

- (14) a. abebe-y hám-k-oyi-ttam-e
 abebe-NOM go-FOC-SUBM-FUT-PRES:CONT.DEC
 S V
 ‘Abebe will go.’
 b. ís-i háy?-o-kk-i-d-e
 she-NOM die-IND-FOC-3FM-PERF-PRES:CONT.DEC
 S V
 ‘She died.’

The second strategy involves identifying object and verb order. Like other OV languages, Ganta object occurs before verb in the clause as in (15).

- (15) a. káw?e fám-a-kk-u-d-e
 food buy-IND-FOC-3PL-PERF-PRES:CONT.DEC
 O V
 ‘They bought food.’
 b. gaayá hám-a-k-osi-ttam-e
 market go-IND-FOC-3MS-FUT-PRES:CONT.DEC
 O V
 ‘He will go to the market.’

The position of subject is also discussed with respect to object position in the clause. Both of them exhibit flexibility in their position with respect to the verb in Ganta. But the order of SO (subject-object) is much frequent than OS (object-subject) in Ganta. Compare the following (16).

- (16) a. doóllo-y gaayá hám-a-kk-oyi-d-e
 doóllo-NOM market go-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 S O V
 ‘Doóllo went to the market.’
 b. gaayá Doóllo-y hám-a-kk-oyi-d-e
 market Doóllo-3MS:NOM go-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 O S V
 ‘Doóllo went to the market.’

When we observe the order of subject, object, and verb in the main clause, verb can have chance to follow either subject or object. But the basic word order employs SOV pattern in Ganta as in (17).

- (17) a. fájw-i dígg-á dísk-a-k-oyi-d-e
 child-PL bed-LOC sleep-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 S O V
 ‘Children slept in the bed.’
 b. mátsts-i jída-kko íd-e
 bee-NOM honey-COP:FOC make (honey)-PRES:CONT.DEC
 S O V
 ‘Bee makes honey.’

8.2.1.2 Word order in noun phrase

As it has stated in the noun phrase above, Ganta head nouns often occurs after modifying element. Therefore, prototypical word order in the noun phrase follows M-N (modifier-noun) pattern. Though more phrase structural illustrations are presented in the above (see noun phrase), here, example (18) is stated for convenience.

- (18) a. lááfa ootso
 easy work
 M N
 ‘easy work’
 b. ííta attsi
 bad man
 M N
 ‘bad man’
 c. óyddu s’eg-i
 four goat-PL
 M N
 ‘four goats’

8.2.1.3 Word order in verb phrase

Locative and manner adverbs show tendency of flexibility to occur before and after a verb. Compare the examples in (19a-b) with (19c-d) below.

- (19) a. só-y-ga-k-ote háñ-í-ǰǰ-e
 there-3MS-ALLA-FOC-1SG go-CONV-IMPERF-PRES:CONT.DEC
 Adv V
 ‘I have gone there.’
 b. út-o-k-oti-d-í-ǰǰ-e so-ná
 sit-IND-FOC-1SG-PERF-CONV-IMPERF-PRES:CONT.DEC there-DIR
 V Adv
 ‘I have sat down there.’
 a. tán-i lépp-a-nna-kko yéé-d-e
 I-NOM slow-IND-INST-COP:FOC come-PERF-PRES:CONT.DEC
 S Adv V
 ‘I came slowly.’
 b. tán-i háñ-ee-s-i lépp-a-nna-kko
 I-NOM go-PA-3MS-NOM slow-IND-INST-COP:FOC
 S V Adv
 ‘I went slowly.’

Temporal adverbs take complete freedom to occur everywhere with respect to the position of subject, object, and verb in Ganta. Look at the illustrations below (20).

- (20) a. tán-i gaayá k’ámma-tte háñ-í-nne
 I-NOM market yesterday-1SG go-CONV-PA
 S O Adv V
 ‘I went to the market yesterday.’
 b. tán-i gaayá hám-a-t-eti-nne k’ámma
 I-NOM market go-IND-FOC-1SG-PA yesterday
 S O V Adv
 ‘I went to the market yesterday.’

- c. k'ámma tán-i gaayá hám-a-k-oti-d-e
 yesterday I-NOM market go-IND-FOC-1SG-PERF-PRES:CONT.DEC
 Adv S O V
 'I went to the market yesterday.'
- d. tán-i k'ámma gaayá hám-a-k-oti-d-e
 I-NOM yesterday market go-IND-FOC-1SG-PERF PRES:CONT.DEC
 S Adv O V
 'I went to the market yesterday.'

8.2.1.4 Word order in postpositional phrase

Postpositional words occur after object noun phrase preceding a verb in the sentence. Look at the example (21) below.

- (21) a. juúro-y oydé oommo-kko yé-s-í-d-e
 cat-NOM bench under-COP:FOC exist-3MS-CONV-PERF-PRES:CONT.DEC
 S O PP V
 'Cat has been under the bench.'
- b. nén-i ?úmma apha tookk-áy
 you-NOM head on carry-IMPER:2SG
 S O PP V
 'You carry on the head!'

8.2.1.5 Word order in comparative

In the comparative construction, standard of comparison (**St**) is followed by the comparative marker of comparison **-pha**. An adjective that is used for comparison occurs at the end position in Ganta. Let us see in (22).

- (22) a. dookkó-y doóllo-pha háta-kko
 dookkó-NOM doóllo-ABL short-COP:FOC
 St COMPR Adj
 'Dookkó is shorter than Doollo.'
- c. joóf-i ?etstseré-pha phazzó-kko
 snake-NOM lizard-ABL long-COP:FOC
 St COMPR Adj
 'Snake is longer than lizard.'

8.2.1.6 Word order in question particles and question words

It is true that, in most OV languages question particles occur at the end of the sentence. But the case is different in Ganta. In the polar question (Yes/No) formation, Ganta employs focus marker **-k(k)-** or **-t(t)-** reduction from a verb stem. So that, in question statement, constituents do not exhibit position change with respect to the original sentence. More of this example is illustrated in the above (see interrogatives). Here, example (23) is presented for structural gap.

- (23) a. tán-i gaayá hám-a-k-oti-d-e
 I-NOM market go-IND-FOC-1SG-PERF-PRES:CONT.DEC
 S O V
 'I went to the market.'
- b. tán-i gaayá hám-a-ti-d-e
 I-NOM market go-IND-1SG-PERF-PRES:CONT.DEC
 S O V
 'Did I go to the market?'

But in the content question formation, question words use freedom to move at the beginning and at the end of the sentence. Compare illustration (24a) with (24b) below.

- (24) a. oóde-wa nén-i wórg-e-s-i
 who-FOC you-NOM want-PRES:CONT.DEC-3MS-NOM
 QW S V
 ‘Who do you want?’
- b. nén-i wórg-e-s-i oóde-wa
 you-NOM want-PRES:CONT-3MS-NOM who-FOC
 S V QW
 ‘Who do you want?’

8.2.1.7 Word order Summary

Ganta is verb-final language and its word order summary is presented in the table as follow.

	Construction	Word order
a	In main clause	S-O-V/O-S-V
b	In noun phrase	M-N
c	In verb phrase	Adv-V/V-Adv
d	In postpositional phrase	N-PP
e	In comparative	St-COMPR-Adj
f	In content question	QW-S-V/S-V-QW

- c. so máatʃ-i hantstsó waatstsé-kko kít-e
that women-PL today water-COP:FOC fetch-PRES:CONT.DEC
'Those women are fetching WATER today.'

Focus by morpheme -tte

In the same way with the marker **-kko**, Ganta subject, object, and adverb word classes take marker **-tte** for focusing strategies, as in (26).

- (26) a. tán-tte zigíne busúʔa wód-ee
I-COP:FOC last time animal kill-PA
'It was I who killed an animal last time.'
- b. tá ítʃe-y zimbber-tte máatʃfo ʔékk-i-nne
I brother-NOM last year-COP:FOC wife take-CONV-PA
'My brother married LAST YEAR.'
- c. kaát-az-i zigíne k'ámma oolló-tte ʃǎŋ-i-nne
king-3MS:SG.PL:DEF-NOM last time day horse-COP:FOC buy-CONV-PA
'The king bought a HORSE a day before yesterday.'

Focus by morpheme -k(k)-

As it has been reported in section (8.2.2), the marker **-k(k)-** occurs on the object, adverb, and verb word classes. It does not suffix to the subject in the sentence. The reason is that the subject of the clause does not directly take the recent form of the marker unless the form occurs as the other variant **-kko**. The marker obligatorily occurs before person markers on the object and adverb speech parts. But in the complex verb stem, it appears after indicative marker and before series of markers such as person, tense, or aspect. See the following examples in (27a-c) respectively.

- (27) a. nún-i gúta zawá-k-unu yé-s-a-m-e
we-NON tomorrow home-FOC-1PL exist-3MS-ACC-FUT-PRES:CONT.DEC
'We will be at HOME tomorrow.'
- b. ís-i k'ámma-kk-i áde gél-í-d-e
she-NOM yesterday-FOC-NOM man get-CONV-PERF-PRES:CONT.DEC
'She married YESTERDAY.'
- c. k'oóll-i lúkko ʃaato wód-a-kk-oyi-d-e
eagle-NOM hen child kill-IND-FOC-SUBM-PERF-PRES:CONT.DEC
'An eagle KILLED chicken.'

Focus by morpheme -t(t)-

Like marker **-k(k)-**, marker **-t(t)-** obligatorily occurs before person markers on the stem of object and adverb word classes. But, in the verb stem, the marker appears after an indicative marker and before series of markers. In the same way with the marker **-k(k)-**, it does not also suffix on the subject of the sentence in Ganta. Look at the illustrations (28)

- (28) a. nún-i hábere keetstsé-t-unu kees's'-í-nne
we-NOM this year house-FOC-1PL build-CONV-PA
'We built HOUSE in this year.'
- b. nún-i hábere-t-unu keetstsé kees's'-í-nne
we-NOM this year-FOC-1PL house build-CONV-PA
'We built house in THIS YEAR.'
- c. nún-i hábere keetstsé kees's'-a-t-uni-nne
we-NOM this year house build-IND-FOC-1PL-PA
'We BUILT house in this year.'

8.2.2.2 Focus in the interrogative and declarative moods

In this section, the focusing strategy of a Wh- questions, declarative constructions and Yes-No questions are discussed.

Focus in the Wh- question

As it has said in the above, the focus marker **-wa** is only restricted to the Wh- words. Since, it does not move to the other constituents in the construction so as to focus them. But, in the Yes-No question and declarative clause construction, it freely moves from word to word for the focusing strategy in Ganta (see focus in the declarative and Yes-No question constructions below).

Focus by marker -wa

The marker **-wa** is suffixed to the Wh- question words to express focused question, as in (29).

- (29) a. áanna-wa íti inddo-y háŋ-í-d-e
 where-FOC you mother-NOM go-CONV-PERF-PRES:CONT.DEC
 ‘WHERE did your mother go?’
 b. ámma-wa bíŋŋ-att-i oótsts-e
 what-FOC girl-3FM.SG:DEF-NOM work-PRES:CONT.DEC
 ‘WHAT is the girl doing?’
 c. áyde-wa nén-i yél-utt-ee-s-i
 when-FOC you-NOM bear-PASS-PA-3MS-NOM
 ‘WHEN were you born?’
 d. ámma-s-i-wa nén-i yeékk-e-s-i
 why-3MS-NOM-FOC you-NOM cry-PRES:CONT.DEC-3MS-NOM
 ‘WHY are you crying?’
 e. oóde-wa só-y-i
 who-FOC that-3MS-NOM
 ‘WHO is that?’

Focus in the declarative and Yes-No question constructions

In this section, focus marking variants **-wa**, **-ma**, **-máá** and **-mma** are used to express the focusing strategies in Ganta. Each of their functions is discussed in detail in the following section.

Focus by marker -wa

In the Wh- question formation, marker **-wa** is only restricted to the Wh- words in Ganta. But, in the Yes-No question, it freely moves from constituent to constituent so as to express the focused word categories in Ganta, as in (30).

- (30) a. abebe-wa há-y-a oótsts-ee-s-i
 abebe-FOC this-3MS-ACC work/do-PA-3MS-NOM
 ‘Did ABEBE do this one?’
 b. tolkkó-y wóra-ga-wa árdd-e
 hyena-NOM forest-INESS-FOC live-PRES:CONT.DEC
 ‘Does hyena live IN THE FOREST?’
 c. gúta nén-i zawá háŋ-e-s-u-wa
 tomorrow you-NOM home go-PRES:CONT.DEC-3MS-ACC-FOC
 ‘WILL you GO to home tomorrow?’

Interestingly, certain pronominal words are focused with **-wa** in the Yes-No question formation. In this case, third person singular feminine and masculine subject

pronouns are motivated by the need to express the focusing system with the marker. The other subjective personal pronouns may not take the marker. Instead, they suffix with the markers like **-mma** (see the situation in example (34) below). For the former construction, look at the following examples in (31a-c).

- (31) a. *ís-wa há-y-a dém-a-mu-s-a*
 she-FOC this-3MS-ACC find-IND-FUT-3MS-ACC
 ‘Is it SHE who will find this one?’
 b. *ís-i há-y-i-wa dém-a-m-e*
 she-NOM this-3MS-NOM-FOC find-IND-FUT-PRES:CONT.DEC
 ‘Will she find THIS ONE?’
 c. *és-i há-y-a déŋ-e-s-u-wa*
 he-NOM this-3MS-ACC find-PRES:CONT.DEC-3MS-ACC-FOC
 ‘WILL he FIND this one?’

Focus by marker -ma

The marker **-ma** is also used to focus word categories in the Yes-No questions and in the declarative sentences, as in (32a-c) and (32d-e) respectively. It mostly focuses words in rapid speech situations. In the focusing strategy, the marker is more sensitive to a postpositional word than that of object of the sentence. For example, in (32e), the focusing strategy is expressed on the postpositional word rather than object of the clause in Ganta. Look at the examples in (32) below.

- (32) a. *k’amma-ma nén-i tamaáre-so háŋ-ee-s-i*
 yesterday-FOC you-NOM school(Amharic)-PLNML go-PA-3MS-NOM
 ‘Was it YESTERDAY that you went to school?’
 b. *bártte-ma zawá fáyf-ee-s-i*
 bártte-FOC home stay-PA-3MS-NOM
 ‘Was it BÁRTTE who stayed at home?’
 c. *bártte-y zawá-ma fáyf-tt-e*
 bártte-NOM home-FOC stay-PA-PRES:CONT.DEC
 ‘Was it Bártte who stayed at HOME?’
 d. *bártte-y zawá fáyf-o-ma-yi-d-e*
 bártte-NOM home stay-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘Was it Bártte who STAYED at home?’
 e. *gáltfj-ma míttsi aḫa útt-í-s-a*
 monkey-FOC tree on/above sit-CONV-3MS-ACC
 ‘It was a MONKEY that sat down on the tree.’
 f. *gáltfj-i míttsi aḫa-ma útt-í-d-e*
 monkey-NOM tree on/above-FOC sit-CONV-PERF-PRES:CONT.DEC
 ‘A monkey sat down ON THE TREE.’

Focus with marker -máá

The marker **-máá** is used to focus word categories in the slow speech contexts in Ganta, as in (33)

- (33) a. *tolkkó-máá wóra-ga háy?-í-s-a*
 hyena-FOC forest-INSS die-CONV-3MS-ACC
 ‘It was a HYENA that died in the forest.’

- b. tolkkó-y wóra-ga-máá háy?-í-d-e
hyena-NOM forest-INSS-FOC die-CONV-PERF-PRES:CONT.DEC
'Hyena died IN THE FOREST.'
- c. tolkkó-y wóra-ga háy?-a?á-máá
hyena-NOM forest-INSS die-NEG-FOC
'Hyena WILL NOT DIE in the forest.'
- d. nén-a-máá gaayá hán-ade-s-i
you-ACC-FOC market go-PROS-3MS-NOM
'Is it YOU that will go to the market?'
- e. nén-i gaayá hám-a-máá-ni-ttam-e
you-NOM market go-IND-FOC-2SG-FUT-PRES:CONT.DEC
'WILL you GO to the market?'

Focus with marker -mma

As it has been stated in the above, the marker **-mma** is not motivated by the need to focus all subject word classes of sentences in the Yes-No question formations in Ganta. For this case, proper names including third person singular feminine and masculine personal subjective pronouns are not sensitive to take the marker. Instead, they suffix with the other marker **-wa** (look at example (31) in the above). In this case, the marker **-mma** is used to focus first and second person singular subjective pronouns, and their plural counterparts including third person plural subjective pronouns as well, as in (34a-e). But, in the declarative constructions, the marker can focus them when they occur in the object position of the sentences. Furthermore, it also marks the adverb and verb word classes in the Yes-No questions and in the declarative clauses in Ganta, as in (35a-d). Compare examples in (34) and (35) below.

- (34) a. tá-mma-ne wórg-e
I-FOC-2SG want-PRES:CONT.DEC
'Are you looking for ME?'
- b. nú-mma-se s'eéll-e
we-FOC-3MS look-PRES:CONT.DEC
'Is he looking at US?'
- c. né-mma-yisi ?uúk-k-e
you-FOC-3FM call-PRES:CONT.DEC
'Is she calling YOU?'
- d. íti-mma-se óytftj'-í-d-e
you (PL)-FOC-3MS ask-CONV-PERF-PRES:CONT.DEC
'Did he ask you?'
- e. ús-u-mma-yiti tamaár-ss-a-m-e
they-3MS-ACC-FOC-2PL student-CAUS-IND-FUT-PRES:CONT.DEC
'Will you teach THEM?'

In the following illustration (35), the marker **-mma** is suffixed on the subject, object, adverb and verb of the declarative clause and Yes-No questions.

- (35) a. tán-i dookkó-mma gá?-a?á
I-NOM dookkó-FOC call-NEG
'I will not call DOOKKÓ.'
- b. tán-i és-a-mma wórg-o-kk-oyi-n-e
I-NOM he-3MS-ACC-FOC want-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC

‘I will not WANT HIM.’

- c. gúta-mma tán-i ís-o ʔékk-aʔá
tomorrow-FOC I-NOM she-ACC take-NEG

‘I will not marry her TOMORROW.’

- d. tá-mma há-y-a oótsts-a-mu-s-a
I-FOC this-3MS-ACC work-IND-FUT-3MS-ACC

‘Is it ME/I who will do this work?’

8.2.2.3 Focus on demonstrative and directional words

As it has been reported in section (8.2.2), the focusing strategy of the demonstrative and directional words is expressed by a marker **-ba** in Ganta. In this case, the focusing system of the marker is only restricted to these words. Look at examples in (36).

- (36) a. há-ba né miísi
his-FOC your cow
‘HERE is you cow.’
b. yé-d-a-ba gáltʃtʃi
MED-PL-ACC-FOC monkey
‘THERE (down) is monkey.’
c. wó-y-a-ba íti adda
up/above-3MS-ACC-FOC your (PL) father
‘Up THERE is your father.’
d. só-y-a-ba tolkkó s'eéll-áy
that-3MS-ACC-FOC hyena look-IMPER:2SG
‘Look at! That is a hyena.’

Focus expressed by gemination

Ganta focusing strategy is also expressed by the gemination of consonant segments. In this case, the segment gemination occurs on citation form words and conceptual category marking affixes in Ganta. For the former situation, the process of entire segment gemination is expressed on the head word modifiers whereas for the latter construction, third person singular masculine nominative case and perfective markers are respectively involved for the process. For this reason, in the illustration, the researcher has used bold print letters for entirely geminated segments and hyphen (-) for the conceptual category markers. Compare example (37a-c) with (37d-f).

- (37) a. adǎó ger-idē-y
big:FOC people-PL-NOM
‘...FAMOUS people’
b. gándʒdʒé adǎó-z-ussu aáts-ts-í
stomach big:FOC-3MS:SG.PL:DEF-DAT pass-CAUS-CONV
íŋ-e-s-i síis'anatsts-u-kko
give-PRES:CONT.DEC-3MS-NOM gullet-ACC-COP:FOC
‘...It is a gullet that passes food to the BIG stomach....’
c. uddá atsts-idē-y yéé-d-í-báʔa
all:FOC man-PL-3MS:NOM come-PERF-CONV-NEG
‘ALL men did not come.’
d. wó-y-y-ga sál-a-nna
up/above-3MS-FOC-ALLA sky-IND-INST

‘...ABOVE in the sky.’

- e. muns'aáse-y-y bább-aʔá
muns'aáse-3MS-FOC fear-NEG...

‘...MUNS'AÁSE will not fear....’

- f. hí-d-d-í háŋ-inno
say-PERF-FOC-CONV go-1PL

‘...let us go in this mood !’

In the same way with that of consonant prolonging, Ganta short vowels are lengthened to express focus in a speech situation. In this case, the final vowels of the word or affix will undergo the prolonging process. Look at the following in (38).

- (38) a. álmmaa
 what:FOC
 ‘...WHAT?’
 b. mikinaát-idě-z-ii
 case (Amharic)-PL-3MS:SG.PL:DEF-NOM.FOC
 ‘...the CASES....’
 c. áamma-se oótsts-ee
 what-3MS work-PRES:CONT.DEC:FOC
 ‘What is he DOING?’
 d. háŋ-aʔá-tee
 go-NEG-1SG.FOC
 ‘I will not GO.’

Focus expressed by vowel lengthening and high tone

A high tone is used to mark for the focusing strategy in Ganta. In the process, the high tone rests on the low tone of the word syllable, on which the high tone was not previously marked. For example, in (39b), the high tone rests on the terminal low tone vowel **e** of the word **hátte** ‘**now**’. In the marking strategy, a phonological process of vowel lengthening is expressed so as to adjust the vowel sound for the focusing system. Compare example (39a) with (39b).

- (39) a. hátte muns'aáse-y-y bább-aʔá
 now muns'aáse-NOM-FOC fear-NEG
 ‘Now, ...Muns'aáse will not fear.’
 b. hátté-é muns'aáse-y-y bább-aʔá
 now-FOC muns'aáse-NOM-FOC fear-NEG
 ‘NOW, ...Muns'aáse will not fear.’

Normally, distance oriented demonstratives do not take a high tone when they occur before the high tonal head nouns in Ganta. But, in the slow attentive speech context, the high tone rests on the vowel segments of the distance oriented demonstratives in order to express the focusing situation, as in (40a-b).

- (40) a. há wóga há baáhil-idě-z-u-ssi-nne
 this:FOC culture this:FOC culture-PL-3MS:SG.PL:DEF-ACC-DAT-INCL
 ‘THIS culture, for THIS culture, ...’
 b. só máydo
 that:FOC ox
 ‘THAT ox’

Focus by word order

Ganta focusing strategy is also expressed by changing the word order of demonstratives and nouns they modify. In the process, as in (40) above, the high tone does not rest on the stems of demonstrative words. Rather, it shifts forward on the prolonged accusative case marker vowel so as to focus the modified nouns. For example, in (41), third person singular masculine accusative case is marked by the high tone so as to focus the preceding nouns **wóga** ‘culture’ and **máydo** ‘ox’ respectively in Ganta. See the following.

- (41) a. wóga ha-y-áá
 culture this-3MS-ACC:FOC
 ‘This CULTURE’
 b. máydo so-y-áá
 ox that-3MS-ACC:FOC
 ‘That OX’

8.2.3 Copula

In Ganta, copulative function can be expressed in two ways. The first function is expressed by markers, **-kko**, **-tte**, and **-ma** whereas the second role occurs with the copular verb **maák-** ‘be/become’, **hí-** ‘say’, and by existential verb **yé-** ‘exist’. Therefore, in the following part, each of such constructions is presented one by one.

8.2.3.1 Copula with -kko or -tte

In the non-verbal predicates, marker **-kko** or **-tte** play copulative role and serve as auxiliary verb in Ganta. But in other speech contexts (see focus in the above), these markers express both simultaneously, focus and copula. As result of these two functions, the term ‘**copular focus**’ which is glossed as ‘**COP:FOC**’ is used throughout this work. These markers are directly suffixed to predicate nominals, and adjectives so as to change them into grammatically verbal counterparts. In (42a-b), predicate nominals are presented to employ copula with suffixes.

- (42) a. tá áñuz-i astamaáre-kko
 my elder sister-NOM teacher (Amharic)-COP:FOC
 ‘My elder sister is a teacher.’
 b. tá áñuz-i astamaáre-tte
 my elder sister-NOM teacher (Amharic)-COP:FOC
 ‘My elder sister is a teacher.’

Predicate adjectives take copular morpheme **-kko** or **-tte** to involve in copulative role as in (43).

- (43) a. nú addá-y háta-kko
 our father-NOM short-COP:FOC
 ‘Our father is short.’
 b. nú addá-y háta-tte
 our father-NOM short-COP:FOC
 ‘Our father is short.’

In the predicate locative construction, the existential verb **yé-** ‘exist/live’ takes markers **-kko** or **-tte** in order to function as copula. Like predicate nominals and adjectives, markers do not directly suffix to predicate locatives. If the markers directly involve into suffixation to the predicate locatives, the role of markers will be changed

into focusing rather than copulating. For example, in (44a-b), the markers occur with existential verb as **yé-s-a-kko/yé-s-a-tte** in the locative predicate clauses to express copula. But in the locative predicate, the markers occur after locative markers and the existence verb is directly suffixed by converb and perfective markers respectively. In this case, the markers are involved in focusing strategy rather than verbalizing role. Compare the following examples (44) with examples of locative predicates (52-54).

- (44) a. bíra-y kiise-z-u-ga yé-s-a-kko
 money-NOM pocket-3MS:SG.PL:DEF-ACC-INESS exist-3MS-ACC-COP:FOC
 ‘Money is in the pocket.’
 b. abebe-y zawá yé-s-a-tte
 abebe-NOM home exist-3MS-ACC-COP:FOC
 ‘Abebe is in the home’.

8.2.3.2 Copula with -ma

In the conversational speech context, markers like **-kko**, **-tte** and **-ma** are used as copular verb to give assertive response. But the marker **-ma** suffixes onto first person singular masculine accusative marker **-a**. See the following

- (45) a. A: oóde-wa ibó-z-a ítʃʃ-e-s-i
 who-FOC door-3MS:SG.PL:DEF-ACC hit-PRES:CONT.DEC-3MS-NOM
 ‘Who is knocking at the door?’
 b. B: tán-kko/tán-tte/tán-a-ma
 I-COP:FOC/ I-COP:FOC/ I-ACC-COP:FOC
 ‘It is me.’

8.2.3.3 Copula with verb *maák'*- ‘be/become’ in the tense/aspect/mood

As Payne (1997: 115) reported, “the copula may inflect for tense, aspect and/or mode”. In the same manner, independent item **maák'**- ‘**be/become**’ is used to function as copular verb and inflected for series of markers like nominalizer, focus, subject marker, future tense, perfective aspect, and for present continuous and declarative marker as in (46a) and (46b) respectively.

- (46) a. és-i astamaáre maák'-o-k-oyi-ttam-e
 he-NOM teacher (Amharic) be-IND-FOC-SUBM-FUT-PRES:CONT.DEC
 ‘He will be a teacher.’
 b. tá mitʃ-att-i hákime
 my sister-3FM.SG:DEF-NOM physician (Amharic)
 maák'-o-kk-oyi-d-e
 be-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘My sister has been a physician.’

For the nearest or immediate future, copular verb **maák'**- ‘**be/become**’ is directly suffixed by infinitive marker **-oda-** and followed by series of affixes like focus, subject, imperfective, and present continuous and declarative respectively. In this combination, the final consonant becomes geminated in the copular verb root when it takes infinitive marker **-oda-** directly. See in (47)

- (47) a. ís-i astamaáre maák'k'-oda-kk-oyi-n-e
 he-NOM teacher (Amharic) be-INFI-FOC-SUBM-IMPERF-PRES:CONT.DEC
 ‘She is going to be a teacher.’

- b. s'éga-ssi gaayá-y ʔállʔo
 goat-DAT market-NOM expensive
 maák'k'-oda-kk-oyi-n-e
 be-INFI-FOC-SUBM-IMPERF-PRES:CONT.DEC
 'A goat's market is going to be an expensive.'

8.2.3.4 Copula with verb hí- 'say'

A verb root **hí-** 'say' has 'suppletive' property. It come after infinitivized copular verb **maák'k'-oda** 'to be/become' in the declarative and interrogative mood to function as grammatical verb of English '**going to be/become**'. Look at the following (48)

- (48) a. tá ítfe-y gabáre-wa maák'k'-oda
 my brother-NOM farmer(Amharic)-FOC be-INFI
 hí-n-e
 say-IMPERF-PRES:CONT.DEC
 'Is my brother going to be a farmer?'
 b. ha naʔá-y kaysó-wa maák'k'-oda hí-n-e
 this boy-NOM thief-FOC be-INFI say-IMPERF-PRES:CONT.DEC
 'Is this boy going to be a thief?'
 c. ís-i astamaäre maák'k'-oda-kko hí-n-e
 she-NOM teacher(Amharic) be-INFI-COP:FOC say-IMPERF-PRES:CONT.DEC
 'She is going to be a teacher.'

8.2.3.5 Copula with existential verb yé- 'exist/live'

As Payne (1997: 123) reported, "locational and existential constructions can be vague in some languages". But these constructions are clear in Ganta. When semantic content is held by the locational predicate, the occurrence of copular focus **-kko** or **-tte** with locational predicate is used for focusing reason (see locational predicate below). But in the case of existential verb, copular focus occurs for copular function as in (49). The copulative role of existence verb together with copular focus is also expressed under possessive clause (see possessive predicate below).

- (49) a. gawará-y s'araḃé-z-i oommo
 cat-NOM table (Amharic)-3MS:SG.PL:DEF-NOM under
 yé-s-a-kko
 exist-3MS-ACC-COP:FOC
 'A cat is under the table.'
 b. índdo-y zawá gidd-á yé-s-a-kko
 mother-NOM home inside-INESS exist-3MS-ACC-COP:FOC
 'Mother is at home.'

According to Dryer (2007), the function of copula is changing non-verbal predicates into syntactically verbal ones. The case is similar in Ganta. In the following section, copular focus **-kko** is phonologically bound as a suffix to the non-verbal predicates so as to form them into verbal forms (see non-verbal predicates).

8.2.4 Predicative morphology

Ganta predicates are discussed into two sections. The first section discusses non-verbal predicates whereas the second section analyzes verbal counterparts.

8.2.4.1 Non-verbal predicates

Ganta non-verbal predicates include adjectival, nominal, locative, possessive, genitive, purposive, ablative, and comitative. At the end of this section, numerals and quantifiers are presented as non-verbal predicates.

Adjectival predicate

In adjectival predicates, the core semantic theme is expressed by an adjective (Dryer 2007: 227). In illustration (50), adjectives **ɸazzó** ‘tall’ and **kúnʔa** ‘narrow’ are suffixed by copular focus **-kko** and also hold the main semantic contents of modified nouns as in (50a) and (50b) respectively.

- (50) a. barttó-y ɸazzó-kko
 barttó-NOM tall-COP:FOC
 ‘Barttó is tall.’
 b. ha keetstsé-y kúnʔa-kko
 this home-NOM narrow-COP:FOC
 ‘This house is narrow.’

Nominal predicate

Semantic contents are determined on nouns. For example, in (51), nouns **kaysó** ‘thief’ and **astamaäre** (Amharic) ‘teacher’ are embodied for semantic contents. The nominal predicates are suffixed by copular focus as **kaysó-kko** ‘is a thief’ and **astamaäre-kko** ‘is a teacher’.

- (51) a. és-i kaysó-kko
 he-NOM thief-COP:FOC
 ‘He is a thief.’
 b. tán-i astamaäre-kko
 I-NOM teacher (Amharic)-COP:FOC
 ‘I am a teacher.’

Locative predicate

Ganta locational predicate is expressed by locational postposition that is inflected for copular focus and followed by existential verb **yé-** ‘exist/live’. The locational postpositions **gállá** ‘on’ and **aɸá** ‘above’ carry the main semantic contents. In this case, the copular focus role is focusing rather than verbalizing. See the following (52).

- (52) a. jaató-y oydé galla-kko yé-n-e
 child-NOM bench on-COP:FOC exist-IMPERF:PRES:CONT.DEC
 ‘A child is on the bench.’
 b. addá-y bak'úlo aɸa-kko yé-s-i-d-e
 father-NOM mule on-COP:FOC exist-3MS-CONV-PERF-PRES:CONT.DEC
 ‘Father is on the (back of) mule.’

The secondary types of locational constructions are formed by using locative (inessive) markers **-á** and **-ga**. These markers are suffixed to the main semantic carrying words like **óta** ‘pot’ and **kiíse** ‘pocket’. When the process of suffixation is involved, the final vowel of the content carrying words is dropped for the inessive case **-á**, but not for the marker **-ga**. Compare (53a) and (53b) below.

- (53) a. waatstsé-y ót-á-kko yé-n-e
 water-NOM pot-INESS-COP:FOC exist-IMPERF-PRES:CONT.DEC
 ‘There is water in a pot.’

- b. bíra-y kíise-ga-kko
 money-NOM pocket(Amharic)-INESS-COP:FOC
 yé-s-a-m-e
 exist-3MS-ACC-FUT-PRES:CONT.DEC
 ‘Money will be in a pocket.’

Like locative markers, independent locative (inessive) item **giddó** ‘inside’ occurs after a noun that contains the main semantic content for the locative predicate. In the process, its final vowel is deleted and replaced by the inessive case marker **-á**, as in (54).

- (54) a. biílla-y óta gidd-á-kko yé-n-e
 drink-NOM pot inside-INESS-COP:FOC exist-IMPERF-PRES:CONT.DEC
 ‘A local drink is in a pot.’
 b. maaʔó-y saas'ine gidd-á-kko
 cloth-NOM box(Amharic) inside-INESS-COP:FOC
 yé-n-e
 exist-IMPERF-PRES:CONT.DEC
 ‘Cloth is in a box.’

Possessive predicate

In many languages, existential clause is used to express possessive predicate. The is true for Ganta when the possessor is inflected for dative. But the semantic content for the possessor rests on the existential verb **yé-** ‘**exist/live**’ which is suffixed by the copular focus, as in (55).

- (55) a. abebe-ssi bíra-y yé-s-a-kko
 abebe-DAT money-NOM exist-3MS-ACC-COP:FOC
 ‘Abebe has money.’
 b. s'éga-ssi katǰé-y yé-s-a-kko
 goat-DAT horn-NOM exist-3MS-ACC-COP:FOC
 ‘A goat has horn.’

Genitive predicate

Ganta pronominal possessive modifications are expressed by the basic pronouns **tá** ‘I’, **nú** ‘we’, **né** ‘you (singular)’, **íti** ‘you (plural)’, **é** ‘he’, **í** ‘she’, and **ú** ‘they’ whenever they come before nouns. For example, the use of **tá** ‘I’ as possessive modifier of a noun is described in (46a). It is also used as a predicate when the noun **zawá** ‘home’ is suffixed by the copular focus **-kko** onto accusative marking predicate in (56b).

- (56) a. tá ʔumma
 I head
 ‘my head’
 b. há-y-i tá keetsts-u-kko
 this-3MS-NOM I home-3MS:ACC-COP:FOC
 ‘This is my home.’

Purposive predicate

The purposive predicate occurs when copular focus **-kko** is suffixed onto infinitive marker **-oda**, as in (57).

- (57) a. ha ʃútʃtʃ-i keés's'-oda-kko
 this stone-NOM build-INFI-COP:FOC
 ‘This stone is for building.’

- b. ha s'éga-y júkk-oda-kko
 this goat-NOM slaughter-INFI-COP:FOC
 jám-utt-i-d-e
 buy-PASS-CONV-PERF-PRES:CONT.DEC
 'This goat was bought for slaughtering.'

Purposive predicate is also formed by dative marker **-ssu**. The marker is suffixed onto nominalizing vowels before accusative case in the verb stem. Copular focus comes at the end position of the augmented verb. See in (58).

- (58) a. so s'éga-y báys-o-ssu-kko
 that goat-NOM sell-NML-DAT-COP:FOC
 'That goat is for selling.'
- b. ha káwʔe-y m-íy-e-ssu-kko
 this food-NOM eat-STM-NML-DAT-COP:FOC
 'This food is for eating.'

Ablative predicate

"A predicate denoting origin" (Dryer 2007: 248) is called ablative predicate. In Ganta, this predicate is formed when the copular focus is suffixed onto the ablative marker **-ɸa**, as in (59).

- (59) a. ha áde-y ganta-ɸa-kko
 this man-NOM ganta-ABL-COP:FOC
 'This man is from Ganta.'
- b. so miiffě-y zawá-ɸa-kko
 that thing-NOM home-ABL-COP:FOC
 'That thing is from home.'

Comitative/Associative predicate

Basically, Ganta comitative predicate is developed on the objective pronoun or noun. Comitative marker **-ra** is attached with the copular focus so as to form focused comitative predicate rather than copulative one, as in (60).

- (60) a. és-i tán-a-ra-kko yé-n-e
 he-NOM I-ACC-COM-COP:FOC exist-IMPERF-PRES:CONT.DEC
 'He is with me.'
- b. nén-i kámbo-ra-kko hám-a-m-e
 you-NOM kámbo-COM-COP:FOC go-IND-FUT-PRES:CONT.DEC
 'You will go with Kámbo.'

Numerals and quantifiers as predicate

In some languages, as Dryer (2007: 247) has reported, numerals are categorized into verbal predicates. The case is opposite in Ganta. Morphologically, numerals and quantifiers are not verbs; but they can be used freely as predicates with the occurrence of copular focus. See illustrations in (61).

- (61) a. maátʃ-az-i námʔu-kko
 wives-3MS:SG.PL:DEF-NOM two-COP:FOC
 'The wives are two (in number).'
- b. é biǰ-as'-i óyddu-kko
 his girls-PL-NOM four-COP:FOC
 'His daughters are four (in number).'

- c. é gayddi lagó-kko
his cattle (PL) many-COP:FOC
'His cattle are many.'
- d. kiϕile tamaár-idě-y ʔeér-e-s-kko
class(Amharic) student (Amharic)-PL-NOM a few-MID-3MS-COP:FOC
'Class students are a few.'

8.2.4.2 Verbal predicates

Ganta verbal predicates include transitive (monotransitive, ditransitive, and semitransitive), and intransitive (zero intransitive, stative intransitive, non-stative intransitive) clauses. Each of them is presented in the following sections.

Monotransitive

Monotransitive clause consists of subject and object arguments. In this construction, Ganta object argument precedes complex verb. In (62a), complex verb **úf-** ‘**drink**’ is immediately followed by unmarked direct object **maáttsi** ‘**milk**’. The action recipient or nominated subject argument **juúro** ‘**cat**’ precedes the direct object. Ganta direct object can be marked for accusative case onto third person singular masculine and plural (feminine and masculine) definiteness marker **-(a)z-**. In (62b), complex direct object **haré** ‘**donkey**’ occurs before complex monotransitive verb root **wód-** ‘**kill**’ and suffixed by series of affixes, definite and accusative markers. The subject argument **tolkkó** ‘**hyena**’ is marked for nominative in the construction.

- (62) a. tá juúro-y maátsti úf-o-kk-oyi-d-e
my cat-NOM milk drink-IND-FOC-SUBM-PERF-PRES:CONT.DEC
'My cat drank milk.'
- b. tolkkó-y hare-z-a
hyena-NOM donkey-3MS:SG.PL:DEF-ACC
wóǵ-a-kk-oyi-d-e
kill-IND-FOC-SUBM-PERF-PRES:CONT.DEC
'A hyena killed the donkey.'

Ditransitive

Ditransitive clause contains two non subject arguments (Dryer 2007: 256). The case in Ganta shows similar situation. But indirect object is occurred with dative case while direct object remains unmarked for accusative case. See the examples (63)

- (63) a. tán-i dookkó-ssu badallá ím-a-k-oti-d-e
I-NOM dookkó-DAT maize give-IND-FOC-1SG-PERF-PRES:CONT.DEC
'I gave maize to Dookkó.'
- b. ís-i índdo-ssu kiíta óh-o-k-i-ttam-e
she-NOM mother-DAT order tell-IND-FOC-3FM-FUT-PRES:CONT.DEC
'She will tell the message to the mother.'
- c. naʔá-z-i bé mitʃo-ssu ogé
boy-3MS:SG.PL:DEF-NOM his sister-DAT road/way
bé-ss-a-kk-oyi-d-e
show-CAUS-IND-FOC-SUBM-PERF-PRES:CONT.DEC
'The boy showed a way to his sister.'

In ditransitive construction, direct object can be marked for third person singular masculine accusative case onto definite case marker. In this case, definite marker is obligatorily suffixed to the direct object as in (64).

- (64) a. tán-i índdo-ssu bíra-z-a
 I-NOM mother-DAT money-3MS:SG.PL:DEF-ACC
 ím-a-k-oti-d-e
 give-IND-FOC-PERF-PRES:CONT.DEC
 ‘I gave the money to the mother.’
- b. úsun-i mas'aáḥa-z-a jáw-ussu
 they-NOM book (Amharic)-3MS:SG.PL:DEF-ACC children-DAT
 báys-a-kk-u-d-e
 sell-IND-FOC-3PL-PERF-PRES:CONT.DEC
 ‘They sold the book to the children.’

Note: direct or indirect object can employ position change in Ganta. In the construction, direct object can immediately precede a verb, or it can also precede indirect object when indirect object precedes a verb.

Semi-transitive

Ganta semi-transitive constructions occur with cognate nominals and verbs. Series of morphemes that are used to mark for tense, mood, mode, aspect, and person are together attached after one another to noun roots so as to change this noun roots into verbal counterparts. As result of this process, the noun and the changed verb roots become similar, or in other words direct object and semi-transitive verb roots are identical. Similar characteristic is observed in Dime (2008). In (65a-d), similar roots are presented for objects and semi-transitive verbs.

- (65) a. tán-i maaʔó maáʔ-a-k-oti-d-e
 I-NOM cloth wear-IND-FOC-1SG-PERF-PRES:CONT.DEC
 ‘I wore a cloth.’
- b. ís-i biíllá biíll-a-kk-i-d-e
 she-NOM drink (local) brew-IND-FOC-3FM-PERF-PRES:CONT.DEC
 ‘She brewed local drink.’
- c. índdo-y káttsa kátsts-a-kk-oyi-ttam-e
 mother-NOM food prepare/cook-IND-FOC-SUBM-FUT-PRES:CONT.DEC
 ‘Mother will prepare food.’
- d. és-i maáttsi maátsts-a-k-osi-d-e
 he-NOM milk milk-IND-FOC-3MS-PERF-PRES:CONT.DEC
 ‘He milked milk.’

Verb roots that are similar to object roots can also employ semi-transitive clause construction without its objects in Ganta, as in (66).

- (66) a. tán-i maáʔ-a-k-oti-d-e
 I-NOM wear-IND-FOC-1SG-PERF-PRES:CONT.DEC
 ‘I wore.’
- b. ís-i biíll-a-kk-i-d-e
 she-NOM brew-IND-FOC-3FM-PERF-PRES:CONT.DEC
 ‘She brewed.’

- c. *índdo-y kátsts-a-k-oyi-ttam-e*
mother-NOM prepare-IND-FOC-SUBM-FUT-PRES:CONT.DEC
'Mother will prepare (food).'
- d. *és-i maátsts-a-k-osi-d-e*
he-NOM milk-IND-FOC-3MS-PERF-PRES:CONT.DEC
'He milked.'

Zero intransitive (Ambient)

Zero intransitive clauses do not “involve any arguments” (Dryer 2007: 267). As Dryer further explains, zero intransitive clause is typically involved to express situations like weather condition reports by a single verb in some languages. In the clause construction, non-referential third person singular forms are occurred. Similarly, the same case is observed in Ganta. But, in zero-intransitive clause, Ganta employs semantically referential third person singular forms (which is different from Dryer’s observation) on a verb to express inanimate things. This verb is suffixed by series of complex linguistic elements (indicative marker, focus, person, tense, aspect). See the example in (67).

- (67) a. *búk-a-k-osi-n-e*
rain-IND-FOC-3MS-IMPERF-PRES:CONT.DEC
'It is raining.'
- b. *moótf'-a-k-osi-d-e*
cold-IND-FOC-3MS-PERF-PRES:CONT.DEC
'It became cold.'
- c. *ϕogól-a-k-osi-n-e*
hot-IND-FOC-3MS-IMPERF-PRES:CONT.DEC
'It is getting hot (now).'

Stative intransitive

Like other languages, Ganta stative intransitive verbs denote state or process in which an argument of a verb undergoes state of change. See the following illustrations (68).

- (68) a. *burtʃuk'o-z-i*
glass(Amharic)-3MS:SG.PL:DEF-NOM
méʔ-a-kk-oyi-d-e
break-IND-FOC-SUBM-PERF-PRES:CONT.DEC
'The glass is broken.'
- b. *oótsó-y aál-a-kk-oyi-d-e*
work-NOM finish-IND-FOC-SUBM-PERF-PRES:CONT.DEC
'Work is finished.'
- c. *mítsts-az-i ʔúmbb-o-kk-oyi-d-e*
tree-3MS:SG.PL:DEF-NOM fall-IND-FOC-SUBM-PERF-PRES:CONT.DEC
'The tree has fallen.'
- d. *ára-z-i teéh-a-k-oyi-ttam-e*
butter-3MS:SG.PL:DEF-NOM melt-IND-FOC-SUBM-FUT-PRES:CONT.DEC
'The butter will melt.'

Non-stative intransitive

As it has been said, this clause consists of verbs that denote ‘event’, ‘process,’ or ‘activity’. Such verbs are also called “unergative verbs” by Foly (2007: 380). In this construction, as Foly states, a single argument acts as “causer” or “initiator”. In the same

manner, Ganta subject argument is also presented as actor of something. Look at the following examples (69)

- (69) a. tán-i hántt-a-k-oti-d-e
I-NOM walk-IND-FOC-1SG-PERF-PRES:CONT.DEC
'I walked.'
- b. naʔá-z-i wós'-a-k-osi-n-e
boy-3MS:SG.PL:DEF-NOM run-IND-FOC-3MS-IMPERF-PRES:CONT.DEC
'The boy is running.'
- c. ʃaató-z-i yeéϕ-a-k-oyi-n-e
child-3MS:SG.PL:DEF-NOM cry-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
'The child is crying.'

8.3 Complex sentence structures

In this section, Ganta clause types including complement, adverbial, and relative constructions are treated. In the last part of this section, different coordination strategies are described by using distinct conjunctions.

8.3.1 Complement

Ganta complement clause includes sentence like complement, indicative versus subjunctive sentence like complement, infinitive complement, nominalized complement, and participial complement. All of them are discussed one by one as follow.

8.3.1.1 Sentence like complement

As a rule of thumb, Noonan (2007: 59) reports that "in a sentence like complement, the predicate remains syntactically and morphologically a verb and any case marking on subjects or objects will have the same form as that in main clause". But the case cannot preclude the situations in verbal predicate respect to the main clause. In Ganta, for example, adjective **adó** 'big' is attached by copular focus **-kko** so as to function as verbal complementation in the main clause in (70). In (71), adjective **adó** 'big' remained independent word and precedes complex copular verb **maák'-be/become** which is used to replace copular focus in the sentence like complement as **áde-y adó maák'-k'-ee-s-a...** '...a man became big'. When we compare (70) and (71), third person singular masculine nominative case marker **-y** in the main clause remains identical in form to the sentence like complement in (71a). Third person masculine marker **-s-** is suffixed onto past tense marker **-ee-** on the copular verb stem **maák'-be/become**. The third person singular accusative case **-a** is occurred at the end position and it is used as subject complementizer in Ganta. Compare the following illustrations in (70) and (71).

- (70) a. áde-y adó-kko
man-NOM big-COP:FOC
'A man is big.'
- (71) a. áde-y adó maák'k'-ee-s-a
man-NOM big become-PA-3MS-ACC
ér-a-k-oti-n-e
know-IND-FOC-1SG-IMPERF-PRES:CONT.DEC
'I know that a man is big.'

8.3.1.2 Indicative versus subjunctive sentence like complement

In Ganta, indicative and subjunctive sentences differ in the morphology of verbs. But both of them can use third person singular masculine marker **-s-**. Indicative verb has occurred with different markers as in (72a), (72b), and (72c) respectively. In (72a), the verb **ámman-** ‘believe’ is suffixed by present continuous and declarative marker **-e**, but third person masculine marker **-s-** occurs in subjunctive verb stem **káys-** ‘steal’ between past **-ee-** and complementizer **-kko**. In (72b) and (72c), indicative verb has occurred with present continuous and declarative marker **-e**, masculine gender marker **-s-** and with complementizer **-i**. The interesting thing is that, when a subjunctive clause occurs within an indicative clause or occurs before an indicative verb, the complementizer **-kko** is obligatorily in the subjunctive verb, as in (72a). Otherwise, it occurs in the indicative verb stems as in (72b-c). In (72b) and (72c), nominative case marker **-i-** is used as complementizer and occurs onto masculine gender marker **-s-** in the verb stem **ammán-** ‘believe’. The subjunctive occurs in two forms. In (72a) and (72b), the verb **káys-** ‘steal’ occurs in the past form by taking past tense marker **-ee-** before third person singular masculine marker **-s-**, which occurs before copular focus **-kko**. In the final example (72c), the verb occurs with indicative marker **-a**, focus **-k-**, perfective aspect **-d-**, present continuous and declarative marker **-e** and with nominative marker **-i-**. In this example, copular focus is attached onto converb in the suppletive verb stem **hí-** ‘say’ in the final position. Compare the following examples in (72).

- (72) a. áde-z-i maátʃtɕ-att-i
man-3MS:SG.PL:DEF-NOM wife-3FM.SG:DEF-NOM
s'éga-z-a káys-ee-s-kko
goat-3MS:SG.PL:DEF-ACC steal-PA-3MS-COP:FOC
ámman-e
believe (Amharic)-PRES:CONT.DEC
'The man believes that the woman stole the goat.'
- b. áde-z-i ámman-e-s-i
man-3MS:SG.PL:DEF-NOM believe-PRES:CONT.DEC-3MS-NOM
maátʃtɕ-att-i s'éga-z-a
wife-3FM.SG:DEF-NOM goat-3MS:SG.PL:DEF-ACC
káys-ee-s-kko
steal-PA-3MS-COP:FOC
'The man believes that the woman stole the goat.'
- c. áde-z-i ámman-e-s-i
man-3MS:SG.PL:DEF-NOM believe-PRES:CONT.DEC-3MS-NOM
maátʃtɕ-att-i s'éga-z-a
wife-3FM.SG:DEF-NOM goat-3MS:SG.PL:DEF-ACC
káys-a-kk-í-d-e hí-d-í-kko
steal-IND-FOC-3FM-PERF-PRES:CONT.DEC say-PERF-CONV-COP:FOC
'The man believes that the woman stole the goat.'

8.3.1.3 Infinitive complement

In this construction, verb **wórg-** ‘want/need’ is suffixed with the series of affixes; past tense, **-ee-**, third person singular masculine **-s-**, and nominative **-i**. But infinitive marker **-oda** immediately occurs on the verb **káys-** ‘steal’ by preceding copular focus **-kko**. In this case, the infinitive complementizer **-oda** occurs in the subjunctive verb stem

(73) a. áde-z-i maátʃtʃ-att-o
man-3MS.SG.PL:DEF-NOM wife-3FM.SG:DEF-ACC
wórg-ee-s-i s'éga-z-a káys-oda-kko
want-PA-3MS-NOM goat-3MS.SG.PL:DEF-ACC steal-INFI-COP:FOC
'The man wanted the woman to steal the goat.'

Ganta nominalized complement occurs when definiteness **-(a)z-** suffixes to the nominalized verb stem by preceding accusative case marker **-a**. In this case, predicates are nominalized and become head noun of the noun phrase. Its subject of the clause takes nominative case, as in (74).

- #### 8.3.1.5 Participial complement

(75) a. nún-i udá miítʃ-e-s-i
we-NOM all lough-PRES:CONT.DEC-3MS-NOM
naʔá-z-i galla-k-unu s'eéll-í-d-e
boy-3MS:SG.PL:DEF-NOM on-FOC-1PL look-CONV-PERF-PRES:CONT.DEC
'We all looked at the laughing boy.'
b. tán-i wós's'-e-s-i tolkkó-kko
I-NOM run-PRES:CONT-3MS-NOM hyena-COP:FOC
béé-d-í-d-e
see-PERF-CONV-PERF-PRES:CONT.DEC

- ‘I saw the running hyena.’
- c. nún-i udá méʔ-ee-s-i burtʃuk'o-z-i
 we-NOM all break-PA-3MS-NOM glass (Amharic)-3MS:SG.PL:DEF-NOM
 galla-k-unu s'eáll-í-d-e
 on-FOC-1PL look-CONV-PERF-PRES:CONT.DEC
 ‘We all looked at the broken glass.’
- d. ís-i ɸás'-ee-s-i áde-z-a
 she-NOM heal-PA-3MS-NOM man-3MS:SG.PL:DEF-ACC
 wóyss-a-kk-í-d-e
 visit-IND-FOC-3FM-PERF-PRES:CONT.DEC
 ‘She visited the healed man.’
- e. és-i wos's'-ontte oolló-kko ʃǎŋ-í-d-e
 he-NOM run-NEG mule-COP:FOC buy-CONV-PERF- PRES:CONT.DEC
 ‘He bought non-running horse.’

8.3.2 Adverbial clause

As Hwang and others (2007: 237-300) have reported, “adverbial subordinate clauses can be grouped based on their word substitution strategies”. The first types of adverbial clauses are substituted by a single word (that includes time, location, and manner). The other categories of clauses cannot be substituted by a single word. Such clauses are purpose, reason, simultaneous, concessive, and substitutive. In Ganta, the former ones are described under chapter 6 (see nominal and verbal modifiers). In this section, therefore, the latter ones are presented.

8.3.2. 1 Reason

In Ganta, independent item **giʃʃá** ‘because’ is used to express reason and it is used to combine adverbial clause to the main clause. The item can be presented at the end of the reason clause by attaching itself with copular focus, **-kko** or alone. In the reason clause construction, main clause can precede or follow reason clause. In the following illustrations, subordinate clauses are occurred in the bracket. Compare examples in (76a-b) and (76c-f) respectively.

- (76) a. ís-i bább-ee-s-i [tolkkó-y só-y-i-ga
 she-NOM fear-PA-3MS-NOM hyena-NOM that-3MS-NOM-ALLA
 yé-s-ee-s-i giʃʃá-kko]
 exist-3MS-PA-3MS-NOM because-COP:FOC
 ‘She feared because there was a hyena.’
- b. és-i kaásse-z-a íntʃ-ee-s-i [bé gooba
 he-NOM playing-3MS:SG.PL:DEF-ACC win-PA-3MS-NOM his intelligent
 maák'k'-ee-s-i giʃʃá-kko]
 become-PA-3MS-NOM because-COP:FOC
 ‘He won the game because he was intelligent.’
- c. [tán-i gúta gaayá hán-e-s-i giʃʃá] zawá
 I-NOM tomorrow market go-PRES:CONT.DEC-3MS-NOM because home
 yé-s-aʔá-te
 exist-3MS-NEG-1SG
 ‘I will not be at home tomorrow because I will go to the market.’

- d. [tolkkó-y só-y-i-ga yé-s-ee-s-i
hyena-NOM that-3MS-NOM-ALLA exist-3MS-PA-3MS-NOM
gi[ʃʃá-kko] ís-i bább-ee-s-i
because-COP:FOC she-NOM fear-PA-3MS-NOM
'She feared because there was a hyena.'
- e. [bé-y gooba maákk-ee-s-i gi[ʃʃá-kko]
his-NOM intelligent become-PA-3MS-NOM because-COP:FOC
és-i kaassé-z-a íntʃ-ee-s-i
he-NOM play-3MS:SG.PL:DEF-ACC win-PA-3MS-NOM
'He won the game because he was intelligent.'
- f. tán-i gúta zawá yé-s-aʔá-te [gaayá
I-NOM tomorrow home exist-3MS-NEG-1SG market
hán-e-s-i gi[ʃʃá]
go-PRES:CONT.DEC-3MS-NOM because
'I will not be at home tomorrow because I will go to the market.'

8.3.2.2 Purpose

Ganta purpose clause is mostly expressed by infinitive marking suffixes (see more under infinitive). But like in some other languages, Ganta dative case marker **-ssi/-ssu/-issi/-ussu** carries the notion of English proposition **'for'** or **'to'** so as to express benefactive or purpose in the purpose clause, as in (77).

- (77) a. áde-z-i deré-ssi-kko oótsts-e
man-3MS:SG.PL:DEF-NOM society-DAT-COP:FOC work-PRES:CONT.DEC
'The man is working for the people.'
- b. tán-i ʃaató-z-ussu-kko ʃán-e
I-NOM boy-3MS:SG.PL:DEF-DAT-COP:FOC buy-PRES:CONT.DEC
'I am buying for the boy.'
- c. áttsi ʃaato-y árdda-ssi-kko oótsts-e
man boy-NOM life-DAT-COP:FOC work-PRES:CONT.DEC
'Human being works to live.'

Purpose clause can also be expressed by infinitive marker **-oda**. See the following illustrations in (78).

- (78) a. és-i míttsi iís's'-oda wóra-kko hán-í-d-e
he-NOM tree cut-INFI forest-COP:FOC go-CONV-PERF-PRES:CONT.DEC
'He went to the forest in order to cut a tree.'
- b. nún-i ís-o wórg-e-s-i gaayá
we-NOM she-ACC want-PRES:CONT.DEC-3MS-NOM market
bé-ss-oda-kko
show-CAUS-INFI-COP:FOC
'We want her so as to show the market.'

8.3.2.3 Simultaneous

Ganta simultaneous clause can be expressed when pluperfect marker **-u-** directly suffixes to a verb root by preceding series of suffixes, masculine gender marker **-s-** and accusative case marker **-u**. The consecutive occurrence of the markers after a clause gives the notion of subordination. These grammatical markers are used to modify a verb phrase of the entire clause. They also used to combine subordinate and main clause. The subordinate simultaneous clause is isolated with bracket in the following illustrations.

The occurrence of the accusative case marker **-u** after the masculine gender marker **-s** realizes the notion of simultaneity in the clause. In the main clause, a verb is with converb **-i-**, imperfective, **-jff-** and present continuous and declarative marker **-e**. Look at the following examples in (79a) and (79b).

- (79) a. [tán-i boobbé túkk-u-s-u] és-i badallá-kko
 I-NOM potato plant-PLPER-3MS-ACC he-NOM maize-COP:FOC
 hoód-i-jff-e
 weed-CONV-IMPERF-PRES:CONT.DEC
 ‘While I was planting potato, he was weeding maize.’

- b. [nún-i ítjtf-u-s-u] ínndo-y káw?e-kko
 we-NOM sleep-PLPER-3MS-ACC mother-NOM food-COP:FOC
 kátsts-i-jff-e
 prepare-CONV-IMPERF-PRES:CONT.DEC
 ‘When we were sleeping, mother was preparing food.’

First person singular marker **-na-** can also express simultaneity together with copular focus **-kko** in the verb, as in (80).

- (80) a. [tán-i míttsi báy?-u-s-u-na-kko] hoóke-y
 I-NOM tree split-PLPER-3MS-ACC-1SG-COP:FOC axe-NOM
 mé?-í-d-e
 break-CONV-PERF-PRES:CONT.DEC
 ‘An axe broke, when I was splitting wood.’

- b. [tán-i wós's'-u-s-u-na-kko] bíra-y
 I-NOM run-PLPER-3MS-ACC-1SG-COP:FOC money-NOM
 dǎw-í-d-e
 lose-CONV-PERF-PRES:CONT.DEC
 ‘Money lost when I was running.’

Simultaneity can also be expressed by allative marker **-ga**. Look at the following examples (81).

- (81) a. [tán-i túkke új-e-nn-i-ga]
 I-NOM coffee drink-PRES:CONT.DEC-3FM-3FM:NOM-ALLA
 ís-i wós'a-kko gaátf'-i-jff-e
 she-NOM millstone-COP:FOC grind-CONV-IMPERF-PRES:CONT.DEC
 ‘When I was drinking coffee, she was grinding.’

- b. [ís-i útt-e-nn-i-ga] yéw-áy
 she-NOM sit-PRES:CONT.DEC-3FM-NOM-ALLA com-IMPER:2SG
 ‘Come ! When she is sitting.’

8.3.2.4 Concessive

Concessive clause uses combination of morphemes in the subordinate clause. In this construction, inclusive marker **-nne** is assumed as subordinator of the construction. In (82), we can see series of affix attachments.

- (82) a. [íra-y búkk-e-s-a-kk-oyi-nne] zawá
 rain-NOM rain-PRES:CONT.DEC-3MS-ACC-FOC-SUBM-INCL home
 hám-a-k-unu-ttam-e
 go-IND-FOC-1PL-FUT-PRES:CONT.DEC
 ‘Even if it is raining, we will go to home.’

- b. [gáde-y jóʔe maák'k'-í-s-a-kk-oyi-nne] market
 land-NOM early become-CONV-3MS-ACC-FOC-SUBM-INCL gaayá
 háŋ-áy
 go-IMPER:2SG
 'Even though it was early, you would go to the market.'
- c. [ʃaato-y és-a ós's'-í-s-a-kk-oyi-nne] és-i
 child-NOM he-ACC hit-CONV-3MS-ACC-FOC-SUBM-INCL he-NOM
 ʃaató ʔeéh-a-kk-oyi-n-e
 child love-IND-FOC-SUBM-IMPERF-PRES:CONT.DEC
 'Even if a boy hits him, he loves the boy.'

8.3.2.5 Substitutive

Substitutive clause can be formed in two ways. The first way is by using prospective marker **-ade-** and ablative marker **-ɸa** on the verb root to express English equivalent meaning **'instead of'** or **'rather than'** (83a-b). The second strategy is by attaching ablative marker on the noun and nominalized verb stem. For example, in (83c), ablative marker occurs on the noun **bíra** **'money'** to express substitutive clause. But in (83d) illustration, a verb occurs two times as nominalized verb of the substitutive clause and as verb of main clause.

- (83) a. tán-i és-u-ro bíra íŋ-ade-ɸa hí-d-í
 I-NOM he-ACC-DAT money give-PROS-ABL say-PERF-CONV
 miijʃé-kko íŋ-í-d-e
 material-COP:FOC give-CONV-PERF-PRES:CONT.DEC
 'I gave him material rather than money.'
- b. tán-i zawá háŋ-ade-ɸa tamaáre-so-k-ote
 I-NOM home go-PROS-ABL school (Amharic)-PLNML-FOC-1SG
 háŋ-a-m-e
 go-IND-FUT-PRES:CONT.DEC
 'Instead of going to home, I will go to school.'
- c. nén-i és-u-ro bíra-ɸa maaʔó íŋ-áy
 you-NOM he-ACC-DAT money-ABL cloth give-IMPER:2SG
 'You give him cloth rather than money.'
- d. addá-y és-u-ro máydo ʃám-o-ɸa miís-u-kko
 father-NOM he-ACC-DAT ox buy-NML-ABL cow-ACC-COP:FOC
 ʃám-a-m-e
 buy-IND-FUT-PRES:CONT.DEC
 'Father will buy for him a cow rather than ox.'

8.3.3 Relative clause

In this section, Ganta external and free relative clauses are discussed.

8.3.3.1 External relative clause

Ganta undergoes external relative clause construction. The domain nominal, that "serves as the semantic function of identifying the domain of objects upon which the relative clause imposes a further restriction" (Andrews 2007: 208), occurs outside following the clause. In the relative clause construction (84a), the main clause (84b) verb shifts its position to the place adjective, and the adjective also changes its position to the place of the verb. Here, the past tense/perfect marker **-d-** of the main clause verb shifts to the other form **-é**, and the focus marker **-k** of the main clause verb shifts to copular focus

(86) a. [nén-a-ra deétt-ade-nn-o] múr-áwo
 you-ACC-COM meet-PROS-3FM-ACC protect-IMPER:2SG
 ‘Advise, the one (girl) who is going to meet with you.’
 b. [íti adda-y ?ékk-ee-nn-o] táá-ro íŋ-áwo
 you father-NOM take-PA-3FM-ACC I-DAT give-IMPER:2SG
 ‘Give me the thing (material) that your father has taken.’

(87) a. [addá-y k'amma és-u-ra zawá háñ-ee-s-i]
 father-NOM yesterday he-ACC-COM home go-PA-3MS-NOM
 áde-z-i háy?-o-kk-oyi-d-e
 man-3MS:SG.PL:DEF-NOM die-IND-FOC-SUBM-PERF-PRES:CONT.DEC
 'The man with whom my father went to home yesterday died.'

b. [oóratstsi maa?o maá?-e-s-i]
 new cloth wear-PRES:CONT.DEC-3MS-NOM
 na?á-z-i ?eéya-kko
 boy-3MS:SG.PL:DEF-NOM foolish-COP:FOC
 'The boy who is wearing a new cloth is foolish.'

c. [tán-i tamáre-so- ϕ a ?ékk-ee-s-i]
 I-NOM school (Amharic)-PLNML-ABL take-PA-3MS-NOM
 mašaá ϕ a-z-i ló?o-kko
 book (Amharic)-3MS:SG.PL:DEF-NOM ood-COP:FOC
 'The book which I took from the school was good.'

d. [gaayá- ϕ a jám-utt-ee-s-i] máydo-y mód ϕ o-kko
 market-ABL buy-PASS-PA-3MS-NOM ox-NOM fat-COP:FOC
 'An ox which was bought from the market is fat.'

e. [nén-i s'eéll-e-s-a] ané
 you-NOM look-PRES:CONT.DEC-3MS-3ACC where it is
 'Where is a thing that you are looking for?'

f. [so gáydd-u-ra yéé-s-e-s-a] ha-ná
 that cattle-ACC-COM come-3MS-PRES:CONT.DEC-3MS-ACC this-DIR
 gá?-áyí
 call-IMPER:2SG
 'Call that (one) who is coming with cattle.'

8.3.4 Coordination

Ganta coordination process takes place by different linguistic elements. The commonly known coordination strategies are happened by conjunctive, disjunctive, adversative, and correlative conjunctions. Conjunctive adverbs and subordinating conjunctions are also used in coordination process. Therefore, in this section, each of these coordination strategies is described one by one.

8.3.4.1 Inclusive conjunction

Ganta mostly uses inclusive marker **-nne** for coordination strategy. The marker enclitically follows both first and second words of the coordinands after third person masculine or feminine singular nominative case markers **-y(i)** when natural and accidental coordination happens. Let us see the following in (88).

- (88) a. tán-i wórg-e-s-i addá-y(i)-nne índdo-y(i)-nne
I-NOM need-PRES:CONT.DEC-3MS-NOM father-NOM-INCL mother-NOM-INCL
báʔa né-ŋkko
NEG you-COP:FOC
'I don't need father and mother. I need you.'
- b. tamá-y(i)-nne waatstsé-y(i)-nne áttsi ʃaato-ssu lóʔo-kko
fire-NOM-INCL water-NOM-INCL man boy-DAT good-COP:FOC
'Fire and water are good for human being.'
- c. nén-i háŋ-í mózze-y(i)-nne báŋa-y(i)-nne ʃáŋ-áy
you-NOM go-CONV sorghum-NOM-INCL barely-NOM-INCL buy-IMPER:2SG
'You go and buy sorghum and barely.'

But in counting numerals (one to hundred ten), marker **-nne** enclitically follows the first word of the coordinand **támm-** 'ten' after frequentative marker **-á** (refer for more information 'cardinal numbers' in chapter six). Look at (89) below.

- (89) a. támm-á-nne námʔu
ten-FREQ-INCL two
'Ten and twelve'
- b. óyddu támm-á-nne bizzó
four ten-FREQ-INCL one
'Forty and one/forty one'
- c. tántsíndde támm-á-nne tántsíndde
nine ten-FREQ-INCL nine
'Ninety and nine/ninety nine'

Like most languages, Ganta does not allow coordination with multiple coordinands. See the example below (90).

- (90) a. ís-i boobbé badallá ʃóŋkkora baŋá hí-s-í-kko
she-NOM potato maize sugarcane barely say-3MS-CONV-COP:FOC
gaayá-ɸa ʃáŋ-í-d-e
market-ABL buy-CONV-PERF-PRES:CONT.DEC
'She bought potato, maize, sugarcane and barely from the market.'
- b. límmbora dookkó bartté hí-d-í-kko tamaáre-so
límmbora dookkó bartté say-PERF-CONV-COP:FOC school-PLNML
háŋ-í-d-e
go-CONV-PERF-PRES:CONT.DEC
'Límmbora, Dookkó, and Bartté were going to school.'

8.3.4.2 Disjunctive coordination

Morpheme **woy-** occurs as prepositive bisyndesis in Ganta (91).

- (91) a. woy-abebe-ssi woy-kebede-ssi ha miifjé íŋ-áy
CO-abebe-DAT CO-kebede-DAT this material/thing give-IMPER:2SG
'Give this material for Abebe or Kebede.'
- b. woy-boobbé woy-badallá fǎŋ-áy
CO-potato CO-maize buy-IMPER:2SG
'Buy potato or maize !'
- c. tán-I woy-k'eerá woy-woggá-kko hám-a-m-e
I-NOM CO-Saturday CO-Sunday-COP:FOC go-IND-FUT-PRES:CONT.DEC
'I will go on Saturday or Sunday.'

An independent item **?áy?áye** has negative meaning that is equivalent to English word '**no**'. When it is suffixed with copular focus **-kko** as **?áy?áye-kko**, it gives literal meaning of '**if not**'. Therefore, in some speech context, this phrase serves as disjunctive coordinator when it occurs between two coordinands. See in (92).

- (92) a. ha bíra abebe-ssi ?áy?áye-kko kebede-ssi gúta
this money abebe-DAT ifnot-COP:FOC kebede-DAT tomorrow
íŋ-áy
give-IMPER:2SG
'Tomorrow, give this money to Abebe or Kebede !'

As Haspelmath (2007: 26) has reported, "interrogative disjunction occurs in an alternative question by which the addressee is asked to specify one of the alternatives in her manner". Similar to this observation, interrogative disjunction is experienced identical properties in Ganta. In this case, the interrogative disjunctive marker **-ne** suffixes to a verb not on the first or second coordinands. Focus marker **-wa** can occur at second coordinand or on both first and second coordinand question constructions. Compare (93a) with (93b).

- (93) a. úsun-i k'eerá-yisu hám-a-m-e-ne woggá-wa
they-NOM Saturday-3PL go-IND-FUT-PRES:CONT.DEC-CO Sunday-FOC
'Will they go on Saturday or Sunday?'
- b. úsun-i k'eerá-wa hám-a-m-e-ne woggá-wa
they-NOM Saturday-FOC go-IND-FUT-PRES:CONT.DEC-CO Sunday-FOC
'Will they go on Saturday or Sunday?'

Interrogative disjunction marker **-ne** involves reduplication process in the question constructions. Look at the following example (94).

- (94) a. tán-i hátte-te yéw-o-ne-ne gám?u-wa
I-NOM now-1SG come-CI-IND-CO-CO later-FOC
'Shall I come now or later?'

8.3.4.3 Adversative coordination

Morpheme **-jin** is used for adversative coordination. It enclitically occurs after first clause, as in (95).

- (95) a. nún-i udá faató zór-a-k-unu-d-e-jin
we-NOM all child advise-IND-FOC-1PL-PERF-PRES:CONT.DEC-CO
nú zóre ?ékk-í-bá?a-se
our advice take-CONV-NEG-3MS
'We all advised him, but he didn't accept our advice.'

- b. í óh-utt-e-z-i lóʔo-kko-ʃin maádd-aʔá-se
 her talk-PASS-NML-3MS:SG.PL:DEF-NO good-COP:FOC-CO help-NEG-3MS
 ‘Her talking is good, but it doesn’t help.’

8.3.4.4 Correlative coordination/Emphatic negative coordination

Negative marker **báʔa** ‘not’ occurs independently after first and second coordinands of inclusive conjunction so as to express emphatic negative coordination ‘**neither...nor**’ in Ganta (96).

- (96) a. hantstsó gaayá háŋ-ee-s-i abebe-y(i)-nne báʔa kebede-y(i)-nne
 today market go-PA-3MS-NOM abebe-NOM-INCL NEG kebede-NOM-INCL
 báʔa
 NEG
 ‘Today, neither Abebe nor Kebede went to the market.’
 b. ís-o-y(i)-nne báʔa tán-a-y(i)-nne báʔa oótso-z-a
 she-ACC-NOM-INCL NEG I-ACC-NOM-INCL NEG work-3MS:SG.PL:DEF-ACC
 oótsts-ee-s-i
 work-PA-3MS-NOM
 ‘Neither she nor I did the job.’

8.3.4.5 Conjunctive adverb

An independent item **assé** ‘also/again’ together with copular focus **-kko** functions for coordination formation in Ganta. Look at the illustration (97).

- (97) a. tán-i k’ámma háŋ-í assé hantstsó
 I-NOM yesterday go-CONV also today
 háŋ-í-k-oyi-d-e
 go-CONV-FOC-SUBM-PERF-PRES:CONT.DEC
 ‘I went yesterday and also today.’

7.3.4.6 Subordinating conjunction

Conditional marker **-kkó** occurs between indicative and copular focus markers so as to serve as subordinating conjunction. The series of such markers signal temporal sequence relationships between subordinate and main clauses. The first situation is expressed by subordinate clause in the bracket whereas the second situation is indicated by the main clause, as in (98).

- (98) a. [tán-i hám-o-kkó-kko] ís-i yéw-ade-s-i
 I-NOM go-IND-COND-COP:FOC she-NOM come-PROS-3MS-NOM
 ‘She will come after I go.’

Without involvement of copular focus, the conditional marker **-kkó** can also express the first event in the subordinate clause in Ganta. Compare (99a) with (98a)

- (99) a. [tán-i hám-o-kkó] yéw-áy
 I-NOM go-IND-COND come-IMPER:2SG
 ‘You come ! After I go.’

Pluperfect marker **-u-** also expresses succession of events when suffixed to a verb root in Ganta. It precedes focus marker **-k(k)-** that occurs before person marker. In the other speech situation, marker **-u-** also occurs before copular focus **-kko** to establish subordinating coordination. Compare these examples in (100a) and (100b-c).

- 100) a. [ʃaató-z-i ítʃtʃ-u-k-ote] zawa
child-3MS:SG.PL:DEF-NOM sleep-PLPER-FOC-1SG home
háŋ-í-d-e
go-CONV-PERF-PRES:CONT.DEC
'I went to home after the child had slept.'
- b. káwʔe-y déndd-u-kko] gáde-y
crop-NOM harvest(lit. stand up)-PLPER-COP:FOC land-NOM
góʃ-utt-í-d-e
till-PASS-CONV-PERF-PRES:CONT.DEC
'Land was tilled after crop had been harvested.'
- c. [ínndo-y gaayá háŋ-u-kko] ís-i háyʔ-ee-s-i
mother-NOM market go-PLPER-COP:FOC sheNO die-PA-3MS-NOM
'She died after mother had gone to the market.'

Marker **-ɸa** normally marks for ablative case in Ganta. But in the subordinate clause it also functions as subordinating conjunction so as to compare more than two things or persons. It occurs on the second coordinands when comparison activities happen between two or more objects. On the other hand, the marker **-ɸa** is suffixed on the second and third coordinands, not to the first coordinand when comparison takes place among three things or persons. In this case, the first coordinand is followed by nominative cases **-y(i)** that is also preceded by inclusive conjunction **-nne**. Look at examples in (101a) and (101b).

- b. zakká-y máydo-ɸa-y(i)-nne haré-ɸa-y(i)-nne adõ-kko
elephant-NOM ox-ABL-NOM-INCL donkey-ABL-NOM-INCL big-COP:FOC
'An elephant is biggest of (all) ox and donkey.'

The durative marker **-mmu** is also used to coordinate subordinate and main clauses in Ganta. It is equivalent to English word ‘**until**’. The marker occurs at the end position of subordinate verb stem after prospective marker **-ade-**, as in (102).

- b. [timírtte-y áll-ade-mmu] goóba tamaáre-y
education (Amharic)-NOM finish-PROS-DUR intelligent student (Amharic)-NOM
lóʔ-atsts-í-kko nábbab-e
good-CAUS-CONV-COP:FOC read (Amharic)-PRES:CONT.DEC
'Intelligent student studies very hard until education over.'

8.3.4.7 Comitative conjunction

- (103)a. índo-ra addá-ra
 mother-COM father-COM
 ‘Mother and father’

- b. tamá-ra waatstsé-ra
fire-COM water-COM
'Fire and water'
- c. awá-ra agúnna-ra
sun-COM moon-COM
'Sun and moon'
- d. naʔá-ra bíjǝ-ira
boy-COM girl-COM
'Boy and girl'
- e. áde-ra maátǝǝ-ira
man/husband woman/wife-COM
'Husband and wife'

8.3.4.8 Converb

As in many other languages, converb in Ganta uses as conjunctive particle, and frequently states sequences of events. For example, a sentence **addá-y ítǝǝ-ú-k-i yéé-d-e** 'She came after father had slept' has two actions. The first event **adda-y ítǝǝ-ú-k-i** 'after father had slept, she...' is constructed with converb **-ú-** and the second event is constructed with past marker **-d-** in **yéé-d-e** 'came'.

In rapid speech, converb **-í-** immediately occurs before past/perfect marker **-d-** in Ganta. Here, someone may not think as right place for converb construction. However, the construction is structured by reduction of some linguistic elements from second action stating verb. For example, in rapid speech, a sentence **k'ámma-k-i háy?-í-d-e** 'She died yesterday' has the converb marker **-í-** before the tense marker **-d-** in verb **háy?-í-d-e** 'died'. But, the final two markers in the verb stem, the past tense **-d-**, and present continuous and declarative marker **-e** are contracted from second action holder verb stem **hí-d-e** 'said' when the suppletive verb root **hí-** 'say/do' subtracts from the stem of the verb in the rapid speech situation as in sentence **k'ámma-k-i háy?-í hí-d-e** 'She died yesterday (and said)'. Here, the occurrence of converb before past tense/perfect marker never expresses meaning change. But, it simply occurs as hiatus to support the base to the marker **-d-** in the verb stem. The same formation is also expressed in Amharic (Appleyard, 2006), in which converb **-o** occurs before past marker **-all** to form base for the past tense as in /**alk'-o-all**/→/**alk'^wall**/ 'It is finished'.

9 Summary and conclusion

This study presents the phonology, morphology and syntactic description of the endangered language, Ganta. Its documentation part is presented with the ELAN software. The language is spoken by 12,789 people who live mainly in six kebeles. The total work including field trip took more than 36 months, since September 2013-October 2017.

The first chapter presents the introduction of the study including aspects of the people, life and culture. It also discusses the reason why Ganta is endangered and the purpose of documentation as well as the scope the study. Works on language death, reasons for language death and care, levels of language endangerment, concepts of phonology, morphology and syntax, and a review of previous works on Ganta are also treated. Lastly, methodological aspects including ethical issues, materials to be collected, documentation and description methods, and the project work plan are presented.

Chapter 2 deals with the phonology of Ganta. In this section, consonant phonemes and their descriptions and distributions are separately discussed before vowel phonemes. Phonotactics of consonant-consonant sequence and vowel-consonant sequence occurrences are discussed in detail before word syllable structure of nouns in Ganta. In this discussion, co-occurrence restriction of phonemes in citation form mono-morphemic words are attested in vowel phonemes rather than consonant counterparts. But, root form words can end in vowel and consonant phonemes. Any word can begin in a vowel or a consonant phoneme, except for alveolar liquid **-r** in Ganta. In consonant-consonant sequential restrictions, the rare sequence of affricate-consonant and consonant-glide occurrence is also asserted in Ganta. Phonological processes and morphophonological rules are treated before tone, by which grammatical and semantical functions of words are distinguished, in this chapter.

Noun inflection including number, gender, definiteness, and cases are treated before noun derivation in chapter 3. The Ganta number system is described with number marking affixes and with process of reduplication. Ganta also attests third person singular feminine and masculine gender marking affixes, **-nn-** and **-s-** as default gender. But the case is expressed with a single gender marking element in some Omotic languages like Sheko (Hellenthal 2010), where the cognate masculine gender marking element **-s-** is realized as default gender. In the definite construction, the two gender sensitive inflectional affixes **-(a)z-** and **-(a)tt-** are used on the nouns to mark for definiteness. Marker **-(a)z-** is used to mark for third person singular masculine and plural (feminine and masculine) nouns in Ganta. But marker **-(a)tt-** is sensitive and it is only used to mark for third person singular feminine nouns. Interestingly, Ganta applies two nominative cases **-y** or **-i**. In some cases, both of them can also occur on all singular or plural subject case nouns or noun phrases. In some Omotic languages as in Haro (Hirut 2004), cognate nominative case **-i** is conservative and it only occurred on the feminine marking word classes. It is not predictable as in Ganta. Furthermore, the marker is also used to mark for third person singular feminine sex referent in declarative construction by occurring obligatorily after focus marker **-(k)k-** or **-(t)t-** on the object, adverb and verb word classes. The other case, for example, dative case has two distinct markers **-ssi/-ssu/-issi/-ussu** and **-ro** in Ganta. The former one occurs with all object nouns whereas the latter counterpart is only used with personal pronouns. Both of them are

conservative on their occurrence. Case “hierarchy” is also asserted in Ganta. In this case, the ablative case is suffixed to inessive case so as to form elative case. Some cases occur on the postpositional (locational noun) words. For example, superessive case is formed when instrumental case marker **-nna** occurs on the postpositional words. Inessive can occur with the postpositional words. In this chapter, cognate nouns and verb roots, compound noun, noun reduplication, noun as modifier and types of nouns are also discussed. In the discussion, the formation of some compound nouns with the process of reduplication, as in **addá** ‘father’ ~ **addá adda** ‘grandfather’ is attested in Ganta.

Pronouns including personal pronouns, reflexive pronoun, and indefinite pronoun are presented in chapter 4. In this section, logophor **bé** is used to replace third person singular and plural possessive pronouns. It can equally function instead of **é** ‘his’, **í** ‘her’ and **ú** ‘their’ in Ganta.

Verb, adjective and adverb morphologies are consecutively presented in chapter 5 and 6. Verb derivations with causative, passive, reciprocal, intensive, inchoative and infinitive marking affixes are analyzed in detail in chapter 5. As it has been attested in the causative construction, some original verb roots undergo alternation in Ganta. For example, the verb root **yé-** ‘exist’ does not express the process of causativization on its root. Instead, it uses another verb root **árdd-** ‘live/exist’ to express causativization strategy in Ganta. In the description of causativization, more than eight distinct allomorphs of morpheme {s} are identified in Ganta. Sometimes the occurrences of these allomorphs are determined by the final segments of the verb roots though the case is limited to some allomorphs. Some allomorphs directly occur suffix to the verb roots, but the others employ the process of sibilant merging if the final segments of the verb roots are sibilant. In principle, inchoativization is used to derive nominal and adjectival words into verbal concepts. But in some cases, as it has been asserted, certain Ganta nouns under go inchoativization process so as to derive themselves into adjectival notion. For example, the noun **naʔá** ‘boy’ occurs with the inchoative marker **-et-** together with the third person singular masculine accusative case marker **-a** so as to change itself into its adjective counterpart **naʔéta** ‘young’. In the process, the high tone of the noun rests on the inchoative segment in the derived adjective stem. The third person singular masculine accusative case marker occurs in the final position after the inchoative marker. Verbs that are inflected for tense, aspect, mode/modality and mood are discussed before negation. Next to negation, subject agreement markings such as person, subject, and gender are also treated in this chapter. Ganta employs any subject markings for all singular or plural noun phrases. Markings **-oyi-**, **-eyi-** and **-yi-** occur on the subject of the verb stems in the clauses of different contexts. But, in some constructions like in habitual or general truth, verbs never exhibit subject or person markings. They will inflect for tense or aspect in Ganta.

Adjective and adverb morphologies are treated in chapter 6 as nominal and verbal modifiers. Adjectives that are used to modify nominals are semantically classified as large and small, medium sized and large, and large adjectives. As it has been observed, most adjectives occur in citation form in Ganta. But, some exceptional counterparts occur with complex linguistic elements. Quantificational word **ʔeere** ‘few/a few/little’ occurs with series of masculine gender **-s-** and with nominative case **-i** markers in citation form, as in **ʔeere-s-i**. But, two of the final markers occur deletion when occur with head noun, as in **ʔeere áttsi** ‘a few men’. Adjective inflection and derivation is discussed before

demonstratives. Demonstratives are presented in five categories: locational, directional, manner, recognitional and temporal. Like demonstratives, adverbs are discussed as place, direction, time, manner and frequency at the last section of chapter 6.

Interjections and ideophones are discussed in chapter 7. Following this chapter, the last chapter of the study, chapter 8, presents the syntax of Ganta. Its discussion ranges from phrase structure to the coordination. The first section of this chapter treats noun, verb, and postpositional phrases in different contexts. Word orders are discussed before focus constructions by which different word classes are described by using its distinct forms. In the focusing strategy, person and tense markings are determined by the movement of focus markers on the conceptual categories of words. The reason is that person markings occur obligatorily with focus markers. They move wherever focus marking moves. For example, if the focusing strategy is occurred with first person singular on the object and adverb conceptual categories in the future tense, the form of first person singular and the future markings will be **-ote** and **-m-** respectively. If focusing is occurred on the verb stem, first person singular and future tense markers will be **-oti** and **-ttam-**. But, when focusing strategy is occurred on a subject position word, one cannot have person marking element on the verb stem. Only the future tense marking allomorph **-mu-** or prospective aspect marker **-ade-** will be realized on the verb stem. Instead of Person marking, third person singular masculine gender marker (default gender) **-s-** occurs with the third person singular masculine accusative case **-a** after future tense or prospective aspect markers. Copula constructions are also described for nominal, adjectival, and existential verb stems in Ganta. Predicative morphology that includes non-verbal and verbal predicates are analyzed in detail. Complex sentence structures that include clauses like complement, adverbial, and relative are described before lastly discussed topic, coordination

10 References

- Akmajian, A. and Others . 2001. Linguistics. An Introduction to Language and Communication. Cambridge, Massachusetts. London, England. The MIT press.
- Aklilu Yilma.1988. The Phonology of Sheko. Unpublished MA Thesis. Addis Ababa University.
- Allan ,Edward J. .1976a. Kullo. In: Bender, M.L. (ed.). The Non-Semetic Languages of Ethiopia. 324-350.East Lansing: African Studies Center, Michigan State University.
- ,1976b. Dizi. In: Bender, M.L. (ed.). The Non-Semetic Languages of Ethiopia. 377-392.East Lansing: African Studies Center, Michigan State University.
- Alebachew Biadgie.2010. Verb Complements in Dawro-A descriptive Approach. Unpublished MA Thesis. Addis Ababa University.
- Anderson, John M. 2006. Modern Grammars of Case. Oxford Linguistics. Oxford University Press.
- Andrews, Avery D. 2007. ‘Relative Clauses’. In Shopen Timothy. (ed). Language Typology and Syntactic Description. Vol. II: Complex Constructions. Second Edition. Cambridge. CUP.
- Appleyard, D. 2006. Amharic. In Concise Encyclopedia of Languages of the World. Keith Brown and Sarah Ogilvie eds. University of London, London, UK. Elsevier Ltd.
- Ashenafi, T. and Wedekind, K. “Characteristics of Omotic Tone: Shinasha (Borna)”. Studies in African Linguistics. Vol. 21, No. 3, December, 1990 :347-366. Addis Ababa University.
- Azeb Amha. 2001. The Maale Language. PhD Dissertation. The Netherlands Research School. CNWS, Lieden University.
- “Tone_Accent and Prosodic Domains in Wolaitta”. Studies in African Linguistics. Vol. 25, No. 2. Fall 1996: 111-136. Leiden University.
- 2012. ‘Omotic’, In Frajzyngier, Zygmunt and Shay, Erin. (eds), Afroasiatic Languages. 423-504. CUP.
- Bauman, Richard and Sherzer, Joel. The Ethnography of Speaking. University of Texas, Austin, Texas 78712.
- Bausi, A. at el. (eds) .2014. Zayse and Zargulla. In: Encyclopaedia Aethiopica. 169-171. Vol. 5. Y-Z. Supplementa Addenda et Corrigenda Maps Index. Harrassowitz Verlag. Wiesbaden.
- Baye Yimam.2006. A General Description of Mao. In: ELRC Working Papers. 166-225. Vol. II. No. 2. Ethiopian Languages Research Center. Addis Ababa University.
- Bender, M.Lionel. 2000. Comparative Morphology of the Omotic Languages. LINCOM EUROPA.
- Binyam Sisay, M. 2008. Aspects of Koorete Verb Morphology. PhD Dissertation. Faculty of Humanities, Department of Linguistics and Scandinavian Studies. University of Oslo.
- Bird, Steven. “Strategies for Representing Tone in African Writing Systems”. A Critical review. May, 1998:1-33. University of Edinburgh.
- Blake, Barry J.2004. Case. Cambridge Textbooks in Linguistics. Second Edition.

- Cambridge University Press.
- Childs, G.Tucker. 2003. An Introduction to African Languages. Portland State University. John Benjamins Publishing Company. Amsterdam/Philadelphia.
- Comrie, Bernard, and Haspelmath, Martin. 2004. The Leipzig Glossing Rules: Conventions for Interlinear morpheme-by-morpheme glosses. Department of Linguistics of the MaxPlanck Institute for Evolutionary Anthropology of the University of Leipzig (Balthasar Bickel). Slightly revised version of September, 2004.
- Comrie, Bernard.1976. Aspect. Cambridge Textbooks in Linguistics. An Introduction to the Study of Verbal Aspect and Related Problems. Department of Linguistics. University of Southern California. CUP.
- 1985. Tense. Department of Linguistics. University of Southern California. CUP.
- Corbett Greville G. 2004. Cambridge Textbook in Linguistics. Number. University of Surrey. Cambridge University Press.
- 2004. 'The Russian Adjectives : A Pervasive Yet Elusive Category' in Dixon, R.M.W. and Aikhenvald Alexandra Y. (eds). Adjective Classes. (201-222). A Cross-Linguistic Typology. Explorations in Linguistic Typology. Oxford Linguistics. Research Center for Linguistic Typology La Trobe University. Oxford University Press.
- Crystal, David. 2000.Language Death.CUP.
- Crystal, David.2008. A Dictionary of Linguistics and Phonetics. ISBN:978-1-405-15296-9.
- Diessel, Holger. 1999. Demonstratives. Form, Function, and Grammaticalization. Typological Study. Studies in Language 42. John Benjamins Publishing Company. Amsterdam/Philadelphia.
- Dixon, R.M.W. 2004. 'Adjective Classes in Typological Perspective'. In Dixon, R.M.W. and Aikhenvald Alexandra Y. (eds). Adjective Classes. (1-49). A Cross-Linguistic Typology. Explorations in Linguistic Typology. Oxford Linguistics. Research Center for Linguistic Typology La Trobe University. Oxford University Press.
- 2010. Basic Linguistic Theory. The Cairns Institute James Cook University. OUP.
- Dryer, Matthew S. 2007a. 'Word Order'. In Shopen Timothy. (ed). Language Typology and Syntactic Description. 61-131. Vol. I: Clause Structure. Second Edition. Cambridge. CUP.
- 2007b. 'Noun Phrase Structure'. In Shopen Timothy. (ed). Language Typology and Syntactic Description. 151-205. Vol. II: Complex Constructions. Second Edition. Cambridge. CUP.
- 2007c. 'Clause Types'. In Shopen Timothy. (ed). Language Typology and Syntactic Description. 224-275. Vol. I: Clause Structure. Second Edition. Cambridge. CUP.
- Evan, Nicholas.2008. Review of Gippert, J.N. Himmelmann, and U.Mosel.2006. Essentials of Language Documentation. Berlin; New York: Walter de Gruyter.
- Fleming, Harold C .1976. Kefa (Gonga) Languages. In: Bender, M.L. (ed.). The Non-Semetic Languages of Ethiopia. 351-376.East Lansing: African Studies

- Center, Michigan State University.
- 1976. Omotic Overview. In: Bender, M.L.(ed.) The Non-Semitic Languages of Ethiopia, 298-323. Michigan: Michigan State University.
- Foley, William A. 2007. A Typology of Information Packaging in the Clause'. In Shopen Timothy. (ed). Language Typology and Syntactic Description. 362-446. Vol. I: Clause Structure. Second Edition. Cambridge. CUP.
- Frajzyngier, Zygmunt . 2012. 'Typological Outline of the Afroasiatic Phylum'. In Frajzyngier, Zygmunt and Shay, Erin. (eds), Afroasiatic Languages. 505-624. CUP.
- Fromkin, Victoria, Hyams, N, and Rodman, R 2009. Language. Nature, Psychology, and Grammatical Aspects. WADSWORTH. CENGAGE Learning.
- Haspelmath, Martin. 2007. 'Coordination'. In Shopen Timothy. (ed). Language Typology and Syntactic Description. 1-51. Vol. II: Complex Constructions. Second Edition. Cambridge. CUP.
- Hayward, Richard J. (eds). 1990. Omotic Language Studies. London: School of Oriental and African Studies.
- Hellenthal, Anne-Christie. 2010. A Grammar of Sheko. Published by LOT, Janskerkhof 13 3512BL Utrecht. The Netherlands.
- Hirut W/Mariam. 2004. A Grammar of Haro with comparative Notes on the Ometo Linguistic Group. PhD Project. Addis Ababa University
- 2005. Reexamining the position of Ganta in 'Lissan Journal of African Languages and Linguistics'. (160-175) Vol. XIX No. II. Addis Ababa University, Ethiopian Languages Research Center. Addis Ababa University printing press.
- Hwang ,Shin Ja J., Longacre Robert E., and Thompson Sandra A. 2007. 'Adverbial Clauses'. In Shopen Timothy. (ed). Language Typology and Syntactic Description. 237-300. Vol. II: Complex Constructions. Second Edition. Cambridge. CUP.
- Hyman, Larry. M. "Private Tone in Bantu". Symposium on Tone, ILCAA, Tokyo, December, 12-16, 2000. University of California, Berkley.
- Kroeger, Paul R. 2005. Analyzing Grammar. An Introduction. Cambridge. CUP.
- Lieber, Rochelle. 2009. Introducing Morphology. English department. University of New Hampshire.CUP.
- Lusted, Marie .1976. Anywa. In: Bender, M.L. (ed.). The Non-Semetic Languages of Ethiopia. 495-512. East Lansing: African Studies Center, Michigan State University.
- Lydall, Jean.1976. Hamer. In: Bender, M.L. (ed.). The Non-Semetic Languages of Ethiopia. 393-436. East Lansing: African Studies Center, Michigan State University.
- Lyons, Christopher.1999. Definiteness. Lecturer in Linguistics. University of Cambridge. Cambridge University Press.
- Mahider Tesfu.2003. Morphology of Malo. Unpublished MA Thesis. Addis Ababa University.
- Mous, Maarten. 2012. 'Cushetic', In Frajzyngier, Zygmunt and Shay, Erin. (eds). Afroasiatic Languages. 342-422. CUP.
- Mufwene, S.S and Vigouroux . C.B .2008. Colonization, Globalization and Language

- Vitality in Africa: An Introduction. Chicago. University of Chicago Press.
- Mufwene, S.S. 2003. Language Endangerment: What have Pride and prestige got to do with it? Chicago. University of Chicago Press.
- Mulugeta Seyoum. 2008. A Grammar of Dime. Utrecht:LOT. Netherlands Graduate School of Linguistics.
- Noonan, Michael. 2007. 'Complementation'. In Shopen Timothy. (ed). Language Typology and Syntactic Description. 52-150. Vol. II: Complex Constructions. Second Edition. Cambridge. CUP.
- Pavlík, Radoslav .2009. A Typology of Assimilations. In: SKASE Journal of Theoretical Linguistics [online]. vol. 6, no. 1 [cit. 2009-07-01]. Comenius University. Available on web page http://www.skase.sk/Volumes/JTL13/pdf_doc/01.pdf. ISSN 1339-782X.
- Payne, Thomas E.1997. Describing Morphosyntax. A guide for field linguists. University of Oregon and Sumer Institute of Linguistics. CUP.
- Payne, Thomas E. 2006. Exploring Language Structure. A student's guide. CUP.
- San, Duanmu. "Tone and Non-tone Languages: An Alternative to Language Typology and Parameters". Language and Linguistics. (2004). 5.4: 891-924. University of Michigan.
- Savà, Graziano. 2005. A Grammar of Ts'amakko. Kuschitischen Sprachstudien, 22.Cologne: Rüdiger Köppe.
- 2008-2010. Documentation of Ongota (Individual postgraduate project) Ethiopia Language family. Università degli studi di Napoli '1
- Schweikert, Walter. 2005. The Order of Propositional Phrases in the Structure of the Clause. Linguistics Today/Linguistik Aktuell. John Benjamins Publishing Company. Amsterdam/Philadelphia.
- Selema Wit Worku.2004. Morphology of Ganta. Unpublished MA Thesis. Addis Ababa University.
- Taylor, Nicholas .1994. Gamo Syntax. PhD Dissertation. University of London.
- Theil, Rolf. 2008b. (forthcoming). Koorete Segmental Phonology. University of Oslo, Norway.
- Thompson, E. David.1976. Nera. In: Bender, M.L. (ed.). The Non-Semitic Languages of Ethiopia. 484-494. East Lansing: African Studies Center, Michigan State University.
- Wondimu Gaga. 2010. Sociolinguistic Facts about the Gamo Area South Ethiopia. ARCCIKCL. Addis Ababa.
- Zaugg-Coretti, Silvia.2010. The Verbal System of Yemsa (Omotic language of Ethiopia). PhD Thesis. University of Zürich.

Appendix A. Text

Text: House building process

The process text of ‘cultural house building’ is described with its interlinear translation. The area of full stop (pause) in the text is marked by double vertical bars ||.

- (1) keetstse keés's'-oda s'úm-ee-s-a maák'-o-kko|| kóyro
 house build-INFI decide (lit. think)-PA-3MS-ACC be-NML-COP:FOC first
 allá-ssi kiidě kaaró-ssu duǵá ǵama káma-ssi s'ĩnk'k'a
 wall (lit. ground)-DAT wood roof-DAT bamboo buy cover-DAT grass
 hí-s-i ǵiǵǵ-o-k-ose wórg-uss-e||
 say-3MS-NOM collect-NML-FOC-3MS need-CAUS-PRES:CONT.DEC
 ‘If you decided to build house, firstly, it needs collecting of wall building wood, buying
 of roof building (making) bamboo and covering grass.
- (2) miiǵǵé mákko-ǵa ginddá|| keetstse hollá-z-a
 material preparation-ABL after house place-3MS:SG.PL:DEF-ACC
 baás-oda gúta-ǵa dagó gér-u-kko
 level-INFI neighbor-ABL unity people-ACC-COP:FOC
 gáǵ-utt-í baás-e-s-i||
 call-PASS-CONV prepare-PRES:CONT.DEC-3MS-NOM
 ‘After material preparation, people are called for unitary work from neighbor and level the
 surface (make complete flat) of the house building area.
- (3) baás-utt-ee hollá-z-i agúnna-ssi woy
 level-PASS-PA place-3MS:SG.PL:DEF-NOM nmoon-DAT or
 nám?u agúnna-ssi-kko saká-z-i
 two moon-DAT-COP:FOC soil-3MS:SG.PL:DEF-NOM
 wóla ǵiǵ-ade-mmu gámm?-e||
 each other agree-PROS-DUR stay-PRES:CONT.DEC
 ‘The leveled area will stay for a month or for two months until the leveled soil agree with
 each other or become strong.
- (4) hollá-z-i s'iig-ade-mmu|| keés's'-ade
 place-3MS:SG.PL:DEF-NOM strong-PROS-DUR build-PROS
 aawá-z-i duǵá ís-ka-kko bé
 owner-3MS:SG.PL:DEF-NOM bamboo cut-INFI-COP:FOC his
 gúta k'aág-í káw?o kátsts-us-í ǵékk-í
 neighbor call-CONV food prepare-CAUS-CONV take-CONV
 duǵ-áade-so há ǵ-e||
 bamboo-POSS-PLNML go-PRES:CONT.DEC
 ‘Until the leveled place become strong, the house builder goes with his neighbors to the
 owner of bamboo in order to cut; the house builder takes lunch with them.
- (5) ís-ka háǵ-ee gér-az-i iis's'-ade
 cut-INFI go-PA people-3MS:SG.PL:DEF-NOM cut-PROS máyne||
 duǵ-áade-z-i hántt-í-kko boundary
 bamboo-POSS-3MS:SG.PL:DEF-NOM walk-CONV-COP:FOC
 malát-e||
 point-PRES:CONT.DEC
 ‘Now, the owner of bamboo shows the area and the type of bamboo up to which the
 people will cut down.

- (6) híi- ϕ a ginddá-kko|| háŋ-ee gér-az-i
say-ABL after-COP:FOC go-PA people-3MS:SG.PL:DEF-NOM
iís's'-e||
cut-PRES:CONT.DEC
'Then, the gone people start cutting of bamboo.
- (7) bágga-y duǰá-z-a iís's'-u-s-u||
half-NOM bamboo-3MS:SG.PL:DEF-ACC cut-PLPER-3MS-ACC
bágga-y iís'-utt-ee-s-idě-kko bízzi
half-NOM cut-PASS-PA-3MS-PL-COP:FOC one
gallá ǰí-ǰí-í gádd-e||
on collect-CAUS-CONV put-PRES:CONT.DEC
'When half of them are cutting the bamboo, the others collect and put together the cut down bamboo.
- (8) ǰám-utt-ee duǰá-z-i iís's'-utt-í
buy-PASS-PA bamboo-3MS:SG.PL:DEF-NOM cut-PASS-CONV
aál-l-ee-s-u- ϕ a ginddá|| iís's'-ee gér-az-i
finish-CL-PA-3MS-ACC-ABL after cut-PA people-3MS:SG.PL:DEF-NOM
bé káwʔo m-úu-d-í dǎgg-í-kko béé-so
their food eat-STM-PERF-CONV leave-CONV-COP:FOC their-PLNML
háŋ-e||
go-PRES:CONT.DEC
'After finishing the cutting of bought bamboo, people eat their lunch and go back to their house.
- (9) ha oótso- ϕ a ginddá|| keetsts-áde-z-i assé dagó
this work-ABL after house-POSS-3MS:SG.PL:DEF-NOM again unitary
gáʔ-í-kko duǰá-z-a bé-y keés's'-ade
call-CONV-COP:FOC bamboo-3MS:SG.PL:DEF-ACC his-NOM build-PROS
hollá miǰf-e||
place collect-PRES:CONT.DEC
'After this job, the owner of the house again calls people for unitary help and collects bamboo to the place where house is built.
- (10) duǰá-z-i miǰf-utt-í aáll-ee-s-u- ϕ a
bamboo-3MS:SG.PL:DEF-NOM collect-PASS-CONV finish-PA-3MS-ACC-ABL
ginddá|| keés's'-ade hiillá-y bé-y és-u-nna
after build-PROS skill-NOM his-NOM he-ACC-INST
keés's'-ade money herég-utt-í kóyro gabbára-kko
build-PROS bíra agree (contract)-PASS-CONV first wall (of bamboo)-COP:FOC
ʔés-s-e||
stand-CAUS-PRES:CONT.DEC
'After collecting bamboo, the owner of the house will agree with skilled man (who is going to build the house) about payment and the man starts deep rooting of bamboo wall at the leveled area.
- (11) gabbára-y ʔéʔé-s-u- ϕ a há-ŋkk-i||
bamboo wall-NOM deep root-3MS-ACC-ABL toward-DIR-NOM
hiillá-z-i kaaró-kko gabbára gidd-á
skill-3MS:SG.PL:DEF-NOM roof-COP:FOC bamboo wall inside-INESS
átǰf-e||

start-PRES:CONT.DEC

‘After bamboo wall construction, the skilled man starts building of the upper part or roof of the house in the surrounded wall of bamboo.

- (12) kaaró-y keés's'-utt-í ĵire
roof-3MS:NOM build-PASS-CONV turn
gákk-e-nn-i-ga|| gabbáre-z-i
reach-PRES:CONT.DEC-3FM-NOM-ALLA bamboo wall-3MS:SG.PL:DEF-NOM
ginddá kiidě-kko ?é?-e-s-i||
after wood wall-COP:FOC stand-PRES:CONT.DEC-3MS-NOM

‘When roof is reached to complete before turning up, wood wall will be deep rooted at the back of bamboo wall by surrounding the previously deep rooted bamboo wall.

- (13) gabbára kiidě-y ?é?-i aáll-ee-s-u-ϕa
bamboo wall wood wall-NOM deep root-CONV finish-PA-3MS-ACC-ABL
há-ŋkk-i keetsts-áade-z-i zumá zumá
toward-DIR-NOM house-POSS-3MS:SG.PL:DEF-NOM hill hill
hántt-í-kko kaaró ĵire-ssi deré wóz-e||
walk-CONV-COP:FOC roof turn-DAT people announce/beg-PRES:CONT.DEC
‘When deep rooting of wood wall before bamboo wall is finished, the owner of the house goes to the surrounding hills and announce for help to the neighbor people so as to turn up the roof (upper part) of the house on the pole.

- (14) deré-y ĵiik'-í kaaró-z-a ĵire-s-u-ϕa
people-NOM collect-CONV roof-3MS:SG.PL:DEF-ACC turn-3MS-ACC-ABL
ginddá|| hiillá-z-i hán-í gabbára gallá gákk-ade-mmu
after skill-3MS:SG.PL:DEF-NOM go-CONV wall of bamboo on reach-PROS-DUR
kaaró-z-u-kko keés's'-e||
roof-3MS:SG.PL:DEF-ACC-COP:FOC build-PRES:CONT.DEC

‘After turning up the roof, the skilled man builds the roof until it meets to the wall of bamboo.

- (15) allá-ra kaaró-ra keés's'-utt-í aáll-ee-s-u-ϕa ginddá||
wall-COM roof-COM build-PASS-CONV finish-PA-3MS-ACC-ABL after
assé káma-ssi hará hiillá-kko herég-utt-í
again cover-DAT other skill-COP:FOC agree (contract)-PASS-CONV
kán-e-s-i||
cover-PRES:CONT.DEC-3MS-NOM

‘When building of wall and roof is finished, the owner of the house agrees contract with another skilled man in order to cover the house with grass. Then, the skilled man covers the house according to the contract.

- (16) káma-ϕa ginddá|| keetstsé giddó k'urús'a-kko
cover-ABL after house inside secret room-COP:FOC
k'urús'-utt-e-s-i||
build-PASS-PRES:CONT.DEC-3MS-NOM

‘Next to the covering with grass, secret rooms will be built with bamboo in the house.

- (17) k'urús'a-y k'urús'-utt-í aállo-kko||
secret room-NOM build-PASS-CONV finish
keetsts-áade-z-i duǰá bée-ro báys-ee
house-POSS-3MS:SG.PL:DEF-NOM bamboo his-DAT sell-PA
aawá-z-a gá?-í bóntǰ-í-kko

owner-3MS:SG.PL:DEF-ACC call-CONV respect-CONV-COP:FOC
 keetsts-a-z-u-ga gél-e|| Ganta wóga-nna
 house-EP-3MS:SG.PL:DEF-ACC-INNESS enter-PRES:CONT.DEC Ganta culture-INST
 udá ha oótso-pha ginddá-kko|| keetsts-áde-z-i
 all this process (lit. work)-ABL after-COP:FOC house-POSS-3MS:SG.PL:DEF-NOM
 arddá áykk-e
 living start (lit. catch)-PRES:CONT.DEC

‘After secret room building, the owner of the house cordially invites the owner of bamboo (the man who sold bamboo for the building) before start living in the house. Now, the owner of bamboo blesses for good opportunity and lifelong living. After all of these processes, the owner of house will start life in the newly built house in Ganta culture’.

Appendix B. Wordlist

Ganta-English word list uses such alphabets: a, b, d, d', e, g, h, i, k, k', l, m, n, o, φ, β, s, s', f, t, ts, tʃ, tʃ, u, w, y, z, 3, and ? in part 1 below. But English-Ganta wordlist uses English alphabets from a-z in part 2.

Abbreviations :

adj	adjective
adjd	adjective with derivational element
car	cardinal number
cn	compound noun
dem	demonstrative
n	noun
nd	noun with derivational element
ni	noun with inflectional element
np	noun phrase
ord	ordinal number
posp	possessive pronoun
pp	postposition
pph	postpositional phrase
pr	pronoun
prd	pronoun with derivational element
qua	quantifier
qw	question word
v	verb
vd	verb with derivational element
vn	verbal nominal

Part 1: Ganta-English

a

áala	qw what
aálo	n end/last/final
áamma	qw what
áaφunttsu	n tear
aawá	n owner
abbá	n lake
addá	adda cn grandfather (of male)
ádda	adv definite, sure
addá	inddo cn grandmother (of male)
addá	itʃe cn uncle
addá	n father
addátetsí	n fatherhood
áde	n 1. man, male; 2. husband
adó	adj big

adó	gilʔa cn thumb
álgga	n bed
allá	pph on the ground; 2. n wall, ground
allá	oommo pph underground
allálle	n problem
alláy	aφáy cn everyone, everybody, anybody
álmma	qw what
áltstso	vn finishing
álʔo	adj expensive
amántstso	vd causing to believe
ámmano	vn believing
áne	v let (us)
ángussu	n elder
ánna	qw where
ánni	qw which
áno	adj heavy
aφá	1. n sky
aφá	pp at, on, above
aφillá	n cloth
áβpa	adj silly, non-sense
ára	n butter
árbba	n Friday
arddá	n life, existence
árdo	vn living, existing
áre	bagga pph toward out
áre	galla pph outside
áre	pp out
árgube	n tobacco smoking material (small one)
assá	n energy, power
asúra	n summer
assé	adv again, also
átʃe	n sand
atʃtʃé	n tooth
átʃtʃo	vn staring, beginning
áttsi	ʔumma cn everyone
áttsi	n man
átʃtʃo	v begin
awá	n sun
awóssu	n uncle
awóstto	n aunt
áwʔe	vn yelping
áyde	qw when
ayllé	n slave

áytstsi *vn* catching
 áyʔe *v* no
 azállá *adj* inactive, weak
 azázo 1. *v* order; 2. *n* instruction

b

baadé *n* mouth
 baáso *n* leveling surface/ground
 baás'a *n* mustache
 bábbó 1. *v* fear, panic; 2. *adj* frightful
 badallá *n* maize
 bagáde *n* lake
 bágga 1. *pp* direction; 2. *n* half part of something
 bak'úlo *n* mule
 bála *n* mistake
 balé *n* threshold
 balggó *n* summer
 bálintʃo *n* testicle
 bálla *n* branch of tree
 balló *adj* bitter
 bānga *n* barely
 báwnde *n* ten birr
 báyso *v* sell
 báytstsi *n* split of wood, splitting
 bázo meḍo *cn* genital organ
 bázo *n* God
 báʔa *v* not present, not exist
 bé *posp* his, her, or their
 béga *pph* inside each other
 begiddá *pph* inside each other
 begiddóga *pph* inside each other
 bení *adv* previous
 béssí *vd* caused to look or observe
 béyo *vn* looking, seeing
 béyta *n* mark, sign
 bidó *n* food
 biiddóso *vd* causing to mock
 biillá *n* local drink
 biítʃʃi *n* urine
 biláhe *n* day time, mid-day
 billí biláhe *cn* mid-day
 bínna *n* between hot and cold
 binnó *vd* let it be warm
 bíra *n* money
 birá *pp* before
 biʃé *n* traditional art

bíʃʃatto *np* the girl
 bíʃʃi bíʃʃo *cn* grand girl (of female)
 bíʃʃo *n* girl
 bíʃte *vn* urinating
 bíʃʃi keetstse *cn* toilet
 bíʃʃi *n* urine
 bizzó *car* one
 bizz-untstsa *ord* first
 bobólʔa *n* tree species
 bógge *n* short (of cloth)
 bólla *n* father-in-law
 bólloto *n* mother-in-law
 bóne *n* winter
 bonʔk'k'á *v* kidnap, loot
 bóntʃʃo *n* leaf
 bóntʃʃo *n* respect
 boobbé *n* potato
 boodó *n* weaver
 bookó *v* dig
 boóra *n* bread (traditional)
 boósso *v* respecting
 boótsso *adjd* causing to be white
 boótsu *adj* white
 bootstsú *adjd* after being white
 boóza *adj* lazy
 boózuntté *adjd* laziness
 bóto *v* forget
 brá *pp* in front, before, previously
 bráddé *n* finger
 búka *v* hit
 búko *vn* raining
 búlo *n* type of vegetation
 búrtʃuk'o *n* glass (Amharic)
 buuló *v* digging of soil (it is act of a bull by its horn or forehead when it wants to defend another bull)
 buúra *n* common cold
 buútʃʃu *v* clearing forest for cultivation

d

daábura *adj* weak
 dábbó *n* relative
 dabbóy allágay *cn* everyone, everybody, anybody
 dábbuntté *nd* relationship
 dáddoda *vd* to weave
 dagó *n* unity

daltŋŋŋ *n* grass species
 dandáŋo 1. *vn* managing, tolerating; 2.
 be able, can
 dántŋŋŋ *n* belt like cloth (of woman)
 dárbbē *n* drum
 deemó *n* eyelash
 deéra *n* edge (of land)
 deesó *adj* heavy
 deetó *v* meet
 démbba *n* field
 demó *v* find
 dénbba *n* field
 dénddo *vn* standing up
 déŋkere *n* name of river
 dénnso *vd* raising, elevating
 déntstso *vd* cause to wake up
 derdzdzó *n* divorced man or woman
 deré *n* people
 deré ŋumma *cn* everyone, anyone
 dézgere *vn* being cool, calm
 diitstsi *n* traditional musical instrument
 dinŋó *n* backside of house
 díra *n* kraal
 dírssa *n* kraal
 díŋŋŋ *vn* growing
 dódo *v* able to eat or speak (for patient)
 dogáli maállī *cn* everyone, everybody,
 anybody
 doló *n* cassava
 dóndzdza *n* adult
 dóntstso *vd* cause to harm
 dónzza *n* adult
 dóodo *nd* being neighborhood
 doóttsu *n* neighbor
 doró atŋo *cn* meat of sheep
 doró lak'k'a *cn* kid (of sheep)
 doró *n* sheep
 dóttŋa *adv* slow
 dóŋo *vn* opening
 dóŋoda *vd* to open
 dubbúŋa *n* place where old people meet
 to discuss community's issue
 dummá *n* isolate
 dúŋa *n* piece of old cloth
 duŋá *nd* in the pieces of old cloth
 dúre *adj* rich

dúrk'a *n* big stick (used for security in
 the night)
 duŋá *n* bamboo
 duuláta *n* discussion
d
 dábó *vn* leaving, stopping
 dántstsi *n* breast
 datté *n* back
 dāwo *vn* losing, leaving
 dāwuso *vd* causing to lose, leave
 díggo *n* bed
 díilla *n* flour
 dik'áro *vn* hating, disliking, ignoring
 dísko *v* sleep
 díŋo *vn* sneezing
 dǒlle *vn* jumping
 dǒntstso *vd* cause someone to be
 childless
 dōok'ó *adj* sour
 dōssí *vd* caused to munch
e
 é *posp* his
 edzdzó *n* circle type playing material (of
 children)
 eelé *n* collected water, pool
 eeló *v* interest
 éeso *prd* his house
 eézzo *v* let be resembling in behavior
 eŋó 1.*v* marry; 2.*vn* taking
 éra 1. *n* wise; 2.*adj* wise
 éro *v* know
 es'á (Amharic) *n* chance
 ésa *prd* him
 ési *pr* he
 ésure *prd* for him
 ŋetŋére *n* rat
 etstseré *n* lizard
g
 gaále *n* camel
 gáalume *n* young male cock or monkey
 gaára *n* fourtune
 gaáte *n* servant
 gaatŋé *n* 'teff' (food type)
 gaátŋŋŋ *v* grind
 gaayá *n* market
 gaáya *n* traditional material for smoking

tobacco
 gabbára *n* wall of bamboo
 gáde *n* land, garden
 gáde ʔumma *cn* everyone, everywhere
 gadó *vn* putting
 gála *adj* between old and new
 galálʔo *n* rose, pink
 gálba *n* dusk
 gállá *n* body
 gallá *pp* at, on, above
 galmma *n* tree species
 gáltʃtʃi *n* monkey
 gálʔa *n* calf
 gammá *n* unconscious mind
 gámmʔu *adv* later
 gámʔo *adv* live (long)
 gánde *n* axe
 gandé *n* type of disease (of cattle)
 gáño *n* exile
 ganná *n* meningitis
 gánzze *n* stomach
 ganʔá *vn* insulting
 gáʔo *vn* calling
 gáɸa *n* hunger
 gaɸé *n* straw of crop
 gará *n* tree species
 garé *adj* cheap
 gármma *n* lion
 gatʃúnna *n* newly delivered woman or
 cow
 gawó *n* belly, stomach
 gáydaade *nd* owner of cattle
 gáyddi *n* cattle
 gayllé 1. *n* rib bone; 2. *vd* giving advice
 gaze *vn* walking in mass line
 gazgázo *n* ant species
 geeddáro *n* boast (negatively)
 geedáʔa 1. *n* proud; 2. *adv* slow; 3. *adj*
 weak
 geéde bágga *pph* toward back
 geéma *n* hidden (for place)
 geéʃʃi *n* clean, pure
 geeʃʃó *nd* cause to be clean
 gélá *vd* to marry
 gélo *vn* getting in
 gembbé *n* cheating (in work)

gidá bere *n* following or coming year
 giddá *pp* in, inside
 giddó bágga *pph* toward in
 giddó *pp* in, inside
 giíga *vn* agreement, concord
 giígesa *vd* enough
 giíra *n* tax
 gína *n* appropriate
 ginddá 1. *adv* latter; 2. *pp* beyond
 giʃʃá *adv* because
 gitstse *n* trouser
 góde *pp* toward there (horizontal)
 gómppa *n* structure of body
 gondálle *n* shield
 gónppa *n* structure of body
 goóba *adj* intelligent, active, brilliant
 goodó *vn* chasing
 gooɸína *n* lung
 goommá *n* baboon
 goóʃʃu *n* crazy
 goótʃtʃo *vn* pulling
 górduma *n* small fox
 gorɸína *n* lung
 górmote *n* evil eye
 gófo *n* tilling
 góʃʃá *nd* to till
 goʃʃántʃtʃa *n* farmer
 goʃʃé *n* farm land
 goyná *n* tail
 góza *n* respect, glory
 gozdá *n* traditionally made ring
 gró *n* mouse
 gúde *n* miracle
 gújjo *v* add
 gulbáto *nd* kneeling down
 gurá *n* umbilical cord
 gúrdzdzé *n* tree species
 gúta *adv* tomorrow
 gúta ɸéyʃi *adv* a day after tomorrow
 gutátetsi *nd* neighborhood
 guúle *n* cloud
 gúytstsu *vn* hitting
 guza *n* stem of ‘enset’ or false banana
h
 haasáʔa *n* speech
 hába *dem* here you are

hádursa bágga *pph* toward left
hála *n* mistake
hamó *vn* going
haná *dem* here, toward here
hantstsó *adv* today
hántta *vn* walking
hará *adj* different, another
harátto *nd* the donkey (female)
hargántstfa *n* patient
hargé *n* disease
harþþé *n* trap
háta *adj* short
háteesa *adjd* something that become
shorten

hátte *adv* now, just
hátte hátte *adv* now and then
háydzdzi *car* three
háyi *dem* this (one)
háyddi *dem* these ones
háyidzdzi támму *car* thirty
háyidzdz-untstsá *ord* third
háý?o *n* death
hazó *n* bird species
há?uzo *n* bird species
herégo *vn* payment or contract
agreement

higífa *n* evil spirit
hínkki *dem* there
hiillá *n* skill, art
hollá *n* hole
hollága *pph* in the hole
hoóde *n* wild grass
hoóke *n* axe
horó *n* gorge
horógo *adj* kind
húm?e *adj* rough
huullá *v* offend

i

í *posp* her
ibíso *v* close
íbo aaþe *pph* in front of door
ibó *n* door
ííro *vn* cutting by shape
ííso *prd* her house
iíta *adj* bad
iíteesa *adjd* something that become bad

iíttsi *v* cut
iítuté *adjd* badness
ilé *n* sound instrument (of horn)
imáttsi *n* gust, strange
imó *vn* giving
índdas'ó *nd* you females
índdo adda *cn* grandfather (of female)
índdo inddo *cn* grandmother
ins'áre *n* tongue
íns'e *vn* yelping
ínfo *vn* winning
íntfo *vn* winning
íra *n* rain
ísi *pr* she
íso *prd* her
íti addá *prd* your father
íti *posp* your (2nd person PL)
ítina *prd* you (2nd person PL)
ítini *pr* you (2nd person PL)
ítsetetsi *nd* brotherhood
itsínke *n* hair
itsó *n* plea
itstfje *vn* hitting
ítstfje *vn* sleeping
itstfj *vd* after hitting
itstfjstfj-untstsá *ord* fifth
izúppu *car* six
izúpp-untstsá *ord* sixth
izé *vn* making fine in constructing or
building something, e.g. house

k

kaaló *n* younger
kaaro *n* roof, cilling
kaassé *n* playing, game
kaáti *n* king
kaatstsé *n* testicle
kállo *adj* bare
káma *n* cover
kamó *vn* musking, covering
kaná atstfi *cn* tree species
kaná *n* dog
káfa *vn* act of watching, keeping
kaþó keetstse *cn* nest
kaþó *n* bird
káppi *adv* after a moment

kára *n* crop (which is immediately grown
 in the harvested land)
 kárdik'a *n* complex
 kardzdzé *n* new house
 karé bagga *pph* toward out
 káre *vn* cutting tree branch
 kárttsi *adj* black
 kárttsidēzi *adjd* the black ones
 kas'só *vn* rest
 katǵaade *nd* owner of horn
 katǵé *n* horn
 káttsa aaǵe *cn* cereal crop
 káttsa *n* food, crop
 káwu?e keetstse *cn* restaurant
 káw?e *n* food
 káymma *n* youth
 káymme *vn* searching
 kaysó *n* thief
 káyso *vn* act of theft
 keetstse *n* house
 keetstsuko *pph* toward house
 kellá *n* terracing
 kiidē *n* wall of wood
 kiísá (Amharic) *pph* in pocket
 kiíse (Amharic) *n* pocket
 kiíta *n* message
 kirbbé *vn* traditional dance of girls
 kiǵtté *n* dwarf
 kíte *vn* fetching
 kólme *n* meninges bone
 kóls'e *vn* protruding
 kólzza *n* unprincipled
 kónk'a *n* not straight
 kóntǵe *n* fork
 kóntǵenna *nd* with fork
 kórnise (Amharic) *n* ceiling
 kótfǵa *n* man made hole on the tree (used
 to climb)
 kúkkuro *v* vibration, shivering
 kuǵké *n* nose
 kúnsa *n* pregnant (of cow, sheep, goat)
 kún?a *adj* narrow
 kútǵe *n* hand
 kuúza *n* shadow
k'
 k'aadá *n* chance

k'aaré *n* ape
 k'aátǵe *vn* scratching
 k'ámma *adv* yesterday
 k'áne (Amharic) *n* date
 k'áne *vn* reporting (of sad issue)
 k'áǵe *n* stick with which fire is taken
 from stove
 k'ára *n* active, sharp, fast
 k'áre *adv* previous
 k'ári bere *adv* a year before last year
 k'áysse *v* cancel, isolate
 k'eerá *adv* Saturday
 k'eerá k'eerá *adv* every Saturday
 k'esé *n* elbow
 k'idē *vn* tease, mocking
 k'ílǵe *vn* preparation of garden for
 cultivation
 k'íǵo *vn* blinking
 k'irǵik'irǵe *n* ankle
 k'irtǵo *n* thin stick (used for punishment)
 k'íta *n* dirty, not tidy
 k'litǵa *adj* jock
 kodē *n* porridge
 k'olé *n* leather
 k'ollé *n* scarf like cloth (which is made
 by weavers)
 k'óltǵante *v* belch
 k'óók'e *n* blind
 k'óó?e *n* feeling or sign of disease (of
 stomach)
 k'otó *vn* hiding
 k'ótǵa *n* rust
 k'ró *n* unpleasant taste of something,
 especially residue of drinks
 k'ulbbá *n* pool
 k'úlfé (Amharic) *n* key
 k'úlfenna *nd* with key
 k'úǵo *vn* coughing
 k'urús'a *n* secrete room
 k'uúle *n* dinning material (of ceramic)
l
 láale *adj* thin
 lááǵa *adj* easy, light
 lááppu *car* seven
 láápp-untstsa *ord* seventh
 láátǵǵi *v* kissing

labbána *n* exhaustion
 lágge *n* friend
 lággetetsi *n* friendship
 laggó *qua* many
 lámmba *n* gas
 lánjk'e bágga *pph* toward side
 lánjk'k'e *n* side of something, lateral
 lánkkutfe *car* eight
 lánkutj-untstsá *ord* eighth
 láppu *car* seven
 láyttsi láyttsi *cn* every year
 láyttsi *n* year
 lépha *n* gap, pause
 liíko *adj* soft
 liipó *n* head
 looddó *n* type of disease (of pancreas)
 ló?o *adj* good
 lúkkó *n* hen
 lúkkó faato *cn* chicken

m

maadó *v* help
 maága *n* lord (traditional)
 maahé *n* serval
 maák'e *v* be/become
 maáti mas'o *cn* payment (of traditional vaccination)
 maáttsi *n* milk
 maátftji *n* women, wives
 maátftjo *n* woman, wife
 maáttsso *vn* milking
 maá?í *nd* after wearing
 maa?ó *n* cloth
 maá?o *vn* dressing, wearing
 makákara giddóttsu *cn* mid-night
 makkál?a *n* miracle
 mak'k'ó *v* persuade
 mákko *v* prepare
 malá *n* resemblance
 maláta *n* point, remark, sign
 malónttesa *adv* unlike
 mal?ó *adj* sweet
 mandára oge *cn* high way
 mánjk'k'o *adj* poor
 mánssa *n* male (of dog, cat, donkey, mule, horse)
 maratfe *n* intestine

márdzdze (Amharic) *n* poison
 mars'á *n* skirt, edge of cloth'
 martftjé *v* debate
 máta 1. *adv* soon, quickly; 2. *adj* near
 matfára *n* skirt, edge
 mátfaro *n* female (for female dog and female pack animals)
 mátssti *n* honey bee
 mátftjo *v* sexual intercourse
 maydē *n* rope type
 máydo *n* ox
 máydo-siide *n* mushroom species
 máydoza *np* the ox
 máyne *n* boundary
 meddī *vd* after creating
 médō *n* creature
 meennó *n* buffalo
 meerá *n* hough
 méhe *n* cattle, money
 mek'ó kayso *cn* grass hopper species
 ménso *n* section of ploughed land
 méntstso *vn* breaking
 metó *n* problem, challenge
 méyftji *v* biting
 mé?esa *vd* breakable
 míde *vn* twisting
 mihána *n* weaving instrument
 miik'árso *vn* insisting on (negatively)
 míisi *n* cow
 miifjé *n* property, money
 miífo *vn* collecting, put something together'
 miitftjé *vn* laughing
 millá *pp* beside
 mílle bágga *pph* toward behind
 mínne *adjd* hard
 míno *adj* strong
 mírggo *n* young ox
 mís'e *n* observation
 mijiro *n* prince
 miskáte *n* genital organ
 míjji *n* satisfaction
 mitó *vn* swallowing
 mítfo *n* sister
 mítftja 1. *v* burn; 2. *n* hot; 3. *adj* sad
 míttsi *n* tree, wood

S

S'

s'ónʔo *s' car* one
s'óntsu *vn* act of throwing (e.g. spear)
s'óólintte *n* star
s'óre *n* drought
s'óto *car* one
s'ḡá *n* muscle (of leg)
s'ugó *n* anus
s'úmo *v* suppose, think, plan
s'úns'o *vn* absorbing
s'úntso *vd* causing something to be
narrow
s'úntsu *adj* narrow
s'uúge *vn* burning
s'uússí *vd* caused to burn

$$\int$$

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fuṅkúrte (Amharic) *n* onion

fuúro *n* cat

fuútfu *n* stone

t

tá *posp* my

tamá *n* fire

támmá *adv* ten times

támmá bizzo *car* eleven

támmá haydzdzi *car* thirteen

támmánne bizzó *car* eleven

támmánne háydzdzi *car* thirteen

támmánne námʔu *car* twelve

támmu *car* ten

támm-untstsá *ord* tenth

tánara *pph* with me

táni *pr* I

tántstsínde *car* nine

tántstsínd-untstsá *ord* ninth

táy *pr* I

teéra *n* rape

térdzdze *vn* standing strongly in a place
or position while doing
something

tiíra *nd* become dark

tiiró *n* dark

tiítta *n* center of road or something

tinʔó *n* stove stone on which kittle or pot
stay for cooking

tlíma *n* last stage of land ploughing
strategy before cultivation

tolkkidě *ni* hyenas

tolkkó *n* hyena

tolkkó-uutstso *cn* vegetation species

tookó *vn* carrying

toorá *n* spear

túke *n* foot, leg

túkke *n* coffee

túña *vd* let be great

túnta *n* soft part of ‘enset’

tússí *vd* caused to plant

tússuso *vd* cause to cause plant

túfte *n* grass species

tuúmo *n* garlic

ts

tsátse *vn* standing up in line (technical
word)

tsiítso *vn* act of cutting tree (technical
word)

tsiítstsa *n* disease (of cattle)

tsotsó *n* roach

tʃ

tʃaállá *adj* old (of age)

tʃaáʃʃi *v* bray (for donkey)

tʃaátʃa *vn* roasting

tʃaátʃo *vn* harvesting

tʃamó *adj* bitter

tʃáββa *adj* wet

tʃeemá tʃeema *cn* every night

tʃeemó *n* night

tʃííta *n* early morning

tʃíntʃa *adj* wise, active, skillful

tʃololó *adj* gray

tʃóntʃu *vn* munching, eating

tʃoóʃʃu *v* vomit

tʃukó *v* cut

tʃúkkoda *vd* to cut

tʃútʃʃu *n* saliva

tʃuutʃʃé *n* louse

tʃ

tʃántʃa *n* dried leaf of ‘enset’ or false
banana

tʃéntʃe *n* fifty cents

tʃíítʃe *n* bird species

u

ú *posp* their

uddá miiʃʃé *cn* everything

uddá *qua* all

uddá wode *cn* daily, all day

udúmo *vn* embracing

ulé *n* tree species

ulúk'a *n* type of food (of maize)

uφáysi *adj* happy

úββa *adj* narrow (of house or material)

urk'k'a *n* mud

usá *adv* please

úfesa *vd* drinkable

úsi *pr* they

úʃʃu *vn* drink

úsuni *pr* they

úte *vn* sitting (down)

utʃʃé *vn* clearing dung

utʃʃi *vd* after cleaning

utúmm?a *n* food type (of ‘enset’)
 uúkkoda *vd* to call
 uúko *vn* calling
 úúso *prd* their house
 uúttsu *n* ‘enset’ or false banana
 uúze *adj* selfish
 úzze *n* young cow
 uú?o *vn* crowing (of cock)

W

waás'a *n* pair
 waatstsé *n* water
 waáye *n* challenge, difficult
 wánna (Amharic) *n* capital (of money)
 wóbbari dook'ámi *cn* everyone,
 everybody
 wóbbbe *adj* not straight
 wodé *n* time, coming year
 wódó *vn* killing
 wóga *n* tradition, culture
 woggá *n* Sunday
 woggá wogga *cn* every Sunday
 wóla *pp* each other
 wóligiddá *pph* inside each other
 wolk'k'a *n* power
 woló *n* pumpkin
 wól?a *n* disease of ‘enset’ or false
 banana
 wól?a foofu *cn* snake species
 wóndde *adv* before certain time
 wóns's'a?a *n* penis
 wóntta *n* day
 wóntta wontta *cn* every day, daily
 wónttaso *nd* in the black and dark night
 woók'a *adj* rotten
 woósa *vn* begging
 wóra *n* forest
 wórbba *n* tiger
 worddó *adj* false
 wórge *v* want, need
 wósa *n* millstone
 wotstsé *vn* running
 wóyisso *v* visit (for patient)
 woylló *v* sexual intercourse
 wóze *vn* announcing
 wózenéna *adv* please
 wozináade *nd* smart

wozíns'e *n* fly
 wudúra *n* daughter (adolescent girl)
 wúrdáa *n* case, reason
 wúrk'k'a *n* dispute
 wurt?t?é *n* bamboo branch
 wúttse *vn* bringing down

Y

yánt?tfo *n* ostrich
 yá?fi *adj* shy
 yéda *adj* free
 yee?ó *vn* crying
 yeése layitsti *n* following or coming
 year
 yegála *n* delivering cow
 yélo *v* bear
 yessá *vn* existence
 yéttsi *n* song
 yewó *vn* coming
 yoóga *n* infant, young

Z

zaáre *n* neck
 zaddá *n* rib bone
 zággó *vn* making partion
 zalbáte *n* belt
 zallá *n* secret room, which made from
 bamboo tree
 zal?ánt?tfa *n* merchant
 zal?é *n* trade
 zál?o *vn* trading
 za?á *n* stretcher
 zawá *n* home
 zawáade *nd* owner of home
 záyzare *n* sieve
 zá?a *n* crack
 zébbba *n* short wooden handle of plough
 zígine bira wode *n* a day before
 yesterday
 zígine k'amma *n* a day before yesterday
 zígine k'ari k'amma *n* two days before
 yesterday
 zígine *n* last, last time
 zímmbere *n* last year
 zoddó *n* wild animal (cat family)
 zoggá *n* bridge
 zolddó *adj* spherical shape
 zoré *n* discussion, advice

zoʔó *adj* red
 zúle *vn* feeling of disease (of stomach)
 zumá *n* hill
 zúntsu *vn* crawling
3
 záare *v* motive, interest
 zádʒdʒara *adj* greedy
 zalá *n* milk (water part)
 zándʒdʒo (Amharic) *n* name of spice
 zánɣare *n* ladder
 zánɣe *n* branch of tree
 záfʃe *vn* circulating, running
 ziilmálle *n* rotation
 ziittó inddo *cn* mother of non-orphan
 zíkko *n* type of traditional vaccination by
 which poisoned blood is let out
 ziló *adj* anger
 ziluk'a *adj* green
 zímppo *n* ring like material that can be
 put on the spear stick
 zíndʒdʒe *vn* upsetting, tempering
 zítʃʃi *n* ring
 ziʔó inddo *cn* mother of orphan
 ziʔó inddoy ziittó inddoy *cn* everyone,
 everybody
 ziʔó *n* orphan
 ziʔó faatʃʃa *cn* vegetation species
 zuúʃʃe *vn* wondering
 ʔ
 ʔaámuk'a *adj* very weak in physical
 appearance
 ʔagetstsí *n* air
 ʔák'o *n* wealth
 ʔála *n* big 'enset' or false banana
 ʔálʔo *adj* expensive
 ʔayllé *n* slave
 ʔeehá *v* love
 ʔeeló *v* interest
 ʔeemó *vn* taking
 ʔeerési *qua* little, few, a few
 ʔeesó *adv* quick
 ʔéuntté *n* foolishness
 ʔeewó *vn* bringing
 ʔéya *adj* foolish
 ʔééʔo *vn* standing up
 ʔésso 1. *vd* deep rooting; 2. *vn* causing to

boil
 ʔetʃé *n* rabbit
 ʔétʃere *n* rat
 ʔétʃerey ʔétʃerey *cn* collection of rats
 ʔiiʔó *vn* shouting
 ʔíʃa *vn* keeping crop from wild animal
 ʔúde *vn* pushing
 ʔúmbbe *vn* falling
 ʔúmma *n* head
 ʔúββa *adj* very narrow container or
 house
Part 2: English-Ganta
 a day after tomorrow gúta ʔéyʃi *adv*
 a day before yesterday zígine birá wode
n
 a day before yesterday zígine k'ámma *n*
 a year before last year k'ári bere *adv*
 able to eat or speak (for patient) dódo *v*
 absorbing s'úns'o *vn*
 accompanying móyso *vn*
 accusant mootántʃʃa *n*
 achievement ʔólo *n*
 act of cutting tree (technical word) tsiítso
vn
 act of running ʔínsse *vn*
 act of theft káyso *vn*
 act of throwing (e.g. spear) s'óntsu *vn*
 act of watching, keeping káɸa *vn*
 active, sharp, fast k'ára *n*
 add gújjo *v*
 adolescent (for boy) sabbá *n*
 adult dóndzdza *n*
 adult dónzza *n*
 after a moment káɸɸi *adv*
 after being white bootstsú *adjd*
 after cleaning utʃʃi *vd*
 after creating meddǎ *vd*
 after hitting itʃʃi *vd*
 after wearing maáʔi *nd*
 again assé *adv*
 agreement giíga *vn*
 air ʔagetstsí *n*
 all uddá *qua*
 anger ziló *adj*
 animal species ʔízʔo *n*
 ankle k'írɸik'írɸe *n*

announce wóze *n*
 ant species gazgázo *n*
 anus s'ugó *n*
 ape k'aaré *n*
 appropriate gína *n*
 at, on, above aḥá *pp*
 at, on, above gallá *pp*
 aunt awóstto *n*
 axe gánde *n*
 axe hoóke *n*
 baboon goommá *n*
 baby, infant, child, son, boy jaató *n*
 back dǎtté *n*
 backside of house dinʔó *n*
 bad iíta *adj*
 badness iítuté *adjd*
 bamboo duṣá *n*
 bamboo branch wurtʃtʃé *n*
 bare kállo *adj*
 barely bǎnga *n*
 be able, can danddáʔo *vn*
 be/become maák'e *v*
 bearing yélo *vn*
 because giṣṣǎ *adv*
 become dark tiíra *nd*
 bed álga *n*
 bed díggo *n*
 before birá *pp*
 before certain time wóndde *adv*
 begging woósa *vn*
 beginning, starting áttʃo *vn*
 being cool, calm dézgere *v*
 being neighborhood dóodo *nd*
 belching k'óltʃante *vn*
 believing ámmo *vn*
 belly, stomach gawó *n*
 belt like cloth (of woman) dántʃtʃo *n*
 belt zalbáte *n*
 bench oydé *n*
 beside millá *pp*
 between hot and cold bínna *adj*
 between old and new gála *adj*
 beyond ginddá *pp*
 big 'enset' or false banana ʔála *n*
 big adó *adj*
 big stick (used for security in the night)

dúrk'a *n*
 bird kaḥó *n*
 bird species hazó *n*
 bird species háʔuzo *n*
 bird species pílloso *n*
 bird species tʃiitʃé *n*
 biting méytʃtʃi *vn*
 bitter balló *adj*
 bitter tʃámó *adj*
 black kárttsi *adj*
 blind k'óók'e *n*
 blinking k'íṣo *vn*
 blood suúttsu *n*
 blue samáye (Amharic) *adj*
 boast (negatively) geeddáro *n*
 body gállá *n*
 boiled ḥéntta *vd*
 boundary máyne *n*
 boy naʔá *n*
 branch of tree bálla *n*
 branch of tree zǎnge *n*
 braying (for donkey) tʃááṣṣi *vn*
 bread (traditional) boóra *n*
 breaking méntso *vn*
 breakable méʔesa *vd*
 breakfast nertʃtʃé *n*
 breast dánttsi *n*
 bridge zoggá *n*
 bringing down wúttse *vn*
 bringing ʔeewó *vn*
 brotherhood ítʃetetsi *nd*
 buffalo meennó *n*
 burn mítʃtʃa *v*
 burn suúge *v*
 butter ára *n*
 butterfly ḥriḥíttsi *n*
 buying ʃámó *vn*
 calf gálʔa *n*
 calling uukó *vn*
 camel gaále *n*
 cancel, isolate k'áysse *v*
 capital (of money) wánna (Amharic) *n*
 carrying material okalé *n*
 carrying tookó *vn*
 case, reason wúrdde *n*
 cassava doló *n*

cat juúro *n*
 catching áytstsi *vn*
 cattle gáyddi *n*
 cattle, money méhe *n*
 someone to be childless dǒntstso
 vd
 cause to be clean geejǒ *nd*
 cause to cause plant tússuso *vd*
 cause to cause wash jójǒuso *vd*
 cause to eat múuso *vd*
 cause to harm dǒntstso *vd*
 cause to wake up déntstso *vd*
 caused to burn s'uússi *vd*
 caused to look or observe béssi *vd*
 caused to munch dǒssi *vd*
 caused to plant tússi *vd*
 caused to wash jójǒi *vd*
 causing something to be narrow s'úntso
 vd
 causing to be white boóttso *adjd*
 causing to believe amántstso *vd*
 causing to lose dǎwuso *vd*
 ceiling kórniise (Amharic) *n*
 center of road or something tiitta *n*
 cereal crop káttsa aaǒe *cn*
 challenge, difficult waáye *n*
 chameleon mórtstsimóllo *n*
 chance es'á (Amharic) *n*
 chance k'aadá *n*
 chasing goodó *vn*
 cheap garé *adj*
 cheating (in work) gemmbé *n*
 cheek jagála *n*
 chicken lúkko jaato *cn*
 childhood jaátuntté *n*
 children fǎwu *n*
 circle type playing material (of children)
 edzdzó *n*
 circulating, running zájǒe *vn*
 clean geejǒi *n*
 clearing dung útǒjǒ *vn*
 clearing forest for cultivation buútǒjǒ *v*
 closing ibís'o *vn*
 cloth aǒillá *n*
 cloth maaǒó *n*
 cloud guúle *n*

coffee túkke *n*
 collect, put something together miǒǒo *v*
 collected water, pool eelé *n*
 collecting jǒǒo *vn*
 collecting miǒo *vn*
 collection of rats ǒétǒerey ǒétǒerey *cn*
 coming yewó *vn*
 common cold buúra *n*
 complex kárdik'a *n*
 concord giíga *vn*
 coughing k'uǒé *vn*
 cover káma *n*
 cow miísi *n*
 crack záǒa *n*
 crawling zúntsu *vn*
 crazy goóǒfu *n*
 creature méǒo *n*
 crop (which is immediately grown in the
 harvested land) kára *n*
 crowing (of cock) uúǒo *vn*
 crying yeeǒó *vn*
 curing ǒátstso *vn*
 cutting ǒǒukó *vn*
 cutting iǒtstsi *vn*
 cutting by shape iíro *vn*
 cutting tree branch káre *vn*
 daily, all day uddá wóde *cn*
 dark tiiró *n*
 date k'ane (Amharic) *n*
 daughter (adolescent girl) wudúra *n*
 day time, mid-day biláhe *n*
 day wóntta *n*
 death háyǒo *n*
 debate martǒǒǒé *n*
 deep rooting ǒéssso *vd*
 definite, sure ádda *adv*
 delivering cow yegála *n*
 diarrhea moodǒ *n*
 different, another hará *adj*
 diffusing muúǒo *vn*
 digging bookó *vn*
 dinning material(of ceramic) kuúle *n*
 direction bágga *pp*
 dirty, not tidy k'íta *n*
 discussion duuláta *n*
 discussion, advice zoré *n*

disease (of bone) joófu maata *cn*
 disease (of cattle) tsiitstsa *n*
 disease hargé *n*
 disease of 'enset' or false banana wólʔa
n
 dispute wúrk'k'a *n*
 divorced man or woman derdzdzó *n*
 dog kaná *n*
 door ibó *n*
 down (ward) súle *pp*
 dressing, wearing maáʔo *vn*
 dried leaf of 'enset' or false banana
 tʃántʃa *n*
 drinking úʃʃu *vn*
 drinkable úfesa *vd*
 dropping ólo *vn*
 drought s'óre *n*
 drum dárbbé *n*
 dung ofá *n*
 dusk gálbba *n*
 dusk siíʃa *n*
 dwarf kiʃtté *n*
 each other wóla *pr*
 early morning tʃíita *n*
 easy, light laáʃa *adj*
 eating míye *vn*
 edge (of land) deéra *n*
 eight lánkkutʃe *car*
 eighth lánkkutʃ-untstsa *ord*
 elbow k'esé *n*
 elder áṇussu *n*
 eleven támmá bizzo *car*
 eleven támmánne bizzó *car*
 embracing udúmo *vn*
 energy, power as's'a *n*
 enough giígesa *vd*
 erecting s'índdo *vn*
 'enset' or false banana uúttsu *n*
 every day, daily wóntta wontta *cn*
 every morning jóʔe jóʔe *cn*
 every night tʃeemá tʃeema *cn*
 every Saturday k'eerá k'eera *adv*
 every Sunday woggá wogga *cn*
 every year láyitstsi láyitstsi *cn*
 everyone átsi ʔumma *cn*
 everyone, many people deré

ʔumma *cn*
 everyone, everybody alláy aʃáy *cn*
 everyone, everybody dabbóy allágay *cn*
 everyone, everybody dogáli maállí *cn*
 everyone, everybody wóbbari dook'ámi
cn
 everyone, everybody ziʔó índdoy ziittó
 índdoy *cn*
 everyone, everywhere gáde ʔumma *cn*
 everything udá miiʃʃé *cn*
 everywhere, everyone saká mayne *cn*
 everywhere, everyone saló mayne *cn*
 evil eye górmote *n*
 evil spirit higíʃa *n*
 exam ʃaatʃé *n*
 exhaustion labbána *n*
 exile gáṇo *n*
 existence yessá *vn*
 expensive álʔo *adj*
 expensive ʔálʔo *adj*
 eyelash deemó *n*
 face, fore head sinó *n*
 falling ʔumbbe *vn*
 false worddó *adj*
 farm land goʃʃé *n*
 farmer goʃʃántʃa *n*
 fat (beef) moódé *n*
 fat módódo *adj*
 fat órdde *adj*
 father addá *n*
 fatherhood addátetsí *n*
 father-in-law bólla *n*
 fear, panic bábbó *v*
 feeling of disease (of stomach) zúle *vn*
 feeling or sign of disease (of stomach)
 k'oóʔe *n*
 female (for female dog and female pack
 animals) mátʃaro *n*
 fetching kíte *vn*
 field démbba *n*
 field dénbba *n*
 fifth itʃtʃitʃ-untstsa *ord*
 fifty cents tʃéntʃe *n*
 find demó *n*
 finger biráddé *n*
 finishing áltstso *vn*

finishing, end, last *aálo vn*
 fire *tamá n*
 first bizz-untstsá *ord*
 fish *moló n*
 flour *diílla n*
 fly *wozíns'e n*
 following or coming year *gidá bere n*
 following or coming year *yeése layitstsi n*
 food *bidǒ n*
 food *káwʔe n*
 food type (of ‘enset’) *utúmmʔa n*
 food, crop *kátstsa n*
 foolish *ʔeéya adj*
 foolishness *ʔeéyuntté n*
 foot, leg *túke n*
 for him *ésuro prd*
 forest *wóra n*
 forgetting *bóto vn*
 fork *kóntʃe n*
 fortune *gaára n*
 four *óyddu car*
 fourth *óydd-untstsá ord*
 free *yéda adj*
 Friday *árbba n*
 friend *lágge n*
 friendship *lággetetsi n*
 from river *ʃoóraʃa pp*
 gap, pause *léʃa n*
 garlic *tuúmo n*
 gas *lámmba n*
 genital organ *bázo meʃo cn*
 genital organ *miskáte n*
 germinating *múʔo vn*
 getting in *gélo vn*
 girl *biʃʃó n*
 giving *imó vn*
 giving advice *gayllé vd*
 glass (Amharic) *búrtʃuk'o n*
 goat *s'éga n*
 God *bázo n*
 going *hamó vn*
 good *lóʔo adj*
 gorge *horó n*
 grand boy (of male) *naʔá naʔa cn*
 grand girl (of female) *biʃʃi biʃʃo cn*

grandfather (of female) índdo adda *cn*
 grandfather (of male) addá adda *cn*
 grandmother (of male) addá inddo *cn*
 grandmother inddo inddo *cn*
 grandson jaató jaato *cn*
 grass hopper species mek'ó kayso *cn*
 grass oóye *n*
 grass species daltʃtʃó *n*
 grass species túʃte *n*
 gray tʃololó *adj*
 greedy zádzdzara *adj*
 green ziluk'á *adj*
 grinding gaátʃte *vn*
 growing díʃtʃo *vn*
 guest, strange moózo *n*
 gust, strange imátstsi *n*
 hair itsínke *n*
 half part of something *n* báɡga
 hand kútʃe *n*
 happy uʃáyisi *adj*
 hard mínne *adjd*
 hard s'iigó *adj*
 harvesting tʃáatʃo *vn*
 hate, dislike, ignore dík'áro *v*
 he ési *pr*
 head liiʃó *n*
 head ʔúmma *n*
 hearing síye *vn*
 heavy áno *adj*
 heavy dees'ó *adj*
 helping maadó *vn*
 hen lúkko *n*
 her í *posp*
 her house íiso *prd*
 her íso *prd*
 here haná *dem*
 here you are hába *dem*
 hidden (for place) geéma *n*
 hiding k'otó *vn*
 hill zumá *n*
 high way mandára oge *cn*
 him ésa *prd*
 his é *posp*
 his house ééso *prd*
 his, her, or their bé *posp*
 hitting búka *vn*

hitting itſtſé <i>vn</i>	key k'úlfe (Amharic) <i>n</i>
hitting gúytstsu <i>vn</i>	kid (of sheep) doró lak'k'a <i>cn</i>
hockey ſinnó <i>n</i>	kidnap, loot bonk'k'á <i>v</i>
hole hollá <i>n</i>	killing wódo <i>vn</i>
home zawá <i>n</i>	kind horógo <i>adj</i>
honey bee máttsi <i>n</i>	king kaáti <i>n</i>
horizon of mountain odzdódzo <i>n</i>	kissing laátſi <i>vn</i>
horn katſé <i>n</i>	kneeling down gulbáto <i>nd</i>
horse oolló <i>n</i>	know éro <i>v</i>
hot mītſſa <i>n</i>	kraal díra <i>n</i>
hough meerá <i>n</i>	kraal dírssa <i>n</i>
house keetstse <i>n</i>	ladder zángare <i>n</i>
huge in physical appearance ózge <i>n</i>	lake abbá <i>n</i>
hundred s'eéti <i>car</i>	lake bagáde <i>n</i>
hunger gáſa <i>n</i>	land, garden gáde <i>n</i>
hyena tolkkó <i>n</i>	larynx sís'anáttsi <i>n</i>
hyenas tolkkidě <i>ni</i>	last stage of land ploughing strategy before cultivation tlíma <i>n</i>
I táni <i>pr</i>	last year zímmbere <i>n</i>
I táy <i>pr</i>	last, last time zígine <i>n</i>
in front of door íbo aaſe <i>pph</i>	later gámm?u <i>adv</i>
in front, before, previously brá <i>pp</i>	latter ginddá <i>adv</i>
in need of something (nostalgia) móoso <i>adj</i>	laughing miitſſé <i>vn</i>
in pocket kíisá (Amharic) <i>pph</i>	laying (egg) ſuuſílló <i>vn</i>
in the black and dark night wónttaso <i>nd</i>	laziness boózuntté <i>adjd</i>
in the hole hollága <i>pph</i>	lazy boóza <i>adj</i>
in the pieces of old cloth duná <i>nd</i>	leaf bóntſſſo <i>n</i>
in, inside giddá <i>pp</i>	leather k'olé <i>n</i>
in, inside giddó <i>pp</i>	leaving, stopping dábó <i>v</i>
inactive, weak azállá <i>adj</i>	let (us) áne <i>v</i>
infant, young yoóga <i>n</i>	let be great túſa <i>vd</i>
inside each other wóligiddá <i>pph</i>	let be resembling in behavior eézzo <i>v</i>
inside each other béga <i>pph</i>	let it be warm binnó <i>vd</i>
inside each other begiddá <i>pph</i>	leveling surface baáso <i>vn</i>
inside each other begiddóga <i>pph</i>	life ſenppó/ſemppó <i>n</i>
insisting on (negatively) miikárso <i>vn</i>	life, existence arddá <i>n</i>
insulting gan?á <i>vn</i>	lion gármma <i>n</i>
intelligent, active, brilliant goóba <i>adj</i>	little, few, a few s'ik'k'ési <i>qua</i>
interest ſeeló <i>v</i>	little, few, a few ſeerési <i>qua</i>
intestine marátſe <i>n</i>	live (long) gám?o <i>adv</i>
isolate dummá <i>n</i>	living, existing árdó <i>vn</i>
issue, talking, speaking óhe <i>vn</i>	lizard etstseré <i>n</i>
jealous salé <i>adj</i>	local drink biillá <i>n</i>
jock k'litſa <i>n</i>	looking, seeing béyo <i>vn</i>
jumping dólle <i>vn</i>	lord (traditional) maága <i>n</i>
keeping crop from wild animal ?íſa <i>vn</i>	losing, leaving dāwo <i>vn</i>

louse tʃuutʃtʃɛ <i>n</i>	mouse ótʃtʃa <i>n</i>
love ʔeehá <i>v</i>	mouth baadé <i>n</i>
lung gooʃína <i>n</i>	mud urk'k'á/ork'k'á <i>n</i>
lung gorʃína <i>n</i>	mule bak'úlo <i>n</i>
maize badallá <i>n</i>	munching, eating tʃóntʃu <i>vn</i>
making fine in constructing or building something (e.g. house) izé <i>vn</i>	muscle (of leg) s'ʃá <i>n</i>
making partition zággo <i>vn</i>	mushroom species máydo-siide <i>n</i>
male (of dog, cat, donkey, mule, horse) mánssa <i>n</i>	mushroom species mórdʒdʒola <i>n</i>
man átsi <i>n</i>	mushroom species s'égi uge <i>cn</i>
man made hole on the tree (used to climb) kótʃa <i>n</i>	musk, cover kamó <i>n</i>
man, male, husband áde <i>n</i>	mustache baás'a <i>n</i>
managing, tolerating danddáʔo <i>vn</i>	my tá <i>posp</i>
many laggó <i>qua</i>	name of game like hockey ʃóle <i>n</i>
mark, sign béyta <i>n</i>	name of river dénʔkere <i>n</i>
market gaayá <i>n</i>	name of spice zándʒdʒo (Amharic) <i>n</i>
marry ʔeʃó <i>v</i>	name súntsu <i>n</i>
meat of sheep doró atʃo <i>cn</i>	narrating náʃʃo <i>vn</i>
meeting deetó <i>vn</i>	narrow (of house or material) úʃʃa <i>adj</i>
meninges bone kólme <i>n</i>	narrow kúnʔa <i>adj</i>
meningise ganná <i>n</i>	narrow s'úntsu <i>adj</i>
merchant zalʔántʃtʃa <i>n</i>	near máta <i>adj</i>
message/order kiíta <i>n</i>	neck zaáre <i>n</i>
mid-day billí bilahe <i>cn</i>	needle narffé (Amharic) <i>n</i>
mid-night makákara giddóttsu <i>cn</i>	neighbor doóttsu <i>n</i>
milk (water part) zalá <i>n</i>	neighborhood gutátetsi <i>nd</i>
milk maáttsi <i>n</i>	nest kaʃó keetstse <i>cn</i>
milking maáttsso <i>vn</i>	new house kardzdzé <i>n</i>
millstone wós'a <i>n</i>	new oórattsi <i>adj</i>
miracle gúde <i>n</i>	newly delivered woman/cow gatʃúnna <i>n</i>
miracle makkálʔa <i>n</i>	night tʃeemó <i>n</i>
miracle ʃála <i>n</i>	nine tántstsínde <i>car</i>
mistake bála <i>n</i>	ninth tántstsínd-unttsá <i>ord</i>
mistake hála <i>n</i>	no áyʔe <i>v</i>
mock biiddōso <i>v</i>	nose kuŋké <i>n</i>
money bíra <i>n</i>	nose siide (Gamo) <i>n</i>
monkey gáltʃtʃi <i>n</i>	not present, not exist báʔa <i>v</i>
morning ʃóʔe <i>n</i>	not straight kóŋk'a <i>n</i>
mother of children ʃáwu inddo <i>cn</i>	not straight wóbbe <i>adj</i>
mother of non-orphan ziittó inddo <i>cn</i>	now and then hátte hatte <i>adv</i>
mother of orphan ziʔó inddo <i>cn</i>	now, just hátte <i>adv</i>
mother-in-law bólloto <i>n</i>	observation míse <i>n</i>
motive, interest zaáre <i>n</i>	offend huullá <i>v</i>
mouse gró <i>n</i>	old (of age) tʃáállá <i>adj</i>
	on the ground allá <i>pph</i>
	one bizzó <i>car</i>

one s'ón?o <i>car</i>	preparation of garden for cultivation
one s'óto <i>car</i>	k'ílɸe <i>vn</i>
onion funkúrte (Amharic) <i>n</i>	preparing mákko <i>vn</i>
opening dó?o <i>vn</i>	previous bení <i>adv</i>
order, instruction azázo <i>vn</i>	previous k'áre <i>adv</i>
orphan zi?ó <i>n</i>	prince miſíro <i>n</i>
ostrich yántſtʃo <i>n</i>	problem allálle <i>n</i>
our nú <i>posp</i>	problem, challenge metó <i>n</i>
out áre <i>pp</i>	property, money miiſſé <i>n</i>
outside áre galla <i>pph</i>	advising múro <i>v</i>
owner aawá <i>n</i>	protruding kólſe <i>vn</i>
owner of cattle gáydaade <i>nd</i>	proud geeddá?a <i>n</i>
owner of goat s'égáade <i>nd</i>	pulling goótſtʃo <i>vn</i>
owner of home zawáade <i>nd</i>	pumpkin woló <i>n</i>
owner of horn katſjáade <i>nd</i>	pure geéſſi <i>n</i>
ox máydo <i>n</i>	pushing ?údē <i>vn</i>
pair waás'a <i>n</i>	putting gadó <i>vn</i>
patient hargántſtʃa <i>n</i>	quarrel, dispute oóſſu <i>vn</i>
payment (of traditional vaccination)	quick ?eesó <i>adv</i>
maáti mas'o <i>cn</i>	quickly máta <i>adv</i>
payment or contract agreement herégo <i>n</i>	rabbit ?etſé <i>n</i>
penis wóns's'aɸa <i>n</i>	rain íra <i>n</i>
people deré <i>n</i>	raining búko <i>vn</i>
persuading mak'k'ó <i>vn</i>	raising, elevating dénso <i>vd</i>
piece of food (which is left after	rape teéra <i>n</i>
dinning) ſoóge <i>n</i>	rat ?étſere <i>n</i>
piece of old cloth dúŋa <i>n</i>	real, true s'illo <i>adj</i>
place name where big stones are	red zo?ó <i>adj</i>
naturally collected oɸá <i>n</i>	relationship dábbuntté <i>nd</i>
place where old people meet to discuss	relative dábbó <i>n</i>
community's issue dubbúfa <i>n</i>	reporting (of sad issue) k'áŋe <i>vn</i>
playing, game kaassé <i>n</i>	resemblance mála <i>n</i>
plea itsó <i>n</i>	respecting boósso <i>vn</i>
pleasant smell, odour sawó <i>adj</i>	respection bóntſtʃo <i>n</i>
please usá <i>adv</i>	respection, glory góza <i>n</i>
please wózenéna <i>adv</i>	rest kas'ó <i>v</i>
pocket kiíse (Amharic) <i>n</i>	restaurant káwu?e keetstse <i>cn</i>
point, remark, sign maláta <i>n</i>	reverse, being in opposite position
poison márdzdze (Amharic) <i>n</i>	múrmuro <i>vn</i>
pool k'ulbbá <i>n</i>	rib bone gayllé <i>n</i>
poor máŋk'k'o <i>adj</i>	rib bone zaddá <i>n</i>
porridge k'odě <i>n</i>	rich dúre <i>adj</i>
pot óta <i>n</i>	ring like material that can be put on the
potato boobbé <i>n</i>	spear stick zímppo <i>n</i>
power wolk'k'á <i>n</i>	ring zítſtʃi <i>n</i>
pregnant (of cow, sheep, goat) kúnsa <i>n</i>	roach tsotsó <i>n</i>

road ogé *n*
 roar s'aagó *vn*
 roasting tʃaátʃa *vn*
 roof, cilling kaaró *n*
 rope type maydē *n*
 rose, pink galálʔo *n*
 rotation ziilmáalle *n*
 rotten woók'a *adj*
 rough flour of barely (of porridge)
 φúns's'a *n*
 rough húmʔe *adj*
 running wotstsé *vn*
 rust k'ótʃa *n*
 sad mítʃʃa *adj*
 saliva tʃútʃʃu *n*
 salt soóge *n*
 sand átʃ'e *n*
 satisfaction míʃʃi *n*
 Saturday k'eerá *adv*
 scarf like cloth which is made by
 weavers k'ollé *n*
 scratching k'aátʃe *vn*
 searching káymme *vn*
 second námʔ-untstsá *ord*
 secret room, which made from bamboo
 tree zallá *n*
 secete room k'urús'a *n*
 section of ploughed land ménso *n*
 seeing, observing, visiting s'eeló *vn*
 selfish uúze *adj*
 selling báysó *vn*
 servant gaáte *n*
 seven laáppu *car*
 seventh laápp-untstsá *ord*
 sexual intercourse mátʃʃo *v*
 sexual intercourse woylló *v*
 shadow kuúza *n*
 she ísi *pr*
 sheep doró *n*
 shield gondálle *n*
 short (of cloth) bógge *n*
 short (traditional cloth) φidzdzó *n*
 short háta *adj*
 short wooden handle of plough zébba *n*
 shouting ʔiiʔó *vn*
 shy yáʃʃi *adj*

side of something, lateral lánk'k'e *n*
 sieve záyzare *n*
 silk (of 'enset', or false banana) ʃalá *n*
 silly, non-sense áʃʃa *adj*
 simple, light ʃaykó *adj*
 sister mitʃó *n*
 sitting (down) úte *vn*
 six izúppu *car*
 sixth izúpp-untstsá *ord*
 skill, art hiillá *n*
 skirt, edge matʃára *n*
 skirt, edge of cloth mars's'a *n*
 sky, on, above aʃá *n*
 slave ayllé *n*
 slave ʔayllé *n*
 sleeping dísko *vn*
 sleeping ítʃʃe *vn*
 slide ʃoódó *vn*
 slow dóttʔa *adv*
 slow geedáʔa *adv*
 small fox górduma *n*
 small pot s'aáro *n*
 smart wozináade *nd*
 snake ʃoóʃu *n*
 snake species wólʔa ʃoofu *cn*
 sneezing díʃo *vn*
 soft líik'o *adj*
 soft part of 'enset' túnta *n*
 solely φóle *adv*
 something that become bad iíteesa *adjd*
 something that become shorten háteesa
 adjd
 something that causes to stay long time
 ʃaatʃʃá *nd*
 song yétstsi *n*
 soon máta *adv*
 sorghum mózze *n*
 sound instrument (of horn) ilé *n*
 sour dook'ó *adj*
 spear toorá *n*
 speech haasáʔa *n*
 sperm ʃló *n*
 spherical shape zolddó *adj*
 spleen ʃimppulá *n*
 split of wood, splitting báytstsi *n*
 spoken óhutte *vd*

standing up dénddo *vn*
 standing up ʔeéʔo *vn*
 standing strongly in a place or position
 while doing something térdʒdʒe *vn*
 standing up in line (technical word)
 tsátse *vn*
 star s'oólintte *n*
 starting, beginning átʃʃo *vn*
 staying for long time or hours ʔéyʃʃi *vn*
 stem of 'enset' or false banana gúza *n*
 stick with which fire is taken from stove
 k'áʔe *n*
 stomach gánʒze *n*
 stone ʃútʃʃu *n*
 stool ʃíʃi *n*
 stove stone on which kittle or pot stay
 for cooking tinʔó *n*
 straight moóle *adj*
 straw of crop gaʔé *n*
 stream of water ʔúltto *n*
 stretcher zaʔá *n*
 strong míno *adj*
 strong, hard s'iigó *adj*
 strong, active s'ála *adj*
 structure of body gónppa /gómppa *n*
 sue moóto *n*
 sugarcane ʃonkorá *n*
 summer asúra *n*
 summer balggó *n*
 summer silá *n*
 sun awá *n*
 Sunday woggá *n*
 suppose, think, plan s'úmo *v*
 swallowing mitó *v*
 sweat ʔogólo *n*
 sweet malʔó *adj*
 tail goyná *n*
 take eʔó *v*
 taking ʔeemó *vn*
 tall, long ʔazzó *adj*
 tax giíra *n*
 tear aáʔunttsu *n*
 tease, mock k'idě *v*
 'teff' (food type) gaatʃʃé *n*
 ten birr báwndde *n*
 ten támmu *car*

ten times támmá *adv*
 tenth támm-untstsá *ord*
 terracing kellá *n*
 testicle bálintʃo *n*
 testicle kaatstsé *n*
 that (one) sóyi *dem*
 that one (for the known girl or small
 thing) sónno *dem*
 the black ones kártstsidězi *adjd*
 the donkey (female) harátto *nd*
 the girl bíʃʃatto *np*
 the ox máydoza *np*
 their ú *posp*
 their house úúso *prd*
 there híŋkki *dem*
 these ones háyiddi *dem*
 they úsi *pr*
 they úsuni *pr*
 thief kaysó *n*
 thin laále *adj*
 thin stick (used for punishment) kírtʃo *n*
 third háyidzdz-untstsá *ord*
 thirteen támmá haydzdzi *car*
 thirteen támmánne háydzdzi *car*
 thirty háyidzdz támmu *car*
 this (one) háyi *dem*
 those ones sóyiddi *dem*
 thousand ʃáʔa *car*
 three háydzdzi *car*
 threshold balé *n*
 throwing (of spear) s'óŋe *vn*
 thumb adó gilʔa *cn*
 serval maahé *n*
 serval wórbba *n*
 tilling góʃo *vn*
 time, coming year wodé *n*
 to call uúkkoda *vd*
 to cut tʃúkkoda *vd*
 to marry géla *vd*
 to open dóʔoda *vd*
 to punish ós's'oda *vd*
 to till góʃʃá *nd*
 to weave dáddoda *vd*
 tobacco smoking material (small one)
 árgube *n*
 today hantstsó *adv*

we núny *pr*
 we núy *pr*
 weak daábura *adj*
 weak geeddáʔa *adj*
 wealth ʔák'o *n*
 weaver boodó *n*
 weaving instrument mihána *n*
 wet tʃáββa *adj*
 what áala *qw*
 what áamma *qw*
 what ámma *qw*
 when áyide *qw*
 where áanna *qw*
 which ánni *qw*
 white boóttsu *adj*
 who óode *qw*
 whole múle *qua*
 wide φátʃtʃa *adj*
 wild animal (cat family) zoddó *n*
 wild grass hoóde *n*
 winning ínʃo *vn*
 winning íntʃo *vn*
 winter bóne *n*
 wise éra *adj*
 wise, active, skillful tʃíntʃa *adj*
 with fork kóntʃenna *nd*
 with key k'úlfenna *nd*
 with me tánara *pph*
 woman, wife maátʃtʃo *n*
 women, wives máatʃtʃi *n*
 wondering zuúʃʃe *vn*
 work, job oótstso *vn*
 year láyitstsi *n*
 yelping íns'e *vn*
 yelping áwʔe *vn*
 yesterday k'ámma *adv*
 you (2nd person PL) ítini *pr*
 you adolescents (for boys) sabbiděé *nd*
 you boys naʔas'ó *ni*
 you females índdas'ó *nd*
 you néni *pr*
 you(2nd person PL) ítina *prd*
 young cow úzze *n*
 young male cock or monkey gáalume *n*
 young naʔéta *n*
 young ox mírgo *n*

younger kaaló *n*
 your né *posp*
 your (2nd person PL) íti *posp*
 your father íti adda *prd*
 youth káymm

Appendix C. Sample Title

Phonology, Morphology and Syntax of Ganta

Sintayehu Semu Workineh

A Dissertation Submitted to School of Graduate Studies Addis Ababa University, for Partial Fulfillment of the Requirements for the Doctor of Philosophy Degree in Documentary Linguistics and Culture

Department of Linguistics: Documentary Linguistics and Culture

Supervisor

Gerald Heusing (Assoc.Prof.)

Addis Ababa University

Addis Ababa, Ethiopia

October, 2017

Appendix D. Sample Signature Page

Addis Ababa University The School of Graduate Studies

This is to certify that the dissertation prepared by Sintayehu Semu, entitled *Phonology, and Morphology and Syntax of Ganta*, PhD program and submitted in Partial Fulfillment of the Requirements for the Doctor of Philosophy Degree in Documentary Linguistics and Culture complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Approved by the Examining Committee:

_____ Examiner (External)	_____ Signature	_____ Date
_____ Examiner (Internal)	_____ Signature	_____ Date
_____ Advisor	_____ Signature	_____ Date
_____ Chair of Department or Graduate Program Coordinator	_____ Signature	_____ Date

October, 2017

Appendix E. Sample Abstract

Phonology, Morphology and Syntax of Ganta

Sintayehu Semu Workineh
Addis Ababa University, 2017

This project was concerned with the phonology, morphology and syntax of endangered language, Ganta. Thus, the investigation aimed at documentation and description of the distributional properties of sound systems, inflectional and derivational strategies of words, and also the order of morphological elements and their relationships in a sentence. To this end, the total documentation part of the project comprised one hour and two minute video text, for which ELAN software was used to annotate linguistic features. The description and distribution of phonological shapes are expressed by consonant and vowel phonemes in which an exceptional Omotic language sequence of consonant-consonant is observed. Phonological and morphophonological processes of the language were discussed in detail. Next to the sound systems, word inflections and derivations were analysed on nouns, verbs and adjectives. Here, Ganta nouns were inflected for number, gender, definiteness and case. Other than inflectional processes, morphological affixes are used to derive nouns into other forms of nouns. Like nouns, verbs also express inflection, by which tense, aspect, mode/modality and mood formations are expressed in Ganta. The issue of negation and subject agreement markings are discussed after inflection strategies of verbs. The processes of verb derivations are described by causative, passive, reciprocal, iterative, inchoative and infinitive marking affixes. The semantic classification of adjectives are treated before sections of adjective inflection and derivation. Morphology of adverbs that are used to express place, direction, time, manner and frequency are described before interjection and ideophone sections. The syntactic structures, in which noun, verb, and postpositional phrases of Ganta are firstly treated before clause structures. Word order, focus, copula and predicative morphology of the language are described under section of clause structures. Next to this section, complex sentence structures including complement, adverbial clause, relative clause and coordination are also presented in the last, next to the summary and conclusion of the project.

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 - 8.3.4 Coordination
 - 8.3.4.1 Inclusive conjunction
 - 8.3.4.2 Disjunctive coordination
 - 8.3.4.3 Adversative coordination
 - 8.3.4.4 Correlative coordination/Emphatic negative coordination
 - 8.3.4.5 Conjunctive adverb