## Graziano Savà

## A Grammar of Ts'amakko

## Table of contents

Acknowledgements<br>Symbols and abbreviations<br>List of tables<br>Map

## 1. Introduction

1.1. The Ts'amakko people
1.1.1. Previous studies on the Ts'amakko people
1.2. The Ts'amakko language
1.2.1. Classification
1.2.2. Previous studies on the Ts'amakko language
1.2.3. Collection of data

## 2. Phonology

2.1. Consonants
2.1.1. Inventory of phonemes
2.1.2. Minimal pairs and distribution
2.2. Realisations of consonant phonemes
2.2.1. Final unreleased realisation
2.2.2. Glottal stop deletion
2.2.3. Trilled realisation
2.2.4. Apical realisation
2.2.5. Preglottalisation
2.2.6. Reduction to glottal stop and to o
2.2.7. Change in air-stream direction
2.2.8. Devoicing
2.2.9. The phoneme / $/$ /
2.2.10. Affricate realisation of ejective
2.2.11. Affricate realisation of fricative
2.2.12. Fricative realisation of affricate ejective
2.2.13. The voiceless labial consonant $/ \mathbf{p} /$
2.2.14. The geminate counterparts of $/ \check{\mathbf{s}} /$
2.3. Vowels
2.4. Tone
2.4.1. High tone (H) and Low tone (L)
2.4.2. The tonal system
2.4.3. Tone in basic nouns and other nominals
2.4.4. Nominal tone in suffixation and cliticisation
2.4.5. Tone in verbs
2.4.6. Tone in clitics, conjunctions, pronominal particles, locative pronoun and sentence marker
2.4.7. Tone vs. pitch accent
2.4.8. A note on tone marking
2.5. Syllables
2.5.1. Onset
2.5.2. Coda
2.5.3. Insertion of an epenthetic vowel as nucleus and degemination
2.5.4. Ambisyllabic geminate consonants
2.6. Consonant clusters
2.6.1. Consonant clusters in syllable sequences
2.6.2. Root internal cluster restrictions
2.6.3. Consonant sequences in words
2.7. Phonological rules
2.7.1. Voice assimilation
2.7.2. Devoicing
2.7.3. Phonation assimilation
2.7.4. Nasal assimilation
2.7.5. Vowel lengthening
2.7.6. Vowel deletion
2.7.7. Metathesis
2.7.8. Sibilant palatal harmony

## 3. Nominal morphology

3.1. Interaction between gender and number
3.2. Basic and derived form
3.3. Basic nouns
3.3.1. Nouns with two basic forms
3.4. Gender
3.4.1. Manifestation of gender
3.4.2. Gender suffixes
3.4.3. Semantic assignment of gender
3.4.4. Lack of congruence between semantic gender and gender suffixes
3.4.5. Feminine gender of loanwords
3.4.6. Gender of sex-inherent loanwords
3.4.7. Semantic gender of borrowed proper names
3.5. Number
3.5.1. Number derivation and gender
3.5.2. Number derivation suffixes
3.5.3. CVCC template Plurative formation
3.5.4. Derivational patterns
3.5.5. Noun lexemes with only derived forms (pattern g.)
3.5.6. Lexical number pairs
3.5.7. Derivation from non-basic units
3.5.8. Age grades, peoples and clans
3.5.9. The masculine kinship suffix -iy
3.6. Sub classes of nouns: Attributive nouns, adjectives and numerals
3.6.1. Attributive nouns
3.6.2. Adjectives
3.6.3. Numerals
3.7. The locative case suffixes
3.8. The Distal demonstrative suffixes
3.9. The proximal demonstrative/vocative tone morpheme
3.10. The definite suffix -se

## 4. Notes on syntax

4.1. The noun phrase
4.1.1. Noun phrases with attributive nouns and adjective as modifier
4.1.2. Noun phrases with numeral as modifier
4.1.3. Noun phrases with demonstrative as modifier
4.1.4. Noun phrases with possessive modifiers
4.1.5. Noun phrases with locative suffix as modifier
4.1.6. Noun phrases with definite as modifier
4.1.7. Noun phrases with 'whose?', 'which one?', or 'different' as modifier
4.2. Relative clauses
4.3. Sequences of modifiers
4.4. The nominal sentence
4.5. The verbal sentence
4.5.1. The subject
4.5.2. The object
4.5.3. Noun phrases in adverbial position
4.5.3.1. =nu ('from')
4.5.3.2. = ma ('to/in')
4.5.3.3. = yay ('with')
4.5.3.4. The semantically empty clitic $=y$
4.5.4. Locative adverbials: the clitic =ta ('upon') and the postposition na
4.6. Sentences conjunctions
4.7. The sentence marker ka

## 5. Pronouns

5.1. Pronoun series
5.2. The third person pronouns
5.3. The subject pronouns
5.4. The object pronouns
5.5. The pronominal particles
5.5.1. Definites
5.5.2. Demonstratives
5.5.3. Possessives
5.5.4. 'whose?'-pronominals
5.5.5. 'which one?'-pronominals
5.5.6. 'different'-pronominals
5.5.7. The pronominal particles and the relative clause
5.5.8. The pronominal particles in sentences with stative verbs
5.5.9. The pronominal particles in interrogative sentences
5.6. The third person locative pronoun na
5.6.1. na in locative function
5.6.2. na as bound space and directive pronoun
5.6.3. na as instrumental-comitative pronoun
5.6.4. na as dative pronoun
5.6.5. na without specific reference
5.6.6. na as locative relative pronoun
6. Verb inflection
6.1. Verb root and stem
6.2. Inflectional categories
6.3. Verb classes
6.4. Suffix sets
6.4.1. Set 1
6.4.2. Set 2
6.4.3. Set 3
6.4.4. Set 4: Consecutive paradigm
6.4.5. Set 5: Adjectival verbs
6.4.6. Imperative
6.4.7. Subject focus verbs
6.4.8. Overview of paradigms
6.5. Unmarked and Marked-Imperfective
6.5.1. Unmarked
6.5.2. Marked-Imperfective
6.5.3. Stative verbs
6.6. Future
6.6.1 Main Future and Subordinate Future
6.6.2. Main Future
6.6.3. Subordinate Future as focus form
6.6.4. Future in conditional and final sentences
6.7. Positive and Negative
6.7.1. Past Negative
6.7.2. Non-Past Negative
6.7.3. Future Negative
6.8. Mood: Jussive and Imperative
6.9. Consecutive
6.10 . Verb paradigms

## 7. Verb derivation

### 7.1. Derivational suffixes

7.2. Verbalisers
7.2.1. Causative verbalisers -as and -os
7.2.2. Middle verbalisers -ad and -od
7.2.3. Verbaliser -om
7.2.4. Inceptive verbaliser -aw
7.3. Valency changing derivation suffixes
7.3.1. Causative -as and -is
7.3.2. Middle -ad
7.3.3. Passive -am
7.3.4. Inceptive -aw
7.3.5. Combination of derivational suffixes
7.3.6. Marginal unproductive suffix -a6
7.4. Derivational stems
7.4.1. Punctual geminated stem
7.4.2. Iterative reduplicated stem

## 8. Other word classes

8.1. Adverbials
8.2. Relational nouns
8.3. Interrogatives

## 9. Texts

9.1. Maakke gelzakkilo Aaaka maakke garrilo
9.2. Maakke kulilatte Aaaka maakke garrilo
9.3. Maakke garrilo Aaaka maakke gubalatte

## 10. Glossaries

10.1. Ts'amakko-English
10.2. English- Ts'amakko

References

## Symbols and abbreviations

| 1 | first person, kind of definite, kind of demonstrative |
| :--- | :--- |
| 2 | second person, kind of definite, kind of demonstrative |
| 3 | third person, kind of definite |
| Adj | adjective, adjectival verb |
| Attr | attributive noun |
| Backgr | background |
| C | consonant |
| Caus | causative |
| Com | comitative |
| Cons | Consecutive verb, Consecutive conjunction |
| Dat | dative |
| Def | nominal definite |
| Def1 | first kind of pronominal definite |
| Def2 | second kind of pronominal definite |
| Def3 | third kind of pronominal definite |
| Diff | 'different' pronominal suffix |
| Dir | directive |
| Dist | nominal Distal deixis |
| Dist1 | first kind of pronominal Distal deixis |
| Dist2 | second kind of pronominal Distal deixis |
| F | feminine |
| Fill | filling clitic |
| Fut | future |
| H | high tone |
| Imp | Imperative |
| Impfv | Marked-Imperfective |
| Inf | infinitive |
| Intr | intransitive |
| Juss | Jussive |
| L | low tone |
| Lit | literally |
| Loc | locative |
| M | masculine |
| Mid | middle |
| Neg | Negative |
| NonPstNeg | Non-Past Negative |
| Obj | object |
| P | plural gender |
| Pass | passive |
| Pl | plural, Plurative |
| Poss | possessive |
| Pron | pronominal particle |
|  |  |


| Prox | nominal Proximal deixis |
| :---: | :---: |
| Prox 1 | first kind of pronominal Proximal deixis |
| Prox2 | second kind of pronominal Proximal deixis |
| PstNeg | Past Negative |
| Sb | somebody |
| Sent | sentence marker |
| Sth | something |
| Sub | subordinate |
| Subj | subject |
| Sg | singular, Singulative |
| Tr | transitive |
| Unm | Unmarked |
| V | vowel |
| Voc | vocative |
| - | affix boundary |
| $=$ | clitic boundary |
| . | separation of abbreviations fused or combined in one morpheme, syllable boundary |

## List of tables

Table 1: Consonant phonemes and their realisations
Table 2: Grid of the consonant phonemes

Table 4: Geminated consonants with one realisation
Table 5: Distribution of consonant phonemes
Table 6: Phonetic realisations of the voiceless labial consonant
Table 7: Dullay correspondences with Ts'amakko cc
Table 8: Tone in Unmarked inflection
Table 9: Verb tone patterns
Table 10: Combinations of sonorants
Table 11: Sonorant-glottalic clusters
Table 12: Possible consonant clusters
Table 13: Gender suffixes and agreement
Table 14: Gender as expression of number derivation
Table 15: The number derivation suffixes
Table 16: Nominal number derivational patterns
Table 17: Patterns (g.1) and (g.2)
Table 18: Pronominal particles and definite suffix after head noun in relative clauses
Table 19: The subject and object personal pronouns
Table 20: The pronominal particles
Table 21: The personal possessive suffixes
Table 22: Syllabification of $1 \mathrm{Sg}, 2 \mathrm{SgM}$ and 2 SgF dative pronouns
Table 23: Syllabification of $1 \mathrm{Sg}, 2 \mathrm{SgM}$ and 2 SgF directive pronouns
Table 24: Haplology in 1 Pl dative pronoun
Table 25: Full paradigms of the object pronouns in all possible syntactic functions
Table 26: The definites
Table 27: The demonstratives
Table 28: The possessives
Table 29: The 'whose?'-pronominals
Table 30: The 'which one?'-pronominals
Table 31: The 'different'-pronominals
Table 32: Locative pronoun with case clitics
Table 33: The verbal paradigms
Table 34: Difference between Unmarked A and Unmarked B
Table 35: Difference between Consecutive A and Consecutive B
Table 36: Difference between Imperative A and Imperative B
Table 37: Suffix sets
Table 38: Suffix sets 1
Table 39: Suffix sets 2
Table 40: Suffix sets 3

Table 41: $\quad$ Suffix sets 4
Table 42: Suffix sets 5
Table 43: Overview of paradigms
Table 44: Verb derivation suffixes
Table 45: Verbaliser suffixes
Table 46: Distribution of -is and -as in similar phonological contexts

## 1. Introduction

### 1.1. The Ts'amakko people

The Ts'amakko live in southwest Ethiopia, in the plain of the Weyt'o River (Dullayko in Ts'amakko) and on the edges of the mountains delimiting the plain. The territory, located between $5^{\circ} 10^{\prime}$ and $5^{\circ} 40^{\prime}$ north latitude, and $36^{\circ} 40^{\prime}$ and $37^{\circ} 05^{\prime}$ east longitude, is limited to the east by the Weyt'o River, to the south by the Lake C'ew Bahïr, to the north by the Maale highlands and to the west by the highlands separating the plain of the Weyt'o from the plain of the Omo River. The administrative location is Bena-Tsamai Woreda, a district within the South Omo Zone, which is a section of the Ethiopian federal state 'Southern Nations, Nationalities and Peoples'. The 1994 Ethiopian Census (1996) gives the number of Ts'amakko at 9.804. In Ethiopia the people and their language are known as Tsamai (Tsamay, Tzamai). Alternative spellings of 'Ts'amakko' are S'aamakko, Tsamako, Tsamakko, Samaco and Tamaha.

The Ts'amakko live in sixteen villages. The administrative and trading centre is the small town of Weyt'o, which hosts a police office and a weekly open market (on Sunday). The development of Weyt'o is linked to the creation of a large nearby cotton farm, the Birale Cotton Company. The farm is a reference point for those who reach the area, which is also known as Birale. No Ts'amakko work on the plantation.

The main economic and socially relevant activity is cattle keeping. Life develops around the social and cultural values related to cattle. Every homestead holds a more or less large herd of livestock. Chickens too are commonly bred. However, food production is based on agriculture. Cultivated crops are sorghum, maize and, to a lesser extent, beans and pumpkin. Edible leaves of trees, wild plants, and wild animals are also consumed. The Ts'amakko are also specialised in bee-keeping, but most of the honey is sold. Eggs and fish are not part of the diet. The first represent marketable goods, the second is considered a taboo food.

The Ts'amakko territory is divided in dawle 'lowland' and Pašše 'highland'. Most Ts'amakko live in the lowland area, which is characterised by poor and uneven rainfall. The land is scarcely productive and is often affected by periods of drought. The climatic conditions limit the possibility of wealth and food accumulation. Therefore, the Ts'amakko often have to face periods of food shortage. The climatic situation in the 'highland', which is on the edge of surrounding mountains, is slightly better, but not good enough to prevent famine.

The neighbours of the Ts'amakko are the Hamer and Banna, to the southwest and west, respectively, the Arbore to the south, the Dullay speaking peoples, such as K'erk'erte and Gawwada, to the east, and the Maale to the north. The hunter-gatherers Ongota live within the Ts'amakko territory, on the left bank of the Weyt'o. The relations of the Ts'amakko with their neighbours are presently peaceful. In the past there have been tensions with the members of the Maale group. The Konso and the Borana, who are not geographically adjacent, but much larger peoples, used to organise hostile raids into the Ts'amakko territory. With the exception of the Maale, the relations with the neighbours develop around trade, cattle-sharing and intermarriage.

The Ts'amakko have build up a particularly strong alliance with the Hamer and the Banna. These two people are called with a single name in Ts'amakko, Porgo, but the Hamer can be distinguished by the term Pamarko. They are seen as prestigious groups worth of imitation and they have a strong influence on Ts'amakko life style. This influence is particularly evident in dressing, hairstyle and body ornaments. The Ts'amakko often visit the Banna market in Qäy Afär and, more sporadically, the Hamer market in Dimeka. Several Ts'amakko are bilingual in HamerBanna, a dialect cluster of the South Omotic language group.

The Ts'amakko language is part of the Dullay dialect cluster of Lowland East Cushitic. The linguistic relation of Ts'amakko and the other Dullay languages is not paired by an ethnic relation. The other Dullay speakers are linked to the Konso, rather than to the Hamer and the Banna. This difference has a geographic basis. The Ts'amakko are the only Dullay speakers who live in a lowland area and on the west bank of the Weyt'o River. The other Dullay-speaking peoples are found in the largely unexplored mountainous area between the east bank of the Weyt'o and the Konso highlands.

The Ts'amakko are the only people who have established fruitful relations with the Ongota, a tiny group of one hundred hunter-gatherers. The Ongota have a positive attitude towards the Ts'amakko. Such attitude is so strong that they decided to abandon their traditional language and replace it with Ts'amakko. The abandonment of the Ongota language is in its final stage. Only eight elders can speak it.

The Ts'amakko are divided in seven clans. Each one claims to trace back their origins from a neighbouring people, whose members migrated to the area where the Ts'amakko presently reside. The members of a clan are considered brothers and sister and, therefore, cannot marry to each other. Children use Pabba 'father' and Payya 'mother' for all the older people who have children. Grandparents are all called Yakka 'grandfather' and ©aabo 'grandmother' by all members of the younger generations. The Ts'amakko villages are not clan-based. People from different clans live in the same village. A council of elders administrates the village. They have a head
which calls for meetings in order to discuss matters concerning the community.

The crucial moment in the life of a ts'amatakko 'Ts'amakko man' or a ts'amatte 'Ts'amakko woman' is the rite of passage called gore. Only after a person has passed this stage is he/she considered a full member of the society and receives the right to be treated as an adult and to get married. The gore also entails the introduction in the age-grade. Each one clusters individuals of two or three generation. Rituals establishing a new age-grade are performed approximately every forty years. Only the male individuals who belong to the senior age-grade may be part of the council of elders. The age grades are distinguished by six terms, which are attributed in sequence according to a fixed order. Individuals of the same age grade are expected to help each other in activities that must be carried out in a group, such as house building. This kind of meeting is called Paylo.

The arrangement of a wedding, including the calculation of bridewealth, must be negotiated with the family of the girl. In some cases a girl may inquire about the character and the value of a potential partner and decide to marry him or not. If she is willing to marry him, the couple secretly organises the 'kidnapping' of the girl. Afterwards the boy proposes the union to her parents, who will have the last word. A married woman carries two signs of her marital status. The first one, adopted from Hamer and Banna, is curly long hair smeared with butter and red sand. The second one is a skirt made of goatskin with a sort of long back tail touching the ground. This kind of skirt is so typically Ts'amakko that the Dhaasanech, a people living farther southwest, call them 'The Hamer with a tail'. Premarital sexual intercourse is allowed. After the wedding women cannot have sex with other men, while the husband can have other sexual partners and also other wives. Couples are mainly formed during dancing meetings (gibdo). A married man can take part in the dancing. Only unmarried women can join the dances.

Two funeral rites are organised for a dead person: the burial and the reburial. The first one takes place soon after the death of a person. The second one, called gilo, is performed about ten years after the burial. It consists in digging out the bones of the dead person and burying them again in another place. The ritual is performed by the members of the family.

The Ts'amakko have a god, wa?ko, who communicates with the people through the bogolko, a leading spiritual figure that the Ts'amakko share with the Arbore. The wa?ko has an influence on people's life, but is not the author of creation. The Ts'amakko believe that, one day, the male and the female stars, takkaditto and $\hbar$ ezgitte created the world. They did it when they were standing on the same line in two opposite points of the sky. These two stars are visible and still create rain when they are in that position. This situation is highly desired, but rare. Usually, the two stars do not face each other because takkaditto gets out in the morning, crosses the sky, and
disappears in the evening, just before hezgitte appears and goes along the same route. hezgitte disappears in the morning, when takkaditto starts a new journey in the sky.

### 1.1.1. Previous studies on the Ts'amakko people

Ethnographic research on the Ts'amakko is very scarce. The most active scholar is Melesse Getu, who has written the most complete description of Ts'amakko so far available (Melesse Getu 1995), an article (Melesse 1997), and a PhD thesis. I had no chance to consult this last study. Pioneering studies include Da Casotto (1945), Jensen (1959), and Pauli (1959). Cerulli (1965) reports Da Casotto's data. The anthropological part of Amborn, Minker and Sasse (1982) contains a good introduction to the culture of the Dullay speaking communities Harso and Dobase.

### 1.2. The Ts'amakko language

### 1.2.1. Classification

bago ts'amakkilo ('mouth of the Ts'amakko'), or simply Ts'amakko, belongs to the Dullay cluster of Lowland East Cushitic (Tosco 2000). The relation between the Dullay languages is probably dialectal. This claim results from the comparative observation of the data available on these languages and is supposed by local opinion that Ts'amakko is mutually intelligible with the other Dullay varieties.

As stated in 1.1., the Ts'amakko are geographically apart and ethnically different from the other Dullay-speaking peoples. This difference is also reflected in linguistic divergence in phonology and morphology, as well as lexicon (Hayward 1989:3, 47).

### 1.2.2. Previous studies on the Ts'amakko language

Ts'amakko is one of the least known languages within East Cushitic. The few data that are available are contained in the following complete list: Da Trento (1941), Fleming (1964), Donham (1972), Amborn, Minker and Sasse (1982), Hayward (1989), Miyawaki (1990), Dinote and Siebert (1994), and Savà (2002). Hayward (1989) is a comparative article containing the first phonological sketch and a few morphological and lexical elements of Ts'amakko. Amborn, Minker and Sasse (1982) is the classic reference for the study of the Dullay languages and cultures (Harso and Dobase in particular). This study contains few and unsystematic morphological material on Ts'amakko collected by the ethnologist Eike Haberland. Savà (2002) offers new Ts'amakko data in a discussion of the Ts'amakko morphological borrowings in Ongota. The other contributions on the language consist of wordlists. Da Trento (1941) is a collection of a few words. Fleming (1964), Donham (1972) and Miyawaki (1990) are unpublished lists containing about 900 items. Dinote and Siebert (1994) is a 320-items wordlist of Ts'amakko, Ongota, and Arbore. Although the words were carefully transcribed, no phonological analysis was attempted.

Besides Amborn, Minker and Sasse (1982), general sources on the Dullay languages are Black (1976), where this cluster is called 'Werizoid', and Hayward (1978), where the Dullay languages are called 'Qawko languages'. Neither of these works contains original data on Ts'amakko.

### 1.2.3. Collection of data

My fieldwork was carried out during four periods: in June-July 1999, August 2000, March-August 2001, and April-July 2003. I was always hosted by the family of Beze Laybo in the village of Luqa, in the northern part of the Ts'amakko area. Beze and his cousin Bašare Manka were my main informants. Beze's brother Šelo Laybo, who is a local policeman, and Haylu, a local student, assisted me in a number of working sessions. The elicitation has been carried out using Amharic. Beze learned this language while trading. Bashare, Šelo and Haylu have learned it at school. Some stories were collected from Ankaso Manka, Bashare's brother. My corpus consists of about 60 hours of audio-recorded material, some video recordings, 2000 elicited sentences, 17 folktales, 16 non-literary texts about Ts'amakko life and historical events, 5 riddles and songs.

## 2. Phonology

### 2.1. Consonants

### 2.1.1. Inventory of phonemes

There are 29 consonant phonemes. Table 1 contains a list of the phonemes and their realisations. The defalt realisations are listed first in each row. The conditioned allophonic realisations are in brackets. The I.P.A signs, in the standard squared brackets, are used for the phonetic realisations. The conventional spelling applying in this grammar is used for the phonemes. The I.P.A. convention will also be used in the rest of the grammar when a more detailed phonetic transcription is needed.

Table 1: Consonant phonemes and their realisations
$/ \mathbf{p} \quad[\mathrm{p}] \quad$ Voiceless bilabial pulmonic stop
([p] Voiceless aspirated bilabial pulmonic stop)
([f] Voiceless labiodental pulmonic fricative)
([ $\Phi] \quad$ Voiceless bilabial pulmonic stop)
/b/ [b] Voiced bilabial pulmonic stop
/t/ [t] Voiceless alveolar pulmonic stop
/d/ [d] Voiced alveolar pulmonic stop
/k/ [k] Voiceless velar pulmonic stop
/g/ [g] Voiced velar pulmonic stop
/?/ [?] Voiceless laryngeal pulmonic stop
/s/ [s] Voiceless alveolar pulmonic fricative
/z/ [z] Voiced alveolar pulmonic fricative

## /s// [J] Voiceless palatal pulmonic fricative

/ž/ [3] Voiced palatal pulmonic fricative
([d3] Voiced palatal pulmonic affricate)
$/ \mathbf{x} / \quad[\chi] \quad$ Voiceless uvular pulmonic fricative
( $[\tilde{\chi}] \quad$ Voiceless trilled pulmonic uvular fricative)
/ $\hbar$ / [ $\hbar] \quad$ Voiceless pharyngeal pulmonic fricative
([Ћ̃] Voiceless trilled pharyngeal pulmonic fricative)
/§/ [9] Voiced pharyngeal pulmonic fricative
( $\left[\mathrm{C}^{\mathrm{P}}\right] \quad$ Voiced glottalised pharyngeal pulmonic fricative)
/h/ [h] Voiceless laryngeal pulmonic fricative
/m/ [m] Voiced bilabial pulmonic nasal
/n/ [n] Voiced alveolar pulmonic nasal
[ท] Voiced velar pulmonic nasal
/n/ [n] Voiced palatal pulmonic nasal
/c/ [tS] Voiceless palatal pulmonic affricate
$/ \mathbf{c}^{\prime} / \quad\left[\mathrm{t} \int^{\text {' }] ~ V o i c e l e s s ~ p a l a t a l ~ e j e c t i v e ~ a f f r i c a t e ~}\right.$
/q'/ [q'] Voiceless uvular ejective stop
([qx'] Voiceless uvular ejective affricate)
([q] Voiceless uvular implosive stop)
([G] Voiced uvular implosive stop)
/ts'/ [ts'] Voiceless alveolar ejective affricate
([s'] Voiceless alveolar ejective fricative)
/6/ [6] Voiced bilabial implosive stop
([b] Voiceless bilabial implosive stop)
/d $/$ / $\left.{ }^{d}\right] \quad$ Voiced apico-alveolar implosive stop
([d] Voiced alveolar implosive stop)
/g/ [g] Voiced velar implosive stop
([G] Voiceless velar implosive stop)
/w/ [w] Voiced bilabial pulmonic glide
/y/ [j] Voiced palatal pulmonic glide
/l/ [1] Voiced alveolar pulmonic lateral
/r/ [r] Voiced alveolar pulmonic trill

The phonemes can be clustered in classes that share the same phonological behaviour. A general binary division is between obstruents and nonobstruents. The obstruent phonemes include the stops $/ \mathbf{p} /$, /b/b, /t/, /d/, /c/, /k/, $/ \mathbf{g} /$ and $/ \mathrm{P} /$, the fricatives $/ \mathbf{s} /, / \mathbf{z} /, / \check{\mathbf{s}} /, / \check{\mathbf{z}} /, / \mathbf{x} /, / \hbar /$ and $/ \mathbf{h} /$, and the glottalic
 phonemes include the glides $/ \mathbf{w} /$ and $/ \mathbf{y} /$, the nasals $/ \mathbf{m} /, / \mathbf{n} /$ and $/ \mathrm{n} /$, the lateral $/ \mathbf{l} /$ and the trill $/ \mathbf{r} /$. A special class is formed by the sibilant palatal phonemes $/ \check{\mathbf{s}} /$, $/ \check{\mathbf{z}} / / \mathbf{c} /$ and $/ \mathbf{c}$ '/ on the basis of a rule of sibilant palatal harmony (see 2.7.8.).

Table 2 below indicates the parameter 'type of articulation' on the vertical axis and the parameter 'place of articulation' on the horizontal axis. The consonant phonemes are distributed in its cells. The left part of each column hosts the voiceless phonemes, the right part is occupied by the voiced phonemes. A wider cell in the column of the palatals isolates the palatal sibilants.

Table 2: Grid of the consonant phonemes

|  | Bilabial |  | Alveolar |  | Palatal |  | Velar |  | Uvular |  | Pharyng. |  | Laryng |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | -v | +v | -v | +v | -v | +v | -v | +v | -v | +v | -v | + v | -v | +v |
| Obstruents |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stops | p | b |  | d | c |  | k | g |  |  |  |  | ? |  |
| Fricatives |  |  |  | z | s | ž |  |  | $\mathbf{x}$ |  | $\hbar$ | ¢ | h |  |
| Glottalic |  | 6 |  | d | c' |  |  | g | q' |  |  |  |  |  |
| Non- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Glides |  | w |  |  |  | $\mathbf{y}$ |  |  |  |  |  |  |  |  |
| Lateral |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Trill |  |  |  | r |  |  |  |  |  |  |  |  |  |  |
| Nasals |  | m |  | n |  | (n) |  |  |  |  |  |  |  |  |

All consonant phonemes also occur geminated (and phonetically long). The exceptions are the phonemes $/ \mathrm{n} /$ and $/ \mathrm{c} /$, which only appear geminated. $/ \mathrm{n} \mathrm{n} /$ is only attested in loanwords. /ce/ is only attested in lexical entries and has an historical correlation with /̌̌̌s/ (see 2.2.14.). The occurrence or the shape of some geminated phonemes depends on their position within the stem or across morpheme boundaries. The sibilant $/ \check{\mathbf{s}} /$, the laryngeal $/ \mathbf{h} /$ and the implosives $/ \mathrm{g} /$ and $/ \mathrm{\sigma} /$ are never geminated in lexical entries but only across morpheme boundaries. Geminated /̌̌̌s/ in lexical entry corresponds historically to /cc/ (see 2.2.14.). The realisation of geminated /p/ correlates with its position in the lexeme or in the morphological make up of the word (see 2.2.14.). See the following table:

Table 3: Geminated consonants /pp/, /ॅ̌̌s/, /66/, /g'g/, /hh/, /cc/ and /nn/

|  | Within lexical entries | Across morphological boundaries |
| :---: | :---: | :---: |
| /pp/ | [p:] Voiceless long bilabial pulmonic stop ([ $\left.\mathbf{p}^{\mathrm{h}}:\right]$ Voiceless long aspirated bilabial pulmonic stop) | [f:] Voiceless long labiodental pulmonic stop |

[ $\int$ :] Voiceless long palatal pulmonic fricative
$\qquad$ [ $\mathrm{g}:$ :] Voiced long velar implosive stop
/hh/ -------
[h:] Voiceless long laryngeal ricative
/cc/ [t $\int$ :] Voiceless long palatal pulmonic affricate
/nn/ [n:] Voiced lonc palatal pulmonic nasal

The other geminated consonants have the same realisation in lexical or grammatical context. They are listed in table 4:

Table 4: Geminated consonants with one realisation

| Lexical and morphological context |  |
| :---: | :---: |
| /bb/ | [b:] Voiced long bilabial pulmonic stop |
| /tt/ | [t:] Voiceless long alveolar pulmonic stop |
| /dd/ | [d:] Voiced alveolar pulmonic stop |
| /kk/ | [k:] Voiceless long velar pulmonic stop |
| /gg/ | [g:] Voiced long velar pulmonic stop |
| /39/ | [?:] Long laryngeal pulmonic stop |
| /žž/ | [d3:] Voiced long palatal pulmonic affricate |
| /ss/ | [s:] Voiceless long alveolar fricative |

/zz/ [z:] Voiced long alveolar fricative
$/ \mathbf{x x}$ [ $\chi:]$ Voiceless long uvular fricative
/ћћ/ [ $\hbar:]$ Voiceless long pharyngeal fricative
/£9/ [¢:] Voiced long pharyngeal fricative
/mm/ [m:] Voiced long bilabial nasal
/nn/ [n:] Voiced long alveolar nasal
$/ \mathbf{q}^{\prime} \mathbf{q}^{\prime} / \quad[\mathbf{q} \mathbf{\prime}:]$ Voiceless long uvular ejective stop
([q:] Voiceless long uvular implosive stop)
([G':] Voiced long uvular implosive stop)
$/ \mathbf{c}^{\prime} \mathbf{c}^{\prime} / \quad\left[\mathbf{t} \mathbf{S}^{\boldsymbol{\prime}}\right]$ Voiceless long palatal ejective affricate
/ts'ts'/ [ts':] Voiceless long alveolar ejective affricate
([s'':] Voiceless long alveolar ejective fricative)
$/ d d$ / $\left.\quad{ }^{T}{ }^{d}{ }^{2}:\right]$ Voiced long apical preglottalised alveolar stop
/ww/ [w:] Voiced long bilabial glide
/yy/ [j:] Voiced long palatal glide
/ll// [l:] Voiced long alveolar lateral
/rr/ [r:] Voiced long alveolar trill

### 2.1.2. Minimal pairs and distribution

The following lists show some (near) minimal pairs. The words are arranged in a way to demonstrate the phonological opposition between consonants that are phonetically reatively close. When possible, the phonemes concerned are compared in initial, intervocalic and final positions. Some of the words pairs oppose consonants differing in the voice parameter. They are $/ \mathbf{p} /$ and $/ \mathbf{b} /$, $/ \mathbf{t} /$ and $/ \mathbf{d} /, / \mathbf{k} /$ and $/ \mathbf{g} /, / \mathbf{s} /$ and $/ \mathbf{z} /, / / \mathbf{s} /$ and $/ / \check{\mathbf{z}} /$. Other pairs have been arranged according to the pulmonic or glottalic articulation of the phonemes in opposition. These pairs of words show the contrast between /b/ and $/ 6 /, / \mathbf{d} /$ and $/ \mathbf{d} /$ /, $/ \mathbf{g} /$ and $/ \mathbf{g} /$, $/ \mathbf{s} /$ and $/ \mathbf{t s} ' /$.

A group of pairs show phonological oppositions between phonemes articulated in the velar, uvular, pharyngeal and laryngeal areas of the oral cavity. These pairs are introduced because sounds of the posterior regions in several languages of the area sound particularly similar. Therefore, the determination of the phonemes and their allophonic realisations is not self-evident. The pairs are $/ \mathbf{g} / /$ and $/ \mathbf{q} ' /, / \mathbf{q}^{\prime} /$ and $/ \mathbf{k} /, / \mathfrak{q} /$ and $/ \mathcal{Y} /, / \mathbf{h} /$ and $/ \hbar /$, $/ \mathbf{h} /$ and $/ \mathbf{x} /$, $/ \mathbf{x} /$ and $/ \hbar /$. Ts'amakko is spoken in a linguistic area in which the realisation of posterior phonemes changes a lot from language to language. The contrasts in this area all involve at least two different points of articulation. The exceptions are the oppositions between $/ \mathbf{q}$ '/ and $/ \mathbf{x} /$, a contrast of two uvular sounds, and between $/ \mathrm{P} /$ and $/ \mathbf{h} /$, a contrast of two laryngeal sounds.

Two last pairs differentiate non-obstruent sounds. They are $/ \mathbf{r} /-/ \mathbf{l} /$ and $/ \mathbf{l} /-/ \mathbf{n} /$, that in many languages represent a single phoneme. All the groups of pairs include contrasts of the geminated consonants.

See the lists of pairs below:
$/ \mathbf{p} /$ and $/ \mathbf{b} /$

| palq'e <br> poolo <br> pudi | broken piece of gourd <br> cloud <br> it flowered | balq'is <br> boolo <br> buli | make sprout! <br> scrabble <br> he separated |
| :--- | :--- | :--- | :--- |
| daapakko blind dabakko mouse <br> Piipe    <br> Papo    | eyelashes <br> steam | kibe <br> Gaabo | dry season <br> grandmother |
| siippo | sweat | Pibbo | riddle |
| rap | sleep! | gab | take! |

/t/ and /d/

| tarbitto | kind of trumpet | darbe | drum |
| :--- | :--- | :--- | :--- |
| teerikko | dust | deli | he has sewn |
| toollo | long walking stick | doolle | ox-hunch |


| tuude | piece of buffalo or hippo skin | duubde | buttock |
| :---: | :---: | :---: | :---: |
| q'ato | black spot on the skin | bado | hunger |
| q'aata | trigger of firearm | q'eeda | he is licking |
| kaata | broken thing | keeda | corridor between house and fence |
| Puttufo | small pole in roof | puddo | cotton |
| pat | vomit! | bood | dig! |
| /k/ and /g/ |  |  |  |
| kacce | shoulders | gac'c'e | tef (Eragrostis abyssinica) |
| karre | door | garro | ground squirrel <br> (Xerus rutilus) |
| kere | seat | gerfe | thieves |
| kiili | he helped | gilo | meeting for dead people |
| seke | stick of roof | segele | grass of roof |
| buke | wooden club | duge | truth |
| wakki | speak once! | žaggi | insert once! |
| Pook | change! | zoog | float! |
| wak | speak! | žag | insert! |
| /s/ and /z/ |  |  |  |
| saq'i | he stored | zaq'i | he slaughtered |
| saarko | chief of village | zaalko | hole made by water |
| sori | he ran | zoora | it is sweet |
| soq'o | salt | zoogo | parent-in-law |
| baasallo | calabash used to pour water | Pazo | brother |
| gaasse | horns | gazze | shadow |
| ¢ugis | make drink! | Pazaz | order! |
| /š/ and / $/$ z/ |  |  |  |
| šaalko | pool made of river water | žaalko | 'godmother' |
| pašo | field | mažo | cilindric bead |
| Gašše | lots of grass | Pažže | smells |
| gooš | tend cattle! | Pažaž | order! |

/b/ and /6/

| bado | hunger | 6adi | he hid |
| :--- | :--- | :--- | :--- |
| buli | he separated | 6uli | he jumped |
| baalko | flower of maize | Galko | lowland plain |

q'aba? listen! $\quad$ q'a6a | instrument for cutting |
| :--- |
| thorns |

£aabo grandmother kabo sheep or goat hide
kibbe dry seasons xi66e lips
gab take
there are no words with final $/ 6 /$
/d/ and /d/

| dawle | lowland | dawri <br> deen | ge has forbidden <br> give! |
| :--- | :--- | :--- | :--- |
| doolle <br> duako | ox-hunch <br> back | doollo <br> duge | leather mat <br> truth |
| boodas | make dig! | Poodas | make walk! |
| booddo | digging | Pooddo | walking |
| bood | dig! | ?ood | walk! |

/g/ and /g/

| gay | arrive! | gab | take! |
| :---: | :---: | :---: | :---: |
| gaare | trees | gaante | udder |
| geefi | he belched | gee?i | he wants |
| gilo | meeting for dead people | giile | calabash for butter |
| gooh | roar! | goh | grow! |
| gaage | small water tortoise | Paage | birds |
| logi | he spoiled | bogi | he killed |
| Pagi | he uprooted | Pagi | he stays |
| žag | insert! | laag | turn! |
| $\log \mathrm{i}$ i | he spoiled at once | bog'gi | he killed at once |
| žug | extract! | nug | have sex! |

/s/ and /ts'/
saarre chiefs of village ts'aare last drops of milk
seke stick of roof
sire jewellery
ts'ekile elbow
ts'iire male

| basa | he is doing | q'ets'a | he is cutting |
| :--- | :--- | :--- | :--- |
| gisso | mongoose sp. | gits'ts'o | flea sp. |
| bas | do! | q'ats' | bend arms and legs of <br> the corpse! |

$/ \mathbf{g} /$ and $/ \mathbf{q} /$

| g'ara | he looks alike | q'arara | it hurts |
| :--- | :--- | :--- | :--- |
| g'ab | take! | q'aw | chew! |

g'or chase! q'od dig
Paagi he went back home
baq'i it melted
ligi he went out šiq'i he farted
nug'go having sex dooq'q'o carrying on the shoulder
nug' have sex! dooq, carry on the shoulders!
$/ \mathbf{q}$ '/ and $/ \mathbf{k} /$

| q'aro | side |
| :--- | :--- |
| q'eeda | he is licking |

$\begin{array}{ll}\text { q'ole } & \text { cattle } \\ \text { q'ummi } & \text { he ate grains }\end{array}$
woq'q'e hot sun
q'aq'q'e barks of tree
kakko kernel
žoq' beat!
šiq' fart!
Pook change!
dik count!
/ $\mathrm{I} /$ and / $\mathrm{P} /$
$\begin{array}{ll}\text { Care } & \text { coffee } \\ \text { Gašse } & \text { lots of grass }\end{array}$
farto smoke
Pagi he stays
bofe manure
boo?e irrigation pond
raico shot ka?Po getting up
ra9 shoot! ka? get up!

| $/ h /$ and $/ \hbar /$ halko | old man | ћaarko | hand |
| :---: | :---: | :---: | :---: |
| šoohi | he washed | šoohi | he urinated |
| gohho | growth | goћћo | roaring |
| goh | grow! | gooh | roar! |
| /h/ and /x/ halle | old people | xalle | pigeon sp. |
| gohi | he grows | c'oxi | he milks |
| gohho | growing | boxxakko | - pus |
| goh | grow! | boox | concimate! |
| $/ \mathbf{x} /$ and $/ \hbar /$ xarše xurri | boiled beans give up! | ћaarke ћulli | hands come in! |
| c'oxi | he milked | šoohi | he urinated |
| maaxxe c'oxxo | gourds milking | laћћo goћћо | bird sp. roaring |
| boox | concimate! | šooh | urinate! |
| $\begin{aligned} & / \mathbf{q}^{\prime} / \text { and } / \mathbf{x} / \\ & \mathbf{q} \cdot \operatorname{aro} \\ & \mathbf{q} \cdot \text { alše } \\ & \mathbf{q} \prime \text { alle } \end{aligned}$ | side belt for men they started singing | xaro xarše xalle | crocodile <br> boiled beans pigeon sp. |
| dooq'i | he carries on the shoulder | muxi h | he cuts |
| q'aq'q'e | barks of tree | Paxxe m | milk |
| žoq' | beat! | c'ox m | milk! |


| /Y/ and /h/ |  |  |  |
| :---: | :---: | :---: | :---: |
| Palge | leather sacs | halko | old man |
| Pažo | smell | hac'ande | body scarification |
| lo?0 | cow | Poholko | greedy |
| gaPali | he got married | Pahayte | milk and blood |
| ko? ${ }^{\text {a }}$ | setting on (fire) | gohho | growing |
| ko? | set on (fire)! | goh | grow! |
| /r/ and /l/ |  |  |  |
| rap | sleep! | las | sell! |
| rooko | curved towards the head (horn) | lo?o cown | cow |
| tibire | rod | tebele i | iron arrow |
| xare | fish | daale g | goats |
| Para | he knows | saala k | kind of trumpet |
| horo | inside part of a gourd | boolo s | scrabble sp. |
| garro | ground squirrel | q'allo s | starting singing |
| mur | pay! | bul s | separate! |
| sor | run! | kol | come back! |
| /l/ and /n/ |  |  |  |
| labale | kind of rifle | nabale | bealt of beads |
| lubi | it was hot | nugi | he had sex |
| longo | shield | nolo | brain |
| malali | he is tired | manaq'o | yoke |
| silitte | feather | šiininko | butter |
| zilanq'a | rainbow | Pinanko | boy |
| Pooladi | I spent time | ts'onaq'o | bee |
| tallaћo | tree sp. | bannado | black scrabble |
| billayko | knife | Pinnakko | flies |
| tillile | bird sp. | kinnisa | pimple |
| kiil | help! | šiin | smear! |

Table 5 contains words showing the phonemes in various positions, as well as in consonant clusters. In the words of the first column the phonemes are in initial position; in the second column they are in intervocalic position; the third column contains the geminated counterparts of the phonemes; in the fourth column they are in postconsonantal position; in the fifth column they
are in preconsonantal position; in the sixth, and last, column the phonemes are in final position. Discussion on the distribution of some phonemes follows the list of occurrences.

Table 5: Distribution of consonant phonemes

| /p/ <br> pari <br> he died | c’ipano boy | siippo sweat | žumpo iron point | bapko python | rap sleep! |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /b/ biye land | q'aba?i <br> I heard | Pibbo riddle | Perbo <br> male sheep | gabdi <br> you took | ts'iib clean! |
| /t/ tire liver | bote pumpkin | katte <br> fire | Paanto now | getko wooden seat | pat womit! |
| /d/ daalte goat | sido eyelashes | middakko rope | ganda neighbours | šudni <br> we dressed | q'od <br> dig! |
| katte fire | ћeeko chest | kallikko <br> sun | ћaerko hand | d'akše animal sp. | deek <br> sharpen! |
| gaarko gat <br> tree | zigammo <br> length | šiggire <br> razor | Pingiye mother | c'egde <br> blood | žug <br> extract! |
| /?/ Pingiye mother | boo?e <br> irrigation <br> pond | ža? Parko <br> rectus | ------ | de?se <br> kidneys | kiccas <br> laugh! |
| $\begin{aligned} & \hline \mathbf{s} / \\ & \text { sinde } \\ & \text { nose } \\ & \hline \end{aligned}$ | gasarko <br> buffalo | gassadi <br> I asked | gawso <br> chin | bisko <br> body | las sell! |
| /z/ zaante branch | Pazo younger brother | gazze <br> shadow | gelzakko <br> baboon | Puzge fire stones | ------ |
| /š/ šąalko older brother | Pošonko coldness | Gašše <br> lots <br> of grass | Pawši <br> It boiled | Pišti she refused | Pooš wipe! |
| $\begin{aligned} & l \check{\mathbf{z}} / \\ & \text { žío } \\ & \text { food } \end{aligned}$ | Pažo <br> smell | božže <br> white clay | Palžo walking stick | ---- | ------ |


| /c/ |  | picce <br> curds | ------- | ------- | ------- |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline / \mathbf{x} / \\ & \text { xumbi } \end{aligned}$ all | maaxatto gourd | Paxxe eyes | borxo ember | sooxmatte tree sp. | cox milk! |
|  | Pukaћe egg | kaћћa <br> it is hard | worћanko war | šumaћto sand | salaћ <br> four |
| /9/ qare coffee | biqa <br> white | leqo moon | dar£o <br> ashes | raiti <br> you shoot | ras shoot! |
| /h/ hucci I fill up | Poholko greedy man | gohho growing | ------ | gohti <br> you grow | goh <br> grow! |
| /6/ <br> Galko <br> lowland plain | kabo <br> sheep or goat hide | lu66e <br> feet | gombo <br> kraal | ------ | ----- |
| $\begin{aligned} & \text { /ts'/ } \\ & \text { ts'onaq'o } \\ & \text { bee } \end{aligned}$ | mits'o <br> sorghum <br> beer | gits'ts'o <br> flea sp. | q'ants'e thorn | q'ets'ti you cut | q'ets' cut! |
| /d/ <br> doollo <br> leather | q'oode snail | mudode <br> handle of a headrest | ¢ande water | --- | Pood walk! |
| /c'/ c'ayde fence | q'aac'a charcoal | gac'c'e <br> tef | kirinc'e spur | ------ | ------ |
| /g/ ginaqe rib | mugaite <br> head | nug'fo <br> having sex | maango sorghum | nug'ti <br> you had <br> sex | lig' get out! |
| $\begin{aligned} & \hline / q ' / \\ & \text { q'awko } \end{aligned}$ $\operatorname{man}$ | ts'eq'o firefly | woq'q'e <br> hot sun | sonq'a <br> klind of guitar | loq'ti <br> you <br> swallowed | loq' swallow! |
| /w/ wa?ko god | gawaiko <br> thunder | q'awwo biting | ------ | gawso <br> chin | gallaw <br> night |
| /y/ | ziya warrior | q'ayya <br> it is good | ------ | kaysa there | mayyi kiss! |
| /r/ |  |  |  |  |  |
| reento | Pure | Porro | sawro | darbe | kibir |


| hippo | wax | forest | dik dik | drum | dance! |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /m/ manne house | goomaro throat | zammo honey | garmo <br> lion | gombo <br> kraal | Pooxam exchange! |
| /n/ <br> na? ${ }^{2}$ <br> small <br> child | zano street | paannatte after | Pawne in the evening | c'ingo mosquito | q'aan chew! |
| /n/ |  |  |  |  |  |
| ------ | ------ | senno <br> Monday | ------ | ------ | ------ |
| /I/ lakki two | Pilmale tears | doollo leather mat | gurlo <br> cat | Pilge teeth | šal <br> light (adj) |

The least frequent consonant phonemes are $/ \mathrm{n} /$, $/ \mathbf{c} /$ and $/ \mathbf{h} /$. The first two only occur geminated and never as simple $/ \mathrm{n} /$ and $/ \mathbf{c} / . / \mathrm{nj} /$ is only attested in loanwords. $/ \mathbf{h} /$ appears in few roots and never in postconsonantal position. Also the sibilants $/ \check{\mathbf{z}} /$ and $/ \mathbf{c} / /$ appear in a particularly low number of roots and never occur in preconsonantal and final positions. The laryngeals and the glides do not appear in postconsonantal position. The implosive $/ \mathbf{d} /$ is not attested before consonants. $/ \mathrm{y} /$ and $/ \mathrm{n} /$ are the only consonants that do not occur word initially. /y/ may, however, be the onset of a root medial or root final syllable. Even though the phoneme $/ \mathbf{z} /$ has not been included among the consonants occurring in word final position, it is attested word finally in Pazaz 'order!', which is the Imperative singular form of the verb of Amharic origin Pazaz- 'to order'. This verb has a free variant Pažaž-, which in the singular Imperative form, ?ažaž 'order!' shows the only case of a final palatal fricative.

The following section, 2.2., contains a discussion on the phonetic realisations of the consonant phonemes.

### 2.2. Realisations of consonant phonemes

### 2.2.1. Final unreleased realisation

All stops and glottalised obstruents are partially released in word final position. The only exception is $/ \mathbf{p} /$, which appears as [ $\mathbf{f}]$, in this position (see 2.2.13.):


See examples of final $/ \mathbf{b} /$, $/ \mathbf{g} /$ and $/ \mathbf{t s} \mathbf{s} /$ :

| ts'iib | ts |
| :---: | :---: |
| meeg | [me:g ${ }^{7}$ ] |
| uts' | [tu:ts' ${ }^{\text {²] }}$ |

### 2.2.2. Glottal stop deletion

The glottal stop may drop in medial position if followed and preceded by identical vowels.
/?/ optionally $\rightarrow$ between $V_{1} \quad V_{1}$
Example:
lo 10 [loo] cow

### 2.2.3. Trilled realisation

The uvular fricative has a trilled articulation before high vowels.

$$
/ \mathbf{x} / \rightarrow[\tilde{\chi}] \text { before } \mathbf{V}_{[\text {high }]}
$$

Example:
xi6te [ $\quad$ ip'te] lip
The voiceless pharyngeal fricative may be pronounced with a particularly powerful airflow, which produces a trilling effect, probably of the epiglottis.

$$
/ \hbar /(\text { optionally }) \rightarrow[\hbar \tilde{i}]
$$

Example:
Pukaћe [Pukaћ̃e] eggs

### 2.2.4. Apical realisation

The stricture point of the alveolar implosive / $d /$ is normally localised in the postalveolar region. The articulation is apical, and optionally laminal.

$$
/ \mathbb{C} /\left[\mathbb{U}^{〔}\right]_{\text {[postalveolar] }} \sim\left[\mathbb{C}_{\mathrm{Q}}\right]_{\text {[postalveolar] }}
$$

Examples:

$$
\begin{aligned}
& \text { doollo [d̛o: }: 1: 0] \sim \text { [dopo:l:o] leather mat } \\
& \text { diim [d̛iim } \left.{ }^{7} \sim \text { diiim }{ }^{7}\right] \text { swim! }
\end{aligned}
$$

### 2.2.5. Preglottalisation

When $/ \mathbb{d} /$ is geminated one clearly perceives a glottal stricture before the release of the stop, which is postalveolar and apical.

$$
/ \mathrm{dd} /\left[^{\mathrm{q}} \mathrm{~d}:\right]_{[+ \text {postalveolar }]}
$$

## Example:

```
mudde [mu 'd:e] handle of a headrest
```


### 2.2.6. Reduction to glottal stop and to zero

A preceding /l/ may cause reduction of / $\mathbf{d} /$ to glottal stop, or $/ \mathbf{d} /$ is assimilated to the preceding lateral $/ \mathbf{l} /$. The assimilation is probably favoured when the glottal stop resulting from the reduction of $/ \mathbf{d} /$ is found in postconsonantal position:

$$
/ \mathrm{d} /(\rightarrow)\left[^{\mathrm{p}}\right](\rightarrow)[\mathrm{I}] / \mathbf{I}_{-}
$$

Example:
gaaldawti [ga:IRawti] or [gal:awti] she became pregnant

### 2.2.7. Change in air-stream direction

The articulation of the uvular ejective $/ \mathbf{q}$ '/ may be implosive. There are two implosive realisations, voiced and voiceless.

$$
/ \mathbf{q}^{\prime} /(\text { optionally }) \rightarrow[G] \sim[q]
$$

## Example:

q'eed [qe:dㄱ] lick!

### 2.2.8. Devoicing

The glottalic / $\mathbf{g} /$ can be devoiced.

$$
/ \mathrm{g} / \rightarrow \text { optionally [g] }
$$

Example:
Pilgakko [Pilgak:o] tooth

### 2.2.9. The phoneme / $\mathrm{q} /$

After the voiced pharyngeal fricative a glottal stop is often perceived, particularly in initial and geminated positions.
$/ \mathrm{C} / \rightarrow\left[\mathrm{C}^{\mathrm{P}}\right] / \#$
$/ £ \varsigma / \rightarrow\left[¢:{ }^{?}\right]$
Example of initial / $\varsigma /$ :
Gardo [ ${ }^{\text { }}$ ardo] ox
Example of geminated / $\mathcal{\Omega} /$ :
zaice [zai: ${ }^{?}$ e] hearts

### 2.2.10. Affricate realisation of ejective

The ejective $/ \mathbf{q} \mathbf{\prime} /$ has an affricate as a free variant.
$/ q^{\prime} /($ optionally $) \rightarrow\left[q \chi^{\prime}\right]$
Example:
q'opte [q $\mathbf{\chi}$ 'ofte] cave

### 2.2.11. Affricate realisation of fricative

$/ \check{\mathbf{z}} /$ appears as an affricate in postconsonantal and geminated positions.

$$
/ \check{\mathbf{z}} / \rightarrow[\mathrm{d} 3] / \mathbf{C}_{-}
$$

$$
/ \check{\mathbf{z}} \mathbf{z} / \rightarrow \text { [d3:] }
$$

Example of / $/ \mathbf{z} /$ in postconsonantal position:
Palžo [Pald3o] walking stick
Example of geminated /ž/:
božže [bod3:e] white clay

### 2.2.12. Fricative realisation of affricate ejective

The ejective affricate /ts'/ has an ejective fricative as a free variant:

$$
/ t s^{\prime} /(\text { optionally }) \rightarrow\left[s^{\prime}\right]
$$

Examples:

ts'onaq'o [s'onaq'o] bee

### 2.2.13. The voiceless labial consonant /p/

The voiceless labial consonant is characterised by ill-understood variations between stop and fricative word initially; it is realised as a stop after a nasal consonants and in lexical internal gemination; and it is realised as a labiodental or bilabial fricative after non-nasal consonants and in intervocalic, preconsonantal, and final positions. In the present discussion, the only voiceless labial consonant of the Ts'amakko phoneme inventory is considered neutral to the phonological categories 'stop' and 'fricative'. In spite of this problem of classification, the symbol $\mathbf{p}$ will be used to indicate the phoneme in concern.

## Initial p

Word initially, $\mathbf{p}$ appears as plain stop $[\mathbf{p}]$, aspirated stop $\left[\mathbf{p}^{h}\right]$, bilabial fricative $[\Phi]$ or labiodental fricative [ $\mathbf{f}]$. The variations exist within the speech of the same speaker for the same words. In principle all variants are possible for all words. An example of a word with the complete allophonic variations of the initial $\mathbf{p}$ we have recorded is puddo 'cotton':

$$
\text { [pud:o] } \sim \text { [phud:o] } \sim \text { [фud:o] } \sim \text { [fud:o] cotton }
$$

Even though a careful analysis of the p-initial words has been carried out, it was not possible to establish restrictions on the variations of initial $\mathbf{p}$.

## Intervocalic $p$

In intervocalic position $\mathbf{p}$ appears as [ $\mathbf{f}]$ or $[\Phi]$. The example below shows the allophonic realisations of $\mathbf{p}$ in intervocalic position. In most cases both fricative variants are possible, as the word laapa 'bat' shows:

$$
[\mathbf{l a}: \Phi \mathbf{a}] \sim[\mathbf{l a}: \mathbf{f a}] \text { bat }
$$

When a mid round vowel precedes, $[\Phi]$ is the only possible realisation. See the only two examples in the corpus:

$$
\begin{array}{ll}
{[? \mathbf{0}: \Phi \mathrm{e}]} & \text { wild pea } \\
{[\mathrm{mo} \Phi \mathbf{a r a}]} & \text { long pole of a plough }
\end{array}
$$

Some words have been recorded with [ $\mathbf{f}]$ as the only realisation.
See some examples:

| [tifa] | straight |
| :--- | :--- |
| $[$ Pafo $]$ | steam |
| $\left[\int\right.$ arifo $]$ | kind of rifle |
| $[$ Put:ufo $]$ | small pole in roof |

The last three examples show that the labiodental pronunciation is also possible before round vowels and that round vowels do not bring about the bilabial pronunciation.

The word [fo:fis] 'to blow' always shows the realisation [f] in initial and medial position. [fo:fis] may be explained as the result of the reduplication of the phonetic onomatopoeic segment.

## Preconsonantal p

$\mathbf{p}$ is normally realised as [f] in preconsonantal position. See the example below, in which $\mathbf{p}$ is in root final position preceded by the suffix -ti (second person feminine Unmarked):

```
rap-ti [rafti] you slept
```


## Postconsonantal p

$\mathbf{p}$ can only be preceded by an homorganic nasal, /r/ or /l/. If the preceding sonorant is the nasal $/ \mathbf{m} /$, $\mathbf{p}$ is represented by the aspirated $\left[\mathbf{p}^{\mathrm{h}}\right]$. See below the example of $\mathbf{p}$ after nasal:
[3ump ${ }^{\text {h }} \mathbf{0}$ ] iron point
If the preceding sonorant is $/ \mathbf{r} /$ or $/ \mathbf{l} /$, $\mathbf{p}$ appears as [ $\mathbf{f}]$. See the examples after $/ \mathbf{r} /$ and $/ \mathbf{l} /$ :

| [c'irfa] | braids |
| :--- | :--- |
| [gilfa] | bellows pump |

## Final p

$\mathbf{p}$ always appears as [f] in final position. See below the example of the pfinal verb rap 'to sleep' in Imperative singular conjugation:
[raf] sleep!

## Geminated $p$

As for the shape of $\mathbf{p}$ in geminated position, there is a difference between gemination within morphemes and gemination across morpheme boundaries related to grammatical rules. Root internally a geminated $\mathbf{p}$ normally appears as an aspirated bilabial stop [ $\mathbf{p}^{\mathrm{h}}$ :]. See the following examples:

| [ up $^{\text {h }}$ : i ] | he blew |
| :---: | :---: |
| [Pup ${ }^{\text {h }}$ :iti] | you blew |
| [g'iip ${ }^{\text {h }}$ : i ] | he went to sleep |
| [g'iip ${ }^{\text {h }}$ :iti] | you went to sleep |
| [bup ${ }^{\text {h }}$ : i ] | he starved |
| [bup ${ }^{\text {h }}$ :iti] | you starved |
| [sip ${ }^{\text {h}}: 0$ ] | sweat |
| [sip ${ }^{\text {h }}$ ad: $:$ ] | lots of sweat |

$\mathbf{p}$ emerges as $\left[\mathbf{p}^{\mathbf{h}}:\right]$ or [ $\left.\mathbf{f}:\right]$ if geminated for grammatical reasons. The grammatical contexts are the formation of the past Negative verbal stems and the plural nominal derivation by gemination. In all these cases we can assume that there is an option between applying the gemination to the two main realisations, the stop or the fricative.

In the formation of the Negative stem by gemination of the last root consonant, some verbs such as rap 'to sleep', tup 'to spit', biip 'to eat' show alternation between the two variants of geminated $\mathbf{p}$. In the examples below the verbs are conjugated for the singular persons of the Unmarked and Past Negative paradigms. The inflection of the first person and third masculine singular person of the Unmarked is $\mathbf{- i}$. The inflection of the second person and third feminine singular person of the Unmarked is $\mathbf{- t} \mathbf{i}$. When the roots in question are followed by -i the $\mathbf{p}$ is found in intervocalic position. When the $-\mathbf{t} \mathbf{i}$ follows the $\mathbf{p}$ is found in preconsonantal position. In both cases its appearance as [f] is regular. As for the Negative paradigm, a single stem is used for all the singular persons. The singular Negative stem is formed by gemination of the last root consonant and the suffixation of the paradigm vowel -a. See the examples:

| $1 \mathrm{Sg} / 3 \mathrm{MSg}$ <br> Unmarked | $2 \mathrm{Sg} / 3 \mathrm{FSg}$ <br> Unmarked | All singular persons Past Negative |
| :---: | :---: | :---: |
| [bi:fi] | [bi:fti] | [bi:p ${ }^{\text {h }}$ a] ~bi:f:a] |
| he had a meal | you had a meal | he did not have a meal |
| [rafi] | [rafti] | [rap ${ }^{\text {h }}$ a] $\sim$ [raf:a] |
| he slept | you slept | he did not sleep |
| [tufi] | [tufti] | [tup ${ }^{\text {h }}$ a] $\sim$ [tuf:a] |
| he spit | you spit | he did not spit |

The gemination of $\mathbf{p}$ in the verb buup- 'to bless' is always based on the realisation [f]. The result is that its Negative stem shows only the realisation [ $\mathbf{f : ]}$ and never [ $\mathbf{p}^{\mathrm{h}}:$ ]. See the examples:

| $1 \mathrm{Sg} / 3 \mathrm{MSg}$ <br> Unmarked | $2 \mathrm{Sg} / 3 \mathrm{FSg}$ <br> Unmarked | All singular persons <br> Past Negative |
| :--- | :--- | :--- |
| biipi [bi:fi] | biipti [bi:fti] <br> he had a meal <br> you had a meal | biippa [bi: $\left.\mathbf{p}^{\mathrm{h}}: \mathbf{a}\right] \sim[$ bi:f:a] <br> he did not have a meal |

\author{

buufi [bu:fi] buupti [bu:fti] buuppa [bu:f:a] | he blessed | he blessed | he did not bless |
| :--- | :--- | :--- |

}

A kind of plural derivation operates by gemination of the last noun root consonant. In addition, the plural derivation suffix $-\mathbf{e}$ is added. Our corpus provides only one example of a noun root ending in $\mathbf{p}$, [kefo] 'kind of rifle', which is likely to be a loanword. The basic noun of this root shows the masculine gender suffix $-\mathbf{0}$. The gemination of $\mathbf{p}$ in the plural form of this noun root is only realised as [ $\mathbf{f}:]$, as the following example shows:
[kefo] kind of rifle
[kef:e] kind of rifle (pl)
In the gemination process the input seems to be the phonetic realisation [f] or $[\mathbf{p}]$. The geminated $[\mathbf{p}:]$ emerges when the phonetic entity $[\mathbf{p}]$ is taken as the unit of gemination. This happens exclusively in lexical context. Across morpheme boundaries the phonetic entity [f] may also optionally be taken as the unit of gemination and long [f:] may emerge. Since the long consonants [ $\mathbf{p}:]$ and [ $\mathrm{f}:]$ cannot be considered as the geminated occurrence of a phoneme $/ \mathbf{p} /$ or $/ \mathbf{f} /$, this is another indication of the impossibility to determine whether the underlying phoneme is a voiceless labial stop or fricative. As a conclusion, I prefer to analyse the voiceless labial consonant in Ts'amakko as undetermined in its stricture parameter. In order to keep the transcription close to the actual pronunciation, $\mathbf{p}$ will be used in initial and postnasal positions and in root internal gemination; $\mathbf{f}$ will be used in intervocalic, preconsonantal, postconsonantal and final positions and in grammatical gemination.

Table 6 presents a summary of the phonetic realisations of $\mathbf{p}$, their conditions and the respective symbols used in the text:

Table 6: Phonetic realisations of the voiceless labial consonant

| Initial | $[\mathrm{p}],\left[\mathrm{p}^{\mathrm{h}}\right],[\Phi],[\mathrm{f}]$ |
| :--- | :--- |
| Intervocalic | $[\mathrm{f}],[\Phi] / \mathrm{V}_{\text {rroundl }}$ |
| Preconsonantal | $[\mathrm{f}],[\Phi] /-\mathrm{CV}$ [round] |
| Postconsonantal | $[\mathrm{f}]$ |
| (except after nasal) |  |
| Postnasal | $\left[\mathrm{p}^{\mathrm{h}}\right]$ |
| Final | $[\mathrm{f}]$ |
| Geminated | $\left[\mathrm{p}^{\mathrm{h}}:\right]$ within roots |
|  | $[\mathrm{f}:] \sim\left[\mathrm{p}^{\mathrm{h}}:\right]$ across morpheme boundaries |

### 2.2.14. The geminate counterparts of $/ \check{s} /$

The palatal sibilant š occurs geminated as šš [ $\left.\int:\right]$ only across morpheme boundaries. Two grammatical contexts in which š appears geminated are
plural noun formation by gemination and punctual verbal derivation. In cases where the basic root with final $/ \check{\mathbf{s}} /$ has been lost, the plural formation has $/ \check{\mathbf{s} s} /$, followed by the plural gender suffix -e (see 3.4.2.). See the examples below:

| Caš-ko | (m) | Caš-š-e | (p) | grass |
| :--- | :--- | :--- | :--- | :--- |
| biš-ko | (m) | biš-š-e | (p) | body |
| laš-ko | (m) | laš-š-e | (p) | kind of food |
| Piš-te | (f) | Piš-š-e | (p) | rib |

Another context of gemination is the punctual derivation. In the example below the simple and derived stems the verbs are in the Unmarked conjugation. The person is in the 3 SgM , marked by the suffix $-\mathbf{i}$ :

$$
\begin{array}{lll}
\text { Pooš-i } & \text { he wiped } & \text { Pooš-š-i } \\
\text { taš-i } & \text { he wiped once } \\
\text { he thatched } & \text { taš-š-i } & \text { he made one thatching movement }
\end{array}
$$

No šš is attested within lexical stems. In this position šš is represented by cc [ $\left.\mathbf{t} \int:\right]$, which is a relic of a historical rule $/ \check{\mathbf{s} \mathbf{s}} / \rightarrow[\mathbf{c c}]$. This rule is synchronically obliterated and only in lexical contexts some traces appear.

Geminated šis represented by cc in the verbal roots Pacc- 'to go', ?ucc- 'to fill up (tr.)', kiccas- 'to laugh' and q'aacc- 'to open', as well as in three nominal roots, kacc-e 'shoulder', picc-e 'curds' and kallacc-o 'rectus', and the adverbial macce 'always'. Another root including cc is geecc-, which appears as the stem of the adjectives geeccakko 'old (m)', geeccatte 'old (f)' and geeccayke 'old (p)'. The segment [cc] also occurs in the Amharic loanword bicca 'only, alone'. Another probable loanword of unclear origin is šicca 'kind of rifle'. The word pacce 'fields', the plural counterpart of pašo 'field', is the only example of cross boundary gemination in which ce appears instead of the regular šš. This is probably due to the fact that this plural noun is considered as a lexical and underived item (cf. 3.5.3.).

The historical origin of ce from geminated š is also indicated by the alternation of the two elements in the stems geešuw- 'to become old' and geecc- 'old person'. geešuw- is a verbal stem which shows a frozen inchoative suffix -uw; geecc- is an adjectival root.

Our historical hypothesis gets support on comparative grounds. Most of the Dullay cognates of the Ts'amakko roots containing ce show š, including most of the lexemes for which synchronically there is no evidence for an origin in š. The examples from the dialects Dobase, Harso and Gollango are extracted from Amborn, Minker and Sasse (1982). The Gawwada and Gorose correspondences have been provided by Tosco (p.c.). See table 7.

Table 7: Dullay correspondences with Ts'amakko cc

| Ts'amakko |  |  |  |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { pašo }(\mathrm{m}) \\ & \text { pacce }(\mathrm{pl}) \end{aligned}$ | Gawwada | pašo (m), <br> pašše (pl) | field <br> fields |
| geeccakko (m) <br> geeccatte (f) <br> geeccayke (pl) <br> geešuw | Gollango <br> Gawwada <br> Gawwada | $\begin{aligned} & \text { g'eešakkó (m), } \\ & \text { g'eešatté }(\mathrm{f}), \\ & \text { g'eešawhe }(\mathrm{pl}) \\ & \text { geešakko }(\mathrm{m}), \\ & \text { geešatte }(\mathrm{f}), \\ & \text { geešawhe }(\mathrm{pl}) \\ & \text { geešuy } \end{aligned}$ | old man old woman old people old man old woman old people to become old |
| Pacc- | Dobase, Gollango Gawwada | ašš- | to go |
| kicca? | Gollango | kišą- | to laugh |
| q'aacc- | Harso Dobase Gawwada | q'aaš- | to open |
| kacce (pl) <br> kaccitte (f) | Harso | heššé, hešáad'e (pl), | shoulder shoulders |
|  | Gorose | hešše hešaddede | shoulder shoulders |
|  | Gollango | hašitto | one shoulder |
|  | Gawwada | $\begin{aligned} & \hline \text { hašše (pl) } \\ & \text { hašsitto (m) } \end{aligned}$ | shoulders one shoulder |

The relation between š and cc that can be observed nowadays is problematic. Since cc is not the result of a synchronic phonological rule, it functions as an independent phonological element. This can be seen from the following contrasts with cc, that from the strictly synchronic phonological point of view must be taken as proof of phonemic opposition:

| Pacce | they go | Cašše | lots of grass | (pl. of Caško 'grass') |
| :--- | :--- | :--- | :--- | :--- |
| picce | curds | bišše | bodies | (pl. of biško 'body') |
| pacce | fields | lašše | kind of food | (pl. of laško) |

The present description attributes phonemic status to cc. However, this conlusion contradicts the fact that all other geminated consonants, with the exception of $/ \mathrm{n} /$, have single counterpart, while no element $/ \mathbf{c} /$ is attested in the language.

### 2.3. Vowels

Ts'amakko has 5 short and 5 long cardinal vowel phonemes. Our spelling conventions make use of the I.P.A. signs [i], [u], [e], [0], [a] for the short vowels. The doubling of the short vowels indicates vowel length. See the full inventory below:

a

aa

See the following (near) minimal pairs:

| dib | to rain | Ciim | to swim |
| :--- | :--- | :--- | :--- |
| buske | castrated (p.) | busše | beard |
| berko | raining season | beelko | cattle sharing |
| nolo | brain | poolo | cloud |
| Pag | to be located | ¢aag | to go back home |

After the pharyngeal $£$ and $\hbar$ the mid-vowels back vowel $\mathbf{0}$ sounds more open than elsewhere.

The long vowels never occur word finally. The only exception is shown by the interrogative word moo 'what?'.

### 2.4. Tone

### 2.4.1 High tone (H) and Low tone ( L )

Two tones, High tone and Low tone, are distinguished in Ts'amakko. Tone is associated with the short or long syllable vowel. High tone is marked by the acute accent ' and Low tone is marked by the grave accent `. The accents appear on the vowel symbols. Both symbols of long vowels are accented. On long vowels, high tone appears as a continued high pitch and low tone appears as a continued low pitch along the vowel. Only in two nouns the long vowel is pronounced with a raising pitch along. These cases are accounted for by analysing the long vowels as the sequence of two morae, the first one carrying low tone and the second one carrying high tone. The raising pitch is the tonal contour resulting from the low-high tonal sequence. See the nouns below:

$$
\begin{array}{lll}
\text { LHL } & \text { gàántè } & \text { udder } \\
\text { LHL } & \text { làáfà } & \text { bat sp. }
\end{array}
$$

The analysis of long vowles as the sequence of two morae is limited to these marginal cases and will not be adopted for the rest of the long vowels because the establishment of vocalic morae is not functional to the general analysis of long vowels.

### 2.4.2. The tonal system

The Ts'amakko tonal system is functionally restricted. The following facts characterise the use of tone:

- Two, or more, High tones must be part of a single string.
- Tone is lexically determined in nominals and in verbs.
- The vast majority of nominals show low tone on the final syllable and high tone on the preceding syllable(s). Other distributions of tone are exceptional.
- Basic nouns are never distinguished only by tone. The only near minimal pair which deserves mention is shown below and includes one of the marginal nouns having a long vowel with rising pitch contour:
$\begin{array}{lll}\text { LHL } & \text { gàántè } & \text { udder } \\ \text { HL } & \text { gáántè } & \text { woman }\end{array}$
- The tonal lexical distinction in verbs is only manifested in the inflectional suffixes of the Unmarked paradigm.
- Tone has a role in grammar.
- Every verbal paradigm is characterised by a tonal pattern.
- Modal and aspectual opposition are often expressed only by tone.
- One grammatical function is expressed only by tone in nominal morphology.
- Tonal change in nouns occurs in one case of cliticisation.


### 2.4.3. Tone in basic nouns and other nominals

The tone of most basic nouns, pronouns, adverbials and numerals is largerly predictable: the vast majority of them show low tone on the final syllable and high tone on the preceding syllable(s). Therefore the most common pattern in disyllabic nominals is HL and the most common pattern in trisyllabic nominals is HHL. A minority of disyllabic basic nouns shows the pattern LL and a minority of trisyllabic basic nouns show the patterns LHL. The distribution LLL is attested in one noun and one adverbial. Only two disyllabic nominals cannot be included in the patterns HL and LL. These are the basic nouns with bimoaic long vowels which have been mentioned in 2.4.1. There two numerals and one interrogative with a HH pattern.

Examples of nominals with HL pattern:

$$
\begin{array}{ll}
\text { Páylò } & \text { working meeting } \\
\text { qárè } & \text { coffee } \\
\text { Páwnè } & \text { in the evening } \\
\text { Písè } & \text { she }
\end{array}
$$

Examples of nouns with HHL tonal pattern:
乌árráfkò tongue
xíbírè bat
ћábúrà wind
Pámmákè properly
Púfúndè they
Examples of nouns with $\mathbf{L H L}$ tonal pattern:
Pìrgáiò axe
šìnšállè ants
Pàbétò sorghum sp .
Examples of nouns with $\mathbf{L L}$ pattern:
bàfkò python
bìyè earth
bàndà fowl's faeces
dòòllò leather mat
Pààgè birds
Below are the noun and the adverbial with LLL pattern:
bàlgìddò ostrich
Pèlèlè together
The two numerals and the interrogative with HH tonal distribution are the following:

| lákkí | two |
| :--- | :--- |
| kúnkó | ten |
| Páћá | who? |

### 2.4.4. Nominal tone in suffixation and cliticisation

With two exceptions, grammatical marking has no influence on the tonal pattern of nouns.

The VCCV number derivation suffixes, e.g. -itt and -add (see 3.5.2.), the locative case suffixes (see 3.7.) and the Distal demonstrative suffixes (see 3.8.) carry high tone on the initial vowel and low tone on the final vowel. These suffixes replace the final vowel of basic nous (which, as explained in 3.4.2., is a gender suffix). See examples of suffixation:

| kárò | dog | HL | kár-íttò | one dog | HHL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| šìnšállè | ants | LHL | šìnšáll-íttè | one ant | LHHL |
| bàlgìddò | ostrich | LLL | bàlgìdd-áddè | ostriches | LLHL |
| dúúkò | back | HL | dúúk-ílò | at the back | HHL |
| gúbálè | rabbit | HHL | gúbál-áttè | by the rabbit | HHHL |
| dale | goats | HL | dáál-étè | by the goats | HHL |
| đòòllò | leather | LL | dòòll-ússà | that leather | LHL |
|  | mat |  |  | at |  |
| mánnè | house | HL | mánn-íssà | that house | HHL |

The case clitics =nù 'from', =yày 'with' and =tà 'upon' cause no change in the tone distribution of the noun they attach to. The nouns followed by the case clitic =mà 'to/in' have high tone on the final vowel and low tone on the preceding vowels. See examples (for the lengthening of the first word vowel see 2.5.7.):

| zíptè | pot | zì̀ 1 té $=$ mà | in the pot |
| :--- | :--- | :--- | :--- |
| gábáyà | market | gààaàyá $=$ mà | to the market |
| kúttúnkò | mountain | kùùttùnkó $=$ mà | on the mountain |

A morpheme used for proximal demonstrative and vocative is expressed by the tone distribution LH. As it happens with the nouns marked by =ma, nouns modified by this morpheme show high tone on the final vowel and low tone on the preceding vowels. The final high tone syllable vowel is most often rised: $\mathbf{e}$ becomes $\mathbf{i}$ and $\mathbf{o}$ becomes $\mathbf{u}$. Nouns following this tone pattern may have proximal demonstrative or vocative meaning. See examples:

```
gààntí tè béézè
woman.Prox/Voc.F PronF Beze.Poss
This is Beze's woman. [gàántè 'woman']
đàllí !
children.Prox/Voc.P
children! [\'állè 'children']
```

This tonal morpheme also applies to some adverbials (see 8.1.)

### 2.4.5. Tone in verbs

Tone is lexically determined in verbs. There are two classes of verbs, the High tone class (class A) and the Low tone class (class B). Most verbs, about $80 \%$, belong to class A. In most situations lexical tone differences are neutralised. They are only manifested in the singular and first plural inflectional suffixes of the Unmarked paradigm (see 6.3. and 6.5.1.). The inflectional suffixes of these persons carry a High tone in Class A verbs and a Low tone in class B verbs. The tone of the Unmarked inflectional suffixes of 2 and 3 plural makes no distinction and it is always Low. See table 8 .

Table 8: Tone in Unmarked inflection

|  | Class A verb | Class B verb |
| :---: | :---: | :---: |
|  | Sùg 'to drink' | žil? 'to eat' |
| 1Sg | ¢úg-í | žíl-ì |
| 2Sg | ¢úg-dí* | ží?-tì |
| 3SgM | ¢úg-í | žíP-ì |
| 3 SgF | ¢úg-dí* | ží?-tì |
| 1 Pl | ¢ úg-ní | žíl-nì |
| 2 Pl | ¢úg-dè* | ží?-tè |
| 3 Pl | ¢úg-è | ží?-è |

(*As shown in 2.7.1. $/ \mathbf{t} / \rightarrow[\mathbf{d}]$ after $\mathbf{b}, \mathbf{d}$ and $\mathbf{g}$
Tone shows the highest functional load in verb morphology. It contributes to the syntactic and modal distinction of the verbal paradigms. The tone patterns depend on the numbers of syllables of the verb forms. Verbs based on CVC stems are predominantly disyllabic because their stem is in most of the cases followed by a suffix containing one vowel. In those cases in which the suffix has two vowels, the CVC verbs are trisyllabic and show a three-tone pattern. The patterns followed by CVC verbs are listed below along with the indication of the verb forms showing the patterns and relative examples:

Table 9: Verb tone patterns

| Pattern | Verb forms | Examples |
| :---: | :---: | :---: |
| H | Imperative singular A | ¢ úg 'drink!' |
| HL | Unmarked B | žíli 'he ate' |
|  | Unmarked A (only 2 and 3 plural) | ¢úgdè 'you drink' |
|  | Marked-Imperfective (only singular persons) | ¢úgà 'I am drinking' |
|  | Main Future (only singular persons) | ¢ úgnà 'I will drink' |
| HH | Unmarked A (except 2 and 3 plural) | ¢úgí 'I drink' |
|  | Subordinate Future (only $1 \mathrm{Sg}, 3 \mathrm{SgM}, 3 \mathrm{Pl}$ ) | ¢ úgní 'I will drink' |
|  | Consecutive A and B (only singular persons) | Súgá (A) 'and I drink' ží?ó (B) 'and I eat' |
|  | Non-Past Negative | žíPé 'they do not eat' |
|  | Past Negative (only singular persons) | žíP Pá 'he did not eat' |
|  | Future Negative (only 1Sg, 3SgM, 3Pl) | žì ${ }^{\text {ní }}$ 'I will not eat' |
|  | Jussive Negative (only singular persons) | žíPú 'don't let me eat' |
| LH | Imperative plural A | Yùgá 'drink (pl)!' |
|  | Imperative singular B | žilá 'eat!' |
|  | Jussive (except 3SgF) | ¢ugná 'let's drink' |
| HHL | Marked-Imperfective (only plural persons) | ¢úgánkì 'we are drinking' |
|  | Main future (only plural persons) | ží? ${ }^{\text {anánkù 'you will drink' }}$ |
|  | Consecutive A and B (only $2 \mathrm{Sg}, 3 \mathrm{SgF}, 1 \mathrm{Pl}$ and 2 Pl ) | Súgínkì (A) 'and they drink' žíPónkì (B) 'and they eat' |
| LHH | Jussive (only 3SgF) | ¢ùgítá 'let her drink' |
|  | Imperative plural B | žiPíndá 'eat (pl)' |
| HHH | Subordinate future (only $2 \mathrm{Sg}, 3 \mathrm{SgF}, 1 \mathrm{Pl}$ and 2 Pl ) | ¢úgnínní 'we will drink' |
|  | Past Negative (only plural persons) | žíP Pánkú 'you did not eat' |
|  | Future Negative (only $2 \mathrm{Sg}, 3 \mathrm{SgF}, 1 \mathrm{Pl}$ and 2 Pl ) | žìPíntí 'she will not eat' |
|  | Jussive Negative (only $2 \mathrm{Sg}, 3 \mathrm{SgF}, 1 \mathrm{Pl}$ and 2 Pl ) | žíPúnkú ‘do not eat (pl)! |

Several verb forms are distinguished only by tonal change. This is the case for the forms of the Unmarked paradigm of class B and the forms of the Non-Past Negative paradigm. The first one shows high tone on the stem vowel only, while the second shows high tone on both the stem and the inflectional vowels. See the comparison below:

|  | ži ' 'to eat' |  |
| :---: | :---: | :---: |
|  | Unmarked (HL) | Non-Past Negative (HH) |
| 1Sg | ží?-ì | ží?-í |
| 2 Sg | ží?-tì | ží?-tí |
| 3 SgM | žíP-ì | ží?-í |
| 3 SgF | ží?-tì | ží?-tí |
| 1 Pl | ží?-nì | ží?-ní |
| 2 Pl | ží?-tè | ží?-té |
| 3 Pl | ží?-è | ží?-é |

The same tonal difference can be observed from the comparison between the second and the third persons plural of the Unmarked paradigm of class A and the Non-Past Negative.

|  | Súg 'to drink' |  |
| :--- | :--- | :--- |
|  | Unmarked | Non-Past Negative |
|  | (HL) | (HH) |
| 2P1 | Cúg-dè | Cúg-dé |
| 3P1 | 乌úg-è | Cúg-é |

Another tone difference appears when comparing the third plural persons just shown with their Jussive counterpart. The Jussive form differs in that it has a low tone on the stem vowel and a high tone on the inflectional vowel.


See also the tonal difference between the HL pattern of the third plural Marked-Imperfective form and the LH pattern of the first singular Jussive form.
©úg 'to drink'
Marked-Imperf. Jussive
3Pl (HL) $\quad 1 \mathrm{Sg}$ (LH)
£úg-à $\quad$ Iùg-á

One more example of an exclusively tonal distinction is between the first plural Unmarked B, which has a HL pattern, and the first singular subordinate future, which has a HH pattern. Example:

| žị 'to eat' |  |
| :--- | :--- |
| Unmarked | Subord. Future |
| 1Pl (HL) | 2Pl (HH) |
| žíP-nì | žíP-ní |

The same tone patterns that apply to CVC stem verbs can be considered valid for stems with more than one syllable. This is because all the syllables of the longer verbs have H or L tone depending on the tone of the corresponding verb form in CVC verbs. If the short vowel of the CVC verb form has H , all the syllables of the corresponding longer stems have H ; if the CVC verb form has L, all the vowels of the corresponding longer stems have L.

Verbs with more than one syllables in the stem are the disyllabic verbs with initial long vowel (CVVC) and plurisyllabic verbs. The stem of a plurisyllabic verb can be made up by a root or by the root plus derivational suffixes. The full verbal paradigms of verbs with CVC, CVVC, CVCVC and CVC-VC stems are presented in chapter 5.

### 2.4.6. Tone in clitics, conjunctions, pronominal particles, locative pronoun and sentence marker

The case clitics =nù 'from', =yày 'with', =tà 'upon' and =mà 'to/in', the sentence conjunctions bà and nà, the sentence marker kà, the pronominal particles kò ( m ), tè ( f ) and kè ( p ), the locative pronoun nà and the homonymous locative clitic nà have always low tone. The conjunctions Páákà and yáákà, the pronominal words formed by the locative pronoun na and a clitic (see 5.6.) and those based on the pronominal particles (see 5.5.) follow the pattern HL.

### 2.4.7. Tone vs. pitch accent

The distribution of high-pitched syllable vowels in Ts'amakko is best accounted for in the context of a tonal system. However, as it happens in the Cushitic languages, the Ts'amakko tonal system shows accentual features.

There is a tendency to create one prominency in the attribution of one high pitch to the word. The tendency to prominency is manifest in the proximal demonstrative/vocative tone pattern and in the cliticisation of the clitic $=$ mà (to/in). In both cases the noun looses its tonal pattern and a High tone sits on the last vowel of the noun. Although this fact can be better accounted for within an accent theoretical background, an analysis as pitch-accent rather than restricted tone would not simplify the analysis and would make it difficult to justify the presence of words without accent and words with two or more accents.

Even though several words have more than one high pitched morae, one may note that they appear in a string along the word and attribute this fact to the tendency to create one prominence. Indeed, a string of High tone morae is never interrupted by one or more Low tone morae. However, in accentual languages, the accent appears in one syllable or mora in the word, unless a rule of accent spread is established. A rule of this kind can be established for most of the nominal and verbal forms. The rule says: if the final vowel is low pitched, all preceding vowels are high pitched. However, this rule does not work for all nominals and verbs and does not cover the cases in which the final vowel is high pitched.

Our conclusion is that the (alleged) characteristics of accentual systems observable in Ts'amakko do not render the Ts'amakko system merely accentual.

### 2.4.8. A note on tone marking

The analysis of tone has been limited to nominals, verbs and the elements described in 2.4.6. No conclusions could be reached on the tonal behaviour of the definite suffix -se and most of the interrogatives.

Tone will only be marked on the nominals that do not show the HL and HHL tonal distribution. Tone in verbs will not be marked because it is always predictable from the paradigm they belong to (see 2.4.5.). The tonal characteristics of conjunctions, case clitics, locative pronoun, sentence marker and pronominal particles is also predictable on the basis of the information found in 2.4.6. A general rule is that all CV elements have low tone, while longer elements show the HL or HHL tonal distribution.

### 2.5. Syllables

The onset and the coda of a Ts'amakko syllable cannot be occupied by more than one consonantal segment. Any short or a long vowel is in the nucleus. The possible phonemic syllable types are:

| CV | (open syllable with short vowel) | ka.ro | dog |
| :--- | :--- | :--- | :--- |
| CVV | (open syllable with long vowel) | poo.lo | cloud |
| CVC | (closed syllable with short vowel) | zi. te | pot |
| CVVC | (closed syllable with long vowel) | gaar.ko | tree |

### 2.5.1. Onset

Any consonants can be the onset of a syllable. The vowel initial syllables $\mathbf{V}$, VV, VC and VVC appear only word initially. The presence of these syllable shows that the onset can be null if the syllable is in initial position. In these cases the universal rule of onset insertion applies. This rule prevents a syllable to begin with a vowel and has an optional application depending on the speed of speech.

The segment inserted as onset is the glottal stop 3 . See the following examples of onset insertion:

Insertion of A onset

| /i.nan.ko/ | .ko] | boy |
| :---: | :---: | :---: |
| /aa.ge/ | [?aa.ge] | birds |
| /ay.ra/ | [?ay.ra] | friend |
| /aal.lit.te/ | [ [aal.lit.te] | shin-bon |
| /or.ro/ | [ Por.ro] | forest |
| /00k/ | [ Pook ] | change! |

If we take the word-initial glottal stop as an underlyingly present consonant that is optionally deleted, one may say that Ts'amakko operates with four syllables CV, CVV, CVC and CVVC.

### 2.5.2. Coda

All consonants can be the coda of a closed syllable. The only exception is $\mathbf{c}^{\prime}$, which is not attested as a coda. The sonorants $/ \mathbf{r} /, / \mathbf{l} /, / \mathbf{n} /, / \mathbf{m} /, / \mathbf{y} /, / \mathbf{w} /$ are the coda of the vast majority of closed syllables. The preference for sonorants in coda position is connected to the restriction in consonant sequence at word-structure level. This is because the first element of a consonant cluster, which is most often sonorant, corresponds to the coda of a closed syllable (see 2.6.).

### 2.5.3. Insertion of an epenthetic vowel as nucleus and degemination

In some verbal contexts, syllabic well-formedness requires the insertion of an epenthetic vowel, which takes the shape i. In nouns, syllabic wellformedness is achieved by degemination. Epenthetic insertion and degemination apply when three consonants come together or a cluster of two consonants appears stem finally. A cluster of three consonants is the result of the affixation of a consonant initial suffix to a CC final stem or, only in verbs, the affixation of a CC initial suffix. Two consonants appear stem finally in the Imperative singular form of class A verbs.

If a consonant initial suffix is added to a stem without a final consonant cluster no cluster of three consonant is realised. See for example the form §ugni 'we drank', which is made up by the verb stem $£ \mathbf{u g -}$ 'to drink', followed by the first person plural suffix of the Unmarked paradigm -ni. Stems ending with geminated consonant can be basic or the result of punctual derivation by gemination of the last root consonant. An example is the verb with punctual derived stem 9 ugg 'sip', derivation of $9 \mathbf{u g -}$ - to drink'. The punctual stem followed by, for example, $-\mathbf{n i}$ gives $*$ © uggni, which is a form with an unacceptable syllable structure. No correct syllabification is possible because the middle consonant of the three segment cluster ggn cannot be part of the preceding syllable, that would generate an unaccepted long coda, it cannot be syllabified as a separate syllable, because there are no C syllables in the language, and it cannot be considered as onset of a
following syllable together with $\mathbf{n}$, because there are no syllables with a consonant cluster as onset. The problem is solved by adding an epenthetic vowel, which acts as the nucleus of a syllable having the stem-final consonant as onset. The verb form becomes 9 ug.gi.ni.

An example of CC initial suffix is $-\mathbf{n t i}$, the second person suffix of the Subordinate Future paradigm. This suffix is made up of the second person suffix of the Unmarked paradigm preceded by the future element $\mathbf{n}$. When attached to a stem, the cluster nt needs to be separated the final stem consonant by the epenthetic i. The suffix therefore appears as -inti. See the suffix attached to the verb §ug 'to drink' and £ugg 'to sip':

$$
\begin{array}{lll}
\text { £ug- to drink } & \text { §u.gin.ti you will drink } & * \text { © ugnti } \\
\text { £ugg- to sip } & \text { §ug.gin.ti you will sip } & * \text { ©uggnti }
\end{array}
$$

No epenthesis is necessary in the suffixation of Subordinate Future suffix with simple initial consonant. It is the case of the third person masculine singular -ni. Also this suffix is composed by an Unmarked paradigm inflection, the third person masculine singular suffix $-\mathbf{i}$, and the future marker $\mathbf{n}$. See an example:

## §ug- to drink $£ \mathbf{u g} . n i$ he will drink

The Imperative singular form of verb class A coincides with the verb root. If the verb root is CC final, the form ends with a final consonant cluster. In order to solve the problem of syllabification caused by this cluster, an epenthetic vowel is added at the end of the stem/root. See for example:

```
đawr- to forbid daw.ri forbid!
```

The same epenthesis appears in the Imperative singular form of the punctual derived stem of class A verbs, which is formed by gemination of the last root consonant. See the Imperative singular forms of the basic and the punctual stems of an A verb.

| basic | ¢ug- | to drink | 〔ug | drink! |
| :--- | :--- | :--- | :--- | :--- |
| punctual | ¢ugg- | to sip | ¢ug.gi | sip! |

Degemination works when a consonant initial suffix follows a nominal stem ending in long consonant. An example is the suffixation of the masculine Singulative suffixes -ko to the noun dò̀̀ll-ò 'leather mat'. The clustering of three consonants in *doollko is avoided by degemination of the stem final $\mathbf{l}$. The result is dool-ko.

### 2.5.4. Ambisyllabic geminate consonants

All geminated consonants function as ambisyllabic segments and appear as the coda of a syllable and the onset of a following syllable. In syllabification geminates function the same way as consonant clusters.

See 2.1.14 for the analysis of geminated /p/ and 2.2.15. For the analysis of geminated/š/.

### 2.6. Consonant clusters

### 2.6.1. Consonant clusters in syllable sequences

The clustering of consonants is partially restricted by the structure of the syllables. This is because a sequence of consonants is the consequence of the meeting of the coda of a closed syllable and the onset of the syllable that follows immediately. The coda of the syllable is the C1 of the cluster. The onset of the adjacent syllable is the C 2 of the cluster.

The restrictions determined by the internal structure of the syllables are:

1) Since coda and onset can be composed by a single consonant phoneme, no clusters of three or more consonants are possible.
2) Since the word initial and final syllables, like any other syllable, must have a vocalic nucleus after the consonantal onset, no initial or final consonant clusters are possible.

### 2.6.2. Root internal cluster restrictions

The possibilities of consonant sequencing in root internal position are determined by cluster restrictions. The inventory of consonants that can form the second element of a consonant cluster is restricted. One notes the absence of $/ \mathrm{g} /$ /, $/ \hbar /, / \mathbf{x} /, / \mathbf{d} /, / \mathbf{d} /, / / \overline{\mathbf{z}} /, / \mathbf{z} /, / \mathbf{h} /, / \mathrm{Y} /$, and $/ \mathbf{w} /$ in this position. This restriction does not apply to the second element of geminate consonants.

A number of consonants do not occur as the first element in root-internal consonant clusters: 1) /h/, /6/, /d'/, /g', /ts'/, /c'/, /q'/ and $/ \Phi / ; 2$ ) /b/ and $/ \mathbf{d} /$. This includes all glottalic phonemes and most voiced stops. The only exception to the last generalisation is the root c'egd-e 'blood'.

### 2.6.3. Consonant sequences in words

Most of the consonant sequences in words show a sonorant C 1 followed by either a sonorant or an obstruent. An obstruent C1 is always followed by another obstruent.

## Sequences of sonorants in consonant clusters

When a sonorant follows a sonorant the following restrictions apply:
-The nasals cannot precede any sonorant.
-The two glides are never in contact.
-/r/can be C 1 only if $/ \mathbf{l} / \mathrm{/} / \mathbf{n} /$ or $/ \mathbf{m} /$ are C 2 .
-A sonorant C2 can be only preceded by a sonorant C1.
See some of the words showing a glide as C 1 . The clusters are $\mathbf{w r}$, wl, wn and $\mathbf{y r}, \mathrm{yl}$ :
dawri 'forbid!'; dawle 'lowland'; Pawne 'in the evening' Payra 'friend; Paylo 'small hoe'

See examples of words showing $/ \mathbf{r} /$ as C 1 . The clusters are $\mathbf{r l}$ and $\mathbf{r n}$ :
mirle 'cheetah'; karna 'hip'

The following table shows the combination of sonorant clusters :
Table 10: Combinations of sonorants

| C 1 | C 2 | w | y | r | l | n |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| m |  |  |  |  |  |  |
| w |  | $/ / / / / / / / / / /$ | - | + | + | + |
| y | - | $/ / / / / / / / / /$ | + | + | - | - |
| r | - | - | $/ / / / / / / / /$ | + | + | + |
| 1 | - | - | - | $/ / / / / / / /$ | - | + |
| n | - | - | - | - | $/ / / / / / / / /$ | - |
| m | - | - | - | - | - | $/ / / / / / / / /$ |

## Sonorant-obstruent clusters

A sonorant C 1 is very commonly followed by an obstruent C2. Among the sonorants, $/ \mathbf{n} /$, /r/ and /l/ can precede a particularly wide range of C2's. Among the phonemes with a common [+obstruent] feature, $/ \mathbf{k} /, / \mathbf{g} /, / \mathbf{t} /, / \mathbf{d} /$, $/ \mathbf{s} /$ and $/ \check{\mathbf{s}} /$ appear as C 2 in a wider number of consonant combinations.

## Sonorant-glottalic clusters

The alveolar sonorant $/ \mathbf{n} /, / \mathbf{r} /$ or $/ \mathbf{l} /$ are the only consonants that appear before the implosives $6, \mathfrak{d}$, and $g$ and the uvular ejective $\mathbf{q}$ '. The coronal ejectives $/ \mathbf{t s}$ '/ and $/ \mathbf{c} \mathbf{\prime} /$ are never preceded by the lateral sonorant /l/. The implosive 6 in C2, is only attested after $\mathbf{m}$, which is the realisation of $/ \mathbf{n} /$ after bilabial sound. The realisation of $\mathbf{n}$ before the velar $g$ is $\eta$ (see the following section Nasal-stop cluster).

See examples with $6, \mathfrak{d}^{\prime}, \boldsymbol{g}^{\boldsymbol{q}}$ and $\mathbf{q}^{\prime}$ as C 2 :

```
šam6-o 'child'
land-e 'spleen'; ¢ard-o 'ox'; gold-e 'penis'
@a\g-o 'jaw'; marg-e 'wrinkles of forehead'; Pilg-e 'teeth'
sonq'-a 'sort of guitar'; turq'ayn-a 'squirrel sp.'; palq'-e 'broken
piece of gourd'
```

See examples of coronal ejective as C2:
q'ants'-e 'thorn'; marts'-a 'young acacia';
gonc'-o 'lower part of back bone'; q'urc'-o 'central part of the stomach'

The situation of the sonorant-glottalic clusters is summarised in the following table:

Table 11: Sonorant-glottalic clusters

| C1 | C2 | d | 9 | q' | ts' | c' | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n |  | + | + | + | + | + | + |
| r |  | + | + | + | + | + | - |
| 1 |  | + | + | + | - | - | - |

Nasal-stop clusters
The nasals $\mathbf{n}, \mathbf{m}$ and $\mathfrak{\eta}$ in C 1 position are homorganic to a stop C . Preconsonantal nasals are considered realisation of a the nasal phoneme $/ \mathbf{n} /$.

Examples of $\mathbf{m}$ before bilabial stop:
žumpo iron point
komba necklace
?ombo tree sp.
Examples of $\mathfrak{\eta}$ before velar stop:
kirriŋko tail
gatayko sixth month
Examples of $\mathbf{n}$ before alveolar stop:
lande spleen
kantale tree sp.
ganda neighbourhood

Clusters of obstruents
In the cases in which C1 is an obstruent, the following C2 must also be an obstruent.

A few additional combinations are allowed in some Amharic loanwords. The only examples attested are the clusters $\mathbf{n z}$, found in ganzabu 'money'; $\mathbf{z m}$, found in mazmare 'nail'; and st, found in lastige 'plastic object'.

See below a table of all the attested combinations. The C 1 are listed in the vertical axis and the C 2 in the horizontal axis. On the axis, the phonemes are listed according to their clustering possibility, from the most common to the less common. Those scoring relatively high clustering possibilities are separated from the rest of the phonemes of the respective axis. Therefore the sonorants make a separate group in the C 1 axis and the obstruents $/ \mathbf{t} /$, $/ \mathbf{k} /$, $/ \mathbf{d} /, / \mathbf{g} /, / \mathbf{s} /$ and $/ \check{\mathbf{s}} /$ make a separate group on the C 2 axis. The possible clusters are marked by + in the cell formed by the intersection of the two axis. The clusters attested only in loanwords are marked by $\pm$. The impossible or unattested clusters are marked by a blank. The clustering of the same consonant is marked by a shaded cell.

Table 12: Possible consonant clusters

| $\begin{aligned} & \hline \mathrm{C} 2 \\ & \mathrm{C} 1 \\ & \mathrm{~V} \end{aligned}$ | t | k | d | g | S | Š | 1 | b | p | d | g | q' | ts' | c' |  | m | n | Z | Ž | r | 9 |  | 6 | ћ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| r | + | + | + | + | + | + | $+$ | $+$ | + | $+$ | $+$ | + | + | + |  | + | + | + | + |  | + |  |  | $+$ |
| 1 | $+$ | + |  | + | + | $+$ |  | + | + | $+$ | $+$ | $+$ |  |  |  | $+$ |  | + | + |  |  |  |  |  |
| n | + | + | + | + | + | + |  |  | + | + | + | + | + | + |  |  |  | $\pm$ |  |  |  |  | + |  |
| y | + | + | + | + | + | + | + | + |  |  |  |  |  |  |  |  | + |  |  | + |  |  |  |  |
| W | + | + |  | + | + | + | + |  |  |  |  |  |  |  |  |  | $+$ |  |  | + |  |  |  |  |
| ? |  | + |  |  | + | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| š | + | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ћ | + |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| m |  |  |  |  |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |  |
| p |  |  |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S | $\pm$ | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| t |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Z |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  | $\pm$ |  |  |  |  |  |  |  |  |
| k |  |  |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| X | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| g |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

### 2.7. Phonological rules

### 2.7.1. Voice assimilation

The voiceless alveolar stop /t/ assimilates to the voicing of a preceding voiced pulmonic stop:

$$
/ \mathbf{t} / \rightarrow[\mathbf{d}] \text { after } / \mathbf{b} /, / \mathbf{d} / \text { or } / \mathbf{g} /
$$

The assimilation can be observed in the suffixation of $\mathbf{t}$-initial morphemes such as the suffix -ti of 2 Sg of the Unmarked paradigm. See the examples:

| c'ib-di | you pierced | (*' $\left.{ }^{\prime} \mathbf{\prime} \mathbf{i b - t i}\right)$ |
| :--- | :--- | :--- |
| žag-di | you inserted | (*̌̌zag-ti) |
| q'od-di | you dug | (*'q'od-ti) |

### 2.7.2. Devoicing

The implosives $/ 6 /, / \mathbf{g} /$ and $/ \mathbf{d} /$ have voiceless allophones before $/ \mathbf{t} /$. The first two appear as ejectives. The third one devoices and in addition looses glottalisation.

$$
/ 6, g^{\prime}, d^{\prime} / \rightarrow\left[p^{\prime}, k^{\prime}, \mathrm{t}\right] \text { before } / \mathbf{t} /
$$

See the example of noun root final $/ 6 /$ followed by the feminine suffix -te and the example of verb root final $/ \mathbf{g} /$ followed by the suffix of $2 \mathrm{Sg}-\mathbf{t i}$ of the Unmarked paradigm:

| q'a6-te | [q'ap'te] | leather sac |
| :--- | :--- | :--- |
| bog-ti | [bok'ti] | you killed |
| Pood-ti | [Po:tti] | you walked |

The voiced nature of the phonemes $/ \mathbf{b} /$ and $/ \mathbf{z} /$ is apparent in gemination for Plurative derivation. The phonemes are devoiced when in contact with the voiceless velar $\mathbf{k}$ of the masculine derivation suffix -ko. The attested examples are:

```
gubuz-z-e (pl) gubus-ko (m) thigh-bone
```

¢arrab-b-e (pl) ¢arraf-ko (m) tongue

### 2.7.3. Phonation assimilation

The alveolar implosive looses the glottalisation following $/ \mathbf{n} /$ :

$$
/ d / \rightarrow[t] \text { before } / t /
$$

The assimilation works after the addition to a $d$-final verb roots of the $-\mathbf{n i}$ of 1 Pl Unmarked paradigm. In the following examples the verb ?ood- 'to walk' is followed by -ni and by the suffix of $1 \mathrm{Sg}-\mathbf{i}$ of the same Unmarked paradigm:

## Pood-ni [Po:nni] we walk <br> cf. Pood-i [Po:di] I walk

### 2.7.4. Nasal assimilation

An alveolar nasal assimilates its place of articulation to a following velar or bilabial. This rule is in accordance to the cluster restriction by which the nasals are followed only by homorganic stops (see Nasal-stop clusters under 2.6.3.).

```
\(/ \mathbf{n} / \rightarrow[\mathrm{n}]\) before \(/ \mathrm{k} /\), /g/ or \(/ \mathrm{g} /\)
\(/ \mathbf{n} / \rightarrow[\mathrm{m}]\) before \(/ \mathbf{p} /\), /b/, / \(\mathrm{b} /\) or \(/ \mathrm{m} /\)
```

In masculine derivation by means of the suffix $\mathbf{- k o}$, the $\mathbf{m}$ geminated for plural derivation turns to $\eta$ (see 3.5.5.). Examples:

```
kirrib-ko (m) kirrim-m-e (pl) tail
šiiniŋ-ko (m) šiinim-m-e (pl) butter
```

The first person verbal proclitic $\mathbf{n}=$ changes to $\mathbf{m}=$ before bilabial initial verbs (see 4.5.1.). Example:

```
q'ayna ka m=bayy-ini
tomorrow Sent 1=start-1SgSubFut
I will start tomorrow.
```


### 2.7.5. Vowel lenghthening

Nouns, pronouns and names followed by the case clitic =ma 'to/in' lengthen the vowel of their initial syllable. See example of clitic following the noun manne 'house' and the locative pronoun na:
maanne=ma to the house
naa=ma in it
The initial syllable vowel of nouns showing the locative case suffix, may be optinally lengthened.
paš-ilo ~paaš-ilo in the field
The lenghthening is regular in possessive constructions. Names in this position do not show the locative case, which is the common way to mark a possessor (see 3.7.):

ћaarko beeze Beze's hand

### 2.7.6. Vowel deletion

The vowel of the second of a string of four open syllables is deleted. This happens because an initial open syllable cannot be followed by three open syllables and has to become close. The onset of the syllable that looses the nucleus becomes the coda of the initial closed syllable. In the following example, the verb gere9i 'to steal' appears in basic from and in middle derived form. The suffixation of the middle marker -ad results in the addition of a syllable and the deletion of the second syllable vowel $\mathbf{e}$.
ge.re. $£ \mathbf{i}$ he has stolen ger.§a.di he has stolen for his own advantage *gere9a.di

A rule of vowel deletion which is not morphological conditioned operates in the formation of plural forms having the $\mathrm{CVC}_{1} \mathrm{C}_{2}$ template. The deleted vowel is the second syllable vowel of the basic noun. See example:
c'ifan-o (m) c'ifn-e (pl) unmarried boy

### 2.7.7. Metathesis

Unaccepted consonant sequences which result from vowel deletion are affected by metathesis. In the following example metathesis works in order to solve the irregular sequence caused by syllabic vowel deletion. The context is the causative derivation of the verb kibir- by suffixation of -as (see 7.3.1.):

## ki.bi.ri he danced kir.ba.si he made dance *kib.ra.si

In the example below, metathesis works in the context of the $\mathrm{CVC}_{1} \mathrm{C}_{2}$ plural formation by vowel deletion (see 3.5.3.)

$$
\begin{aligned}
& \text { Pagil-e (m) } \text { Palg-o (pl) newborn calf } \\
& \text { * Pagl-o }
\end{aligned}
$$

### 2.7.8. Sibilant palatal harmony

The Omotic and Cushitic groups of languages often show a natural class of sibilant phonemes. The phonemes of this class are distinguished by the absence or presence of the [palatal] feature. There is a co-occurrence restriction affecting this class of phonemes: if two or more sibilants are found in a word all of them agree in palatalisation. In other words, all of them belong to the [+palatal] or [-palatal] set of sibilants. In Ts'amakko, palatal harmony can be only observed in the behaviour of the Causative derivational suffix -Vs. The voiceless alveolar fricative /s/ of this suffix becomes palatal if the verbal stem contains a palatal sibilant of the group š, ž, $\mathbf{c}$ and $\mathbf{c}^{\prime}$. See the examples below:

| šukuy- | to be scared | šukuy-aš | to scare |
| :--- | :--- | :--- | :--- |
| ži $P-$ | to eat | žiß-aš | to feed |


| Pucc- | to fill up | Pucc-aš <br> c'ur-aš |
| :--- | :--- | :--- | | to make fill up |
| :--- |
| c'ur- make throw |

See examples with non-palatal sibilants:

| bas- | to do | bas-as | to make do |
| :--- | :--- | :--- | :--- |
| zaq'- | to slaughter | zaq'-as | to make slaughter |

From a phonetic point of view $\mathbf{s}, \mathbf{z}, \mathbf{s}, \check{\mathbf{z}}^{\prime}, \mathbf{c}^{\prime}$ and $\mathbf{t s}{ }^{\prime}$ are the candidate group of sibilants. If one limits oneself to the root, it is interesting to note that a sibilant is the exact copy of another sibilant. Therefore, a kind of root sibilant harmony extends to all the features of the sibilant and does not involve only the palatalisation feature. The examples, however, involve only $\mathbf{s}, \mathbf{z}, \mathbf{s}^{\text {and }}$ and $\mathbf{t s}$, while there is no co-occurrence of two instances of $\check{\mathbf{z}}, \mathbf{c}, \mathbf{c}^{\prime}$ in a root. See the examples below:

| siis-e | honey water <br> sass-abbe <br> scorpion sp. |
| :--- | :--- |
| ziiz-a | back-bone |
| šaaš-e | cloth covering the head of a groom <br> ants |
| šinš-alle | ts'its'ts'-o |

The only example of a root with different sibilants is the probable borrowing šicca 'kind of rifle'. However, according to the description in 2.2.15., cc may be considered the historical geminated counterpart of $\check{\mathbf{s}}$.

## 3. Nominal morphology

Nouns can morphologically be recognised by their ability to express gender, number, and case. From a syntactic point of view, nouns can be the head of a noun phrase and the subject of a verb. There are groups of nouns with different syntactic and morphological behaviour. The attributive nouns, adjectives and numerals are treated in this chapter. The relational nouns are described in 8.2.

There are two kinds of bound morphemes to the noun: suffixes and clitics. The suffixes are inflectional or derivational nominal markers that are attached to the noun stem. The stem may correspond to the simple root or may be made up of the root plus other suffixes. The clitics are a property of the noun phrase and appear at the right edge of the noun phrase. Their presence after a noun is therefore limited to those cases in which the final element of a phrase is represented by a noun.

### 3.1. Interaction between gender and number

Gender and number in Ts'amakko, as in the other Cushitic languages, show a great deal of interaction. The two categories must be distinguished because gender is a classificatory category, which includes nouns with common lexical or semantic characteristics reflected on agreeing words, while number is a grammatical category, which operates through derivational processes. Basic nouns are morphologically gender-specific but numberneutral. They become morphologically number-specific, i.e. singular or plural, after Singulative or Plurative derivation. Other manifestations of number are to be attributed to semantic factors.

An overview of the interaction between gender and number focuses on the following points:

- $90 \%$ of the basic nouns in Ts'amakko are classified in the gender classes masculine ( m ) and feminine (f). Masculine nouns agree with third person masculine verbs and feminine nouns agree with third person feminine verbs. A third group of basic nouns, covering the remaining $10 \%$, has no masculine or feminine but plural agreement. They are associated to third person plural verbs and accordingly included in the gender class called plural (p).
- The labels 'masculine', 'feminine' and 'plural' are conventional and, according to normal procedure, have been established on the basis of the presence of inherently masculine, feminine and plural nouns in the gender classes and on the basis of the agreement with verbs. Therefore, the masculine class includes sex-inherent masculine nouns and a wider number of semantically undetermined nouns which agree with third person masculine verbs. The feminine class includes the sex-inherent feminine
nouns and a wider number of semantically undetermined nouns which agree with third person feminine verbs. The class labelled as 'plural' includes nouns that can be considered inherently plural and one number-undetermined noun, all of which agree with third person plural verbs. Inherent plural nouns are those expressing a collective entity, such as names of peoples, mass nouns, nouns indicating entities perceived as a group, such as teeth, firestones and feathers, but also eggs, tears and flies. However, there are also mass and collective nouns with plural meaning that are found in the masculine and feminine classes.
- The vast majority of the masculine and feminine nouns have the gender assigned arbitrarily. This means that only lexical considerations are taken into account in the inclusion of a noun in the gender categories. In other words, the fact that a noun is said to be 'masculine' means that it is formally and not semantically masculine. Gender is assigned semantically in sex-inherent masculine and feminine nouns. Semantic assignment of gender also applies to most of the plural gender nouns.
- Every basic noun is followed by a gender sensitive suffix. The shape of the gender suffix normally reflects the gender of the noun. Lack of correspondence between gender of the noun and the shape of the suffix is possible if the noun has sex-determined meaning. The gender suffix that follows most of the masculine nouns is -o. Feminine nouns suffixes are -a and -e. A suffix -e also appears after most of the plural gender nouns. The situation is summarised in table 13.

Table 13: Gender suffixes and agreement

|  | suffix $\mathbf{- 0}$ | suffix -a | suffix -e |  |
| :--- | :---: | :---: | :---: | :---: |
| non-sex-inherent <br> nouns | masculine <br> agreement | feminine <br> agreement | feminine <br> agreement | plural <br> agreement |
| sex-inherent <br> nouns | semantic <br> agreement <br> (mostly <br> males) | semantic <br> agreement <br> (mostly <br> females) | semantic <br> (mostly feemales) |  |
| inherent plural- <br> nouns | masculine <br> agreement | feminine <br> agreement | plural <br> agreement |  |

- The status of the basic nouns belonging to the plural class needs clarification. The term 'plural gender' distinguishes a class of basic nouns with plural agreement, as opposed to the basic nouns with masculine agreement and the basic nouns with feminine agreement. The gender suffix -e, which follows most of the plural basic nouns, does not indicate plurality and is not a plural number marker. It will be called 'plural gender suffix'. The plurality of the plural gender nouns may be grammatically determined through pluralisation. It is therefore possible to talk about the
pluralisation of a plural gender noun. The suffixes which determine the plurality of a noun are called Plurative suffixes.
- Most of the masculine and feminine basic nouns are only gender determined and they express no number. This also applies to one plural gender basic noun, while most of the basic nouns with plural agreement are sematically plural in number. Some masculine and feminine nouns referring to populations are also semantically plural. Therefore, a basic noun is either unspecified for number or semantically plural. It either expresses a numberunspecified reference to an entity, or it indicates plurality.
- In the European languages an underived noun expresses singular number, unless it has a collective meaning. In Ts'amakko, and in the languages of the area, the underived nouns are by default 'unspecified' in meaning. A semantically unspecified noun expresses a concept and not a number-specific entity and it is used whenever the number of an entity is not important in the communication or whenever its number is understood from the context. The unspecified number of the underived Ts'amakko nouns can be explained looking at the sentences below:


## Pakk-o wor-add-ite Pag-i

wild.animal-M forest-Pl-LocP be.located-3SgMUnm
The wild animal lives in the forests.

## gerg-e Paddis abeba Pag-ti

Amhara-F Addis.Ababa be.located -3SgFUnm The Amharas live in Addis Ababa.

## mann-e garis-i

house-P build-3SgMUnm
He builds houses
When uttering these sentences the speaker does not reveal if he or she is talking about one 'wild animal' or many 'wild animals', one 'Amhara' or many 'Amhara's' or one 'house' or many 'houses'. The speaker is expressing only concepts that are specified in terms of number by the context. In formal terms, the gender suffix of a noun root expresses an overt m , f or p gender, while number is unspecified and only vaguely understood.

- Number determining morphemes are the Singulative and Plurative derivation suffixes, which appear before the gender suffix. Number derivation, like most derivational processes, does not apply regularly and not all the nouns may be derived to express singularity and plurality. Whenever either or both Singulative and plural number forms do not appear among the derived forms of a noun, the basic, underived, form is used instead of the missing derived form(s). For example, if a nominal lexeme has a derivation for plural but not for singular, the basic form is used to express singular in
place of the Singulative form. The basic noun in this context is still morphologically basic and it does not carry any number indication. Semantic plural nouns, most of which belong to the plural gender class, have inherently plural meaning and for this reason they are normally not derived for Plurative. In those cases in which Plurative derivation is possible, it indicates particularly high quantity. manne (p) 'house' is the only plural gender noun that can only be derived for Plurative and has a basic form used in place of the Singulative form.
- In some exceptional cases, a noun has two basic forms. One form has unspecified meaning and agrees with masculine, while the other form has plural meaning and shows a plural gender suffix. The passage from unspecified to plural is therefore indicated by change of gender suffix and is not due to a derivational process.
- In formal terms, number derivation is an expression of gender. The number derivation suffixes indicate or stress the membership of a noun in one of the three gender classes. Singulative derivation is always masculine or feminine gender specific. Plurative derivation is always plural gender specific.
- A derived noun showing a Singulative suffix may represent the unit for pluralisation. In this case the Singulative suffix looses its number property and the noun acquires plural meaning. The word shows only one gender suffix, which follows the last derivative element, and which expresses the gender of this last element. The most common Singulative suffixes -itt and -att have no own indication of gender. These suffixes are gender distinguished by means of the gender suffix $-\mathbf{0}(\mathrm{m})$ and $-\mathbf{e}(\mathrm{f})$. The gender suffix elides when followed by the Plurative suffixes and they do not manifest gender distinction. An example is the noun karitt-add-e 'dogs/bitches', which can represent the pluralisation of either kar-itt-o 'dog' or kar-itt-e 'bitch'. The Plurative derivation is realised by affixation of the pluralising suffix -add (followed by the plural gender suffix -e). See below the composition of the noun:

| kar- | -itt | -add | -e |
| :---: | :---: | :---: | :---: |
| Root <br> 'dog' | Singulative <br> derivation | Plurative <br> derivation | plural <br> gender suffix |

### 3.2. Basic and derived form

An underived noun is made up of a nominal plus a gender suffix. There are three gender suffixes: -o for masculine gender nouns, -e and -a for feminine gender nouns and -e for plural gender nouns. Their role as gender markers is described in 3.4.2.

With derived (non-basic) nouns we mean noun roots followed by number derivation suffixes. These suffixes can be attached to another number derivation suffix. The possible structures of a derived noun are exemplified below:

## Root (-number derivation) (-number derivation)-gender suffix

An example of noun with a maximal number of suffixes is gurl-itt-adde 'male or female cats'

| gurl- | -itt | -add | -e |
| :---: | :---: | :---: | :---: |
| Root <br> 'cat' | Singulative <br> derivation | Plurative <br> derivation | plural <br> gender suffix |

See 3.5.2. For an inventory of number derivation suffixes and 3.7. For a description of the locative case suffixes.

### 3.3. Basic nouns

Most basic nouns are disyllabic. Their root have the shape $\mathbf{C V}(\mathbf{V}) \mathbf{C}(\mathbf{C})$-. The majority of these disyllabic nouns have a short internal root vowel.

See some examples of CVC-V and CVCC-V nouns:

| CVC-V | bot-e | (f) | pumpkin |
| :---: | :---: | :---: | :---: |
|  | fug-a | (f) | blacksmith |
| CVCC-V | Paž-o | (m) | smell |
|  | mann-e | (p) | house |
|  | fudd-o | (m) | cotton |
|  | c'irf-a | (f) | braid |
|  | Pilg-e | (p) | teeth |

See examples of the less common CVVC-V and CVVCC-V basic nouns:

| CVVC-V | ћeek-o | (m) | chest |
| :--- | :--- | :--- | :--- |
|  | q'aac'-a | (f) | charcoal |
|  | diig'-o | (m) | gall bladder |
| CVVCC-V | dòòll-ò | (m) | leather mat |
|  | siipp-o | (m) | sweat |
|  | ћeesk-o | (m) | women |
|  | maalk-a | (f) | flute |

Few nouns have three, four or five syllables. See examples:

| žabbarn-a | (f) | belt with pockets |
| :--- | :--- | :--- |
| ¢aarma P-e | (f) | plant sp. |
| dambala? | (f) | snake sp. |
| mic'angall-e | (f) | arm bone |

The longest nouns are the result of reduplication. See two examples:

| kuttakutt-o | (m) | small braid |
| :--- | :--- | :--- |
| dangadangac'c'-o | (m) | porcupine |

### 3.3.1. Nouns with two basic forms

Few nouns have two basic forms. The roots lo?- 'cow', ©ard- 'ox', sogg'magician' and ћark- 'hand' can be followed both by the masculine gender suffixes -0 and the plural gender suffix -e. The masculine gender form has unspecified meaning and the plural gender form has plural meaning. The plural form le?-e 'cows', which is the plural counterpart of lo?-o, shows irregular vowel harmony. However, this case could be seen as an instance of lexical (suppletive) plural (see 3.5.6.). See the examples:

| loP-o | (m) | cow |
| :--- | :--- | :--- |
| le?-e | (p) | cows |
| ¢ard-o | (f) | ox |
| ¢ard-e | (p) | oxen |
| sogg-o | (m) | magician |
| sogg-e | (p) | magicians |
| ћark-o | (m) | hand |
| ћark-e | (p) | hands |

In one case two basic forms are used to express a distinction in sex. The root Paz- can be the stem of a masculine and a feminine basic noun.

| Paz-o | (m) | younger brother |
| :--- | :--- | :--- |
| Paz-e | (f) | younger sister |

### 3.4. Gender

### 3.4.1. Manifestation of gender

A classic definition states that 'Genders are classes of nouns reflected in the behaviour of associated words' (Hockett 1958: ).
In Ts'amakko the gender of a noun determines the shape of several elements associated with the noun. The shape of these elements reveals if the noun is masculine, feminine or plural.

The Unmarked paradigm verbs show the gender of the agreeing noun in their suffixes. The Unmarked verb suffix -i of the third singular masculine person indicates that the noun belongs to the masculine category. The Unmarked verb suffix -ti of third singular feminine person indicates that the noun is a member of the feminine category. If the verbal ending is $\mathbf{- e}$, it means that the associated noun is plural in gender. Nouns with inherent masculine, feminine and plural meaning are marked with $b$. in the examples; the others with $a$.

Masculine nouns
a. dar£-o bi¢-i The ashes fell.
ashes-M fall-3SgMUnm
b. šam6-o žiP-i The child ate.
child-M eat-3SgMUnm
Feminine nouns
a. layb-e bii-ti The cloth fell.
cloth-F fall-3SgFUnm
b. šitt-e žiP-ti The girl ate.
girl-F eat-3SgFUnm
Plural nouns
a. mann-e grondam-e The house broke.
house-P break-3PIUnm
$b$. gor-e žiP-e The people ate.
people-P eat-3PIUnm
Adjectives also adapt their shapes to the gender of the associated noun. Masculine nouns require adjectives ending in -akko; feminine nouns require adjectives ending in -atte; plural nouns require adjectives ending in -ayke:

Masculine nouns

| a. | tooll-o <br> walking.stick-M | geecc-akko <br> old-AdjM | old walking stick |
| :--- | :--- | :--- | :--- |
| b. | zoog-o <br> father.in.law-M | q'anc'arl-akko <br> ugly-AdjM | ugly father-in-law |
|  |  |  |  |

Feminine nouns
a. tunt-a
hammer-F
b. q'alat-e
jackal-F
Plural nouns
a. sil-e
feathers-P
b. gor-e
geecc-atte old hammer
old-AdjF
q'anc'arl-atte ugly jackal
ugly-AdjF
geecc-ayke old feathers
old-AdjP
q'anc'arl-ayke ugly people
people-P ugly-AdjP

### 3.4.2. Gender suffixes

Every noun, derived and underived, ends in a gender suffix. The gender suffixes are reflections of gender rather than carriers of gender. This is in accordance with the fact that only very few nouns have the possibility of different gender suffixes with the same base, and that the suffix -e refers to both feminine and plural gender.

The gender suffixes do not belong to the lexical entry. From the examples above it is possible to notice that masculine nouns end in the gender suffix -o, feminine nouns end in -e and -a, and plural nouns end in -e. See more examples below:

## Masculine nouns

Paylo 'small hoe'; dar£o 'ashes'; duuko 'back'; giršo 'porcupine sp.'; gurlo 'wild cat'; maango 'sorghum'; ©aško 'grass'; c'arro 'grasshopper'; dawwo 'snake'; gazo 'hair'; nolo brain; šumaћto 'sand'; $\mathcal{\text { sarditto 'ox', }}$ q'awko 'man'; gaarko 'tree'; maxatto 'calabash'; teerikko 'dust'.

Feminine nouns
bìyè 'earth'; daažimale 'ginger'; game 'maize'; Pingiye 'mother'; parše 'beer'; xaaše 'leaf'; šitte 'girl'; Parritte 'she-donkey'; makkatte 'plough'; daalte 'goat'; dalba 'pond'; paana 'footprint'; laaša 'kind of bread'; marts'a 'young acacia'; mirža 'kudu'; q'aac'a 'charcoal'; q'awa 'rifle'; sarba 'calf'.

## Plural nouns

§arde 'oxen'; manne 'house'; ¢ande 'water'; punge 'sheep without fat tail'; Paxxe 'milk'; ?ukaћe 'eggs'; Pašše 'highland', Pilge 'teeth', Pilmale 'tears'; Puzge 'firestones'; denge 'neck'; kirde 'testicles'; marge 'wrinkle of forehead', c'ifne 'unmarried boys', baartadde 'huts'; geerinne 'house poles'; dabanne 'mice'.

One piece of evidence that the gender suffixes are not final vowels belonging to the root is the fact that no nouns end in a consonant, or in vowel $\mathbf{u}$ or $\mathbf{i}$. All nouns end in $\mathbf{0}, \mathbf{e}$ and $\mathbf{a}$ (see 3.4.5. for exceptions in borrowings). If the final segments of the Ts'amakko nouns were part of the lexical entry one would expect there any of the five Ts'amakko vowels $\mathbf{u}, \mathbf{i}, \mathbf{o}, \mathbf{e}$ and $\mathbf{a}$.

A further proof that the final vowels are gender suffixes is their replacement with vowel initial suffixes such as the plural suffixes -add- and -ann, the Singulative suffix -itt and the Distal demonstrative suffixes -ussa (m) and -issa ( $\mathrm{f} / \mathrm{p}$ ). However, this argument is not conclusive, as instead of morphological replacement these could be considered as cases of phonological coalescence or vowel deletion aiming to avoid an unaccepted vocalic cluster (see 2.6.3). The clusters in these cases would be composed by
the last vowel of the noun and the first vowel of the morphemes. I opt for an analysis of the final vowels as suffixes according to the statement at the beginning of this paragraph.

See below some examples of replacement:
Replacement of the masculine gender suffix -o:

| ћaburk-o raandaћa | cold wind |
| :--- | :--- |
| ћaburk-add-e raandaћanki | cold winds |
| ћaburk-ussa raandaћa | that cold wind |

g'annatt-o bogami The lizard has been killed.
g'annatt-addof-e bogame
gannatt-ussa bogami
The lizards have been killed.
That lizard has been killed.
koš-o xinawa The dung stinks.
koš-adod-e xinawanki
koš-ussa xinawa
Card-o ko bi9a
¢ard-itt-o ko bifa
¢ ard-ann-e ko bi¢ anki
¢ard-ussa ko biqa
girš-o bodi
girš-itt-o bodi
girš-addó-e bode
girš-ussa bode
c'ifan-o gaialna
c'ifan-itt-o gaialna
c'ifan-itt-e gasalnay
c'ifn-e ga@alnanki
c'ifan-ussa ga@alna

The dung stinks.
That dung stinks.
white ox
a white ox
white oxen
that white ox
The porcupine digs.
One male porcupine digs.
The porcupines digs.
That porcupine digs.
The boy will marry
One boy will marry
One girl will marry
The boys will marry
That boy will marry

Replacement of the feminine gender suffix $\mathbf{- a}$ :

| naPY-a gohti | The small child grew. |
| :--- | :--- |
| na PS-adde gohe | The small children grew. |
| naP?-issa gohti | That small child grew. |
| žabbarn-a titta | this belt |
| žabbarn-add-e kitta | these belts |
| žabbarn-issa | that belt |

bàndà xinaway<br>bànd-áđd̛-è xinawanki<br>bànd-íssà xinaway

gand-a xafe
gand-itt-o xafi
gand-itt-e xafti
đong-a taayu
dang-itt-e taayu
dang-addf-e taani
laaf-a boganti
laaf-itt-o bog'ami
laaf-itt-e boganti
laaf-add-e bogame
laaf-issa boganti

The excrement of chicken stinks. The excrements of chicken stink. That excrement of chicken stinks.

The neighbours came.
A male neighbour came. A female neighbour came.
my uvula
my uvula
our uvula's
The bat has been killed.
A male bat has been killed.
A female bat has been killed.
The bats have been killed.
That bat has been killed.

Replacement of the feminine/plural gender suffix -e:

## feminine nouns

| bìy-è raandahay | cold soil |
| :---: | :---: |
| bìy-ádof-è raandaћanki | cold soils |
| bìy-íssà raandaћay | that cold soil |
| q'esk-e boganti | The louse has been killed. |
| q'esk-adod-e bogame | The lice have been killed. |
| q'esk-issa boganti | That louse has been killed. |
| boq-e xinaway | The manure stinks. |
| bos-addf-e xinawanki | The manures stink. |
| bo§-issa xinaway | That manure stinks. |
| kird-e pugade | The testicles swell. |
| kird-itt-e pugatti | One testicle swell. |
| kird-addo-e pugade | The testicles swell. |
| kird-issa pugatti | That testicle swell. |
| ћezg-e ligti | The star went out. |
| ћezg-itt-e ligti | The female star went out. |
| ћezg-addo-e lige | The stars went out. |
| Pooš-e boddi | The fox digged. |
| ?ooš-itt-o bodi | One male fox digged. |
| Pooš-itt-e boddi | One female fox digged. |
| Pooš-addol-e bode | The foxes digged. |

Pooš-issa boddi that fox digged

## plural nouns

| ¢ard-e pare | The oxen died. |
| :---: | :---: |
| ¢ard-ann-e pare | The oxen died. |
| ¢ ard-itt-o pari | One ox died. |
| q'omayk-e ke q'ayyanki | good shoes |
| q'omayk-issa ke q'ayyanki | those shoes are good |
| Cand-e Pawšanki | The water boils. |
| ¢ and-itt-e Pawšay | A little water boils. |
| mann-e ke q'ayyanki | good house |
| mann-issa ke q'ayyanki | that house is good |
| Pilg-e bu¢ ade | The teeth hurt. |
| Pilg-akk-o bu¢adi | The tooth hurts. |
| Paxx-e pugame | The eyes swell. |
| Paxx-itt-e puganti | One eye swell. |

The example below shows the replacement of the gender suffix following a number derivational suffix by the masculine locative case suffix -il:
kar-itt-o one male dog kar-itt-ilo by the male dog
There are cases of lack of correspondence between gender and gender suffixes. These cases are linked to semantically masculine, feminine and plural determined nouns that are assigned to a gender according to their meaning despite their formal shape (see 3.4.3.and 3.4.4.).

### 3.4.3. Semantic assignment of gender

Some nouns take the masculine, feminine and plural gender agreement according to some inherent gender characteristics of their meaning. Basic nouns such as 'man', 'warrior' and 'son' are masculine, basic nouns such as 'sister', 'daughter' and 'grandmother' are feminine. Inherently plural basic nouns are collective names, such as names of peoples and nouns indicating entities that are thought in a group, such as teeth, feathers, firestones, flies, eggs and tears. Different from masculine and feminine nouns, semantically plural nouns are not automatically assigned to the plural gender class and not all semantically plural nouns are part of the plural gender class. Some of them are masculine or feminine. Semantic assignment of gender is in most cases reflected on the gender suffixes. The exceptions are accounted for in the following paragraph 3.4.4.

See a few examples of basic nouns showing a gender suffix which reflects their semantic gender:

| masculine <br> q'awk-o | (m) | man |
| :--- | :--- | :--- |
| Pinank-o | (m) | boy |
| šåalk-o | (m) | older brother |
| Perb-o | (m) | male sheep |
|  |  |  |
| feminine |  |  |
| gaant-e | (f) | woman |
| sitt-e | (f) | girl |
| Palawt-e | (f) | older sister |
| žaP-a | (f) | wife of the 'godmother' |
|  |  |  |
| plural |  |  |
| Puzg-e | (p) | firestones |
| sil-e | (p) | feathers |
| Pilg-e | (p) | teeth |
| sir-e | (p) | ornamental objects |

### 3.4.4. Lack of congruence between semantic gender and gender suffixes

 In some exceptional cases, the gender indicated by the agreeing elements is not reflected in the gender suffix: sex-inherent nouns with feminine gender can irregularly end in -0; sex-inherent nouns with masculine gender and agreement can irregularly end in -e or $-\mathbf{a}$ and inherently plural gender nouns can end in $\mathbf{- 0}$ and $\mathbf{- a}$. I regard these cases as instances of semantic gender agreements with lack of congruence between the semantic gender of the noun and the gender suffix. Thus, as a rule, agreement is formal, but for sex-inherent and plural-inherent nouns the agreement is semantic. For most sex-inherent nouns and plural-inherent nouns formal and semantic agreement cannot be distinguished. It is only in these exceptional cases that we can see semantic agreement at work. See the examples:| $\begin{aligned} & \text { lo } \mathrm{P-0} \\ & \text { cow.F-쓰 } \end{aligned}$ | par-ay <br> die-3SgEImpfv | The cow is dying. |
| :---: | :---: | :---: |
| sobor-e <br> castrated.calf.M-F | dabad-i disappear -3SgMUnm | The castrated calf disappeared. |
| ziy-a <br> warrior.M-F | xaf-i <br> come-3SgMUnm | The warrior came. |
| $\begin{aligned} & \text { Padd-a } \\ & \text { uncle.M-F } \end{aligned}$ | geecc-akko <br> old-Adj프 | old uncle |
| Porg-0 | xaf-e | The Bannas came. |


| banna.P- $\underline{\mathrm{M}}$ | come-3PlUnm |  |
| :--- | :--- | :--- |
| ћeesk- <br> women.P- $\underline{M}$ | xaf-e <br> come-3PlUnm | The women came. |

There are also original Ts'amakko proper names whose gender agreement pattern depends on the sex of the person to which it is given. Here too some names end with the 'wrong' gender suffix. See some example of names and agreements:

| masculine names | feminine names |
| :--- | :--- |
| Beze | Pakkorro |
| Bašare | Paylo |
| Tasama | Poyto |

## Beze mirža ra9-i

Beze kudu shoot-3SgMUnm
Beze shot a kudu.
Pakkorro naP?a Pabun-ay
Pakkorro small.child rock-3SgFImpfv
?akkorro is rocking the child.
Some of these names also appear as ordinary nouns with the gender as expected because of the suffix. For example Beze means 'light at sun set' and Pakkorro is etymologically a compound of Pakko 'wild animal' and Porro 'forest'. The probable original meaning was 'animal of the forest'. When these nouns are used as proper names, their gender changes according to semantic factors.

Proper names with irregular suffixes and no meaning in Ts'amakko are borrowings. Therefore, they are treated in 3.4.5.

In derived forms no semantic agreement takes place. For example, heeskatto, the derived Singulative form of ћeesko 'women' takes a masculine derivation suffix and agrees with masculine. See the example:

## ћeesk-att-o xaf-i

women-Sg-M come-3SgMUnm
One woman came.

### 3.4.5. Feminine gender of loanwords

All loanwords that are not sex-inherent are categorised by default as feminine and have feminine agreement. In such cases one of the feminine suffixes -e and -a is suffixed, or the word remains unchanged, and therefore lacks morphological gender marking. One remarks that final $-\mathbf{o}$ and $-\mathbf{u}$,
which would obviously too much resemble the masculine suffix $-\mathbf{o}$ are always replaced by the suffix -e. Examples:

The Amharic word silk 'telephone' appears as silke.

```
silk-e garn-ay
telephone-F be.useful-3SgFImpfv
The telephone is useful.
```

The Amharic tep 'tape' became tebba and acquired the meaning 'tape recorder, radio'.
tebb-a grondan-ti
radio-F brake-3SgFUnm
The radio broke.
Loans originally ending in $\mathbf{u}$ follow the general pattern by replacing this vowel with -e. For example, the Amharic Paysuzu 'truck' is realised as Paysuze.

Paysuz-e zow-ti
truck-F go-3SgFUnm
The truck went.
Several loanwords have no feminine gender suffix. They appear with the original final segment, e.g.

## kilaaš Kalashnikov (Amharic kïlaaš 'kalashnikov’)

batteri torch (Amharic batteri 'torch')

## batteri bi9-ti

torch.F fall-3SgFUnm
The torch fell.

### 3.4.6. Gender of sex-inherent loanwords

Borrowed sex-inherent nouns in Ts'amakko get semantic gender agreement like any sex-distinguishable noun (see 3.4.3.). Irrespective whether they are feminine or not they receive the feminine suffix $-\mathbf{e}$, just like most other loanwords. The result is that a noun with masculine agreement may end in a feminine marker, as shown in the following example:
šuume chief (Amharic šum 'chief')
šuum-e xaf-i
chief.M-F come-3SgMUnm
The chief came.

This is an indication that the gender suffixes are not the carriers of gender because the suffix -e is automatically attached to loanwords without regard of the gender. Thus, it seems that gender assignment only takes place on a formal basis with non-sex nouns and on a semantic basis with sex-inherent nouns.

### 3.4.7. Semantic gender of borrowed proper names

The following proper names are probably borrowings because no meaning can be reconstructed from their structure. These names do not change their final vowel, as it happens with some of the borrowed nouns (see 3.4.6.). Since they are inherently sex determined, they take semantic gender regardless of their shape (cf. 3.4.5.):

| masculine names | feminine names |
| :--- | :--- |
| Polle | Poyto |
| Bašare | Bedo |
| Baq'q'ala | Balo |
| Tasama |  |

See below the example of the masculine name Baq'q'ala:

```
Baq'q'ala (Amharic bäqqäl 'to sprout')
baq'q'ala žinka=ma zow-i
Baq'q'ala.M Jinka=to/in go-3SgMUnm
Baq'q'ala went to Jinka.
```

The feminine names ending in $\mathbf{- 0}$ are irregular because this ending is never retained during the borrowing process with normal nouns (see 3.4.5).

### 3.5. Number

### 3.5.1. Number derivation and gender

Morphological number can be determined by derivational processes. The number derivation process implies the use of Singulative and Plurative suffixes. Plurative derivation can be also achieved by two kinds of non-suffixal processes (see 3.5.3.).

There is a relation between number derivation and gender. According to their agreement, nouns derived for number are classified in one of the three gender classes established for the basic nouns. This means that both basic and derived nouns can formally be distributed in the three gender classes. Basic and derived nouns differ in the relation with number. While basic nouns are not number-determined, every derived m , f or p noun is always number-specific in meaning, i.e., either singular or plural. Moreover, number distribution is restricted in derived nouns. Masculine and feminine gender derived nouns are always singular and never plural. Plural gender derived
nouns are always plural and never singular. The situation is schematised in table 14:

Table 14: Relation between gender and number

|  | Underived nouns |  | Derived nouns |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 'Gender' | $\mathrm{m} \quad \mathrm{f} \quad \mathrm{p}$ | m | f | p |  |
| 'Number' | Unspecified | singular | singular | plural |  |

### 3.5.2. Number derivation suffixes

The number derivation suffixes are morphemes that specify the number of a noun and indicate its gender. Every derivation suffix is followed by a gender suffix that reflects the gender of the derived noun. The Singulative suffixes impose masculine and feminine gender. There are masculine Singulative and feminine Singulative suffixes. The plural derivation suffixes impose plural gender.

In formal terms, a noun showing a derivation suffix changes or confirms the gender of its basic form. For example, a masculine Singulative suffix attached to a masculine basic noun indicates the singularity of the noun it attaches to and confirms its membership in the masculine class. The plural derivation of the same masculine noun implies the changing of its gender to the plural class. Plural basic nouns must change its gender to masculine or feminine when derived for Singulative. The choice between the two gender depends on the noun. Normally, masculine and feminine basic nouns do not change their gender in Singulative derivation. Masculine Singulative suffixes attach to masculine basic nouns and feminine Singulative suffixes attach to feminine basic nouns. But there are exceptions. Most of the sex-inherent masculine and feminine basic nouns can show both masculine and feminine Singulative derivation.

Singulative and Plurative derivation are not obligatory. If the number of the noun is understood from the context no number derivation is used and the noun appears in the basic form. Grammatical number provides a stronger sense of singularity or plurality as compared to context-attributed number. The nominal lexemes differ in the extension of their derivational possibilities giving raise to derivational patterns. These patterns are described in 3.5.4.

The number derivation suffixes have the structures -C and -VCC. They are: Singulative masculine -k, -akk, -ikk, (followed by the masculine gender suffix -0) and Singulative feminine -t, (followed by feminine gender suffix -e). The only Singulative derivation suffixes that fail to express gender distinction are -itt and -att. These suffixes can follow either masculine or feminine nouns and can be followed by either the masculine suffix $-\mathbf{o}$ or the feminine suffix -e. The Plurative suffixes are: -n, -add, -ann, -inn. The Plurative suffixes are always followed by the plural gender suffix -e.

Henceforth the suffixes will be shown with the following gender suffix. The suffixes are presented in table 15:

Table 15: The number derivation suffixes

| Singulative M and F | Singulative M | Singulative F | Plurative |
| :--- | :--- | :--- | :--- |
| -itt-o (m) | -k-o | -t-e | -add-e |
| -itt-e (f) | -akk-o |  | -ann-e |
| -att-o (m) | -ikk-o |  | -inn-e |
| -att-e (f) |  | -n-e |  |

The Singulative masculine suffix -att-o is scarcely productive. The Plurative suffix -n-e only appears in cases of derivation from lost units.

Another important limitation is that feminine Singulative derivation suffixes are always followed by the gender suffix -e and never -a.

The examples below show nouns with Singulative masculine, Singulative feminine and Plurative number derivation suffixes:
masculine nouns with masculine Singulative suffixes

```
garm-itt-o (m) 'one male lion' (from garm-o (m) 'lion')
\hbareesk-att-o (m) 'one woman' (from \hbareesk-o (p) 'women')
Pol-ko (m) 'one thing' (from Pol-a (f) 'thing')
Pilg'akk-o (m) 'one tooth' (from Pilg-e (p) 'teeth')
gontor-ikk-o (m) 'one eland' (from gontor-e (f) 'eland')
Pats'ts'-ikk-o (m) 'white stone' (from a lost unit, which is also
attested in Plurative form Pats'ts'-inn-e (p) 'white stones')
```

feminine nouns with feminine Singulative suffixes

```
Parr-itt-e (f) 'one she-donkey' (from Parr-e (f) 'donkey')
Pinn-att-e (f) 'one spider' (from Pinn-e (f) 'spider')
maar-t-e (f) 'one female calf' (maar-e (p) 'female calves')
```

plural nouns with Plurative suffixes
goll-add'-e (p) 'rivers' (from goll-e (f) 'river')
Gerb-ann-e (p) 'male sheeps' (from 9erb-o (m) 'male sheep')
bayš-inn-e (p) 'wounds' (from bayš-e (p) 'wound')
Porgay-n-e (p) 'male goats' (from a lost unit, which is also attested in Singulative form Porgay-k-o (m) 'white stones')

### 3.5.3. CVCC template Plurative formation

A group of nouns are derived for Plurative by transformation to a CVCCtemplate. The Plurative stem is directly followed by the plural gender suffix -e. Insertion into the template is reached by gemination of the last consonant of CVC- roots or deletion of the second root vowel of CVCVC- roots. For the phenomena of change $\check{\mathbf{s}} \rightarrow \mathbf{c c}$ and $\mathbf{n} \rightarrow \mathbf{m m}$, and metathesis affecting some Plurative nouns see $2.2 .15,2.7 .4$. and 2.7.7. respectively:


### 3.5.4. Derivational patterns

As common in derivation, the number derivation suffixes are not evenly productive. The amount of number derived nouns in one lexeme varies from lexeme to lexeme. The speakers know the derived forms of each noun and its derivational property. A lexeme can have many, some or none of the derivational options. A lexeme shows a full set of derivations when it is derived with a masculine Singulative, a feminine Singulative and a Plurative derivation suffixes (or Plurative template). If a Singulative or a Plurative form is missing, the number-unspecific basic form is used in place of the missing derived form. If the noun is not derived at all, it only appears in the basic form. The nominal number derivation is structured in patterns. Each noun takes derived forms that can be ordered in a derivational pattern. The lexemes can be clustered according to the derivational pattern they belong to. The patterns are shown in table 16.

A lexeme may express 'singular' and 'plural' by Singulative and Plurative derived forms. It is the case of patterns (a) and (b). The patterns with partial number derivation are (c), (d), (e) and (f). The basic form of the lexemes following pattern (c) and (d), i.e. those without Plurative derivation, will replace the missing Plurative form. If a noun follows pattern (e), i.e. it has only a Plurative derived form, its basic form will be used in those context in which a Singulative noun is expected. If a lexeme has no derivations, the basic form will be used in all contexts. It is the case of pattern (f). Most of the cases of patters (a) and (c) involve sex-distinguishable nouns, which can have both masculine and feminine Singulative derivation.

Table 16. Nominal number derivational patterns

|  | Underived | Derived |  |
| :--- | :--- | :--- | :--- |
|  | Basic | Singulative | Plurative |
| (a) | 'unspecified' | 'singular' <br> $(2$ forms: masculine and <br> feminine) | 'plural' |
| (b) | 'unspecified' | 'singular' <br> $(1$ form: masculine or <br> feminine) | 'plural' |
| (c) | 'unspecified' <br> (used in place of the <br> missing Plurative form) | 'singular' <br> $(2$ forms: masculine and <br> feminine) | ----- |
| (d) | 'unspecified' <br> (used in place of the <br> missing Plurative form) | 'singular' <br> $(1$ form: masculine or or <br> feminine) | ----- |
| (e) | 'unspecified' <br> (used in place of the <br> missing Singulative form) | ----- | 'plural' |
| (f) | 'unspecified' <br> (used in place of the <br> missing Singulative and <br> Plurative forms) | ----- | ----- |

The Plurative forms of uncountable nouns imply high quantity. Their Singulative forms imply low quantity. For example, gam-m-e, the pluralized form of the noun gam-e (f) 'maize', indicates a great amount of maize. The noun has two Singulative forms gam-itt-o and gam-itt-e, both meaning 'little quantity of maize'. The Plurative derivation of basic nouns that are already inherently 'plural' is not commonly attested. Whenever it is realised it indicates a particularly high quantity. For example, the basic noun Pinnakk-o (p) means 'flies'. Its pluralized form Pinnakk-addo-e indicates a considerably high number of flies.

In the rest of this paragraph we show examples of derived nouns. They are ordered according to their derivational pattern. Recurrent combinations of kinds of derivations exist within one lexeme in some of the patterns.

Pattern (a). The nouns with the fullest derivation possibilities represent pattern (a). From the lists the nouns appear in the basic form as well as in Singulative masculine, Singulative feminine and Plurative forms. Most of the sex-distinguished nouns belong to this pattern. Most of the Singulative derivations are formed with the Singulative suffix -itt. The gender distinction is given by the gender suffix. Few nouns are not gender distinguished. The semantic difference between the two Singulative
derivations of these nouns is not clear. The plurals are formed by suffixation of -addd or transformation to CVCC template. See examples:

| gurl-0 | (m) | cat | gurl-itt-o | (m) | gurl-addo-e | (p) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | gurl-itt-e | (f) |  |  |
| Pilaaš-e | (f) | bushpig | Pilaaš-itt-o | (m) | Pilaaš-addode | (p) |
|  |  |  | Pilaaš-itt-e | (f) |  |  |
| Sand-e | (p) | water | ¢ and-itt-0 | (m) | ¢andadde | (p) |
|  |  |  | ¢ and-itt-e | (f) |  |  |
| kar-o | (m) | dog | kar-itt-o | (m) | kar-r-e | (p) |
|  |  |  | kar-itt-e | (f) |  |  |
| gam-e | (f) | maize | gam-itt-o | (m) | gam-m-e | (p) |
|  |  |  | gam-itt-e | (f) |  |  |
| Pagil-e | (f) | newborn calf | Pagil-itt-o | (m) | Palg-0 | (p) |
|  |  |  | Pagil-itt-e | (f) |  |  |
| $\mathbf{c}^{\prime}$ ifan-o | (m) | unmarried | c'ifan-itt-o | (m) | c'ifn-e | (p) |
|  |  | person | c'ifan-itt-e | (f) |  |  |
| q'ol-e | (f) | cattle | q'ol-k-o | (m) | q'ol-add-e | (p) |
|  |  |  | q'ol-t-e | (f) |  |  |
| dờòll-ò | (m) | leather mat | dờòl-k-ò | (m) | dồòll-áddd-è | (p) |
|  |  |  | dờòl-t-è | (f) |  |  |

Pattern (b). This pattern includes nouns with basic, Singulative and Plurative forms. There are no particular correlations between the kinds of Singulative and Plurative derivations. See examples:

| Payl-o | (m) | small hoe | Payl-itt-o | (m) | Payl-add-e | (p) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Perb-o | (m) | male sheep | Perb-itt-o | (m) | Perb-ann-e | (p) |
| ziy-a | (m) | warrior | ziy-itt-o | (m) | ziy-add-e | (p) |
| fung-e | (p) | tailless | fung-itt-o | (m) | fung-add-e | (p) |
|  |  | sheep |  |  |  |  |
| baant-e | (f) | bow | baant-itt-e | (f) | baant-add-e | (p) |
| bayš-e | (p) | wounds | bayš-itt-e | (f) | bayš-inn-e | (p) |
| Pukaћ-e | (p) | eggs | Pukaћ-itt-e | (f) | Pukaћadd-e | (p) |
| Pilmal-e | (p) | tears | Pilmal-itt-e | (f) | Pilmal-add-e | (p) |
| Paxx-e | (p) | eyes | Paxx-itt-e | (f) | Paxx-add-e | (p) |
| Pinn-e | (f) | Spider | Pinn-att-e | (f) | Pinn-add-e | (p) |
| Pilg-e | (p) | teeth | Pilg-akk-o | (m) | Pilg-add-e | (p) |

Pattern (c). This pattern includes nouns with a basic form and both masculine and feminine Singulative derivation. All of them are derived by means of the suffix -itt followed by the gender suffix -o (m) and -e (f). Many of the nouns of this group are sex distinguished. No Plurative derivation is possible. See examples:

| gaark-0 | (m) | clan/ members of a clan | gaark-itt-o | (m) |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | gaark-itt-e | (f) |
| morq'-0 | (m) | age grade 1/ | morq'-itt-0 | (m) |
|  |  | members of age grade 1 | morq'-itt-e | (f) |
| pug-a | (f) | wild cat | fug-itt-o | (m) |
|  |  |  | fug-itt-e | (f) |
| gerg-e | (f) | Amhara people | gerg-itt-o | (m) |
|  |  |  | gerg-itt-e | (f) |
| zool-e | (f) | stalk of sorghum | zool-itt-o | (m) |
|  |  |  | zool-itt-e | (f) |
| kayk-o | (p) | bridegrooms | kayk-itt-o | (m) |
|  |  |  | kayk-itt-e | (f) |
| kays-e | (p) | poor people | kays-itt-o | (m) |
|  |  |  | kays-itt-e | (f) |

Pattern (d). A group of nouns has a basic form, one Singulative form, and no Plurative derivation. The Singulative derivation is masculine or feminine. Many show the Singulative suffix -itt. The Singulative masculine nouns are also derived with the suffixes $\mathbf{- k}$ and $-\mathbf{i k k}$. The Singulative feminine nouns are also derived with the suffixes $-\mathbf{t}$, and $-\mathbf{a t t}$. Sex inherent masculine nouns have a masculine derivation. Sex-inherent feminine nouns have a feminine derivation. If the basic form is semantically plural, the noun has no unspecified form. See examples:

| gaabot-e | (f) | bushbuck | gaabot-k-o | (m) |
| :--- | :--- | :--- | :--- | :--- |
| goontor-e | (f) | eland | goontor-ikk-o | (m) |
| sir-e | (p) | ornaments | sir-att-e | (f) |
| pugg-o | (m) | calf from unnatural | pugg-itt-o | (m) |
|  |  | birth |  |  |
| Pill-e | (f) | top of the house | Pill-itt-e | (f) |
| gaar-e | (p) | trees | gaar-k-o | (m) |
| maar-e | (p) | female calves | maar-t-e | (f) |

Pattern (e). It is made up of nouns with basic form and Plurative derivation. Probably, the Singulative derivation of some of these nouns has not been recorded but may be it exists. Most of the lexemes are derived for Plurative by means of affixation of -add-e. Three nouns, two of which are probably loanwords, show the suffix -ann-e. A group of lexemes is derived for Plurative by transformation to the template CVCC-. Most of them are derived by gemination of the last root consonant. See some examples below:

| Pikkitt-o | (m) | sound, voice | Pikkitt-add-e | (p) |
| :--- | :--- | :--- | :--- | :--- |
| Pert-o | (m) | gum | Pert-add-e | (p) |
| Perr-o | (m) | rain | Perr-add-e | (p) |
| c'ark-e | (f) | dew | c'ark-add-e | (p) |


| gac'c'-e | (f) | tef | gac'c'-add-e | (p) |
| :---: | :---: | :---: | :---: | :---: |
| Pankars-a | (f) | stick with ironed point | Pankars-add-e | (p) |
| mann-e | (p) | house | mann-add-e | (p) |
| gayt-e | (f) | fire stick | gayt-ann-e | (p) |
| waštir-e | (f) | kind of rifle | waštir-ann-e | (p) |
| baalžig-e | (f) | kind of rifle | baalžig-ann-e | (p) |
| Paž-o | (m) | smell | ? až-ž-e | (p) |
| bag-o | (m) | mouth | bag-g-e | (p) |
| gaz-o | (m) | hair | gaz-z-e | (p) |
| ker-e | (f) | seat | ker-r-e | (p) |
| kib-e | (f) | dry season | kib-b-e | (p) |
| q'ar-e | (f) | border | q'ar-r-e | (p) |
| tebel-e | (f) | iron arrow | telb-e | (p) |
| c'aq'al-e | (f) | wasted stalk of sorghum | c'alq'-e | (p) |

Pattern (f): This group consists of nouns for which there is only the basic form and no derived forms have been attested.

| sarabe | (f) | corpse |
| :--- | :--- | :--- |
| zilanq'a | (f) | rainbow |

### 3.5.5. Noun lexemes with only derived forms (pattern g.)

There exist a number of exceptional nouns that only occur in derived forms and have no number-unpecified basic form. All these nouns have a Plurative derivation and one of both Singulative derivations. The Singulative form is used in citation. The pattern followed by these nouns is pattern g. A distinction will be made between nouns with Plurative derivation by means of Plurative derivation suffixes (g.1) and nouns with Plurative derivation by consonant gemination or vowel deletion (g.2). The situation is summarized below:

Table 17: Patterns (g.1) and (g.2)

|  | Underived | Singulative | Plurative |
| :--- | :--- | :--- | :--- |
| (g.1) | ----- | $1: \mathrm{m}$ or F | p (suffixal derivation) |
| (g.2) | ----- | $1: \mathrm{m}$ or f | p (CVCC derivation) |

In (g.1) nouns there is a correlation between Singulative and Plurative suffix derivations. The combinations are recurrent within one lexeme. The Plurative derivation by CVCC transformation of (g.2) nouns correlates with any Singulative form of the noun.

## Pattern (g.1) (suffixal Plurative derivation)

The nouns without base form and with a suffix as Plurative derivation always have a masculine Singulative form. If the masculine Singulative suffix is -akk-o the Plurative suffix is -ann-e. Nouns with masculine Singulative suffixes -ikk-o pattern have a plural derivation in -inn-e. See examples:

| Pingir-akk-o <br> Ping'r-ann-e | (m) <br> (p) | clitoris <br> clitorises |
| :--- | :--- | :--- |
| boxx-akk-o | (m) | pus |
| boxx-ann-e | (p) | lots of pus |
| dab-akk-o | (m) | mouse |
| dab-ann-e | (p) | mice |
| ћanšal-akk-o | (m) | cooked flour |
| hanšal-ann-e | (p) | lots of cooked flour |
| karkar-akk-o | (m) | warthog |
| karkar-ann-e | (p) | warthogs |
| mid-ikk-o | (m) | lower grind stone |
| mid-inn-e | (p) | lower grind stones |
| Pats'ts'-ikk-o | (m) | white stone |
| Pats'ts'-inn-e | (p) | white stones |

Three more lexemes are derived for Plurative with the suffix-ne. See the examples:

| Porgay-k-o <br> Porgay-n-e | (m) <br> (p) | male goat <br> male goats |
| :--- | :--- | :--- |
| billay-k-o | (m) | knife |
| billay-n-e | (p) | knives |
| las-akk-o | (m) | plain without trees |
| las-n-e | (p) | plains without trees |

The only noun with a feminine Singulative form is mirmå-att-e 'intestine'. See example:

```
mirma&-att-e (f) intestine
mirma&-ann-e (p) intestines
```


## Pattern (g.2) (CVCC template Plurative derivation)

Some nouns without a basic form are derived for Singulative by means of masculine and/or feminine Singulative suffixes, while their Plurative form is the result of gemination of the last root consonant or deletion of the second
root vowel, due to the adjustment to the CVCC Plurative template (see 3.5.3.).

The combinations of CVCC- Plurative noun and Singulative derived noun could be included in pattern (b) (basic form/Singulative form). The pluralised noun could actually be a basic form made up by a CVCC- root and a gender suffix. Indeed there are several basic nouns with CVCC-V structure. The Singulative derived form can show any Singulative suffix. In the case of nouns with consonant initial Singulative suffixes, this analysis would be very well possible, as the differences in stem shape (Singulative CVCVC- Plurative $\mathrm{CVC}_{1} \mathrm{C}_{2}$ - and Singulative CVC- Plurative $\mathrm{CVC}_{1} \mathrm{C}_{1}$ ) can be accounted for by syllable reshaping in order to avoid a sequence of three consonants (see 2.6.1.). Such an analysis does not explain the cases of suffixation of vowel initial Singulative suffixes, such as -akk and -itt, to a hypothesised $\mathrm{CVC}_{1} \mathrm{C}_{1}$ basic root. (Nouns with $\mathrm{CVC}_{1} \mathrm{C}_{2}$ plural are irrelevant because all of them correspond to Singulative with -CV suffixes). As the suffixation of the -VCC suffixes does not result in a cluster of three consonants, a basic stem $\mathrm{CVC}_{1} \mathrm{C}_{1}$ - should remain as such. Instead, the stems of Singulative derived nouns with -VCC suffixes also appear as CVC-.

That gemination and vowel deletion are Plurative derivational rules is also clear from the combinations of a basic noun and a CVCC- pluralised noun that represent pattern (e) (see the pattern under 3.5.4). There is no reason to assume that this pattern is made up of basic CVCC-V nouns with plural agreement and meaning and CVC-V or CVCVC-V nouns derived respectively by de-gemination and vowel insertion. Pattern (g) has the same kind of Plurative formation as some of the nouns of pattern (d). The difference lies in the fact that the nouns of pattern (e) have an attested basic form and no Singulative derivation, while the nouns of pattern (g) have no basic form and an attested Singulative derivation.

Concluding, I consider it appropriate to establish a pattern, pattern (g.2), for those lexemes derived for Singulative by suffixation and for Plurative by transformation to the template CVCC-

Below are examples of nouns with Plurative form by gemination belonging to pattern (g.2) (for the cases of nasal assimilation and methatesis see 2.7.4. and 2.7.7. respectively):
$\mathrm{CVC}_{1} \mathrm{C}_{2}$ Plurative

| Pawal-k-o | (m) | tombstone |
| :---: | :---: | :---: |
| Pawl-e | (p) | tombstones |
| gibil-k-o | (m) | knee |
| gibl-e | (p) | knees |
| xoxon-k-o | (m) | hole |
| xoxm-e | (p) | holes |
| garas-t-e | (f) | belly |
| gar¢-e | (p) | bellies |
| Pagal-t-e | (f) | leather sac |
| Palg-e | (p) | leather sac |

$\mathrm{CVC}_{1} \mathrm{C}_{1}$ Plurative

| gubus-k-o | (m) | thigh bone |
| :---: | :---: | :---: |
| gubuz-z-e | (p) | thigh bones |
| šiinin-k-o | (m) | butter |
| šiinim-m-e | (p) | butter |
| maax-k-o | (m) | bead |
| max-x-e | (p) | beads |
| maax-att-o | (m) | gourd |
| maax-x-e | (p) | gourds |
| q'ot-akk-o | (m) | finger, claw |
| q'ot-t-e | (p) | fingers, claws |
| qeem-t-e | (f) | sheep |
| 9em-m-e | (p) | sheep (pl) |
| Palaw-t-e | (f) | older sister |
| Calaw-w-e | (p) | older sisters |
| gaan-t-e | (f) | woman |
| gaan-n-e | (p) | women |
| madday-itt-e | (f) | temple |
| madday-y-e | (p) | temples |


| ts'iy-itt-e | (f) | bullet |
| :--- | :--- | :--- |
| ts'iy-y-e | (p) | bullets |

### 3.5.6. Lexical number pairs

The plural counterpart of the following four nouns is a basic plural noun:

| q'awko | (m) | man |
| :--- | :--- | :--- |
| gore | (p) | people |
| Pinanko | (m) | boy |
| dalle | (p) | children |
| šitte | (f) | girl |
| Pekaddede | (p) | girls |
|  |  |  |
| gaante | (f) | woman |
| Ћeesko | (p) | women |

The plural noun heesko 'women' can be derived for Singulative with the masculine Singulative suffix -att-o. In spite of the feminine inherent characteristic of this noun, the agreement of the Singulative form is masculine. See example:

| ћeesko | (p) | women |
| :--- | :--- | :--- |
| heeskatto | (m) | one woman |

The case of loPo 'cow'/ le?e 'cows' is not treated as an instance of lexical plural, but as one of a double basic lexeme with the plural meaning form affected by irregular vowel harmony (see 3.3.1.)

### 3.5.7. Derivation from non-basic units

Plurative from lost unit. The noun biško 'body', an ancient Singulative which was reinterpreted as a basic noun, forms the Plurative by gemination on the basis of a lost unit. The masculine and feminine derivations are based on the attested basic form. See example:

| bišk-o | (m) | body |
| :--- | :--- | :--- |
| bišk-itt-o | (m) | one body |
| bišk-itt-e | (f) | one body |
| biš-š-e | (p) | bodies |

Plurative from derived Singulative unit. A Plurative derivation suffix can be attached to a derived masculine or feminine form. This happens with sex-distinguished nouns. The Plurative form *baakkadde of the feminine noun baakko 'cows without milk' is not attested. A Plurative form by
suffixation of -add' is possible, however, from the Singulative derived form baakkitte. See example below:

| baakk-o | (f) | cow without milk |
| :--- | :--- | :--- |
| baakk-itt-e | (f) | one cow without milk |
| baakk-itt-add-e | (p) | cows without milk |

Also the basic plural noun sil-e 'feathers' has a 'plural' meaning. The Plurative derivation is based on the Singulative feminine derivation sil-itt-e 'one feather':

| sil-e | (p) | feathers |
| :--- | :--- | :--- |
| sil-itt-e | (f) | one feather |
| sil-itt-adod-e | (p) | many feathers |

The noun ћabur-a 'wind' is a general feminine noun. It changes gender in the Singulative derivation becoming ћabur-k-o. The Plurative derivation habur-k-add-e is based on the masculine Singulative derivation:

| habur-a | (f) | wind |
| :--- | :--- | :--- |
| ћabur-k-o | (m) | wind |
| ћabur-k-add-e | (p) | winds |

Plurative from Plurative. A noun derived for Plurative can be the base for Plurative derivation. The secondary Plurative derivation conveys a greater sense of plurality. The noun mažže 'cylindrical beads' is the Plurative form of the masculine basic noun mažo. It can be derived for Plurative again by suffixation of -add. See example:

```
maž-o (m) cylindrical bead
maž-ž-e (p) cylindrical beads
maž-ž-addo-e (p) lots of cylindrical beads
```

The noun q'omayke 'sandals' is the Plurative counterpart of the feminine noun with lost basic form q'omatte. It can be the unit for a secondary Plurative derivation. See example:

$$
\begin{array}{lll}
\text { q'om-att-e } & \text { (f) } & \text { sandal } \\
\text { q'om-ayk-e } & \text { (p) } & \text { sandals } \\
\text { q'om-ayk-add-e } & \text { (p) } & \text { lots of sandals }
\end{array}
$$

### 3.5.8. Age grades, peoples and clans

The terms indicating some peoples and the age grades which operate in the Ts'amakko social structure follow a particular kind of number derivation. In the derivation of these words, the element $\mathbf{t}$ appears in the base of masculine and feminine Singulative forms. This is probably a reflex of the Cushitic suffix *-atu, which distinguished names of people.

With the exception of the name for age grade 1 , the number-unspecified form for the age grade terms is always masculine and shows the suffix -k-o. The form with plural meaning is based on this masculine form. The masculine Singulative suffix is always -akk-o. The feminine Singulative suffix is always -itt-e. The term for age grade 1 morq'o is exceptional. It is derived as a noun of pattern (c) (cf. 3.5.4.). See examples:

| loobar-k-o | (m) | age grade 2 |
| :---: | :---: | :---: |
| loobar-k-adod-e | (p) | members of age grade 2 |
| loobar-t-akk-o | (m) | male member of age grade 2 |
| loobar-t-itt-e | (f) | female member of age grade 2 |
| bil-k-o | (m) | age grade 3 |
| bilbil-k-add-e | (p) | members of age grade 3 |
| bilbil-t-akk-o | (m) | male member of age grade 3 |
| bilbil-t-itt-e | (f) | male member of age grade |
| bas-k-0 | (m) | age grade 4 |
| nelbas-k-addde | (p) | members of age grade 4 |
| nelbas-t-akk-o | (m) | male member of age grade 4 |
| nelbas-t-itt-e | (f) | male member of age grade 4 |
| gurma | (m) | age grade 5 |
| gurmal-k-addd-e | (p) | members of age grade 5 |
| gurmal-t-akk-o | (m) | male member of age grade 5 |
| gurmal-t-itt-e | (f) | female member of age grade 5 |
| baasar | (m) | age grade 6 |
| baasar-k-addo-e | (p) | member of age grade 6 |
| baasar-t-akk-o | (m) | male member of age grade |
| baasar-t-itt-e | (f) | female member of age grade |

The name indicating the alliance between the clans Pozbikko and Palgakko follow the same pattern

| binnas-k-o | (m) | Pozb-ikk-o and Palgakko alliance <br> binnas-k-add-e |
| :--- | :--- | :--- |
| (p) | members of Pozb-ikk-o and Palgakko <br> alliance |  |
| binnas-t-akk-o | (m) | male member of Pozb-ikk-o and <br> Palgakko alliance |
| binnas-t-itt-e | (f)female member of Pozb-ikk-o and <br> Palgakko alliance |  |

The names of some ethnic groups have a basic number-unspecified form which is also used for plural. The agreement of the basic form can be masculine, feminine or plural. No Plurative derivation is possible.

| biral-e | (f) | Birale people |
| :--- | :--- | :--- |
| biral-t-akk-o | (m) | Birale man |
| biral-t-itt-e | (f) | Birale woman |


| ¢aal-e | (f) | Gawwada people |
| :--- | :--- | :--- |
| ¢aal-t-akko | (m) | Gawwada man |
| ¢aal-t-itt-e | (f) | Gawwada woman |


| murris-o | (p) | Mursi people |
| :--- | :--- | :--- |
| murris-t-akko | (m) | Mursi man |
| murris-t-itt-e | (f) | Mursi woman |

§aar-e (p) Ari people
£aar-t-akko (m) Ari man
¢aar-t-itt-e (f) Ari woman

The number-unspecified term with feminine agreement gitam-a, indicating the outcast group of blacksmiths, is treated as an ethnic term. It differs in the fact that it can be derived for Plurative on the base of the basic form:

| gitam-a | (f) | blacksmith |
| :--- | :--- | :--- |
| gitam-adde | (p) | blacksmiths |
| gitan-t-akko | (m) | male blacksmith |
| gitan-t-itt-e | (f) | female blacksmith |

The clan names form a group of their own in terms of their derivational characteristics. The base of the terms is lost. The reference form is masculine and shows the suffix -ikk-o or -akk-o. The feminine derivation is formed on the basis of the lost basic form. In other words the feminine suffix, which is either -itt-e or -att-e, replaces the masculine suffixes. In particular -itt-e replaces -ikk-o and -att-e replaces -akk-o. The masculine form is made by suffixation of $-\mathbf{a k k} \mathbf{o}$ to the lost unit characterised by the element -it or $-\mathbf{a t}$, rather than simply -t. The first appears if the general form shows -ikk-o. The second appears if the general form shows -akk-o. See examples:

| Pozb-ikk-o | (m) | Pozbikko clan |
| :--- | :--- | :--- |
| Pozb-itt-e | (f) | Pozbikko woman <br> Pozb-it-akk-o |
| (m) | Pozbikko man |  |
| Pizm-akk-o | (m) | Pizmakko clan |
| Pizm-att-e | (f) | Pizmakko woman |
| Pizm-at-akk-o | (m) | Pizmakko man |
| reeg-akk-o | (m) | Reegakko clan |
| reeg-att-e | (f) | Reegakko woman |


| reeg-at-akk-o | (m) | Reegakko man |
| :--- | :--- | :--- |
|  |  |  |
| Ceel-akk-o | (m) | 乌eelakko clan |
| Ceel-att-e | (f) | Ceelakko woman |
| Ceel-at-akk-o | (m) | Ceelakko man |
| Palg-akk-o | (m) | Palgakko clan |
| Palg-att-e | (f) | Palgakko woman |
| Palg-at-akk-o | (m) | Palgakko man |

The autonym term of the Ts'amakko has the same derivational characteristics as the clan terms. See example:

| ts'am-akk-o | (m) | Ts'amakko people |
| :--- | :--- | :--- |
| ts'am-att-e | (f) | Ts'amakko woman |
| ts'am-at-akk-o | (m) | Ts'amakko man |

The clan terms baritto and £amaddo have a slightly divergent behaviour. The first has a general form in -itt-o. The second shows an unique suffix -add-o. The root extension making up the base of masculine derivation is $\mathbf{- i t}$ for baritto and -at for Camaddo. See examples:

| bar-itt-o | (m) | Baritto clan |
| :---: | :---: | :---: |
| bar-itt-e | (f) | Baritto woman |
| bar-it-akk-o | (m) | Baritto man |
| ¢ am-adod-o | (m) | Camaddo clan |
| ¢am-at-akk-o | (f) | ¢amaddo woman |
| ¢am-at-itt-e | (m) | ¢amaddo man |

### 3.5.9. The masculine kinship suffix -iy

A masculine gender suffix -iy may follow masculine kinship nouns. The Plurative suffix is always -adde. No Singulative derivation is attested. The kinship suffix has no Singulative meaning.

| Pabb-a | (m) | Pabb-iy-o | (m) | Pabb-add-e | (p) | father |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Padd-a | (m) | Padd-iy-o | (m) | Padd-add-e | (p) | brother |
| Pakk-a | (m) | Pakk-iy-o | (m) | Pakk-add-e | (p) | grandfather |
| mogg-o | (m) | mogg-iy-o | (m) | mogg-add-e | (p) | child named after |
|  |  |  |  |  |  | godfather' |

### 3.6. Sub-classes of nouns: Attributive nouns, adjectives and numerals

Attributive nouns, adjectives and numerals are sub-classes of nouns with attributive properties. The morphology of most of the attributive nouns is very similar to the morphology of the ordinary nouns, while adjectives employ a distinctive morphology. Attributive nouns are closer to ordinary nouns than adjectives because they show ordinary nominal derivational
suffixes and patterns. Adjectives, on the other hand, have a morphological behaviour not attested in nominal derivation. Attributive nouns and adjectives are ordered in patterns made up of forms agreeing in gender and number with a head noun. This is also valid for the numeral 'one'. The other numerals are invariable.

From the syntactic point of view, attributive nouns and adjectives differ from nouns in that they cannot appear as subject. Numerals, on the other hand, can take subject position. The nouns belonging to these nominal sub-classes do not show the locative suffixes -ilo, -atte and -ete in modifying position. These suffixes must appear whenever an ordinary noun is used as modifier (see 3.7.4.1.4. and 4.1.5.).

### 3.6.1. Attributive nouns

Each lexeme of the attributive nouns takes specific forms agreeing in gender with a basic or derived head noun. The head noun may be basic or derived. Some of the exponents of the attributive nouns are homophonous to the number derivation suffixes of ordinary nouns.

The attributive nouns q'awt-o 'new' and dagg-o 'young (people)' are made of a base agreeing with plural, and derived forms agreeing with masculine and feminine respectively. See the examples:

```
plural masculine feminine
q'awt-o q'awt-itto q'awt-itte new
dagg-o dagg-itto dagg-itte young (person)
```

One may note that in the basic form the gender suffix is $\mathbf{- 0}$ in spite of the plural agreement.

The forms of the attributive noun for 'orphan', built on the stem q'awwad-, make use of the highly productive nominal derivational suffixes -itto (m), -itte (f) and -adde (p).

| masculine | feminine | plural |
| :--- | :--- | :--- |
| q'awwad-itto | q'awwad-itte | q'awwad-adde | orphan

Some attributive nouns have more than one basic form and one Plurative form. The attributive noun lexeme fakal- 'clever' is attested in a basic form showing -a, fakal-a, appearing in combination with a masculine head; a basic form in -e, fakal-e, appearing in combination with a feminine head; and fakal-adde agreeing with plural head.

| masculine | feminine | plural |
| :--- | :--- | :--- |
| pakal-a | pakal-e | pakal-adde |

The attributive nouns kamur 'rich' and baxxar 'beautiful' have a masculine agreement form showing -ko, a feminine agreement marker showing -te and a plural agreement form showing gemination of the last root consonant.

| masculine | feminine | plural |  |
| :--- | :--- | :--- | :--- |
| kamur-ko | kamur-te | kamur-r-e | rich |
| baxxar-ko | baxxar-te | baxxar-r-e | beautiful |

Several attributive nouns have two forms: a basic form, agreeing with masculine and feminine heads, and a Plurative form with the ending -adde, which agrees with plural heads. Attributive nouns with this pattern are numerically predominant. See three examples:

| masculine/feminine | plural |  |
| :--- | :--- | :--- |
| šilšilk-o | šilšilk-adde | smooth |
| zarg-e | zarg-adde | spotted |
| warkat-a | warkat-adde | left |

The attributive noun gaal-e 'difficult' may appear in the basic form or as gaal-atte. The form gaal-e appears with any head noun. The form gaalatte agrees with feminine head nouns. There is therefore an overlapping expression of agreement with feminine nouns.

| any gender | feminine <br> gaal-e |
| :--- | :--- |
| gaal-atte $\quad$ difficult |  |

There are two attributive nouns meaning 'sterile', one used for men and the other for women. Both attributive nouns have a plural agreement form with $\mathrm{CVC}_{1} \mathrm{C}_{2}$ template and a form agreeing with masculine or feminine, depending on their inherent gender. The inherently masculine attributive noun has the suffix -ko while the inherently feminine attributive noun has the suffix-te:

| masculine <br> busuk-ko | plural <br> busk-e | sterile (man) |
| :--- | :--- | :--- |
| feminine | plural |  |
| meken-te | mekn-e | sterile (woman) |

The attributive noun sobor 'castrated (cattle)' has the masculine basic forms sobor-e and sobor-itto. Plural agreement is expressed by the CVCC form sorb-e.
masculine plural
sobor-e sorb-e castrated (cattle)
sobor-itto

The ordinary nouns gaante, gešante, both meaning 'female person', and ts'iirakko 'male person', behave like attributive nouns when defining or confiming the sex of living beings. Examples:

```
gannatt-o gaan-t-e
lizard-M woman-Sg-F
female lizard
lukkal-e gešan-t-e
chicken-F woman-Sg-F
hen (female chicken)
lukkal-e ts'iir-akk-o
chicken-F man-Sg-M
cock (male chicken)
Porg-itt-o ts'iir-akk-odookko
Banna.P-Sg-M man-Sg-M one.M
one Banna man
```

The plural counterparts of these nouns are used with the same aim. The plural form of tsiirakko is tsiire, which represents its derivational base. The Plurative form of gaante is gaanne and the Plurative form of gešante is gešanne. Another term for woman, ћeesko, has no attributive role. See examples of modification of the head noun gore 'people':

```
gor-e ts'iir-e
people-Pmen-P
men (male people)
gor-e gešan-n-e
people-P woman-Pl-P
women (female people)
gor-e gaan-n-e
people-P woman-Pl-P
women (female people)
```

There are some invariable attributive nouns. xum6i 'all' is the only (attributive) noun ending in -i. The following is an exhaustive list:

| Payyakko | many |
| :--- | :--- |
| mume | entire |
| waana | different |
| q'amme | bad |
| xum6i | all |
| meelo | fresh (milk) |

```
Paberro sour (milk)
lukkurro curved towards the head (of horns)
```

The invariable attributive nouns meelo 'fresh (milk)', Paberro 'sour (milk)' and lukkurro 'curved towards the head (of horn)' are restricted in application to one particular noun. The first two can only modify the noun Paxxe (p) 'milk'. lukkurro applies only to gaassakko 'horn' (m) and gaasse (p) 'horns'.

Paxx-e meelo<br>milk-P fresh.Attr<br>fresh milk

## Paxx-e Paberro

milk-P sour.Attr
sour milk

## gaass-akk-o lukkurro

horn-Sg-M curved.towards.the.head.Attr
horn curved towards the head

## gaass-e lukkurro

horn-P curved.towards.the.head.Attr
horns curved towards the head
These adjectives with restricted application end in the nominal masculine marker -0, in spite of the fact that they modify plural nouns.

### 3.6.2. Adjectives

Adjectives form a small category of eleven nouns. It also includes a productive derivation: The adjectives are derived by the suffixes -akk-o (masculine agreement), -att-e (feminine agreement) and -ayk-e (plural agreement). The suffixes used in adjectival agreement can historically be analysed as the combination of an inchoative verbal marker -ay, which is sporadically attested synchronically, and the pronominal particles ko (m), te (f) or ke (p) (cf. 5.6).

The adjectives express an abnormal, often detrimental negative human property, as shown in the following exhaustive list:

| masculine | feminine | plural |  |
| :--- | :--- | :--- | :--- |
| daaf-akko | daaf-atte | daaf-ayke | blind |
| toonn-akko | toonn-atte | toonn-ayke | hump |
| mukkan-akko | mukkan-atte | mukkan-ayke | having a short limb |
| q'anc'arl-akko | q'anc'arl-atte | q'anc'arl-ayke | ugly |
| zaar-akko | zaar-atte | zaar-ayke | mad |
| ћey-akko | hey-atte | ћey-ayke | widow and orphan |


| geecc-akko | geecc-atte | geecc-ayke | old |
| :--- | :--- | :--- | :--- |
| Carr-akko | Carr-atte | Carr-ayke | white (hair, fur) |
| gaald-akko | gaald-atte | gaald-ayke | pregnant |
| g'insel-akko | g'insel-atte | Ginsel-ayke | begging |
| c'ubbol-akko | c'ubbol-atte | c'ubbol-ayke | unappreciated |
|  |  |  | (person) |

The root of some adjectives appears as a verbal stem:

| daaf-akko | blind | daaf- | to be blind |
| :--- | :--- | :--- | :--- |
| zaar-akko | mad | zaar-aw- | to get mad |
| geecc-akko | old | geeš-uw- <br> gaald- | to be old |
| gaald-akko | to become pregnant |  |  |
| gregnant | gaw- <br> awinsel-akko | begging | gins-ad- | to beg

The masculine form gaald-akko 'pregnant' is used for grammatical agreement. It qualifies, for example, the masculine noun ћeesk-atto (m) 'a woman', which is the Singulative form of the basic plural noun ћeesk-o 'women'.

The adjectival agreement pattern is productive after derived stems showing the morpheme $-(\mathbf{V}) \mathbf{I}$, which is used for the derivation of adjectives from nominal roots. See some examples:

Puskakk-o (m) dirt
Puskakk-ol-akko Puskakk-ol-atte Puskakk-ol-ayke dirty
buuše (f) beard
buuš-ol-akko buuš-ol-atte buuš-ol-ayke bearded
baay-a (f) hair of chest
baay-al-akko baay-al-atte baay-al-ayke having hair on the chest
The adjectives c'ubbol-akko 'unappreciated', g'insel-akko 'begging' and q'anc'arl-akko 'ugly' have absorbed the adjectiviser in the stem:

| masculine | feminine | plural |  |
| :--- | :--- | :--- | :--- |
| c'ubbol-akko | c'ubbol-atte | c'ubbol-ayke | unappreciated |
| g'insel-akko | g'insel-atte | ginsel-ayke | begging |
| q'anc'arl-akko | q'anc'arl-atte | q'anc'arl-ayke | ugly |

The lexeme q'anc'arl- 'ugly' has an alternative plural agreement form q'anc'arre. This form seems to result from the gemination of $\mathbf{r}$, which is the last consonant of the unattested stem * $\mathbf{q}$ 'anc'ar.

The suffixes that characterise the adjectival derivation are homophonouns to number derivation suffixes attested in ordinary nouns. The masculine and feminine agreement suffixes -akk-o and -att-e play a role in nominal derivation and can be recognised in several stems. However, no ordinary nominal lexeme has both of them among its derivational possibilities. The masculine suffix -akk-o is found in about 20 nouns, most of which belong to the derivational pattern (g) (lexemes without base form with a Singulative masculine and a Plurative derived form). Within this pattern, the masculine nouns in -akk-o match with Plurative forms in -anne. The only exceptions are q'ot-akk-o 'finger' and q'ob-akk-o 'nail', which correspond to the geminated Plurative form q'ot-t-e 'fingers' and q'ob-b-e 'nails' respectively. Two of the nouns in $\mathbf{- a k k} \mathbf{- o}$ are the result of derivation from a basic form. They are Puzg-akk-o 'firestone', derivation of Puzg-e 'firestones', and Pilg-akk-o 'tooth' derived from Pilg'e 'teeth'. A third one is a noun with attributive value: ts'iir-akk-o 'man' derived from ts'iir-e 'men'. The feminine suffix -att-e is attested in the five nouns mirmas-att-e 'gut', q'om-att-e 'sandals', sir-att-e 'jewel', Pinn-att-e 'spider'. and q'aq'q'-att-e 'bark', and in the feminine agreement form of the attributive noun gaal-e 'difficult': gaal-att-e. mirmas-att-e 'gut' is the only feminine noun corresponding to a Plurative form in -ann-e: mirmas-ann-e 'guts'. sir-att-e 'jewel', Pinn-att-e 'spider' and q'aq'q'-att-e 'bark' are derived from basic forms. These forms are respectively sir-e 'jewels’, Pinn-e 'spider' and q'aq'q'-e 'barks'. The suffix -ayk-e is shown only in the noun q'om-ayk-e (p) 'sandals', which is combined to another adjective-like form q'om-att-e (f) 'sandal'.

### 3.6.3. Numerals

Numerals are mostly found in modifying function, following the head noun, but they are also attested in subject, predicate and adverbial positions. The bases are twenty and ten. Higher bases, such as one hundred and one thousand, are borrowed from Amharic.

The numeral 'one' is the only numeral that shows gender distinction. The forms are: dookko (m), dootte (f), dookke (p). The other numerals are invariable.

In modifying position the three forms agree in gender with the head noun. When the plural dookke modifies a plural gender noun with plural meaning, it does not indicate an individual entity but one group of entities, such as ?uzge 'three firestones'. See examples:

```
Card-o dookko q'awk-o=nu n-dee\hbar-i
ox-M one.M man-M=from 1-give-3SgMUnm
```

I gave one ox to the man.
q'aw-a dootte Pag-ay
rifle-F one.F be.located-3SgFImpfv

There is a rifle.
mann-e dookke garis-ne=nu Pufo geeq-a
house-P one.P build-3PlSubFut=from 3SgMSubj want-3SgMImpfv He wants that they build a house.

## Puzg-e dookke n-geeq-i

firestones-P one.P 1-want-1SgUnm
I want three firestones.
Gender distinction in subject position has not been recorded for the plural form. See examples or the masculine and feminine forms:

## Pardulum-anki=nnay dookko ni par-i

race-3PlImpfv=Backgr one.M Loc. 3 die-3SgMUnm
While they were racing one of them died.

## guuyu dootte dal-ti

today one.F give.birth-3SgFUnm Today someone gave birth.

In adverbial position, the numeral 'one' appears invariably in its masculine form dookko. In the following sentences it is repeated with the meaning 'one by one' or 'individually':

```
q'aac'c'-e=ma dookko dookko badd'am-inki
bush-P=to/in one.M one.M hide.oneself-3PlConsA
One by one they hid thesemlves in the bush.
```

See below a list of numerals form ' 1 ' to ' 10 ':

```
dookko (m), dootte (f), dookke (p) 1
lákkí 2
zee\hbar 3
sala\hbar 4
xobin 5
tabben 6
ta\hbar\hbaran 7
sezzen 8
gollan 9
kúnkó 10
```

The numbers from ' 11 ' to ' 19 ' are expressed by the combination of kúnkó 'ten' and the unit. The unit 'one' appears as dookko. See the list below:
kúnkó dookko ..... 11
kúnkó lákkí ..... 12
kúnkó zeeћ ..... 13
kúnkó salaћ ..... 14
kúnkó xobin ..... 15
kúnkó tabben ..... 16
kúnkó sezzen ..... 17
kúnkó taћћan ..... 18
kúnkó gollan ..... 19

The iteration of the numeral used in adverbial function is attested also for numbers above one. See examples:

## xobin xobin 9 akkad-inki

five five sit.down-3PlConsA
They sit in groups of five.

| baal-inn-e | tabben | tabben | q'ets'-inki |
| :--- | :--- | :--- | :--- |
| pole-Pl-P | six | six | cut-3Pl-ConsA |

'Twenty' is the base for the numbers from twenty onwards. The concept is metaphorically expressed by the noun phrase q'awko mume 'an entire person', who is the holder of twenty digits. The units are counted in bago 'mouth' and are joined to the ventigisimal base by the Consecutive conjunction ba. For example, ' 21 ' is expressed by q'awko mume ba bago dookko 'one entire person and one mouth', ' 30 ' is expressed by q'awko mume ba bago kúnkó 'one entire person and ten mouths' and '39' by q'awko mume ba bago kúnkó gollan 'one entire person and eleven mouths'. See a reduced list of numerals from 20 to 39 :

$$
\begin{array}{lll}
\text { q'awko mume } & 20 & \\
\text { q'awko mume ba bago dookko } & 21 & \\
\text { q'awko mume ba bago lákkí } & 22 & \\
\text { q'awko mume ba bago zeeћ } & 23 & \\
\text { q'awko mume ba bago salaћ } & 24 & \\
& & 30 \\
& \\
\text { q'awko mume ba bago kúnkó } & 31 \\
\text { q'awko mume ba bago kúnkó dookko } & 31 \\
\text { q'awko mume ba bago kúnkó lákkí } & 32 \\
\text { q'awko mume ba bago kúnkó zeeћ } & 33 \\
\text { q'awko mume ba bago kúnkó salaћ } & 34
\end{array}
$$

The multiples of twenty are expressed by an exponent after the base expressed by q'awko or gore 'people'. This option has to do with the fact that in a numeral phrase having a number higher than one as modifier the head noun may be singular or plural (see 4.1.2). The element mume is omitted. Therefore, 40 corresponds to q'awko (or gore) lákkí 'two people';

60 corresponds to q'awko (or gore) zeeћ 'three people', and so on. See a short list of the multiples of 20 :

q'awko (or gore) lákkí forty<br>q'awko (or gore) zeeћ sixty<br>q'awko (or gore) salah eighty<br>q'awko (or gore) xobin one hundred<br>q'awko (or gore) tabben one hundred and twenty

See two numerals higher then 39 attested in the corpus:

```
q'awko lákkí ba bago kúnkó sala}\ddagger\mathrm{ fifty four
q'awko tabben ba bago kúnkó one hundred and thirty
```

There is a difference in arithmetic function between the juxtaposition kúnkó lákkí 'twelve' and the juxtaposition q'awko lákkí (20x2) 'forty'. The first one express the addition $10+2$, while the second one expresses the multiplication 10x2.

An alternative system is used for counting money. It is a decimal system based on the word bonde 'ten', most probably a borrowed term widespread with the same meaning among people speaking South Omotic and Surmic languages. In isolation, this word means 'ten birr' (birr is the name of he Ethiopian currency), but is also possible to specify bonde dootte, which often appears as bondootte 'ten birr', or to explicitly mention the word birre 'birr'. The units are still counted in bago 'mouth'. Therefore, 'twenty two birr' is expressed with (birre) bonde lákkí ba bago lákkí.

The money counting system includes the Amharic terms mato 'one hundred' (from the Amharic mïto 'one hundred') and ši 'one thousand' (from the Amharic ši 'one thousand').

### 3.7. The locative case suffixes

The locative case suffixes are general location markers. There are used to mark a locative adverbial noun in sentences and as possessive modification in noun phrases. These suffixes are gender sensitive like the number suffixes. The masculine suffix is $\mathbf{- i l}$ (in some cases -ul), the feminine suffix is -att, the plural suffix is -et (in some cases -it). Each locative suffix is followed by the respective gender suffix. Therefore, the three suffixes will be henceforth transcribed as -ilo, -atte and -ete.

The range of the locative meaning expressed by the locative case suffixes includes positions that we would translate as 'in', 'on', 'from', 'onto' etc.

These English prepositions are only approximations that occur in translation. The suffix indicates a very general sense of location. The details of the location are inferred from other words in the sentence, in particular the verbs, and from the context, that is the story or the observation of the real world. Below are examples of locative nouns marked by the locative case suffixes:

## General location

manne (p) 'house' in:
zow ba mann-ete $\quad$ hull-a
go. SgImpA Cons house-LocP
Go and enter-2SgConsA
Ge house.

Palga (f) 'bed' in:
Pinank-o Palg-atte Pood-i
boy-M bed-LocF walk-3SgMUnm
The boy walks on the bed.
pašo (m) 'field' in:
q'awk-o paš-ilo liğ-i
man-M field-LocM go.out-3SgMUnm The man goes out of the field.

Ground, surface
zano (m) 'street' in:
zan-ilo makin-a Pag-a
street-LocM car-F be.located-3SgMImpfv
The car is on the street.
Bounded space
katte (f) 'fire' in:
Pats'ts'-ikk-o bis-a gabb-a=bba katt-atte
stone.sp.-Sg-M be.white-3SgMAdj take-SgImpB=Cons fire-LocF ¢ addo-i
put -SgImp
Take a white Aats 'ts 'ikko stone and put into the fire.
All possessors expressed by nouns are marked as locatives by the locative suffixes. The locative suffixes do not appear if the possessor is indicated by a name (see 4.1.4.). Examples:
q'awko (m) 'man' in:
Parr-e q'awk-ilo
donkey-F man-LocM
donkey of the man
gosingo6o (m) 'lizard' in:
maang-o gosingo6-ilo Pawš-i
sorghum-M lizard-LocM ripen-3SgMUnm
The sorghum of the lizard ripened.
Perbo (m) 'male sheep' in:
duub-d-e Perb-ilo
tail-Sg-F male.sheep-LocM
tail of male sheep
hezgitte (f) 'star' in:
kammakk-o hezg-itt-atte
light-M star-Sg-LocF star light
¢ $\operatorname{arde}(\mathrm{p})$ 'oxen' in:
Pabb-a card-ete
father.M-F ox-LocP
owner of oxen

Parre (f) 'donkey' in:
c'aaq'-e Parr-atte
faeces-F donkey-LocF
faeces of donkey
šayna (f) 'pump' and dalba (f) 'pond' in:
Polk-o-se Pano Cand-e šayn-atte dab-i=nu
thing-M-Def 1 SgSubj water-P pump-LocF fail-3SgMUnm=from
ka Pano Cand-e dalb-atte $\mathcal{I}$ ug-i
Sent 1 SgSubj water-P pond-LocF drink-3SgMUnm
Since I failed (to collect) the water of the pump, I drink the water of the pond.
baaya (f) 'hair of chest' in:
gaz-o baay-atte
hair-M hair.of.chest-LocF
hair of the chest
gaarma (f) 'brave person' in:
Pingiy-e gaarm-atte Pasa sukkan-ti
mother-F brave.person-LocF so roll.down-3SgFUnm
The mother of the brave one rolls down in this way
(Extracted from the tale: 'The squirrel and the Baboon')
A locative noun in modifying position in a noun phrase may also have attributive meaning (see 4.1.4). See, for example:

```
mann-e ¢ašk-ilo
```

house-P grass-LocM
grass house
With the verbal complement of kiy- 'to say' the locative case suffix indicates the addressee:
kulile 'guinea fowl' in:

| Pèlèlè raf-anki | garr-o | kulil-atte |
| :--- | :--- | :--- | Pasa

The locative case indicates the base of comparison. See for example game (f) 'maize' in:

```
maang-o likke gam-atte gura ko q'ayy-a
sorghum-M exactly maize-LocF like PronM be.good-3SgMAdj
Sorghum is exactly as good as maize.
```


### 3.8. The Distal demonstrative suffixes

The Distal demonstrative suffixes -ussa (m) and -issa ( $\mathrm{f} / \mathrm{p}$ ) are attached to the stem of the noun and replace the gender suffix. They are exclusively used for pointing to elements that are far from the speakers.

## baasall-ussa

calabash.for.water-DistM
that man

## gaant-issa

woman.F-DistF/P
that woman

## gor-issa

people.P-DistF/P
those people
See 4.1.3. and 5.5.2. For a description of pronominal Distal demonstratives. The function of these demonstratives is not limited to pointing, as is the case of the Distal demonstrative suffix.

### 3.9. The proximal demonstrative/vocative tone morpheme

The description of the tonal morpheme used for proximal demonstrative and vocative is found within the discussion on nominal tone in suffixation and clitisation (see 2.4.4.).

### 3.10. The definite suffix -se

A noun can be defined by suffixation of the definite suffix -se. This is the only suffix that follows the case suffix. It has anaphoric function and is mainly used to mark heads modified by relative clauses or locative nouns (see 4.1.4. and 4.2.).

Examples:

## Perr-o-se dib-i

rain-M-Def rain-3SgMUnm
The rain fell.
lo 9 -o-se [dal-ti] par-ti
cow.F-M-Def give.birth-3SgFUnm die-3SgFUnm The cow that gave birth died.
šam6-o-se gudurk-ilo
child-M-Def hyena-LocM
the child of the hyena

## 4. Notes on syntax

### 4.1. The noun phrase

A noun phrase is minimally made up of a head noun. Modifying suffixes and modifiers follow the head noun. The suffixes are divided into those that attach to the head noun and those that attach to pronominal particles.

The modifiers are attributive nouns, adjectives, locative nouns, the locative case suffix, definitives, demonstratives, possessives, 'different'-pronominals, 'which'-pronominals, 'whose'-pronominals, and adverbials.

See the follwing noun phrase structures:
Noun phrase with an attributive modifier:
head noun + attributive noun
Noun phrase with an adjectival modifier:
head noun + adjective
Noun phrase with a definite modifier:
head noun + definite suffix
head noun + pron-definite suffix
Noun phrase with a demonstrative modifier:
head noun + demonstrative suffix
head noun + pron-demonstrative suffix
Noun phrase with a possessive modifier:
head noun + pron-possessive suffix
Noun phrase with a locative noun modifier:
head noun + noun-locative case suffix
Noun phrase with a 'different' modifier:
head noun + pron-‘different' suffix
Noun phrase with a 'which?' modifier:
head noun + pron-'which' suffix
Noun phrase with a 'whose?' modifier:
head noun + pron-'whose' suffix
Noun phrase with a locative modifier:
head noun + locative case suffix

The Distal demostrative suffix, the locative suffixes and the definite suffix -se, as well as attributive nouns, adjectives and numerals are described in the chapter on nominal morphology (chapter 3). The modifiers that attach to the particles of pronominal origin are characterised by the presence of a pronominal particle, which refers to the head noun and agrees with it in gender. Some pronominal modifiers, under certain conditions, may appear suffixed to the head noun. Most of the pronominal modifiers can also take head noun position. The pronominal modifiers are described in section 5.5. and its sub-sections.

### 4.1.1. Noun phrases with attributive nouns and adjective as modifier

Ts'amakko has a lexical category adjective. Attributive modification in a noun phrase is mainly expressed by two sub-categories of nouns called attributive nouns and adjectives (see 3.6.). Also ordinary nouns modified with locative suffixes may be used attributively (see 3.7., 4.1.4. and 4.1.5.).

The attributive nouns and the adjectives agree in gender with the head noun according to their derivational possibilities. The agreement of an attributive noun with the head noun depends on the derivation pattern followed by each attributive noun, which may distinguish from one to three forms (see 3.6.1.) For example, the attributive noun daggo ( p ) shows three forms, one agreeing with masculine head nouns, one with feminine head nouns and one with plural head nouns. See examples:

```
dall-e dagg-o
```

children-P young-AttrP
young children
as in:
dall-e dagg-o sek-e žaginki
children-P young-AttrP sticks.of.roof-P insert-3PlConsA
Young children inserted the sticks of the roof.
See also:

## Pinank-o dagg-itto

boy-M young-AttrM
young boy
šitt-e dagg-itte
girl-F young-AttrF
young girl

The agreement expressed by the attributive noun bile 'other' in modifying context is limited to two forms. One appears in combination with masculine and feminine head nouns, and the other one with plural head nouns. See example:

```
žiP-o bil-e
food-M other-AttrM/F
other food
```

as in:
Pufo žiP-P-o bil-e c'igad-i=kka

3SgMSubj food-M other-AttrM/F love-3SgMNonPstNeg=Sent He does not like other food.

See also:

```
layb-e bil-e
cloth-F other-AttrM/F
other cloth
\hbareesk-o bil-adde
women.P-M other-AttrP
other women
```

An adjectival modifier is characterised by the regular gender agreement of the adjective with the head noun. The agreement is shown by the derivational suffixes: -akko (m), -atte (f) and -ayke (p). See an example of an adjectival phrases with geecc-atte 'old female being':

```
loP-o geecc-atte
cow.F-M old-AdjF
old cow
```

as in:

## lo?-o geecc-atte=nu gom6-o c'aa6-a

cow.F-M old-AdjF=from kraal-M build.a.fence-PIImpA Build a kraal for an old cow!

See also:
q'awk-o geecc-akko
man-M old-AdjM
old man

```
gor-e geecc-ayke
```

people-P old-AdjP
old people
Adjectival verbs are modifiers that appear as the predicate of subject relative clauses having the head noun as subject. Verbs with stative meaning may also appear as modifier in the same relative syntactic context (see 6.4.5. and 6.5.3.).

### 4.1.2. Noun phrases with numeral as modifier

For the gender agreement expressed by the numeral 'one' see 3.6.3. In most cases the head noun modified by numbers higher than 'one' is specially marked as Plurative. Examples:

```
@ard-ann-e lákkí
ox-Pl-P two
two oxen
dal-e q'awk-o mume
goats-P man-M entire
twenty goats
```

The modified noun may appear in its basic form. See examples:

```
Pinank-o dookko
boy-M one.M
one boy
gulm-a sala\hbar
beer.calabash-F four
four beer calabashes
```

The head noun is singular also if it is a loanword, such as q'ane 'day' from Amharic qän 'day'.

```
q'an-e sala\hbar raf-inki
day-F four sleep-3PlConsA
He slept four days.
```

Numerals may modify a pronoun.

| Pufo dookko | q'arts'eta | zeeћ | ka | c'an-o |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3SgMSubj one.M bag.F | three | Sent load-3SgMConsB |  |  |
| He has loaded alone three bags. |  |  |  |  |

Pufunde lákkí kol-e Pelle Porћam-inki 3PISubj two return-3PIUnm each.other fight-3PlConsA The two of them have fought again.

A numeral can modify an attributive phrase.

| Porg-ayn-e | busk-e | xobin |
| :--- | :--- | :--- |
| male.goat-Pl.P | castrated-AttrP | five |
| five castrated male goats |  |  |

Numeral phrases are used as unit of measurement. They appear as complex modifiers of a head noun referring to the measured entity. Both the modifiers and the measured element are not in plural form. In following example duuko kúnkó, a noun phrase meaning 'ten backs', is a unit measuring the amount of dry grass that can be carried on the back:

```
roc'ant-e duuk-o kúnkó
dry.grass-F back-M ten
ten 'backs' of dry grass
```


### 4.1.3. Noun phrases with demonstrative as modifier

In demonstrative noun phrases, the head noun is followed by a demonstrative modifier. There are two Proximal and two Distal demonstrative modifiers.

The Proximal modifiers are the pronominal demonstratives kutta/titta/kitta and kusi/tisi/kisi. The two series differ in that the first one is only used for pointing. Both pronominals may occur in head noun position (cf. 4.6.1.). See examples:

Head noun + kutta

```
@ardo kutta
ox.M PronM.Dist21
this ox
```

If the head noun ends in ko, te or ke, the pronominal particles may replace these endings. See example:

```
q'aw-kutta
```

man-PronM.Prox 1
This man [q'awko 'man']
Head noun + tisi

## gaan-t-e tisi

woman.F PronF.Prox2
this woman

The Distal demonstrative modifiers are the suffixes -issa (m)/-ussa (f/p), and the pronominal demonstratives kotta/tetta/ketta. The suffixes -issa (m)/-ussa (f/p) are only used for pointing. The Distal pronominal demonstratives also appear in head noun position. The Distal demonstrative kussa is also attested in this position, but only in very few examples (cf. 4.6.1.). See examples:

Head noun + -issa
mann-issa
house.P-DistF/P
that house
Head noun + kotta

```
gaar-ko kotta
tree.M PronM.Dist1
that tree
```

In addition to these modifiers, one should mention the use of a tonal morpheme with proximal demonstrative and vocative meaning (see 2.4.4. and 3.9.).

### 4.1.4. Noun phrases with possessive as modifiers

Possessive modification may by expressed by possessive pronouns or nouns modified by a locative case suffix, and names in possessive form.

Head noun + possessive pronouns
Possessive pronouns are made up of a pronominal particle and a personal possessive suffix (see 5.5.3.). See an example of noun phrase with possessive pronoun:

```
daal-t-e taayu
goat-Sg-F PronF.1SgPoss
my goat
```

Head noun + noun + locative suffix
Nouns modified by a locative suffix may function as possessive modifiers of a head noun. The head noun is optionally followed by the definite suffix -se (see 4.3.) or one of the pronominal definites kosse (m), tesse (f) or kesse (p). See two examples of head noun modified by a locative noun with possessive meaning:

ћaark-o q'awk-ilo<br>hand-M man-LocM<br>the hand of the man

# šamb-o-se gudurk-ilo <br> child-M-Def hyena-LocM <br> the child of the hyena 

gor-e kesse saabank-ilo
people-P PronP.Def3 neighbouring.field-LocM
The people of the neighbouring fields
as in:
gor-e kesse saabank-ilo booћ-e
people-P PronP.Def3 neighbouring field-LocM sow-3PlUnm
The people of the neighbouring fields have sown.
The locative noun may be used as attributive modifier (see 3.7. and 4.1.1.). See an example:
dò̀oll-ò-se toont-atte
skin.mat-M-Def poison-LocF
poisoned leather mat
as in:
dò̀lll-ò-se toont-atte=ma sor-i
skin.mat-Def poison-LocF=to/in run-3SgMUnm
He run towards the poisoned leather mat.
Head noun + name in possessive form
A name can play the role of possessor. In this case its initial vowel is lenghthened. See example:

> Parr-e baašare
> donkey-f bašare.Poss
> Bašare's donkey

### 4.1.5. Noun phrases with locative suffix as modifier

A head noun may be modified by a locative case suffix. The meaning of the modifier is general locative if the modified noun is in adverbial position (see 4.5.5.). See an example:

## paš-ilo

field-LocM
in the field
as in:
paš-ilo $\quad$ Rağ-i
field-LocM be.located-3SgMUnm He is in the field.

As seen in 4.1.4. the nouns modified by locative suffixes have possessive or attributive meaning when in modifying position.

### 4.1.6. Noun phrases with definite as modifier

Definite noun phrases are composed of a head noun and a definite modifier. Definite modifiers are the nominal suffix -se (Def1, cf. 3.8.) and the pronominal definites consisting of the pronominal particles and the definite elements -3a, -s(s)a or -sse (cf. 4.6.1.). The pronominal definites are not attested in head noun position. One remarks the strange fact that these pronominal definite noun phrases, with the exception of those showing -sse, must be followed by a clitic. See examples:

Head noun-se
dò̀̀ll-ò-se c'aldax-a
leather.mat-M-Def be.soft.3SgMAdj the soft leather mat

Head noun + te?
gaan-t-e te? $\mathbf{a}=\mathbf{y}$
woman-Sg-F PronF.Def1=Fill
the woman
Head noun $+\mathbf{k e ( s ) s a ~}$
maang-add-e kessa=y
sorghum-Pl-P PronP.Def3=Fill
the sorghum plants
Head noun + kesse

## gor-e kesse

people-P PronP.Def3
the people
4.1.7. Noun phrases with 'whose?', 'which one?', or 'different' as modifier
These noun phrases consist of a head noun followed by the pronominal particles and the elements -aћa 'whose?', -nda 'which one?', and -ba
'different'. The 'whose?'-noun phrase and the 'different'-noun phrase must be followed by a clitic (see 5.5.4. and 5.5.6.)

Head noun + taћa
Pingiy-e taћa=kka
mother-Sg-F PronF.who=Sent whose mother?

Head noun + tinda
hez-itte tinda
root-F PronF.which
which root?
Head noun + ti6a
gaan-t-e tiba=y
woman-Sg-F PronF.diff=Fill
a different woman

### 4.2. Relative clauses

A relative clause is a modifying clause following a head noun or a pronominal particle. When the head noun is not present, the pronominal particles act as relative pronouns. In this function they appear as a head noun incorporating the relativiser. Examples:

```
ko [gaan-t-e žoq'-i]
PronM woman-Sg-F beat-3SgMUnm
the one who bit the woman
Pawš-a=kka, ko [laxx-a]
ripen-PstNeg=Sent PronM be.unripe-3SgMAdj
It did not cook, it is raw (litt: 'It is the one which is raw').
```

ko [q'ayy-a] ki lig'g-a

PronM be.good-3SgMAdj Sent. 3 go.out-3SgMImpfv Something nice comes out (litt: 'It is the nice one that comes out').

When a nominal head is present, it must be followed by a definite suffix -se or a pronominal particle. The head of subject relative clauses in subject position may be followed by one of the pronominal definites kosse, tesse or kesse. The use of pronominal particles is excluded when the head noun is the object of both the relative clause and the matrix clause and if the subject relative clause is in syntactic positions other than subject and object. In these contexts only -se may follow the head noun. The distribution of pronominal
particles and a definite suffix after the head noun in relative clauses is summarised in the following table:

Table 18: Pronominal particles and definite suffix after head noun in relative clauses

| Relative clause $\rightarrow$ <br> Matrix clause $\downarrow$ | Subject | Object |
| :--- | :--- | :--- |
| Subject | pron or -se <br> or pron-sse | pron or -se |
| Object | pron or - se | -se |
| Other positions | -se | ---- |

Relative clauses in non-subject position are followed by elements such as the sentence marker ka, the case clitics or the conjunctions. In some cases, the whole relative clause may be recalled by the locative pronoun na or by pronominals based on it. See examples:

Subject relative clause in subject position with -se:
q'awk-o-se xaf-i
man-M-Def come.3SgMUnm
the man who came
as in:
q'awk-o-se xaf-i šąal-k-o kaayu
man-M-Def come.3SgMUnm brother-Sg-M PronM. 1 SgPoss The man who came is my brother.
lo3-o-se [dal-ti] par-ti
cow.F-M-Def give.birth-3SgFUnm die-3SgFUnm
The cow that gave birth died.
Subject relative clause in subject position with kesse:

```
gor-e kesse q'aru [buka6-e]
people-P PronP.Def3 place gather-3PIUnm
the people who gathered earlier
```

as in:

```
gor-e kesse q'aru [buka6-e] Pise=ma bìy-è
people-PPronP.Def3 place gather-3PlUnm 3SgF=Dir earth-F
laag-e
turn-3PlUnm
The people who gathered earlier turned the earth on her.
```

Subject relative clauses in subject position with pronominal particle:
gor-e ke [waPk-o wuyy-am-es-ad-anki] ki
people-P PronP god-M call-Pass-Caus-Mid-3PlImpfv Sent. 3
naa=ma Pacc-anki
Loc=to/in go-3PlImpfv
The people who pray (lett: make call from themselves) to god go to her.

Subject relative clause in object position with -se:

| q'awk-o-se [Pogoy-a] | ka | Pano | Par-a |
| :--- | :--- | :--- | :--- |
| man-M-Def come-3SgMImpfv | Sent | 1SgSubj | know-1SgImpfv |
| I know the man who is coming. |  |  |  |

Subject relative clause in object position with pronominal particle:
q'awk-o ko [wožž-a goddo-a] ka Par-a
man-M PronM work-F do-3SgMImpfv Sent know-1SgImpfv I know somebody who works.

Object relative clause in subject position with -se:

| q'awk-o-se | [?ano | žoq'-i] | -e |
| :---: | :---: | :---: | :---: |
| man-M-Def | 1 SgSubj | beat-1SgMUnm | ho |
| Pakim-atte=ma zey-i |  |  |  |
| doctor-LocF=to/in go3-3SgMUnm |  |  |  |
| The man I bit | went to the | hospital. |  |

Object relative clause in subject position with pronominal particle:
lukkal-itt-o ko [q'aro zaq'-nini] gayy-i
chicken-Sg-M PronM side slaugher-1PISubFut remained-3SgMUnm The chicken that we would have slaughtered before remained (alive).

Object relative clause in object position with -se:

| žiP-o-se | [Pise | gaP-ti] ka | Pi=nnu |
| :---: | :---: | :---: | :---: |
| food-M-Def | 3SgFSubj | prepare-3SgFUnm Sent | $1 \mathrm{Sg}=\mathrm{Dat}$ |
| šeeg-a |  |  |  |
| bring-SgImpB |  |  |  |
| Bring me the | od she prep | ared. |  |

Subject relative clause in locative position with -se:
dò̀̀lll-ò-se $\quad$ [c'aldax-a]=ma
skin.mat-M-Def

be.soft-3SgMAdj=to/in poison-F toont-e | godd-i |
| :--- |
| do-3SgMUnm |

The following example of a subject relative clause in locative position shows how to ask for a name. There is a location represented by a subject relative clause headed by q'awk-o 'man', followed by -se, and a located element maiko 'name'. The locative pronominal na=ta which appears in the main sentence refers to the location.

```
q'awk-o-se [geeray max-xe gassad-i] ma&-ko na=ta
man-M-Def yesterday bead-P ask-3SgMUnm name-M Loc=Loc
Pá\hbará
who
What is the name of the man who asked for beads yesterday?
```

The following is a similar example. The head noun is in an instrumental element:

```
gaar-k-o-se [na=kka=ya Pilg'e muc'c'-i]
tree-Sg-M-Def Loc=Sent=with teeth-P brush-3SgMUnm
nay ma&-ko Pá\hbará
Backgr name-M who
What is the name of the tree with which one brushes one's teeth?
```

Locative relative clause in locative position with -se

```
Payk-o-se [bogol-ko na=ta Pag-i]=ma
place-M-Def king-M Loc-Loc be.located-3Sg.M=to/in
šeegonki
bring-3PlConsB
They have brought it to the place in which the king lived.
```

The pronominal particles may not appear if the head noun has one of the homohponouns endings ko, te or ke. See examples:

## Pinank-o [geres-i] šab-am-i

boy-M steal-3SgMUnm tie-Pass-3SgMUnm The boy that has stolen has been arrested.

```
Pinank-o [takk-a] Pin=nu \hbaraalt-e deeћ-i
boy-M be.small-3SgMAdj 1Sg=Dat cup-F give-3SgMUnm
The small boy gave me the cup.
(litt: `The boy who is small gave me the cup').
```

| q'awk-o | [Pard-ann-e salah šeeg-i] |
| :--- | :---: |
| man-M | ox-Pl-P four bring-3SgMUnm sister-Sg-F |
| taayu | ka ga@al-na |

```
gaan-t-e [lakkay dal-ti] Palaw-t-e taayu
woman-Sg-F twins give-birth-3SgFUnm sister-Sg-F PronF.1SgPoss
The woman who gave birth to twins is my sister.
```

gaan-t-e so?-att-e [biš-k-o gab-a] ki
woman-Sg-F magician-Sg-F body-Sg-M take-3SgMFocImpfv Sent. 3
?ag-a
be.located-3SgMFocImpfv
There is a woman magician that reads (takes) the body.

Adjectival verbs such as damm 'be big', takk 'be small', zigam 'be long', §idd' 'be red' etc. are inflected attributive elements that form subject relative clauses. Relative clauses formed by verbal adjectives can be interpreted as sentences with verbal adjectives as predicate (see 6.4.5.).

```
q'awko [d`amm-a]
man.M be.big-3SgMAdj
```

big man
(or 'The man is big'. Litt: 'the man who is big').

## §and-e ke [đamm-a]

water-P PronP be.big-3SgMAdj
lots of water
(or 'The water is a lot'. Litt: 'The water which is big').

```
Pato te [damm-ay]
2SgSubj PronF be.big-2SgFAdj
You (f) are big
(or 'You (f) are the big one'. Litt: 'You, who are big').
```

```
zan-o kutta ko [zigam-a]
street-M PronM.Prox1 PronM be.long-3SgMAdj
This long road
(or 'This road is long'. Litt: 'This road, which is long').
```


### 4.3. Sequences of modifiers

Two modifiers, the second of which is not an attributive noun, an adjective or a numeral, are coordinated by a pronominal particle. In the following example with a Proximal demonstrative and a possessive name, the second is
preceded by a pronominal particle, while in simple possessive phrases it is not preceded by a pronominal particle:

Head noun + Prox. demonstrative + pronom. particle + nominal possessive

```
gaan-t-e titta te basšare
woman-Sg-F PronF.Prox1 PronF Bašare.Poss
This is Bašare's wife.
```

The 'which?' modifier always takes the last position in a string of modifiers. See for example the following complex noun phrase:

Head noun + demonstrative + relative verb + 'which'

```
q'aw-kutta xoris-a kunga?
man-PronM.Prox1 snore-3SgMImpfv PronM.which
Who is this snoring person.
```

The head noun of a locative noun in possessive mofigying position or a subject relative clause is often modified by the definite suffix -se or the definite pronominals kosse, tesse or kesse. See 3.7., 4.1.4., 4.1.6. and 5.5.1.

When functioning as possessive modifier, a noun shows the locative suffix (see 3.7. and 4.1.4.) . However, it carries no locative suffix if it is further modified. In the following example the noun q'awko 'man' functions as modifier of the head noun manne 'house' and is further modified by a relative clause:

Head noun-se + nominal possessive-se + relative clause

```
mann-e-se q'awk-o-se [q'om-ayk-e sog-a]
```

house-P-Def man-M-Def sandal-Pl-P read.shoes-3SgMImpfv
The house of the man who reads the shows (i.e. who foresees the future).
as in:

```
mann-e-se q'awk-o-se [q'om-ayk-e sog-a]=ma
house-P-Def man-M-Def sandal-Pl-P read.shoes-3SgMImpfv
gass-0=nu kaP-i
asking-M=from get up-3SgMUnm
He left to ask something at the house of the man who reads the
shoes.
```

In a sequence of two nominal locatives the head noun is followed by - se. The first modifier also act as the head noun of the second modifier, but it
shows no definite article. Moreover, it carries no locative suffix, which normally appears in locative noun modifiers. :

Head noun-se + nominal possessive + nominal possessive

## xoxon-k-o-se mann-e gudurk-ilo

hole-Sg-M-Def house-P hyena-LocM The hole in the house of the hyena
as in:

```
xoxon-k-0-se mann-e gudurk-ilo=ma na=ya
hole-Sg-M-Def house-P hyena-LocM=to/in Loc-with
\hbarull-i
enter-3SgMUnm
He entered in the hole which was in the house of the hyena.
```

In a sequence of a nominal possessive and a pronominal possessive, the nominal possessive does not show any marking such as a pronominal particle: the whole complex is followed by the clitic ta 'upon' (see 4.5.4.).

Example:

```
mann-e Paz-o kaayu=ta
house-P younger.brother-M PronM.1SgPoss=Upon
my younger brother's house
```

See below two more possible sequences of modifiers:
Head noun + personal pronoun + attributive noun

## mann-e kuusunde q'awt-itte

house-P PronP.3PlPoss new-AttrF their new house
as in:

```
mann-e kuusunde q'awt-itte=nu kune=ka gaar-e
house-P PronP.3PlPoss new-AttrF=from 2Pl=Obj tree-P
q'ets'ts'-o g'ees-e
cutting-M want-3PlUnm
They want you to cut wood for their new house.
```

The agreement of the plural gender noun manne 'house' with the feminine form q'awtitte 'new' is based on wrong interpretation of manne as a basic feminine noun (See 3.6.).

Head noun + attributive nouns + demonstrative + relative

| Card-o bus-ukko | kotta $\quad$ Camm-a |
| :--- | :--- | :--- |
| ox-M castrated-AttrM | PronM.Distl be.big-3SgMAdj |
| that big castrated ox |  |

as in:

| Card-o bus-ukko | kotta $\quad$ Camm-a |
| :--- | :--- | :--- |
| ox-M castrated-AttrM | PronM.Distl be.big-3SgMAdj Sent |
| gab-a |  |

The pronominal particles play a role in noun phrases with locative noun as possessive modifier if the modifying noun refers to a previously modified head noun. In this context these particles appear as resumptive pronouns taking up an earlier head. See the following two examples:

```
c'aq'-e kulil-atte maang-o ke garr-ulo
faeces-P guinea-fowl-LocF sorghum-M PronP squirrel-LocM
{aš-k-o
grass-Sg-M
The faeces of the guinea fowl were sorghum, those of the squirrel grass.
```

| kirrin-k-o | kaaki | Paaka | ko | Pabba=yay |
| :--- | :--- | :--- | :--- | :--- |
| tail-Sg-M PronM.2SgFPoss | and | PronM |  |  |
| father. $M=$ with |  |  |  |  |

Sent. 3 play-1SgMSubFut
Let me play with your tail and my father's tail.
Two or more noun phrases are joined by the conjunction Paaka.

## Pano Sand-e Paaka Paxx-e reek-i

1 SgSubj water-P and milk-P mix-1SgUnm
I mixed water and milk.

### 4.4.The nominal sentence

Nominal sentences follow the order subject - predicate. The subject may be a simple or modified noun, a name or a pronoun. It may appear equated to the predicate or located/possessed by the predicate. Equational predicates may be attributive nouns and demonstrative pronominals. Locative predicates are nouns marked by the locative suffix or names or noun phrases followed by the case clitic =ta. They may also indicate a possessor, as is the case with the locative case suffix (see 3.7., 4.1.4, and 4.1.6.). Their locative meaning may be specified by a relational noun or an adverbial in relational function.

Example of a nominal sentence with attributive noun as equated predicate:

```
garr-o baxan-itto
```

squirrel-M smart-AttrM The squirrel is smart.

Examples of a nominal sentence with demonstrative pronominal as equated predicate:

```
maakk-e gubal-atte ketta=y
tale-P rabbit-LocF PronP.Dist1=Fill
That was the tale of the rabbit.
```

hez-itte te [gar-nay] titta
root-F PronF be.useful-3SgFMainFut PronF.Prox1
The useful root is this one.

Example of a nominal sentence with locative noun as locative predicate:

```
šam6-o la@akk-ilo
child-M field-LocM
The child is in the field.
```

Example of a nominal sentence with locative noun followed by an adverbial in relational function as locative predicate:

## šam6-o mann-ite Pinna

child-M house-LocP on
The child is on the house.
Example of a nominal sentence with locative noun followed by relational noun as locative predicate:

```
ziP-te katt-atte sabb-ete
pot-F fire-LocF top-LocF
The pot is on the fire.
```

The attributive noun šal 'light' only appears as predicate and must be associated to the verb Pag' 'to be located', which has normally a locative or existential meaning:
gaan-t-e šal Pag-ay
woman-Sg-F light.Attr be.located-3SgFImpfv
The woman is light.
Locative nominal sentences may optionally use the verb Pag' 'to be located'.

See examples:
beze paš-ilo Pag̛-a
Beze.M field-LocM be.located-3SgMImpfv
Beze is in the field.
q'om-ayk-e dunk-atte gid-atte Pag-e
shoe-Pl-P tent-LocF inside-LocF be.located-3PIUnm The shoes are in the tent.

A locative predicate may appear in topicalised position on the left of the subject. When the constituents of a locative nominal sentence are inverted the verb $\mathbf{3}$ ag must appear.

```
gil-atte gid-atte q'awk-o ?ag-a
butter.calabash-LocF inside-LocF man-M be.located-3SgMImpfv
In the butter calabash there is a person.
beze=ta bayš-itt-e Pag}-\textrm{a
Beze=Upon wound-Sg-F be.located-3SgMFocImpfv
Bezi has a wound.
```

The kind of possessive clauses that in many European languages would be translated with the verb 'to have', is expressed by a 'locative' construction Noun-Loc Pag- 'to be located'. The possessor is the location and it is marked by the proper locative suffix. The possessed is the located element:

| lo?-ilo | Ca6n-e | me? | ke Pag-a |
| :--- | :--- | :--- | :--- |
| cow.F-LocM | breast-P | how.many | PronP |
| How many breasts does a cow have? |  |  |  |

lo?-ilo Pa6n-e salaћ ke Yag-a
cow.F-LocM breast-P four PronP be.located-3SgMFocImpfv A cow has four breasts.

If the subject is modified a pronominal particle agreeing in gender with the subject must appear. See the following examples:
gaan-t-e titta te baašare
woman-Sg-F PronF.Prox1 PronF Bašare.Poss
This is Bašare's wife.
deng-e kaayu ke [damm-a]
neck-P PronP.1SgPoss PronP be.big-3SgMAdj
My neck is big.

## Parr-e titta te q'awk-o kutta=nnay

donkey-F PronF.Prox1 PronF man-M PronM.Prox1=Loc This donkey belongs to this man.

```
@and-e ketta=y ke ts'eeggay
water-P PronP.Dist1=Fill PronP Ts'eggay.Poss
This water belongs to S'eggay.
```


### 4.5. The verbal sentence

Verbal sentences have a verb as their predicate. Information on subject, aspect, mood and negation are indicated in the verbal form.

A verb may constitute a sentence on its own. Lexical subject, object, adverbials, and nouns, noun phrases phrases and verbs in adverbial position may also appear as constituents. In a neutral sentence the subject takes the leftmost position, while the object precedes the verb. Adverbials appear between subject and object. Some adverbials, such as q'arra and q'arratte 'before', are characterised by their preverbal or initial postion (see 8.1.).

A sentence may also include the sentence marker ka. In neutral sentences it appears in preverbal position. It may follow pragmatically marked elements (see 4.7.).

### 4.5.1. The subject

The lexical subject may be represented by a simple or modified noun, a subject pronoun, a name or one of the pronominals based on a pronominal particle described in 5.5. Among these, only the definite pronominals cannot appear in subject position.

The subject pronouns are mainly used for anaphoric or contrastive purposes. See an example of anaphoric use of the the third person singular masculine subject pronoun ?ufo 'he', which in the example refers to the squirrel, i.e. garro:

```
garr-o kulul-atte kiy-a nay
squirrel-M guinea.fowl-LocF say-3SgMImpfv Backgr
berk-o xaf-na ba door-o žiP-onki
rainy.season-M come-3SgMMainFut Cons granary-M eat-1PlConsB
Paanto waP}-e žiP-nini
now vegetables-P eat-1PISubFut
Pufo door-o ka q'ayto xumbi ki žiP-a
3SgMSubj granary-M Sent time all Sent.3 eat-3SgMImpfv
The squirrel said to the guinea fowl 'When the rainy season comes
we eat the (sorghum of the) granary. Now, let's eat vegetables'.
He was always eating the (sorghum of the) granary.
```

See an example of contrast between Pano 'I' and Pato 'you (sg)' (the third person masculine form of the verb associated to Pato 'you (sg)' indicates that this subject is in focus (see 6.4.7.)):

| Pabb-a | Pano | Pint-aw-i=kka |  |
| :--- | :--- | :--- | :--- |
| father.M-F | 1SgSubj in.front.of-Incep-1SgNonPstNeg=Sent |  |  |
| Pato | Pint-aw-u | kiy-i | šam6-o |
| 2SgSubj | in.front.of -Incep-3SgMFocConsA | say-3SgMUnm child-M |  |
| 'Father, I do not go first, you go first' the child said. |  |  |  |

Below is an example of possessive pronominal in subject position:

| kaayu | ka | dal-i |
| :--- | :--- | :--- |
| PronM.1SgPoss | Sent | give.birth-3SgMUnm |
| Mine gave birth. |  |  |

In the example below, the subject $\mathcal{C}$ ande ( p ) is used in order to express selective focus. The subject is in focus, as shown by its association to a third person masculine singular form rather then to a third person plural form:

```
katt-e ka moo bog-i bay-i yaaka
fire-F Sent what kill-3SgMUnm say-3SgMUnm when
@and-e bog-i
water-P kill-3SgMFocUnm
If someone sais 'Who killed the fire?' (the answer is) the water
killed it.
```

Ts'amakko has only traces of the preverbal subject elements which are attested in the Dullay dialects. They are the first person $\mathbf{n}$ and the third person i. Both of them occur in preverbal position. However, the marker $\mathbf{n}$ is attached to the verb, while the marker $\mathbf{i}$ attaches to the case clitic ma 'to/in', the adverbial Pasa 'so', and the sentence marker ka when these occur in preverbal position. It replaces the final a of these elements. Both subject markers are used irregularly. See examples:

```
q'awk-o=nu daal-te n=deeћ-i
man-M=from goat-F 1=give-1SgUnm
I gave a goat to the man.
```


## luq'a ka gellekworra n=gay-ni

Luq'a Sent day.before.yesterday 1-arrive-1PIUnm
We arrived in Luqa the day before yesterday.

## šąalk-o=yay gaabay-a=mi zey-i

older.brother-M=with market-F=to/in. 3 go-3SgMUnm
He went to the market with the brother.

```
Pato maang-o raw-i kulil-atte
2SgMSubj sorghum-M finish-3SgMUnm guinea.fowl-LocF
Pas-i kiy-i
so-3 say-3SgMUnm
'You finished the sorghum', so he said to the guinea fowl.
max-x-e xum6-i ki lass-i
bead-Pl-P all.Attr Sent. }3\mathrm{ sell-3SgMUnm
He sold all the beads.
```


### 4.5.2. The object

Objects represented by modified nouns, names and object pronouns are normally followed by the sentence marker ka. The sentence marker appears cliticised to the pronouns. See the following examples:

```
mann-issa ka n-garis-i
house-DistF/P Sent 1-build-1SgUnm
I have built that house.
bulo ka n-ts'ib-i
Bulo Sent 1-wash-1SgUnm
I washed Bulo.
Pufo Pee=ka tamaris-a
3SgMSubj 1Sg=Obj teach-3SgMImpfv
He is teaching me.
```

This marker cannot be considered an object marker because it appears irregularly after simple nouns and may follow elements covering other syntactic roles. It is ultimately analysed as a sentence marker. A discussion on the presence of the sentence marker after an object is found in 4.7.

### 4.5.3. Noun phrases in adverbial position

The syntactic role of noun phrases in adverbial position is marked by case clitics. These clitics follow and determine the noun phrase. All the case clitics have the shape CV except for the comitative $=\mathbf{y a y}$. The final $\mathbf{y}$ may be connected to the semantically empty clitic $=\mathbf{y}$ which is characterised by irregular behaviour. This clitic does not appear if the comitative clitic follows an object pronoun (see 4.5.3.4. and 5.4.). The clitic =ma has an influence on the tonal structure of the noun it follows: High tone takes position on the final syllable of the noun and all preceding syllables take low tone. Moreover, the initial vowel of the marked noun is lenghthened. In our transcription the clitics are separated from the noun phrase by the equal sign $=$. See a list of case clitics and examples:

| From | $=\mathbf{n u}$ | q'áwko=nu | from the man |
| :--- | :--- | :--- | :--- |
| To/Into | $=\mathbf{m a}$ | q'awkó== <br> qa | towards the man |
| With | $=\mathbf{y a y}$ | q'áwko=yay | with the man |
| Upon | $=\mathbf{t a}$ | q'áwko=ta | upon the man |

The role of the case clitic $=\mathbf{t a}$ is described in the section on locative adverbials (see 4.5.5.).

### 4.5.3.1. =nu ('from')

The case clitic =nu indicates directed events. Its exact interpretation depends from the context. The clitic has two basic functions. With movement verbs, =nu expresses an ablative action ('from'). In this case, the element marked by =nu is always inanimate. In other contexts, $=\mathbf{n u}$ is used as a marker of affectedness of the element by the action ('for, concerning'). These elements are normally animate, but this is not obligatorily the case. In addition to these two basic functions, some metaphorical extensions occur, such as the use of $=\mathbf{n u}$ in order to mark the base in a comparative clause.

The clitic is glossed 'from' for practical reasons and because the gloss recalls one of the possible meanings emerging from the interpretation of the clitic. Therefore, this label is not meant to indicate the final value of the clitic.

Non-movement verbs
In a non-movement context, the entity modified by =nu is the element affected by the action.

Example with beze=nu 'from Beze' and Aooš 'to wipe, shave'
Pano beze=nu gaz-o Pooš-i
1SgSubj Beze=from hair-M shave-3.Sg.Unm
I have shaved Beze.
Example withAabba kaayu=nu 'for my father' and qodas 'to plough'
bašare ? ?abba kaayu=nu paš-o
Bašare father PronM.1SgMPoss=from field-M
q'od-as-i
plough-Caus1-3SgMUnm
Bašare ploughed the field to the benefit of my father.
Example with boæolko=nu 'for the king' and c'ox 'to milk'
bogol-k-o=nu q'ol-e c'ox-inda
king-Sg-M=from cattle-P milk-PlurImpB
Milk the cattle on behalf of the king!
Example with maare=nu 'for the heifers' and dayy 'to get'
maar-e=nu $¢$ ¢aš-k-o dayy-e
heifer- $\mathrm{P}=$ from grass-Sg-M get-3PlUnm

They got grass for the female calves.
In the examples below, extracted from folktales, the beneficiary is a personified animal:

## Example with garro=nu 'for the squirrel' and kubb 'to pour grains' booraћ-o kubb-i garr-o=nu <br> seeds-M pour.grains-3SgMUnm squirrel-M=from He put the the seeds (in the cup) for the squirrel.

Example with Aarrafko=nu 'for the elephant' and goš 'to tend cattle'
garr-o Parraf-k-o=nu le?-e goš-i
squirrel-M elephant-Sg-M=from cows-P tend-3SgMUnm The squirrel tended cattle for the elephant.

In one attested case the action is to the detriment of the marked element. In the example below, also extracted from a folktale, the omitted subject, which in the story is the squirrel, acts in order to create the condition to accuse the guinea fowl. The action of placing his faeces by the guinea fowl goes to the detriment of the guinea fowl (see the text 'The Squirrel and the Guinea fowl').

```
Example with kulile=nu 'to the Guinea fowl' and saq' 'place'
    c'aq'-e kuusu ka kulile=nu saq'-o
    faeces PronP.3SgMPoss Sent guinea.fowl=from place-3SgMConsB
    He placed his faeces to the guinea fowl.
```

If the case clitic =nu modifies a human and the non-movement verb indicates projection, $=\mathbf{n u}$ marks a recipient or receiver. See examples with the verbs šeeg' 'to bring' deeћ 'to give', and gaaћ 'to tell', gassad' 'to ask', mur 'to pay'.

Example with gaante=nu 'to the woman' and šee» 'bring'
laabl-e gaan-t-e=nu šeeg-i
cloth-F woman-Sg-F=from bring-1SgUnm
I brought the cloth to the woman.
Example with Ainanko kaayu takka=nu 'to my small boy'and dee ${ }^{\text {TM }}$ 'give'
Pinank-o kaayu takk-a=nu ka
boy-M PronM.1SgPoss be.small-3SgAdj=from Sent
n=deeћ-i
$1=$ give- 1 SgUnm
I gave it to my small boy.
Example with q'awko=nu 'to the man' and gaa ${ }^{\text {™ }}$ 'tell'
wor-e q'awk-o=nu gaaћ-i
news-F man-M=from tell-3SgMUnm

He told the news to the man.
Example with qawko=nu 'to the man' and gassâ̂ 'ask'
q'awk-o=nu gassad-i
man-M=from ask-3SgMUnm
He asked the man.
Example with qawko=nu 'to the man' and mur 'pay'
q'awk-o=nu mur-i
man-M=from pay-3SgMUnm
He paid the man.
Since the verb q'aba? 'to hear' indicates projection towards the subject, in the sentences with this verb $=\mathbf{n u}$ is ablative:

> Patunde=kka Pabb-ay- $\mathbf{0}=\mathbf{n u} \quad$ q'aba $P-\mathbf{t e}=\mathbf{k k a}$
> 2PISubj=Sent father-Sg-M=from hear-2PINonPstNeg=Sent You do not listen to your father.

When =nu marks an inanimate, this entity may appear as the final result of the action. This is shows by the following example. In the first one the people assemble and cut (the wood) in order to build the house wall, korkoro, which is marked by =nu:

Example with korkoro=nu 'for the house wall' and Pergad 'to assemble' korkor-o=nu gor-e Pergad-e q'ets'-inki house.wall-M=from people-P assemble-3PlUnm cut-3PlConsA The people assembled and cut (wood) for (building) the wall of the house.

In the second example, the sentence asserts that the root is necessary in order to produce the marked element, i.e. deešo 'medicines':

## Example with $\hat{\mathrm{I}} \boldsymbol{e} \boldsymbol{e} \boldsymbol{\operatorname { s ̌ o }}=\mathbf{n u}$ 'for the medicine' and $\boldsymbol{g e} \neg$ as 'to be necessary' <br> deeš-o=nu hezz-itt-e ge? as-a <br> medicine-M=from root-Sg-F be.necessary-3SgMFocImpfv <br> The root is necessary for (making) medicines.

## Verbs of movement and inanimates

If the verb expresses movement, the marked element is always inanimate It marks the location from which the subject creates distance. Examples of verbs of movement are xaf 'come' and kol 'return'. When associated to an element marked by $=\mathbf{n u}$, this element indicates the origin of the movement:

Example with manne Beze=nu 'from Beze's house' and xaf 'come' mann-e beze=nu xaf-i
house-P Beze=from come-1SgUnm I came from Beze's house.

## Example with Jinka=nu 'from Jinka' and kol 'return'

žinka=nu kol-i
Jinka=from return-1SgUnm I returned from Jinka.

The fact that these verbs can be associated to a destination, marked by the clitic =ma 'to', proves that the interpreted meaning 'from' is not inherent in the verbs.

Example with Luuq'a=ma 'to Luqa' and xaf 'come'
ts'eggay Luuq'a=ma xaf-i
Ts'eggay Luq'a=ma come-3SgMUnm
Ts'eggay came to Luqa.
Example with Addis Ababa=ma 'to Addis Ababa' and kol 'return'
Addis Ababa=ma kol-i nay ts'eggay=ta
Addis Ababa=to/in return-3SgMUnm Backgr ts'eggay=upon
bay-i=nay
say-3SgMUnm=Backgr
When he returned to Addis Ababa he said to Ts'eggay...
In consideration of this use of =nu with inanimates, the noun phrase mann-e Beeze 'Beze's house' contained in the following sentence might represent not the origin of the movement but the entity the subject works for.

## mann-e beeze=nu xaf-i

house-P Beze.Poss=from come-1Sg.M.Prf
I came from Beze's house.
or
I came for (working on) Beze's house.
An animate never appears as the location from which the movement is realised. A sentence such as 'he came from the man' demands the general locative case suffix -ilo after 'man' (see.

A head marked by $=\mathbf{n u}$ unequivocally represents an origin if the verb implicitly indicates motion 'from'. See below the example with the verb žug 'take out':

Example with mann-e=nu 'from the house' and žug 'take out'
Pano billay-k-o mann-e=nu žug-i
1SgSubj knife-Sg-M house-P=from take.out-1 SgUnm I took out the knife from the house.

## Comparative context

The clitic =nu indicates the base in a comparative sentence. The other element of the comparison is the subject of a stative, adjectival or middle verb. It can also be the subject of a nominal sentence:
baq'q'ala miša=nu q'arra ki dal-ad-i
Baq'q'ala Miša=from before Sent. 3 give.birth-Mid-3SgMUnm Baq'q'ala was born before Miša.

```
mann-e kaayu mann-e kaako=nu ke
house-P PronP.1SgPoss house-P PronP.2SgPoss=from PronP
^amm-a
be.big-3SgMFocAdj
My house is bigger than your house.
```

luq'a q'eyPafer=nu defo
Luq'a Qäy Afär=from close
Luq'a is close to Qäy Afär.

### 4.5.3.2. =ma ('to/in')

The case clitics =ma has two basic meanings: Movement towards and bounded space.

Movement towards
Example with maanne=ma 'towards the house' and zow 'to go'
Pufo maann-e=ma zow-i
3 SgMSubj house-P=to/in go-3SgMUnm
He went home.

Example with dalissa kaysa=ma 'towards those goats' and sor 'to run'
dal-issa kaysa=ma sor
goat.DistM/P there=to/in run.SgImpA
Run towards those goats!
Bounded space
Example with ${ }^{\text {TM }} \boldsymbol{a a l t e}=\mathbf{m a}$ 'in the calabash' and $\neg \boldsymbol{a q}$ ' 'to be left'
saan-k-o takk-a $\quad$ haalt- $\mathbf{e}=\mathbf{m a} \boldsymbol{9} \mathbf{a q}$ '-i
meat-Sg-M be.small-3SgMAdj calabash-F=to/in be.left-3SgMUnm Some meat was left in the calabash.

Example with kuttonko=ma 'to the mountain' and kâ̂ㅅI 'to descend' q'aw-k-o kuutton-k-o=ma kadd-a
man-Sg-M mountain-Sg-M=to/in descend-3SgMImpfv A man is going down the mountain.

## Example with Aakko=ma 'at the wild animal' and Æaba $\hat{\mathrm{I}}$ 'to take'

q'aw-a ?aakk-o=ma gabad-a
rifle-F wild.animal-M=to/in take-PlImpA
Aim the rifles at the animal!
When it follows a verbal nouns, the clitic =ma indicates a prolonged activity.

Pooddd- $=$ =ma nagay- $\mathbf{i}$
walking-M=to/in spend.the.day-1SgUnm
I spent the day walking.

### 4.5.3.3. =yay ('with')

The case clitic =yay means 'with'. The marked element is interpreted as comitative or instrumental.
comitative
Example with ša $\neg$ alko=yay 'with the brother' and zow 'to go'
šąal-k-o=yay gaabay-a=ma zey-i
brother-Sg-M=with market-F=to/In go-3SgUnm
He went to the market with his brother.
Instrumental
Example with Aìrgá $\neg \mathbf{o}=y a y$ 'with the axe' and $\mathbf{q}$ 'aq' 'to cut'
Pìrgá 9 -ò =yay gaar-ko n=q'aq'-i
axe-M=with tree-M $1=$ cut-1SgUnm
I cut a tree with the axe.
hez-itt-e boytakk-ilo=yay moo goddf-ini
root-Sg-F boytakko-LocM=with what do-1SgSubFut
What will I do with the root of the boytakko tree?
Animates can be interpreted as comitative or instrumental elements. In the example below the cows, le?e, accompany the subject:

```
le?-e=yay ka??-i
cows-P=with stand up-3SgMUnm
He left with the cows.
```

In the following example, extracted from a folktale, the subject uses the hyena gudurko to bury someone (it is the squirrel, who ties together the tails of the hyena and the corpse of the lion and makes the hyena run up to the lion's grave):

## gudur-k-o=yay may-u

hyena-Sg-M=with bury-3SgMConsA
He buried him using the hyena.

### 4.5.3.4. The semantically empty clitic $=y$

The clitic $=\mathbf{y}$ is an ill-understood element. It is glossed 'Fill' because it fills the space left empty by a case clitics in the context of the pronominals described in 5.5. and sub-sections. In the example below it follows the demonstrative kitta in the nouns phrase dalle kitta 'these children':

$$
\begin{array}{ll}
\text { dall-e } \quad \text { kitta=y } & \text { baamb-a=ma zow } \\
\text { children-P PronP.Prox } 1=\text { Fill } & \text { pump-F=to/in } \\
\text { Go to the pump with these children! } & \\
\text { go.SgImpA }
\end{array}
$$

The final element of the comitative clitic =yay may be connected to this semantically empty clitic (see 4.5.3.4.). Note that the comitative clitic shows no final $\mathbf{y}$ after pronouns, but it may also appear as =yay when it attaches to the locative postposition na (see 4.5.4.). The clitic $=\mathbf{y}$ may also be detected in nay, which is an alternative form of the sentence backgrounder na and the homophonous locative pronoun (see 4.6. and 5.6.). The semantically empty clitic is not glossed when it appears in yay and nay.

### 4.5.4. Locative adverbials: the clitic =ta and the postposition na

Simple nouns in locative adverbial position are marked by a nominal gender suffix. Modified nouns, pronouns, names and interrogatives in adverbial positions are marked by the clitic =ta 'upon' or may be followed by the locative postposition na. Elements referring to animates appear as possessors.

See examples of sentences with locative adverbials marked by the clitic $=\mathbf{t a}$ :
mann-e kaayu=ta q'aw-a dootte Pag-a
house-P PronP.1SgPoss=upon rifle one.F be.located-3SgMImpfv
In my house there is a rifle.
mago=ta q'ane salaћ raf-inki
Mago.park=upon day.F four sleep-3PlConsA
They slept for four days in the Mago park.
beze=ta Payra lákkí Pag-a
Beze=upon peer.friend.M two be.located-3SgMImpfv
Beze has two peer friends.

Páћá=ta ki bayš-itt-e Paģ-ti ћaark-ilo
who=upon Sent. 3 wound-Sg-F be.located-3SgFUnm hand-LocM Who has a wound on his hand?

The postposition na may appear as nay or may be followed by the clitic =ta 'upon'. Under the shape nay it may cliticise and geminate its initial consonant.

In the following examples the postposition follows nouns marked by the locative suffixes or the clitic =ma 'to/in':

## warž-e ža£¢ar-k-ilo na ћull-iti

spear-F rectum-Sg-LocM Loc enter-3SgFUnm
The spear entered there, in the rectum.
kiirrin-k-o=ma na dabb-iti
tail-Sg-M=to/in Loc cling-3SgFUnm
She clung there, on the tail.
kinn-e $\quad$ Pita deemitte=ma na 6ull-iti
ear.of.cattle-F away middle=to/in Loc jump-3SgFUnm
The ear of the cattle jumped to the middle.
In the following examples na marks the interrogative element Pakka 'where':

## Pakka na baPPay-ini?

where Loc carry-1SgSubFut
Where shall I carry it?
gaar-ko Pakka na q'ets'-i Par-i=kka
tree-M where Loc cut-1SgUnm know-1SgNonPstNeg=Sent I do not know how to cut wood.

With the verb deeh 'give' the pronoun na is interpreted as a dative marker, following the interrogative word Раћћa 'who?':
warž-e Páћá na deeћ-ti Pallo?
spear-F who Loc give-2SgUnm Allo
To whom did you give the spear, Allo?
na appears as nay (or =nnay) after noun phrases with a locative noun or a locative name as modifier. In most of the cases the modifiers appears as a possessor.
Sand-e Paka katt-e bìy-è q'awk-ilo nay worћank-o
water-P and fire-F land-F man-LocM Loc war-M
c'ib-e
pierce-3PlUnm
Water and fire started a war in the man's land.
gaar-k-o bilbilk-ilo nay ma¢k-o Páћá
tree-Sg-M Bilbilko-LocM Loc name-M who
What is the name of the tree of the Bilbilko clan?
mann-e pawlos baart-e Paka mann-e s'eggay nay
house-P Pawlos hut-F and house-P S'eggay Loc šaark-ilo
middle-LocM
Pawlos' house is between the hut and S'eggay's house.
mann-e ts'eggay mann-e pawlos nay duk-ilo
house-P ts'eggay house-P Pawlos Loc back-LocM Ts'eggay's house is behind Pawlos' house.
zan-o mann-e beze Paka Pallo=nnay šaark-ilo road-M house-P Beze and Allo=Loc middle-LocM The road is between the house of Bezi and Allo.
q'awk-o-se saabank-ilo=nnay ma£k-o na=ta gosingo6-o
man-M-Def1 parallel.field-LocM=Loc name-M Loc=Loc chameleon-M The name of the person of the parallel field is chameleon.
nay may also follow other kinds of noun phrases. In the first of the following examples, the modifier is a demonstrative. In the second one it is the proximal demonstrative/vocative tonal morpheme:

## Parr-e titta te q'awk-o kutta=nnay

donkey-F F.this Fcon manM PronM.Prox1=Loc
This donkey belongs to this man.
lò?-ó=nnay $\quad$ Pottakk-o bog-ni
cow.Prox/Voc.F-M=Loc cub-M kill-1SgSubFut
I will kill the calf of this cow.
na is followed by =ta 'upon' when it refers to a relational noun or a simple noun followed by the sentence marker ka. See examples:
bork-ilo gid-atte na=ta max-xe
belly-LocM interior-LocF Loc=Loc calabash-P
In her belly there were calabashes.
naPaka na=ta muducio na hadd-i ba
baby Sent Loc=Loc pointed iron Loc add-3SgFConsA Cons
loq'-i
swallow-3SgFConsA
She inserted the pointed iron into the baby and swallowed him .

In the following example na=ta looks like a partitive marker:

## dookko na=ta ko Pekke zigam-a

one.M Loc=Loc PronM very tall-3SgMAdj
One of them is very tall.
The particle na in isolation may also function as time backgrounding marker. This function can be considered a metaphorical extension of its locative meaning. The background elements provide information about the time setting of the main action. Time information backgrounded by na is provided by an advebial noun phrase. See the following three examples:

Example with samminte paann-atte 'week after' and na samminte paann-atte na žinka n=zow-ni week footprint-LocF Loc Jinka 1=go-1Sg SubFut Next week I will go to Jinka.

Example with gize tetta 'that time' and na
gize tetta=nna garo bìy-è taani=ma ts'eggaye time PronF.Dist1=Loc side land-F PronF.1PlPoss=to/in Ts'eggaye salaћ ki kol-i
four Sent. 3 return-1SgUnm Since that time S'eggaye came back three times to our land.

Example with gellenko qaratta 'three days ago' and nay gellenko q'aratte=nnay žiinka=ma n=zow-i
three.days before=Loc Jinka=to/in $\quad 1=$ go- 3 SgMUnm Three days ago I went to Jinka.

Sentences are backgrounded by the homonymous conjunction na, which is described in the following section (4.6.).

The postposition na is found as part of adverbial words. See some examples below. See 8.1. For details on the adverbials:

## Passanna pann-atte Yufunde xumbi 9 akkad-e

so.Loc footprint-LocF 3PlSubj all sit-3PlUnm
ba $£$ ar-e $£$ ug-e
Cons coffee-F drink.3PIUnm
After that (moment), all of them sat down and drank coffee.
Pise dal-ti yaaka Paysana gar-o
2SgFSubj give.birth-3SgFUnm when then.Loc side-M
Pinank-o=yay kol-u
boy-M=with return-3SgMCons
When she gives birth then he will come back here with the boy.

ћayna beze=ta bayš-itt-e Pag-a
here.Loc Bez2=upon wound-Sg-F be.located-3SgMImpfv
Bezi has a wound here.
Panto $\hbar$ ayna Pag-i
now here.Loc be.located-3SgMUnm
Now I live here.

## Paysana lig-ti=kka

fromthere.Loc go.out-2SgMNonPstNeg=Sent You will not go out from there.

### 4.6. Sentence conjunctions

There is no morphological marking of subordination. Relatives may be joined by the pronominal particles, as shown in 4.5. Two sentences may be joined by ba, yaaka and na. These conjunctions normally appear between the two sentences, however, ba and na can also follow the subject of the second sentence. When they follow the verb these two conjunctions may appear with geminated initial consonant. In this case they are cliticised to the verb. na often attracts the empty clitic $=\mathbf{y}$. One of the two adjoined sentences, most often the subordinate one, contains the sentence marker ka in preverbal position. The sentence marker does not appear in relatives.

The verbs following ba express the consequence of what is described in the preceding sentence. For this reason, the conjunction is glossed 'Cons'. In most of the cases the verb following ba is in the Consecutive form (cf. 5.6). See example:

```
Cand-ete lig-ti ba gaama=ma
water-LocP get.out-3SgMUnm Cons shore=to/in
qakkad-i
sit.down-3SgFConsA
He got out the water and sat on the shore.
```

The adjunct yaaka in most of the cases links two sentences, the first of which describes the temporal or conditional setting of the following one. See examples:

$$
\begin{array}{lllll}
\text { Pano ka n-booh-i } & \text { yaaka } & \text { maang-o } & \text { goh-a } \\
\text { 1SgSubj } & \text { Sent } & \text { 1-sow-1SgUnm when } & \text { sorghum-M } \\
\text { grow-3SgMJuss }
\end{array}
$$

If you did not prepare food we would not eat.

```
Perr-o ki dib-i yaaka makin-a
rain-M Sent. }3\mathrm{ rain-3SgMUnm when car-F
zaarb-iti=kka
pass-3SgFNonPstNeg=Sent
If the rain falls the cars do not pass.
```

The sentences preceding na in most of the cases provide scope or background:


He did not come by car, but by bus.
na has backgrounding function. It indicates the temporal, conditional or circumstantial setting of the following sentence.

Examples of temporal setting
Pano q'awk-o daPad-a nay
1SgSubj man-M wait-1SgImpfv Backgr
while I was waiting for the man...

## bolg-om-i nay

become.king-Pass-3SgMUnm Backgr
having become king...
lukkal-itto ka Pawne bìy-è goon-ti na
chicken-M Sent evening land-F get dark-3SgFUnm Backgr
zaq'-anki
slaughter-1PlImpfv
When it became dark in the evening, we slaughtered a cock.
booћ-i nay naa=ma kalikk-o $\hbar$ hadd-i
sow-1SgUnm Backgr Loc=Dir sun-M add-3SgMUnm

While I was sowing the sun went down.
Pine žiP-9-o žị-ni na ka Patunde xaf-te 1PlSubj food-M eat-1PlUnm Backgr Sent youPl come-2PlUnm You came after we ate.
gabay-a Pogoy-na na q'eyPafer=ma zow-ni market-F come-3SgMMainFut Backgr Q'äy Afär=to/in go-1SgSubFut When the market (day) comes I will go to Qäy Afär.
kup bay-iti nay garas-t-e na=ta bo?-ti
kup say-3SgFUnm Loc belly-Sg-F Loc=Loc blast-3SgFUnm She bent and her belly blasted.

## Examples of circumstantial setting

Perr-o-se dib-i na ka?P-iti dor-o
rain-M-Def1 rain-3SgMUnm Backgr stand up-2SgUnm granary-M
bod-na
dig-1PIJuss
Since it is raining, get up and let's collect some grains from the granary.
bìy-è wor-addd-ite na xoris-i=kka na
land-F forest-P-LocP Loc snore-3SgMNonPstNeg=Sent Backgr q'aw-kutta xoris-a kung'a?
man-PronM.Prox1 snore-3SgMImpfv M PronM.which Nobody snores in the forest, so who is this man who is snoring?
kole?aka tiir-a nay kotta na par-i
again run-3SgMImpfv Backgr PronM.Dist1 Loc die-3SgMUnm This one run again and died there.

Examples of conditional setting

| Pakka | Pato | Pogoy-inti | ka Par-ni |
| :--- | :--- | :--- | :--- | | nay |
| :--- |
| where | 2SgSubj | come-2SgSubFut |
| :--- | Sent know-1SgSubFut Backgr

q'aru q'aw-a šeeg-i nay gasar-k-o ka
side rifle-F bring-1SgUnm Backgr buffalo-Sg-M Sent

## ra?-na

shoot-1PIImpfv
If I had brought a rifle we would have shot the buffalo.
Pise dòòll-ò=ma §akkat-ti nay galla na=ta
2SgFSubj skin.mat-M=to/in sit-3SgFUnm Backgr down Loc=Loc

```
xoxon-k-o Pag-a
hole-Sg-M be.located-3SgMImpfv
She sat on the leather mat. Below it there was a hole.
```

na often follows the verbs bay or kay, both meaning 'to say'. The first one introduces or closes direct speech, while the second one is found only at the beginning of direct speech:

Example of bay 'to say' after direct speech
Pano saan-k-o ži?-ni bay-i nay
1SgSubj meat-Sg-M eat-1SgSubFut say-1SgUnm Backgr
I said: 'I will eat meat'.
Example of bay 'to say' before direct speech
bay-i nay garr-o moo koo
say-3Sg.Unm Backgr squirrel-M what 2 SgM .Obj
day-i
get-3SgMUnm
He said: 'Squirrel, what happened to you?'
Example of kay 'to say' before direct speech

| Pato | kay-a | nay | Perr-o | dib-na | ba |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2SgSubj | say-3SgImpfv | Backgr | rain-M | rain-3SgMMainFut Cons |  |
| dor-o | žiP-onki |  |  |  |  |

### 4.7. The sentence marker ka

The sentence marker ka may follow a topicalised sentence constituent. The third person subject $\mathbf{i}$ may attach to $\mathbf{k a}$, which appears as $\mathbf{k i}$.

In the example below, the topicalised element is the object:

## liq'amber-a gor-e ka buska6-i

chief.M-F people Sent gather.Caus-3SgMUnm
The chief brought the people together.

## maax-x-e xumbi ki lass-i

bead-Pl-P all Sent. 3 sell-3SgMUnm
He sold all the beads.

```
ts'eggay @a6n-e Pingiy-atte ki šur-i
Ts'eggay breast.Pl-P mother-LocF Sent. }3\mathrm{ suck-1SgUnm
Ts'eggay sucks the mother's breast.
```

Here is an example of adverbial in sentence followed by ki:
pawlos ts'eggay=nu q'arra ki xaf-i
Pawlos Ts'eggay=from before Sent. 3 come-3SgMUnm Pawlos arrived before Ts'eggay.

## 5. Pronouns

### 5.1. Pronoun series

There are subject pronouns, object pronouns and pronominal particles. The subject pronouns are independent. The object pronouns also appear in isolation, but most often they attract the sentence marker ka (see 4.7.). This element is glossed 'obj' when cliticised to an object pronoun. The pronominal particles represent and agree in gender with modified heads. They appear in isolation if the modification is expressed by a relative clause. They are also attested in sentences with stative verbs and in interrogative sentences. In most cases they are fused to modifying suffixes with which they form a group of pronominals (see 5.5).

The object pronouns also occur in other syntactic functions. They play the roles of datives, directives, comitatives, and locatives. Each role is indicated by a case clitic, which is bound to the right of the pronoun. The case clitic $=\mathbf{n u}$ 'from' follows the datives, the clitic =ma 'to/in' follows the directives (but it also indicates bound location); the clitic $=\mathbf{y a}$ 'with' follows the comitatives; locatives are followed by the clitic $=\mathbf{t a}$ 'upon'. Before a clitic, the object pronouns keep the shape they have in isolation. However, the datives show some phonological change (see 5.4.). The case clitics are also used to indicate noun phrases in adverbial position (see 4.5.3.).

A series or personal elements to be mentioned here is the personal possessive suffixes. They form possessive pronominals with the pronominal particles and share structural similarities with the pronouns.

Another pronominal element with a more limited application is the invariable third person locative pronoun na. It is treated in section 5.7. (see also 5.2).

The subject and object pronouns are shown in table 19. The pronominal particles are shown in table 20. The personal possessive suffixes are shown in table 21. The tables are followed by some comments:

Table 19: The subject and object personal pronouns

|  | Subject | object |
| :--- | :--- | :--- |
| 1 Sg | Pano | Pee |
| 1 Pl | Pine | Pine |
| 2 SgM | Pato | koo |
| 2 SgF | Pato | kee |
| 2 Pl | Patunde | kune |
| 3 SgM | Pufo | Pufo |
| 3 SgF | Pise | Pise |
| 3 Pl | Pufunde | Pufunde |

Table 20: The pronominal particles

| m | ko/ku |
| :--- | :--- |
| f | ke/ki |
| p | te/ti |

Table 21: The personal possessive suffixes

|  |  |
| :--- | :--- |
| 1 Sg | -aayu |
| 2 SgM | -aako |
| 2SgF | -aaki |
| 3SgM | -uusu |
| 3SgF | -iisi |
| 1 Pl | -aani |
| 2 Pl | -aakunde |
| 3 Pl | -uusunde |

The Subject series is the only one that fails to distinguish gender in the second singular person.

- The Subject and Object series share the pronouns indicating the person external to the speech act. These are the third person pronouns Pufo ( 3 SgM ), Pise (3SgF) and Pufunde (3P) (see 5.2.).
- The third persons Possessive suffixes are distinguished by an element $\mathbf{s}$. Their possessive vocalic marker appears as ii in the 3 SgF -iisi and uu in the 3 SgM -uusu and 3 Pl -uusunde, which is a plural form derived from the 3 SgM -uusu. The difference in the initial possessive marker is due to assimilation of aa to the final vowel of the third person Possessive suffixes. The assimilation is realised through $\mathbf{s}$. The third feminine singular -iisi shows ii because of assimilation to the final vowel i, the third masculine singular -uusu show uu because of assimilation to the final vowel $\mathbf{u}$. The
third person plural -uusunde also shows uu because it is derived from the third person singular masculine by suffixation of -unde.
- A second person marker $\mathbf{k}$ is shared by the Object pronouns and the Possessive suffixes.
- All pronominal series show the derivation of the second and third person plural pronouns from their singular masculine counterpart. The plural derivational marker is -unde except for the second plural object pronoun, that shows -ne (kune). This pronoun is also exceptional because it is based on the dative form of the second person singular masculine object pronoun, i.e. ku. The singular and plural forms of the first persons are independent from each other.
- Masculine/feminine gender distinction can be expressed by vocalic alternation along the front/back parameter. It is the case of the second persons singular possesive suffixes -aaku (m) and -aaki (f) and the third persons singular possessive suffixes -uusu (m) and -iisi (f), where the alternation is masculine $\mathbf{u}$ /feminine $\mathbf{i}$ (the initial long vowels are assimilated to the gender markers). Another case is the difference between the second person masculine object pronoun koo and the second person feminine object pronoun kee, which show an alternation masculine oo/feminine ee. The shape of the final vocalic element of some other pronouns is reminiscent of the nominal gender suffixes -o (masculine), -e (feminine and plural). The plural pronouns end in e, the third person masculine Subject pronoun Pufo ends in $\mathbf{0}$, the third person feminine Subject pronoun Pise ends in $\mathbf{e}$.


### 5.2. The third person pronouns

The use of the third person pronouns is limited to human referents. However, the reference to human third persons may also be made by means of the generic locative pronoun na (see 5.6.). This pronoun is not used as subject or object. It may appear in place of the third person object pronoun in dative position before the clitic $=\mathbf{n n u}$, in directive position before the clitic $=\mathbf{m a}$, in comitative position before the clitic =ya, and in locative position before the clitic $=\mathbf{t a}$.

Among the forms of na, those indicative of dative and directive function, respectively $\mathbf{n u}=\mathbf{n n u} \mathbf{/ n i}=\mathbf{n n u}$ and naa=ma, are the most used for human reference. This is particularly true for the indication of the masculine and feminine singular persons. The dative $\mathbf{n u}=\mathbf{n n u} / \mathbf{n i}=\mathbf{n n u}$ seems to be taking over the role played by the object third person pronouns in dative position. This form is structurally exceptional because it contains a masculine or feminine vowel gender marker: u (masculine and plural) or $\mathbf{i}$ (feminine). These vocalic elements appear directly before the clitic =nnu and replace the final vowel a of na. Therefore there are two dative forms for the third person locative pronouns: $\mathbf{n u}=\mathbf{n n u}(\mathrm{m}$ and p ) and $\mathbf{n i = n n u}(\mathrm{f}$ ). The use of na for comitative feminine and plural human third person is not attested.

The following examples show the use of the third person pronouns. The sentences with the pronouns in dative, directive, comitative and locative positions are compared with sentences showing the third person locative pronoun na in the relevant position:

```
Example with 3SgM in Subject function
    Pufo mann-e garis-i
    3SgMSubj house-P build-3SgMUnm
    He built a house.
```


## Example with $3 S g F$ in object function (in isolation)

Pusk-akk-o ?ise bog-i
dirt-Sg-M 3SgF.Obj kill-3SgMUnm
The dirt killed her.
Example with 3 SgF in object function (bound to $=\mathbf{k a}$ )
? ise $=$ ka gees-i
3SgF=Obj want-1SgUnm
I want her.
Example with 3SgM in dative function
? ufo=nu gaaћ-oy
$3 \mathrm{SgM}=$ Dat tell-3SgMConsB
and he told him...
Compare with nu=nnu in the following example:

## nu=nnu layb-e rakk-i

LocM/P=Dat cloth-F hang-3SgMUnm
He hung the cloth for him.
Example with $3 S g F$ in dative function
Pise=nu 9 and-e šeeg-e
3SgF=Dat water-P bring-3PlUnm
They brought water to her.
Compare with $\mathbf{n i}=\mathbf{n n u}$ in the following example:
ni=nnu $\quad$ xoxon-k-o $q$ 'od-onki
LocF=Dat hole-Sg-M dig-3PlConsB
....and they dug a hole for her

## Example with 3Pl in dative function

 Pufunde=nu deeš-o bitam-i 3Pl=Dat medicine-M buy-3SgMUnm He bought medicines for them.Compare with nu=nnu in the following example:
Palle Paaka bašare zey-inki ba maang-o
Alle and Bashare go-3PIUnm Cons sorghum-M
nu=nnu PiPas-u
LocM/P=Dat show=3SgMConsA
Alle and Bashare went and he showed the sorghum to them.

## Example with $3 S g M$ in directive/bound locative function ?ufo=ma Pogoy-i <br> $3 \mathrm{SgM}=$ Dir come-3SgMUnm <br> He arrived to him.

Compare with naa=ma in the following example:

## gaarro=ma ger£-int-e naa=ma ¢armat-ti

squirrel=to/in steal-Nom-F Loc=Dir appear-3SgFUnm
The squirrel was clearly guilty of stealing.
(litt: 'The stealing appeared on him, on the squirrel'.)
Example with 3SgF in directive/bound locative function
gaar-k-o Pise=ma biS-i
tree-Sg-M 3SgF=Dir fall-3SgMUnm
A tree fell on her.
Compare with naa=ma in the following example:

| gaan-t-e bolgom-i | tannu gor-e ki wa?ko |
| :--- | :--- | :--- | :--- | :--- |
| woman-Sg-F become.king-3SgMUnm | then people.PSent-3 god |

Example with 3SgPl in directive/bound locative function
šukuy-i ba ?ufunde=ma sor-u
be.scared-3SgM Cons $3 \mathrm{Pl}=$ Dir run- 3 SgMConsA
He got scared and ran to them.
Compare with naa=ma in the following example:
naa=ma zey-i
Loc=Dir go-3SgMUnm
He went to them.
Example with 3Pl in comitative function
?ufo=ya nassan-na
3SgM=Com rest-1SgMainFut
I will rest with him.
Compare with naa=ma in the following example:

Example with $3 S g F$ in comitative function
Pise $=$ ya nassan-na
$3 \mathrm{SgM}=\mathrm{Com}$ rest-1 SgMainFut I will rest with her.

Example with 3Pl in comitative function
? ufunde=ya biif-i
3Pl=Com have.a.meal-3SgMUnm
He ate with them.
Example with 3 SgM in locative function
Pufo=ta Pard-o baPate
3SgM=Loc ox-M there.is.not
He does not have a ox.
(Litt: ‘A ox is not by him.')
Compare with na=ta in the following example:

```
nu=nnu ki le?-e goš-a ba na=ta
LocM/P=Dat Sent-3 cows-P tend-3SgMImpfv Cons Loc=Loc
galla ki Pag-a
down Sent-3 be.located-3SgMImpfv
He was tending the cows for him and was living by him.
```

Example with $3 S g F$ in locative function
? ise=ta kiy-i
3SgF=Loc say-3SgMUnm
He said to her.
Compare with na=ta in the following example:
na=ta kiy-i
Loc=Loc say-3SgMUnm
He said to her.

## Example with 3Pl in locative function

Pinank-o ?ufunde=ta buqad-i
boy-M 3Pl=Loc get sick-3SgMUnm
Their boy got sick.
(Litt: 'The boy got sick to them.')
Compare with $\mathbf{n a}=\mathbf{t a}$ in the following example:

```
Peed-adde zigg-umma Payyakko Pag-a
friend-Pl tall-3PlAdj many be.located-3SgImpfv
dookko na=ta ko Pekke zigam-a
one.M Loc=Loc PronM very tall-3SgMAdj
I have many tall friends. One of them (litt: in them) in very tall.
```


### 5.3. The subject pronouns

See some examples of sentences showing the Subject pronouns:

## Pano soq'-o godd-i

1SgSubj salt-M add-1SgUnm
I added salt.

## Pato šitte dal-ti

2SgSubj girl.F give.birth-2SgFUnm
You gave birth to a girl.

## Patunde q'awk-o šukuyaš-te

2PISubj man-M scare-2PIUnm
You (p) scared the man.
The grammatical subject pronouns are facultative in a sentence. Sentences without subject pronoun, or without an explicit subject, are correct. The following examples show the same sentences with and without subject pronouns:

$$
\begin{aligned}
& \text { Pano PìrgáS-ò }=\text { ka deek-i } \\
& \text { 1SgSubj axe-M=Sent sharpen-1SgUnm } \\
& \text { I have sharpened the axe. } \\
& \text { PìrgáS-ò }=\text { =ka deek-i } \\
& \text { axe-M=Sent sharpen-1SgUnm } \\
& \text { I have sharpened the axe. }
\end{aligned}
$$

## Pato Pine $=$ ya nassan-nay

2 SgSubj $1 \mathrm{Pl}=$ Com rest- 2 SgMainFut You will rest with us.

Pine=ya nassan-nay
$1 \mathrm{Pl}=$ Com rest-2SgMainFut You will rest with us.

Pufo šukuy-i ba kee=ma sor-u
3SgSubj be.scared-3SgMUnm Cons 2 SgF=Dir run-3SgMConsA He got scared and run towards you.

## šukuy-i ba kee=ma sor-u

be.scared-3SgMUnm Cons $2 \mathrm{SgF}=$ Dir run-3SgMConsA
He got scared and run towards you.
Pufunde luq'a=ma gellekworra gay-e
3PlSubj Luqa=to/in day.before arrive-3PlUnm The day before yesterday they arrived in Luqa.
luq'a=ma gellekworra gay-e
Luqa=to/in day.before arrive-2PIUnm The day before yesterday they arrived in Luqa.

The subject pronouns contribute to pragmatic interpretation. For example, they appear to stress a contrast with another subject or to focus on a selected subject. In the following sentence, extracted form the folktale 'The squirrel and the korkiša get married', the first person singular subject pronoun Pano, referring to the squirrel, appears to stress a contrast with the korkiša, which is the subject of the previous Imperative verb gabb-a, 'take!':

## naP-a gabb-a=bba

baby-F take-SgImpB=Cons
Pinda Pano zow-na ba na=ta gassad-a=y
Excl 1SgSubj go-1SgMainFut Cons Loc=Loc ask-1Sg ConsA=Fill Take the baby. I will go and ask him.

The following sentence, extracted from the folktale 'The squirrel and the guinea fowl', shows another example of this contrast. The third person singular subject pronoun Pise, is used to stress the reference to the guinea fowl in opposition the subject of the previous sentence, i.e. garro 'squirrel':

```
garr-o bukkis-adod-e boq'q'-o katt-e naa=ma
squirrel-M den-P-Pl stop.hole-3SgMConsB fire-F Loc=Dir
ko?u Pise gidatte riir-ay
light-3SgMCons 3SgFSubj inside shout-3SgFImpfv
The squirrel stopped the dens and lighted fire in them. She was
screaming inside.
```

From the same folktale has been extracted a sentence showing the selective pragmatic property of the subject pronouns. The second person subject pronouns ?ato is used to select the participant that is accused to have eaten the grains:

```
door-o žiPad-i
granary-M be.eaten-3SgMUnm
Pato door-o žiP-ti kulul-e bay-ti
2SgSubj granary-M eat-2SgUnm guinea.fowl-F say-3SgFUnm
garr-ulo
squirrel-LocM
The grains of the silo were eaten. 'You ate the grains of the silo' said
the guinea fowl to the squirrel.
```

The first persons can be optionally indexed on the verb with the proclitic $\mathbf{n}=$ ( $\mathbf{m}=$ before bilabial) with no further pronominal indication of the subject. The first personal proclitic is a relic of the preverbal person markers that still function in the other Dullay dialects (Amborn, Minker and Sasse 1982, Hayward 1989). Examples:

```
žinka=ma n=zey-i
Jinka=to/in 1=go-1SgUnm
I went to Jinka.
q'ayna ka m=bayy-ini
tomorrow Sent 1=start-1SgSubFut
I will start tomorrow.
dal-a Paka n=dayy-inini
newborn.calf-F where 1=get-1PlSubFut
Where will we get a newborn calf?
bogol-t-e ka mala m=bas-inini
queen-Sg-F Sent how 1=do-1PISubFut
What shall we do with the queen?
```


### 5.4. The object pronouns

A single pronominal series is used in object, comitative, directive, locative and dative position.

In order to mark their role as dative, the object pronouns take the dative clitic $=\mathbf{n u}=\mathbf{n n u}$. This clitic is =nnu after the object pronouns of first person singular ( 1 Sg ), first person plural ( 1 Pl ), second person singular masculine $(2 \mathrm{SgM})$ and second person singular feminine ( 2 SgF ).

Ts'amakko is exceptional in the Dullay context in using =nu or =nnu according to the person. The other Dullay dialects described by Amborn, Minkel and Sasse (1982) show only nu for the whole dative series. However, they report the free alternation nu~nnu of the ablative clitic attached to the noun phrase. In the context of a noun phrase, also in Ts'amakko the clitic nu can be interpreted as indicator of ablative function (see 4.5.3.1.), but no gemination of initial $\mathbf{n}$ is attested.

The dative forms of the object pronouns of first person singular ( 1 Sg ), first person plural ( 1 Pl ), second person singular masculine ( 2 SgM ) and second person singular feminine $(2 \mathrm{SgF})$ are affected by morphologically conditioned changes. These changes can be accounted for as the effect of the cliticisation of $=\mathbf{n n u}$.

Two kinds of processes occur. One is haplology and affects the first person plural Pine. The dative from of this pronoun is $\mathbf{P i}=\mathbf{n n u}$, and not the expected * Pine=nnu. The other process is vowel shortening and raising and affects the first person singular Pee, the second person singular masculine koo and the second person singular feminine kee. The result is that the long mid front vowel ee of the first person singular and the second person singular feminine becomes $\mathbf{i}$; the long mid back vowel $\mathbf{0 0}$ which appears in the second person singular masculine becomes $\mathbf{u}$. Therefore the objects pronouns ?ee ( 1 Sg ), kee $(2 \mathrm{SgF})$ and koo ( 2 SfM ) in dative position appear respectively $\mathbf{P} \mathbf{i}=\mathbf{n n u}$, $\mathbf{k i}=\mathbf{n n u}$ and $\mathbf{k u}=\mathbf{n n u}$. With the cliticisation of =nnu the vocalic elements of the pronouns Pee, koo and kee are located in a closed syllable. This position conditions their short and raised realisation, which remains invariable if any other clitic is attached. See below the syllabification of the word made up of the object pronouns in question and =nnu:

Table 22: Syllabification of $1 \mathrm{Sg}, 2 \mathrm{SgM}$ and 2 SgF dative pronouns

| 1 Sg | * Pee=nnu | *?een.nu | Pin.nu |
| :--- | :--- | :--- | :--- |
| 2 SgM | *koo=nnu | *koon.nu | kun.nu |
| 2 SgF | *kee=nnu | *keen.nu | kin.nu |

When they appear bound to any other clitic, all of which have a CV structure, the vocalic elements of these pronouns are found in open syllable and no shortening and raising occurs. See below the syllabification of the words made up of the object pronouns in question and the directive clitic $=\mathbf{m a}$, which is taken as representative of the CV clitics:

Table 23: Syllabification of $1 \mathrm{Sg}, 2 \mathrm{SgM}$ and 2 SgF directive pronouns

| 1 Sg | Pee $=$ ma | ?ee.ma |
| :--- | :--- | :--- |
| 2 SgM | koo=ma | koo.ma |
| 2 SgF | kee $=$ ma | kee.ma |

The change affecting $P$ ine in dative position, is also due to the contact with =nnu. The clitic causes the haplology of the final syllable ne. The reduction process can be exemplified as follows:

Table 24: Haplology in 1Pl dative pronoun

| 1Pl regular form | Cliticisation of $=\mathbf{n n u}$ | Reduction |
| :---: | :---: | :---: |
| Pine | * ?ine $=\mathbf{n n u}$ | ? $\mathbf{i}=\mathbf{n n u}$ |

Even though they are the outcome of two different processes, the dative forms of the first singular and first plural object pronouns are identical, i.e. Pinnu. Paradigmatic levelling is likely to have played a role in achieving a situation in which one form expresses first person singular and the first person plural object pronouns. See the column 'datives' in table 25. This table contains the paradigms of the object pronouns in isolation and as complement of the case clitics (see 4.5.3. For a description of the semantic properties of the case clitics):

Table 25: Full paradigms of the object pronouns in all possible syntactic functions

|  | Object in isolation | Object = ka | Datives $=\mathbf{n u} /=\mathbf{n n u}$ |
| :---: | :---: | :---: | :---: |
| 1 Sg | Pee | Pee=ka | Pi=nnu |
| 2 SgM | koo | koo=ka | ku=nnu |
| 2 SgF | kee | kee=ka | ki=nnu |
| 3 SgM | Pufo | Pufo=ka | Pufo=nu |
| 3 SgF | Pise | Pise=ka | Pise=nu |
| 1 Pl | Pine | Pine=ka | Pi=nnu |
| 2 Pl | kune | kune=ka | kune=nu |
| 3 Pl | Pufunde | Pufunde=ka | Pufunde=nu |
|  | Comitative = ya | Directive $=\mathbf{m a}$ | Locative $=$ ta |
| 1 Sg | Pee=ya | Pee=ma | Pee=ta |
| 2 SgM | koo=ya | $\mathbf{k o o}=\mathbf{m a}$ | koo=ta |
| 2SgF | kee $=$ ya | kee=ma | kee=ta |
| 3 SgM | ?ufo=ya | Pufo=ma | Pufo=ta |
| 3SgF | Pise=ya | Pise=ma | Pise=ta |
| 1 Pl | Pine=ya | Pine=ma | Pine=ta |
| 2 Pl | kune=ya | kune=ma | kune= ta |
| 3 Pl | Pufunde=ya | Pufunde=ma | Pufunde=ta |

The Comitative clitic does not take the semantically empty clitic $=\mathbf{y}$ (see 4.5.3. and 4.5.3.4.). See below an example with the modified noun ša£al-k-uusu followed by =yay:

## gabaya=ma šafal-k-uusu=yay ki zey-i

market.F=to/in brother-Sg-3SgMPoss=with Sent-3 go-3SgMUnm
He went to the market with his brother.
See some examples of the object pronoun:
Example in object position (in isolation)
Pošonk-o Pee bog-i
coldness-M 1Sg.Obj kill-3SgMUnm
The dirt killed me.
Example in object position (=ka)
Pošonk-o Pee=ka bog-i
coldness-M $1 \mathrm{Sg}=\mathrm{Obj}$ kill-3SgMUnm
The dirt killed me.
Example in dative position (=nu)
$\mathbf{P i = n n u}$ wak-i
$1 \mathrm{Sg}=$ Dat speak-3SgMUnm
He spoke to me.
§ardo ki=nnu laag-i
ox.M $2 \mathrm{SgF}=$ Dat turn-1SgUnm
I returned to ox to you (f).
Examples in comitative position ( $=\mathbf{y a}$ )
koo=ya nassan-n-a
$2 \mathrm{SgMSg}=$ Com rest-MFut-1Sg
I will rest with you.
Examples in directive position (=ma)
gaar-k-o kune=ma bic-i
tree-Sg-M 2Pl=Dir fall-3SgMUnm
The tree fell towards you (p).
Examples in locative position (bound to $=\boldsymbol{t a}$ )
lu6-6-e ?ee=ta lákkí
foot-Pl-P $1 \mathrm{Sg}=$ Loc two
I have two legs (litt: two legs are on me).

### 5.5. The pronominal particles

The main function of the pronominal particles ko (m), te (f), and ke (p) and $\mathbf{k u}(\mathrm{m})$, $\mathbf{t i}(\mathrm{f})$, and $\mathbf{k i}(\mathrm{p})$ is to replace or refer to modified head nouns. These
particles agree in gender with the head they represent. They are used obligatorily in certain kinds of noun phrases and appear sporadically in relative clauses. These particles also have resumptive function (see 4.3.).

The pronominal particles are obligatory whenever the modification is expressed by possessive suffixes, demonstrative suffixes, definite suffixes, the 'different' suffix, the 'which?' suffix and the 'whose?' suffix. Pronominal particles and suffixed modifiers form pronominal words in which the pronominal particles are the stem and indicate the relation with the head noun. These pronominals are classified as definites, demonstratives, 'different' -pronominals, 'which' -pronominals, possessives, and 'whose'-pronominals.

The particles appear optionally when the modifier is a relative clause. They are not used with nominal modifiers such as attributive nouns, adjectives, numerals and possessive nouns followed by the locative case suffix.

These particles can take head, predicative and modifying position in most of the syntactic contexts in which they appear. The exceptions are indicated in the following sub-sections. When the pronominal particles are in modifying positions they refer to the head noun. No other head noun is expressed if the particles act as head or predicate.

The two sets of pronominal particles are semantically and syntactically the same, but differ in the way they are distributed. Each set is associated to certain kinds of modifiers. Only the demonstrative suffix -tta appears with both sets, but with two different meanings. Besides being used in isolation in genitive noun phrases and relative clauses, the pronominal particles ko (m), te (f), and ke (p) combine with the definite suffixes - $\mathbf{~} \mathbf{a}$, $\mathbf{- s ( s ) a}$ and -sse in the formation of the definite pronominals and with -tta in the formation of Distal demonstratives. The pronominal particles of set ku (m), ti (f), and ki (p) form Proximal demonstrative pronominals with the suffixes $-\mathbf{t t a},-\mathbf{s i}$, and combine with the 'different' suffix -ba, and the 'which?' suffix -nda. Moreover, the masculine particle ku is attested in few examples with the Distal nominal suffix -ssa in the formation of a rarely used Distal demonstrative.

When the modification is represented by a relative clause the pronominal particles appear in isolation as relativisers. Only the ko (m), te (f), and ke (p) set is used, while $\mathbf{k u}(\mathrm{m})$, $\mathbf{t i}$ (f) and $\mathbf{k i}$ (p) are never attested as independent words.

It is not possible to establish which pronominal particles appear with possessives and 'whose'-pronominals. This is because the vowel of the particles is deleted before vowel initial suffixes, such as the possessive suffixes and the 'whose' suffix. See examples:

Example with kuusu (ko + -uusu 'his')
¢ard-o kuusu
ox.M-M PronM. 1 SgPoss
my ox
Example with $\boldsymbol{k a}^{\text {TMTM }} \boldsymbol{a}\left(\mathbf{k o}+-\boldsymbol{a}^{\text {TMTM }} \boldsymbol{a}\right.$ 'whose')
¢ard-o kutta kaћћa=y
ox.M-M PronM.Prox1 PronM.whose=Fill
Whose ox is this?
In fast speech, the pronominal particles may appear bound directly to the noun if the possessives and the demonstratives with -tta are suffixed to head nouns ending in ko, te or ke. See examples:

Example with ša $\neg \boldsymbol{a l}-\mathbf{k - o}$ (m) 'brother' and kuusu 'his'
gabay-a=ma šąal-kuusu=yay ki zey-i
market-F=to/in brother-PronM.3SgMPoss=with Sent3 go-3SgMUnm He goes to the market with his brother.

Example with Aalaw-t-e (f) 'sister' and taayu 'my'
Palaw-taayu ka n=ka? ?is-i
sister-PronF.1SgPoss Sent 1=let.get.up-1SgUnm
I woke up my sister.
Example with bukkis-att-e (f) 'den' and taayu 'my'
bukkis-at-taayu
den-Sg-PronF.1SgPoss
my den
Example with gaa ${ }^{\text {TM }} \mathbf{- k} \mathbf{k}-\mathbf{o}$ (m) 'stone' and kotta 'that (m)'
zow ba gaaћ-kotta ka gabb-a
go.SgImpA Cons stone-PronM.Dist1 Sent take-SgImpB
Go and take that stone.
Example with gaan-t-e (f) 'woman' and tetta 'that (f)'
gaan-tetta paš-o boox-ad-ay
woman-PronF.Dist1 field-M sow-Mid-3SgFImpfv
That woman is sowing the field.
Example with q'aw-ko (m) 'woman' and kutta 'this (m)'
q'aw-kutta max-x-e bitman-ni kiy-i
Man-PronM.Prox1 bead-Pl-P buy-3SgMSubFut say-3SgMUnm
This man said, 'I will buy beads'.
Example with q'om-ayke (p) 'shoes' and kitta 'this (p)'
q'om-ay-kitta
shoe-Pl-PronP.Prox1
these shoes

### 5.5.1. Definites

In a definite phrase the pronominal particles combine with three kinds of definite markers: - Pa, -(s)sa, and -sse. These suffixes only appear attached to a pronominal particle. The first suffix is related to a spatial adverbial element ?a (see 8.1.). The definite suffix -sa (or $-\mathbf{s s a}$ ) is probably related to the nominal Distal demonstrative suffix -ssa (see 3.8.). The pronominal definite suffix -sse is connected with the nominal definite suffix -se (see 3.10).

The three series of definite pronominals resulting from the association of the definite suffixes with the pronominal particles are used for anaphoric and referential purposes. They do not differ in use and meaning. There is a strange difference from the point of view of the relation with case clitics. The suffixes - Pa and -(s)sa are always followed either by a case clitic or by the semantically empty clitic $=\mathbf{y}$. The suffix -sse is never followed by a clitic. This means that when the definite noun phrase is modified by a case clitic, the suffix -sse is not used. The definites with -sse have the specific function to mark a head noun modified by a locative noun or a relative clause (see 3.7., 4.1.4. and 4.2.).

The definites are only used in modification. They are not attested in head and predicative positions. This happens because a definite head noun must be expressed. If the head noun is understood, a demonstrative pronoun would be used. See the table 24 of definites below:

Table 26: The definites

| m | ko ?a | kosa $\sim$ kossa | kosse |
| :--- | :--- | :--- | :--- |
| f | te?a | tesa $\sim$ tessa | tesse |
| p | ke?a | kesa $\sim$ kessa | kesse |

See examples of definites with - $\mathbf{~}$ a suffix:

```
q'awk-o ko?a=y
man.M-M PronM.Def1=Fill
the man
Pom6-0 ko?a=ka garr-o ži@-a
Pom6o tree-M PronM.Def1=Obj squirrel-M eat-3SgMImpfv
fug-am-u
fill-Pass-3SgMConsA
He filled himself eating (the fruits of) the Aomóo tree.
```

q'awk-o ko ${ }^{\prime}$ a=kka wuyyi
man.M-M PronM.Defl=Sent call.SgImpA
Call also the man.

## gaan-te te? $\mathbf{a}=\mathbf{y}$

man.F-F PronF.Def1=Fill
the woman
wars-a te?a=ka kibir-ni
warsa-dance.F PronF.Defl=Obj dance-1PlUnm
We danced the warsa dance.
gur-a laag-anki,
gura-dance.F turn-1PlImpfv
gura te? $=$ =kka kibir-anki
gura-dance PronF.Defl=Sent dance-1PIImpfv
We started the gura dance and danced also the gura dance.

```
gaan-t-e te?a=nnu šeeg-a
woman-Sg-F PronF.Def1=from bring.SgImpB
```

Bring it to the woman.
gor-e ke?a=y
people-P PronP.Def1=Fill
the people
Pom6-adde ke?a=kka
Pom6o-tree-P PronP.Defl=Sent
Also the omóo trees.

## gor-e ke?a=mma zow

people.P-P PronP.Def1=to/in go-SgImpA
Go to the people.
See examples of definites with $\mathbf{- s}(\mathbf{s}) \mathbf{a}$ suffix:
paš-o kosa=y garr-ulo Pawš-a=kka
field-M PronM.Def3=Fill squirrel-LocM ripen-3SgMPstNeg=Sent The field of the squirrel did not produce.
salliss-o kosa=kka zeћ kibir-u
sallisso-dance-M PronM.Def3=Sent three dance-3SgMConsA
bog-u
kill-3SgMConsA
He danced the sallisso dance three times and finished it.

wars-a tesa=kka kibir-anki<br>warsa-dance-F PronF.Def3=Sent dance-1PlImpfv<br>We danced the warsa dance.

mang-adde kessa=y Pawš-e
sorghum-P PronP.Def2=Fill ripen-3PlUnm
The sorgum ripened.
See examples of definites with -sse suffix:
q'awko kosse paš-o=ma zey-i
man.M PronM.Def3 field-M=to/in go-3SgMUnm The man went to the field.

| Pise | tesse | gor-e | ži $-\mathbf{t i}$ |
| :--- | :--- | :--- | :--- |
| 2SgFSubj | PronF.Def3 | people-P | eat-3SgFUnm |

She eats people.
šaw-w-e kesse q'arra žag-i
beehive-Pl-P PronP.Def3 before insert-3SgMUnm
first, he put the beehives inside.

### 5.5.2. Demonstratives

The pronominal particles combine with the demonstrative suffixes $-\mathbf{t t a}, \mathbf{- s i}$ and -ssa in the formation of demonstrative pronominals. The first suffix is reminiscent of the case clitic $=\mathbf{t a}$ 'upon'. The suffix $-\mathbf{s i}$ is probably related to the nominal definite suffix -se and the pronominal definite suffix -sse. The suffix -ssa is related to the Distal demonstrative suffixes -ussa (m) and -issa ( $\mathrm{f} / \mathrm{p}$ ), which are used in noun modification, and to the definite element $-\mathbf{s s a}$ which is part of a pronominal definite (see 3.8. and 5.5.1.).

Both sets of pronominal particles appear with the suffix -tta. The resulting suffixes have opposite meaning: kutta, titta and kitta are Proximal demonstratives; kotta, tetta and ketta are Distal demonstratives. The suffix -si forms with ku, ti and ki a second set of Proximal demonstratives. A rarely attested Distal demonstrative suffix is kussa. It is made up of the masculine pronominal particle ku and the nominal Distal demonstrative suffix -ssa.

The demonstratives are mainly used in pointing, but they may also have anaphoric and referential function. In pointing to close elements, the Proximal demonstratives kutta, titta and kitta are preferred to the Proximal demonstratives kusi, tisi and kisi. In pointing to far elements, the Distal demonstratives kotta, tetta and ketta are much more widely used than the Distal demonstrative kussa. A head noun modified for Distal demonstrative is more commonly followed by the suffixes -ussa (m) or -issa ( $\mathrm{f} / \mathrm{p}$ ) rather than by Distal demonstrative pronominals.

The demonstratives can take modifying, head and predicate position, but there are some exceptions. The Distal series kotta, tetta and ketta is rare in predicate position, while the Distal kussa is only attested as a head.

See the table 27 of demonstratives:
Table 27: The demonstratives

|  | Proximal | Proximal | Distal | Distal |
| :--- | :--- | :--- | :--- | :--- |
| m | kutta | kusi | kotta | kussa |
| f | titta | tisi | tetta | ---- |
| p | kitta | kisi | ketta | ---- |

Examples of Proximal demonstratives kutta, titta and kitta.
Modifying position
la@-akko kutta=ka q'od-as-i
field-M PronM.Prox1=Obj dig-Caus-3SgMUnm
He ploughed this field.

ћaalt-e titta=y te takk-ay
cup-F PronF.Prox $=$ Fill PronF be.small-3SgFAdj
This cup is small.
§and-e kitta=y k-uusu
water-P PronP.Prox1=Fill PronP-3SgMPoss
This cup is small.

## Head position

kutta maaxx-e bitam-i
PronM.Prox1 beads-P buy-3SgMUnm
This one buys beads.
kutta=y $\quad$ Porgo=nu ki xaf-i
PronM.Prox $1=$ Fill banna=from Sent-3 come-3SgMUnm This one comes from Banna.

Predicate position
hez-itte te garn-ay titta
root-F PronF be.useful-3SgFMainFut PronF.Prox1
The useful root is this one.
Examples of Proximal demonstrative kusi, tisi and kisi.

## Modifying position

q'awk-o kusi=kka max-xe bitam-i
man-M PronM.Prox2=Sent bead-P buy-3SgMUnm Also this man bought beads.
gor-e kisi
people.P-P PronP.Prox2
these people.
Head position

| kusi | Páhá | kusi | Pano |
| :--- | :--- | :--- | :--- |
| PronM.Prox2 | who | PronM.Prox2 | 1SgSubj |

Who is this? This is me.
tisi $\quad$ Pee=ta Paafad-e
PronF.Prox2 1Sg=Loc dinner-F
This is my dinner.
Examples of Distal demonstratives kotta, tetta and ketta.

## Modifying position

bolt-e tetta=kka garas-t-e=ma biS-ti
drop-F PronF.Dist1=Sent belly-Sg-F=to/in fall-3SgFUnm
That drop fell on the belly.
Pombot-ann-e ketta ka xumbi raaw-i
bucket.for.milk-Pl-P PronP.Dist1 Sent all finish-3SgMUnm He finished all those buckets of milk.

Head position
kotta Pol-a ži¢-a
PronM.Dist1 thing-F eat.3SgMImpfv
That one is eating something.
buçad-i kiy-ti=ba tetta hotol-ay
be.sick-1SgUnm say-3SgFUnm=and PronF.Dist1 shiver-3SgFImpfv
She said 'I am sick' and she (litt.: that one) was shivering.
Predicate position
maakk-e garr-ilo Paaka maakk-e gubal-atte
tale-P squirrel-LocM and tale-P rabbit-LocF
ketta=y
PronP.Dist1=Fill
That was the tale of the squirrel and the rabbit.
The Distal demonstrative kussa is only attested in the following examples. The second one is strange because it shows two Distal demonstratives:
kussa mo?
PronM.Dist2 what What is that?

## kussa kotta ka Pano Par-a

PronM.Dist2 PronM.Dist1 Sent 1SgSubj know-1SgMImpfv
I know that one.

### 5.5.3. Possessives

The possessives consist of pronominal particles and possessive suffixes (see 4.1.4.). The following table shows them in combination with the masculine, feminine and plural pronominal particles:

Table 28: The possessives

|  | m | f | p |
| :--- | :--- | :--- | :--- |
| 1 Sg | kaayu | taayu | kaayu |
| 2 SgM | kaako | taako | kaako |
| 2 SgF | kaaki | taaki | kaaki |
| 3 SgM | kuusu | tuusu | kuusu |
| 3 SgF | kiisi | tiisi | kiisi |
| 1 Pl | kaani | taani | kaani |
| 2 Pl | kaakunde | taakunde | kaakunde |
| 3 Pl | kuusunde | tuusunde | kuusunde |

See examples of possessives:
Modifying position
¢ard-o kaayu
ox-M PronM.1SgPoss be.big-3SgMAdj
My ox is big.
daal-t-e taakunde
par-ti
goat-Sg-F PronF.2PIPoss die-3SgFUnm
Your ( P ) goat died.
lu6-6e kaaki
xinaw-anki
feet-P PronP.2SgFPoss stink-3PlImpfv
Your (f) feet stink
Head position
kaayu ka dal-i
PronM.1SgPoss Sent give.birth-3SgMUnm
Mine gave birth (referred to a ox. Extracted from the folktale 'The Squirrel and the Rabbit').

## Predicative position

žiP-o kutta kaayu Payid-i=nu
food-M PronM.Prox1 PronM.1SgPoss be.Sub-3SgM=from
deeћ- $\mathbf{i}=\mathbf{k k a}$
give-1SgNonPstNeg=Sent
Since this food is mine, I do not give it.
In the following example, the first person possessive pronoun, taako 'your', is in modifying position, while the second one, taayu 'my' is in predicative position (for the use of te before Adjectival verbs see 5.5.7.):


### 5.5.4. 'whose?'-pronominals

In the 'whose?' interrogative phrase the pronominal particles are used in connection to the suffix -aћћa 'whose?'. This suffix is clearly related to the interrogative word Páћá 'who?' (see 8.3.). The 'whose?' pronominal series are shown in the following table:

Table 29: The 'whose?'-pronominals

| $m$ | kaћћa |
| :--- | :--- |
| f | taћћ |
| p | $\mathbf{k a \hbar \hbar \mathbf { a }}$ |

The 'whose' pronominals only occur in modifying position.
The semantically empty clitic $=\mathbf{y}$ must follow the 'whose'-pronoun if no other clitic or particle appears. In the first of the examples below, the 'whose?' pronoun is followed by the sentence marker =kka. In the other examples, in the absence of another clitic, this place is occupied by $=\mathbf{y}$. Note that the 'whose'-pronominals take the last position in a series of modifiers.

See examples of 'whose'-pronominals:
Pingiy-e taћћa=kka haš haš Pasa sukkam-nay mother-F PronF.whose=Sent haš xaš so roll down-3SgFMainFut Whose mother will roll down making the sound of leaves?

## ¢ard-o kutta kaћћa=y

ox-M PronM.Prox1 PronM.whose=Fill Whose ox is this one?
lo?-o-se bis-ay taћћa=y
cow.F-M-Def be.white-3SgFAdj PronF.whose=Fill
Whose is the white cow?

## mann-e kitta kaћћa=y

house-P PronP.Prox1 PronP-whose=Fill
Whose house is this one?

### 5.5.5. 'which one?'-pronominals

The pronominal particles combine with the interrogative element -nda. The result is a series of pronominals meaning 'which one?'. Like the 'whose' pronominal, these interrogative words only appear as part of the modification and take the last position in a series of modifiers. The 'which one'- pronominals are shown in the following table:

Table 30: The 'which one?'-pronominals

| m | kunda |
| :--- | :--- |
| f | tinda |
| p | kinda |

See examples of 'which one?' pronominals:
q'awk-o kunda?
man-M PronM.Mwhich
Which man?
q'aw-kutta xoris-a kunda?
man-PronM.Prox1 snore-3SgMImpfv PronM.which Which one is the man who is snoring?
hez-itte tinda ki garn-a
root-F PronF.which Sent-3 be.useful-3SgMImpfv
Which root is useful?
gor-e kinda ki xaf-i
people-P PronP.which Sent-3 come-3SgMUnm
Which people came?

### 5.5.6. 'different'-pronominals

The 'different'-pronominals are made up of the pronominal particle and the suffix -6a 'different'. Within the relevant nouns phrase these pronominals take modifying and head positions. See in table 31 the 'different'pronominals:

Table 31: The 'different'-pronominals

| $m$ | ku6a |
| :--- | :--- |
| $f$ | ti6a |
| $p$ | ki6a |

These pronominals are always followed by a clitic.
See examples of 'different'-pronominals:
Modifying position
q'awk-o ku6a=y
man-M PronM.Diff=Fill
a different man
gaan-t-e $\quad$ tiba $=\mathbf{y}$
woman-Sg-F PronF-Diff=Fill
a different woman
gor-e ki $6=y$ kibir-ko ka bog-e
people-P PronP.Diff=Fill dance-M Sent kill-3PlUnm
Other people ended the dancing.
Head position
kiba ka bitam-i=kka
PronP.Diff Sent buy-3SgMNonPstNeg=Sent
I do not buy different ones.

### 5.5.7. The pronominal particles and the relative clause

The pronominal particles could be taken to be relative pronouns, but we analyse them parallel to the same particles in other situations of noun phrase internal modification. They may modify or replace the head of subject relative clauses, incorporating the relativiser, or may refer to the head in subject and object relative clauses. Their use and distribution in relative clauses is described in 4.2.

### 5.5.8. The pronominal particles in sentences with stative verbs

Sentences formed by stative verbs may contain pronominal particles. The verb of the following examples, zoor 'sweet', is a stative verb which normally follows the imperfective inflection:

```
pappaya likke muz-atte gura te zoor-ay
papaya.F exactly banana-LocF as PronF be.sweet-3SgFImpfv
The papaya is as sweet as the banana.
```

The following sentence shows the verb gaaldaw 'be pregnant' in Unmarked reduced subject focus form (see 6.4.7). See example:

Pine ke gaaldaw-i<br>1PlSubj PronP be.pregnant-3SgMFoc.Unm<br>We are pregnant

The adjectival verb q'ay- 'be good' in the following sentence represents the stem of an Unmarked verb.

```
\hbarez-itte gaark-ulo te q'ay-ti
root-F tree-LocM PronF be.good-3SgFUnm
The root of the tree is good.
```


### 5.5.9. The pronominal particles in interrogative sentences

The pronominal particles optionally appear in interrogative sentences containing mala 'how?'. See two examples with pronominal particles:

```
parš-e gaan-te=nu dee\hbar-ti te mala
beer-F woman-F=from give-2SgUnm PronF how
?ag-ay
be.located-3SgFImpfv
How is the beer you gave to the woman?
```

| Pinank-ú na | nalt-e deeћ-ti ko mala |
| :--- | :--- | :--- | :--- |
| boy-M.Prag Loc calabash cup-F give-2SgUnm PronM | how |
| How is the boy you gave the calabash cup to? |  |

The second example above is also attested without pronominal particle:

| Pinank-ú | na | ћalt-e | deeћ-ti | mala |
| :--- | :--- | :--- | :--- | :--- |
| boy-M.Prag | Loc | calabash cup-F | give- $2 S g U n m$ | how |
| How is the boy you gave the calabash cup to? |  |  |  |  |

### 5.6. The third person locative pronoun na (Loc)

The third person locative pronoun na may appear in isolation with generic locative function or as complement of the clitics $=\mathbf{m a}$ 'to/in' $=\mathbf{y a}$ 'with', and $=\mathbf{t a}$ 'upon'. It is also used as a third person dative pronoun; in this case it is bound to the dative clitic =nnu and the na changes to nu if it refers to a masculine or plural element or to ni if it refers to a feminine element. The masculine and plural locative pronoun in dative position appears as nunnu and the feminine one appears as ninnu. No *nannu is therefore attested. The elements $\mathbf{u}$ and $\mathbf{i}$ are masculine/feminine gender markers that play a certain role in the indication of gender in the pronominal series and the personal possessive suffixes (see 5.1.). The locative pronoun na is never followed by the sentence marker ka, which often follows pronouns playing the role of object (see 5.4.). When combined to $=\mathbf{m a}$ 'to/in', the pronoun appears as naa. When bound to the locative pronoun, the clitic =ya 'with' may appear
as =yay, which is the shape of the comitative clitic after nominal phrase (see 4.5.3.4.).

Table 32 shows the locative pronoun in connection to the clitics:
Table 32: Locative pronoun with case clitics

|  | 3 masculine | 3 feminine | 3 plural |
| :--- | :--- | :--- | :--- |
| $=\mathbf{m a}$ | naa=ma | naa=ma | naa=ma |
| $=\mathbf{y a}$ | na=ya(y) | na=ya(y) | $\mathbf{n a}=\mathbf{y a}(\mathbf{y})$ |
| $=\mathbf{t a}$ | na=ta | na=ta | $\mathbf{n a}=\mathbf{t a}$ |
| =nu | nu=nnu | $\mathbf{n i}=\mathbf{n n u}$ | $\mathbf{n u}=\mathbf{n n u}$ |

The locative pronoun differs from the third person object pronoun in that it may refer to human as well as non-human entities, while the object pronouns are limited to human entities. Whenever the reference is to a human being, the cliticised forms of the locative pronoun na may appear instead of the third person object pronouns. In particular, the dative forms nu=nnu and $\mathbf{n i}=\mathbf{n n u}$ in most of the attested cases replace the object third person pronouns followed by $=$ nu (see 5.2.).

### 5.6.1. na in locative function

The pronounn na has the function of a locative pronoun referring to a known or undetermined element. Since the pronoun appears before the verb, it may also be interpreted as a locative semantic extension of the verb.

In the following sentence, na refers to a previously mentioned calabash:

Paxx-e na huccad-u<br>milk-P Loc pour-3SgConsA<br>He poured milk in it.

The locative element referred to by na in the sentence below is a rifle, which appears at the beginning of a preceding sentence:
ts'iy-itt-e na Pag-a
bullet-Sg-F Loc be.located-3SgImpfv
There is a bullet.
In the following example, the first na, after boota 'place', refers to a previously mentioned truck, while the second na refers to the town in which the Subject had to remain:

> boota na ba? kiy-i ba na gay-onki
place.F Loc there.is.not say-3Sg.Unm Cons Loc remain-1PlConsB
He said that there was no place and we remained there.

See another example with reference to reedio 'radio':
reedio Pekke wožžad-inti dingay q'awto na žag-di
radio.F very work-3SgFSubFut battery.F new Loc insert-2SgUnm The radio will work better if you put new batteries in it.

The referred location may be expressed by an adverbial phrase, such as Pula guddo 'down there' in the following example:

```
Pula guddo garm-o na kiy-i
there down lion-M Loc say-3SgMUnm He said: there is a lion over there.
```

The locative pronoun in locative function may be followed by the case clitic $=\mathbf{t a}$.
$\mathbf{n a}=\mathbf{t a}$ in the following example refers to a previously mentioned fire:

```
@ard-o naP-itt-o c'ib-a=bba na=ta žag-a
ox-M baby-Sg-M pierce-SgImpB=Cons Loc=Loc insert-SgImpB
Kill a male calf and put it in it.
```

Below are two more examples of $\mathbf{n a}=\mathbf{t a}$ in locative pronominal function:

```
nu=nnu ki le?-e goš-a ba na=ta
LocM/P=from Sent-3 cow-P tend-3SgMImpfv Cons Loc=Loc
galla ki Pag-a
down Sent-3 be.located-3SgMImpfv
He tended the cows for him and lived by him.
```

bannad-ilo gaan-te na=ta ki Pag-ay
beetle-LocM woman Loc=Loc Sent-3 be.located-3SgFImpfv
The beetle used to have a wife.

With the verb žug 'take out' na=ta appears as an ablative pronoun. See example:

```
@ardo zaq'-o ba mooro na=ta
ox slaughter-3SgMConsB Cons fat Loc=Loc
žug-u
take out-3SgMConsA
He slaughtered a ox and added the fat on it.
```

With the verb bay- 'say' na=ta appears as an object pronoun. See example:
booh-nanki na=ta bay-i
sow-1PlJuss Loc=Loc say-3SgMUnm
He said to him, 'let's sow!'

### 5.6.2. na as bound space and directive pronoun

When used as bound space or directive pronoun, na is followed by the case clitic $=\mathbf{m a}$ 'to/in'

In the following example, naa=ma is a bound space pronoun referring to the holes:

> xoxm-e bod-o ba bal-inn-e naa=ma žag-u holes-P dig-3SgMConsB Cons pole-Pl-P Loc=Dir insert-3SgMConsA He dug a hole and put the poles in it.

Below is an example of naa=ma as directive pronoun. The referred entity is a female human:

```
naa=ma Racc-anki
Loc=Dir go-3PlImpfv
They go to her.
```


### 5.6.3. na as instrumental-comitative pronoun

na is followed by the comitative case clitic =ya (or =yay) 'with' when it acts as an instrumental-comitative pronoun. See examples:

```
q'awa ka=kka Pee=ta gabb-u=bba pawlos
rifle.F Sentj=Sent 1Sg=Loc take-3SgConsA=Cons Pawlos
na=yay lig-u
Loc=Com turn-3SgConsA
He took the rifle from me and turned towards Pawlos holding it.
```

```
saark-o naPa=kka, so?akko=kka na=ya
chief-M alone=Sent magician=Sent Loc=Com
?ag-i
be.located-3SgMUnm
The chief is not alone, the magician is with him.
```

q'awko $\boldsymbol{P} \mathbf{i = n n u}$ gaar-e q'ets'-na ba mann-e na=yay
man me=from wood-P cut-3SgMMainFut Cons house-P
Loc=Com
gaP3-a ka gees-i
prepare-1SgMJuss Sent want-1SgUnm
I want someone to cut wood for me so that I will prepare the house
with it.

### 5.6.4. na as dative pronoun

The shape of the locative pronoun na in dative position is discussed in sections 5.1. and 5.6.

See some examples below:

## Examples with $\mathbf{n u}=\mathbf{n n u}$

titta=ka nu=nnu deeћ
this=Obj LocM/P=Dat giveImpSgA
Give this to him!
wožža ka Pato nu=nnu godd-i
work Sent 2 SgSubj LocM/P=Dat do.3SgMUnm 2SgMUnm You will do the work for him.

## Example with $\mathbf{n i}=\mathbf{n n u}$

titta=ka ni=nnu deeћ
this $=\mathrm{Obj}$ LocF $=$ Dat giveImpSgA
Give this to her!

### 5.6.5. na without specific reference

In the following example, the entity referred by na is uspecified.

| titta ka na | bitam-ni ki6a | ka |  |
| :--- | :--- | :--- | :--- |
| this Sent Loc | buy-1SgSubFut | PronM.different | Sent |
| bitam-i=kka |  |  |  |
| buy-1SgNonPstNeg=Sent |  |  |  |
| I will buy this one, I will not buy another one. |  |  |  |

cox-an-nanki Paxx-e na biif-anki
milk-Mid-1PlMainFut milk-P Loc have.a.meal-1PIImpfv Let's milk and drink the milk as a meal.

As shown by the following examples, when referring to an unspecified entity, the locative pronoun may be followed by =ma:

```
daal-t-e dootte na \hbaradd-i
goat-Sg-F one.F Loc add-1SgUnm
I added one goat
daal-t-e dootte naa=ma \hbaradof-i
goat-Sg-F one.F Loc=Dir add-1SgUnm
I added one goat
```


### 5.6.6. na as locative relative pronoun

A specific function of the pronoun na is locative relative pronoun. If associated to the verb 'to give' it has dative function. It can also be used as comitative relative pronoun followed by the clitic =ya 'with'. When it refers to a bound location or a destination it is followed by the clitic =ma 'to/in' or the clitic $=\mathbf{t a}$. Its position in the relative sentence is after the noun phrase it recalls, but this is not always true.

Example of na in relative locative function:

place Loc water-P drink-3SgM=to/in=Sent come-3SgMConsB He came to the place where he was drinking the water.

Pano Pawk-o [na gor-e garm-o bog-e]=mma
1SgSubj place-M Loc people-P lion-M kill-3PlUnm=to/in n-zey-i
1-go-1SgUnm
I went to the place where the people killed the lion.
Pano bìy-è [na dal-ad-i]=ma n-zow-ni
1SgSubj land-F Loc give.birth-Mid.1SgUnm=to/in 1-go-1SgSubFut I went to the place where I was born.

Example of na in relative dative function:
Pinank-o [na ћalt-e deeћ-ti] mala?
boy-M Loc cup-F give-2SgUnm how
How is the boy to whom you gave the calabash?
Example with na=ya in relative comitative function:
?ola [na=yay may-i] na ki da6-i
thing Loc=Com bury-3Sg Loc Sent-3 miss-3SgMUnm
He missed something with which he could bury him.
Example with naa=ma in relative bound locative function:
Pawk-o [naa=ma mann-e ga?P-inini] ka garis-ini
place Loc=Dir house-P prepare-1PSubFut Sent make-
1PISubFut
We will work on the place where we will prepare the house.
In the following example, the locative pronoun, followed by the locative clitic $=\mathbf{t a}$ does not appear after the element it recalls.

Example of $\boldsymbol{n a = t a}$ in relative locative function:
Payk-o-se bogol-k-o [na=ta Pag-i]=ma
place-M-Def king-Sg-M Loc=Loc be.located-3SgMUnm=to/in šeeg-onki
bring-3PlConsB
They brought it to the place in which the king lived.

## 6. Verb inflection

### 6.1. Verb root and stem

The most common verb root structures are CVC- and CVCC-. Longer roots are less frequent and have the structure CVCVC- or CVCCVC-. Very few roots have a CVCCVCVC- structure. An example is ?ardulum- 'to race'.

In stem formation the verb root is immediately followed by one or more derivational suffixes. Stems can also be derived by gemination of the last root consonant or by reduplication of part of the root. Inflectional suffixes appear as the last element of a verb word. The distributional order of verb root and suffixes is summarised below:

## Verb stem-Derivational Suffixes-Inflectional Suffix

### 6.2. Inflectional categories

The expression of inflectional categories in Ts'amakko verbs is exclusively suffixal. The inflectional verbal suffixes are portemanteau morphemes conveying grammatical information on the subject and the situation expressed in the verb.

Subject indexing categories are:
-Person ( $1^{\text {st }}, 2^{\text {nd }}$ and $\left.3^{\text {rd }}\right)$
-Number (singular and plural)
-Gender (for third person singular)
The intersection of the subject indexing categories makes the following distinctions:

1 Sg
2 Sg
3 SgM
3SgF
1 Pl
2P1
3 Pl

The paradigms are shown in the following table:
Table 33: The verbal paradigms

| -Unmarked (Unm) |  |
| :--- | :--- |
| -Marked-Imperfective (Impfv) |  |
| -Past Negative (PstNeg) | -Non Past Negative (NonPstNeg) |
| -Main Future (MainFut) | -Subordinate Future (SFut) |
| -Future Negative (FutNeg) |  |
| -Jussive Positive (Juss) | -Imperative Positive (Imp) |
| -Jussive Negative (JussNeg) |  |
| -Consecutive (Cons) |  |

A discussion on the tonal properties of the verb paradigms can be found in paragraph 2.4.5. of the chapter on Phonology. The full verb paradigms are given at the end of the present chapter.

### 6.3. Verb classes

There are two lexically based verb classes: class A and class B. No semantic factors have been found to correlate with this lexical classification. Verbs of class A are numerically predominant and represent about $80 \%$ of the verbal lexemes.

The distinction between the two verb classes is manifested in the paradigms Unmarked, Consecutive and Imperative Positive.

The difference in the Unmarked paradigm is tonal. The verbs of class A carry high tone on the paradigm vowel of all the persons except 2 Pl and 3 Pl , while verbs of class B have low tone Unmarked inflectional suffixes and high tone on all preceding vowels. See below the difference between the verb of class A ¢ug-‘to drink' and the verb of class B ži?- 'to eat':

Table 34: Difference between Unmarked A and Unmarked B

|  | Unmarked A <br> 'to drink' | Unmarked B <br> 'to eat' |
| :--- | :--- | :--- |
| č̌̌íp-i |  |  |

*The /t/ regularly changes to [d] after voiced plosives.
In the Consecutive the difference lies in the shape of the suffixes. See in table 35 the comparison of the same two verbs:

Table 35: Difference between Consecutive A and Consecutive B
Consecutive A Consecutive B
'to drink' 'to eat'
1 Sg £úg-á žíp-ó
2Sg $\quad$ úg-áy ží?-óy
3 SgM £úg-ú ží?-ó
3 SgF ¢úg-í ží?-óy
1Pl ¢úg-ánki ží?-ónki
2Pl 乌úg-ánku ží?-ónku
3Pl £úg-ínki ží?-ónki
The singular of the Imperative A corresponds to the simple verb root while the plural shows high tone on the suffix -á. The singular of Imperative B is inflected by -á while the plural has a suffix -indá, as shown in table 36:

Table 36: Difference between Imperative A and Imperative B

|  | Imperative A | Imperative B |
| :--- | :--- | :--- |
|  | 'to drink' | 'to eat' |
| 2Sg | ¢úg | žís-á |
| 2Pl | ¢ug-á | žiP-indá |

### 6.4. Suffix sets

The subject-indexing suffixes can be grouped in the four sets shown in table 37. The $\mathbf{V}$ indicates a vowel that is established by the paradigm and characterises the whole paradigm. This vowel in the paradigms of set 1 is either $\mathbf{i}$ or $\mathbf{a}$. The paradigms following set 2 have either a or $\mathbf{o}$. The paradigms following set 3 have either a or $\mathbf{u}$. Set 4 is limited to Consecutive verbs of class A and is the only set that shows no regular paradigm vowel. Set 5 is limited to adjectival verbs.

Table 37: Suffix sets

|  | $\begin{aligned} & \text { Set } 1 \\ & (\mathrm{~V}=\mathrm{a} / \mathrm{i}) \end{aligned}$ | $\begin{aligned} & \text { Set } 2 \\ & (\mathrm{~V}=\mathrm{a} / \mathrm{o}) \end{aligned}$ | $\begin{aligned} & \text { Set } 3 \\ & (V=a / u) \end{aligned}$ | Set 4 | Set 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Sg | -V | -V | -V | -á | -á |
| 2 Sg | -tV | -Vy | -V | -áy | -áy |
| 3 SgM | -V | -V | -V | -ú | -á |
| 3 SgF | -tV | -Vy | -V | -í | -áy |
| 1 Pl | -nV | -Vnki | -Vnki | -ánki | -úmma |


| 2 Pl | -te | -Vnku | -Vnku | -ánku | -úmma |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3 Pl | -e | -Vnki | -Vnki | -ínki | -úmma |

### 6.4.1. Set 1

The paradigms belonging to set 1 are Unmarked, Non-Past Negative, Subordinate Future, Future Negative and Jussive positive and are shown in table 38.

All of them except the Jussive have the same inflectional suffixes based on the vowel $\mathbf{i}$. The Jussive is different in that the paradigm vowel is $-\mathbf{a}$ and is not inflected for the second person. The future suffixes are preceded by the future marker $-\mathbf{n}$. The $\mathbf{i}$ appearing in initial position in some of the suffixes is epenthetic.

All Unmarked B suffixes carry low tone. All inherent vowels of the Subordinate Future, Negative and Jussive paradigms carry high tone. The Unmarked series for verbs class A shows high tone vowels in all persons except 2 Pl and 3 Pl

Table 38 : Suffix sets 1

|  | Unm. B | Unm. A | SFut | N-Pst Neg. | Fut.Neg. | Juss. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1Sg | -i | -í | -ni | -í | -ní | -á |
| 2 Sg | -ti | -tí | -inti | -tí | -intí | --- |
| 3 SgM | -i | -í | -ni | -í | -ní | -á |
| 3 SgF | -ti | -tí | -inti | -tí | -intí | -tá |
| 1 Pl | -ni | -ní | -inni | -ní | -inní | -ná |
| 2 Pl | -te | -te | -inte | -té | -inté | --- |
| 3 Pl | -e | -e | -ne | -é | -né | -é |

### 6.4.2. Set 2

The paradigms belonging to set 2 are Marked-Imperfective, Main Future and Consecutive B (the structure of Consecutive A is discussed in 6.4.4.). The paradigm vowel of the Imperfective and the Main Future is -a. The Main Future shows the future marker -n. The vowels of the Marked-Imperfective suffixes and Main Future carru low tone. The tone of the paradigm vowel -ó of the Consecutive B is high, while the final vowels of the plural persons carry low tone. See the paradigms in table 39 below:

Table 39: Suffix sets 2

|  | Marked-Imperf. | Main Future | Consecutive B |
| :--- | :--- | :--- | :--- |
| 1Sg | -a | -na | -ó |
| 2Sg | -ay | -nay | -óy |
| 3SgM | -a | -na | -ó |
| 3SgF | -ay | -nay | -óy |
| 1Pl | -anki | -nanki | -ónki |


| 2 Pl | -anku | -nanku | -ónku |
| :--- | :--- | :--- | :--- |
| 3 Pl | -anki | -nanki | -ónki |

### 6.4.3. Set 3

The paradigms belonging to set 3 are Past Negative, and Jussive Negative. The Past Negative has a paradigm vowel -a. The Jussive Negative has a paradigm vowel -u. All the vowels of any suffix carry high tone in both paradigms See the two paradigms in table 40 below:

Table 40 : Suffix sets 3

|  | Past Negative | Jussive Negative |
| :--- | :--- | :--- |
| 1Sg | -á | -ú |
| 2Sg | -á | -ú |
| 3 SgM | -á | -ú |
| 3 SgF | -á | -ú |
| 1 Pl | -ánkí | -únkí |
| 2 Pl | -ánkú | -únkú |
| 3 Pl | -ánkí | -únkí |

### 6.4.4. Set 4: Consecutive paradigm

Set 4 has only one member, the Consecutive paradigm of class A verbs. This set is closer to the set 2 and 3 in that the paradigm vowels are followed and not preceded by other segments in complex suffixes. However, it differs from set 2 because no $y$ appears in the 3 SgF and it differs from set 3 because the 2 Sg suffix has a $\mathbf{y}$. The suffix set 4 has no homogeneous paradigm vowel. All vowels, except the final vowels of the plural persons, carry high tone. See the paradigm Consecutive A below:

Table 41: Suffix sets 4

|  | Set 4 |
| :--- | :--- |
| 1 Sg | -á |
| 2Sg | -áy |
| 3 SgM | -ú |
| 3SgF | -í |
| 1Pl | -ánki |
| 2Pl | -ánku |
| 3 Pl | -ínki |

### 6.4.5. Set 5: Adjectival verbs

The paradigm of the adjectival verbs shows suffix set 5 . The tone is high for all the vowels except for the final a of the plural persons suffixes of set 5, which carries low tone. Set 5 distinguishes the adjectival verbs from the stative verbs used as adjectival modifiers, which are inflected according to the Marked-Imperfective paradigm. See the suffix set 5 in table 42, which is followed by a list of adjectival verbs:

Table 42: Suffix set 5

## Set 5

$1 \mathrm{Sg} \quad$-á
2Sg -áy
3 SgM -á
3SgF -áy
1 Pl -úmma
2 Pl -úmma
3 Pl -úmma
Most adjectival verbs denote permanent state. Two semantic groups can be isolated: basic colours and size adjectival verbs. A third group includes verbal adjectival verbs denoting general physical quality. Below is a complete list of adjectival verbs:

Colors

| bic- | to be white |
| :--- | :--- |
| ¢idd- | to be red |
| gumm- | to be black |
| laxx- | to be unripe |


| Size |  |
| :---: | :---: |
| damm- | to be big |
| gaarm- | to be enormous |
| takk- | to be small |
| zigam- | to be long |
| maanga?- | to be short |
| Physical quality |  |
| raandaћ- | to be cold |
| rešas- | to be light |
| kaћћ- | to be hard |
| xampa?- | to be soft |
| c'aldax- | to be soft |

Others

| c'ab- | to be wet |
| :--- | :--- |
| goob- | to be fertile |

An adjectival verb may appear in predicative position or in attributive position. In the second case it forms a subject relative clause (cf. 4.1.2.). When in attributive position, the subject is often in focus position and the verb appears in the third singular masculine form for all persons (see 6.4.7.).

```
q'awko damm-a
man.M big-3SgMAdj
big man (litt: 'the man who is big')
```


## gor-e kaxx-a

people-P be.strong-3SgMFocAdj
strong people (litt: 'the people who are strong')
Not all the permanent states are indicated with an adjectival verb. 'To be hot', for example, has a stative verbal root lu6- (see 6.5.3.).

### 6.4.6. Imperative

The only paradigm that does not fit in the suffix sets is the Imperative. This paradigm expresses the inflectional difference between class A verbs and class B verbs (see 6.3.):

|  | Imperative A | Imperative B |
| :--- | :--- | :--- |
| 2 Sg | -ø | -á |
| 2Pl | -á | -indá |

### 6.4.7. Subject focus verbs

The Unmarked, Marked-Imperfective, Adjectival and Consecutive verbs associated to a subject in focus neutralise person distinction and all the subject persons are indexed with the third person masculine singular suffix. See an example of plural subject in focus with reduced Unmarked verb:

## 〔and-e Paaka katt-e duul-i

water-P and fire-F go.to.war-3SgMFoc.Unm The water and the fire went to war.

### 6.4.8. Overview of paradigms

The distribution of the paradigms in the three sets with details on the suffixes is summarised in table 43:

Table 43: Overview of paradigms

| Set 1 | Set2 | Set3 | Set4 |
| :---: | :---: | :---: | :---: |
| Unmarked B | Imperfective | Past Negative | Adjectival verbs |
| -(t/n)i | -a(y $\quad$ nki $\sim n k u)$ | -á(nkí~nkú) | -a(y) |
| -(t)e |  |  | -umma |
| Unmarked A | Main future | Jussive Negative |  |
| -(t/n)í | -na( $\mathbf{y} \sim n k i \sim n k u)$ | -ú(nkí~nkú) |  |
| -(t)e |  |  |  |
| Unmarked Neg/ | Consecutive B |  |  |
| -(t/n)íl | -ó( $\mathbf{y} \sim \mathbf{n k i} \sim n k u)$ |  |  |
| -(t)é |  |  |  |

Subordinate
future
-(i)n(t/n)-i
-(i)n(t)-e
Future Negative
-(i)n(t/n)-í
-(i)n(t)-é
Jussive
-(t/n)-á
-é

### 6.5.Unmarked and Marked-Imperfective

The main declarative paradigms are the Unmarked and the Marked-Imperfective. There is no complementary distribution in the division of the aspectual sphere between the Unmarked and the Marked-Imperfective paradigm. The only paradigm that provides a formal expression within the aspectual sphere is the Marked-Imperfective, which describes imperfective situations. The Unmarked form covers the whole aspectual sphere. It can be used to describe perfective and imperfective situations. In other words, it is not a Perfective form.

Even though the Unmarked is not a formal expression of perfective it is the only paradigm to be used in perfective situations. The reason for this is accidental: there is no alternative to the Unmarked paradigm. The Unmarked verbs are in most of the cases translated with English Past tense verbs.

The following example is taken from the folktale 'The elephant and the squirrel'. The background setting is expressed by the verb goš- 'to tend'. In this role it has Unmarked form and imperfective context. The verb dal- 'to give birth' is also in Unmarked form. It indicates the action inserted in the background situation and it is taken as a temporal whole. In other words it has perfective context:

```
garr-o ¢arraf-ko=nu lePe goš-i
squirrel-M elephant-M=from cows-P tend-3SgMUnm
Parraf-ko=nu lePe goš-i Pa=nnay lo?-o
elephant-M=from cows.P tend-3SgMUnm=Backgr cow.F-M
dal-i
give.birth-3SgMUnm
The squirrel tended the cows for the elephant.
While he was tending the cows for the elephant a cow gave birth.
```

The Unmarked can be used in imperfective contexts. As the Marked-Imperfective is explicitly imperfective, imperfective situations can therefore be expressed by both paradigms. This in shown by the following examples:

```
Paanto šam6-o 6ul-i
now child-M jump-3SgMUnm
The child is jumping now.
Paanto šam6-o 6ula
now child-M jump-3SgMImpfv
The child is jumping now.
```

Informants attributed the same progressive value to the two verbal forms shown above.

The verbs of the two sentences below describe habitual events/situations. The first sentence shows an Unmarked verb. The second shows two MarkedImperfective verbs:

## garr-o ¢arraf-ko=nu le?-e goš-i

squirrel-M elephant-M=from cows-P tend-3SgMUnm
The squirrel used to tend the cows for the elephant.

```
gor-e ki waPk-o wuyyamesad-anki ki naa=ma
people-P Sent-3 god-M make.call-3.PIImpfv Sent-3 Loc=Dir
Pacc-anki
go-3.PIImpfv
The people who prayed to god used to go to him.
```

Compare also:

```
Pinank-o Paanto daale goš-i
boy-M now goats tend-3SgMUnm
Now the boy is tending the goats.
Yošonk-o {ee=ka bog-a
coldness-M 1Sg=Obj kill-3SgMImpfv
The coldness is killing me.
Perr-o pool-o=yay dib-i
rain-M cloud-M=with fall rain-3SgMUnm
The rain falls from the clouds.
hayna guddo ki zey-i kallikk-o lig'f-a
so up Sent-3 go-3SgMUnm sun-M go.out-3SgMImpfv
When it (the moon) goes up in this way the sun goes out.
```

These overlaps of the Unmarked and the Marked-Imperfective in imperfective contexts prove that the opposition between the Unmarked and the Marked-Imperfective paradigms is not in the aspectual sphere.

The reason behind the choice between them must reside in some other dimension. This dimension could not be determined in the context of the present study.

### 6.5.1. Unmarked

The Unmarked paradigm does not attribute a specific aspectual value to a process or a state. This paradigm is used to express a verbal concept in any aspectual and temporal situation. Examples:

## Perfective context

Unmarked verbs may express an action that occupies a point in time and is not seen as a process.

In the examples below, the Unmarked forms of the verb xaf- 'to come' describe that the subject arrived at a certain point, while someone else was involved in a durative action:

```
Pise žiP-a=nnay Pine xaf-ni
3SgFSubj eat-3SgFImpfv=Backgr 1PlSubj come-1PIUnm
We arrived while she was eating.
Pine maaxx-ete wag-a wak-anki=nnay baq'q'ala
1PlSubj good-LocP price-F talk-1.PImpfv=Backgr Baqqala
guddo=nu tirmatt-o xaf-i
up=from running-M come-3SgMUnm
While we were talking about the price of the objects Baqqala
arrived running.
```

The Unmarked verb šiggaroš-i 'he stopped (tr.)' in the example below indicates an abrupt event: while the subject was driving, he stopped the car. See example:

| makin-a gor-a | gor-a |
| :--- | :--- |
| car-F drive-3SgMImpfv | nay |
| makive- | nSgMImpfv | Backgr

Also the Unmarked verb kiy-ti 'she said' appearing in the example below, shows no internal development:

| g'iif-ay | buqad-i | kiy-ti |
| :--- | :--- | :--- |
| sleep-3SgFImpfv | be.sick-1SgUnm <br> say-3SgFUnm |  |
| While she was sleeping she said 'I am sick'. |  |  |

## Perfect context

The following example shows the verbs xaf- 'come', gar- 'be made', gas'to cook' in the Unmarked form, indicating completed actions:

```
gudur-k-o xaf-i ba loo?-o-se=ma
hyena-Sg-M come-3SgMUnm Cons cow.F-M-Def=to/in
da?ad-a na?a
wait-3SgMImpfv Cont
The hyena arrived to the cow and waited for the cow.
(From the folktale 'The elephant and the squirrel).
```

```
žiP-o ki gar-i yaaka žiP-nanki
eat-M Sent-3 be.made-3SgMUnm when eat-1PlMFut
We will eat when the food is ready.
```

| žiP-o-se | Sise | ga P-ti | ka | Pin=nu |
| :--- | :--- | :--- | :--- | :--- |
| eat-M-Def | 3SgFSubj | prepare-3SgFUnm | Sentj | 1Sg=Dat |

## Concomitant context

In the example below, the action of the Unmarked verbs zow-i 'he was going' and q'omm-i 'he was eating grain' are performed along the same time line:

```
zow-i yaaka q'omm-i
go-3SgMImpfv when eat.grains-3SgMUnm
While he was going he ate the grains.
```


## Habitual context

The action of the verb $\mathfrak{q u g}$ - in the example below is habitual:

## Pulde q'ayto xumbi weyts'o=ta xoronko §ug-i

Ulde.M time all Weyt'o=upon honey.mead drink-3SgMUnm Ulde in Weyt'o always drinks tej.

## Progressive context

The Unmarked is also used with ongoing events. This is shown in the examples below by the verb godd'- 'to do' and raf- 'sleeping':

```
moo godd-iti
```

what do-3SgFUnm
What is she doing?

## Paanto Pise raf-ti

now 3SgFSubj sleep-3SgFUnm
She is sleeping now.

## Future context

The Unmarked is also used for future situations. Its presence in the future context is quite infrequent because of the existence of the proper future paradigms (see 6.6.). In the example below the verb wal- has an Unmarked form and indicates a future action:

```
baq'q'ala Pakim-itt-o goodd-i yaaka
baqqala doctor-Sg-M do-3SgMUnm when
paš-o daPt-e ka wal-i
field-M watching.F Sent forget-3SgMUnm
When Baqqala becomes a doctor he will forget how to watch the
field.
```

The Unmarked paradigm may also express an order. See example:

```
Ree=ta magg-iti
1Sg=Loc leave-2SgUnm
Get away from me!
Pammake bay-iti
perfect say-2SgUnm
Say that correctly!
Pinda muunt-o Peem-ni
exhort sky-M look at-1PlUnm
Come one let's look at the sky.
```


### 6.5.2. Marked-Imperfective

The Marked-Imperfective stresses the internal temporal development of a process or a state. No reference is made to the beginning and the end of the action. The most common meanings of the Marked-Imperfective are durative, habitual and concomitant. The relative time in which the situation is realised is not indicated and is determined by the context. The use of the Marked-Imperfective paradigms is shown in the sentences below.

## Durative

The Marked-Imperfective is used to indicate that a situation holds along a certain span of time. In the first two examples below the forms da9ad-a 'he was waiting' and Pogoy-a 'he was coming' are set in the past. da9ad-a 'he
was waiting' is followed by the continuative marker naia, which can optionally follow a durative verb.

```
daPad-a naPa ba daPad-a naPa ba
wait-3SgMImpfv Cont Cons wait-3SgMImpfv Cont Cons
gallawo raf-i
night sleep-3SgMUnm
He was waiting and waiting until at night he fell asleep.
```

gelzakk-o garr-ulo faann-atte Pogoy-a
baboon-M squirrel-LocM after-LocF come-3SgMImpfv
garr-o zow-i=nay gelzakk-o xaf-i
squirrel-M go-3SgMUnm=Backgr baboon-M come-3SgMUnm
The baboon was going behind the squirrel. When the squirrel left the
baboon arrived.

In the following examples the situation described by the Marked-Imperfective verb ximbad-a holds during the time of speech.

```
Paanto pool-o ximbad-a
now cloud-M be.visible-3SgMImpfv
Now the cloud is visible.
```


## Habitual

The Marked-Imperfective forms fugad-ay 'you are satiated', Pacc-a 'he goes' and lu6as-a 'it burns' in the three examples below indicate situations occurring habitually:

| Pato moo žiP-ti | ba q'ayto | xum6i | ka |
| :--- | :--- | :--- | :--- | :--- |
| 2SgSubj what eat-2SgUnm | Cons time | all | Sent | pugad-ay

be.satiated-2SgImpfv
What do you eat to be always satiated?
Pallo q'ayto xumbi gabaya=ma Pacc-a
Allo time all market.F=to/in go-3SgMImpfv
Allo goes always to the market.

## kaallikk-o lu6as-a

sun-M burn-3SgMImpfv
The sun burns.

## Concomitant

The situations indicated by the Marked-Imperfective verbs tiir-a 'he was running', goš-a 'I was tending', ¢ag-anki they were' far-ay 'she was dying' and hotol-ay 'she was shivering' in the five examples below are concomintant to other events. See examples:

| tiir-a | nay $\quad$ kotta=na | par-i | nay |
| :--- | :---: | :---: | :---: |
| run-3SgMImpfv | Backgr PronM.Dist1=Loc die-3SgMUnm | Backgr |  |
| That one died while he was running. |  |  |  |

```
maar-te ka goš-a gur-i
female calf.F-F Sent tend-3SgMImpfv mate-3SgFConsA
woq'oš-i dal-i
be.pregnant-3SgFCons give.birth-3SgFCons
While I was tending the female calf, she mated, became pregnant
and gave birth.
```

| žiPt-ilo | Pag-anki=nnay | garm-o | gaar-ko=ma |
| :--- | :--- | :--- | :--- |
| eating-Loc | be.located-3PlImpfv=Backgr | lion-M | tree-M=to/in |
| kadd-i | ba $\quad$ Pufunde=ka | PiP-u |  |

far-ay yaaka $\quad$ Pufo=kka sor-i
die-3SgFImpfv when 3 SgMSubj=Sent run-3SgMUnm While she was dying he run away.
buccad-i kiy-ti ba tetta ћotol-ay
be.sick-1SgUnm say-3SgFUnm Cons PronF.Dist1 shiver-3SgFImpfv While she was shivering she said 'I am sick'.

## Future context

The Marked-Imperfective has been found in future contexts only once in the corpus. See the example below:

## Pato moo godd-ay

2 SgSubj what do-2SgImpfv
What will you do?

### 6.5.3. Stative verbs

In many languages, stative verbs such as 'know', 'think' and 'love' are not inflected with an imperfective paradigm as the stativity of these verbs cannot be described in their internal development (Comrie 1976: 35). In Ts'amakko this holds true only for the verb gees- 'to want', which is inflected only in the Unmarked. A group of stative verbs can be inflected both in Unmarked and Marked-Imperfective. See a list below:

|  | to think | to look at | to like | to know | to forget |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Unm. | Pekkesad-i | Peem-i | c'igad-i | Par-i | wal-i |
| Impfv. | Pekkesad-a | Peem-a | c'igad-a | Par-a | wal-a |

Other qualitative verbs have the Marked-Imperfective paradigm as the only possible option. They are listed below. The list is followed by some example sentences:

| 3 SgM | 3Pl |  |
| :--- | :--- | :--- |
| lu6-a | lu6-anki | to be hot |
| maq'al-a | maq'al-anki | to be salty |
| zoor-a | zoor-anki | to be sweet |
| xinaw-a | xinaw-anki | to stink |

## saan-k-o maq'al-a

meat-Sg-M be.salty-1SgMImpfv
The meat is salty.

## muuz-e zoor-ay

banana-F be.sweet-3SgFImpfv
The banana is sweet.
These sentences may also be interpreted as subject relative clauses, in which the stative verb appears as an adjectival modifier. They can be therefore translated as 'hot wood', 'salty meat' and 'sweet banana' respectively (cf 4.1.1.).

### 6.6. Future

### 6.6.1 Main Future and Subordinate Future

Future is morphologically expressed by the suffix -n attached to the root or the stem and followed by the suffixes that are formally identical to those of the Unmarked and the Marked-Imperfective paradigms. Therefore there are two paradigms expressing future, and only future, actions. Note, however, that the two future paradigms do not indicate Unmarked and Marked-Imperfective situations in the future. The opposition is between a main and subordinate clauses. The Main Future has the inflectional endings of the Marked-Imperfective. The Subordinate Future has the inflectional endings of the Unmarked.

The Subordinate Future is the inflection for a subordinate future verb. Moreover, the Subordinate Future has focusing function in main clauses (see 6.6.3).

### 6.6.2. Main Future

The Main Future appears only in main sentences and has a basic future meaning. It is commonly used in order to express intention, will, order and exhortation. The following declarative sentences provide examples:

geeray zow-e=bba q'ayna kol-nanki<br>yesterday go-3PlUnm=Cons tomorrow return-3PlMainFut They went yesterday and will come back tomorrow.

| Pano zow-na ba | na=ta | gassad-a |  |
| :--- | :--- | :--- | :--- |
| 1SgSubj go-1SgMainFut | Cons | Loc=Loc | ask-1SgImpfv |
| I will go and ask him. |  |  |  |

## ¢and-ete gid-atte ¢ardulum-nanki water-LocP inside-LocF race-1PlMainFut

 Let's make a race in the water.kaP?-i le?-e c'ox-nanki get up-SgImpA cows-P milk-1PlMainFut Get up! Let's milk the cows.

In main sentences, also the Subordinate Future form can appear. The Subordinate Future paradigm has the same basic future meaning and modal uses of the Main Future.

| Pano bu¢ad-i | ba | Pakima=ma zow-ni |
| :---: | :---: | :---: |
| 1 SgSubj be.sick-1 SgUnm | C | doctor. $\mathrm{M}=$ to/in go-1 SgSubF |
| Since I am sick I will go |  | octor |


| q'awk-o | kotta=y | max-x-e | bitman-ni $\quad$ kiy-i |
| :--- | :--- | :--- | :--- | :--- |
| man-M | PronM.Dist1=Fill | bead-Pl-P | buy-1SgSubFut say-3SgMUnm |
| This man said 'I will buy beads'. |  |  |  |


| kirrin-ko | kaaki | Paaka | ko | Pabba=yay | k |
| :---: | :---: | :---: | :---: | :---: | :---: |
| tail-M | PronM.2SgFPoss |  | PronM | father=within | Sent-3 |
| ћegg-ini |  |  |  |  |  |
| play-1SgSubFut |  |  |  |  |  |
| I will play | with your tail and | my fa | r's |  |  |

## maar-e=nu=kka gom6-o ga££-inini

female calves- $\mathrm{P}=$ from=Sent kraal-M prepare-1PlSubFut We will prepare a kraal for the female calves.

## gabaya Pogoy-nay na q'ey Pafer=ma zow-ni

market.F come-3SgFMainFut Loc3 Qäy Afär=to/in go-1SgSubFut When the market (day) comes I will go to Qäy Afär.

The semantic difference between the Main and the Subordinate Future in main clauses is not always evident, but has probably to do with the focussing property of the Subordinate Future. Those cases in which the Subordinate Future clearly functions as focus marker give support to this hypothesis.

### 6.6.3. Subordinate Future as focus form

There are cases in which the Subordinate Future appears as constituent focus marker or expresses evidentiality.

This is shown in the following examples. The first example is taken from the folktale 'The Squirrel and the Baboon'. The two characters decide to kill their mothers by putting them in a bag and throwing them from a hill. Before doing so they guess about what sound their mothers will produce while rolling down. There are two options: 'haš haš' and 'kuh kuh'. The element focussed by the Subordinate Future, e.g. 'kuh kuh', is the selected option.
See example:

| Pingiy-e taћћa=kka haš haš mother-F whose=Senthaš haš | Pasa sukkam-nay <br> so roll-3SgFMainF |
| :---: | :---: |
| Pingiy-e t-aayu | kuh kuh Pasa sukkam-in |
| mother-F PronF-1SgPoss | kuh kuh so roll-3SgFSubFut |
| Whose mother will roll dow | making a hash hash-like sound? |
| will roll down | king a kuh kuh-like sound. |

The following example is extracted from the folktale 'The Squirrel and the Guinea fowl'. The squirrel proposes to his friend not to eat the stored grains until the following rainy season. He has to propose to eat another kind of food. He selects waiqe 'beans'. The Subordinate Future form of the verb focuses on the selected item.
See example:
ber-ko xaf-na ba dor-o
rainy-season-M come-3SgMMainFut Cons granary-M
žiP-onki=ye
eat-1SgCons=Emph
Panto žiP-ni=kka wasc-e žiP-nini.
now eat-1PlFutNeg=Sent beans-P eat-1PlSubFut
When the rainy season comes we will eat from the granary
Let us not eat from it now, let us eat beans.

Content questions make use of an interrogative element. These interrogative elements represent the pivots of the question and are pragmatically marked by the Subordinate Future. This paradigm has therefore a distinctive function to mark the wh-word as the focus element of a future content questions.

Below are examples of future content interrogative sentences. The focused wh-words are found immediately before the Subordinate Future verb. They are in italics in the translation:

## bara zoy-inti

when go-2SgSubFut When will you go?

ћez-itt-e boytakk-ilo=yay moo goodd-ini
star-Sg-F boytakko-LocM=with what do-3SgSubFut What will he do with the root of the boytakko-tree?
bogol-t-e ka mala m=bas-inini
queen-Sg-F Sent how $1=$ do-1PlSubFut What shall we with to the queen?

## dal-a Paka n=dayy-inini

newbornFutcalf-F where $1=$ get-1PlSubFut
Where will we get a newborn calf?
The focus expressed by the Subordinate Future may enhance evidentiality. This is shown by native speaker judgements concerning sentences that, on first sight, seem to be neutral in meaning. This will be shown by the analyses of the yes/no question 'Will he come tomorrow?' and the related answer 'He will come tomorrow'. They are made up of the same elements. Their intonations differ in that the questions risen their pitch sentence finally. Compare the two questions:
q'ayna Pogoy-na?
tomorrow come-3SgMMainFut
Will he come tomorrow?
and

## q'ayna Pogoy-ni?

tomorrow come-3SgMSubFut Will he come tomorrow?

The question is presented with a Subordinate Future verb if the person who answers is supposed to be informed and can answer correctly. The first question, with Main Future verb, has no special implication. Who utters this question just wonders and does not expect a precise answer.

The answer 'He will come tomorrow' can also be formulated with both verb forms:

## q'ayna Pogoy-na

tomorrow come-3SgMMainFut
He will come tomorrow.

```
q'ayna Pogoy-ni
```

tomorrow come-3SgMSubFut He will come tomorrow.

The second answer, with a Subordinate Future verb, is used if one is really sure that the event, his arrival tomorrow in this case, will happen. The first one, with a Main Future, is a more general statement. It does not imply that the event will surely happen.

The Subordinate Future can express focus. It is used to focus an element of the sentence. The focus element is the one selected among a limited or unlimited group. Moreover, this paradigm indicates the focussed status of interrogative elements in content questions. Evidentiality is enhanced by the sentence focus and the Subordinate Future has also an evidential role. This property has been suggested by the speakers and resulted from the comparison with the Main Future. It was not possible to determine all the contexts in which the Subordinate Future stresses evidentiality.

### 6.6.4. Future in conditional and final sentences

This Future paradigm is labelled Subordinate because it is used in semantically conditional or final sentences. A future main sentence has a Subordinate Future verb if it indicates the necessary condition for the realization of a coordinated sentence or indicates for which purpose the action of the coordinated sentence is performed. See the examples below:

$$
\begin{array}{ll}
\text { Pufunde } & \text { q'ayy-ine }=\text { nu } \quad \text { šitt-o šiinam-e } \\
\text { 3PlSubj } & \text { be.good-3PISubFut=from cream-M smear.to.oneself-3PlUnm } \\
\text { They smeared cream over themselves to look nice. }
\end{array}
$$

žiP-o gaP-inti katt-e ko?-itá
food-M prepare-3SgFSubFut fire-F light-3SgFJuss
Light the fire so that she will cook.

| Pine | q'awa | šeegr-ni | nay | gasar-ko ka |
| :---: | :---: | :---: | :---: | :---: |
| 1PISubj rifle-F bring-1PlSubFut Backgr buffalo-M Se |  |  |  |  |
| raP-nanki |  |  |  |  |
| shoot-1PlMainFut |  |  |  |  |
| If I brin | a rifl | ill shoo | buf |  |

### 6.7. Positive and Negative

There are several main Negative declarative paradigms. They are distinguished in the tense dimension between Past and Non-Past. A Future Negative paradigm is made up of the Non-Past Negative and the future marker -n.

Formally, the Negative paradigms are not linked directly to the positive paradigms and semantically do not reflect the values of the positive
paradigms. The Past Negative describes past situations and Non-Past Negative describes present and future situations. They are used with no reference to the aspectual development of the event.

See, for examples the two sentences below. Both contain a Past Negative verb and are set in the past. In the first sentence the verb describes a habitual negative event. In the second sentence the aspectual value of the Negative verb is perfect.

## 

luqa=upon sitting-M love-3SgMPstNeg=Sent He did not like staying in Luqa.

```
Pinank-o-se=nnay bu@S-o waan-na=kka
boy-M-Def=Loc disease-M heal-3SgMPstNeg=Sent
The disease of the boy did not heal.
```

The Negative verbs are followed by the Sentence marker =kka when occurring in a main clause. They are followed by a conjunction in dependent clauses.

### 6.7.1. Past Negative

The Past Negative negates situations that occurred before the time of speech. Examples:

## šiinin-k-o šeegat-ti

butter-Sg-M bring-2SgUnm
Did you bring the butter?

## šeeg'ad-da=kka

bring-1SgPstNeg=Sent
I did not bring it.

```
geeray Perr-o dib-ba=kka ba makin-a
yesterday rain-M rain-3SgMPstNeg=Sent Cons car-F
zaarb-i
pass-3SgFConsA
Since it did not rain yesterday the cars passed.
```

The Past Negative is the only Negative paradigm that can be subordinated by the temporal conjunction yaaka 'when':

## Perr-o ki dib-ba yaaka makin-a zaarb-ay

rain-M Sent-3 rain-3SgMPstNeg when car-F pass-3SgFImpfv When it does not rain the cars pass.

### 6.7.2. Non-Past Negative

The Non-Past Negative paradigm is used for situations occurring at the time of speech, habitual situations and future situations. See two examples of Non-Past Negative forms in habitual context:

Patunde=kka Pabbay=nu Pol-a q'abaP-te=kka 2PlSubj=Sent father=from thing-F hear-2PINonPstNeg=Sent You do not listen to your father.
Pilmal-e kaaki $\quad$ ka $\quad$ Pemm-
tears-P
PronP. 2 SgFPoss
ges-i=kka
I do not want to see your tears.

The Non-Past Negative verbs of the following two examples are set in the Future:
titta ka na bitam-ni ki6a=ka
PronF.Prox1 Sent Loc buy-1SgSubFut PronM.different=Sent
bitam-i=kka
buy-1SgNonPstNeg=Sent
I will buy this, I will not buy another one.
žiP-o kutta kaayu Payid-i=nu
food-M PronM.Prox1 PronM.1SgPoss be.Sub-3SgMUnm=from deeћ-i=kka
give- $1 \mathrm{SgNonPstNeg}=$ Sent
Since this food is mine I will not give it.
The stative verb geef- 'to want' cannot be inflected for Past Negative. The only possible Negative form is Non-Past Negative. This is used even referring to past situations. Example:

## Pano geef-í=kka

1 SgSubj want-1SgNonPstNeg=Sent
I do not want.

### 6.7.3. Future Negative

The Future Negative applies only to situations occurring after the time of speech.

| Pine guuyu | žiP-o | gaP-ni | yaaka |
| :--- | :--- | :--- | :--- |
| 1PlSubj today food-M | prepare-1PlNonPstNeg | when |  |
| žiP-ni=kka |  |  |  |
| eat-1PIFutNeg=Sent |  |  |  |
| If we do not cook today we will not eat. |  |  |  |

### 6.8. Mood: Jussive and Imperative

Orders are expressed by the Jussive and the Imperative paradigms. The Jussive is used for first and third persons. Orders addressed to a second person have an Imperative form. Examples of Jussive:

```
naP-a Yabun-á
baby-F rock-1SgJuss
Let me rock the baby.
Pogoy-é \(\quad\) kiy-i
come-3PlJuss
say-3SgMUnm
He said 'let them come'.
```

The Imperative manifests the verb class distinction. The Imperative of class A shows the verb stem without suffixes in the singular. In case of stem final double consonants an epenthetic $\mathbf{- i}$ is added. The plural of class A shows the suffix -á. See examples of class A Imperative forms:

| singular | plural |  |
| :--- | :--- | :--- |
| 6ul | Culá | Jump! |
| loq' | loq'á | Swallow! |
| xur | xurá | Give up! |
| beerri | beerrá | Touch! |
| Puppi | Puppá | Whistle! |
| zaarbi | zaarbá | Pass! |

Class B Imperative forms show a suffix -á in the singular and a suffix -indá in the plural. See examples:

| singular | plural |  |
| :--- | :--- | :--- |
| žiPá | žiPindáa | Eat! |
| c'oxá | c'oxindáá | Swallow! |
| zaq'á | zaq'indá | Slaughter! |

With negations the Jussive paradigm is used for all the persons. The verb form is preceded by the Negative element Pínnu See the whole paradigm of the verb zow- 'go':
$1 \mathrm{Sg} \quad$ Pínnu zow-ú Do not let me go.
2Sg Pínnu zow-ú Do not go.
3 SgM Pínnu zow-ú Do not let him go.
3SgF Pínnu zow-ú Do not let her go.
1Pl Pínnu zow-únki Do not let us go.
2Pl Pínnu zow-únku Do not go.
3Pl Pínnu zow-únki Do not let them go.

### 6.9. Consecutive

The binary verb class distinction is manifested in the morphology of the Consecutive. There are two Consecutive inflectional series, one for each verb class (See 6.3.).
The Consecutive is an a-temporal paradigm. A Consecutive verb appears both as the last element in a sequence of sentences and as a converb preceding another verb.
In the following example a Consecutive is the last of a series of verbs:
Pano bog-i $\quad$ na=ta kiy-i $\quad$ ba zow-u
1SgSubj kill-3SgMUnm Loc=Loc say-3SgMUnm Cons go-3SgMConsA
He said 'I killed her' and left.

In the following example a Consecutive verb precedes a final Consecutive verb:
bukkis-addo-e boq'q'-u
den-Pl-P close-3SgMConsA
koP-u
light-3SgMConsA
He closed the dens and set fire in it.
(From the tale 'The squirrel and the guinea fowl').

The following string of verbs is made up of Consecutive verbs preceding other Consecutives verbs. Only the last Consecutive verb precedes a final Unmarked verb.


### 6.10. Verb paradigms

CVC stem: £ug (A) 'to drink' and ži $\mathbf{z}$ (B) 'to eat'
Positive paradigms

|  | Unm A | Unm B | Marked Impfv |  |
| :---: | :---: | :---: | :---: | :---: |
| 1Sg | ¢úg-í | ží?-i | ¢ úg-a | žíl-a |
| 2Sg | ¢ úg-dí | ží?-ti | ¢ úg-ay | ží?-ay |
| 3 SgM | ¢ úg-í | ží?-i | ¢ $\mathrm{úg}_{\text {-a }}$ | ží?-a |
| 3 SgF | qúg-dí | ží?-ti | ¢ úg-ay | ží?-ay |
| 1 Pl | ¢úg-ní | ží?-ni | ¢ úg-ánki | ží?-ank |


| 2 Pl 3 Pl | ¢úg-de ¢úg-e | $\begin{array}{ll} \text { ží?-te } & \text { 乌ú ú } \\ \text { ží?-e } & \text { ú } \end{array}$ | $\begin{array}{ll}\text { ¢úg-ánku } & \text { žíP-anku } \\ \text { ¢úg-ánki } \\ \text { žíP-anki }\end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Main Future |  | Subordinate Future |  |
| 1 Sg | ¢ úg-na | ží?-na | ¢ úg-ní | ží?-ní |
| 2Sg | ¢úg-nay | ží?-nay | ¢úg-íntí | žíP-íntí |
| 3 SgM | ¢ úg-na | žíl-na | ¢ úg-ní | ží?-ní |
| 3 SgF | ¢úg-nay | ží?-nay | qúg-íntí | žíP-íntí |
| 1 Pl | ¢úg-nánki | ží9-nánki | ¢ úg-nínní | ží?-nínní |
| 2 Pl | ¢ úg-nánku | ží?-nánku | ¢ úg-ínté | ží?-ínté |
| 3 Pl | ¢ úg-nánki | ží?-nánki | ¢úg-né | žíl-né |


|  | Jussive |  | Cons A | Cons B |
| :---: | :---: | :---: | :---: | :---: |
| 1Sg | ¢ug-á | žiP-á | ¢úg-á | žíl-ó |
| 2Sg | ---- | --- | ¢úg-áy | ží?-óy |
| 3 SgM | ¢ug-á | žiP-á | ¢ úg-ú $^{\text {chen }}$ | ží9-ó |
| 3 SgF | ¢ug-ítá | žiP-ítá | ¢úg-í | žíP-óy |
| 1 Pl | ¢ug-ná | žiP-ná | ¢ úg-ánki | ží?-ónki |
| 2 Pl | ---- | ---- | ¢ úg-ánku | ží?-ónku |
| 3 Pl | ¢ug-é | žiP-é | ¢ úg-ínki | ží?-ónki |


|  | Imp. A | Imp. B |
| :---: | :---: | :---: |
| 2 Sg | ¢ úg- | ži 1 -á |
| 3 Pl | ¢ug-á | žiP-índá |

## Negative paradigms

|  | Non-Past Neg. |  | Past Neg. |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 Sg | ¢ úg-í | žíl-í | ¢ úgg-á | ží? 3 -á |
| 2 Sg | ¢ úg-tí | žíP-tí | ¢ úgg-á | ží? 3 -á |
| 3 SgM | ¢ úg-í | ží?-í | ¢ úgg-á | ží? 3 -á |
| 3 SgF | ¢ úg-tí | ží?-tí | ¢ úgg-á | ží? 3 -á |
| 1 Pl | ¢ úg-ní | žíP-ní | ¢ úgg-ánkí | žíP 3 -ánkí |
| 2 Pl | ¢ úg-té | žís-té | ¢ úgg-ánkú | ží? ${ }^{\text {-ánkú }}$ |
| 3 Pl | ¢úg-é | ží?-é | ¢ úgg-ánkú | ží? 3 -án |


|  | Future Negative |  | Jussive Negative |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 Sg | ¢ug-ní | ži?-ní | ( P ínnu) ¢ ¢ úg-ú | (Pínnu) ží?-ú |
| 2 Sg | ¢ug-íntí | ži 3 -íntí | ( (ínnu) ¢ ¢ úg-ú | (Pínnu) žíP-ú |
| 3 SgM | ¢ug-ní | ži 1 -ní | ( (ínnu) ¢úg-ú | (Pínnu) ží?-ú |
| 3 SgF | qug-íntí | ži 3 -íntí | ( $\mathrm{Pínnu)} \mathrm{¢úg-ú}$ | (Pínnu) ží?-ú |
| 1 Pl | ¢ug-ínní | ži 3 -ínní | ( $\mathrm{Pínnu}$ ) $¢$ úg-únkí | (Pínnu) ží?-únkí |
| 2 Pl | ¢ug-ínté | žiP-ínté | (Pínnu) ¢úg-únkú | (Pínnu) žíl-únkú |
| 3 Pl | ¢ug-né | ži 3 -né | (Pínnu) ¢úg-únkí | (Pínnu) ží?-únkí |

CVVC stem: ? $\mathbf{3 0 0 y}$-(A) 'to cry' and bood- (B) 'to dig'
Positive paradigms
Unm. A Unm. B Marked Imperf.
1 Sg Póóy-í bóód-i Póóy-a bóód-a
2 Sg Póóy-tí bóód-ti Póóy-ay bóód-ay
3SgM Póóy-í bóód-i Póóy-a bóód-a
3 SgF Póóy-tí bóód-ti Póóy-ay bóód-ay
1 Pl Póóy-ní bóód-ni Póóy-ánki bóód-anki
2Pl Póóy-te bóód-te Póóy-ánku bóód-anku
3Pl Póóy-e bóód-e Póóy-ánki bóód-anki

|  | Main Future |  | Subordinate Future |  |
| :--- | :--- | :--- | :--- | :--- |
| 1Sg | Póóy-na | bóód-na | Póóy-ní | bóód-ní |
| 2Sg | Póóy-nay | bóód-nay | Póóy-íntí | bóód-íntí |
| 3SgM | Póóy-na | bóód-na | Póóy-ní | bóód-ní |
| 3SgF | Póóy-nay | bóód-nay | Póóy-íntí | bóód-íntí |
| 1Pl | Póóy-nánki | bóód-nánki | Póóy-nínní bóód-nínní |  |
| 2Pl | Póóy-nánku | bóód-nánku | Póóy-ínté | bóód-ínté |
| 3Pl | Póóy-nánki | bóód-nánki | Póóy-né | bóód-né |


|  | Jussive |  | Cons. A | Cons. B |
| :--- | :--- | :--- | :--- | :--- |
| 1Sg | Pooy-á | bood-á | Póóy-á | bóód-ó |
| 2Sg | ------ | Póóy-áy | bóód-óy |  |
| 3SgM | Pooy-á | bood-á | Póóy-ú | bóód-ó |
| 3SgF | Pooy-ítá | bood-ítá | Póóy-í | bóód-óy |
| 1Pl | Pooy-ná | bood-ná | Póóy-ánki | bóód-ónki |
| 2P1 | ---- | Póóy-ánku | bóód-ónku |  |
| 3P1 | Pooy-é | bood-é | Póóy-ínki | bóód-ónki |

Imp. A Imp. B
2Sg Póóy bood-á
2 Pl Pooy-á bood-índá
Negative paradigms

|  | Non-Past Negative | Past Negative |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 1 Sg | Póóy-í | bóód-í | Póóyy-á | bóódd-á |
| 2Sg | Póóy-tí | bóód-tí | Póóyy-á | bóódd-á |
| 3SgM | Póóy-í | bóód-í | Póóyy-á | bóódd-á |
| 3SgF | Póóy-tí | bóód-tín | Póóyy-á | bóódd-á |
| 1Pl | Póóy-ní | bóód-ní | Póóyy-ánkí | bóódd-ánkí |
| 2Pl | Póóy-té | bóód-té | Póóyy-ánkú | bóódd-ánkú |
| 3Pl | Póóy-é | bóód-é | Póóyy-ánkú | bóódd-ánkú |

Future Negative Jussive Negative
1 Sg žiP-ní žiP-ní (?ínnu) óóy-ú (?ínnu) bóód-ú
2 Sg žiP-íntí žiP-íntí (?ínnu) óóy-ú (?ínnu) bóód-ú

| 3 SgM | žiP-ní | žiP-ní | (1/nu) boy-u | ) bôod-u |
| :---: | :---: | :---: | :---: | :---: |
| 3 SgF | žiP-íntí | ži 3 -íntí | ( 3 i ( $n u$ ) óóy-ú | ( (ínnu) bóód-ú |
| 1 Pl | žiP-ínní | ži 3 -ínní | ( 3 ínnu) óóy-únkí | ( Pínnu) bóód- |
| 2 Pl | žiP-ínté | žiP-ínté | ( 3 ínnu) óóy-únkú | (Pínnu) bóód-ún |
| 3 Pl | žiP-né | žiP-né | ( $3 i ́ n n u)$ óóy-únkí | ( Pínnu) bóód-ún |

CVCVC stem: q'aba P-(A) 'to hear' and 3abun- (B) 'to rock'
Positive paradigms
Unm. A Unm. B Marked Imperf.
$1 \mathrm{Sg} \quad$ q'ábá $P-i ́$ Pábún-i q'ábá $P-\mathrm{a} \quad$ Pábún-a
2 Sg q'ábáP-tí Pábún-ti q'ábáP-ay Pábún-ay
3 SgM q'ábá $P-i ́$ Pábún-ti q'ábá $P-\mathrm{a}$ Pábún-a
3SgF q'ábá?-tí Pábún-i q'ábá?-ay Pábún-ay
1 Pl q'ábáP-ní Pábún-ni q'ábáP-ánki Pábún-ánki
2Pl q'ábáP-te Pábún-te q'ábáP-ánku Pábún-ánku
3Pl q'ábá?-e Pábún-e q'ábá?-ánki Pábún-ánki

|  | Main Future |  | Subordinate Future |  |
| :---: | :---: | :---: | :---: | :---: |
| 1Sg | q'ábá?-na | Pábún-na | q'ábá?-ní | Pábún-ní |
| 2Sg | q'ábá?-nay | Pábún-nay | q'ábá?-íntí | Pábún-íntí |
| 3 SgM | q'ábá?-na | Pábún-na | q'ábáP-ní | Pábún-ní |
| 3 SgF | q'ábá?-nay | Pábún-nay | q'ábá?-íntí | Pábún-íntí |
| 1 Pl | q'ábá?-nánki | Pábún-nánki | q'ábá?-nínní | Pábún-nínní |
| 2 Pl | q'ábá?-nánku | Pábún-nánku | q'ábá?-ínté | Pábún-ínté |
| 3 Pl | q'ábá?-nánki | Pábún-nánki | q'ábá?-né | Pábún-né |


|  | Jussive |  | Cons. A | Cons. B |
| :--- | :--- | :--- | :--- | :--- |
| 1Sg | q'abaP-á | Pabun-á | q'ábá?-á | Pábún-ó |
| 2Sg | --- | ---- | q'ábá?-áy | Pábún-óy |
| 3SgM | q'abaP-á | Pabun-á | q'ábá?-ú | Pábún-ó |
| 3SgF | q'abaP-ítá | Pabun-ítá | q'ábá?-í | Pábún-óy |
| 1Pl | q'abaP-ná | Pabun-ná | q'ábá?-ánki | Pábún-ónki |
| 2Pl | --- | ---- | q'ábá?-ánku | Pábún-ónku |
| 3Pl | q'abaP-é | Pabun-é | q'ábá?-ínki | Pábún-ónki |

Imper. A Imper. B
2Sg q'ábá? Pabun-á
2Pl q'abaP-á Pabun-índá

Negative paradigms
Non-Past Negative Past Negative
$1 \mathrm{Sg} \quad$ q'ábá $P-i ́$ Pábún-í q'ábáP P-á Pábúnn-á
2 Sg q'ábáP-tí Pábún-tí q'ábáPP-á Pábúnn-á
3 SgM q'ábá $P-i ́$ Pábún-í q'ábá $P$ P-á Pábúnn-á
3 SgF q'ábá?-tí Pábún-tí q'ábáPP-á Pábúnn-á
1 Pl q'ábá?-ní Pábún-ní q'ábáPY-ánkí Pábúnn-ánkí
2Pl q'ábáP-té Pábún-té q'ábáPP-ánkú Pábúnn-ánkú
3 Pl q'ábá?-é Pábún-é q'ábá? $\mathrm{Pl}^{-a ́ n k u ́ ~ P a ́ b u ́ n n-a ́ n k u ́ ~}$

| Future Negative |  |  |
| :---: | :---: | :---: |
| 1Sg | q'aba?-ní Pabun | Pabun-ní |
| 2 Sg | q'abaP-íntí Pabun | Pabun-íntí |
| 3 SgM | q'aba?-ní Pabun | Pabun-ní |
| 3 SgF | q'aba?-íntí Pabun | Pabun-íntí |
| 1 Pl | q'aba?-ínní Pabun | Pabun-ínní |
| 2 Pl | q'aba ${ }^{\text {-íntí }}$ Pabun | Pabun-íntí |
| 3 Pl | q'aba?-ní Pabun | Pabun-ní |
| Jussive Negative |  |  |
| 1 Sg | (Pínnu) q'ábá -ú | ( Pínnu) Pábún-ú |
| 2 Sg | ( Pínnu) q'ábá -ú | ( Pínnu) Pábún-ú |
| 3 SgM | ( Pínnu) q'ábá -ú | ( Pínnu) Pábún-ú |
| 3 SgF | (Pínnu) q'ábá -ú $^{\text {a }}$ | ( Pínnu) Pábún-ú |
| 1 Pl | (Pínnu) q'ábá?-únki | ( (ínnu) Pábún-únki |
| 2 Pl | (Pínnu) q'ábá?-únku | (Pínnu) Pábún-únku |
| 3 Pl | (Pínnu) q'ábá?-únki | (Pínnu) Pábún-únki |

CVC-VC stem:
ka3-is- (A) 'to make stand up' and žoq'-am- (B) 'to be beaten'
Positive paradigms
Unm. A Unm. B Marked Imperf.

| 1Sg | ká?-ís-í | žóq'-ám-i | káP-ís-a | žóq'-ám-a |
| :---: | :---: | :---: | :---: | :---: |
| 2Sg | ká 3 -ís-tí | žóq'-án-ti | ká?-ís-ay | žóq'-ám-ay |
| 3 SgM | ká 3 -ís-í | žóq'-ám-i | káP-ís-a | žóq'-ám-a |
| 3 SgF | ká 9 -ís-tí | žóq'-án-ti | ká?-ís-ay | žóq'-ám-ay |
| 1 Pl | ká 3 -ís-ní | žóq'-ám-ni | ká?-ís-ánki | žóq'-ám-ánki |
| 2 Pl | ká 3 -ís-te | žóq'-án-te | ká?-ís-ánku | žóq'-ám-ánku |
| 3 Pl | ká 3 -ís-e | žóq'-ám-e | ká?-ís-ánki | žóq'-ám-ánki |

Main future
Subordinate future

| 1 Sg | káP-ís-na | žóq'-ám-na | káP-ís-ní | žóq’-ám-ní |
| :--- | :--- | :--- | :--- | :--- |
| 2Sg | káP-ís-nay | žóqq-ám-nay | káP-ís-íntí | žóq'-ám-íntí |


| $\begin{aligned} & 3 \mathrm{SgM} \\ & 3 \mathrm{SgF} \end{aligned}$ | káp-ís-na žó |  | žóq'-ám-na | káP-ís-ní | žóq'-ám-ní |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | káP-ís-nay ž |  | žóq'-ám-nay | káP-ís-íntí | žóq'-ám-íntí |
| 1 Pl | ká?-ís-nánki žơ |  | žóq'-ám-nánki | káP-ís-nínní | žóq'-ám-nínní |
| 2 Pl | ká?-ís-nánku žơ |  | žóq'-ám-nánku | káP-ís-ínté | žóq'-ám-ínté |
| 3 Pl | káP-ís-nánki ž |  | žóq'-ám-nánki | káP-ís-né | žóq'-ám-né |
|  |  | Jussive |  | Cons. A | Cons. B |
|  | 1Sg | ka 3 -is-á | žoq'-am-á | ká?-ís-á | žóq'-ám-ó |
|  | 2Sg | ---- | -- | ká?-ís-áy | žóq'-ám-óy |
|  | 3 SgM | ka ${ }^{\text {-is-á }}$ | žoq'-am-á | ká?-ís-ú | žóq' ${ }^{\text {cám-ó }}$ |
|  | 3 SgF | ka?-is-ítá | žoq'-am-ítá | káP-ís-í | žóq'-ám-óy |
|  | 1 Pl | ka?-is-ná | žoq'-am-ná | ká?-ís-ánki | žóq'-ám-ónki |
|  | 2 Pl | ---- | --- | ká?-ís-ánku | žóq'-ám-ónku |
|  | 3 Pl | ka 3 -is-é | žoq'-am-é | ká?-ís-ínki | žóq'-ám-ónki |
|  |  | Imper. A | Imper. B |  |  |
|  | 2 Sg | ká?-ís | žoq'-am-á |  |  |
|  | 2 Pl | ka?-is-á | žoq'-am-ínc |  |  |

Negative paradigms

|  | Non-Past Negative |  | Past Negative |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 Sg | káP-ís-í | žóq'-ám-í | káP 3 -ís-á | žóq'q'-ám-á |
| 2 Sg | káP-ís-tí | žóq'-ám-tí | káP?-ís-á | žóq'q'-ám-á |
| 3 SgM | káP-ís-í | žóq'-ám-í | ká? 3 -ís-á | žóq'q'-ám-á |
| 3 SgF | ká 3 -ís-tí | žóq'-ám-tí | káPP-ís-á | žóq'q'-ám-á |
| 1 Pl | káP-ís-ní | žóq'-ám-ní | káPP-ís-ánkí | žóq'q'-ám-ánkí |
| 2 Pl | ká $P$-ís-té | žóq'-ám-té | ká? ${ }^{\text {-ís-ánkú }}$ | žóq'q'-ám-ánkú |
| 3 Pl | káP-ís-é | žóq'-ám-é | ká? $P$-ís-ánkú | žóq'q'-ám-ánkú |


| Future Negative |  |  |
| :---: | :---: | :---: |
| 1 Sg | ka?-is-ní žoq'-a |  |
| 2 Sg | ka?-is-íntí žoq'-a | -íntí |
| 3 SgM | ka?-is-ní | -ní |
| 3 SgF | ka?-is-íntí žoq'-a | -íntí |
| 1 Pl | ka?-is-ínní čoq'-a | -ínní |
| 2 Pl | ka?-is-íntí žoq'-a | -íntí |
| 3 Pl | ka 3 -is-ní |  |
| Future Negative |  |  |
| 1 Sg | ( P ínnu) ká ${ }^{\text {-ís-ú }}$ | ( $\mathrm{Pínnu}$ ) žóq'-ám-ú |
| 2Sg | (Pínnu) ká?-ís-ú | ( Pínnu) žóq'-ám-ú |
| 3 SgM | (Pínnu) ká 3 -ís-ú | ( Pínnu) žóq'-ám-ú |
| 3SgF | (Pínnu) ká?-ís-ú | ( Pínnu) žóq'-ám-ú |
| 1 Pl | (Pínnu) káP-ís-únki | ( P ínnu) žóq',-ám-únki |
| 2 Pl | (Pínnu) káP-ís-únku | ( Pínnu) žóq'--ám-únku |
| 3 Pl | (Pínnu) káP-ís-únki | ( i (innu) žóq'-ám-únki |

## 7. Verb derivation

An inflected stem can be basic or derived. A basic stem corresponds to the verb root. A derived stem is a root with derivational suffixes or subject to the derivational process of gemination or reduplication. Derivational affixes can follow a derived geminated or reduplicated stem. They can also follow each other in fixed combinations.

### 7.1. Derivational suffixes

The derivational suffixes are Causative, Middle, Passive and Inceptive. There are suffixes that modify the valency of verbal roots (see 7.3), and suffixes that verbalise non-verbal roots (the verbalisers are described in 7.2.).

All derivational suffixes have a VC structure. The consonant characterises the derivation: $\mathbf{s}$ expresses the Causative; $\boldsymbol{d}$ the Middle, $\mathbf{m}$ the Passive and $\mathbf{w}$ the Inceptive. The vocalic element in the valency modifying suffixes is predominantly a. It may appear as $\mathbf{o}$ in the Causative, the Middle and the Passive. A second Causative suffix shows a vocalic element $\mathbf{i}$. The vocalic elements a or $\mathbf{0}$ are also used in the Causative verbalisers and the Middle verbalisers. The only inceptive verbaliser has a and the only Passive verbaliser has o. See table 44:

Table 44: Verb derivation suffixes

|  |  | Assimilation <br> to radical $\mathbf{0}$ | Verbalisers |
| :--- | :--- | :--- | :--- |
| Causative 1 | -as | -os | -as, -os |
| Causative 2 | -is | --- | -- |
| Middle | -ad | -od | $\mathbf{- a d}, \mathbf{- o d}$ |
| Passive | -am | -om | $\mathbf{- o m}$ |
| Inceptive | -aw | --- | -aw |

The $\mathbf{s}$ of the Causative suffixes changes to $\check{\mathbf{s}}$ if the root contains a palatal sibilant (see 2.7.8.).

Some of the variants with $\mathbf{0}$ can be explained by a kind of irregular vowel harmony with the root vowel $\mathbf{0}$. This is only attested with verbs ending with $\mathbf{q}, \mathbf{h}$ or $\mathbf{g}$. One remarks that with consonants having the same place of articulation, such as $\mathbf{x}$, and $\boldsymbol{P}$ this assimilation is not attested. Moreover, the consonants $\mathbf{q}^{\prime}, \mathbf{h}$ or $g$ cannot be clustered in the phonological class of glottalised because of the presence of $\mathbf{h}$, which is not glottalised. It is therefore difficult to establishing a natural class of consonants that allow for o-perseveration.

All the derivational suffixes of the verb $\mathbf{l o q}$ ' show $\mathbf{0}$ as vocalic element. See example:

| loq, | loq'-os | loq'-od | loq'-om |
| :--- | :--- | :--- | :--- |
| swallow | make swallow | swallow | be swallowed |

There are few more examples of this kind of assimilation. See a complete list below:

| boq'- to cut off | boq'-os to make cut off <br> bog'- to kill |
| :--- | :--- |
| bog-os to make kill |  |
| y̌oq'- to beat | ̌̌oq'-od to be beaten |
| šooh- to wash | šooh-od to wash oneself <br> šooh-om to wash oneself |
|  | šoq'om to have diarrhoea <br> roq'om to wrinkle |

Harmony of $\boldsymbol{o}$ through a consonant is realised only in verbal derivation and it is not a regular process. For example, the derived affixes of the verb log' 'to spoil' show a and not $\mathbf{o}$. The derived forms of this verb are $\log$-as (Causative), log'ad (Middle) and log'am (Passive). The verb žooq' 'to grind' is derived for Causative and Middle. The suffixes of these derivations appear as -aš and -ad respectively. šooh-ad and šooh-od are both accepted as middle forms of the verb šooh- 'to wash'. However, the Passive derivation of the verb bog', which as been listed above, is not bog-om but bog-am. Assimilation is realised in the Causative derivation of the lexeme, bog-os, and not in the Passive derivation bog-am. This is the only case of a lexeme with assimilation in one derived form and not in another.

Not all the cases of vowel $\mathbf{0}$ in the derivational suffixes can be accounted for by assimilation to the root vowel. See the examples:

| žag | to insert | žag-od | to insert for oneself |
| :--- | :--- | :--- | :--- |
| kaћћћ | to be hard | kaћћћ-os | to make hard |
| šiggar | to stop | šiggar-os | to stop sb. |

The causative verb šiggar-oš alternates freely with the form šiggar-iš. Despite the phonological observations, the presence of $\mathbf{0}$ in the derivational suffixes is ultimately considered lexical.

There is a series of verbalisers characterized by the vowel $\mathbf{0}$ : -os, -od and $-\mathbf{o m}$. This vocalic element probably resulted from the merger of the inceptive verbaliser -aw and the derivational suffixes (See 7.2.).

### 7.2. Verbalisers

The series of verbalisers is made up of the Causative -as and -os, the Middle -ad and -od, the Passive -om and the Inceptive -aw. They follow the meaning of the verbal derivational suffixes: -as and -os have similar causative pattern meaning of the Causative suffixes -as and -is; -ad and -od have the same middle meaning of the Middle suffix -ad; -om has the same passive meaning of the Passive suffix -am; -aw has the same inceptive meaning of the Inceptive suffix -aw. Derived Causative, Middle and Passive verbs can therefore have either a verbal or a nominal root.
The verbalisers in $\mathbf{0}$ are probably historically derived from the Inceptive suffix -aw followed by the derivational suffixes -as/-is, -ad and -am. The vocalic element $\mathbf{0}$ results from the merge of -aw and the vowel of the derivational suffixes. See the table below:

Table 45: Verbaliser suffixes

| -aw +-as/-is | -os |
| :--- | :--- |
| -aw +-ad | -od |
| -aw +-am | $-\mathbf{o m}$ |

The verbalisers are normally attached to the stem of the noun. They take the place of the gender suffix of the noun. See for example Puskakkod 'to be dirty', the middle verbalised form of the noun ?uskakko 'dirt':

$$
\text { Puskakk-o (m) dirt } \quad \text { Puskakk-od to be dirty }
$$

In some cases the verbaliser attaches to adjectival stems. See, for example, zaar-od' 'to get mad', which is based on the stem zaar 'mad':

| *zaar |  |  |  |
| :--- | :--- | :--- | :--- |
| zaar-akko (m) | mad | zaar-od | to get mad |
| zaar-atte (f) | mad |  |  |
| zaar-ayke (p) | mad |  |  |

### 7.2.1. Causative verbalisers -as and -os

The causative verbalisers -as and -os have a limited application. The first -as is attested in the verbalisation of the nominal root bayš-e (p) 'wounds':
bayš-e (p) wounds bayš-aš to wound

## moo koo=ka bayš-aš-i

what 2 SgM $=$ Obj wound-Caus1-3SgMUnm
What wounded you?
-os is attested in the verbalisation of an unattested stem *bogol related to the derived nouns bogol-ko 'king' and bog'ol-te 'queen'. The meaning is causative:

| bogol-ko $(\mathrm{m})$ <br> bogol-te (f) | king <br> queen | bolg-os | to elect as king |
| :--- | :--- | :--- | :--- |

### 7.2.2. Middle verbalisers -ad and -od'

Nouns can become verbs by suffixation of the Middle verbaliser -ad and -od. The verbs convey meanings related to body and mind, which is characteristic of the middle.
The verbaliser -ad is only attested in the verbalisation of the following nouns. The derived verbs have to do with grooming:

| sir-e (p) | adornment | sir-ad | to adorn oneself |
| :--- | :--- | :--- | :--- |
| božž-e (f) | white clay | božž-ad | to smear white clay |

The verbaliser -od has a wider application. See a list of lexemes derived by this middle suffix:

Body activity

| c'egd-e (f) | blood | c'egd-od | to bleed |
| :---: | :---: | :---: | :---: |
| q'ats'-o (m) | itch | q'ats'-od | to itch |
| q'arm-a (f) | cramps | q'arm-od | to have cramps |
| ate |  |  |  |
| Puskakk-o (m) | dirt | Puskakk-od | to be dirty |
| bad-o (m) | hunger | bad-od | to be hungry |
| baq'ass-o (m) | splitting | baq'ass-od' | to have a headache |
| mind |  |  |  |
| zaar-akko (m) | mad | zaar-od | to get mad |
| zaar-atte (f) | mad |  |  |
| zaar-ayke (p) | mad |  |  |

The suffix -od has a variant -ud' in the formation of the verb bayš-ud' to be wounded':
bayš-e (p) wounds bayš-ữ to be wounded
The roots of a group of middle verbs have absorbed the middle verbaliser suffix -od. No lexical nominal root has been attested:

| Cac'arkod | to get goosebumps |
| :--- | :--- |
| šikkomod | to be numb |
| dagod | to be angry |
| gasod | to be happy |
| Pinsud | to dream |

### 7.2.3. Verbaliser -om

The verbaliser -om has a very limited derivational function. The only example is the derivation of the verb bolg'om 'become a king' from the underlying stem bogol. The meaning is inceptive:

$$
\begin{array}{llll}
\text { bog'ol-ko (m) } & \text { king } & \text { bolg-om } & \text { to become king } \\
\text { bog'ol-te (f) } & \text { queen } & &
\end{array}
$$

### 7.2.4. Inceptive verbaliser -aw

The role of -aw as inceptive verbaliser is attested in the following examples:

| q'olt-e (f) | female domestic <br> animal | q'olt-aw | to become a female domestic <br> animal |
| :--- | :--- | :--- | :--- |
| gaald-0 pregnancy gaald- <br> (m)  aw |  |  |  |

Another inceptive verb, geecc-aw 'to become old' is derived from the stem *geecc. This stem is also found in the adjectives geecc-akko (m) 'old man', geecc-atte (f) 'old man' and geecc-ayke (p) 'old people’. A stem *geeš and an inceptive verbaliser -uw can be identified in the basic verb geešuw 'to become old'. The stem *geeš is considered a variant of the stem *geecc on the basis of the discussion in 2.2.13 about the origin of $\mathbf{c c}$ from geminated $\check{\mathbf{s}}$.

*geecc \begin{tabular}{llllll}

geecc-aw \& to become old \& *geeš \& | geeš- |
| :--- |
| uw | \& to become old <br>

\& \begin{tabular}{l}
geecc-akko <br>
$(\mathrm{m})$

 \& 

old man <br>
old woman
\end{tabular} \& \& <br>

\& \begin{tabular}{l}
geecc-atte $(\mathrm{f})$ <br>
geecc-ayke $(\mathrm{p})$

 \& 

old people
\end{tabular} \& <br>

\& \&
\end{tabular}

Two active verbs paan-aw 'to follow' and Pint-aw 'to precede' are derived from the affixation of the inceptive -aw to the noun paan-a 'footprint' and to the adverbial Pinte 'before':

| paan-a (f) | footprint | paan-aw | to follow |
| :--- | :--- | :--- | :--- |
| Pint-e | before | Pint-aw | to precede |

### 7.3. Valency changing derivation suffixes

### 7.3.1. Causative -as and -is

The distribution of -as or -is in causative verbs is to a large extent lexically determined, although semantics also play a role. The majority of the verbal lexemes selects -as as causative marker. I will refer to the suffix -as (and its variant $-\mathbf{o s}$ ) as Causative 1 and to the suffix -is as Causative 2.

Table 46 shows that the distribution of the two suffixes is not phonologically conditioned:

Table 46: Distribution of -is and -as in similar phonological contexts

| f/ |  |  |  |
| :---: | :---: | :---: | :---: |
| biif-as | to invite | raf-is | to make sleep |
| d/ |  |  |  |
| 6ad-as | to make hide | zormad-is | to cause anger |
| r/_ |  |  |  |
| xorr-as | to make send | gar-is | to build |
| k/ |  |  |  |
| lekk-as | to make pierce side to side | reek-is | to make mix |
| rakk-as | to make hang | rook-is | to make speak |
| ћ/ |  |  |  |
| deeћ-as | to make give | gooh-is | to make roar |
| b/_as |  | 6/_is |  |
| c'ib-aš | to make spear | dag'ga6-is | to make arrive |

The presence of -as and -is is not due to vowel harmony as is the case of -os in some derivations (see 7.1.). The only verb in which assimilation through back consonant may have played a role in the selection of the causative suffix -as is $\mathbf{q}$ 'aq'-as 'to make cut'. More examples go against the analysis involving the assimilation process. There are verbs with stem final back vowels preceded by $\mathbf{i}$ that select -as, rather than -is. See examples of verbs with stem final ig', lig- 'to go out' and $\mathbf{i}$, $\mathbf{~ P i} 1$ - 'to see':

| lig | to go out | lig-as | to make go out |
| :--- | :--- | :--- | :--- |
| PiP | to see | PiP-as | to show |

There are also verbs with stem final back vowels preceded by a that select -is, rather than -as. See examples of verbs with stem final ag', mag'to change direction', and aaћ, gaaћ- 'to tell':

$$
\begin{array}{lll}
\text { mag } & \text { to change direction } & \text { mag-is }
\end{array} \begin{aligned}
& \text { to re-address } \\
& \text { gaaћ to tell }
\end{aligned}
$$

The presence of $-\mathbf{a s}$ and -is is partially predictable from the transitive or intransitive nature of the basic verb. -is is used almost exclusively with an intransitive base and -as is predominantly used with transitive bases.
Examples of transitive base derived by -as

| Pooš | to shave |
| :--- | :--- |
| c'ib | to pierce |
| diig | to pour |
| gabb | to take |
| godd | to make |
| xorr | to send |
| deeћ | to give |
| rakk | to hang sth. |
| bood | to dig |
| q'aq' | to cut |
| q'aw | to bite sth. |
| seћ | to collect |
| kibir | to dance |


| Pooš-aš | to make shave |
| :--- | :--- |
| c'ib-aš | to make pierce |
| diig-as | to make pour |
| gabb-as | to make take |
| goddo-as | to let sb. make |
| xorr-as | to make send |
| deeћ-as | to make give |
| rakk-as | to make sb. hang sth. |
| bood-as | to make dig |
| q'aq'-as | to make cut |
| q'aw-as | to make sb. bite sth. |
| seћ-as | to make collect |
| kirb-as | to make dance |

Intransitive base derived by -is

| žimmir | to be stunned | žimmir-iš | to stun |
| :--- | :--- | :--- | :--- |
| zormad | to be angry | zormad-is | to cause anger |
| kicca? | to laugh | kiccaP-is | to make laugh |
| mag' | to change direction | mag-is | to re-address |
| raf | to sleep | raf-is | to make sleep |
| wak | to speak | wak-is | to make speak |
| dagga6 | to arrive | dagg'G-is | to make arrive |
| giipp | to go to sleep | g'iipp-is | to put to sleep |
| goh | to grow (intr.) | goh-is | to cultivate |
| ka? | to get up, to wake up (intr.) | kaP-is | to put up, to waken |
| mugur | to be surprised | murg-is | to surprise |
| goob | to get fat | goob-is | to make fat |

The large number of counter-examples to these generalizations renders an analysis in terms of a functional opposition between the two Causative suffixes impossible. Several intransitive verbs have a Causative form in -as. See some of them in the list below:

| Pucc | to be filled up | Pucc-aš <br> lig-as | to fill up |
| :--- | :--- | :--- | :--- |
| to make go out |  |  |  |

One may note that Ts'amakko does not have a difference between patientsubject intransitives and agent-subject intransitives as in Oromo, where patient-subject intransitives require double causative (see Stroomer 1995:).

See, for example, that the semantically similar intransitive verbs wak 'speak' and bay 'say' show different causative suffixes: wak-is and bay-as.

Moreover, there is a group of four Causative verbs with a transitive base showing -is. See a complete list below:

| ¢ 9 agg | to insult sb. | dagg-is | to make insult sb. |
| :---: | :---: | :---: | :---: |
| šooh | to wash | šooh-iš | to make wash |
| q'eed | to lick sth. | q'eed-is | to make lick sth. |
| Pazaz | to order | Pazaz-is | to make order |
| (From Amharic | zaz- 'to order' |  |  |

The subject of a Causative verb is a causer. The causer represents an added argument to the valency of the verb.

Due to causative derivation transitives become double transitives. The subject of a transitive verb becomes the object of the derived Causative form. See the example of šambo 'child' in the following sentences. In the first one the child is the subject of the underived transitive verb šur 'to suck'. Its object is $\mathbf{9} \mathbf{a b - n e}$ 'breast'. In the second one it is the object, together with $£ \mathbf{9} \mathbf{a b - n e}$ 'breast', of šur-aš 'make suck', which is the causative counterpart of šur. The mother, ?ingiye, is the new subject/causer:

## šam6-o 9 a6-ne šur-i

child-M breast-Pl suck-3SgMUnm
The child sucks the breast.

## Pingiy-e šam6-o=ka ¢a6-ne šur-aš-ti

mother-F child-M=Obj breast-Pl suck-Caus-3SgFUnm The mother makes the child suck the breast.

By causative derivation, intransitive verbs may become transitive. See examples:
kadd to climb kadd-as to put on top

## gaar-ko=ma kadd-i

treeM=to/in climb-3SgMUnm
He climbed on the tree.
Pingiy-e tuusu ka wombo sabbe=ma
mother-F PronF.3SgMPoss Sent womóo top=to/in

## kaddd-as-i

climb-Caus 1-3SgMUnm
He put her mother on the wom6o-tree.

Pawš to be ripen, to boil (intr.) Pawš-aš to make ripen, to boil (tr.)

```
Cand-e Pawš-e
water=Pl ripen-3PlUnm
Water boiled.
```


## zow-a ba 〔and-e Pawš-aš-a

go-PlimpA Cons water=Pl ripen-Caus1-PlImpA Go and boil the water.
ka? to get up suddenly kaP?-is to wake sb. up suddenly

## Paanto kaP?-i

now get up-1SgUnm
I got up now.

## Pano q'awk-o kaP?-is-i

1SgSubj man-M get up.Pun-Caus2-1SgUnm
I woke up a man.
kicca? to laugh kicca?-is to make laugh
moo kicca?-ti?
what laugh-2SgUnm
Why are you laughing?

```
damm-int-e tuusu ki Pee=ka
be.big-Nom-F PronF.3SgMPoss Sent.3 1SgObj=Sent
kiccaP-is-ti
laugh-Caus2-3SgFUnm
His big size makes me laugh.
```

The expression of the object in sentences with Causative verb is not obbligatory. See, for example:

```
damm-int-e t-uusu ki kicca?-is-ti
be.big-Nom-F FConn-3SgMPoss Foc3 laugh-Caus2-3SgFUnm
His big size makes laugh.
```

takk-int-e t-uusu ki murg-is-ti
be.small-Nom-F FConn-3SgMPoss Foc3 be.surprised-Caus2-3SgFUnm
His small size surprises.

The meaning of some causatives cannot be completely predicted.

| q'od | to dig | q'od-as | to plough |
| :--- | :--- | :--- | :--- |
| g'ees | to want | g'ees-as | to be necessary |

Two basic verbs contain a causative suffix. No corresponding verb form without causative suffix is attested. It is remarkable that one of the two, Palgas 'to be able' is intransitive:

Palgas to be able
gaagis to carry on the back

### 7.3.2 Middle -ad

The Middle derivation suffix -ad and its variant -od indicate that the effect of the action is experienced by the subject himself, or that the action is performed for the own interest of the subject. The suffix has most of the meanings described by Mous (2004), which re-examines the classification of Middle verbs proposed by Kemmer (1994) from a Cushitic point of view.
The Middle suffix can indicate that the action affects the body of the subject. Several body oriented Middle verbs belong to the semantic spheres of grooming and body care:

| Yooš | to shave | Pooš-ad | to shave oneself |
| :--- | :--- | :--- | :--- |
| šiin | to smear | šiin-ad | to smear oneself |
| pil | to comb | pil-ad | to comb one's hair |
| ša6 | to tie | šab-ad | to wear |
| pug | to inflate | pug-ad | to get satiated |

Body affecting Middle verbs have the body itself as agent:

$$
\begin{array}{llll}
\text { muts' } & \text { to reduce } & \text { muts'-ad } & \text { to shrink } \\
\text { dab } & \text { to miss } & \begin{array}{l}
\text { dab-ad } \\
\text { ma?sad }
\end{array} & \text { to disappear } \\
& & \text { to sprain }
\end{array}
$$

The Middle verbs with basic forms expressing involuntary body actions such as 'to yawn', 'to breath', 'to sneeze' and 'to hiccup' are shown below:

| šammaPšad | to yawn |
| :--- | :--- |
| nassad | to breathe |
| tiršaq'ad' | to sneeze |
| Peq'ad | to hiccup |

Specification of the body, or spontaneous action, characterises also the Middle derivation of the verb dal 'to give birth':

## Pise Pinanko dal-ti

2 SgFSubj boy give.birth-3SgFUnm
She gave birth to a boy.
Pinanko dal-ad-i
boy give.birth-Mid-3SgMUnm
A boy was born.

The Middle derivation of bad 'to hide something' has to do with body position:

Gad to hide bad-ad to be hidden
Below is a group of basic Middle verbs indicating body position and state:

| daqad | to wait |
| :--- | :--- |
| sexad | to shelter |
| gilbad | to lay on knees |
| Gakkad | to sit |
| gobad | to crouch down |
| tuuts'ad | to twist (e.g. to get into a small hole) |
| šukkad | to trample upon |
| bagad | to run (only for plural subject) |

Several Middle derived verbs indicate that the action aims to affect the subject. The action usually goes to the benefit of the subject. This autobenefactive function of Middle is highly productive (see the same situation in Somali, Saeed 1993: ). Only one verb, geq-ad derivation from the verb gee $£$ 'to want', indicates detriment of the subject:

| bas | to do | bas-ad | to do for oneself |
| :---: | :---: | :---: | :---: |
| bay | to say | bay-ad | to say for oneself |
| ¢add | to add | cadd-ad | to do for oneself |
| bitam | to buy | bitm-ad | to buy for oneself |
| gass | to ask | gass-ad | to ask for one's own interest |
| gee? | to want | gee?-ad | to want (when referring to a situation affecting the subject) |

Other uses of the Middle extension are reciprocal, passive and stative. See the examples below:

Reciprocal
Pook to change ?ook-ad to exchange
Passive
ži? to eat žiP-ad to be eaten
The meaning of a verb can become stative through affixation of the Middle suffix. See below the cases of bus-ad'to be sick', fug-ad' 'to be satiated', gali-ad' 'to be married', log-ad' 'to be spoiled' and raw-ad to be finished:

| buuq | to hurt | buus-ad | to be sick |
| :--- | :--- | :--- | :--- |
| gaPal | to marry | gal?-ad | to be married |
| log | to spoil | log-ad | to be spoiled |
| raw | to finish | raw-ad | to be finished |

A number of verbs appear to contain a frozen Middle. Some Middle frozen verbs with stative meaning refer to feeling, mental conditions and mental activity. See examples:

| q'abad | to feel |
| :--- | :--- |
| c'igad | to love |
| naabad | to hate |
| miPad | to be sleepy |
| Pekkešad | to think |

See two more basic Middle verbs with stative meaning:

| dikkad | to be completed |
| :--- | :--- |
| pagad | to be over |

In addition, there are a few verbs that do not appear without the middle suffix which have Middle meaning. Examples:

Body position
baalaabad to put a head rest on the nape
gaftad to be stuck

## Autobenefactive

waysad to mix for oneself
darbad to throw for oneself
g'insad to beg
It is problematic to include the rest of the verbs with frozen -ad attested in the corpus in one of the middle semantic categories. See a list below:

```
gullasad to see from far
Poladi to wait, be late, spend the day
q'arrasad to take mucus out of the nose
naggadad to trade (from Amharic näggädä 'to trade')
gubad to build
wožžad to work
žammad to enter (plural subject)
Parmad to appear
```


### 7.3.3. Passive -am

The Passive derivation suffix -am and its variant -om change a transitive verb to an intransitive one by suppressing the agent and assigning the subject position to the patient.

In the first example below the verb q'aq' 'to cut' is in basic form. The inflection indicates that a first singular person is performing the action of cutting. The object is mars'a dootte 'a young acacia'. In the second
sentences the same verb $\mathbf{q}$ ' $\mathbf{a q}{ }^{\prime}$, contains the Passive suffix -am and is inflected for 3 SgF . The agreement is with the new subject mars'a dootte 'a young acacia', while there is no indication of the agent. An agent phrase in the Passive is not allowed. See examples:

```
marts'-a dootte q'aq'-i
young.acacia-F one.F cut-1SgUnm
I cut a young acacia.
marts'-a dootte q'aq'-am-ti
young.acacia-F one.F cut-1SgUnm
A young acacia has been cut.
```

Some Passive verbs show semantic overlap with Middle. No semantic difference could be noticed between the Passive and Middle derivations of the following verbs:

| šooh- | to wash | šooh-om | šooh-od | to wash oneself |
| :--- | :--- | :--- | :--- | :--- |
| šiin-ad | to smear oneself |  |  |  |
| šiin- | to smear | šiin-am | sud |  |
| wuyy- | to call | wuyy-am | wuyy-ad | to call for one's interest |

In some cases the surfacing of the middle meaning of 'passive' derived verbs is due to the fact that the subject of a Passive verb does not loose the role of agent. For example, the subjects of the verbs šooh-om 'wash oneself' and šud-am 'get dressed' are patient and agent at the same time.

$$
\begin{array}{llll}
\text { šooh } & \text { to wash } & \text { šooh-om } & \text { to wash oneself } \\
\text { šud } & \text { to cover } & \text { sud-am } & \text { to get dressed }
\end{array}
$$

The Passive expresses reciprocal action in bulam 'to leave each other'. In this respect it functions like a middle in this lexeme.
bul to separate bul-am to leave each other

## tannu bul-am-anki mann-adde=ma Paag-onki

then separate-PAS-1PConsA house- $\mathrm{P}=$ to go back home-1PConsB
Then we left each other and went home
Two verbs that show the Passive suffix in the root, worћam 'to fight' and Pooxam 'to quarrel', have inherent reciprocal meaning. A third one, sukkam 'to roll down', expresses body motion:

| worћam | to fight | (See worћanko 'war') |
| :--- | :--- | :--- |
| Pooxam to quarrel <br> sukkam to roll down |  |  |

The verb žag 'to put in' has acquired a different meaning in the Passive:
žag insert žag-am descent
The Passive derivation of the verb godd 'to do' has the meaning 'to become'.
godd to do godd-am become
daal-e tannu dal-ad-e=bba gaan-inki
goat-P then give.birth-Mid-3PlUnm=Cons be.a.lot-3PlConsA
Payyakko godd-am-inki
many do-Pass-3PlConsA
Then the goats were born and grew in number. There were a lot of them. (Litt: 'They became a lot').

The verbaliser -om also has the meaning 'to become'. See example:
bogol-ko (m) king bolg-om to become king

Another way to convey to meaning 'to become' is by suffixation of the Inceptive -aw (see the following paragraph 7.3.4.).

The suffix -om appears in the following reciprocal verb which has no base form.

## karom co-habit

A variant -um appears in the following verbs with a frozen extension um:

$$
\begin{array}{ll}
\text { Pardulum } & \text { to compete } \\
\text { gussum } & \text { to follow } \\
\text { Porgošum } & \text { to grow up (calf) }
\end{array}
$$

### 7.3.4 Inceptive -aw

The suffix -aw indicates that the subject enters into the state or the condition indicated by the derived lexeme. This suffix can be attached to verbal and non-verbal roots. See examples of verbal derivation by -aw:

| kaћћ | to be hard | kaћћ-aw | to become hard |
| :--- | :--- | :--- | :--- |
| lax | to be green, fresh | laxx-aw <br> lo become green, fresh <br> q'onn | to be slim |

A variant of -aw is -uw. It is attested in a few verbs. One example is šaguw 'collect honey', derivation of the verb šag-. No difference of meaning between the basic and the derived form of this root has been recorded:
šag to collect honey šag-uw to collect honey
-aw is -uw can be found in the verbs xinaw 'to stink' and šukuw 'to frighten', but the meaning of these verbs is not inceptive:

### 7.3.5. Combination of derivational suffixes

A derivational suffix may follow a verb stem already having a derivational suffix. This process results in a sequence of derivational suffixes. The combination of suffixes is restricted by distributional rules. The order of suffixes reflects the order of derivation. The Inceptive -aw is never combined with other suffixes, but it plays a role in the historical background of the verbalisers (see 7.2.).

The general order is Passive-Causative-Middle. In a few exceptional cases, a Middle verb is followed by the Causative suffix -is. The Passive -am can be followed by the Causative2 -is and the Middle -ad. No combination with Causative 1 -as is attested. The use of -is for the causative of a passive is in line with the fact that -is is mainly used with intransitive verbs. Most of the verbs have a root CVC (see 6.1.). The suffixation of two VC morphemes results in a CVCVCVC stem. According to the vowel deletion rule described in 2.7.6., a stem with such a structure looses the second vowel. See below examples of the possible combinations (in the first examples, log 'to rot' and xur 'to give up' are followed by the combination -am-ad. The deleted vowel is the a of -am) :

```
-am-ad
log to rot
log-am to be rotten log-m-ad to be rotten to one's disadvantage
Paxx-e log wuyy-am-is
    wuyy-am-is-ad-m-ad-e
    milk-P rot-Pas-Mid-3PIUnm
    The milk is spoiled (and now I do not have any to drink)
xur to give up
xur-am to be given up xur-m-ad to be given up on one's behalf
    -am-is
Pook to change
Pook-am to be changed Pook-am-is to cause to be changed
```

If the Passive -am is followed by both Causative 2 and Middle suffixes the Causative -is directly follows the Passive and the Middle appears as the last element of the stem. See below the combination of the three suffixes:
-am-is-ad

| wuyy- | to call |
| :--- | :--- |
| wuyy-am | to call on one's behalf |
| wuyy-am-is | to make call on one's behalf |
| wuyy-am-is-ad | to make call on one's behalf |

A verb derived by the Causative 1 -as can only be followed by the Middle suffix -ad
-as-ad
wuyy-as-ad to make call on one's behalf
No difference of meaning has been recorded between wuyy-am-is, wuyy-am-is-ad' and wuyy-as-ad. All of them mean 'to make call on one's behalf'.

A Middle verb with derivation in -ad can only be followed by Causative 2 -is.

> -ad-is
dee6de (f) thirst
dee6-ad to be thirsty dee6-ad-is to make someone thirsty
A double causative is made up of two Causative 2 suffixes. The double causative is not productive. Few examples are attested:

```
-is-is
zaaray-is to make mad
zaaray-is-is to cause to make mad
```

Lexicalised derived verbs can also be derived and their frozen suffix is followed by the derivational suffixes. See the example of the Middle derivation of the lexicalised causative verb gaagis 'to carry'. The Passive suffix -am appears after the whole stem and, therefore, immediately after is. This happens in spite of the fact that according to the normal order the Passive derivational suffix precedes the Causative suffixes:
gaagis to load gaagis-am to be loaded

### 7.3.6. Marginal unproductive suffix -ab

There is evidence for a marginal derivational suffix -ab. This suffix is considered a 'middle voice formative' by Hayward (1989). In the few cases attested in our corpus in which it has a role in derivation, a6 looks like a verbaliser. The only evidence for derivation from a verb is bazza6'to be
plenty'. This verb is the derived form of bazz 'to be plenty', a loan from the Amharic bäzz 'to be plenty'. Verbaliser are often used for loans because loans are treated as nouns. Two denominal verbs with derivation in - $\mathbf{a 6}$ are based on the nouns buke 'meeting' and the attributive noun gaale 'difficult'.

| bazz | to be plenty | bazz-a6 | to be plenty |
| :--- | :--- | :--- | :--- |
| buk-e (f) | meeting | buk-a6 | to gather |
| gaale | difficult | gaal-a6 | experience trouble |

The verb kama6 'to be rich' is possibly connected to the verb kamur, which has the same meaning.
Other attestations of -a6 are found in verbs without basic forms. They are listed below:

| seka6 | to roast meat |
| :--- | :--- |
| korša6 | to weed |
| porima6 | to be brave |
| gaansa6 | to be unready |
| baša6 | to defeat |
| šira6 | to turn |
| pika6 | to be straight |
| žuq'unta6 | to throw wood |
| tumalsa6 | to be paralysed |

If we allow the derivational suffix -a6 to have a variant in - $\mathbf{0}$, one might also add the verb šolo6 'to be swollen' to the list.
Some of the verbs ending in -a6 can be further derived for causative. It is remarkable that the causative derivation is infixed before the unproductive -a6. This fact supports the evidence for the status of -a6 as a grammatical unit. The Causative marker $\mathbf{s}$ appears infixed in the root in the examples below. This is due to metathesis between $\mathbf{k}$ and $\mathbf{s}$. Metathesis worked in order to avoid a cluster ks (see 2.6.3.).

| buka6 | to gather | buska6 | to collect | <*buk-s-a6 |
| :--- | :--- | :--- | :--- | :--- |
| pika6 | to be straight | piska6 | to make straight | < *pik-sa-6 |

The verb gaala6 'to experience troubles' is irregular in that its Causative suffix is palatalised.
gaala6 to experience troubles gaalša6 to cause troubles
The verb baša6 'to defeat' is derived for Punctual and Passive. The Passive derivation is realised by infixation of the element $-\mathbf{m}$ before the $-\mathbf{a} 6$.
baša6 to defeat baš-m-a6 to be defeated
bašša6 to conquer
žuq'unta6 (< *žuq'u-m-ad-a6) 'to throw wood' shows a frozen Passive marker and a frozen Middle suffix. The Passive appears as $\mathbf{n}$ and the Middle as t. tumalsa6 'to be paralysed' is a root with frozen infixed causative. Both verbs can be derived for Causative with suffixation of the Causative 2 -is.
žuq'unta6 to throw wood žuq'unta6-is to make throw wood tumalsa6 to be paralysed tumalsa6-is to paralyse

### 7.4. Derivational stems

### 7.4.1. Punctual geminated stem

Punctual derivation is realized by gemination of the second root consonant. This is usually the root-final consonant.

| raw | to finish | raww | to finish in one time |
| :--- | :--- | :--- | :--- |
| Cul | to jump | Cull | to make a jump |
| bitam | to buy | bittam | to buy one thing |
| baq'ali | sprout | baq'q'ali $^{\text {a }}$ | to sprout at once |

It should be noted that there also exist underived verbs with a CVCC root. These verbs are formally indistinguishable from punctual derived verbs. They do not allow for punctual derivation. See examples with rakk 'to hang', ћegg 'to play', and ћull 'to enter'.:

## layb-e $\mathrm{Pi}=$ nnu rakk-i

cloths-F $1 \mathrm{Sg}=$ Dat hang-3SgMUnm
He hung the cloths for me.
Pabbay-o=yay ћegg-ini
father-M=with play-1SgSubFut
I will play with my father.

## mann-e=ma ћull-iti

house- $\mathrm{P}=$ =to/in enter-3SgFUnm She entered the house.

The punctual derivation marks the punctuality of the action. An example is the difference between $£ \mathbf{u g}$ 'drink’ and $£ \mathbf{u g g}$ 'sip’. The former is a general verb expressing the action of drinking. The latter indicates that the action is performed once or at intervals.
©ug to drink ¢ugg to sip

Other geminated derived verbs expressing punctuality are shown below:

| kad | to climb | kadd | to climb with one movement |
| :--- | :--- | :--- | :--- |
| fug | to inflate | fugg | to inflate with one blow |
| ka? | to get up | kaP? | to get up suddenly |
| q'eed | to lick | q'eedd | to lick once |
| cox | to milk | coxx | to squeeze the udder once |

Punctuality often refers to the object of the action, which is understood as one and not more:

| šab to tie šabb <br> diš̌   | to tie one thing at one time <br> to plant | dišs | to plant one plant at one time |
| :--- | :--- | :--- | :--- |

In the case of the verb gab 'to take', the attention is moved from the use of the whole hand to the use of the fingers only.
gab to take, to catch, to seize gabb to take with the fingers
A Punctual verb can indicate that the subject ideally limits the space setting of the action. For example, the verb lig' 'to go out' implies that the subject leaves a closed space, a house for instance. The derived punctual verb lig'g 'to go out from an open place' implies that the subject leaves an open space, such as a forest or a field, and delimits with its body the point in which he or she moves out. The verb lig'g is also used for the movement of the rising sun.

> lig to go out lig'g to go out from an open place

The use of the Punctual stem is the preferred option in the Imperative. It gives a more immediate connotation to an order:

```
mag-g-i
change.direction-Pun-SgImpA
Leave!
```

There are no lexical or lexicalised verbs with longer structures. Verbal lexems with final gemination are interpreted as basic verbs with final geminated consonant. Only one attested verb, q'omm 'to eat grains', has punctual meaning and is likely to be a lexicalised punctual derived verb.

The meaning of the CVCC verb godd' 'to de' diverges from the meaning of the correspondent basic verbs. It can either be considered as a derived verb with lexicalised meaning or as a basic verb with final geminated consonant.

```
god to braid godd` to do
```

The rest of underived CVCC verbs attested in the corpus are listed below:

| ћull | to enter |
| :--- | :--- |
| beerr | to touch |
| Puppi | to blow |
| q'acc | to open |
| q'all | to start singing |
| šumm | to work hard |
| kell | to help |
| temm | to try |
| rakk | to hang |
| ko?? | to light fire |
| Pucci | to be filled up |
| qadd | to add |
| Pacc | to go |

The lexical or lexicalised $\mathrm{CV}(\mathrm{V}) \mathrm{CC}$ may represent the base stem for suffixal and reduplicative derivational processes, but not for punctual derivation.

### 7.4.2. Iterative reduplicated stem

A derived stem with intensive and iterative meanings is formed by reduplication of the verb root. The reduplicated part is the initial $\mathrm{CV}(\mathrm{V}) \mathrm{C}(\mathrm{C})$. This means that the reduplicated part corresponds to a syllable having a short vowel and a final consonant (CVC), a syllable with short vowel and final consonant cluster (CVCC) or a syllable with long vowel and a final consonant (CVVC). An epenthetic a is infixed between the base and the reduplicated part.
See examples:

| CVC | $\rightarrow$ | CVCaCVC |
| :--- | :--- | :--- |
| Pel | to drop | PelaPel |


| CVCVC | $\rightarrow$ | CVCaCVCVC |  |
| :--- | :--- | :--- | :--- |
| gereq | to steal | geragere | to steal continuously |
| bitam | to buy | bitabitam | to keep on buying |
| Pazaz | to order | Paza?azaz | to keep on ordering |


| CVVC | $\rightarrow$ |  |  |  | CVVCaCVVC |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| ziir | to extract | ziiraziir | to keep on extracting |  |  |  |
| biif | to have a meal | biifabiif | to have a quick meal |  |  |  |

$\mathrm{CVCC} \quad \rightarrow \quad \mathrm{CVCCaCVCC}$
Pupp to blow PuppaPupp to keep on blowing Pawš to be ripe Pawša?awš to be ripe for a long time

| CVCCVC $\rightarrow$ | CVCCaCVCCVC |  |  |
| :--- | :--- | :--- | :--- |
| baq'q' | to sprout at once | baq'q'abaq'q | to sprout at once continuously |
| al |  | 'al |  |
| bittam | to buy one thing | bittabittam | to keep on buying one thing |

The derivation by reduplication indicates that the subject performs the action iteratively or continuously.

| a? | to prepare | gapaga? | to keep on preparing |
| :---: | :---: | :---: | :---: |
| bas | to do | basabas | o keep on doing |
| bi9 | to fall | bicabic | fall several times |
| Pook | to change | Pooka?ook | to keep on changing |
| ?ooss | to shave | PoošaPooš | to keep on shaving |
| 6ul | to jump | 6ula6ul | o keep on jumping |

In some cases the stem indicates that the subject is particularly involved in holding a situation. It is the case of the reduplication of the verb bad 'to hide':

> bad to hide badabad to keep hidden

Involvement of the subject may result in greater intensity. The following derivations generate intensive verbs:

| bog | to kill | bogabog | to destroy |
| :--- | :--- | :--- | :--- |
| biif | to have a meal | biifabiif | to have a quick meal |
| bull | to separate | bullabull | to separate violently |
| Pišk | to untie | Piška?išk | to untie violently |

The reduplication only affects the meaning of the verb. It does not imply plurality of the subject of an intransitive verb, nor plurality of the object of a transitive verb. In this sense, it differs from a Pluractional.

## 8. Other word classes

### 8.1. Adverbials

Adverbials are semantically defined as words providing time, space and manner information to the whole sentence. They do not constitute a morphosyntactic word class. The Ts'amakko adverbials are shown in the following exhaustive lists:

Time adverbials
Paani after
Paanto now

Pawne in the evening
Pawnane in the evening
gallawo at night
geera yesterday
gidano this year
guuyu today
kaarinko everyday
macce never
q'amma the day after tomorrow
q'ammakko two days after tomorrow
q'ammatinko three days after tomorrow
q'ammatinte three days after tomorrow
q'arra before (also space)
q'ayna tomorrow
q'ane during the day
zingano in the morning
zingatte in the morning
Passanna at that moment
hayyay since then
Passanna then
Space adverbials

Pita
Pulo, ?ulu, ?ula on the side
gada on the highland side, up
guddo on the highland side, up
galla on the lowland side, down
gallo on the lowland side, down
garo side (also time. Adverbial noun)
q'aro side (also time)
kaaysa
kaaysanu
kaaynu
away
there
from there
from there

| Paysana | from there |
| :--- | :--- |
| kaasa | here |
| kaakanu | from here |
| ћayna | here |
| hayma | here |

Manner adverbials
Pammake properly
?ekke very
Pèlèlè together
gilinkasa a little
gura equal
kanna quickly
latto naturally, on his own
sollakko slowly
tahtatti at low volume
Pasa so, in this way
Pasama so, in this way
Passayay so, in this way
Paysa so, in this way
Paysama so, in this way
Paysayay so, in this way
Passayay so, in this way
Payssayay so, in this way
Many adverbials are similar to nouns in their morphological make up. Moreover, some adverbials can be combined with case clitics. With the exception of garo 'side' (see below), adverbials can never appear in head noun position. This shows that they are fundamentally different from nouns syntactically.
garo 'side' is a noun (in adverbial function) and appears also in head noun position. See example:

## Pita garo kallikk-o hulla=ma god-ay

away side sun-M enter-3SgMImpfv=ma throw-2SgMConsA
Throw it away towards the side where the sun sets.
In the following sentence garo has temporal meaning and appears as the head noun of the relational noun paann-atte 'before' (for a discussion of this relational noun see 8.2.). The construction garo paannatte has the meaning 'some time ago':
garo paann-atte q'ey?afer=ma lu6-6-e=yay zow-ni
side footprint-LocF Qäy Afär=to/in foot-Pl-P=with go-1PlUnm
Some time ago we went to Qäy Afär by foot.

In adverbial use garo is mainly used with the meaning 'towards the speaker or towards the centre of the action'. Example:

```
garo Pogoy kiy-ti
side come.SgImpA say-3SgFUnm
She said 'come towards (me)'.
```

The other adverbials only function as adverbials. The adverbial q'aro 'in the place' is formally similar to garo 'side', but it has no nominal syntactic characteristics. The two adverbials are also semantically similar in that both of them can be used with space and time meaning. However, the use of q'aro is less restricted. In the following example its meaning may be interpreted as 'in the place of the patient':

```
Pombot-ann-e q'aro xum6i šeeg-i ka
milk container-Pl-P place all bring-3SgMUnm Sent
@ug-is-i
drink-Caus2- 3SgMUnm
```

He made her drink all the milk containers that he brough to her.
In the following example q'aro 'place' means 'close to each other':

## Pufunde q'aro raf-e

3PISubj place sleep-3PIUnm
They slept close to each other.
The adverbial may express the time adverbial meaning 'before', as shown it the following example:
lukkal-itt-o ko q'aro zaq'-nini gayy-i
chicken-Sg-M PronM place slaugher-1PlSubFut remained-3SgMUnm The chicken that we would have slaughtered before remained (alive).

The adverbial also appears as a postposition referring to a location or a temporal adverbial. In the examples below it refers to gaarko 'tree' and to zingatte 'in the morning':

```
gaar-ko q'aro kadd-i ba raf-o
tree-M place climb-3SgMUnm Cons sleep-3SgMConsB
He climbed the tree and slept (there).
```

zingatte q'aro lukkal-itto kutta=ka zaq'-nini
in the morning side chicken-M PronM.Prox1=Sent slaughter1PISubFut
kay-ini
say-1PIUnm
In the morning we said that we would have slaughtered this cock.
Most adverbials share with nouns the property that the final vowel is either $\mathbf{0}$, $\mathbf{e}$ or $\mathbf{a}$, which in nouns represent the gender suffixes. Exceptions are guuyu 'today', Paani 'after' and tahtatti 'at low volume' (loanword, from Amharic tahtat). See examples:

Example with guuyu 'today'
Pano guuyu žiP-o gaP?-a yaaka
1SgSubj today food-M prepare-1SgPastNeg when
Pine žiP-ni=kka
1PISubj eat-1PlUnm=Sent
If today I do not cook we will not eat.
Example with Aaani 'after'
Pano Paani leonšin-a dąan-nanki ka m-bay-i
1SgSubj after busF-F wait for-1PlMainFut Sent 1 -say-1SgUnm
I said: 'Later we will wait for the bus'.
Example with tahtatti 'at low volume'
tahtatti wak
at.low.volume speak.SgImpA
Speak at low volume.
Some adverbials have variants showing the proximal demonstrative/vocative tonal morpheme (see 2.4.4. and 3.9.). The pattern is characterised by high tone on the final mora and low tone on all preceding morae. The final high tone vowel $\mathbf{0}$ and $\mathbf{e}$ may be rised to $\mathbf{u}$ or $\mathbf{i}$ respectively.

The adverbial noun gáro 'side' and the adverbial q'áro 'side' are also attested as garú and q'arú respectively. See examples:
žiP-P-o ga66a ba garú Pine=ma Pogoy-anku food-M take-PlImpA Cons side.Prox/Voc 1Pl=Dir come-2PlConsA Take the food and come towards us.

Pufunde garú bay-e=nnay galla dal-e na 3PISubj side.Prox/Voc start-3PlUnm=Backgr down goat-P Loc žiP-i
eat-3SgMUnm
While they were getting close, down there the goats were eating it.

## gor-e kesse q'arú buka6-i

people-P PronP.Def3 place gather-3SgMUnm
The people gathered in that place.
Other adverbials may also be modified in the same way. See below the examples with zingáno and zinganú both meaning 'in the morning' and the examples with Páwne and Pawní both meaning 'in the evening' (?áwne is the only e-final adverbial that is affected by the modification):

Pufo zingáno kol-i q'oš-ad-i
3SgMSubj in the morning return-3SgMUnm tend cattle-Mid-3SgMUnm He in the morning when again to tend the cattle.

Pano zinganú boћћ-te na nagay-i
1 SgSubj in the morning sow-Nom Loc spend the day-1SgUnm I spend the morning sowing.
(Litt: 'In the morning I spend the day sowing').
lukkal-itto ka Páwne bìy-è goon-ti
chicken-M Sent in.the.evening land-P become.dark-3SgFUnm
na zaq'-anki
Back slaughter-1PlImpfv
In the evening the land became dark and we slaughtered the chicken.

## Pufo Pawní baddo-am-i

3 SgMSubj in the evening hide-Pass-3SgMUnm
In the evening he hid himself.
The final vowel of the adverbial Páwne is also attested as é, i.e., it carries high tone but it is not raised to $\mathbf{i}$.

$$
\begin{array}{lll}
\text { Pawné } & \text { q'ol-e } & \text { goom6-0=ma }=\mathbf{z} \text { zammad-e } \\
\text { in.the.evening } \\
\text { domestic.animal-P kraal-M=to/in } & \text { enter-3PIUnm } \\
\text { In the evening the animals enter in the kraal. }
\end{array}
$$

An adverbial related to Pawne is Pawnáne 'in the evening':

```
le&9-o q'ane Pacc-ini=nay Pawnane
moon-M day go-3SgMSubFut= Backgr in the evening
ligg'i
go out-3SgMUnm
```

During the day the moon goes (far away) and in the evening it comes out.

Some adverbials can be followed by a case clitic. See example of the combination of kaysa 'there' and =nu 'from':

```
makin-a kaysa=nu xaf-ti
car-F there=from come-3SgFUnm
The car comes from there.
```

In the following sentence the adverbial kaysa appears with no clitic:

```
zan-o mangai-a zey-i ba kaysa gil-e
street-M short-3SgMAdj go-3SgMUnm Cons there milk shaker-F
zowu gabb-ad-u
go-3SgMConsA take-Mid-3SgMCons
He went along the short way and (once he arrived) there he took the
milk shaker.
```

Some adverbials appear only with a case clitic. See the example of kaay=nu 'from there':
tiir-a nay kaaynu šala gay-iti
run-3SgMImpfv Backgr from.there Šala arrive-3SgFUnm He run and from there he arrived to Shala.
geera 'yesterday', may show the semantically empty clitic $=\mathbf{y}$ with no change in meaning:

Example with geera 'yesterday'
Pato geera moo bitam-ti
2 SgSubj yesterday what buy-3SgFUnm
What did you buy yesterday?
Example with geera=y 'yesterday'
geera=y Pano wožžad-i
yesterday=fill 1 Sg Subj work-3SgMUnm
Yesterday I worked.
The adverbial q'arra 'before' may show the nominal case marker -atte. q'arr-atte always appears sentence initially. See example:
q'arr-atte miša Pingiy-atte Paxx-e šur-ti
before-LocF Miša mother-LocF milk-P suck-3SgFUnm
Paanto Paxx-e dal-ete ki biif-ti
now milk-P goat-LocP Sent-3 have.a.meal-3SgFUnm
Before Misha used to suck her mother's milk, now she drinks goat's milk.

The basic form of the adverbial, q'arra, may occur at the beginning and in the middle of the sentence. See example of $\mathbf{q}$ 'arra sentence initially:

```
q'arra Pano Paaka beze božž-e božžan-ni
```

before 1 SgSubj and Beze clay-F smear.clay-1PlSubFut first I and Bezi smear ourselves with clay.

When in the middle of the sentence, q'arra could be interpreted as a relational postposition that specifies the relative time of a preceding noun phrase. See two examples:

## baq'q'ala miša=nu q'arra ki dal-ad-i

baq'q'ala Miša=from before Sent. 3 give.birth-Mid-3SgMUnm Baq'q'ala was born before Misha.

## maang-o le£̧-e zeћ=ta q'arra boox-i

sorghum-M moon- P three=upon before sow-3SgMUnm
He sowed the sorghum three months ago.
zingatte 'in the morning' also shows the female locative case suffix -atte, but it has no basic form. However, it is related to zingano 'in the morning'. See examples with zingatte and zingano:

| biif-u | gallawu raf-u | zingatte |
| :--- | :--- | :--- |
| have.a.meal-3SgMConsA | at night | sleep.3SgMConsA |
| ka? |  |  |
| in.the.morning |  |  |

Pufo zingano kol-i q'oš-ad-i

3SgMSubj in.the.morning return-3SgMUnm tend.cattle-Mid-3SgMUnm In the morning he went again to tend the cattle.

The nominal derivation suffixes -akko and -inko can be recognised in the shape of adverbials such sollakko 'slowly' and kaarinko 'everyday'. See examples:

## sollakko ?ood

slowly walk-SingImpA
Go slowly!
kaarinko q'ayto xumbi q'ol-e Pellele goš-ad-e
everyday time all cattle-P together tend-Mid-3PlUnm
Everyday they were always tending cattle together.
The adverbials q'ammakko 'two days after tomorrow', q'ammatinko and q'ammatinte both meaning 'three days after tomorrow' stem from q'amma 'the day after tomorrow' and show nominal morphological material. See examples:

Example with q'amma 'the day after tomorrow' q'amma žinka n-zow-ni
day.after.tomorrow Jinka 1 -go-1SgMSubFut The day after tomorrow I will go to Jinka.

Example with q'ammakko 'two days after tomorrow' q'ammakko žinka n-zow-ni
two.days.after.tomorrow Jinka 1-go-1SgMSubFut Two days after tomorrow I will go to Jinka.

Example with q'ammatinko 'three days after tomorrow' q'ammatinko gabaya=ma n-zow-ni three.days.after.tomorrow market=to/in 1-go-1SgMSubFut Three days after tomorrow I will go to Jinka

Example with q'ammatinte 'three days after tomorrow'
q'ammatinte gabaya=ma n-zow-ni
three.days.after.tomorrow market=to/in 1 -go- 1 SgMSubFut Three days after tomorrow I will go to Jinka.

The adverbial gada 'towards the higlands' may replace the final a with the third person subject marker i. This subject marker may attach to the background maker ka (which appears as $\mathbf{k i}$ ) and the case clitic =ma 'in/to' (which appears as $=\mathbf{m i}$. See 4.5.1.). See example of gada and gadi:
max-x-e xumbi ki lass-i

bead-Pl-P all | Sent. 3 |
| :--- |
| sell- 3 SgMUnm |

zow-u
go-3SgMConsA
He sold all the beads and went towards the highlands to the pump.
tannu gad-i Per〔ad-i
then up-3 go down-3SgMUnm
Then (the moon) goes down towards the highlands.
A word medial variation a~i is shown by Pammake 'properly', which may appear as Pammike. The alternation is accidental and cannot be explained by the presence of the third person subject marker i. See examples:
šam6-o garm-o ka Pammake PiP-i
child-M lion-M Sent properly see-3SgMUnm
The child had clearly seen the lion.
Pano Pammike mann-e garis-i
1SgSubj properly house-P build-3SgMUnm I built a house properly.

Some adverbials result form the combination of a limited group of elements. The sentence marker ka, which appears as kaa, the pronominal definite suffix - Pa and the element $\hbar \mathbf{a}$, which has no parallels in the rest of the grammar take initial position in these. They may be followed by semantically empty clitic $=\mathbf{y}$ and/or the definite suffix -(s)sa. Most of these adverbials also include a case clitic or the locative pronoun na.

The adverbials with initial ka are concrete locative adverbials 'here'. Some of them combine with the clitic =nu.

Example with kaaysa 'there'
$\begin{array}{llllll}\text { zan-o } & \text { mangai-a } & \text { zey-i } & \text { ba } & \text { kaaysa } & \text { gil-e } \\ \text { street-M } & \text { short-3SgMAdj } & \text { go-3SgMUnm } & \text { Cons } & \text { there } & \text { shaker-F }\end{array}$
zow-u gabb-ad-u
go-3SgMConsA take-Mid-3SgMCons
He went along the short way and (once he arrived) there he took the shaker.

Example with kaaysanu 'from there'
makin-a kaaysanu xaf-ti
car-F from.there come-3SgFUnm
The car comes from there.
Example with kaaynu 'from there'
tiir-a nay kaaynu šala gay-iti
run-3SgMImpfv Backgr from.there šala arrive-3SgFUnm He kept on running and from there he arrived to Shala.

Example with kaasa 'here'
kaasa ?ee=ka daћad-a
here $1 \mathrm{Sg}=\mathrm{Obj}$ wait.for-3SgMImpfv
Wait here for me.
The adverbial kaakanu is the only one showing the sentence marker ka. It has the meaning 'from here'. See example:

Example with kaakanu 'from here'
kaakanu zey-i
from.here go-3SgMUnm
He went from here.
The meaning of the adverbials with initial $\mathbf{P a}$ and $\hbar \mathbf{h a}$ is more obscure. Those with initail Pa are given the basic meaning 'so, in this way'. Those with initial ha are given the basic meaning 'there'.

In the following examples, the adverbial Pasa means 'so, in this way'.

```
garm-o Pasa Pabb-ay-o ki bog-i
```

lion-M so father-M-M Sent. 3 kill-3SgMUnm The lion killed the father in this way.

The adverbial Pasama, which incorporates the clitic =ma 'to/in', has the same meaning of Pasa:

## kulile $\quad$ Pasama xoxon-k-o gidde=ma raaw-at-ti

guinea.fowl so=to/in hole-Sg-M inside=to/in finish-Mid-3SgFUnm The guinea fowl died in the hole in this way.

The adverbial base Paysa appears in Paysana, which incorporates the locative postoposition na, Paysama, which incorporates the case clitic =ma 'to/in, and Paysayay, which shows the case clitic =yay 'with'. ?aysana has locative meaning, as can be seen from the following example:

```
Paysana ligt-i=kka
there go.out-NonPstNeg=Sent
You will not get out of there.
```

The meaning 'so, in this way' emerges in Paysama and Paysayay. See examples:

```
Paysama dikkad-inki
so finish-3PlConsA
They finished in this way
```

Paysayay gelzakk-o par-i
so baboon-M die-3SgMUnm
The squirrel died in this way.

The adverbial base Passa is attested in Passanna, Passayay. The adverbial Passanna has temporal meaning.

Passanna pann-atte Pufunde xumbi ¢akkad-e ba
then footprint-LocF 3PlSubj all sit-3PlUnm Cons
©ar-e ¢ug-e
coffee-F drink-3PlUnm
After that (moment), all of them sat down and drank coffee.
Passayay is attested with the meaning 'so, in this way':

## garro ka Passayay šannaf-i

sqirrel Sent so defeat-3SgMUnm
In this way he defeated the squirrel.

Payssayay is attested only in the following example with the meaning 'so, in this way':

Payssayay gelzakk-o gaftad-i<br>so baboon-M get.poisoned-3SgMUnm

In this way the baboon got poisoned.
The adverbial base hay is followed by the locative pronoun na in ћayna, the clitic =ma 'to in' in hayma and the clitic =yay 'with' in hayyay. The meaning of hayna and hayma is 'here'. hayyay means 'since then'. See examples:

Paanto hayna Pag-i<br>now here be.located-3SgMUnm<br>Now I live here.<br>gallawu hayma raf-inki<br>at night here $=$ to/in sleep-3PlConsA<br>At night he slept here.

ћayyay gaan-t-e bolq'-um-ma
here=with woman-Sg-F elect.as.king-Pass-3Sg.Neg
Since then no woman was elected as king.

### 8.2. Relational nouns

The relational nouns have the grammatical function to indicate a position with respect to a location. They show the locative case suffix and appear after the location they relate to. The related location is a noun followed by the locative case suffix or an element of a different class followed by the locative clitic =ta or, more rarely, by the locative pronoun nay.

Even though the relational nouns form a small set, they show two different levels of grammaticalisation. The lowest level of grammaticalisation is shown by a group of four relational nouns that appear in all syntactic positions occupied by common nouns. Their grammatical meaning is connected to the lexical meaning they express in the other syntactic contexts. They are låakko meaning 'field' and 'outside'; miinte meaning 'forehead' and 'in front of'; duko meaning 'back' and 'behind', paana meaning 'footprint' and 'after'.
$\boldsymbol{l} \boldsymbol{a} \neg \boldsymbol{a} \boldsymbol{k} \boldsymbol{k}-\boldsymbol{o}(\mathrm{m})$ 'field' $\rightarrow$ 'outside'
šam6-o paš-ilo ląakk-ilo
child-M field-LocM field-LocM
The child is outside the field.
miint-e (f) 'forehead' $\rightarrow$ 'in front of'

## šam6-o gaark-ilo miint-atte

child-M tree-LocM forehead-LocF
The child is in front of the tree
mann-e pawlos mann-e ts'eggay nay miint-atte
house-P Pawlos house-P Ts'eggay Loc forehead-LocF Pawlos' house is in front of S'eggaye's house

## duk-o (m) 'back' $\rightarrow$ 'behind'

šam6-o gaark-ilo duuk-ilo
child-M tree-LocM back-LocM
The child is behind the tree
mann-e ts'eggay mann-e pawlos nay duuk-ilo
house-P Ts'eggay house-P Pawlos Loc back-LocM
S'eggaye's house is behind Pawlos' house
The noun paana 'foorprint' is included in this group even though in relational function the noun appears as paann-atte 'after', with irregular gemination of the final consonant. Gemination of the last root consonant is characteristic of nouns; howev er it is used to form plural derived forms, while the locative suffix attached to paana is feminine.

```
paan-a (f) 'footprint' }->\mathrm{ 'after'
    gelzakk-o garr-ilo paann-atte Pogoy-a
    baboon-M squirrel-LocM footprint-LocF come-3SgMImpfv
    The baboon was following the squirrel
```

paana is the only relational noun that can express a temporal relation.

## maksepno senp-ilo paann-atte

Tuesday Monday-LocM footprint-LocF
Tuesday is after Monday
paana is irregular also because it has an adverbial function.
Pise=kka paann-atte ћull-iti
2 SgFSubj=Sent footprint-LocF enter-3SgFUnm
She entered after
ts'eggay pawlos=nu paann-atte xaf-i
Ts'eggay Pawlos=from foortprint-LocF come-3SgMUnm
Ts'eggay arrived after Pawlos
The remaining relational nouns are more grammaticalised because they have no manifestation other than in grammaticalised position. However, they still
need the locative gender suffix in order to express their grammatical function. Their glosses indicate the hypothetical lexical meaning.

The second group of relational nouns are syntactically more similar to case clitics than to nouns. In spite of this fact, they are classified as nouns because some characteristics of the case clitics are incompatible with the behaviour of the relational nouns: clitics occur as the last element of a phrase-therefore they may appear after a relational noun, while a relational noun cannot follow a case clitic; clitics are never followed by locative case; their CV structure is not characteristic of any noun.
gid-atte 'in the interior, inside'
q'om-ayk-e dunk-atte gid-atte ?ag-e
shoes-Pl-P tent-LocF interior-LocF be.located-3PlUnm
The shoes are in the tent
Gand-ete gid-atte 6ull-anna
water-LocP interior-LocF jump-1PlJuss
Let's jump into the water
sabb-ete 'on the top, on'
šam6-o gaark-ilo sabb-ete
child-M tree-LocM top-LocP
The child is on the tree
gul-ilo 'at the bottom, under'
šam6-o gaark-ilo gul-ilo
child-M tree-LocM bottom-LocM
The child is under the tree
saark-ilo 'in the middle, between,
boyt-ann-ete šaark-ilo zoog-inki
boytakko-P-LocP middle-LocM distribute-3PlConsA
They distributed them between the boytakko-trees
q'ey?afer luq'a Paaka q'aq' $=$ =ta šaark-ilo
Qäy Afär Luq'a and Q'aq'o=Upon middle-LocM
Qäy Afär is between Luqa and Qaqo

### 8.3. Interrogatives

Words with interrogative function end in $\mathbf{0}$ or a. Some interrogatives are made up of one of these words and a case clitic. In one case, the locative postposition na is cliticised. The interrogative pronouns 'whose?' and the 'which one?', characterised by the presence of the pronominal particles, are described in 5.5.4 and 5.5.5. respectively. See below a list of interrogatives:

| moo | what? |
| :--- | :--- |
| moonu | why? |
| moona | why? |
| Páћá | who? |
| Paћama | towards whom? |
| Paћaya | with whom? |
| Pakka | where? |
| Pakkama | where to? |
| Pakkanu | where from? |
| Pakkura | where to? |
| bara | when? |
| mala | how? |
| me? | how many? |
| kaћћa | whose? (m/p) |
| taћћa | whose? (f) |
| kunda | which one? (m) |
| tinda | which one? (f) |
| kinda | which one? (p) |

See examples of the interrogatives in the following sentences:

## moo bitan-ti

what buy-2SgUnm
What did you buy?
moonu zow-ti
what.from go-2SgUnm
Why did you go?

## moona goddi-ti

why.loc do-2SgUnm
Why did you do it?
gaabay-a=ma Páћá zow-i
market-F=to/in who go-2SgUnm
Who went to the market?
Páћá=ma Pacc-iti
who=to/in go-2SgUnm
Who did you go to?
Páћá=ya gabay-a=ma zow-ti
who=with market-F=to/in go-2SgUnm
With whom did you go to the market?

## Pakka Pag-inti

where be.located-2SgSubFut

Where will you live?

## Pakka=ma sor-i

where=to/in run-3SgMUnm
Where is he running to

## Pakka=nu xaf-ti

where=from come-2SgMUnm
Where is he coming from
Pakkura Pacc-iti
where.to go-2SgUnm
Where are you going?
bara xaf-e
when come-3PIUnm
When did they come?
mala wožžat-ti
how do-2SgUnm
How did you do it?
gor-e me? xaf-i
people-P how.many come-3SgMFocUnm
How many people came?

## 9. Texts

The following three folktales have been written down in Ts'amakko by Bašare Manka, one of my main informants. The Amharic script has been used for this purpose. Some characters had been adapted to indicate those Ts'amakko sounds that are not present in Amharic. The texts have been recorded, analysed and glossed with the help of Bašare and another main informant, Beze Laybo. The actors of the these folktales are animals. The squirrel, garro, is the main character. It appears as the smartest of all animals in the Ts'amakko oral literature.

### 9.1. Maakke gelzakkilo Aaaka maakke garrilo

The tale of the baboon and the squirrel

## gelzakk-o Paaka garr-o q'arra le?-e Pèlèlè goš-ad-e

baboon-M and squirrel-M before cows-P together tend.cattle-Mid-3PIUnm One day the baboon and the squirrel were tending cows together.
q'ayt-o xumbi le?e Pèlèlè goš-ad-e
time-M all cows-P together tend.cattle-Mid-3PlUnm
They were always tending cows together.
baami, Pingiy-add-e kaani $\quad$ Pufunde Pag-a ba
friend mother-Pl-P PronP.1PlPoss 3SgPSubj be.located-3SgMFocImpfv Cons
Pine gals-o xur-anki
1PISubj marrying-M leave-1PlImpfv
'Friend! Our mothers are alive and we cannot get married.
Pogoy ba Pingiy-add-e kaani ka
come.SgImpA Cons mother-Pl-P PronP.1PlPoss Sent
sukk-as-nanki Pee
roll.down-Caus-3PlMainFut ok
Come and let's make our mothers roll down'. 'Ok!'.

```
gelzakk-o Pingiy-e tuusu ka ¢agal-t-e=ma
baboon-M mother-F PronF.3SgMPoss Sent leather.sac-Sg-F=to/in
qadd-i ba sukk-as-o
put.in-3SgMUnm Cons roll.down-Caus-3SgMConsB
The baboon put his mother in a leather sac and let her roll down.
```

```
garr-o Pingiy-e tuusu ka xur-i ba gaah-k-o
```

squirrel-M mother-F PronF.3SgMPoss Sent leave-3SgMUnm Cons stone-Sg-M Gagal-t-e=ma ¢add-i ba sukk-as-o
leather.sac-Sg-F=to/in put.in-3SgMUnm Cons roll.down-Caus-3SgMConsB
The squirrel left her mother and put a stone in the leather sac and let it roll down.

## garr-o kiy-a nay Pingiy-e taћa=y ki

squirrel-M say-3SgMImpfv Backgr mother-F PronF.whose=Fill Sent. 3
haš haš ?asa sukk-am-na
haš haš so roll.down-Pass-3SgMFocMainFut
The squirrel had said 'Whose mother will roll down making the haš haš sound of leaves?

## Pingiy-e taayu kuh kuh Pas-i sukk-am-inti

mother-F PronF.1SgPoss kuh kuh so-3 roll.down-Pass-3SgFSubFut My mother will roll down making the kuh kuh sound of stones.

## Pingiy-e garm-atte Pas-i sukk-an-ti

## Peem-a

mother-F brave-AdjF so-3 roll.down-Pass-3SgFUnm look.at- SgImpB The brave mother rolls down like this. Let's see!'.
garr-o kaP3-i ba Pingiy-e tuusu ka
squirrel-M get.up-3SgMUnm Cons mother-F PronF.3SgMPoss Sent
Pom6-o sabb-e=ma kadd-as-u
?ombo.tree-M top=to/in climb-Caus-3SgMConsA
The squirrel left and made his mother climb on top of a Aomóo-tree.
kaddot-as-i ba garr-o le?-e goš-i
climb-Caus-3SgMUnm Cons squirrel-M cows-P tend-3SgMUnm
He made her climbing and the squirrel kept tending the cows.

## gelzakk-o maar-e goš-i

baboon-M heifers-P tend-3SgMUnm
The baboon tended the heifers.

```
garr-o zingatte zow-a ba Pingiy-e
squirrel-M in.the.morning go-3SgMImpfv Cons mother-F
tuusu=ta nats'ir-o ts'iir-akk-o
PronF.3SgMPoss=upon mother.of.male.F-M male-Sg-M
kaaki=nu war bay-i nay
PronM.2SgFPoss=from throw.SgImpA say-3SgMUnm Backgr
ga\hbar\hbaris-ti
shake-3SgFUnm
The squirrel in the morning went and said to his mother 'Mother of a male
child, throw to your male child' and she shook the tree.
```

Pom6o ko ${ }^{2}$ a=kka garr-o ži $\mathbf{z - o}$ ba
Pom6o-tree PronM.Def1=Sent squirrel-M eat-3SgMConsB Cons
pug-am-u ba ¢aag-o
fill-Pass-3sgMConsA Cons return.home-3SgMConsB
The squirrel ate the fruit of the Aomóo tree, satiated himself and returned home.
zingatte le?-e=yay ka?-P-i
in.the.morning cows- $\mathrm{P}=$ with get.up-Punct-3SgMUnm In the morning he left with the cows.
kole?aka zingatte garr-o le?-e goš-i
again in.the.morning squirrel-M cows-P tend-3SgMUnm He was tending cows again in the morning.
kole?aka zow-u ba nats'ir-o ts'iir-akk-o
again go-3SgMConsA Cons mother.of.male.F-M male-Sg-M
kaaki=nu war bay-i nay
PronM. 2 SgFPoss=from throw.SgImpA say-3SgMUnm Backgr
nu=nnu $\operatorname{Pom6-o}$ ka gaћћis-ti
Loc=Dat Pom6o.tree-M Sent shake-3SgFUnm
He went again and said 'Mother of a male child, throw to your male child' and she shook the Aomóo tree for him.

## ki q'ayto xumbi nu=nnu gaћћis-a=bba ki žípa

Sent. 3 time-M all Loc=Dat shake-3SgFImpfv=Cons Sent. 3 are-3SgMImpfv All the time she shook for him and he ate.
gallawo ko pug-ad-i ki Pogoy-a
at.night PronM fill-Mid-3SgM Sent. 3 come-3SgMImpfv
At night he got satiated and came back.
bayi garr-o Pato moožiP-ti ba q'ayto xumbi
friend squirrel-M 2 SgSubj what eat-2SgMUnm Cons time-M all
ka pug-ad-ay
Sent fill-Mid-2SgImpfv
'Friend squirrel, what do you eat to get satiated all the time'.
Pana Pano leP-ete gaass-e rukadi ba gaass-e
1 SgSubj.Emph Sent cows-LocP horns-P pinch-1SgUnm Cons horns-P
Pa=nnay deematt-o ka žiP-ad-a ka n-pug-ad-a.
there=Loc cattle.blood-M Sent eat-Mid-1SgImpfv Sent 1-fill-Mid-1SgImpfv 'Me? I pinch the horns of the cows and eat the blood of the horns and get satiated'.
zingatte garr-o leP-ete paann-atte kaPP-u in.the.morning squirrel-M cows-LocP footprint-LocF get.up-3SgMConsA In the morning the squirrel left behind the cows.

Pacca nay Pingiy-atte nats'ir-o ts'iir-akk-o
go-3SgMImpfv Backgr mother-LocF mother.of.male.F-M male-Sg-M
kaaki=nu war bay-i nay

PronM.2SgFPoss=from throw.SgImpA say-3SgMUnm Backgr
$\mathbf{n u}=\mathbf{n n u}$ g'aћћis-ti
LocM=Dat shake-3SgFUnm
While he was going he said to the mother 'Mother of a male child, throw to your male child' and she shook for him.

## ží?-o pug-ad-u Saag-o

eat-3SgMConsB fill-Mid-3sgMConsA return.home-3SgMConsB
He ate, got satiated and returned home.
gelzakk-o garr-ilo paann-atte ka? P-i ki
baboon-M squirrel-LocM footprint-LocF get.up-3SgMUnm Sent. 3

## Pogoy-a

come-3SgMImpfv
The baboon left after the squirrel and arrived.
garr-o zey-i nay gelzakk-o xaf-i
squirrel-M go-3SgMUnm Backgr baboon-M come-3SgMUnm
The squirrel went and the baboon arrived.

## nats'ir-o ts'iir-akk-o

go-3SgMImpfv Back mother-LocF mother.of.male.F-M male-Sg-M
kaaki=nu war na=ta gelzakk-o kiy-i

PronM.2SgFPoss=from throw.SgImpA Loc=Loc baboon-M say-3SgMUnm
'Mother of a male child, throw to your male child' said the baboon to her.

```
zik kiy-i Pag-ti.
```

zik say-3SgMFocUnm be.located-3SgFUnm
She kept silent.

## Peem-a kadd-ina ba kallacc-o kinni

look.at-SgImpB climb-1SgMainFut Cons rectum-M PronF.3SgFPoss
miint-e=ma šabb-a
forehead- $\mathrm{F}=\mathrm{to} / \mathrm{in}$ tie-3SgMJuss
'Look! I will climb and I will tie your rectum on your forehead'.
kadod-u ba kallacc-o ka miint-e=ma ninnu
climb-3SgMConsA Cons rectum-M Sent forehead-F=to/in LocF=Dat
šabb-u
tie-3SgMConsA
He climbed and tied the rectum on her forehead.
zingatte garr-o xaf-o nats'ir-o ts'iir-akk-o
in.the.morning squirrel-M come-3SgMConsB mother.of.male.F-M male-Sg-M
kaaki=nu war bay-i nay
PronM.2SgFPoss=from throw.SgImpA say-3SgMUnm Backgr In the morning the squirrel arrived and said 'Mother of a male child, throw to your male child'.

## zik kiy-i Pag-ti.

zik say-3SgMFocUnm be.located-3SgFUnm
She kept silent.
tannu gallawo Pag-o ba ki Pooy-a ba
then at.night return.home Cons Sent. 3 cry-3SgMImpfv Cons
garr-o moo koo day-i bay-i nay
squirrel-M what 2SgMObj get-3SgMUnm say-3SgMUnm Backgr
Then at night he returned home and cried and he said 'What happened to you squirrel?'.
le?-e Ree=ka kirrim-me=yay tu66-a ka n-Pooy-a
cows-P 1SgM=Obj tail-P=with beat-3SgMFocImpfv Sent 1-cry-1SgImpfv
'I cry because the cows beat me with the tails'.
Pinto Polk-o-se Pano koo=ta Pingiy-e taako ka
wow thing-M-Def 1SgSubj 2SgM=Loc mother-F PronF.2SgMPoss Sent
bog-i=nu ka Pasa godd-iti mu Pasa bay-i
kill-3SgMUnm=from Sent so do-2SgUnm or so say-3SgMUnm
nay kicca?-i
Backgr laugh-3SgMUnm
'Wow! Or you do like this because I killed your mother to you?', he said so and laughed.

Polk-o-se Pato Pingiy-e taayu ka bog-i
thing-M-Def 2SgSubj mother-F PronF.1SgPoss Sent kill-3SgMFocUnm kiy-i
say-3SgMUnm
'Is it true that you have killed my mother?' he said.
Pinni Pano bog-i na=ta kiy-i ba zow-u
yes 1 SgSubj kill-3SgMUnm Loc=Loc say-3SgMUnm Cons go-3SgMConsA 'Yes I killed her' and left.
nu=nnu dòòll-ò=ma toont-e šiin-u ba Pufo
LocM=Dat skin.mat-M=to/in poison-F smear-3SgMConsA Cons 3SgMSubj
gelzakk-o rigad-u
baboon-M call-3SgMUnm
He smeared poison on a leather mat and called the baboon.

## baami Pogoy bagan-nanki q'awk-o dò̀̀ll-ò

friend come.SgImpA run-1PlMainFut man-M leather mat-M
c'aldax-a=ma giipp-i tsíirakk-o kiy-i
be.soft-3SgMAdj=to/in sleep-3SgMUnm male-Sg-M say-3SgMUnm
He said 'Friend! Come, let us run. Who sleeps on the soft leather mat is the man'.
dò̀òll-ò-se c'aladax-a naa=ma toont-e goddf-i=ma
skin.mat-M-Def be.soft-3SgMImpfv Loc=to/in poison-F do-3SgMUnm=to/in
bagad-inki
run-3PlConsA
They run towards the soft leather mat on which he had put poison.
gelzakk-o dò̀̀ll-ò-se toont-atte=ma sor-i ba
baboon-M skinmat-M-Def poison-LocF=to/in run-3SgMUnm Cons
giip-p-u
sleep-Punct-3SgMConsA
The baboon ran towards the poisoned leather mat and slept.
garr-o dooll-o bis-a=m-i g'iip-p-i.
squirrel-M skin.mat-M be.white-3SgMAdj=to/in-3 sleep-Punct-3SgMUnm The squirrel slept on the white leather mat.

## hayssa=yay gelzakk-o gaftad-i

so=with baboon-M get.stuck-3SgMUnm
In this way the baboon got stuck.
toont-e duuk-o=ma gab-di
poison- F back-M=to/in take-3SgFUnm
The poison covered the back.
tannu bayi gelzo ka? i i le?-e c'ox-nanki
then friend baboon.Voc get.up.SgImpA cows-P milk-1PlMainFut Then 'Friend baboon, get up, let's milk the cows'.
kaP?-i=kka malal-i dooll-o Pèlèlè
get.up. 3 SgMNonPstNeg=Neg be.tired-1SgUnm skin.mat-M together ka? 3 -i
get.up-1SgUnm
'I do not get up. I am tired. I get up together with the leather mat'.
Pano le?-e c'ox-na giif kiy-i garr-o
1SgSubj cows-P milk-1SgMainFut sleep.SgImpA say-3SgMUnm squirrel-M
The squirrel said 'I will milk the cows. Sleep!'.
haysa=yay gelzakk-o par-i
so=with baboon-M die-3SgMUnm
In this way the baboon died.
biddir-e-se Pingiy-e tuusu=ta ka garr-o laag-i
debt-F-Def mother-F PronF.3SgMPoss=Upon Sent squirrel-M turn-3SgMUnm The squirrel returned the debt of his mother.

### 9.2. Maakke kulilatte Aaaka maakke garrilo

The tale of the guinea hen and the squirrel
(With the word kulile the Ts'amakko indicate the guinea fowl irrespective of its sex. In this folktales, however, the animal is considered female. Therefore in the translation it is called guinea hen and is referred to as a female entity).
garr-o Paaka kulil-e paš-o Pèlèlè q'od-e=bba pašo
squirrel-M and guinea.fowl-F field-M together dig-3PIUnm=Cons field-M
\}awš-u
ripen-3SgMConsA
The squirrel and the guinea hen dug the field together and the field ripened.

## Pèlèlè door-o door-ad-inki

together granary-F prepare.granary-Mid-3PlConsA
They prepared the granary together.

## garr-o kulil-atte kiy-a nay ber-k-o

squirrel guinea.fowl-LocF say-3SgMImpfv Backgr rainy.season-Sg-M
xaf-na ba door-o žiP-onki Paanto wa?P-e žiP-nini
come-3SgMMainFut Cons granary-M eat-3PlConsB now beans-P eat1PISubFut
The squirrel said to the guinea hen 'The rainy season comes and we will eat the grains of the granary. Now let's eat beans'.

Pufo door-o ka q'ayt-o xumbi ki ži?-a
3SgMSubj granary-M Sent time-M all Sent. 3 eat-3SgMImpfv
He was eating the grains of the granary at all times.
tannu Perr-o dib-u kulil-e garr-ilo gassaddo-o
then rain-M rain-3SgMConsA guinea.fowl-F squirrel-LocM asking-M
xaf-oy
come-3SgFConsB
Then, the rain came and the guinea hen came to ask to the squirrel.
garr-o Perr-o-se dib-i na kaPP-iti=bba door-o
squirrel-M rain-M-Def rain-3SgMUnm Back get.up-2SgUnm=Cons granary-M
bod-na ba booh-anki na=ta bay-i nay
dig-1PIJuss Cons sow-1PlImpfv Loc=Loc say-3SgMFocUnm Backgr
'Squirrel, the rain has come, get up and let's dig in the granary and let's sow'.
tannu garr-o Pas-i kiy-i muga?-ti bi¢-ay
then squirrel-M so-3 say-3SgMUnm head -F.pragm be.white-3SgFAdj
Pa=nna le?-ite šooћ-e PiPti ba Perro dib-i
there $=$ Loc cows-LocP urine-F see-2SgUnm Cons rain-M rain-3SgMUnm
kay-ay
say-2SgImpfv
Then the squirrel said so 'White head! You saw cow's urine and say that the rain came'.
duuk-o kondusk-u Pa=nna Pato kiy-a nay
back-M broken.back-M.Prox/Voc there=Loc 2SgSubj say-3SgMFocImpfv Backgr
Perr-o dib-na ba door-o ži?-onki kiy-a ba
rain-M rain-3SgMMainFut Cons granary-M eat-3PlConsB say-3SgMFocImpfv
Cons
Pano=kka xaf-o
1 SgSubj=Sent come-1SgConsB
'Broken back! You said 'The rain comes and we will eat the granary' and I came'
zow ba door-o bod-d-ay garr-o Pas-i
go.SgImpA Cons granary-M dig-Punct-2SgConsA squirrel-M so-3
kiy-i kulil-atte
say-3SgMUnm guinea.fowl-LocF
The squirrel said so to the guinea hen 'Go and dig in the granary'.
kaysa xaf-ti na door-o žiP-ad-i
there come-3SgFUnm Back granary-M eat-Mid-3SgMUnm
When she arrived there the granary had been eaten.
Pato door-o žiP-i kiy-iti kulil-e garr-ilo
2SgMSubj granary-M eat-3SgMFocUnm say-3SgFUnm guinea.fowl-F squirrel-

## LocM

The guinea hen said to the squirrel 'You ate the sorghum of the granary!'.
Pinda c'aq'-nanki c'aaq'-e Pille=ta Peem-nini kiy-i
come.on defecate-1PlMainFut faeces-F self=upon look.at-1PlSubFut say3SgMUnm

## garr-o kulil-atte

squirrel-M guinea.fowl-LocF
The squirrel said to the guinea hen 'Come on, let's defecate and let's look at our own faeces'.

Pinda muunt-o Peem-ni c'aaq'-onki
come.on sky-M look.at-1PlUnm defecate-3PlConsB
kulil-atte garr-o Pas-i kiy-i
guinea.fowl-LocF squirrel-M so-3 say-3SgMUnm
The squirrel said so to the guinea hen 'Come on, let's look at the sky and defecate'.
kulil-e Paaka garr-o c'aq'-e=nnay garr-o

```
guinea.fowl-F and squirrel-M defecate-3PlUnm=Backgr squirrel-M
c'aq'-e kulil-atte ka \hbarark-o=yay xurr-i ba
```

faeces-F guinea.fowl-LocF Sent hand-M=with send-3SgMUnm Cons
ga6-6-0 ba Pille=nu saq'-q'-ad-o
take-Punct-3SgMConsB Cons self=from store-Punct-Mid-3SgMConsB While the guinea hen and the squirrel were defecating the squirrel stretched his hand and took the faeces of the guinea hen and placed it to himself.

## c'aq'e kuusu ka kulil-e=nu saq'-o

faeces-F PronM.3SgMPoss Sent guinea.fowl-F=from store-3SgMConsB He placed his faeces by the guinea hen.
c'aq'-e tannu Pille=ta Peem-na kiy-i kulul-atte
faeces-F then self=upon look.at-1PlJuss say-3SgMUnm guinea.fowl-LocF Then he said to the guinea hen 'Let's look at our own faeces'.

Peem-e=nna c'aq'-e kulul-atte maang-o ke
look.at-3PlUnm=Back faeces-F guinea.fowl-LocF sorghum-M PronP
garr-ilo $\quad$ ¢aš-k-o
squirrel-LocM grass-Sg-M
When they looked at the faeces of the guinea hen, they were sorghum and those of the squirrel were grass.
tannu garr-o na=ta kiy-a nay Pato maang-o
then squirrel-M Loc=Loc say-3SgMFocImpfv Backgr 2 SgSubj sorghum-M
raaw-i kulil-atte Pas-i kiy-i
finish-3SgMUnm guinea.fowl-LocF so-3 say-3SgMUnm
Then the squirrel said so to the guinea hen 'You finished the sorghum!'.
Pinda Pille=ta žą¢ar-r-ite gaar-e žag-nanki Peem-onki
come.on self=upon anus.Pl-LocP trees-P insert-1PlMainFut look.at-1PlConsB 'Come on! Let's insert a wooden stick in our own anus and let's look at them'.
gaar-e žag-e=nnay ža $¢ 9$ ar-k-o garr-ulo nay
trees-P insert-3Pl=Backgr anus.Sg-M squirrel-LocM Back
maang-o Pag-a žą¢ar-k-o kulil-atte na
sorghum-M be.located-3Sg,Impfv anus.Sg-M guinea.fowl-LocF Loc
Gaš-k-o $\quad$ Pag'-a
grass-Sg-M be.located-3SgImpfv
They inserted the wooden stick and in the anus of the squirrel there was sorghum, in the anus of the guinea hen there was grass.
tannu garr-o=ma ger£int-e haysa=yay Parmat-ti
then squirrel-M=to/in theft-F so=with appear-3SgFUnm
So, squirrel's theft appeared in this way.

```
maang-o ka Pato raaw-i ba Pato maang-o
sorghum-M Sent 2SgSubj finish-3SgMFocUnm Cons 2SgSubj sorghum-M
raaw-i {ee=ta kay-ay
finish-3SgMFocUnm 1Sg=Loc say-2SgMImpfv
'You finished the sorghum and you told me 'you finished the sorghum'!'.
```


## Peši Pogoy zow-nanki Pèlèlè gallawu raaf-anki

ok come.SgImpA go-1PlMainFut together at.night sleep-1PIImpfv
garr-o kulul-atte kiy-i
squirrel-M guinea.fowl-LocF say-3SgMUnm
The squirrel said to the guinea hen 'Ok, come, let's go and sleep together tonight'.

## Pufo q'arra Pita ћull-i

3SgMSubj before away enter-3SgMUnm
He entered first.

## bukkis-att-e lig-u

den-Sg-F get.out-3SgMConsA
He got out the den.

## Pise $=k k a \quad$ paann-atte $\hbar u l l-i t i$

3 SgFSubj=Sent footprint-LocF enter-3SgFUnm
She entered after.
garr-o bukkis-addd-e boq' ${ }^{\prime}$ '-o.
squirrel-M den-Pl-P close.a.hole-3SgMConsB
The squirrel closed the dens.
kaysa=nu xaf-o ba Pawk-o-se q'ar-o
there=from come-3SgMConsB Cons place-M-Def place-M
žammade=mma katt-e ko?-u.
enter.P-3PlUnm=to/in fire-F light-3SgMConsA
He came from there and lit fire on the place in which they had entered.
Pise gid-atte riir-ti na
3SgFSubj inside-LocF scream-3SgFUnm Loc
bayi kululla šummi na=ta kiy-i
friend guinea.fowl.Voc resist.SgImpA Loc=Loc say-3SgMUnm
While she was screaming form inside he said 'Friend guinea hen, resist!'.
kulile $\quad$ Paysa=mma xoxon-k-o gid-d-e=ma raaw-at-ti
guinea.fowl-F so=to/in hole-Sg-M inside-Pl-P=to/in finish-Mid-3SgFUnm
The guinea hen died in the hole in this way.

### 9.3. Maakke garrilo Aaaka maakke gubalatte

The tale of the squirrel and the rabbit
q'arra garr-o Pard-o bitam-i na gubal-e maar-t-e
before squirrel-M ox-M buy-3SgMUnm Back rabbit-F heifers-Sg-F
bitan-ti
buy-3SgFUnm
One day the squirrel bought a ox and the rabbit bought a heifer.

## maar-t-e gubal-atte gur-ti ba woq'oš-i

heifers-Sg-F rabbit-LocF mate-3SgFUnm Cons get.pregnant-3SgFConsA ba dal-i
Cons give.birth-3SgFConsA
The heifer of the rabbit mated, got pregnant and gave birth.

```
maar-t-e dal-ti=nnay garr-o kiy-a
```

heifers-Sg-F give.birth-3SgFUnm=Backgr squirrel-M say-3SgMImpfv
nay kaayu ka dal-i kiy-i ba

Backgr PronM.1SgPoss Sent give.birth-3SgMUnm say-3SgMUnm Cons
Pard-ilo turd-itt-e sort -o ki Padd-a
ox-LocM buttocks-Sg-F placenta-M Sent. 3 put.in- 3 SgMImpfv
After the heifer gave birth the squirrel said 'Mine gave birth' and put some placenta in the buttock of the ox.

## gubal-e gor-e buska6-ti

rabbit-F people-P gather.Caus-3PIUnm
The rabbit gathered people.
gor-e zingatte saPat-e lákkí=yay buka6-e ba
people-P in.the.morning hour-F two=with gather-3PIUnm Cons
gubal-e sa?at-e salaћ ki xaf-ti
rabbit-F hour-F four Sent. 3 come-3SgFUnm
The people gathered at two in the morning and the rabbit came at four.
gor-e kiy-anki=nnay $\quad$ Pine ka buska6-ti ba
people say-3PIImpfv=Backgr 1PISubj Sent gather.Caus-3SgFUnm Cons
Pato Pakka=ma bad-ay kiy-e
2 SgSubj where=to/in hide-2SgImpfv say-3PIUnm
The people said, 'You gathered us and where do you disappear?'.
gaahk-o grond-am-i ba dell-o=ma Polad-i
stone-Sg-M break-Pass-3SgMUnm Cons sewing-M=to/in spend.the.day-1SgUnm
Pise ka kiy-iti
3SgFSubj Sent say-3SgFUnm
She said 'A stone broke and I spent the day sewing it'
gor-e kesse buka6-i kiy-anki=nnay
people-P PronP.Def3 gather-3SgMFocUnm say-3PIImpfv=Backgr
gaaћ-k-o moo gond-am-u ba ka deel-ay gubal-atte
stone-Sg-M what break-Pass-3SgMConsA Cons Sent sew-2SgConsA rabbit-LocF kiy-e
say-3PIUnm
The people who gathered said to the rabbit 'How come that a stone breakes and you sew it?'.

Pise kiy-a=nnay $\quad$ Gard-o moo ki
3SgFSubj say-3SgFImpfv=Backgr ox-M what Sent. 3
dal-ad-a nu=nnu buka6-anku kiy-iti
give.birth-Mid-3SgMImpfv LocM=Dat gather-2PlConsA say-3SgFUnm
She said 'How come that a ox gives birth and you gather for him?'.
tannu Pise ka bolg-om-is-i
then 3 SgFSubj Sent be.king-Pass-Caus-3SgMFocUnm
Then, she was made king.
tannu garr-o kiy-a nay bogol-k-o=nu q'ol-e
then squirrel-M say-3SgMImpfv Backgr king-Sg-M=from cattle-P
c'ox-inda
milk-PIImpB
Then, the squirrel said 'Milk cattle for the king!'.
Pombott-ann-e kúnkó=yay Paxx-e c'ox-onki=bba gand-a
milk.container-Pl-P ten=with milk-P milk-3PlConsB=Cons neighbourhood-F
xum6i c'ox-anki=bba nu=nnu Pawk-o-se bogol-k-o na=ta
all milk-3PlImpfv=Cons LocM=Dat place-M-Def king-Sg-M Loc=Loc
Pag-i=ma šeeg-onki
be.located-3SgMUnm=to/in bring-3PlConsB
They milked ten containers, the whole neighbourhood milked and brought it to the place where the king lived.


Pombot-ann-e ketta xum6i raaw-ti nay bolt-e
milk.container-Pl-P PronP.Distl all finish-3SgFUnm Backgr drop-F
takk-a ki ©aq'-i
be.small-3SgMFocAdj Sent. 3 be.left-3SgMFocUnm
After she finished all those milk containers a small drop remained.
bolt-e tetta=kka garas-t-e=ma bi¢-i
drop-F PronF.Dist $1=$ Sent belly-Sg-F=to/in fall-Reduc-Unm
That drop fell on the belly.

## đ(awr-a bog'ol-k-o $\ddagger$ haark-o=yay gab-b-i=kka

taboo-F king-Sg-M hand-M=with take-Punct-3SgMNonPstNeg=Sent
kup bay-i ba q'eed-d-a loq'-a
kup say-3SgMUnm Cons lick-Punct-3SgMConsA swallow-3SgMConsA
bogol-t-e=kka kup bayi-ti nay garas-t-e na=ta
king-F-F=Sent kup say-3SgFUnm Backgr belly-Sg-F Loc=Loc
6o?-ti
blast-3SgFUnm
Taboo! A king does not take it with the hand. He bends, licks and swallows.
When the queen bended, the belly blasted

## Pasa tannu gubal-atte mala day-i gubal-e ka par-ti

so then rabbit-LocF how get-3SgMUnm rabbit-F Sent die-3SgFUnm So, then, what happened to the rabbit? The rabbit died.
maakk-e garr-ilo Paaka maakk-e gubal-atte ketta=y
tale-P squirrel-LocM and tale-P rabbit-LocF PronP.Dist1
That was the tale of the squirrel and the rabbit.

## 10. Glossaries

### 10.1. Ts'amakko-English

## ?

- $\mathbf{~} \mathbf{a}$ - definite suffix

Paage $f$.; -adde $p$. - amniotic fluid
?aage $p$.; -itte $f$. - bird
Paaka conj. - conjunction of head nouns
Paallitte $f$.; -addel $p$. - shin-bone
Paani $a d v$. - after
Paanto $a d v$. - now
Paare $p$.; Paartakko $m$., ?aartitte $f$. - Ari people
Paaza $f$. - arrow with iron point
Pabba m.; -iyo m.,-adde p. - father
Paberro attr. - sour (milk)
Pabeto $m$. - sorghum sp.
3acc $v$. - to go
Padda $m$.; -iyo $m$.,-adde $p$. - younger brother
Paddisabeba - Addis Ababa
Pafo $m$.; -adde $p$. - steam, blow
Pag $v$. - to uproot
Pagal*; Pagalte $f$., Palge $p$. - sac made of leather
Pagile $f$.; Pagilitto m., Yagilitte $f$., Palgo $p$. - newborn calf
Pagumu $m$. - sorghum sp.
Pag v.; (Redupl) - to be located
Pahayte $f$.; -added $p$. - milk and blood
Paћa interr. - who?; ? aћama - towards whom?; Paћaya - with whom?
Pakima $m$. .; -itto $m$., -itte $f$., -adde $p$. - doctor
Pakka $m$.; -iyo $m$., -added $p$. - grandfather
Pakka interr. - who?; Pakkama - where to?; Pakkanu - from where?
Pakko $m$.; -itto $m$., -itte $f$., -addede $p$. - wild animal
Pakkura interr. - where to?
Palaw*; Palawte $f$., ?alawwe $p$. - older sister
Palbine $f$.; -added $p$. - kind of rifle
Palga $f$. - bed (Amh. alga)
Palgakko $m$.; Palgatakko $m$., Palgatte $f$. - clan name
Palgas $v$. - to be able
Palla9e $f$. - predatory birds
Pallo $m$.; -adde $p$. - fresh local beer
Palžo $m$., ?alže $p$. - stick, walking
Pamarko m.; Pamartakko m., Pamartitte $f$., Pamarkadde p. - Hamer people

Pamate $f$. - sorghum sp.
Pammake $a d v$. - properly
Pamule $f$.; -adde $p$. - stone sp. (salty)
Pankarsa $f$.; -adde $p$. - stick with iron point
Pano-I
Par v.; (Caus2, Pass) - know
Para - eyes' disease
Para - tree sp.
Parafko $m$. - elephant
Paraša $f$. - ox pecker
Pardulum $v$. - to race
Pargakko $m$. - tree sp.
Parka $f$. - animal sp.
Parmad $v$. - to appear
Parmante $f$. - weed sp.
Parre $f$. - donkey
Pasa adv.; Pasama - so, in this way
Passanna $a d v$. - at that moment, then
Passayay $a d v$. - so, in this way
Pašawa $f$. - white bracelet
Pašše $p$. - highland
Patare $f$. - pulse sp.
Pato - you (sg)
Patunde - you (pl)
Pabun $v$. - to rock
Pawal*; Yawalko $m$., Yawle $p$. - tombstone
Pawko $m$., Payko $m$. - place
Pawne $a d v . ;$ Pawnane - in the evening
Rawš $v . ;$ (caus) - to ripen, to boil; Rawšo $m$. - fruit
Paxxe $p$.; -itte $f$, added $p$. - eye
Paxxe $p$ - milk
Paylo $m$.; -itto $m$., -adde - small hoe
Paylo - meeting, working
Paylobate $f$. - sorghum sp.
Payra $m$. - friend
Paysa $a d v$.; Paysama, Paysayay - so, in this way
Paysana $a d v$. - from there
Payssayay $a d v$. - so, in this way
Paysuze $f$. - truck (Amh. aysuzu)
Payya $f$. - mother
Pazaz (also Pažaž) (Caus2) Paza?azaz keep on ordering - order
Pazo $m$.; Paze $f$.; Pazze $p$. - younger brother/sister
Pažo m.; Pažže $p$. - smell
Pe? $1 \mathbf{a} f$. - soghum sp.
Peeda $m$. - relative
Peem $v$. - to look at
Peero $m$. - grass sp. (edible)

Peger*; Pegerko $m$., ?egerre $p$. - tree sp.
Pekadde $p$. - girls
Pekke - very
Pekkešad $v$. - to think
Pel v.; (Redupl) - to drop, to flow
Pelele - together
Pelele $a d v$. - to together
Pelle $a d v$. - to each other
Peq'ad $v$. - to hiccup
Perbo $m$.; -itto $m$., -anne - ram
Perro m.; -adde $p$. - rain
Perto m.; adde $p$. - gums
Pi? v.; (Caus1) - to see
Pibbo - riddle
Piddónte $f$. - redness
Pigo $m$. - line of the father
Piife $f$. - eyelashes
Pikkitto $m$.; adde $p$. - sound, voice
Pilaaše $f$. - animal sp.
Pilge $p$.; -akko $m$., -adde $p$. - tooth
Pille $f$.; -itte $f$. - top of the house
Pilmale $p$.; -itte $f$, -adde $p$. - tear
Pimmon $f$. - kind of rifle
Pinanko ~ Pinawko m. - boy
Pine - we
Pingiye $f$.; -adde $p$. - mother
Pingir*; Ping'rakko $m$., Ping'iranne $p$. - clitoris
Pinnakko $p$.; -itto $m$.-addele $p$. - fly
Pinne $f$.; -atte $f$, -addede $p$. - spider
Pinsud $v$. - to dream
Pinte $a d v$. - before, oneself; Pintaw $v$. to precede
Pir£o $m$. - collar for women
Pirgafo $m$. - axe
Pirriš $v$. - to prohibit
Pise - she
Piš $v$. - to refuse
Piš*; Pište $f$., Pišše $p$. - rib of sternum
Pišk v.; (Redupl.) - to tear
Pita $a d v$. - away
Pizmakko $m$.; Pizmatakko $m$., Pizmatte $f$. - clan name
?odol*; ?odolko m., ?odle $p$. - spotted goat
Pogoy $v$. - to come (only with plural persons as subject)
Poholko $m$., ?oholte $f$., ?oholle $p$. attr. - greedy
Rola $f$.; -ko $m$. - thing
Pongoro $m$. - outer part of the buttocks
Pood $v$. - to walk; Pooddo $m$. - journey, trip
?oofe $f$. - pea sp. (wild)

Pook $v$. - to change (Mid, Redupl, Pass-Caus)
Poolad $v$. - to spend time
Pombotto m . - container for milk made of wood
Poongo $m$. - fruit of kuyatto tree
Pooš v.; (Caus1, Mid, Punct, Redupl) - to wipe, to shave
Pooše $f$. - jackal
Pooxam $v$. - to quarrel; Pooxmatto $m$. - quarrel
Pooy $v$. - (Caus 1) to cry
Porgay*; Porgayko $m$., Porgayne $p$. - male goat
Porgo $p$.; -itto $m$., -itte $f$.-addede $p$. - Banna people, Banna and Hamer
peoples
Porgošum $v$. - to grow up (calf)
Porro m.; -adde $p$. - forest; Porro - name of a Ts'amakko village
Porša?te $f$. - rhinocerous
Pošo $\mathcal{I} v$. - to scent
Pošonko $m$. - coldness
Pottakko $m$., ?okke $p$. - cub, newborn of any animal
Pozbikko $m$.; ?ozbitakko $m$., ?ozbitte $f$. - clan name
Pucc $v$.(Caus1) - to fill up
?ufo - he
Pufunde - they
Pukaћe $p$.; -itte $f$., -adde $p$. - egg
Pukunte $f$. - fence for goats
Pula, Pulo, ?ulu $a d v$. - on the side
Pupp v.; (Redupl) - to blow, to whistle
?ure $f$. - wax
Purre $f$., Payidurre $f$. - domestic
Pusk*; Puskakko $m$., Puskanne $p$.- dirt; Puskakkod $v$. - to be dirty;
Puskakkolakko $m$., ?uskakkolatte $f$., ?uskakkolayke $p$. adj - dirty
Puttufo $m$. - pole in roof (small)
? uunto $m$. - soot
Puzge $p$. - firestones

## £

Caabo $f$. - granmother
¢aag v. $B$ - go back home
£ aale $p$.; § aaltakko m., £ aaltitte $f$. - gawwada people
Gaarma 9 e $f$. plant sp. (wild and edible)
¢a6un*; ¢a6unko m., ¢a6ne $p$. - breast; ¢adinko $m$. - breast
Sac'arkod $v$. - to get goosebumps
¢addr v.; (Mid) - to put
Cakkad $v$. - to sit down
¢alge $f$. - plant sp. (used to make ropes)
£ amaddo m.; ¢amatakko $m$., £ amatitte $f$. - clan name
Cammo $m$. - strip of leather wore by young girls
¢ande $p$.; -itto $m$., -itte $f$., -addele $p$ - water

Sango $m$. - molar and palate
£ ardo m., £ arde p.; -anne $p$. - ox
iare $f$. - coffee
£arraf*; £arrafko $m$., £arrabbe $p$. - tongue
£ arrakko m., ¢ arratte $f .$, ¢ arrayke $p$. adj. - white (hair, fur)
Garto $m$. - smoke
€ aš*; © aško m., © ašše p. - grass
¢awde $p$. - plane of mud for threshed sorghum
Gesiakko $m$. - tree sp.
Seelakko $m$.; 乌eelatakko $m$., 乌eelatte $f$. - clan name
¢eem*; ©eemte $f$., ¢eemme $p$. - sheep

£idd adj.v. - to to be red
com6o $m$. - fontanelle
3om6o $m$. - tree sp.
Sug v.; (Caus2, Punct) - drink
£ugisso $m$. - thing to drink

## b

ba conj. - conjunction of consecutive sentences
baakko $f$., baakkitte $f$., baakkittaddede $p$. - cow with no milk
baal*; baalitte $f$., baalinne $p$. - poles of house
baalaabad $v$. - put a head rest on the nape
baalgiddo $m$. - ostrich
baalko $m$. - flower of maize
baalžige $f$.; anne $p$. - kind of rifle
baante $f$. - bow
baaro $m$. - armpit
baarte $f$. - hut
baasallo $m$. - calabash used to pour water
baasarko $m$.; baasartakko $m$., baasartitte $f$., baasarkadde $p$. - age grade
6
baay v. - to start
baaya $f$. - hair of chest; baayalakko m., baayalatte $f$., baayalayke $p$. adj .

- having hair of chest
ba? Pay $v$. - to carry with both arms
bado $m$. - hunger; badod - to be hungry
bafko $m$. - python
bagad $v$. - to run (only for plural subject)
bago $m$.; bagge $p$. - mouth
bala $f$. - skull, bold head
balisas*; bal§ asko $m$., bal¢azze $p$. - house foundement, site
balka $f$. - kind of calabash
banda $f$. - fowl's faeces
banga $f$. - machete
bannado $m$. - kind of black scrabble
baq' $v$. - to melt
baq'al v.; (Caus2 balq'is, Punct, Redupl.) - to sprout;
baq'as $v$. - split; baq'asso $m$. - splitting; baq'assod $v$. - to have an
headache
bara interr. - when?
barbara $f$.- Ethipian pepper (Amh. barbarre)
bardaq'o $m$. - kind of black scrabble
bargade $f$. - collar bone
barido $m$. - man shouting without saying anything
baritto $m$.; baritakko $m$., baritte $f$. - clan name
barlo $m$. - spotted bird
bas $v$. .; (Mid, Redupl) - to do
baša6 v.; (Caus bǎ̌ša6, Pass bašma6, Redupl) - to defeat
batteri $f$. - torch (Amh. batteri)
bax $v$. - to be smart
bax*; baxko $m$., baxxe $p$. - small pond
baxxarko $m$., baxxarte $f$., baxxarre $p$. attr. - beautiful; baxxaninte $f$. beauty
bay $v$. .; (Caus1, Mid) - to say
bayše $p$.; bayšitte $f$. - wound; bayšaš $v$. - to wound; bayšư̛ $v$. - to be wounded
bazz v.; (Mid bazza6) - to be plenty
beel*; beelko $m$., beelle $p$. - cattle sharing
beerr $v$. - to touch
ber*; berko $m$., berre $p$. - rainy season
bero $a d v$. - really
bi¢ adj.v. - to be white
bii $v_{.}$; (Caus1, Redupl) - to fall; bicinte $f$. - falling thing
bicca $a d v$. - only
biddir $v$. - to borrow; biddire $f$. - debt
biif $v$. .; (Caus1, Redupl) - to have a meal; biife $f$. - meal
bilbilko $m$.; bilbiltakko $m$., bilbiltitte $f$., bilbilkadde $p$. - age grade 3
bile m.lf. attr. - other
billay*; billayko $m$., billayne $p$. - knife (Amh. billawa)
binnasko $m$.; binnastakko $m$., binnastitte $f$., binnaskadde $p$. - alliance between the clans Pozbikko and Palgakko
bira $f$.- beer (Amh. bira)
birale $p$.; biraltakko $m$., biraltitte $f$. - Birale people
birbir*; birbirko $m$., birbirre $p$. - tree sp.
birts'e $f$. - worm sp. (kosotel)
bisko $m$. - flower
biš*; biško $m$., biškitto $m$., biškitte $f$., bišše $p$. - body
bitam v.; (Mid bitmad, Punct, Redupl, Punt-Redupl) - to buy
biye $f$. - land, soil
bofe $f$. - manure
bog v. - (Caus bogos, Pass, Redupl) - to kill
bog'ol$^{*}$; bogolko $m$., bogolte $f$., bolge $p$. - king; bolgos $v$. - to elect as
king; bolgom $v$. to become king; bolgomis $v$.- to be elected as king bonde $f$., bondotte $f$. num. - ten birr
boo 2 e $f$. - irrigation pond
boo?e $f$. - soil ploughed one time
bood $v . ;$ (Caus1) - dig
booh $v$. - to sow; booћto $m$. - seed
boolo $m$. - scrabble sp.
booro $m$. - calabash for milking
boorto $m$. - barley
boositte $f$. - pubic hair
boox $v$. - to concimate
bopp $v$ - to starve
boq' v.; (Caus boq'os) - to cut off
borde attr. - spotted
bordolo $m$. - spotted small mongoose
borxo $m$. - ember
bote $f$.; botte $p$. - pumpkin
boxx*; boxxakko $m$., boxxanne $p$. - pus
božže $p$. - white clay for dance adornment; božžad $v$. to smear white clay
busio $m$. - fever; disease
buusv.; (Mid) - to hurt
buda $f$. - evil spirit
buka6 buska6 - gather
buke $f$. - wooden club
buke $f$. buka6 gather - meeting
bukkisa $f$. - tunnels underground
bul v.; (Pass, Punct, Redupl) - to separate, to put apart
burde $f$. - vagina
burza $f$. - fruit eaten by donkey and goat
busante $f$. - plant, grass
buska $f$. - small seed form the oil
busukko $m$., buske $p$. attr - sterile man
buup $v$. - to bless
buuše $f$. - beard; buušolakko $m$., buušolatte f., buušolayke $p$. - bearded


## 6

6ad v.; (Caus 1, Mid, Redupl)
Galko m . - plain, in lowland
Gizze $f$. - animal sp.
Cul v.; (Caus1, Punct, Redupl) - to jump; 6ullo m. - jump

## c'

c'aa6 $v$. - to build a fence
$\mathbf{c}^{\prime} \mathbf{a a q}$ ' $v$. - to defecate; c'aaq'e $f$. - faeces
c'abala $f$. - twisting bracelet

```
c'a6 adj.v. - to be wet
c'aldax \(v\). ; (Caus2) - to be soft
c'an \(v\). - to load
c'aq'ale \(f\). ; \(\mathbf{c}\) 'alq'e \(p\). - sorghum, stalk of remained on the field
c'aq'ante \(f\). - tree sp.
\(\mathbf{c}\) 'aq'om \(v\). - to close with a lid; c'aq'q'omme \(f\). lid
c'arke \(f\).; addede \(p\). - dew
c'arro \(m\). - grasshopper
c'ayde \(f\)., c'ayye \(p\). - fence
c'egde \(f\). - od' bleed - blood
c'ib \(v\). .; (Caus2) - to pierce
c'ifano \(m\).; -itto \(m\)., -itte \(f\)., c'ifne \(p\). - unmarried person
c'igad \(v\). - to love
c'ingo \(m\). - mosquito
c'irfa \(f\). - braids, kind of
c'ooro \(m\). - cricket
\(\mathbf{c}^{\prime} \mathbf{0 x}\) v.; (Pass, Redupl) - to milk
c'oxxe \(f\). - mud with rain
c' ubbolakko m., c'ubbolatte \(f ., \mathbf{c}\) ' ubbolayke \(p\). adj. - unappreciated
(person)
c'ummo \(m\). - tree sp. (small)
c'ur \(v\). - to throw
c'uruq'e \(f\). - bird sp.
c'uube \(f\). - sickle not used here
```


## d

```
daaf \(v . ;(\) Caus1) - to be blind
daafakko \(m\)., daafatte \(f\)., daafayke \(p\). adj - blind
daale \(p\).; -te \(f\). - goat
dasad \(v\). - to wait
da9an*; daianko \(m\)., daine \(p\). - food gemfo
dab*; dabakko \(m\)., -dabanne \(p\). - mouse
dada Panko \(m\). - centre of foot palm
daggo \(m\).;-itto \(m\)., -itte \(f\). - young (person)
daћan*; daћante \(f\)., daћne \(p\). - calabash used to fetch water
dalba \(f\). - pond
dambala? \(3 \mathrm{e} f\). - kind of snake
dangadangac'c'o \(m\). - hedgehog
dara?ukuli \(f\). - zebra
dario \(m\). - ashes
darbad \(v\). - to throw for oneself
darbe \(f\). - drum
daw \(v\). - to get, to find
dawle \(f\). - highland
dawwo \(m\). - snake
daažimale \(f\). - ginger
```

```
dee \(\uparrow v\). - (Caus1) - to give
deelo \(m\). - flat plane
del \(v\). ; - (Mid) - to sew
diig v.; (Caus1) - to pour
diigo \(m\). - gall bladder
dildila \(f\). - bridge
dingeša \(f\). addde - animal sp.
do PYe \(f\). - tattoo
do?osko \(m\). - waterbuck
doc'a \(f\). - fat, dark mouse
dodolko \(m\). - animal sp.
dongo \(m\). - tree sp.
dookko \(m\), dootte \(f\)., dookke \(p\). num. - one
doolle \(p\). - ox-hunch
dooma \(f\). - pointed metal of hoe
dooro \(m\). - pile of sorghum, doorad \(v\). - to make a pile of sorghum
dooyi - someone
dubaza \(f\). - animal sp.
dullayko - Weyt'o River
dunka \(f\)., dunkayna \(f\). - tent (Amh. dunkan)
dunko \(m\). - pointed part of a bullet
duub*; duubde \(f\)., duubbe \(p\). - buttock, tail, wasted tail of sheep after
emptied of fat and meat
duuko \(m\). - back, behind
duul \(v\). ; (Caus2) - to go to war; duule \(f\). - going to the war; duulko \(m\). -
war
duunko \(m\). - eye, coloured part
duzze \(f\). - plant
d
đaammo m. - flour
daatt*; deaattakko m. ©eattanne \(p\). - acacia
dab v.; (Mid) - to miss
dagg v.; (Caus2) - to insult
dagod \(v\). - to be angry
dag'ga6 v.; (Caus2) - to arrive
đakše \(f\). - animal sp.
dal \(v\).(Mid) - to give birth
dalle \(p\). - children
damay*; damayko \(m\)., damayye \(p\). - flour of any cereal
damiatto \(m\). - giraffe
đamm adj.v. - to be big; đamminte \(f\). - bigness
danga \(f\). - uvula
dawr \(v\). - to forbid
dayte \(f\). - fire-stick
de?se \(f\). - kidney
```

dee6te $f$. - thirst; dee6ad $v . ;$ (Caus2) - to be thirsty
deek $v$. - to accuse
deek $v$. - to sharpen
đeem*; deematto $m$.đeemitte $f$., deemme $p$. - horn scretch
deešo $m$. - medicine
denge $f$. - neck
dibl v.; (Caus1) - to rain
diile $f$. - calabash for shaking milk
diim $v$. - to swim
diire $f$. - tree sp.
diiit $v$. - to step on, to crush
dik $v$. - to count
dikkad - be completed
din $v$. - to judge
din $v$. - to recove, to heal
diš - plant
dišš - plant one plant at one time
doollo m.; -ko m., -te $f$., -addede $p$. leather mat
©ooq' $v$. - to carry on the shoulder
duge $f$. - truth, condition

## g

gaabote $f$.; -ko $m$. - bushbuck (tragelaphus scriptus)
gaage $f$. - tortoise, small water
gaagis $v$. ; (Pass) - to carry
gaaћ*; gaaћko $m$.. gaaћћe $p$. - stone
gaaћ $v$.; (Caus2) - to tell
gaaћo $m$. - affair, matter
gaaldo $m$. - pregnancy; gaaldaw $v$. - to become pregnant; gaaldakko $m$., gaaldatte $f$., gaaldayke $p$. adj. - pregnant
gaale $m . / f . / p .$, gaalatte $f$. attr. - difficult; gaala6 $v$. .; (Caus gaalša6) - to
experience trouble
gaamayle $f$. - camel
gaan $v$. - to be plenty
gaan*; gaante $f$., gaanne $p$. - woman
gaansa6 - be unready
gaaraboq'o $m$. - ankle
gaare $p . ;-$ ko $m$. - tree, wood
gaarko $m$.;-itto $m$., -itte $f$. - clan
gaarm adj.v. - to be enormous
gaarre $p$. - horse carriage
gaas $v$. - to fish
gaasse $p$.; -akko $m$. - horn
ga? v.; (Mid, Redupl) - to prepare
gaayye $f$. - tobacco
ga?al v.; (Mid gal?adi, Punct) - to marry
gabaya $f$. - market
gabate $f$. - funnel
gac'c'e $f$.; addde $p$. - t'ef (Eragrostis abyssinica)
gada $a d v$. - on the highland side, up
gafko $m$. - clan
gaftad $v$. .; (Caus2) - be stuck
galaba $p$. - Dhaasanach people
galla $a d v$. - on the lowland side, down
gallawo - at night
gallo $a d v$. - on the lowland side, down
game $f$.; -itto m., -itte f., gamme $p$. - maize
gana£*; gana£ko m., gana£qep. - central internal point of foot and hand
ganda $p$. - neighbourhood
ganzabu $f$. - money
gar $v$. .; (Caus2) - to prepare, to build
garas*; garaite $f$., gar@e $p$. - belly
garmo $m$. - lion
garn $v$. - to be useful
garo $m$. - place, base for beehive
garo $m$.- side
garro $m$. - ground squirrel (Xerus rutilus)
gasar*; gasarko $m$., garse $p$. - buffalo
gasod - be happy
gass $v$. (Mid) - ask; gasso $m$. - request
gawa ${ }^{*}$; gawåko m., gawaice $p$. - thunder and lightening
gawarakko $m$. - bird sp.
gawge $f$. - maxilla bone
gawso $m$. - chin
gay $v$. - to arrive
gayit*; gayitakko $m$. gayitanne $p$. - scorpion
gayte $f$.; anne $p$. - fire stick
gazo $m$. gazze $p$. - hair
gazgo $m$. - grain
gazze $f$. - shadow
geeq $v$. - to belch
geera, geeray $a d v$. - yesterday
geerinne $p$. - house poles
geeš*; geešuw - become old, to
geeccakko $m$, geeccatte $f$., geeccayke $p$. adj. - old
gelzakko $m$. adde - baboon
gengo $m$. - top of penis
gere $£$ mid - steal

theft
gerekko $m$. - trunk for roof, big
gerge $f$.; -itto $m$., -itte $f$.- Amhara people
gešan*; gešante $f$., gešanne $p$. - woman
getko $m$. - wooden seat
gibdo $m$. - meeting, dancing
gibil*; gibilko $m$., gible $p$. - knee
gilbad - lay on knees
gidanko $m$. - braid of women
gidano $a d v$. - this year
giire $f$. - tree sp.
gillad $v$. - to divine
gil $v$. - to tell a lie; gillo $m$. - lie
gilfa $f$. - bellows pump
gilinkasa $a d v$. - bit, a little
gilo $m$. - meeting for dead people
giršo $m$. - porcupine sp.
gisso $m$. - mongoose sp.
gitama $m$.; gitantakko $m$., gitantitte $f$., gitamaddede $f$. - blacksmith
gits'ts'o $m$. - flea sp.
goccay $a d v$ - next
gos*; goiakko m., goice $f$. - hoof, nail
godd $v . ;$ (Caus1, Pass) - to do, to put
golde $f$. - penis
gollan num. - nine
golle $f$. - river
gom6o $m$. - cattle camp, kraal
gonc'o $m$. - lower part of the back bone below the ziiza
gongala $f$. - carved wood for several uses, canoe
gongollo $m$. - calabash for coffee, pipe belly
goob $v$. .; (Caus2) - to be fat, to be fertile; goobinte $f$. - fat, grease
goodo $m$. - mole
googa $f$. - tree, big dead
gooh $v$. - to roar
goomaro $m$. - throat
goontore $f$., ; -ikko $m$. - eland
gorda $f$ - sorghum sp.
goorko $m$. - belt for pregnant woman
gooš $v . ;(\mathrm{Mid})$ - to tend cattle
gor $v .-$ to drive
gordisa $f$. - wild animal with long tail eating chickens
gore $p$. - people
gorle $f$. - hook shaped thorn
goržo $m$. - cheetah
goyte $f$. - kind of tree that gives fresh shadow
gubale $f$. - rabbit
gubus*; gubusko $m$., gubuzze $p$. - thigh bone
guddo $a d v$.- on the highland side, up
gudur*; gudurko $m$., gudurre $p$. - hyena
gufac $v$. ; gufacio $m$. - cough
gula $f$. - lizard, very tiny
gulfo $m$. - cold
gullasad - see from far
gulma $f$. - calabash for beer
gura $a d v$. - equal
gurdo $m$. - animal sp.
gurlo $m$.; -itto m., -itte $f$., -addede $p$. - wild cat
gurmalko $m$.; gurmaltakko $m$., gurmaltitte $f$., gurmalkadde $p$. - age
grade 5
gurragala $f$. - last vertebra behind the neck
gussum $v$. - to follow
gummo $m$. - sorghum sp .
guuyu $a d v$. - today

## g

gaab $v$. - to be worried
gaansindo $m$. - sperm
graante $f$. - udder
gab v.; (Mid, Punct, Punct-Caus, Punct-Mid) - to take
gannatto $m$. - lizard
gar $v$. - to look like
gayy $v$. - to remain
gee? v.; (Caus1, Mid) - to want; gee? Po m. - wish
g'iip v.; (Punct, Punct-Caus) - to go to sleep
gim $v$. - to reap; g'imakko $m$. - harvest
ginafe $f$ - rib
ginante $f$. - wasted meat of the rear legs
g'insad $v$. - to beg; g'inselakko $m$., g'inselatte $f$., g'inselayke $p$. adj. -
begger
girro $m$. - instrument from cutting wood
gobad $v$. - to crouch down
goh v.; (Caus2) - to grow
gond $v . ;$ (Pass) - to break
gor $v$. - to chase, to lead
gor@ummo m. - plant
gubad - build
gumm Adj.v.- to be black; g'umminte $f$. -blackness

## h

hac'ande $f$. - scarification of body
hal*; halko $m$. halle $p$. - old man, husband
haq'ayte $f$. - month coming after the rainy season
hats'ts'ikko $m$. - kind of white stone

## ћ

ћaarko $m$., ћaarke $p$. - hand
ћabura $f$. ћaburko $m$. ћaburkadde - wind
ћandura $f$.; ћandurte $f$. - umbellical chord
ћandurra $f$., ћandurre $f$. - humbellical chord
ћanšal*; ћanšalakko $m$., ћanšalanne - flour, cooked
ћayma $a d v$. - here
ћayna $a d v$. - here
ћayyay - since then
ћeeko $m$. ћeekke $p$. - chest
ћeenge $f$. - internal part of panicle
ћeesko $p$. - women
ћeeyatte $f$. - tree sp.
ћello $m$. - magician
ћeyakko $m$., ћeyatte $f$., ћeyayke $p . a d j$. - , widow; orphan
ћezge $f$.; -itte $f$. - star
ћezgitte $f$. - star, female
ћezze $p$. - root, vein
ћoro $m$. - internal waste of pumpkin
$\hbar \mathbf{u l} v$.(Punct) - to enter

## k

ka - sentence marker

kaakanu $a d v$. - from here
kaale $f$. - spoon
kaalkome $f$. - kneading
kaallikko $m$. - sun general
kaanšima $f$. - entrails
kaarinko $a d v$. - to in agreement
kaasa $a d v$. - here
kaata $f$. - broken and wasted thing
ka? v.; (Caus2, Punct) - to get up; kaP?o $m$. - getting up
kaaynu $a d v$. - from there
kaaysa $a d v$. - there; kaaysanu - from there
kaбo $m$., ka66e $p$. - hide of sheep or goat
kacce $f$.; -itte $f$., -adde $p$. - shoulder
kad v.; (Punct, Redupl, Punct-Caus) - to climb
kaћћ adj.v. - to be hard; kaћћaw $v$. - to become hard
kakko $m$. - kernel
kalko $m$. - holy bone
kallacco $m$. - rectum
kama6 - be rich
kammakko $m$. - light
kamur $v$. - to be rich
kamurko $m$., kamurte $f$., kamurre $p$. attr. - rich
kamurinte $f$. - richness
kanna $a d v$. - quickly
kantale $f$. - tree sp.
karam6a $f$. - calabash to drink coffee
karawko $m$. - guereza
karkar*; karkarakko $m$., karkaranne $p$. - warthog
karna $f$. - hip
karo $m$.; -itto $m .$, -itte $f$. , karre $p$. - dog
karom $v$. - to co-habit
karre $f$. - door
kaskale $f$. - animal sp.
kata $\AA \mathrm{m}$. - stick to carry stuff on the shoulder
katte $f$. - fire
kay $v$. - to say
kayko $m$.; -itto $m$., -itte $f$. - bridegrooms
kayse $f$.; -itto $m$., -itte $f$. - poor person
ke - plural pronominal particle
keeda $f$. - corridor between house and fence
kefo $m$., keffe $p$. - kind of rifle
kellefer $f$. - kind of rifle
kere $f$. kerre $p$. - headrest, carrying seat
kibe $f$.; kibbe $p$. - dry season
kibay - be named
kibir $v . ;$ (Caus kirbas) - to dance; kibirko $m$., kirbe $p$. - dance
kicca@ $v_{\text {. }}$; (Caus2) - to laugh
kiil - to help
kilaaš $f$. - kalashnikov (Amh. kïlaaš)
kinnisa $f$. - pimple
kirde $f$. - testicle
kirinc'e $f$. - bone protuberance, spur
kirrin*; kirrinko $m$. kirrimme $p$. - tail of all the animal of sheep only smal bone end
kiy - say
ko - masculine pronominal particle
ko? - set on (fire), roast, to
koka $f$. - iron point
kokakko $m$. - bird sp. (it eates calves)
kol $v$. - to come back
kolkoško $m$. - wasted broken big calabash
komba $f$. - necklace of beads
kongo $m$. - plane
konso $p$. - konso
koolo $m$. - wing
koor $v$. - to refuse
korkoro $m$. - house fence or small places for animal
korondo $m$. - spur
korša6 $v$. - weed
košo $m$. - dung, dry manure
kubbad $\times 0$ - fill a calabash
kubbaya $f$. - cup
kufe $f$. - tortoise
kulile $f$. kulule - guinea fowl
kullumme $f$. - catapult
kum $v$. - to be finished
kumbala $f$. - food
kunda $m$., tinda $f$., kinda $p$. interr. - which one?
kunko num. - ten
kurfa $f$. - cooked blood
kurumo $m$. - wooden milk container
kušte $f$. - top of a house
kuttakutto $m$. - braid, small
kutton*; kuttonko $m$., kuttomme - mountain
kuuškuušo $m$. - cock's mane
kuyyo $m$. - termite hill

## I

laaddahe $f$. - lower rib laafa $f$. - bat sp.
laag $v$. - to give back
laale $f$. - animal sp.
laalo $m$. - bird sp.
las*; lafakko $m$., laine $p$. - plain, border
labale $f$. - kind of rifle
lable $f$., laybe $f$. - cloths of any size
labša $f$. - scapula
laade $f$. - rope used to keep cattle
laћћawko $m$. - dried thing, dead small tree
laћћo $m$. - bird sp.
lakkay $p$. - twins
lakki num. - two
lande $f$. - spleen
laq'a $f$. - fruit like onion that is not eaten
laq'a $f$. - wart, sixth finger
las $v$. - to sell
lastige $f$. - plastic goods
laša $f$.; laško $m$., lǎ̌̌̌e $p$. - kind of bread
latto - naturally, on his own
laax*; laaxko $m$. laaxxe - wooden arrrow
laxx $a d j . v$. - to be unripe; to be green; laxxaw $v$. - to become unripe, to become green
leso $m$. - moon, month
lekk v.; (Caus 1) - to pierce from side to side
lenc'iš $v$. - to train (animals)
lonšina $f$. - bus (Amh. loncina 'truck', from Italian leoncino 'name of a truck')
lig $v$. - to resemble
lig $v$. .; (Caus1, Punct) - to get out
liq'ambare $m$. - chief (Amh. liqambär)
loobarko $m$.; loobartakko $m$., loobartitte $f$., loobarkadde $p$. - age grade 2
$\log v . ;($ Mid, Pass-Mid $\operatorname{logmad})$ - to spoil, to break
longo $m$. - shield
lo $\boldsymbol{\text { o }} f$. - cow
lu6 adj.v.; (Caus1) - be hot
lu6*; lu6te $f$., lu66e $p$. - foot
lukkale $f$. -itto $m$., -itte $f$., -adde - chicken
lukkurro m./p. attr. - curved towards the head (horn)
lulle $f$. - plant sp.

## m

ma clit. - towards, within
maakke $p$. - story, tale
maalka $f$. - flute, pipe stem
maaltitte $f$. - fenugreek
maanga? adj.v. - to be short
maango m. - sorghum
maarama $f$. - possessive spirit of god
maaraša $f$. - plough
maare $p$.; -te $f$. - female calf
maaršo $m$. - teller
ma?sad $v$. - to sprain
ma Pše $p$. - end, border
maax*; maaxko $m$., maaxxe $p$. - bead
maax*; maaxatto $m$., maaxxe $p$. - gourd
mą*; maiko $m$ maice $p$. - name
macce $a d v$. - always
mac' $\mathbf{c}^{\prime} \mathbf{e}$ - cabbage sp.
madalakko $m$. - muscle of arm
madday*; maddayitte $f$., maddayye $p$. - tempia
maga $f$. - goat's weed
magal*; magalko $m$. malge $p$. - hammer of rifle
mag $v$. - to change direction, to readdress
makkatte $f$. - plough
mala interr. - how?
malal $v$. - to be sick, to be tired
manaq'o $m$. - yoke
mango $m$. - mango

```
maango \(m\). - sorghum
manne \(p\).; adde \(p\). - house
mano \(m\). - family
mano \(m\). - spot, place, container
maq'al \(v\). - to be salty
marge \(f\). - wrinkles of forehead
markam \(f\). - kind of rifle
marraћe \(f\). - edible wild plant
marrote \(f\). - red bracelet
marts'a \(f\). - young acacia
masano \(m\). - rainy month
mato num. - one hundred birr (Amh. mïto 'one hundred')
may \(v\). - to bury
mayo \(m\). - tomb
mayle \(f\). - more evident palm lines
mayy \(v\). - to kiss; mayyo \(m\). - kiss
mazmare \(f\). - nail (Amh. mäzmär)
mažo \(m\)., mažže \(p\)., mažžadde - kind of cilindric bead
me? interr. - how many?
meeg \(v\). - to pour
meelo \(p\). attr. - fresh (milk)
meeq'e \(p\).;meeq'te \(f\). - bone
meeše \(f\). - devil spirit of dead
meken*; mekente \(f\), mekne \(p\). attr. - sterile (woman)
mi \({ }^{*}\); miPte \(f\)., mi? Pe \(p\). - fruit sp.
mi \(19{ }^{-}\)- be sleepy
mic'angalle \(f\). - arm bone
mid*midikko \(m\). midinne - grind stone, lower
midd*; middakko \(m\). middanne middakkadde - rope
middo \(m\). - bracelet for pulse
miinte \(f\). - forehead
miire \(f\). - pond, gurf
\(\operatorname{mir} v\). - to squeeze cloths
mirle \(f\). - cheetah
mirma \(9^{*}\); mirma£atte \(f\)., mirma£anne \(p\). - intestines
mirša \(f\). - kind of black stone
mirža \(f\). - kudu
mits'o \(m\). mits'ts'e \(p\). - sorghum beer
mofara \(f\). - thin and long wood of the plough
moggo \(m\). .; -iyo \(m .\), -addede \(p\). - child named after 'godfather'
mogol* \(^{*}\) mogolte \(f\). molge \(p\). - bracelet, black iron
moo interr. - what?
moonu, moona interr. - why?
mooro \(m\). - hard internal part of animal fat
moralle \(f\). - bird sp.
morq'o m.; -itto m., -itte \(f\). - age grade 1
moyle \(f\). - genenuk (red meda fiel)
```

moylo $m$. - in which place
muc'c' - brush
mudocio m. - sort of thorn to sew strong things
mudde $f$. - handle of a headrest
mugai*; mugaite $f$. mugaife $p$. - head
mugur v.;(Caus2 murgis) - to be surprised
mukkanakko $m$., mukkanatte $f$., mukkanayke $p$. adj. - limb, having a
short
mume $m . / f . / p$. attr. - entire
mur $v$. - to pay
murriso m., murristakko m., murristitte $f$. - mursi people
muts' v.; (Mid) - to reduce
muunto $m$. - sky
muuq'um $v$. - to be powerful
muuze $f$. - banana
$\operatorname{mux} v$. - to cut

## n

na, nay - locative pronoun, locative postposition, backgrounder
naabad $v$.- to hate
naaba $m$.- enemy
naP1a $f$. - child, small
nabale $f$. - belt of beads
nagay $v$. - to spend the day
naggadad $v$. - to trade (Amh. näggäd)
narfe $f$. - needle
nassad $v$. - to breath, rest
nats'ar $v$. - to take aim; nats'ire $f$. - gun sight
nats'iro $m$. - mother of a boy
nelbasko $m$.; nelbastakko $m$., nelbastitte $f$., nelbaskadde $p$., - age grade 4
niyarroge $f$. - earing chain
nolo $m$. - brain
nu, nnu clit. - from; to
nug' $v$. - to have sex, nuggo $m$. - having sex
nure $f$. - woman leaving her husband

## p

paanaw to follow
paana $f$. - trace, footprint; paannatte relat. - after, later
paappaya $f$. - papaya
pagad - be over
pakala $m$., pakale $f$., pakaladde $p$. attr. - intelligent, clever
palde $f$. - iron arrow
palke $f$. - grass growing with the new rains
palq'e $f$. - gourd, broken piece of

```
pandalte \(f\). - goat skin for women
par \(v\). - to die
paranc'a \(f\). - foreigner
pararo \(m\). - spotted multicolor insect
pardo \(m\). - horse
parše \(f\). - beer, local
pašo \(m\).; pacce \(p\). - field, cultivated
pat \(v\). - to vomit; pate \(f\). - vomit
pec'e \(f\). - bean, black
pelampelo \(m\). - butterfly
pelta \(f\). - dirt of calabash
picce \(f\). - curds
pika6 piska6 - be straight
pil \(v\). .; (Mid) - to comb
piška \(f\). - whistle
po? \(v\). - to dry
ponq'a \(f\). - point of arrow
poolo \(m\). - cloud
porima6 - be brave
puddo \(m\). - cotton
pud \(v\). - to flower
pug v.; (Mid 'to get satiated', Pass, Redupl) - to inflate
puga \(f\). - blacksmith
puga \(f\).; -itto m., -itte \(f\). - wild cat
puggo \(m\).; -itto - male calf from unnatural birth
pulle \(f\). - hole
punge \(\mathbf{p}\). - sheep without fat
pure \(f\). - bead, big
q'
q'aace \(v\). - to open
q'aac'a \(f\). - charcoal
q'aac'c'e \(f\). - bush
q'aan \(v\). - to chew
q'aan*; q'aante \(f\). q'aamme \(p\). - ear
q'aara \(f\). - pepper
q'aarakko \(m\). - monkey
q'aaš \(v\). - to open a fence
q'aata \(f\). - trigger of firearm
q'aba? \(v\). - to listen to
q'abad - feel
q'aba \(f\). - instrument for cutting thorns
q'abte \(f\). - hide basket
q'ac'ara \(f\). - small bell for goats and sheeps
q'alate \(f\). - jackal, sïmyän fox (canis simensis)
q'alay*; q'alayte \(f\). q'alayye \(p\). - rest of a bullet expelled after shooting
```

q'all $v$. - to start singing
q'alq'alko $m$. - tree sp.
q'alše $f$. - belt for men; water carrier
q'amma $a d v$. - day after tomorrow
q'ammatinko - three days after tomorrow
q'ammatinte - three days after tomorrow
q'ammakko - two days after tomorrow
q'amme m./f./p. attr. - bad
q'anc'arlakko $m$., q'anc'arlatte $f ., \mathbf{q}$ 'anc'arlayke $p$. adj. - hugly
q'ane $f$ - day (Amh. qän)
q'ane - during the day
q'anta $f$. - granary
q'ants'e $f$. - sprout, thorn
q'aq' v.; (Caus1) - to cut
q'aq'q'e p. q'aq'q'atte f . - bark
q'arar $v$. - to be hurt, be sick; q'ararro $m$. - illness
q'arma $f$. - cramps; q'armod $v$. - to have cramps
q'aro $m$. q'arre $p$. - side
q'arra $a d v$. - before (space and time)
q'arrasad - take mucus out of the nose
q'arts'eta $f$. - bag for grain (Amh. qärts'a)
q'ats'o $m$. - itch; q'ats'od - to itch
q'ato $m$. - spot on the skin, black
q'ats' $v$. - to bend arms and legs of a corpse
q'aw v.; (Caus1) - bite
q'aw*; q'awte $f$. q'awwe - gourd
q'awa $f$. - rifle
q'awko $m$. - man
q'awto p. q'awtitto m., q'awtitte f. attr. - new
q'awwaditto $m$., q'awwaditte $f$., qáwwadad̛ơe $p$. - new
q'ayile $f$. - dried sorghum or maize panicle
q'ayna $a d v$. - tomorrow
q'ayto $m$. - time
q'ayy adj.v. - to be good, be nice
q'ayyinte $f$. - good quality, beauty
q'eedd - lick once
q'eed v.; (Caus2) - to lick
q'emame $f$. - spice
q'enta $f$. - long chain metal earring
q'erts'a $f$. - thin calabash
q'eske $f$. - louse
q'ets' $v$. - to cut
q'ob*; q'obakko $m$., q'obbe $p$. - nail, big toe
q'od ;q'odas (caus) plough - dig
q'ofte $f$. - cave
q'ole $p$.; -ko, -te, -adde - cattle; q'oltaw $v$. - to become a domestic animal q'olfe $f$. - edible plant
q'olfe $f$. - key
q'olse $f$. - sorghum panicle without grains
q'omatte $f$., q'omayke $\mathbf{p}$,, q'omaykaddde $p$. - sandal, shoe
q'omm $v$. - to eat grains
q'onc'or - stir something
q'onn aw become - be slim
q'ontar*; q'ontarko m., q'ontarre $p$. - hide put underground to dry
used to make knife holders.
q'onts'a $f$. - kind of rifle
q'onts'e $f$. - upper grind stone
q'oode $f$. - snail
q'0oš $v$. - to hunt; q'0ošo $m$. - hunting
q'ooše $f$. - flap ears
q'orke $f$., q'orka $f$. - curved thing
q'ormo $m$. - dance phase in which the men chase the women
q'orq'oro $m$. - latta, pots etc.
q'orq'oro $m$. - bell made of tortoise house
q'osor*; q'osorko $m$. q'osorre $p$. - plant for rope
q'oš $v$. - to scretch
q'ot*; q'otakko $m$. q'otte p. - finger, claw
q'otyo $m$. - ploughing ox
q'oyto $m$. - red stone grinded to make a powder for the hair
q'uce $v$. - to fill (intr.)
q'urc'o $m$. - intersection of the two parts of the stomach
q'urrube $f$. - bird sp.
q'uts'o $m$. - bird sp.

## r

raai $v$. - to be bitter
raandaћ adj.v. - to be cold
raiv. - to shoot; ra99o $m$. - shot
raf $v$. ; (Caus2) - to sleep
rakk $v$. ; (Caus1) - to hang; rakkinde $f$. - handle, strap
rammo $m$. - belly jerm
raww - finish in one time
raw $v$. ; (Mid) - to finish
reegakko $m$.; reegatakko $m$., reegatte $f$. - clan name
reek $v$. ; (Caus2) - to mix
reento $m$. - hippo
reše§ $v$. - to be light
rifanko $m$; -adde $p$. - fur
$\boldsymbol{r i g} v$. - to smear
rigad - go towards someone, leave somewhere
riir $v$. - to shout
ringa $f$. - beans, big, similar to chick peas
roc'ante $f$. - grass, kind of dry
rook v.; (Caus2) - to speak
rooko attr. - curved away from the head (horn)
roq'om $v$. - to wrinkle
rukad $v$. - to pierce, to shoot
rummaite $p$. - Arbore people
ruuk $v .(\mathrm{Mid})$ - to throw somth. for chasing

## $\mathbf{S}$

-s(s)a - definite suffix
saala $f$. horn of orix (šaalto) used as trumpet, rifle's mouth
saamuna $f$. - soap
saar*; saarko $m$, saarre $p$. - head of village
saara $f$. - consumed wasted cloth
saarko $m$. adde - panicle's threads
sa'e $f$. - child carrier made of rope, small flea which is not in the rural area
saabanko $m$., saabankadde $p$., saabanne $p$. - strip of field
sabbe $p$. - top
sagan*; saganko (also sa? anko $m$.) sagne - meat
sala ${ }^{\text {n }}$ num - four
samminte $f$. - week
sanaxe $f$. - skin around two bonesof thrback of the knee
saq' v.; (Punct) - to store
sarabe $f$. - corpse
sarba $f$. - calf, ankle
sassabbe $f$. - kind of scorpion
sawro $m$. - dik dik
-se - definite suffix
seere $f$. - dry meat
segele $f$. - grass of roof
seћ $v . ;$ (Caus2, Mid) - to collect
seka6 $v$. - to roast meat
seke $f$. - stick of roof
sexad - shelter
sezzen num. - eight
sibil*; sibilko $m$., sible $p$. - iron
siibde $f$., siibbe $p$. - hand made rope; trap
siido $m$. - eyebrow
siine $f$. - mucus
siippo $m$. - sweat
siise $f$. - honey water
silke $f$. - iron trap
silke - telephone (Amh. silk)
sile $p$.; silitte $f$., silittadde $p$. - feather
simbale $f$. - sorghum sp.
$\sin d e f$. - nose
sine $f$. - mucus, what comes out of nose
sire $p . ;$-atte $\mathrm{f} .-$ jewellery, ornamental objects; $\boldsymbol{\operatorname { s i r a d }} v .-$ to adorn oneself
sobore $m$., soboritto $m$., sorbe $p$. attr. - castrated (cattle)
$\boldsymbol{\operatorname { s o g }} v$. - to divine
soggo $m$, sogge $p$. - magician
sollakko $a d v$. - slowly
somba $f$., sompa $f$. - lung
sonq'a $f$. - guitar, kind of
sooxmatte $f$. - edible wild tree
soq'o $m$. - salt
sor $v$. - to run (only singular persons as subject)
sorto $m$. - placenta
sufe $f$. - sunflower
sukk* $v$. ; sukkas - to make roll down; sukkam - to roll down
sure $f$. - gathering place
surke $f$. - arm bone
suutta $f$. - very small bird

## Š

šaalko $m$. - pool made of river water
šaalo $m$. - house store
šaalo $m$. - top of foot
šaalto $m$. - oryx
šaaše $f$. - cloth used by old an man to cover his head
ša£al*; ša£alko $m$., ša£alte $f$., šal\&e $p$. - brother, older
šab $v . ;$ (Pass, Punct) - to tie
šag, šaguw $v$. - to collect honey
šam6o $m$. - newborn
šamma?šad $v$. - to yawn
šarifo $m$. - kind of rifle
šaw*; šawte $f$. šawwe $p$. - beehive
šayna $f$. - water pump
šeeg $x 0$ - bring
šibde $f$. - tree sp.
šibo $m$. - part of rifle, where the bullet pierces
šicca $f$. - kind of rifle
šiggar v.; (Caus šiggariš, šiggaroš - to stop
šiggire $f$. - razor
šiin $v$. ; (Mid) - to smear
šiinin*; šiininko $m$. šiinimme $p$. - butter
šitte $f$. - girl
šikkomod - be numb
šilšilko $m . / f$., šilšilkad̛de $p$. attr. - smooth
šinšalle $p$.; -itte $f$. - ants
šiq' $v$. - to fart; šiq'ne $f$. - fart
šira6 $v$.- to turn
šolo6 - be swallen
šooh v.; (Pass šoohom) - to wash
šooћ $v$.; to urinate; šooћe $p$. - urine
šoona $f$. - reedbuck
šoonte $f$. - skin used to carry flour, earth and similar
šorke $f$. - honey calabash
šud̛ v.; (Pass 'get dressed') - to cover
šukkad $v$. - to trample upon
šuko $m$. - wooden handle of knife
šula $f$. - sorghum sp.
šuma $\uparrow$ to $m$. - sand
šum $v$. - to work hard, to do any kind of work, to try hard
šunkurte $f$. - onion
šunšule $f$. - hair adornment with mud
šur v.; (Caus1) - to suck
šurrabe $f$. - sweater
šurte $f$. - hair with clay
šuume $m$. - chief (Amh. šum)

## t

ta clit. - upon
tabben num. - six
tahtatti - at low volume
taћћan num. - seven
takk adj.v. - to be small
takkaditto $m$. - star, male
takkinte $f$. - smallness
talla $ћ \boldsymbol{m}$. - tree giving edible leaf
tamar $v$. .; (Caus2 'to teach') - to learn
tarbitto $m$. - kind of trumpet (played in occasion of the gilo meeting)
taš $v$. - to thatch
taygo $m$. - watching tower
te - feminine pronominal particle
tebba $f$. - radio (Amh tep, from English tape)
tebele $f$.; telbe $p$. - iron arrow (shot to pierce a bull's neck)
teerikko $m$. adde - dust
tel $v$. - to build a wall with stones
temm - to try
tibire $f$. - hook
tibire $f$. - tree sp.
tillile $f$. - bird sp.
tipa $f$. - straight think
tire $p$, tirre - liver
tir $v .-$ to run
tiršaq'ad' - sneeze
tokon*; tokonko $m$.kme $p$. - heel
toolingo $m$. - stick for married man
toollo $m$. - walking stick, long
toonnakko $m$., toonnatte $f$., toonnayke $p$. adj. - hump
toonte $f$. - poison
tu6 $v$. ; (Punct) - to whip
tuf $v$. - to spit
tumalsa6 v.; (Caus2) - be paralysed
tumo $m$. - garlic
tunta $f$. - hammer of iron
tuntuma $f$. - punch
turde $f$. - lower buttocks
turq'ayna $f$. - squirrel sp.
tuude $f$. - hippo and buffalo skin, piece of (taken by the bride)
tuuts' $v$. - to push
tuuts'ad $v .-$ to twist (e.g. in order to get into a small hole)
ts'
ts'aalq'o m. - small tree
ts'aare $f$. - drops of milk left in the bucket
ts'agade $f$. - frame of roof
ts'amakko $m$., ts'amatakko $m$., ts'amatte $f$. - Ts'amakko people
ts'ats'a $f$. - ring
ts'e? ${ }^{\text {Po } m \text {. - grasshopper }}$
ts'ekile $f$. - elbow
ts'eq'o $m$. - firefly
ts'iib $v$. - to clean
ts'iire $p$. ts'iirakko $m$., - male
ts'iirinte $f$. - manhood
ts'iloote $f$. - thread of blue colour
ts'its'ts'o $m$. - bead, black, which is found in the final section of a collar
ts'iy*; ts'iyitte $f$., ts'iyye $p$. - bullet
ts'onaq'o $m$. - bee
ts'ulde $f$. - rat with long mounth
ts'una''e $f$. - game with stones and 6 holes

## W

waalko $m$. - calabash used to pour water
waan $v$. - to recover, heal
waana $m . / f . / p$. attr. - different
waaq'e $p$. - saliva
warsa $f$. - dance phase
waice $f$. - vegetables

```
wak v.; (Caus2, Punct) - to speak
wal \(v\). - to forget
walka \(f\). - small thin piece of wood
wallale \(f\). - stalk of sorghum
wallare \(f\). - arrow, body of
walta \(f\). - genet
war \(v\). - to throw
warkata \(m . / f\)., warkatadode \(p\). - left
warna \(f\). - red tree
warrakko \(m\). - guinea fowl sp .
warže \(f\). - spear
waštire \(f\).; -anne \(p\). - kind of rifle
waysad - mix for oneself
wayte \(f\). - blessing by blowing
\(\boldsymbol{\operatorname { w o g }} v .-\) to step on
woq'oš \(v\). - to be pregnant (animal)
woq'q'e \(f\). - hot sun of midday
worћam \(v\). - to fight; worhanko \(m\). - war
wožža \(f\). - work; wožžad \(v\). - to work
wuyy \(v . ;\) (Mid, Pass, Pass-Caus2, Pass-Mid) - to call
```


## X

xaaše $f$. itte xašše - leaf
xaf $v$. - to come (only with singular person as subject)
xalle $f$. - bird sp.
xampa 3 adj.v. - to be soft
xare $f$. - fish
xariš*; xariško $m$. xarše $f$. - beans, boiled
xaro $m$. - crocodile
xawše $f$. - sugar cane
xerero $m$. - plant sp
xi6*; xi6te $f$. xi66e $p$. - lip
xiibire $f$. - bat sp.
xinawno $m$. - bad smell
xinaw - stink
xobin num. - five
xoonsitte $f$. - mithic animal
xoronko $m$. - honey mead
xoronko $m$. - male
xorr $v . ;$ (Caus1) - to send
$\operatorname{xos} v$. - to enlight
xoxon*; xoxonko $m$. xoxme $p$. - hole
xumbi attr. - all
xur $v$. .; (Punct, Pass-Mid xurmad') - to give up, to leave
y clit - semantically empty clitic
yaaka conj. - subordinate conjunction
ya, yay clit. - with

## $\mathbf{Z}$

zaaf - crawl
zaal*; zaalko $m$., zaalle $f$. - hole made by water
zaan*; zaante $f$. zaamme, - branch
zaaq'e $f$. - thread
zaar*; zaaraw, zaarod $v$. - to get mad; zaarays $v$. - to make mad;
zaaraysis $v$.- to cause to make mad; zaarakko $m$., zaaratte $f$., zaarayke $p$.
adj. - mad; zaarinte $f$. - madness
zaarbi $v$. - pass, to
za@*; za¢ko $m$., za¢¢e $p$. - heart
zalbate $f$. - clasp
zammo $m$. - honey
zanga $f$. - wood for the fence of the house
zano $m$.; zamme $p$. - street
zaq' $v$. - to slaughter
zargano $m$. - tree sp.
zarge $m . l f$., zargadofe $p$. - spotted
zarikko $m$. - leopard
zayte $f$ - oil
zeeћ num. - three
zi ${ }^{*}$; $\mathbf{z i}$ ite $f$., ziP?e $p$. - pot of clay
zigam adj.v. - to be long
zigammo $m$. - height
zigo $m$. - wooden spear
zigo $m$. - porridge
zilanq'a $f$. - rainbow, lizard sp.
ziir v.; (Redupl.) - to take out one by one
ziiza $f$. - back bone
zimba $f$. - tree sp.
zingano $a d v . ;$ zingatte. - in the morning
zit $v$. - to pull
ziya $m$. - warrior
$\operatorname{zog} v$. - to float, to put one on the other
zoogo $m$. - father-in-law
zoola $f$. - calabash, kind of long
zoole $f$. - shank
zoole $f$.; -itto m., -itte $f$. - stalk of sorghum
zoor adj.v. - to be sweet
zormad $v . ;$ (Caus2) - be angry
zow $v$. - to go

```
zubaPPe \(f\). - stink-ant
̌̌
ža Pa \(f\). - wife of 'godfather'
ža Pal*; ža?alko \(m\). ža?alte \(f\). - godfather / godmother
```



```
žabbarna \(f\). - belt with pockets
žag \(v\). .; (Punct) - to insert
žaga \(f\) - bird sp.
žagam \(v\). - to go down
žalamba \(f\). - bird sp.
žammad \(v\). - to enter (with plural persons as subject)
žegela \(f\). - twisted wood, side scoliosis
ži \(v_{\text {. ; }}\) (Mid) - to eat
ži?o \(m\). - food
žimmir \(v\). ; (Caus2) - to stun
žinka - Jinka (administrative centre of the Southern Omo Zone)
žinnare \(f\). - belt for bullet
žoq' žoq'oš caus žoq' ớ mid - beat, hit, grind
žoq'omi - have diorrhea
žug \(v\). - to extract
žumpo \(m\). - iron point
žuq'unta6 \(v . ;\) (Caus2) - to throw wood
```


### 10.2. English-Ts'amakko

## a

acacia - ©aatt*; đaattakko $m$. ©aattanne $p$.
acacia, young - marts'a $f$.
accuse, to - deek $v$.
Addis Ababa - Paddisabeba
affair, matter - gaaћ $\boldsymbol{m}$.
after - Yaani $a d v$.
age grade 1 - morq'o $m$.; -itto $m$., -itte $f$.
age grade 2 - loobarko $m$.; loobartakko $m$., loobartitte $f$.,
loobarkadded $p$.
age grade 3 - bilbilko $m$.; bilbiltakko $m$., bilbiltitte $f$., bilbilkadde $p$.
age grade 4 - nelbasko $m$.; nelbastakko $m$., nelbastitte $f$., nelbaskadde $p$.
age grade 5 - gurmalko $m$.; gurmaltakko $m$., gurmaltitte $f$.,
gurmalkadde $p$.
age grade 6 - baasarko $m$.; baasartakko $m$., baasartitte $f$., baasarkadde $p$.
all - xumbi attr.
alliance between the clans Pozbikko and Palgakko - binnasko $m$.;
binnastakko $m$., binnastitte $f$., binnaskadde $p$.
always - macce $a d v$.
Amhara people - gerge $f$.; -itto $m$., -itte $f$.
amniotic fluid - Paage $f$.; -adde $p$.
animal sp. - Parka $f$.
animal sp. - Pilaaše $f$.
animal sp. - bizze $f$.
animal sp. - dingeša $f$. addede
animal sp. - dodolko $m$.
animal sp. - dubaza $f$.
animal sp. - dakše $f$.
animal sp. - gurdo $m$.
animal sp. - kaskale $f$.
animal sp. - laale $f$.
animal, wild - Pakko m.; -itto m., -itte $f .$, -adde $p$.
ankle - gaaraboq'o $m$.
ants - šinšalle $p$.; -itte $f$.
anus - ža? Par*; ža P Parko $m$., ža ? Parre $p$.
appear, to - ? $\operatorname{armad} v$.
Arbore people - rummaite $p$.
Ari people - Paare $p$.; Paartakko m., Paartitte $f$.
arm bone - mic'angalle $f$.
arm bone - surke $f$.
armpit - baaro $m$.
arrive, to - dag'ga6 v.; (Caus2)
arrive, to - gay $v$.
arrow with iron point - Paaza $f$.
arrow, body of - wallare $f$.
arrow, wooden - laax*; laaxko $m$. laaxxe
ashes - dar£o $m$.
ask, to - gass $v$. (Mid); gasso $m$.
at low volume - tahtatti
at night - gallawo
at that moment, then - Passanna $a d v$.
away - Sita $a d v$.
axe- Pirgaio $m$.

## b

baboon - gelzakko $m$. adde
back bone - ziiza $f$.
back, behind - duuko $m$.
bad - q'amme m./f./p. attr.
bad smell - xinawno $m$.
bag for grain (Amh. qärts'a) - q'arts'eta $f$. (Amh. qärts'a)
banana - muuze $f$.
Banna people, Banna and Hamer peoples - Porgo p.; -itto m., -itte $f$.
-adde $p$.
bark - q'aq'q'e $p$.
barley - boorto $m$.
bat sp. - laafa $f$.
bat sp. - xiibire $f$.
be able, to - Palgas $v$.
be angry, to - dagod $v$.
be angry, to - zormad v.; (Caus2)
be big, to - damm adj.v.; damminte $f$.
be bitter, to - raas $v$.
be black, to - gumm Adj.v.; gumminte $f$.
be blind, to - daaf $v$. ; (Caus1)
be brave, to - porima6
be cold, to - raandaћ adj.v.
be completed, to - dikkad
be enormous, to - gaarm adj.v.
be fat, be fertile, to - goob $v$. ; (Caus2); goobinte $f$.
be finished, to - kum $v$.
be good, be nice, to - q'ayy adj.v.
be happy, to - gasod
be hard, to - kaћћ adj.v.; kaћћaw $v$.
be hot - lu6 adj.v.; (Caus1)
be hurt, be sick, to - q'arar $v . ;$ q'ararro $m$.
be light, to - rešes $v$.
be located, to - Pag v.; (Redupl)
be long, to - zigam adj.v.
be named, to - kibay
be numb, to - šikkomod
be over, to - pagad
be paralysed, to - tumalsa6 v.; (Caus2)
be plenty, to - bazz v.; (Mid bazza6)
be plenty, to - gaan $v$.
be powerful, to - muuq'um $v$.
be pregnant, to (animal) - woq'oš $v$.
be red, to - $}$ adj. $v$.
be rich, to - kama6
be rich, to - kamur $v$.
be salty, to - maq'al $v$.
be short, to - maanga? adj.v.
be sick, be tired to - malal $v$.
be sleepy, to - miPad
be slim, to - q'onn aw become
be small, to - takk adj.v.
be smart, to - bax $v$.
be soft, to - c'aldax v.; (Caus2)
be soft, to - xampa? adj.v.
be straight, to - pika6 piska6
be stuck, to - gaftad $v$. ; (Caus2)
be surprised, to - mugur $v$. ;(Caus2 murgis)
be swallen, to - šolo6
be sweet, to - zoor adj.v.
be unready, to - gaansa6
be unripe, be green, to - laxx adj.v.;; laxxaw $v$.
be useful, to - garn $v$.
be wet, to - c'a6 adj.v.
be white, to - bi¢ adj.v.
be worried, to - gaab $v$.
bead-maax*; maaxko $m$., maaxxe $p$.
bead, big - pure $f$.
bead, black, which is found in the final section of a collar - ts'its'ts'o $m$.,
bean, black - pec'e $f$.
beans, big, similar to chick peas - ringa $f$.,
beans, boiled - xariš*; xariško $m$. xarše $f$.
beard - buuše $f$.; buušolakko $m$., buušolatte, buušolayke $p$.
beat, hit, grind, to - žoq' žoq' oš Caus žoq'od Mid,
beautiful - baxxarko $m$., baxxarte $f$., baxxarre $p$. attr.; baxxaninte $f$.
become old, to - geeš*; geešuw
bed (Amh. alga) - Palga $f$. (Amh. alga)
bee - ts'onaq'o $m$.
beehive - šaw*; šawte $f$. šawwe $p$.
beer (Amh. bira) - bira $f$. (Amh. bira)
beer, fresh local - Pallo m.; -adde $p$.
beer, local - parše $f$.
before (space and time) - q'arra $a d v$.
before, oneself - Pinte $a d v$.; Pintaw $v$.
beg, to - ginsad $v$. ; ginselakko $m$., ginselatte $f$., g'inselayke $p$. adj.
belch, to-gees $v$.
bell made of tortoise house - q'orq'oro $m$.
bellows pump - gilfa $f$.
belly - garaf*; garaite $f$., garfe $p$.
belly jerm - rammo $m$.
belt for bullet - žinnare $f$.
belt for men; water carrier - q'alše $f$.;
belt for pregnant woman - goorko $m$.
belt of beads - nabale $f$.
belt with pockets - žabbarna $f$.
bend arms and legs of a corpse, to - q'ats' $v$.
Birale people - birale $p$.; biraltakko $m$., biraltitte $f$.
bird - Paage $p$.; -itte $f$.
bird sp. - c'uruq'e $f$.
bird sp. - gawarakko $m$.
bird sp. - laalo $m$.
bird sp. - laћћo $m$.
bird sp. - moralle $f$.
bird sp. - q'urrube $f$.
bird sp. - q'uts'o $m$.
bird sp. - tillile $f$.
bird sp. - xalle $f$.
bird sp. - žaga $f$.
bird sp. - žalamba $f$.
bird sp. (it eates calves) - kokakko $m$.
bird, spotted - barlo $m$.
bird, very small - suutta $f$.
birds, predatory - Pallafe $f$.
bit, a little - gilinkasa $a d v$.
bite, to - q'aw v.; (Caus1)
blacksmith - gitama $m$.; gitantakko $m$., gitantitte $f$, gitamaddele $f$.
blacksmith - puga $f$.
bless, to - buup $v$.
blessing by blowing - wayte $f$.
blind - daafakko m., daafatte $f$., daafayke $p$. adj
blood - c'egde $f$. $\alpha$
blow, whistle, to - Pupp v.; (Redupl)
body - biš*; biško $m$., biškitto $m$., biškitte $f$., bišše $p$.
bone - meeq'e $p$.; meeq'te $f$.
bone protuberance, spur - kirinc'e $f$.
borrow, to - biddir $v$.; biddire $f$.
bow - baante $f$.
boy - Pinanko $\sim$ Pinawko $m$.
bracelet for pulse - Middo $m$.
bracelet, black iron-mogol*; mogolte $f$. molge $p$.
bracelet, red - marrote $f$.
bracelet, white - Pašawa $f$.
braid of women - gidanko $m$.
braid, small - kuttakutto $m$.
braids, kind of -c'irfa $f$.
brain-nolo $m$.
branch-zaan*; zaante $f$. zaamme,
bread, kind of - laša $f$.; laško $m$., lašše $p$.
break, to - gond v.; (Pass)
breast - £a6un*; £a6unko m., ¢a6ne p.; £adinko $m$.
breath, rest, to - nassad $v$.
bridegrooms - kayko $m$.; -itto $m$., -itte $f$.
bridge - dildila $f$.
bring, to - šeeg $x 0$
brother, older - šåal*; šåalko $m$., šaqalte $f$., šal£e $p$.
brother, younger - Padda $m$.; -iyo $m .$, -adde $p$.
brother/sister, younger - Yazo $m$.; Paze $f$.; Pazze $p$. /
brush, to - muc'c'
buffalo - gasar*; gasarko $m$., garse $p$.
build a fence, to - c'aa6 $v$.
build a wall with stones , to - tel $v$.
build, to - gubad
bullet - ts'i्' ${ }^{*}$; ts'iyitte $f$., ts'iyye $p$.
bury, to - may $v$.
bus - lonšina $f$. (Amh. loncina, from Italian leoncino)
bush - q'aac'c'e $f$.
bushbuck (tragelaphus scriptus) - gaabote f.; -ko m. (tragelaphus scriptus)
butter - šiinin*; šiininko $m$. šiinimme $p$.
butterfly - pelampelo $m$.
buttock, outer part - ?ongoro $m$.
buttock, tail, wasted tail of sheep after emptied of fat and meat - duub*;
duubde $f$., duubbe $p$.,
buy, to - bitam v.; (Mid bitmad, Punct, Redupl, -Redupl)

## C

cabbage sp. - mac'c'e
calabash for beer - gulma $f$.
calabash for coffee, pipe belly - gongollo $m$.
calabash for milking - booro $m$.
calabash for shaking milk - diile $f$.
calabash to drink coffee - karam6a $f$.

calabash used to pour water - baasallo $m$.
calabash used to pour water - waalko $m$.
calabash, kind of - balka $f$.
calabash, kind of long - zoola $f$.
calf, ankle - sarba $f$.
calf, newborn - Pagile $f$.; Pagilitto m., Pagilitte $f$., Palgo $p$.
call, to - wuyy v.; (Mid, Pass, Pass-Caus2, Pass-Mid)
camel - gaamayle $f$.
carry on the shoulder, to - dooq' $v$.
carry with both arms, to-baPPay $v$.
carry, to - gaagis $v$. .; (Pass)
carved wood for several uses, canoe - gongala $f$.
castrated (cattle) - sobore $m$., soboritto $m$., sorbe $p$.
cat, domestic - Purre $f$., Payidurre $f$.
catapult - kullumme $f$.
cattle - q'ole $p$.; -ko, -te, -adde; q'oltaw $v$.
cattle camp, kraal- gom6o $m$.
cattle sharing - beel*; beelko $m$., beelle $p$.
cave - q'ofte $f$.
central internal point of foot and hand - ganas*; ganaiko $m$., ganaice $p$.
centre of foot palm - dada? anko $m$.
change direction, readdress, to - mag $v$.
change, to - Pook $v$. (Mid, Redupl, Pass-Caus)
charcoal - q'aac'a $f$.
chase, lead, to - gor $v$.
cheetah-goržo $m$.
cheetah - mirle $f$.
chest - ћeeko $m$. ћeekke $p$.
chew, to - q'aan $v$.
chicken - lukkale $f$. -itto $m$., -itte $f$., -addde
chief (Amh. liqambär) - liq'ambare $m$. (Amh. liqambär)
chief (Amharic šum ') - šuume $m$. (Amh. šum)
child carrier made of rope, small flea which is not in the rural area - sa'e $f$.
child named after 'godfather' - moggo $m$.; -iyo $m$., -added $p$.
child, small-na? $9 \mathbf{a} f$.
children - dalle $p$.
chin-gawso $m$.
clan - gaarko m.;-itto m., -itte $f$.
clan-gafko $m$.
clan name - Palgakko $m$.; Palgatakko $m$., Palgatte $f$.
clan name - Pizmakko $m$.; Pizmatakko $m$., ?izmatte $f$.
clan name - Pozbikko $m$.; Pozbitakko $m$., ?ozbitte $f$.
clan name - £amaddo m.; © amatakko $m$., ¢ amatitte $f$.
clan name - £eelakko $m$.; § eelatakko $m$., § eelatte $f$.
clan name - baritto $m$.; baritakko $m$., baritte $f$.
clan name - reegakko $m$.; reegatakko $m$., reegatte $f$.
clasp - zalbate $f$.
clean, to - ts'iib $v$.

```
climb, to - kad v.; (Punct, Redupl, Punct-Caus)
clitoris - Pingir*; Ping'irakko m., Ping'iranne p.
close with a lid, to - c'aq'om v.; c'aq'q'omme }f\mathrm{ .
cloth used by old an man to cover his head - šaaše f.
cloths of any size - lable f}f\mathrm{ ., laybe }f\mathrm{ .
cloud - poolo m.
club, wooden - buke f}\mathrm{ .
cock's mane - kuuškuušo m.
coffee - qare f.
co-habit, to - karom v.
cold - gulfo m
coldness - ?ošonko m.
collar bone - bargade f
collar for women - Pir@o m
collect honey, to - šag, šaguw v.
collect, to - seћ v.; (Caus2, Mid)
comb, to - pil v.; (Mid)
come back, to - kol v.
come, to (only with plural persons as subject) - Pogoy v.
come, to (only with singular person as subject) - xaf v.
concimate, to - boox v
conjunction of consecutive sentences - ba conj.
conjunction of head nouns - Paaka conj.
consumed wasted cloth - saara f.
container for milk made of wood - ?ombotto m.
cooked blood - kurfa f.
corpse - sarabe f
corridor between house and fence - keeda }f\mathrm{ .
cotton - puddo m.
cough, to - gufa@ v.; gufacio m.
count, to - dik v.
cover, to - šươv.; (Pass)
cow - lo?0}f\mathrm{ .
cow with no milk - baakko f., baakkitte f., baakkittaddef p
cramps - q'arma f.; q'armod v.
crawl, to - zaaf
cricket - c'0orom.
crocodile - xaro m.
crouch down, to - gobad}v
cry, to - ?ooy v. (Caus 1)
cub, newborn of any animal - Pottakko m., Pokke p
cup - kubbaya }f\mathrm{ .
curds - picce f.
curved away from the head (horn) - rooko attr.
curved thing - q'orke f., q'orka }f\mathrm{ .
curved towards the head (horn) - lukkurro m./p. attr.
cut off, to - boq' v.; (Caus boq'os)
```

```
cut, to - mux v.
cut, to - q'aq' v.; (Caus1)
cut, to - q'ets'v.
```


## d

dance phase - warsa $f$.
dance phase in which the men chase the women - q'ormo $m$.
dance, to - kibir $v$. ; (Caus kirbas); kibirko $m$., kirbe $p$.
day (Amh. qän) - q'ane $f$. (Amh. qän)
day after tomorrow - q'amma $a d v$.
defeat, to - baša6 v.; (Caus bašša6, Pass bašma6, Redupl)
defecate, to - c'aaq' $v . ; \mathbf{c}^{\prime} \mathbf{a a q} ' \mathbf{e} f$.
definite suffix - - $\mathbf{~ a}$
definite suffix - $\mathbf{- s}(\mathbf{s}) \mathbf{a}$
definite suffix - -se
devil spirit of dead - meeše $f$.
dew - c'arke $f$.; addfe $p$.
Dhaasanach people - galaba $p$.
die, to - par $v$.
different - waana $m . / f . / p$. attr.
difficult - gaale $m . / f . / p .$, gaalatte $f$. attr.; gaala6 $v$. .; (Caus gaalša6)
dig - bood v.; (Caus1)
dig - q'od;q'odas (Caus) plough
dik dik - sawro $m$.
dirt - Pusk*; Puskakko $m$., ?uskanne $p$ Puskakkod $v . ;$ Puskakkolakko
$m$., ? uskakkolatte $f$., ?uskakkolayke $p$. adj
dirt of calabash - pelta $f$.
divine, to - gillad $v$.
divine, to $-\boldsymbol{\operatorname { s o g }} v$.
do, put, to - goddd v.; (Caus1, Pass)
do, to - bas $v$. ; (Mid, Redupl)
doctor - Pakima $m$. ; -itto $m$., -itte $f .$, -adde $p$.
dog - karo $m$.; -itto $m$., -itte $f$., karre $p$.
donkey - Parre $f$.
door - karre $f$.
dream, to - Pinsud $v$.
dried thing, dead small tree - la $\ddagger \hbar$ awko $m$.
dried sorghum or maize panicle - q'ayile $f$.
drink, to - £ug v.; (Caus2, Punct)
drive, to - gor $v$.
drop, flow, to - Pel $v_{\text {. }}$; (Redupl)
drops of milk left in the bucket - ts'aare $f$.
drum - darbe $f$.
dry meat - seere $f$.
dry season - kibe $f$.; kibbe $p$.
dry, to - po? $v$.
dung, dry manure - košo $m$.
during the day -q'ane
dust - teerikko $m$. adde

## e

each other - Pelle $a d v$.
ear-q'aan*; q'aante $f$. q'aamme $p$.
earing chain - niyarroge $f$.
eat grains, to $-\mathbf{q}$ 'omm $v$.
eat, to - ží $\boldsymbol{\text { v.; ( }}$ (Mid)
edible plant -q'olfe $f$.
edible wild plant - marra $\ddagger$ e $f$.
edible wild tree - sooxmatte $f$.
egg - Pukaћe $p . ;$-itte $f .$, -adde $p$.
eight - sezzen num.
eland - goontore $f$.,; -ko $m$.
elbow - ts'ekile $f$.
elephant - Parafko $m$.
ember - borxo $m$.
end, border - ma?še $p$.
enemy - naaba $m$.
enlight, to - $\mathbf{x o s} v$.
enter - $\hbar \mathbf{u l} v$. (Punct)
enter, to (plural persons as subject) - žammado $v$.
entire - mume m./f./p. attr.
entrails - kaanšima $f$.
equal - gura $a d v$.
evil spirit - buda $f$.
extract, to - žug $v$.
eye - Paxxe $p$.; -itte $f$, adde $p$.
eye, coloured part - duunko $m$.
eyebrow - siido $m$.
eyelashes - Piife $f$.
eyes' disease - Para

## f

fall, to - bi¢ v.; (Caus1, Redupl); bi¢inte $f$.
family - mano $m$.
fart
fart, to - šiq' $v$. .; šiq'ne $f$.
fat, dark mouse - doc'a $f$.
father - Pabba $m$.; -iyo $m$.,-adde $p$.
father-in-law - zoogo $m$. --
feather - sile $p$.; silitte $f$., silittadde $p$.
feel - q'abad'
female calf-maare $p . ;$-te $f$.
fence - c'ayde $f$., c'ayye $p$.
fence for goats - Pukunte $f$.
fenugreek - maaltitte $f$.
fever, disease - bu99o m.;
field, cultivated - pašo $m$.; pacce $p$.
fight, to - worћam $v$.; worhanko $m$.
fill (intr.), to - q'ucc $v$. (.)
fill a calabash, to - kubbad x0
fill up, to - Pucc $v$. (Caus1)
finger, claw - q'ot*; q'otakko $m$. q'otte $\mathbf{p}$.
finish in one time, to - raww
finish, to - raw v.; (Mid)
fire - katte $f$.
fire stick - gayte $f$.; anne $p$.
firefly - ts'eq'o $m$.
fire-stick - dayte $f$. -
firestones - Puzge $p$.
fish - xare $f$.
fish, to - gaas $v$.
five - xobin num.
flap ears - q'ooše $f$.
flat plane - deelo $m$.
flea sp. - gits'ts'o $m$.
float, put one on the other, to $-\mathbf{z o o g} v$.
flour-daammo $m$.
flour of any cereal-damay*; damayko $m$., damayye $p$.
flour, cooked - ћanšal*; ћ ${ }^{\text {anšalakko } m \text {., ћanšalanne }}$
flower - bisko $m$.
flower of maize - baalko $m$.
flower, to - pud $v$.
flute, pipe stem - maalka $f$.
fly - Pinnakko $p$.; -itto $m$.-adde $p$.
follow, to - gussum $v$.
fontanelle - 90 mbom .
food - kumbala $f$.
food-žii? $m$.
food gemfo-da£an*; daianko $m$., da£ne $p$.
foot - lu6*; lu6te $f$., lu66e $p$.
footprint - paanaw
forbid, to - dawr $v$.
forehead - miinte $f$.
foreigner - paranc'a $f$.
forest - Porro m.; -adde p.; Porro
forget, to - wal $v$.
four - sala ${ }^{\text {num }}$
fowl's faeces - banda $f$.
frame of roof-ts'agade $f$.
fresh (milk) - meelo $p$. attr.
friend - Payra $m$.
from here-kaakanu $a d v$.
from there - Paysana $a d v$.
from there - kaaynu $a d v$.
from; to - nu, nnu clit.;
fruit eaten by donkeys and goats - burza $f$.
fruit like onion that is not eaten - laq'a $f$.
fruit of kuyatto tree - Poongo m. kuyatto
fruit sp. - miP*; miPte $f$., miP?e $p$.
funnel-gabate $f$.
fur - rifanko $m$; -added $p$.

## g

gall bladder - diigo $m$.
game with stones and 6 holes - ts'una''e $f$. 6
garlic - tumo $m$.
gather, to - buka6 buska6
gathering place - sure $f$.
gawwada people - £ aale $p$.; £ aaltakko $m$., $£$ aaltitte $f$.
genenuk (red meda fiel) - moyle $f$.
genet - walta $f$.
get goosebumps, to - qac'arkod $^{\prime} v$.
get mad, to
mad
made
madness - zaar*; zaaraw, zaarod $v$. ; zaarays $v$. ; zaaraysis $v$. Caus;
zaarakko $m$., zaaratte $f$., zaarayke $p$. adj.; zaarinte $f$.
get out, to - lig v.; (Caus1, Punct)
get up, to - ka v.; (Caus2, Punct); kaP?om.
get, find, to - daw $v$.
ginger - daažimale $f$.
giraffe - damiatto $m$.
girl - šitte $f$.
girls - Pekadde $p$.
give back, to - laag $v$.
give birth, to - dal $v$.(Mid)
give up, leave, to - xur v.; (Punct, Pass-Mid xurmad')
give, to - deeћ $v$. (Caus1)
go back home, to - ¢aag v. $B$
go down, to - žagam $v$.
go to sleep, to - giip v.; (Punct, Punct-Caus)
go to war, to - duul $v$. ; (Caus2); duule $f$.; duulko $m$.
go towards someone, leave somewhere - rigad
go, to - Pacc $v$.

```
go, to - zow v.
goat - daale p.; -te f.
goat skin for women - pandalte f.
goat, male - Sorgay*; Porgayko m., ?orgayne p.
goat, spotted - _odol*; Podolko m., Podle p}\mathrm{ .
goat's weed - maga }f\mathrm{ .
godfather / godmother - ža Pal*; ža Palko m. ža Palte f. /
good quality, beauty - q'ayyinte}f\mathrm{ .
gourd - maax*; maaxatto m., maaxxe p}\mathrm{ .
gourd - q'aw*; q'awte }f\mathrm{ .
gourd, broken piece of - palq'e}f\mathrm{ .
grain - gazgo m.
granary - q'anta f.
grandfather - Pakka m.; -iyo m., -adde p.
granmother - qaabo f.
grass - ¢aš*; ¢ aško m., ¢ \ašše p.
grass growing with the new rains - palke f.
grass of roof - segele f
grass sp. (edible) - Peero m.
grass, kind of dry - roc'ante}f\mathrm{ .
grasshopper - c'arro m.
grasshopper - ts'e?Po m.
greedy - Poholko m., ?oholte f., Poholle p.attr.
grind stone, lower - Mid*Midikko m}\mathrm{ . Mid
grow up, to (calf) - Porgošum v.
grow, to - goh v.; (Caus2)
guereza - karawko m.
guinea fowl - kulile f.
guinea fowl sp. - warrakko m.
guitar, kind of - sonq'a }f\mathrm{ .
gums - Perto m.; adde p
```


## h

```
hair - gazo \(m\). gazze \(p\).
hair adornment with mud - šunšule \(f\).
hair of chest - baaya \(f\).; baayalakko m., baayalatte \(f\)., baayalayke \(p\). adj.
hair with clay - šurte \(f\).
Hamer people - Pamarko m.; Pamartakko m., Pamartitte \(f\)., Pamarkadde \(p\).
hammer of iron - tunta \(f\).
hammer of rifle - magal*; magalko \(m\). malge \(p\).
hand - ћaarko \(m\)., ћaarke \(p\).
handle of a headrest - mudde \(f\).
handle of knife, wooden - šuko \(m\).
hang, to - rakk \(v . ;\) (Caus1); rakkinde \(f\).
hard internal part of animal fat - mooro \(m\).
```

hate, to - naabad $v$.
have a meal, to - biif $v . ;$ (Caus1, Redupl); biife $f$.
have diorrhea, to - žoq'omi
have sex, to
having sex - nug $v$. .; nug'go $m$.
he - ? ufo
head-muga£*; mugaite $f$. mugaife $p$.
head of village - saar*; saarko $m$ saarre $p$.
headrest, carrying seat - kere $f$. kerre $p$.
heart-za9*; za@ko $m$., za£qe $p$.
hedgehog - dangadangac' $c^{\prime} \mathbf{o} m$.
heel - tokon*; tokonko $m$.kme $p$.
height - zigammo $m$.
help, to - kiil
here - ћayma $a d v$.
here - ћayna $a d v$.
here - kaasa $a d v$.
hiccup, to - Peq'ad $v$.
hide - 6 ad $v$. ; (Caus 1, Mid, Redupl)
hide basket - q'abte $f$.
hide of sheep or goat - ka6o $m$., ka66e $p$.
hide dry (used to make knife holders) - q'ontar*; q'ontarko m., q'ontarre $p$.
highland - Pašše $p$.
highland - dawle $f$.
hip - karna $f$.
hippo - reento $m$.
hippo and buffalo skin, piece of (taken by the bride) - tuude $f$.
hoe, small - Paylo m.; -itto m., -adde
hole - pulle $f$.
hole - xoxon*; xoxonko $m$. xoxme $p$.
hole made by water - zaal*; zaalko $m$., zaalle $f$.
holy bone - kalko $m$.
honey - zammo $m$.
honey calabash - šorke $f$.
honey mead - xoronko $m$.
honey water - siise $f$.
hoof, nail -go@*; gocakko m., goçe $f$.
hook - tibire $f$.
hook shaped thorn - gorle $f$.
horn - gaasse $p$.; -akko $m$.
horn scretch - deem*; deematto $m$.deemitte $f$., deemme $p$.
horn uor orix (šaalto) used as trumpet, rifle' mouth - saala $f$. (šaalto)
horse - pardo $m$.
horse carriage - gaarre $p$.
hot sun of midday - woq'q'e $f$. Mid
house - manne $p$.; addede $p$.
house fence or small places for animal - korkoro $m$. house foundement, site - balf as*; balfasko $m$., balfazze $p$. house poles - geerinne $p$. house store - šaalo $m$. house, top of the - Pille $f$.; -itte $f$. how many? - me? interr. how? - mala interr. hugly - q'anc'arlakko $m$., q'anc'arlatte $f$., q'anc'arlayke $p$. adj . humbellical chord - ћandurra $f$., ћandurre $f$.
hump - toonnakko $m$., toonnatte $f$., toonnayke $p$. adj.
hunger - bado $m$.; badod
hunt, to - q'ooš $v . ; \mathbf{q}$ ' $\mathbf{o o s ̌ o} m$.
hurt, to - buusv.; (Mid)
hut - baarte $f$.
hyena-gudur*; gudurko $m$., gudurre $p$.

## i

I - Pano
in agreement - kaarinko $a d v$.
in the evening - Pawne $a d v$.; Pawnane
in the morning - zingano $a d v$.; zingatte.
in which place - moylo $m$.
inflate, to - pug v.; (Mid , Pass, Redupl)
insert, to - žag $v$.; (Punct)
instrument for cutting thorns $-\mathbf{q} \mathbf{a} \mathbf{a} \mathbf{a} f$.
instrument for cutting wood - girro $m$.
insult, to - dagg v.; (Caus2)
intelligent, clever - pakala $m$., pakale $f$., pakaladdede $p$. attr.
internal part of panicle - ћeenge $f$.
internal waste of pumpkin - ћoro $m$.
intersection of the two parts of the stomach - q'urc'o $m$.
intestines-mirmå*; mirma£atte $f$., mirma@anne $p$.
iron - sibil*; sibilko $m$., sible $p$.
iron arrow - palde $f$.
iron arrow (shot to pierce a bull's
neck) - tebele $f$.; telbe $p$.
iron point - koka $f$.
iron point - žumpo $m$.
iron trap - silke $f$.
irrigation pond -boole $f$.
itch - q'ats'o m.; q'ats'od'
j
jackal - Pooše $f$.
jackal, sïmyän fox (canis simensis) - q'alate $f$.
jewellery, ornamental objects - sire $p$.; -atte; sirad $v$. Jinka (administrative centre of the Southern Omo Zone) - žinka judge, to - din $v$.
jump, to - 6ul v.; (Caus1, Punct, Redupl); 6ullo m.

## k

kalashnikov (Amh. kïlaaš) - kilaaš $f$. (Amh. kïlaaš)
kernel - kakko $m$.
key - q'olfe $f$.
kidney - de?se $f$.
kill, to - bog $v$. (Caus bogos, Pass, Redupl)
kind of black stone - mirša $f$.
kind of cilindric bead - mažo $m$., mažže $p$., mažžadơe
kind of rifle - markam $f$.
kind of scorpion - sassabbe $f$.
kind of snake - dambala? 1 e $f$.
king - bogol*; bogolko m., bogolte $f$., bolge $p . ; \operatorname{bolg} \mathbf{o s} v_{\text {. }}$; bolgom $v_{\text {. }}$;
bolgomis $v$.
kiss, to - mayy $v$.; mayyo $m$.
kneading - kaalkome $f$.
knee - gibil*; gibilko $m$., gible $p$.
knife (Amh. billawa) - billay*; billayko $m$., billayne $p$. (Amh. billawa)
know, to - Par v.; (Caus2, Pass)
konso - konso $p$.
kudu - mirža $f$.

## I

land; soil - biye $f$.
last vertebra behind the neck - gurragala $f$.
latta, pots etc. - q'orq'oro $m$.
laugh, to - kiccas v.; (Caus2)
lay on knees, to - gilbad
leaf - xaaše $f$.
learn, to - tamar v.; (Caus2 )
leather mat - doollo m.; -ko $m$., -te $f$., -adde $p$.
left - warkata $m$.lf., warkatadde $p$.
leopard - zarikko $m$.
lick once, to - q'eedd
lick, to - q'eed v.; (Caus2)
lie, to - gil $v$.; gillo $m$.
light - kammakko $m$.
limb, having a short - mukkanakko $m$., mukkanatte $f$., mukkanayke $p$.
adj.
line of the father - Pigo $m$.
lion-garmo $m$.

```
lip - xi6*; xi6te \(f\). xi66e \(p\).
listen to, to - q'abal \(v\).
liver - tire \(p\), tirre
lizard - gannatto \(m\).
lizard, very tiny - gula \(f\).
load, to - c'an \(v\).
locative pronoun, locative postposition,
backgrounder - na, nay
long chain metal earring -q'enta \(f\).
look at, to - Peem \(v\).
look like, to - gar \(v\).
louse - q'eske \(f\).
love, to - c'igad \(v\).
lower buttocks - turde \(f\).
lower part of the back bone below the ziiza - gonc'o \(m\).
lung - somba \(f\)., sompa \(f\).
```


## m

machete - banga $f$.
magician - ћello $m$.
magician - soggo msogge $p$.
maize - game $f$.; -itto, -itte, gamme $p$.
male - ts'iire $p$. ts'iirakko $m$.,
male - xoronko $m$.
male calf from unnatural birth - puggo m.; -itto
man - q'awko $m$.
man shouting without saying anything - barido $m$.
mango - mango $m$.
manhood - ts'iirinte $f$.
manure - boie $f$.
market - gabaya $f$.
marry, to - ga?al v.; (Mid gal?adi, Punct)
maxilla bone - gawge $f$.
meat - sagan*; saganko (also saPanko m.) sagne
meat, wasted of the rear legs - ginante $f$.
medicine-deešo $m$.
meeting - buke $f$. 6
meeting for dead people - gilo $m$.
meeting, dancing - gibdo $m$.
meeting, working - Paylo
melt, to - baq' $v$.
milk - Paxxe $p$.
milk and blood - Pahayte $f$.; -addede $p$.
milk container, wooden - kurumo $m$.
milk, to - c'ox v.; (Pass, Redupl)
miss, to - dab $v$. ; (Mid)
mithic animal - xoonsitte $f$.
mix for oneself, to - waysad'
mix, to - reek $v . ;$ (Caus2)
molar and palate - Cango $m$.
mole-goodo $m$.
money - ganzabu $f$.
mongoose sp. - gisso $m$.
mongoose, spotted small - bordolo $m$.
monkey - q'aarakko $m$.
month coming after the rainy season - haq'ayte $f$.
moon, month - le9o $m$.
more evident palm lines - mayle $f$.
mosquito - c'ingo $m$.
mother - Payya $f$.
mother - Pingiye $f$.; -addede $p$.
mother of a boy - nats'iro $m$.
mountain - kutton*; kuttonko $m$., kuttomme
mouse - dab*; dabakko $m$., -dabanne $p$.
mouth - bago $m$.; bagge $p$.
mucus - siine $f$.
mucus, what comes out of nose $-\operatorname{sine} f$.
mud with rain-c'oxxe $f$.
mursi people - murriso $m$., murristakko $m$., murristitte $f$.
muscle of arm - madalakko $m$.

## n

nail (Amh. mäzmär) - mazmare $f$. (Amh. mäzmär)
nail, big toe - q'ob"; q'obakko $m$., q'obbe $p$.
name-må*; mąko ma§qe $p$.
naturally, on his own - latto
neck - denge $f$.
necklace of beads $-\operatorname{komba} f$.
needle - narfe $f$.
neighbourhood - ganda $p$.
new - q'awto $\mathbf{p}$. q'awtitto $m$., q'awtitteattr.
new - q'awwaditto $m$., q'awwaditte $f$., qáwwadadợe $p$.
newborn - šam6o $m$.
next-gociay $a d v$
nine-gollan num.
nose - $\operatorname{sind} \mathbf{e} f$.
now - Paanto $a d v$.

## 0

oil-zayte $f$.
old - geeccakko $m$, geeccatte $f$., geeccayke $p$. adj .
old man, husband - hal*; halko $m$. halle $p$.
on the highland side, up - gada $a d v$.
on the highland side, up - guddo $a d v$
on the lowland side, down - galla $a d v$.
on the lowland side, down - gallo $a d v$.
on the side - Yula, ?ulo, Yulu $a d v$.
one - dookko $m$, dootte $f$., dookke $p$. num.
one hundred $\operatorname{birr}$ (Amh. mïto 'one hundred') - mato num. (Amh. mïto )
onion - šunkurte $f$.
only - bicca $a d v$.
open a fence, to - q'aaš $v$.
open, to - q'aace $v$.
order, to - Pazaz ( Pažaž) (Caus2) Paza Pazaz
oryx - šaalto $m$.
ostrich - baalgiddo $m$.
other - bile m.lf. attr.

ox pecker- Paraša $f$.
ox-hunch - doolle $p$.

## p

panicle's threads - saarko $m$. -adde
papaya - paappaya $f$.
part of rifle, where the bullet pierces - šibo $m$.
pass, to - zaarbi $v$. Pass,
pay, to - mur $v$.
pea sp. (wild) - Poofe $f$.
penis - golde $f$.
people-gore $p$.
pepper - q'aara $f$.
pepper, Ethiopian (Amh. barbarre) - barbara $f$. (Amh. barbarre)
pierce from side to side, to - lekk v.; (Caus 1)
pierce, shoot, to - rukad $v$.
pierce, to - c'ib v.; (Caus2)
pimple - kinnisa $f$.
place - Pawko $m$., Payko $m$.
place, base for beehive - garo $m$.
placenta-sorto $m$.
plain, border - lå*; låakko $m$., laine $p$.
plain, in lowland - Galko $m$.
plane - kongo $m$.
plane of mud for threshed sorghum - ¢awde $p$.
plant - duzze $f$.
plant-gor@ummo m.
plant, to - díš
plant for rope - q'osor*; q'osorko $m$. q'osorre $p$.
plant one plant at one time, to - dišš
plant sp - xerero $m$.
plant sp. - lulle $f$.
plant sp. (used to make ropes) - $\varsigma$ alge $f$.
plant sp. (wild and edible) - ¢aarmaPe $f$.
plant, grass - busante $f$.
plastic goods - lastige $f$.
plough - maaraša $f$.
plough - makkatte $f$.
plough, thin and long wood of the $-\operatorname{mofara} f$.
ploughing ox - q'otyo $m$.
point of arrow - ponq'a $f$.
pointed metal of hoe - dooma $f$.
pointed part of a bullet - dunko $m$.
poison - toonte $f$.
pole in roof (small) - Puttufo $m$.
poles of house - baal*; baalitte $f$., baalinne $p$.
pond - dalba $f$.
pond, gurf - miire $f$.
pool made of river water - šaalko $m$.
poor person - kayse $f$.; -itto $m$., -itte $f$.
porcupine sp. - giršo $m$.
porridge - zigo $m$.
possessive spirit of god - maarama $f$.
pot of clay-zi ${ }^{*}$; ziPte $f$., ziP?e $p$.
pour, to - diig v.; (Caus1)
pour, to - meeg $v$.
pregnancy - gaaldo $m$.; gaaldaw $v$. ; gaald akko $m$., gaaldatte $f$.,
gaaldayke $p$. $a d j$.
prepare, build, to - gar v.; (Caus2)
prepare, to - ga v.; (Mid, Redupl)
prohibit, to - Pirriš $v$.
pronominal particle, feminine - te
pronominal particle, masculine - ko
pronominal particle, plural - ke
properly - Pammake $a d v$.
pubic hair - boositte $f$.
pull, to - zit $v$.
pulse sp. - Patare $f$.
pumpkin - bote $f$.; botte $p$.
punch - tuntuma $f$.
pus - boxx*; boxxakko $m$., boxxanne $p$.
push, to - tuuts' $v$.
put a head rest on the nape, to - baalaabad $v$.
put, to - $\mathbf{9}$ add $v$. .; (Mid)
python - bafko $m$.

## q

quarrel, to - Pooxam $v$. ; Pooxmatto $m$.
quickly - kanna $a d v$.

## r

rabbit - gubale $f$.
race, to - Pardulum $v$.
radio (Amh tep, English tape) - tebba $f$. (Amh tep, English tape)
rain - Perro m.; -adde $p$.
rain, to - dib $v_{\text {. ; }}$ (Caus1)
rainbow, lizard sp. - zilanq'a $f$.
rainy month - masano $m$.
rainy season - ber*; berko $m$., berre $p$.
ram - ?erbo m.; -itto m., -anne
rat with long mounth - ts'ulde $f$.
razor - šiggire $f$.
really - bero $a d v$.
reap, to - gim $v . ;$ gimakko $m$.
recove, heal, to - din $v$.
recover, heal, to - waan $v$.
rectum - kallacco $m$.
red stone grinded to make a powder for the hair - q'oyto $m$.
redness - Piddinte $f$.
reduce, to - muts' $v$.; (Mid)
reedbuck - šoona $f$.
refuse, to - Piš $v$.
refuse, to - koor $v$.
relative - Peeda $m$.
remain, to - gayy $v$.
resemble, to - lig $v$.
rest of a bullet expelled after shooting - q'alay*; q'alayte $f$. q'alayye $p$.
rhinocerous - Porša?te $f$.
rib - ginafe $f$.
rib of sternum - Piš*; Pište $f$., Sišše $p$.
rib, lower - laaddahe $f$.
rich - kamurko $m$., kamurte $f$., kamurre $p$. attr.
richness - kamurinte $f$.
riddle - Sibbo
rifle - q'awa $f$.
rifle, kind of - Palbine $f$.; -adde $p$.
rifle, kind of - Pimmon $f$.
rifle, kind of - baalžige $f$.; anne $p$.
rifle, kind of - kefo $m$., keffe $p$.
rifle, kind of - kellefer $f$.
rifle, kind of - labale $f$.

```
rifle, kind of - q'onts'a}f\mathrm{ .
rifle, kind of - šarifo m.
rifle, kind of - šicca }f\mathrm{ .
rifle, kind of - waštire f.; -anne p
ring - ts'ats'a }f\mathrm{ .
ripen, boil, to - Pawš v.; (Caus); Pawšo m.
river - golle f
roar, to - goo\hbar v.
roast meat, to - seka6 v.
rock, to - Pabun v.
roll down, to - sukk*v.; sukkas; sukkam
root, vein - \hbarezze p.
rope - Midd*; Middakko m. Mid Midadde
rope used to keep cattle - laade f
rope, hand made, trap - siibde f., siibbe p}\mathrm{ .
run, to (only with plural persons as subject) - bagad v.
run, to (only with singular persons as subject) - sor v.
run, to (only with singular persons as subject) - tir v.
```


## $\mathbf{S}$

```
sac made of leather - Ragal*; Pagalte f., Palge p.
saliva - waaq'e p p
salt - soq'0 m.
sand - šuma\hbarto m.
sandal, shoe - q'omatte f., q'omayke p,, q'omaykadde p}p\mathrm{ .
say, to - bay v.;(Caus1, Mid)
say, to - kay v.
say, to - kiy
scapola - la6ša f.
scarification of body - hac'ande}f\mathrm{ .
scent, to - Pošo& v.
scorpion - gayit*; gayitakko m. gayitanne p
scrabble sp. - boolo m.
scrabble, black, kind of - bannado m.
scrabble, black, kind of - bardaq'o m.
scretch, to - q'ošv.
seat, wooden - getko m.
see from far, to - gullasad
see, to - PiP v.; (Caus1)
sell, to - las v.
semantically empty clitic - y clit
send, to - xorr v.; (Caus1)
sentence marker - ka
separate, put apart, to - bul v.; (Pass, Punct, Redupl)
set on (fire), roast, to - ko?
seven - ta\hbar\hbaran num.
```

```
sew, to - del \(v . ;\) (Mid)
shadow - gazze \(f\).
shank - zoole \(f\).
sharpen, to - deek \(v\).
she - Pise
```



```
sheep without fat - punge \(p\).
shelter, to - sexad
shield - longo \(m\).
shin-bone - Paallitte \(f\).; -adde \(p\). -
shoot, to - ra§ v., raicio \(m\).
shoulder - kacce \(f\).; -itte \(f\)., -adde \(p\).
shout, to - riir \(v\).
sickle not used here - c'uube \(f\).
side - garo \(m\).
side - q'aro \(m\). q'arre \(p\).
since then - ћayyay
sister, older- Palaw*; Palawte \(f\)., Palawwe \(p\).
sit down, to - ¢akkad \(v\).
six - tabben num.
skin around two bonesof thrback of the knee - sanaxe \(f\).
skin used to carry flour, earth and similar - šoonte \(f\).
skull, bold head - bala \(f\).
sky - muunto \(m\).
slaughter, to - zaq' \(v\).
sleep, to - raf \(v . ;\) (Caus2)
slowly - sollakko \(a d v\).
small bell for goats and sheeps -q'ac'ara \(f\).
small pond - bax*; baxko \(m\)., baxxe \(p\).
small seed form the oil - buska \(f\).
small thin piece of wood - walka \(f\).
small tree - ts'aalq'o \(m\).
smallness - takkinte \(f\).
smear, to - rig \(v\).
smear, to - šiin v.; (Mid)
smell - Pažo m.; Pažže \(p\).
smoke - £arto \(m\).
smooth - šilšilko \(m . l f\)., šilšilkaddede \(p\). attr.
snail - q'oode \(f\).
snake - dawwo \(m\).
sneeze, to - tiršaq'ad'
so, in this way - Pasa \(a d v\).; Pasama
so, in this way - Passayay \(a d v\).
so, in this way - ?aysa adv.; Paysama, Paysayay
so, in this way - Payssayay \(a d v\).
soap - saamuna \(f\).
soghum sp. - Pe? Pa \(f\).
```

soil ploughed one time - boo $\mathbf{e} f$.
someone - dooyi
soot - Puunto $m$.
sorghum - maango $m$.
sorghum - maang'o $m$.
sorghum beer - mits'o $m$. mits'ts'e $p$.
sorghum panicle without grains - q'olse $f$.
sorghum sp. - Pabeto $m$.
sorghum sp. - Pagumu $m$.
sorghum sp. - Pamate $f$.
sorghum sp. - Paylobate $f$.
sorghum sp. - gorda $f$.
sorghum sp. - gummo $m$.
sorghum sp. - simbale $f$.
sorghum sp. - šula $f$.
sorghum, pile of - dooro m.; doorad $v$.
sorghum, stalk of - wallale $f$.
sorghum, stalk of - zoole $f$.; -itto $m$., -itte $f$.
sorghum, stalk of remained on the field - c'aq'ale $f . ; \mathbf{c}^{\prime}$ alq'e $p$.
sort of thorn to sew strong things - mudocio $m$.
sound, voice - ?ikkitto $m$.; adde $p$.
sour (milk) - Paberro attr.
sow, to - booh $v$.; booћto $m$.
speak, to - rook v.; (Caus2)
speak, to - wak $v . ;$ (Caus2, Punct)
spear - warže $f$.
spear, wooden - zigo $m$.
spend the day, to - nagay $v$.
spend time, to - Poolad $v$.
sperm - gaansindo m.
spice - q'emame $f$.
spider - Pinne $f$.; -atte $f$, -adde $p$.
spit, to - tuf $v$.
spleen - lande $f$.
split, to - baq'as $v$. ; baq'asso $m$ baq'assod $v$.
spoil, break, to - $\log v . ;$ (Mid, Pass-Mid logmad')
spoon - kaale $f$.
spot on the skin, black - q'ato $m$.
spot, place, container - mano $m$.,
spotted - borde attr.
spotted - zarge $m . / f$., zargadded $p$.
spotted multicolor insect - pararo $m$.
sprain, to - maisad $v$.
sprout, thorn -q'ants'e $f$.
sprout, to - baq'al v.; (Caus2 balq'is, Punct, Redupl.)
spur - korondo $m$.
squeeze cloths, to $-\operatorname{mir} v$.
squirrel sp. - turq'ayna $f$.
squirrel, ground (Xerus rutilus) - garro $m$.
star - ћezge $f$.; -itte $f$.
star, female - ћezgitte $f$.
star, male - takkaditto $m$.
start singing, to - q'all $v$.
start, to - baay $v$.
starve, to - bopp $v$
steal, to - geres Mid
steal, to - gere؟ $v . ;$, gere§ko $m$., gere§te $f$., ger£e $p$.; ger§inte $f$.
steam, blow - Pafo $m$.; -adde $p$.
step on, crush, to - diit $v$.
step on, to $-\boldsymbol{\operatorname { w o g }} v$.
sterile (woman) - meken*; mekente $f$, mekne $p$.
sterile man - busukko $m$., buske $p$. attr
stick for married man - toolingo $m$.
stick of roof - seke $f$.
stick to carry stuff on the shoulder - kata $1 \mathrm{o} m$.
stick with iron point - Pankarsa $f$.; -adde $p$.
stick, walking - Palžo $m$., ? Calže $p$.
stink - xinaw
stink-ant-zubaP?e $f$.
stir something - q'onc'or
stone - gaaћ*; gaaћko $m$,. gaaћћe $p$.
stone sp. (salty) - Pamule $f$.; -adde $p$.
stop, to - šiggar v.; (Caus šiggariš, šiggaroš
store, to - saq' v.; (Punct)
story, tale - maakke $p$.
straight think - tipa $f$.
street - zano $m$.; zamme $p$.
strip of field - saabanko $m$., saabankadde $p$., saabanne $p$.
strip of leather wore by young girls - $\mathrm{Cammo} m$.
stun, to - žimmir v.; (Caus2)
subordinate conjunction - yaaka conj.
suck, to - šur v.; (Caus1)
sugar cane - xawše $f$.
sun general - kaallikko $m$.
sunflower - sufe $f$.
sweat - siippo $m$.
sweater - šurrabe $f$.
swim, to - diim $v$.

## t

t'ef (Eragrostis abyssinica) - gac'c'e $f$.; adde $p$.
tail of all the animal of sheep only smal bone end - kirrin*; kirrinko $m$.
kirrimme $p$.
take aim, to - nats'ar $v$. ; nats'ire $f$.
take mucus out of the nose, to - $\mathbf{q}$ 'arrasad
take out one by one, to - ziir $v$. .; (Redupl.)
take to - grab v.; (Mid, Punct, Punct-Caus, Punct-Mid)
tattoo-do P3e $f$.
tear - Pilmale $p$.; -itte $f$, -added $p$.
tear, to - Sišk v.; (Redupl.)
telephone (Amh. silk) - silke (Amh. silk)
tell, to - gaaћ $v$. .; (Caus2)
teller - maaršo $m$.
tempia - madday*; maddayitte $f$., maddayye $p$.
ten - kunko num.
ten birr - bonde $f$., bondotte $f$. num.
tend cattle, to - gooš $v$. ; (Mid)
tent (Amh. dunkan) - dunka $f$., dunkayna $f$. (Amh. dunkan)
termite hill - kuyyo $m$.
testicle - kirde $f$.
thatch, to - taš $v$.
there - kaaysa $a d v$.; kaaysanu
they - Pufunde
thigh bone - gubus*; gubusko $m$., gubuzze $p$.
thin calabash - q'erts' $\mathbf{a} f$.
thing - Pola $f$.; -ko $m$.
thing to drink - qugisso $m$.
thing, broken and wasted - kaata $f$.
think, to - Pekkešad $v$.
thirst - deebte $f$.; deebad $v$. ; (Caus2)
this year-gidano $a d v$.
thread-zaaq'e $f$.
thread of blue colour - ts'iloote $f$.
three - zeeћ num.
three days after tomorrow - q'ammatinko
three days after tomorrow - q'ammatinte
throat-goomaro $m$.
throw for oneself, to - darbad $v$.
throw somth. for chasing, to - ruuk $v$.(Mid)
throw wood, to - žuq'unta6 v.; (Caus2)
throw, to - c'ur $v$.
throw, to - war $v$.
thunder and lightening-gawå*; gawaiko m., gawaice $p$.
tie, to - šab v.; (Pass, Punct)
time - q'ayto $m$.
tobacco - gaayye $f$.
today - guuyu $a d v$.
together - ?elele
together - Pelele $a d v$.
tomb - mayo $m$.

```
tombstone - Pawal*; Pawalko m., Pawle p.
tomorrow - q'ayna adv.
tongue - ¢arraf*; ¢ arrafko m., ¢ arrabbe p.
tooth - Pilge p.; -akko m., -adde p.
top - sabbe p
top of a house - kušte f
top of foot - šaalo m.
top of penis - gengo m.
torch - batterif. (Amh. batteri)
tortoise - kufe f.
tortoise, small water - gaage f}\mathrm{ .
touch, to - beerr v.
towards, within - ma clit.
tower, watching - taygo m}\mathrm{ .
trace, footprint - paana f paannatte relat.
trade, to - naggadad}v.(Amh. näggäd)
train, to (animals) - lenc'iš v.
trample upon, to - šukkad}v
tree giving edible leaf - talla}\mathrm{ % m.
tree sp. - ?ara
tree sp. - Pargakko m.
tree sp. - Yeger*; Pegerko m., Pegerre p.
tree sp. - &e&@akko m.
tree sp. - ?om6o m.
tree sp. - birbir*; birbirko m., birbirre p
tree sp. - c'aq'ante f.
tree sp. - dongo m.
tree sp. - diiire f.
tree sp. - giire f.
tree sp. - \hbareeyatte f
tree sp. - kantale f.
tree sp. - q'alq'alko m.
tree sp. - šibde f}\mathrm{ .
tree sp. - tibire f.
tree sp. - zargano m.
tree sp. - zimba }f\mathrm{ .
tree sp. (small) - c`ummo m.
tree that gives fresh shadow, kind of - goyte f}\mathrm{ .
tree, big dead - googa f.
tree, red - warna f.
tree, wood - gaare p.;-ko m.
trigger of firearm
                                    - q'aata }f\mathrm{ .
truck - Paysuze f. (Amh. aysuzu)
trumpet, kind of (played in occasion of the gilo meeting) - tarbitto m.
trunk for roof, big - gerekko m.
truth, condition-duge f.
try, to - temm
```

Ts'amakko peoplw - ts'amakko $m$., ts'amatakko $m$., ts'amatte $f$. tunnels underground - bukkisa $f$.
turn, to - šira6 $v$
twins - lakkay $p$.
twist, to (e.g. in order to get into a small hole) - tuuts'ad $v$.
twisted wood, side scoliosis - žegela $f$.
twisting bracelet - c'abala $f$.
two - lakki num.
two days after tomorrow - q'ammakko

## u

udder - gaante $f$.
umbellical chord - ћandura $f$.; ћandurte $f$.
unappreciated (person) - c' ubbolakko $m$., c'ubbolatte $f$.
c' ubbolayke $p$. adj.
unmarried person - c'ifano $m$.; -itto $m$., -itte $f$., c'ifne $p$.
upon - ta clit.
upper grind stone $-\mathbf{q}$ 'onts'e $f$.
uproot, to - Pag $v$.
urinate, to - šooћ $v$.; šooћe $p$.
uvula - danga $f$.

## V

```
vagina - burde f.
vegetables - wacief f
very - Pekke
vomit, to - pat v.; pate f.
```

W
wait, to - dafad $v$.
walk, to - Pood $v$. ; Pooddo $m$.
walking stick, long - toollo $m$.
want, to - gee? v.; (Caus1, Mid); gee? 3 m .
warrior-ziya $m$.
wart, sixth finger - laq'a $f$.
warthog - karkar*; karkarakko $m$., karkaranne $p$.
wash, to - šooh v.; (Pass šoohom)
wasted broken big calabash - kolkoško $m$.
water $\quad-\mathbf{~ C a n d e} p$.; -itto $m$., -itte $f$., -adde $p$.
water pump - šayna $f$.
waterbuck - do?osko $m$.
wax - ? ure $f$.
we - Pine
weed sp. - Parmante $f$.
weed, to - korša6 $v$.
week - samminte $f$.
well- ¢el*; ¢elko $m$., ¢elle $p$.
Weyt'o River - dullayko
what? - moo interr.
when? - bara interr.
where to? - Pakkura interr.
where? - Pakka interr.; Pakkama; Pakkanu
which one?

- kunda m., tinda $f$., kinda $p$. interr.
whip, to - tu6 v.; (Punct)
whistle - piška $f$.
white (hair, fur) - £ arrakko m., £ arratte $f$., £ arrayke $p$. adj.
white clay for dance adornment - božže $p$.; božžad $v$.
white stone, kind of - hats'ts'ikko $m$.

whose? - kaћћ $\mathbf{m} . / p$., taћћ $\mathbf{f}$. interr.
why? - moonu, moona interr.
widow, orphan - ћeyakko $m$., ћeyatte $f$., ћeyayke $p$. adj.
wife of 'godfather' - ža Pa $f$.
wild animal with long tail eating chickens - gordisa $f$.
wild cat - gurlo m.; -itto, -itte f., -adde $p$.
wild cat - puga $f$.; -itto $m$., -itte $f$.
wind - ћabura $f$. ћaburko $m$. ћaburkadde
wing - koolo $m$.
wipe, shave, to - Pooš v.; (Caus1, Mid, Punct, Redupl)
with - ya, yay clit.
woman-gaan*; gaante $f$., gaanne $p$.
woman - gešan*; gešante $f$., gešanne $p$.
woman leaving her husband - nure $f$.
women - ћeesko $p$.
wood for the fence of the house - zanga $f$.
work - wožža $f$.; wožžad $v$.
work hard, do any kind of work, try hard, to - šum $v$.
worm sp. (kosotel) - birts'e $f$.
wound - bayše $p$.; bayšitte $f$.; bayšaš $v$.; bayšư̛ $v$.
wrinkle, to - roq'om $v$.
wrinkles of forehead - marge $f$.


## y

yawn, to - šamma?šad $v$.
yesterday - geera, geeray $a d v$.
yoke - manaq'o $m$.
you (pl) - Patunde
you (sg) - Pato
young (person) - daggo m.;-itto m., -itte $f$.

## Z

zebra - dara?ukuli $f$.

## References

Amborn, Hermann, Gunter Minker and Hans-Jürgen Sasse
1980. Das Dullay: Materialien zu einer ostkuschitischen Sprachgruppe. Berlin: Dietrich Reimer.

## Black, Paul

1976. Werizoid. In: M. Lionel Bender (ed.), The Non-Semitic Languages of Ethiopia. East Lansing: African Studies Center, pp. 222-231.

## Comrie, Bernard

1976. Aspect: An Introduction to the Study of Verbal Aspect and Related Problems. Cambridge: University Press.
1977. Tense. Cambridge: University Press.

Da Casotto, Gabriele
1945. Note sulle popolazioni dell'alto e medio Galena. Rassegna di Studi Etiopici 4, pp. 150-181.

Da Trento, Gabriele
1941. Vocaboli in lingue dell'Etiopia meridionale. Rassegna di Studi Etiopici 1, pp. 203-207.

Dinote, Kusia (Shenkere) and Ralph Siebert
1994. Wordlists of Arbore (Irbore), Birayle (Ongota), Tsamai (Tsamaho).

In: Survey of Little-known Languages of Ethiopia-Linguistic Report No. 20. Addis Ababa: Institute of Ethiopian Studies, pp. 1-12.

Donham, Donald L.
1972. Tsamay wordlist. Ms.

Fleming, Harold C.
1960. Tsamay wordlist. Ms.

Getu, Melesse
1995. Tsemako Women's Roles and Status. Addis Ababa: Addis Ababa University Department of Sociology, Anthropology and Social Administration.
1997. Local versus outsider forms of natural resources use and management: the Tsamako experience in South-West Ethiopia. In: Fukui Katsuyoshi, Eisei Kurimoto and Masayoshi Shigeta (eds.), Papers of the XIIIth International Conference of Ethiopian Studies, Kyoto 12-17 December 1997, vol II. Kyoto: Shokado, pp. 748-767.

Hayward, Richard J.
1978. The Qawko languages and Yaaku. Abbay 9, pp. 59-70.
1989. Comparative notes on the language of the S'aamakko. Journal of Afroasiatic Linguistics 1, pp. 1-53.

Hockett, Charles F.
1995. A Course in Modern Linguistics.

Jensen, Adolf E.
1959. Die Tsamako. In: Jensen, Adolf E. (ed.), Altvölker Süd Äthiopiens. Stuttgart: Kohlhammer, pp. 359-384.

## Kemmer

1994. Middle

Miyawaki, Yukio
1990. Tsamay wordlist. Ms.

Mous, Marten
2004. The Middle in Cushitic languages.

Pauli, Elisabeth
1959. Materielle Kultur der Tsamako. In: Jensen, Adolf E. (ed.), Altvölker Süd Äthiopiens. Stuttgart: Kohlhammer, pp. 389-397.

Saeed, John
1993. Somali Reference Grammar. Oxford: University Press.

## Sasse, Hans J.

1986. A Southwest Ethiopian languages area and its cultural background. In: Fishman J.A. et al. (eds.), The Fergusonian Impact. Vol. 1, From Morphology to Society. Berlin: Mouton de Gruyter, pp. 327-342.

Savà, Graziano
2002. Ts'amakko morphological borrowings in Ongota (or Birale). In: Christian Rapold and G. Savà (eds.), Proceedings of the 1st International Symposium 'Ethiopian Morphosyntax in an Areal Perspective’. Afrikanistische Arbeitspapiere 71, pp. 75-93.

## Stroomer, Harry

1995. A Grammar of Boraana Oromo (Kenya): Phonology, Morphology, Vocabularies. Köln: Koppe.

## Tosco, Mauro

In print. Gawwada morphology. In: Alan S. Kaye (ed.), Morphologies of Asia and Africa. Eisenbrauns, Winona Lake.

