

## T'ambaaro phonology

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This article describes the phonology of T'ambaaro, a Highland East Cushitic language of the Afro-asiatic phylum spoken in southwest Ethiopia. The language has twenty-four consonant phonemes, and five oral vowels and one nasal vowel whose phonemic status is not safely established. The oral vowels are typical Cushitic vowels occurring short and long. In T'ambaaro, except the phonemes /h/ and /f/ which never occur geminate, the rest of the consonant phonemes appear geminate, but that is only in word medial position. The palatal nasal and the voiceless, alveo-palatal affricate never occur as a single consonant, but only as a geminate consonant. Gemination and vowel length are phonemic in the language. Consonant cluster are allowed only in word medial position with a maximum of two consonants. Some consonants and vowels appear in free variation, but it is very difficult to formulate a systematic rule that captures the phenomenon. The phonology has phonological processes such as assimilation, epenthesis, deletion, and metathesis. T'ambaaro is not a tonal language, but seems a pitch accent language which is difficult to establish a rule for at this stage.

**Keywords:** T'ambaaro, phonology, Highland East Cushitic, Ethiopia

### 1. Introduction

The T'ambaaro mainly live in Kambata-Tambaro Administrative Zone, particularly in the Tambaaro *woreda* (district) in the Southern Nations, Nationalities and Peoples' Regional State (SNNPRS). Durame is the main town of the Kambata-Tambaro Zone while Mudula is the main town of the Tambaro *woreda*.

The main economic source and means of livelihood strategy in T'ambaaro is farming. They produce various types of crops such as sorghum, maize, wheat and teff, among others. They also grow enset 'false banana,' coffee as well as various spices such as ginger, mace, etc. They also practice cattle rearing in the lowlands mainly along the Gibe River. Bilingualism and multilingualism are common phenomena due to contact with neighboring ethnic groups such as Kambaata, Hadiyya and Wolayta. Genetic relationship also plays a crucial role in the bilingual phenomenon. For instance, for the most part, Kambaata and T'ambaaro speakers do not have any difficulties in understanding each other due to genetic relationship between the two languages. Even some scholars write about T'ambaaro being a slightly divergent dialect of Kambaata (Treis 2008; Korhonen *et al.* 1986). Treis (2008: 4) writes about

the high degree of mutual intelligibility between the two languages saying that “[T]he differences between Kambaata and T’ambaaro are marginal and they do not impose any difficulties for communication between the two groups.” During fieldwork periods, the key language consultants were asked if their language was similar to or different from Kambaata, and that they have any communication barrier. Their response was that “our language is quite different from Kambaata even if we do not have any difficulty understanding each other.” Other languages spoken in the wereda are Amharic and English. During the data collection, Amharic was serving as a medium of instruction in the primary school. It was also the language of administration though code mixing in Amharic and T’ambaaro, and a tendency to overwhelmingly use T’ambaaro is observed when only the native members in the administration hold meetings. Amharic is also widely used in Mudula. English is used as a medium of instruction from grade five (the beginning of the second cycle of the primary school) onwards. In the lower grades, it is used as a school subject, and spoken to varying degrees. Highly educated members of the community speak it fluently.

The T’ambaaro language belongs to the Highland East Cushitic (HEC) languages of the Afroasiatic phylum. According to Hudson (1981: 120) and Tosco (2000: 89), the genetic classification of the HEC languages subsumes such languages as Hadiyya, Kambaata, Sidama, Gedeo and Burji. The classification of these scholars (see Hudson 1981: 120; Tosco 2000: 89) does not include Halaba, K’abeena, Libido/Marek’o and T’ambaaro. The exclusion of these varieties in the genetic classification of the HEC seems to stem from the assumption that they are dialects (Kambaata has close relation with Halaba, T’ambaaro and K’abeena, and Hadiyya has close links with Libido/Marek’o on both phonological and lexical aspects) rather than independent languages (see Eba 2016; Treis 2008; Fekede 2012). Of course, the key language consultants with whom I worked during the field visits on T’ambaaro informed me that their language is closely related to such HEC languages as Kambaata, Sidama and Hadiyya.

According to the key language consultants, the word *T’ambaaro* is used with reference to the people as well as to their land. When reference to the language is intended, the derivational suffix *-sa* is added to the nominal root *t’ambaar-* so that we get *T’ambaarsa* as the name of the language. Based on the official orthography of T’ambaaro, the alveolar, voiceless ejective /t’/ is written as <x>. As a result, we have *Xambaro* and *Xambarsa* as the spelling for the self-name and the language, respectively. According to the Central Statistical Agency (2007) report, the Tambaro number around 98,600. The local official figures on the Tambaro population show that the number of population of the Tambaro people is much higher than the figures of the Central Statistical Agency (2007).

According to the information obtained from the Finance and Economic Office of the Tambaro district, the total population of the Tambaro is about 137,000.

The T'ambaaro language has received very little attention. So far, there is only one unpublished sociolinguistic survey report for SIL by Hussein (2012). In this survey report, Hussein discusses about language attitude, language vitality and community desire to develop their language. Hussein states that despite reports (e.g., Korhonen *et al.* 1986) that there is a high level of mutual intelligibility between T'ambaaro and Kambaata, the T'ambaaro perceive themselves and their language as different from Kambaata. This strong self-esteem and language identity has also been observed during the data collection for this paper. The majority of the T'ambaaro people are monolinguals though bilingualism in Amharic and T'ambaaro is on the rise, particularly in the urban areas. With regard to language vitality, Hussein (2012) also reports that the T'ambaaro language is actively used in everyday life in the rural areas. Indeed, in recent years, attempts have been made to promote the language as a medium of instruction in the lower levels of primary education. Like many Cushitic language speakers, the T'ambaaro community has adopted the Latin script to write their language with. During the data collection, I checked the T'ambaaro alphabet, and found out that it contains extra two symbols **v** and **zh** that represent the English voiced, labio-dental fricative, and voiced, alveo-palatal fricative, respectively. Members of the orthography committee for the promotion of the T'ambaaro language informed me that the extra graphemes are included in order to support children during their transition from T'ambaaro to English. My position in this regard is that the inclusion of foreign sounds and graphemes into the native sound inventory and alphabet when these sounds are not significantly incorporated into the native language contradicts with the notion of mother tongue education, and, therefore, should not be included in the name of easing the transfer from native language to a foreign language.

The main purpose of this article is to account for the phonological aspects of the T'ambaaro language. It is organized as follows: after the introduction, I discuss the sound inventory in Section two. Section three presents the phonotactic constraints of the T'ambaaro language. Sections four and five treat free variation and phonological processes, respectively. Data for this article were collected during field visits made to T'ambaaro district in 2013, 2015 and 2018.

## 2. Sound inventory

The inventory of consonant phonemes in T'ambaaro involves seven manners of articulation (namely, plosive, nasal, fricative, affricate, liquid, ejective, and glide) and six places of articulation (namely, labial, alveolar, (alveo)-palatal, palatal, velar and glottal). Along these places and manners of

articulation, we identify 24 consonant phonemes (Ongaye and Samson 2018). The consonant phonemes are presented in Table 1. Among the consonant phonemes, voice opposition is found between alveolar and velar plosives, alveolar fricatives and alveo-palatal affricates. Treis (2008: 22) in her Kambaata consonant inventory includes the glottalized liquids /r’/ and /l’/, that are not attested in T’ambaaro nor in other genetically related languages such as Hadiyya (Tadesse 2015: 20), Halaba (Fekede 2012: 34), Gedeo (Eyob 2015: 25), K’abeena (Ongaye 2014: 23) and Sidama (Kawachi 2007: 28).

	Labial	Alveolar		Alveo-palatal	Palatal	Velar	Glottal
Plosives	b	t	d			k	ʔ
Nasals	m		n		ɲ		
Fricatives	f	s	z	ʃ			h
Affricates				tʃ	dʒ		
Liquids			l, r				
Ejectives	p’	t’		tʃ’		k’	
Glides	w				y		

Table 1. Consonant phonemes<sup>1</sup>

In order to describe all the consonant phonemes of T’ambaaro, I use three parameters: *place of articulation*, *manner of articulation* and *condition of vocal cords*. Based on these parameters, I provide the description of each of the consonant phonemes presented in Table 1. After the description, I give illustrative example words.

## 2.1. Plosives

T’ambaaro has six plosives, viz. /b, t, d, k, g, ʔ/. All the six plosives are also found in the genetically related languages such as Hadiyya (Tadesse 2015: 20), Halaba (Fekede 2012: 40), K’abeena (Ongaye 2014: 23) and Sidama (Kawachi 2007: 23). The description and illustrative examples of the plosives are presented in 1.

1. /b/ bilabial, voiced, plosive  
badala ‘maize’

<sup>1</sup> In the table, when two symbols occur in a pair in a column, the one to the left represents a voiceless sound and the one to the right represents a voiced counterpart. Except the symbol <y> which is used to represent the palatal glide /j/, I have adhered to the IPA conventions.

	<i>badʒita</i>	‘cheek’
	<i>beeze</i>	‘star’
	<i>buula</i>	‘mule’
	<i>arrabi</i>	‘tongue’
	<i>dabaak’ula</i>	‘pumpkin’
/t/		alveolar, voiceless, plosive
	<i>kota</i>	‘small’
	<i>tumaa</i>	‘garlic’
	<i>hizoota</i>	‘sister’
	<i>tofa</i>	‘ant’
	<i>taʔifʃfu</i>	‘fly’
/d/		alveolar, voiced, plosive
	<i>darga</i>	‘forest’
	<i>donikka</i>	‘potato’
	<i>duunna</i>	‘hill’
/k/		velar, voiceless, plosive
	<i>kaazu</i>	‘ice, snow’
	<i>kinu</i>	‘stone’
	<i>koru</i>	‘flea’
	<i>kufʃaami</i>	‘stomach’
/g/		velar, voiced, plosive
	<i>gaameela</i>	‘camel’
	<i>geeggi</i>	‘tortoise’
	<i>giira</i>	‘fire’
	<i>godu</i>	‘hut’
	<i>gula</i>	‘testicle’
/ʔ/		voiceless, glottal, stop
	<i>saʔa</i>	‘cow’
	<i>woʔaa</i>	‘water’
	<i>zuruʔma</i>	‘finger’

## 2.2. Nasals

There are three nasal phonemes in T’ambaaro. These are /m, n, ŋ/. The first two nasal consonants are well established in the language as we can find them in word initial and medial positions. However, the last phoneme /ŋ/ is very doubtful as it exists only in one instance. Indeed, the fact that its phonemic status is doubtful is also observed in Kambaata (Treis 2008: 33). In Hadiyya (Tadesse 2015: 20) and Gedeo (Eyob 2015: 27), it is not present at all. On the other hand, it is present in such Highland East Cushitic languages as Halaba (Fekede 2012: 40) and Sidama (Kawachi 2007: 28). In 2., I describe the nasal phonemes and provide illustrative examples of T’ambaaro.

- |    |                  |                         |
|----|------------------|-------------------------|
| 2. | /m/              | bilabial, nasal, voiced |
|    | <i>malabu</i>    | ‘honey’                 |
|    | <i>mat’ini</i>   | ‘salt’                  |
|    | <i>mini</i>      | ‘house’                 |
|    | <i>muli</i>      | ‘kidney’                |
|    | <i>muummi</i>    | ‘head’                  |
|    | /n/              | alveolar, nasal, voiced |
|    | <i>nubaatffu</i> | ‘old man’               |
|    | <i>unuuna</i>    | ‘breast (woman’s)’      |
|    | <i>wozanaa</i>   | ‘heart’                 |
|    | <i>t’ena</i>     | ‘rain’                  |
|    | /ŋ/              | palatal, nasal, voiced  |
|    | <i>haŋŋ asse</i> | ‘to bite’               |

## 2.3. Fricatives

T’ambaaro has five fricatives. These are /f, s, z, ʃ, h/. As can be seen from the list, T’ambaaro makes voice distinction only in the alveolar fricatives. This is also attested in Hadiyya (Tadesse 2015: 20), Gedeo (Eyob 2015: 27) and Sidama (Kawachi 2007: 28). In 3., I provide the description and example words for the fricatives in T’ambaaro.

- |    |               |                                    |
|----|---------------|------------------------------------|
| 3. | /f/           | labio-dental, voiceless, fricative |
|    | <i>feeru</i>  | ‘garden’                           |
|    | <i>fuutta</i> | ‘cotton’                           |

	<i>fink'illu</i>	'porridge'
	<i>fellaa</i>	'goat'
/s/	alveolar, voiceless, fricative	
	<i>samaa</i>	'sky'
	<i>sanu</i>	'nose'
	<i>sarbaa</i>	'calf (of leg)'
	<i>saʔa</i>	'cow'
	<i>waasa</i>	'food'
/z/	alveolar, voiced, fricative	
	<i>zaraaru</i>	'flower'
	<i>ziifu</i>	'bee'
	<i>azu</i>	'milk'
	<i>bagazu</i>	'spear'
	<i>ozi</i>	'dinner'
/ʃ/	alveo-palatal, voiceless, fricative	
	<i>faʃfu</i>	'horse'
	<i>ifima</i>	'maternal uncle'
	<i>fuma</i>	'urine'
	<i>ʃaafa</i>	'sand'
/h/	glottal, voiceless, fricative	
	<i>bahaara</i>	'sea, ocean'
	<i>haamu</i>	'chest'
	<i>hizoo</i>	'bother'
	<i>hulla</i>	'hump'

#### 2.4. Affricates

There are two affricates in T'ambaaro. These are /tʃ, dʒ/. Both of the affricates are found in all the other Highland East Cushitic languages. The description and illustrative examples are given in 4.

4.	/tʃ/	palato-alveolar, voiceless, affricate	
		<i>mik'itʃfu</i>	'bone'
		<i>k'amaltʃu</i>	'monkey'
	/dʒ/	alveo-palatal, voiced, affricate	

<i>dʒaala</i>	‘friend’
<i>andʒa</i>	‘saliva’
<i>badʒi</i>	‘cheek’
<i>gudʒdʒu</i>	‘back’

## 2.5. Liquids

There are two liquids in T’ambaaro, namely, /l, r/. Both are voiced. In 6., I give the description and illustrative examples for the liquids in T’ambaaro.

6.	/l/	alveolar, voiced, lateral liquid
	<i>gulubi</i>	‘knee’
	<i>maalaa</i>	‘meat’
	<i>laalu</i>	‘fruit, seed’
	<i>laga</i>	‘river’
	/r/	alveolar, voiced, liquid
	<i>t’ork’ee</i>	‘whip’
	<i>ʃarafa</i>	‘weed’
	<i>ortʃ’a</i>	‘mud’
	<i>ari</i>	‘wife’

As mentioned earlier, Treis (2008) reports that Kambaata has glottalized liquids /l’, r’/ in addition to the plain liquids /l, r/. She argues that the presence and phonemic status of these liquids eluded the attention of linguists who worked on the Kambaata language before. She provides ample examples for each of these sounds (Treis 2008: 35-36), some of which are presented in 7. It is not yet clear how Kambaata happened to get these glottalized liquids, as such liquids are not attested in T’ambaaro, nor in the other Highland East Cushitic languages.

7.	a.	<i>gal’á</i>	‘shard’
		<i>dʒal’íta</i>	‘lotion’
		<i>dʒal’á</i>	‘sloppy (e.g. of bean or pea pods that are not fresh any more)’
	b.	<i>fur’á</i>	‘agent for fermentation, yeast’
		<i>gor’ú</i>	‘to be(come) green, unripe (of coffee, beans, oranges, lemons)’
		<i>hur’á</i>	‘protruding navel’

<i>sur'á</i>	'umbilical cord'
<i>fur'á</i>	'tuft of hair in the middle of the belly (of bulls, goat rams)'

## 2.6. Ejectives

There are four voiceless ejectives in T'ambaaro. These are /p', t', tʃ, k'/. The other Highland East Cushitic languages also have the four voiceless ejectives in their inventory. In 8., I describe the ejective phonemes, and provide illustrative examples.

8.	/p'/	bilabial, voiceless, ejective
	<i>t'ap'a</i>	'root'
	<i>k'up'p'a</i>	'egg'
	/t'/	alveolar, voiceless, ejective
	<i>siint'a</i>	'heel'
	<i>t'abaroo</i>	'ash'
	<i>t'eema</i>	'fresh milk'
	<i>mat'ini</i>	'salt'
	/tʃ'/	alveo-palatal, voiceless, ejective
	<i>ortʃ'a</i>	'mud'
	<i>tʃ'iiʔa</i>	'bird'
	<i>tʃ'amba</i>	'soup'
	<i>tʃ'inu</i>	'faeces'
	/k'/	velar, voiceless, ejective
	<i>hark'oota</i>	'yoke'
	<i>mik'itʃfu</i>	'bone'
	<i>k'eessa</i>	'cheese'
	<i>k'egi</i>	'blood'

## 2.7. Glides

There are two glides in T'ambaaro, namely, /w, y/. These phonemes are also found in the other Highland East Cushitic languages. The descriptions and illustrative examples are given in 9.

9. /w/ labio-velar, voiced, glide
- |                 |                |
|-----------------|----------------|
| <i>waasa</i>    | ‘food’         |
| <i>weesi</i>    | ‘false banana’ |
| <i>wodaru</i>   | ‘rope’         |
| <i>awuriɸɸu</i> | ‘cock’         |
- /y/ palatal, voiced, glide
- |                 |         |
|-----------------|---------|
| <i>yemazu</i>   | ‘waist’ |
| <i>yaburu</i>   | ‘lip’   |
| <i>yemetɸɸu</i> | ‘rat’   |

Minimal pairs are quite rare in the language. No example of minimal pairs is found for consonant sounds that differ only in one parameter. The few available examples show that the contrasting phonemes differ in more than one parameter. These minimal pairs are given in 10.

10. /f/ and /r/
- |             |             |
|-------------|-------------|
| <i>kofu</i> | ‘upper arm’ |
| <i>koru</i> | ‘flea’      |
- /b/ and /tʃ/
- |                |            |
|----------------|------------|
| <i>goobaa</i>  | ‘neck’     |
| <i>gootʃaa</i> | ‘entrance’ |
- /d/ and /m/
- |               |                 |
|---------------|-----------------|
| <i>adataa</i> | ‘paternal aunt’ |
| <i>amataa</i> | ‘mother’        |
- /dʒ/ and /m/
- |                |          |
|----------------|----------|
| <i>dʒaalaa</i> | ‘friend’ |
| <i>maalaa</i>  | ‘meat’   |

### 3. Gemination

In T’ambaaro, consonant phonemes occur geminate, but that is only in word medial position. Moreover, gemination is not only of lexical but also of morphological and grammatical importance in T’ambaaro. This is also true in the other Cushitic language such as Kambaata (Treis 2008), Halaba (Fekede 2012), K’abeena (Ongaye 2014), Hadiyya (Tadesse 2015), Konso (Ongaye 2013). Among the twenty-four consonant phonemes in T’ambaaro consonant inventory, only two consonant phonemes

(i.e., /h/ and /f/) do not occur as geminate consonants. The palatal nasal and the voiceless, alveo-palatal affricate never occurs as a single consonant, but only as a geminate consonant. Below, I give illustrative examples in which we have the geminate consonants. It is, indeed, important to point out that where we have only one or two examples, this means that these are the only lexical items in which the geminate consonant in question is attested in the language.

11.	bb	<i>zoobbeetffu</i>	'lion'
		<i>oobbaa</i>	'foot'
tt		<i>attaba</i>	'chicken'
		<i>tittiraa</i>	'nose cancer'
		<i>fuutta</i>	'cotton'
dd		<i>diddibbaa</i>	'fatness below the calf (of leg)'
		<i>maaddaa</i>	'meal' (cf. Amharic <i>ma'id</i> )
		<i>met't'edda</i>	'together, with'
kk		<i>lokka</i>	'leg'
		<i>makkaa</i>	'comfort'
		<i>donikka</i>	'potato'
gg		<i>geeggi</i>	'tortoise'
		<i>gaggarra</i>	'plain area'
		<i>aagga</i>	'introduction'
mm		<i>muummi</i>	'head'
		<i>undulumma</i>	'mortar'
		<i>billamma</i>	'knife'
nn		<i>duunna</i>	'hill'
		<i>binni</i>	'gnat'
		<i>lankaanna</i>	'uncle (paternal)'
ɲɲ		<i>hɲɲ asse</i>	'to bite'
ss		<i>k'eessa</i>	'cheese'
		<i>maassa</i>	'blessing'
zz		<i>beezzee</i>	'star'
		<i>yamezzu</i>	'waist'
tʃtʃ		<i>irritʃtʃu</i>	'sun'
		<i>butʃtʃaa</i>	'soil'

	<i>maatfffa</i>	‘ear’
ɖɖ	<i>gudɖɖzu</i>	‘back’
	<i>kobbodɖɖzu</i>	‘seedling’
ʃʃ	<i>hallaaffa</i>	‘crocodile’
	<i>hooffu</i>	‘lunch’
	<i>faaffu</i>	‘horse’
p’p’	<i>k’up’p’a</i>	‘egg’
	<i>tuup’p’a</i>	name of a historical place
t’t’	<i>hit’t’i</i>	‘grass’
	<i>t’at’t’i</i>	‘be ready (SG addressee)!’
	<i>met’t’e</i>	‘once’
k’k’	<i>wok’k’a</i>	‘road’
	<i>hak’k’a</i>	‘wood’
ʧʧ	<i>maʧʧ’aa</i>	‘ear, leaf’
	<i>gooʧʧ’a</i>	‘door’
ll	<i>iilli</i>	‘eye’
	<i>fellaa</i>	‘goat’
	<i>olla</i>	‘village, neighborhood’
rr	<i>arrabi</i>	‘tongue’
	<i>arriitffu</i>	‘sun’
	<i>harruutffu</i>	‘donkey’
	<i>gooʧʧ’aa</i>	‘door’
ww	<i>billawwaa</i>	‘knife’
	<i>gawwaa</i>	‘foolish, hard of hearing’
	<i>hawwarru</i>	‘evening’
yy	<i>ayyaano</i>	name of a person
	<i>ayyamo</i>	name of a person
	<i>waalayyoom</i>	‘I am coming’
??	<i>ã??ã?</i>	‘no’
	<i>ka??udin</i>	‘there (towards the speaker)’

In T’ambaaro, gemination is phonemic. Indeed, not all consonant phonemes show the contrast between a single consonant and its geminate counterpart as shown in 12. The attested examples for

the phonemic status of gemination are found only in ten of the twenty-four consonant phonemes. The contrast between the single and its geminate counterpart among some phonemes is also reported in such genetically related languages as Hadiyya (Tadesse 2015) and Gedeo (Eyob 2015). The work of Tadesse (2015) on Hadiyya also contains the contrast between single and their counter geminate consonants in about ten consonants, namely, /b vs. bb; d vs. dd; f vs. ff; g vs. gg; l vs. ll; n vs. nn; s vs. ss; t vs. tt; t' vs. t't'; p' vs. p'p'/. For Gedeo, Eyob (2015: 58) also provides minimal pairs for single-geminate consonants only for six consonants, viz. /d vs. dd; b vs. bb; l vs. ll; n vs. nn; t' vs. t't'; d' vs. dd'/.

12. /b/ and /bb/

<i>dubuu</i>	'frying something on the fire (e.g. potato)'
<i>dubbuu</i>	'false banana seedling'

/l/ and /ll/

<i>leluu</i>	a collective name for animals such as a cow, sheep, etc.
<i>lelluu</i>	'being visible'
<i>woluu</i>	'another'
<i>wolluu</i>	'number'

/t' / and /t't' /

<i>t'aat'i</i>	'coil it (SG addressee)!'
<i>t'aat't'i</i>	'be ready (SG addressee)!'

/t/ and /tt/

<i>kotaa</i>	'small'
<i>kottaa</i>	'someone who lost fingers'

/f/ and /ff/

<i>tʃefuu</i>	'brewing'
<i>tʃeffuu</i>	'renovating'

/m/ and /mm/

<i>t'umaa</i>	'generous'
<i>t'ummaa</i>	'peace'

/s/ and /ss/

<i>basuu</i>	'hitting, beating'
<i>bassuu</i>	'food prepared from barley flour'

/d/ and /dd/

<i>badaa</i>	‘fallow land’
<i>baddaa</i>	‘highland’
/k’/ and /k’k’/	
<i>mik’aa</i>	‘never, not at all’
<i>mik’k’aa</i>	‘bone’
/g/ and /gg/	
<i>toguu</i>	‘demonstrating’
<i>togguu</i>	‘make someone stressed’

### 2.3. Vowel phonemes

In T’ambaaro, there are five short vowels, each of them with a long counterpart. This five-vowel system is a typical characteristic feature of the Cushitic five-vowel system. In this article, vowel length is shown by doubling the first letter rather than using a colon after the first letter. There is one marginal nasal vowel in T’ambaaro. That is the low, mid, unrounded nasal vowel /ã/. As discussed below, it appears only in two instances. Hence, its status is unclear yet. The short and their counterpart long vowels are given in Table 2. Treis (2008: 21) reports the marginal presence of nasal vowels in the genetically related Kambaata language. In fact, unlike T’ambaaro which seems to have only one nasal vowel, Kambaata has three nasal vowels: /ã, ã̃, ã̄/ (Treis 2008: 21). The presence of nasal vowels in the other Highland East Cushitic languages has not been attested (see Kawachi 2007 for Sidama; Fekede 2012 for Halaba; Ongaye 2014 for K’abeena; Tadesse 2015 for Hadiyya; Eyob 2015 for Gedeo).

	Front	Centre	Back
High	i, ii		u, uu
Mid	e, ee		o, oo
Low		a, aa (ã), (ãã)	

Table 2. Vowel phonemes

Using four parameters such as height of the tongue, part of the tongue involved, condition of lips, and orality/nasality, I provide the description of each of the short vowel phonemes in T’ambaaro. After the descriptions, I give some illustrative examples.

13.	/i/	high, front, unrounded, oral vowel
	<i>dʒibbaa</i>	‘mat’
	<i>mat’ini</i>	‘salt’
	<i>inku</i>	‘tooth, end point’
	<i>illi</i>	‘eye’
	/e/	mid, front, unrounded, oral vowel
	<i>gennenu</i>	‘nape’
	<i>eloo</i>	‘ditch’
	<i>k’egi</i>	‘blood’
	/a/	low, centre, unrounded vowel
	<i>angeta</i>	‘hand’
	<i>arrabi</i>	‘tongue’
	<i>ginata</i>	‘second wife’
	<i>darga</i>	‘forest’
	/u/	high, back, rounded, oral vowel
	<i>unuuna</i>	‘breast (of a woman)’
	<i>undulumma</i>	‘mortar’
	<i>koru</i>	‘flea’
	<i>tuma</i>	‘garlic’
	/o/	mid, back, rounded, oral vowel
	<i>bokku</i>	‘house’
	<i>olla</i>	‘village, neighbourhood’
	<i>ozi</i>	‘dinner’
	<i>koru</i>	‘flea’
	/ã/	low, central, unrounded, nasal vowel
	<i>ãã</i>	‘yes’
	<i>ã??ã?</i>	‘no’

As shown in Table 13., T’ambaaro has one nasal vowel in its inventory. What is more, this vowel has been found only in the positive and negative responses of polar questions as illustrated in the following examples. Again, no example is found with regard to lexical distinctions between a short nasal vowel and its long counterpart. Indeed, the presence of the nasal vowel in the positive and

negative responses of the polar questions is also attested in Kambaata (Treis 2008: 21). So, it is not clear yet whether T’ambaaro has borrowed the vowel and the lexical items in which it occurs from Kambaata through language contact or that it has retained only these materials from a common ancestral language.

- 14a. *kuun mini-yaa-n*  
 this house-COP-Q  
 ‘is this a house?’
- b. *ãã*  
 yes  
 ‘yes’
- c. *ã??ã?*  
 no  
 ‘no’

As shown in Table 2., all the short oral vowels have their counter long vowels. The following are illustrative words with the long vowels:

15. /uu/ *muummi* ‘head’  
*buuda* ‘horn’  
*fuutu* ‘fart’  
*guundzu* ‘cloud’
- /aa/ *gimbaara* ‘forehead’  
*laalu* ‘fruit, seed’  
*bargaara* ‘enemy’  
*haamu* ‘chest’
- /oo/ *oobbaa* ‘foot’  
*ooloo* ‘termite’  
*afoo* ‘mouth’  
*booraa* ‘ox’
- /ii/ *iinku* ‘tooth’  
*iilli* ‘eye’  
*wiliili* ‘smoke’

	<i>tʃiiʔa</i>	‘bird’
/ee/	<i>eelaa</i>	‘pond’
	<i>weessi</i>	‘false banana’
	<i>adabeetʃfu</i>	‘boy’
	<i>geeggi</i>	‘tortoise’

Short vowels may occur in a contrastive distribution. The minimal pairs with short vowel contrast are not widely available. The attested minimal pairs are given in 16.

16.	/i/ and /o/	<i>ʃikkaa</i>	‘walking stick’
		<i>ʃokkaa</i>	‘twisted thing’
	/i/ and /a/	<i>birraa</i>	‘dry season; Ethiopian currency (Birr)’
		<i>barraa</i>	‘day time’
	/e/ and /o/	<i>bellaa</i>	‘V-shaped branch’
		<i>bollaa</i>	‘shoot (of plant)’

In T’ambaaro, the substitution of a long oral vowel for another long oral vowel may result in a lexical distinction. The substitution of a long oral vowel for a long nasal vowel has not been attested in the language. This may be due to the fact that the nasal vowel is quite restricted in its distribution in the vocabulary of the language. In 17., I provide minimal pairs in which long oral vowels contrast.

17.	/aa/ and /oo/	<i>baatuu</i>	‘paying’
		<i>bootuu</i>	‘bull’
	/uu/ and /oo/	<i>buuttaa</i>	‘wind instrument’
		<i>boottaa</i>	‘bulls’
	/ii/ and /uu/	<i>giira</i>	‘fire’
		<i>guura</i>	‘morning’
	/aa/ and /uu/	<i>faatta</i>	‘false banana leaf’
		<i>fuutta</i>	‘cotton’
	/ee/ and /oo/	<i>heellaa</i>	‘comfort, safety’
		<i>hoollaa</i>	‘sheep (PL)’

Vowel length is phonemic in T’ambaaro. The phonemic behavior of vowel length in the language is observed in oral vowels. In other words, the marginal nasal vowel does not make length difference. The contrast between the short and their long counterparts among the five oral vowels is shown in 18.

18.	/a/ and /aa/	<i>assuu</i>	‘work’
		<i>aassuu</i>	‘gift’
		<i>laluu</i>	‘cattle’
		<i>laaluu</i>	‘fruit’
	/i/ and /ii/	<i>ituu</i>	‘eating’
		<i>iittuu</i>	‘liking, loving’
	/u/ and /uu/	<i>t’urii</i>	‘victory’
		<i>t’uurii</i>	‘dirt’
	/e/ and /ee/	<i>eluu</i>	‘old wound inside the body’
		<i>eeluu</i>	‘stagnant water, harvested water’
	/o/ and /oo/	<i>obba</i>	‘valley’
		<i>oobba</i>	‘sole’

### 3. Phonotactic constraints

This section presents the phonotactic constraints of the T’ambaaro language. I first treat consonant occurrences in word initial, word medial and word final positions. Then, I discuss about consonant clusters in the language. With regard to consonant distribution, we find out that T’ambaaro allows consonant phonemes in word initial position. However, not all consonant phonemes appear in this position. Among the twenty-four consonant phonemes of T’ambaaro, five phonemes are disallowed to occur in word initial position. These are: /tʃ, ɲ, p’, r and ʔ/. In word medial position, all consonant phonemes occur. In word final position, only two consonant phonemes occur: /ʔ/ and /n/. In the following table, I present the positions in which each consonant phoneme is allowed or disallowed using a plus (+) sign for the presence of the consonant phoneme in the given position, and a minus (-) sign for the absence of the consonant phoneme in the given position.

Consonant phoneme	Word initial	Word medial	Word final
/b/	+	+	-
/t/	+	+	-
/d/	+	+	-
/k/	+	+	-
/g/	+	+	-
/ʔ/	-	+	+
/m/	+	+	-
/n/	+	+	+
/ɲ/	-	+	-
/f/	+	+	-
/s/	+	+	-
/z/	+	+	-
/h/	+	+	-
/ʃ/	+	+	-
/tʃ/	-	+	-
/dʒ/	+	+	-
/l/	+	+	-
/r/	-	+	-
/pʰ/	-	+	-
/tʰ/	+	+	-
/tʃʰ/	+	+	-
/kʰ/	+	+	-
/w/	+	+	-
/y/	+	+	-

Table 3. Consonant distributions

For the phonemes marked with the plus sign in Table 3, it is important to provide illustrative examples. In 22., I provide illustrative words which allow the occurrence of consonant phonemes in word initial position.

22.	/b/	badalaa	‘maize’
		badzi	‘cheek’
		buulataa	‘mule’
	/m/	moomme	‘head’
		miini	‘forehead’
		malabu	‘honey’
	/n/	nubaatffuta	‘old woman’
		nubaatffu	‘old man’
	/f/	feerutaa	‘garden’
		fagaaraa	‘buttock’
		fuutu	‘fart’
	/h/	hullaa	‘hump’
		hoollataa	‘sheep’
		haamuta	‘chest’
	/t/	tofaa	‘ant’
		tumaa	‘garlic’
		ta?itffu	‘fly (insect)’
	/d/	dabaak’ulaa	‘pumpkin’
		dargaa	‘forest’
		donikka	‘potato’
	/k/	kaazu	‘ice, snow’
		kutfaami	‘stomach’
		kofu	‘upper arm’
	/g/	geeggi	‘tortoise’
		giira	‘fire’
		godebaa	‘belly’
	/s/	saarbata	‘calf (of leg)’
		sagadaa	‘downhill’
		soha	‘barley’
	/z/	zaraaru	‘flower’
		zoofu	‘flood’
		ziifu	‘bee’
	/l/	laalu	‘fruit’

	<i>laga</i>	‘river’
	<i>leʔa</i>	‘nape’
/ʃ/	<i>ʃafaa</i>	‘sand’
	<i>ʃarafa</i>	‘weed’
	<i>ʃeerimaa</i>	‘tail’
/dʒ/	<i>dʒaala</i>	‘friend’
	<i>dʒibbaa</i>	‘mat’
/tʰ/	<i>tʰabaroo</i>	‘ash’
	<i>tʰapʰaa</i>	‘root’
	<i>tʰeena</i>	‘rain’
	<i>tʰufa</i>	‘door, gate’
/kʰ/	<i>kʰadafaraa</i>	‘lung’
	<i>kʰamalchu</i>	‘monkey’
	<i>kʰota</i>	‘mountain’
	<i>kʰurtʰummee</i>	‘fish’
/tʃʰ/	<i>tʃʰaʔmaa</i>	‘shoe’
	<i>tʃʰiiʔa</i>	‘bird’
	<i>tʃʰiila</i>	‘male child’
/w/	<i>waaʃaa</i>	‘food’
	<i>weesi</i>	‘false banana’
	<i>wokʰkʰaa</i>	‘road’
	<i>worakana</i>	‘fox’
/y/	<i>yemetʃʃu</i>	‘rat’
	<i>yaamazu</i>	‘waist’
	<i>yaburu</i>	‘lip’

Consonant clusters exist in Tʼambaaro, but only in word medial position. This means that the language does not allow consonant clusters either in word initial position or in word final position. Moreover, consonant clusters contain a maximum of two consonants. This is not, of course, unique to Tʼambaaro, but rather a phonological feature shared by a number of Cushitic languages (Ongaye 2013 for Konso; Treis 2008 for Kambaata; Kiwachi 2007 for Sidama) as well as Omotic languages of Ethiopia (for Maale, see Azeb (2001); for Haro, see Hirut (2004); for Dime, see Mulugeta (2008)). Below, I provide illustrative words for which consonant clusters are attested. Except the palatal nasal, the rest of the

consonant phonemes are allowed to occur in word medial position in consonant clusters as illustrated in 23.<sup>2</sup>

23.	/bs/	<i>biddilibsa</i>	‘blanket’
	/mb/	<i>ʃumbuu</i>	‘lung’
		<i>k’ombata</i>	‘testicle’
	/nd/	<i>undulummaa</i>	‘mortar’
		<i>ʃenderaa</i>	‘porridge’
	/nt/	<i>siint’a</i>	‘heel’
		<i>mentifʃfuta</i>	‘woman’
	/nk/	<i>inku</i>	‘tooth’
		<i>ʃinkurta</i>	‘onion’
		<i>lankaamataa</i>	‘maternal aunt’
	/ng/	<i>anga</i>	‘hand’
		<i>t’ulunga</i>	‘fingernail’
	/nt’/	<i>siint’a</i>	‘heel’
		<i>hint’a</i>	‘breast (animal’s)’
		<i>bont’a</i>	‘leaf’
	/nz/	<i>maganzeebu</i>	‘rainbow’
	/nʃ/	<i>hanʃu</i>	‘bed’
		<i>anʃebo</i>	name of a person
	/ns/	<i>ansoola</i>	‘bed sheets’
	/ntʃ/	<i>adanʃu</i>	‘cat’
		<i>ilanʃu</i>	‘relative (male)’
		<i>manʃu</i>	‘man, person’
	/ndʒ/	<i>andʒaa</i>	‘saliva’
		<i>guundʒu</i>	‘cloud’
		<i>gundʒireeta</i>	‘machete’
	/lb/	<i>gulbi</i>	‘knee’
		<i>gilbota</i>	‘May’

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<sup>2</sup> Two instances of consonant clusters attested in the data seem to have been borrowed from Amharic: *biddilibsa* ‘blanket’ and *ansoola* ‘bed sheets,’ from *birdlibs* and *ansola* (the latter originally from Italian *lenzuola*), respectively.

/lt/	wolta	‘shield’
	waalte	‘she/they came’
/ld/	baaldita <sup>3</sup>	‘bucket’
	bolda	‘top of cane, stalk’
/lk/	folkiya	‘fourth’
	lemalkiya	‘seventh’
/lg/	balgaara	‘enemy’
/lk’/	t’ulk’aketa	‘thumb’
/ltʃ/	k’amaltfu	‘monkey’
	hoolʃfuta	‘ewe’
/rb/	saarba	‘calf (of leg)’
	barbaritaa	‘pepper’
/rg/	dargaa	‘forest’
	bargaaraa	‘enemy’
	durgii	name of an administrative division ( <i>kebele</i> )
/rk’/	t’ork’ee	‘whip’
	hark’oota	‘yoke’
/rtʃ’/	ortʃ’a	‘mud’
	burtʃ’uk’k’o	‘glass (to drink from)’
/rm/	zurmitʃ’ʃ’e	‘finger’
/rz/	orza	‘hair’
/rt/	ʃinkurta	‘onion’
	burtukkaana	‘orange’
	ari	‘wife’
/rt’/	k’urt’ummi	‘fish’
/rb/	horbaa	‘dinner’
	ʃorbaa	‘soup’
	harba	‘Friday’
/rf/	arʃiindʒaa	‘pepper’

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<sup>3</sup>The word *baaldita* is borrowed from Amharic *baldi* ‘bucket.’ The same is true for the words *burtʃ’uk’k’o* and *burtukkaana*, which are adapted from the Amharic words *birtʃ’ik’k’o* ‘glass’ and *birtukkan* ‘orange,’ respectively.

	<i>marfa</i> <sup>4</sup>	‘needle’
	<i>arfiʃʃo</i>	name of a person
/rtʃ/	<i>burʃʃuk’k’uta</i> <sup>5</sup>	‘glass (for drinking)’
	<i>ortʃ’a</i>	‘mud’
/rk’/	<i>t’ork’ee</i>	‘whip’
	<i>hark’oota</i>	‘yoke’
/ʔl/	<i>maafuʔlaa</i>	‘sorghum’
	<i>feʔloma</i>	‘frog’
/ʔm/	<i>ʃ’aʔma</i>	‘shoe’
/ʔt/	<i>ʃ’iʔti</i>	‘buttock’
/sl/	<i>meslaakkata</i>	‘girls’

The other dimension of phonotactic constraint is intervocality. In this respect, we find that all consonant phonemes occur intervocalically. Of course, a few remarks are important to mention. For example, the voiceless alveo-palatal affricate /tʃ/ and voiced palatal nasal /ɲ/ never occur as single sounds intervocalically. Moreover, the voiceless, bilabial ejective /p’/ was attested only in one instance as a single consonant between two vowels, and instances of geminate /p’/ are very rare, too. In 24., I provide illustrative examples with consonant phonemes occurring intervocalically.

24.	/b/	<i>arrabi</i>	‘tongue’
		<i>dabaak’ula</i>	‘pumpkin’
		<i>ibiibi</i>	‘louse’
	/t/	<i>beetu</i>	‘son’
		<i>fuutu</i>	‘fart’
		<i>k’ota</i>	‘mountain’
	/d/	<i>adata</i>	‘aunt (paternal)’
		<i>godu</i>	‘hut’
		<i>gidaantfu</i>	‘baboon’
	/k/	<i>worakana</i>	‘fox’
		<i>mikiʃʃfu</i>	‘bone’

<sup>4</sup> The word *marfa* ‘needle’ is borrowed from Amharic *mərfa*.

<sup>5</sup> The word *burʃʃuk’k’uta* ‘cup’ is borrowed from Amharic *birʃʃik’k’o*.

	<i>burtukaana</i>	‘orange’
/g/	<i>aganʃu</i>	‘moon’
	<i>goga</i>	‘skin, hide’
	<i>k’egi</i>	‘blood’
/ʔ/	<i>ʃiiʔa</i>	‘bird’
	<i>leʔa</i>	‘nape’
	<i>baʔeelaa</i>	‘beans’
/m/	<i>amataa</i>	‘mother’
	<i>ʃuma</i>	‘urine’
	<i>k’oomu</i>	‘gourd, calabash’
/n/	<i>wozana</i>	‘heart’
	<i>ana</i>	‘father’
	<i>sanu</i>	‘nose’
/ɲ/	<i>hɲɲiassé</i>	‘to bite’
/f/	<i>t’ufaa</i>	‘door’
	<i>ʃafaa</i>	‘sand’
	<i>afeli</i>	‘liver’
/s/	<i>kasaraa</i>	‘walking stick’
	<i>misaani</i>	‘axe’
	<i>bisa</i>	‘sword’
/z/	<i>hizootaa</i>	‘sister’
	<i>ozi</i>	‘dinner’
	<i>beeze</i>	‘star’
/ʃ/	<i>miʃira</i>	‘lentil’
	<i>ifimaa</i>	‘maternal uncle’
	<i>tofa</i>	‘ant’
/h/	<i>bahaara</i>	‘sea, ocean’
	<i>lankiihu</i>	‘the second’
	<i>soha</i>	‘barley’
/dʒ/	<i>badʒi</i>	‘cheek’
	<i>hudʒa</i>	‘work’
/p’/	<i>t’ap’a</i>	‘root’
/t’/	<i>hit’itaa</i>	‘grass’

	<i>mat’ini</i>	‘salt’
/k’/	<i>marak’i</i>	‘soup’
	<i>dabak’ula</i>	‘pumpkin’
/tʃ’/	<i>goof’aa</i>	‘entrance’
	<i>kutʃ’aami</i>	‘stomach’
/l/	<i>eelaa</i>	‘pond’
	<i>tʃ’iilaa</i>	‘male child’
/r/	<i>zoobira</i>	‘vulture’
	<i>ʃeerima</i>	‘tail’
	<i>giira</i>	‘fire’
/y/	<i>k’egiyaa</i>	‘it is blood’
	<i>miniyaa</i>	‘it is a house’
/w/	<i>awuritʃʃu</i>	‘cock’

When we look at the distribution of vowels, we find out that all the five oral vowel phonemes occur in word initial, medial and final positions. For Kambaata, Halaba and Hadiyya, Treis (2008), Fekede (2012) and Tadesse (2015), respectively, report that no word begins with a vowel. I do not know what their ground is because in T’ambaaro, all oral vowels occur in the word initial position. These linguists add the voiceless glottal stop for words that begin with vowels. The presence of vowels in the word initial position in other Highland East Cushitic languages has also been reported by other linguists such as Eyob (2015) for Gedeo, and Kawachi (2007) for Sidama. In Table 4., I present the distribution of the oral vowels in the three positions.

Vowel	Word initial position	Word medial position	Word final position
/i/	<i>ibiibi</i> ‘louse’	<i>mini</i> ‘house’	<i>afeli</i> ‘liver’
	<i>illi</i> ‘eye’	<i>gina</i> ‘second wife’	<i>ari</i> ‘wife’
	<i>ifima</i> ‘maternal uncle’	<i>birra</i> ‘dry season’	<i>badzi</i> ‘cheek’
/u/	<i>unuuna</i> ‘breast’	<i>fuutta</i> ‘cotton’	<i>kofu</i> ‘upper arm’
	<i>undulumma</i> ‘mortar’	<i>hulla</i> ‘hump’	<i>kinu</i> ‘nose’
		<i>muli</i> ‘kidney’	<i>tunsu</i> ‘dark’
/e/	<i>eela</i> ‘pond’	<i>geeggi</i> ‘tortoise’	<i>beeze</i> ‘star’
	<i>eloo</i> ‘ditch’	<i>k’eessa</i> ‘cheese’	<i>tork’ee</i> ‘whip’
		<i>feeru</i> ‘garden’	
/o/	<i>ozi</i> ‘dinner’	<i>godu</i> ‘hut’	<i>eloo</i> ‘ditch’
	<i>ortʃa</i> ‘mud’	<i>koru</i> ‘flea’	<i>ooloo</i> ‘termite’
	<i>omolu</i> ‘bark (of tree)’	<i>goga</i> ‘skin, hide’	<i>afoo</i> ‘mouth’
/a/	<i>anna</i> ‘father’	<i>hama</i> ‘branch, stem’	<i>ada</i> ‘paternal aunt’
	<i>azu</i> ‘milk’	<i>sagada</i> ‘downhill’	<i>ama</i> ‘mother’
	<i>alasu</i> ‘wheat’	<i>t’abaroo</i> ‘ash’	<i>maala</i> ‘meat’

Table 4. Distribution of short vowel phonemes

#### 4. Free variation

Free variation is not common in T’ambaaro. Attested examples show that both consonants (25a.) and vowels (25b.) may occur in free variation. There is also an example of free variation in which a single consonant and its geminate substitute as in 25c. Indeed, it is very difficult to formulate a systematic rule that captures the phenomenon of free variation.

25a.	/m/ and /n/	<i>saymitaa</i>	~	<i>saynitaa</i>	‘plate’
	/l/ and /r/	<i>balgaaraa</i>	~	<i>bargaaraa</i>	‘enemy’
	/ʃ/ and /tʃ/	<i>aʃfi</i>	~	<i>atʃfi</i>	‘tick (parasite)’
	/h/ and /ʔ/	<i>kohaa</i>	~	<i>koʔaa</i>	‘guest’
	/w/ and /b/	<i>hawaankaanee</i>	~	<i>habaankanee</i>	‘how much’
b.	/aa/ and /ii/	<i>araagaa</i>	~	<i>araagii</i>	‘penis’
	/i/ and /u/	<i>fank’alimbaʔ</i>	~	<i>fank’alumbaʔ</i>	‘he has not returned yet’
c.	/a/ and /aa/	<i>yamezu</i>	~	<i>yaamezu</i>	‘waist’

## 5. Phonological processes

Phonological processes such as assimilation, epenthesis, deletion, and metathesis have been discovered in the language. Below, I describe each of the phonological processes in the language briefly.

Assimilation is among the phonological processes of T’ambaaro. Partial and complete assimilations have been discovered. Partial assimilation occurs when, for example, the alveolar nasal occurs before the palatal affricates and becomes a palatal nasal (26a.). The case of complete assimilation occurs when the first person plural suffix –n follows a root final bilabial nasal and copies all its features as shown in 26b.

- 26a.            *manʃus*  
                   *manʃu-s*  
                   man-DEM.M  
                   ‘the man’
- b.                *naʔodak’k’ammeem*  
                   *naʔo    dak’k’m-n-eem*  
                   we        meet-1PL-1PF  
                   ‘we met each other’

Epenthesis is another phonological process in T’ambaaro. T’ambaaro verb roots contain a maximum of two consonants on the coda; when a suffix that begins with a consonant is added to the root, the vowel /i/ is inserted between the verb root and the suffix in order to avoid impermissible sequence of sounds. This is shown in 27.

27.            *gagaʔne muʔrineem*  
                   *gaga-ʔne        muʔr-n-eem*  
                   skin-1PL        cut-1PL-1PF  
                   ‘we cut ourselves’

Deletion is still another phonological process. One instance of deletion is the case of optionally deleting the final consonant of the verb root *orook’-* ‘to go.’ The phenomenon happens when this verb root is followed by person and aspect marking suffixes as in (28a.-b.).

- 28a.            *naʔo orooneem*  
                   *naʔo    orook'-n-eem*  
                   we        go-1PL-1PF  
                   'we went'
- b.                *anʔo orooteenta*  
                   *anʔo                orook'-teenta*  
                   you (PL)go-2PL.PF  
                   'you went'

Again, metathesis is another phonological process considered for T'ambaaro. During the data collection, only one instance of metathesis has been observed. This particular case involves the exchange of the consonant /g/ in verb roots with the alveolar nasal /n/ that marks first person plural. This process is, indeed, a result of phonological restriction in that T'ambaaro does not allow a cluster of /gn/, but rather the /ng/ cluster. An illustrative example is given in 29.

29.            *angaam*  
                   *ag-n-aam*  
                   drink-1PL-OPT  
                   'let us drink'

## 6. Tone and pitch-accent

I tried to find out whether T'ambaaro is a tonal language or not, but could not find any lexical or grammatical distinctions made based on tone. In fact, several Cushitic languages are characterized by not having tone distinctions, or if there is any, that is only to a limited level. From the conversation of the study participants, it seems that the language is a pitch-accent language although I could not figure that out very well. This obviously calls for further research to determine if the language is a pitch-accent language or not.

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### Abbreviation and symbols

COP	copula
M	masculine
OPT	optative
PF	perfective
PL	plural
Q	question
SG	singular
SIL	Summer Institute of Linguistics
SNNPRS	Southern Nations, Nationalities and Peoples’ Regional State
1	first person
2	second person
3	third person

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