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#### **Onomatopoeias in Kambaata**

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#### 1. Introduction

The Kambaata language (iso-code: ktb, glottolog code: kam1316) is spoken by more than 600,000 speakers (Federal Democratic Republic of Ethiopia Census Commission 2010: 91), the large majority of whom live in the Kambaata-Xambaaro Zone of the Southern Nations, Nationalities and Peoples' Region of Ethiopia. Kambaata belongs to the Highland East Cushitic branch of the Cushitic family (Afroasiatic). Its immediate neighbours are speakers of other Cushitic languages (Hadiyya and Alaaba) and Ometo languages of the Omotic family (Wolaitta and Dawro). Kambaata is spoken in the Ethiopian Linguistic Area (Crass & Meyer 2008). Amharic, the Ethiopian lingua franca, is the second language of most Kambaata speakers.

Kambaata has a consistently head-final constituent order, and it is agglutinating-fusional and (almost) exclusively suffixing. Apart from closed word classes including different types of pronouns, Kambaata has five open word classes: verbs, nouns, adjectives, ideophones and interjections, which are defined by morphosyntactic criteria (Treis 2008: 82–97). Verbal, nominal and adjectival roots are bound, i.e. they cannot occur in isolation but combine obligatorily with inflectional morphology. Stress is phonemic. The official orthography of Kambaata uses a modified Roman script (Treis 2008: 73–80; Alemu 2016). The data in this chapter, however, is presented in an IPA-based phonological transcription to allow for easier comparability with other contributions to this handbook. Length is marked by doubling the letter (e.g. ax = aa, bx = bb), and stress is marked by an acute accent on the vowel of a stressed syllable.

The data on which this chapter is based comes from different sources. We proceeded as follows in our data collection: The first author consulted the Kambaata dictionary by Alemu (2016). As onomatopoeias are not tagged, she searched for 'sound' in the English

<sup>1</sup> Citation forms in this chapter are presented as follows: The citation form of nouns, adjectives and verbs consists minimally of a root and a suffix, which are separated by a hyphen. Nouns are cited in their accusative form. Gender-agreeing adjectives are given in their masculine accusative form with the feminine marker in brackets. Verbs are cited in their verbal noun form, which is always realized with a  $-\hat{u}$ -suffix.

translation, for <maccooccis> 'produce a sound' and <laaga tukkaanchuta> (or similar) 'sound representation' in the Kambaata definitions of the entries. In parallel, the second author brainstormed for sound-imitative lexemes according to the questionnaires provided by the handbook editor. In a third step, the data was combined, compared, supplemented, its transcriptions and translations revised, and stress marking added. Dictionary entries with which the second author was not familiar were discarded. We also discarded lexemes whose onomatopoeic status was disputable.

#### 2. Position of onomatopoeias in the language system

No prior linguistic work on Kambaata onomatopoeias has been undertaken, and lexicographic and pedagogical works by native speakers do not identify onomatopoeias as a discrete word category and do hence not propose any Kambaata label.

Primary onomatopoeias belong to the large, open word class of ideophones, which encompasses almost a third of Kambaata's verbal concepts and includes lexemes covering all positions on Dingemanse's (2012) implicational hierarchy of ideophone systems. Most ideophones are not sound-imitative, and onomatopoeias therefore constitute a subclass of them. Onomatopoeias, just like ideophones, are morphologically invariant. In order for them to be inflected and syntactically integrated into a clause, e.g. to index the subject and be marked for aspect, mood and syntactic dependency, they must combine as invariant coverbs with a light verb, which is j- $\acute{u}$  'say' to express a noncausal meaning in intransitive clauses and  $a^2$ - $\acute{u}$  (or its variant ass- $\acute{u}$ ) 'do' to express a causal meaning in transitive clauses. The light verb tends to encliticise to the preceding coverb, as indicated by the equal sign in the examples in Sections 3.2 and 3.3.

Apart from onomatopoeias integrating the ideophone word class, Kambaata has a number of secondary onomatopoeias that belong to the inflecting word classes of verbs and nouns, see (1)-(2). See also the derived onomatopoeic verbs and nouns in (11).

(1)	hafaaff-ú	'whisper'
	tut-ú	'stammer'
	gug-ú	'thunder'
	t'ot'-ú	'crackle, pop (of grain being roasted on the fire),
		explode, go off (e.g. of gun), crack (of whip)'
(2)	doddok'-íta (F)	'motorbike' (a vehicle with a two-stroke engine producing a

## dok'-dok'-sound)

Secondary onomatopoeias inflect exactly like other members of the verb or noun word class, i.e. as verbs, they minimally index the subject and are marked for mood and/or aspect (3), and as nouns they are obligatorily marked for case and gender (4).

- (3) gót-u ankar-í **himimmees-án** gállo
  hyenas-M.NOM night-M.ACC laugh-3M.IPFV.CVB pass.the.night-3M.PFV
  'The hyenas laughed all through the night.'
- (4) **doddók'-it** fiin-fin-ta-nne hig-góo?u
  motorbike-F.NOM side-M.ICP-LNK-1PL.POSS pass-3F.PFV
  'A motorbike passed us by.'

Kambaata has no conventionalized phonesthemes. We are not aware of borrowed onomatopoeias, but the light verb construction (Section 3.2) which helps embed ideophones into the clause could easily accommodate onomatopoeic loans and adhoc coinages. Further research based on natural language use, especially with children, would shed light on the expansion of the onomatopoeia category through borrowing and creative word invention.

- 3. Description of onomatopoeias
- 3.1 Phonology
- 3.1.1 Vowel and consonant inventory

Kambaata has a phoneme inventory of medium size with 25 safely established consonant phonemes: /b, t, d,  $\mathfrak{f}$ , d $\mathfrak{z}$ , k, g, ?, p', t',  $\mathfrak{f}$ ', k', f, s, z,  $\mathfrak{f}$ , h, m, n, r, r', l, l', w, j/, one marginal consonant / $\mathfrak{z}$ /, which is restricted to a regional variant of certain perfect(ive) forms, and three marginal consonants /p, v, p/, which are essentially restricted to Amharic and English loanwords. The vowel system distinguishes between five oral phonemes /a, e, i, o, u/ and three less frequent nasal phonemes / $\tilde{a}$ ,  $\tilde{i}$ ,  $\tilde{u}$ /. The distinction between single and geminate consonants and between short and long vowels is phonemic and amply exploited to distinguish between lexemes and grammatical word forms.

Apart from a single noun,  $h\tilde{a}j$ -i (M) 'front leg of cattle', nasal vowels are only attested in a few interjections, e.g.  $\tilde{a}\tilde{a}$  'yes',  $\tilde{a}\tilde{r}\tilde{a}\tilde{r}\tilde{a}$  'no',  $h\tilde{t}\tilde{t}$  'huh?' and  $\tilde{t}$  'take what I have in my hand', and in ideophones, especially onomatopoeic ideophones, as in (5).<sup>2</sup>

(5) a. hãã {say/do} 'sound of gaping mouth or (fig.) abyss, deep hole'
b. hãã??ã {say} 'sound of braying donkey'
c. hã??ấ {say} 'sound of human groaning in sudden pain'
d. hĩ??ấ {say/do} 'sound of defecation, sound of pushing out a baby (during birth)'
e. úũ {say} 'humming sound (mm-hmm, uh-huh) (to show that one is listening)'

Only one non-borrowed word, an onomatopoeia (6), contains a palatal nasal /n/.

(6) *páu* {say} 'sound of meowing cat'

In non-onomatopoeic word forms, geminate glottal fricatives are always realized as /kk/, and glottal stops are not realized as geminate, the child-directed interjections  $h\acute{a}$ ??a 'yuck',  $g\acute{a}$ ??a 'drink!' and  $n\acute{a}$ ??a 'eat!' being the only known exceptions. In onomatopoeias, however, we find one lexeme with a geminate /hh/ (7a) and a number of lexemes with a geminate /??/ (7b-c; 5b-e).

(7) a. buhhú {say} 'sound of coughing'
b. dú??u-dú??u {say} 'sound of beating heart'
c. mé??a {say} 'sound of bleating goat'

Unsurprisingly from a cross-linguistic perspective, close vowels tend to correlate with smallness and open vowels with bigness of the sound source (see Appendix no. 7 and 8 for a particularly clear case). Furthermore, breathing- and wind-related onomatopoeia, such as *fúrr* {say} 'sound of snorting horse', fúu {say} 'sound of snorting cattle' / {do} 'sound of strong wind', and úff {say} 'sound of sighing (audibly exhaling)' / {do} 'sound of blowing', all contain the voiceless labiodental fricative.

<sup>2</sup> For all onomatopoeic ideophones, we indicate in curly brackets whether they combine with the light verb 'say' or 'do' or both.

## 3.1.2 Syllabic structure

Possible syllable types are V(V), CV(V) and CV(V)C(C), of which V(V) is only found word-initially. Consonant clusters are generally either identical sequences i.e. geminates  $(C_1C_1)$  or heterogeneous consonants of the following types: sonorant plus obstruent (if the obstruent is not ?) or obstruent plus sonorant (if the obstruent is ?). Other clusters are uncommon and occur, if anything, in certain derived forms, compounds or loanwords.<sup>3</sup> The language does not permit sequences of three consonants, which means that such potential clusters are broken up by epenthesis or simplified at syllable boundaries.

Onomatopoeias do not differ in syllable structure from the prosaic lexicon. Non-reduplicated forms of various shapes of up to four syllables are attested. Mono- and disyllabic forms are predominant. Monosyllabic onomatopoeias usually have a heavy syllable with a long vowel and/or a coda with a consonant (cluster); the only exception to this rule is (8a).

Consonant-only onomatopoeias are unattested, but forms consisting of only a (long) vowel are seen in (5e) and (8b).

#### 3.1.3 Stress

Kambaata is a language with morphological stress. Whereas lexical roots and derivational morphemes are unspecified for stress, inflectional morphemes always consist of a segmental component and a suprasegment (stress) that is realised, dependent on the grammatical category to be marked, on a specific syllable of the inflected word form. Consequently, there are no lexical but only grammatically determined minimal stress pairs in the inflecting word classes. In contrast, for non-inflecting interjections and ideophones (including onomatopoeias), the stress position is lexically determined, in other words, it is arbitrary. On polysyllabic forms, ultimate stress is more common (9), but penultimate stress is also attested (5b, 7b-c). A near minimal stress pair is seen in (5b-c).

(9) a. didí {say/do} 'sound of stones tumbling down a slope'

<sup>3</sup> Obstruent-obstruent clusters are found, for instance, between the root and the C-initial causative morpheme -siis (Treis 2022, §3.1.3).

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b. t'it'i {say/do} 'sound of small seeds being roasted on the fire' c. t'at'á {say/do} 'sound of big seeds being roasted on the fire'
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When onomatopoeic lexemes are reduplicated, each reduplicant has its own stress (10), which is in contrast to lexical reduplication within an onomatopoeia, which has only one stressed syllable (9).

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(10) a. wáak'k'-wáak'k' {say} 'sound of cawing raven'
b. p'íip'-p'íip' {say/do} 'sound of (beeping) car horn'
c. k'umbú-k'umbú {say/do} 'sound of drum'
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## 3.2 Morphology and syntax

## 3.2.1 Word-formation

Kambaata has a wealth of word-class maintaining and word-class changing derivational processes that input nominal, adjectival, verbal or ideophonic roots and output derived nouns, adjectives or verbs. Among the most productive processes are the adjectivizing agentive and proprietive derivations (Treis 2008: 274–277; 2011) as well as the causative, passive and middle derivations of verbs (Treis 2022).

Ideophonic onomatopoeias, like ideophones in general, are underived, monomorphemic words that cannot be generated by means of word-formation. In some cases, however, they themselves serve as word-formation bases. Examples of de-onomatopoeic nouns are *ilill-eenn-á* 'ululation', derived from *ilíli* {say} 'sound of ululation', and *tilill-eenn-á* 'telephone', derived from *tililí* {say/do} 'sound of telephone ringing', by the nominalizing suffix *-eenn*, which also forms nouns on the basis of non-onomatopoeic ideophones (Treis 2008: 165). De-onomatopoeic adjectives are not (yet) attested. De-onomatopoeic verbs are given in (11). The derivational morphemes *-ees* and  $-a2^4$  are set off by hyphens (see Treis 2022, §4.5 for information on these, at most, semi-productive processes); where they exist, the synchronic onomatopoeic bases are given.

<sup>4</sup> The derivational -a?-suffix is not to be confused with the homonymous light verb a?-ú 'do'.

himimm-ees-ú 'neigh, whinny (of horse), laugh (of hyena)'

(no synchronic base)

ororr-ees-ú 'sing a lullaby' – base cf. (16)

wooww-ees-ú 'bawl' – cf. Appendix no. 20

hant'iff-a?-ú 'sneeze' – cf. nominal base: hant'iff-úta 'sneezer'

Many ideophones including onomatopoeias can be fully reduplicated (twice or more often) to reflect the repeated realisation of an event; recall (10) and see the recurrent, intermittent sound represented in (12).

(12) ti  $sii-sii=j-it\acute{a}a$   $l\acute{a}ag-at$ 

DEM.ADJ.F.NOM high.pitched.sound-RED=say-3F.IPFV.REL sound-F.NOM

matſ'tſ'-áta af-fáa-taa

ear-F.ACC seize-3F.IPFV.REL-F.COP2

'This high-pitched *sii-sii* sound (e.g. of a car driving in reverse) is irritating (lit. ear-seizing).'

#### *3.2.2 Syntax*

The majority of primary onomatopoeias in our database are attested in constructions with the light verb j- $\hat{u}$  'say'; see, e.g., (12) and (13).

(13) hīʔʔī=j-ít íl-tee-haa fʃ'iil-a

push.out.O=say-3F.PFV.CVB give.birth-3F.PRF.REL-M.COP2 infant-M.PRED

'(It) is a child that she (herself) gave birth to, pushing it out with a hīʔʔī-sound.'

(Message: it is her own child.)

If the emitted sound is perceived to be externally caused, a?-u 'do' is used instead. In (14), the onomatopoeia 'hiccup' takes the light verb 'do' in a transitive clause. Hiccupping is expressed in the same way as many other physical or psychological states, namely by a construction in which the experiencer is expressed as the direct object, as conveyed by the 1sG suffix on the verb. The causing subject can remain unspecified and the subject position empty, in which case a default 3M subject is indexed on the verb.

(14) *hík'k'=a?-ájjoo-?e*hiccup.O=**do**-3M.PROG-1SG.OBJ
'I have the hiccups (lit. (it) is doing/causing me *hík'k'*).'

The word 'hiccup' in (14) cannot be used intransitively with 'say', and, vice versa, the unattested combination of animal onomatopoeias (cf. Appendix) with transitive 'do' seems improbably to the second author. However, many onomatopoeic ideophones are combinable with either light verb, given an appropriate context. For instance, in a context where a child is potty trained, the use of  $h\tilde{\imath}22\tilde{\imath}$  'sound of defecation' (cf. 5d, 13) with transitive 'do' is possible, in which case the adult trainer is the subject and the child the object. Similarly, the onomatopoeia  $k'umb\hat{u}-k'umb\hat{u}$  'sound of drum' (10c) is used with 'say' when the drum is the subject but with 'do' when the sound-causing drummer is the subject and the drum the object.

Onomatopoeias, be they of the primary or secondary type, display no specific syntactic behaviour, and they do not occur in a fixed position. The syntactic functions that onomatopoeic ideophones and onomatopoeic verbs can adopt are exactly like those of verbs. They can be used

- as main predicates of sentences (14);
- as subordinate predicates, e.g. in relative and converb clauses (12, 13);
- as verbal nouns in argument function (15).
- (15) kú sá?-u **humbáa**=j-ú batíff-ee?u

  DEM.ADJ.M.NOM cow-M.NOM moo.O=say-M.ACC do.much-3M.PRF

  'This cow has mooed a lot/too much.'

The most likely position of an onomatopoeia is in a converb clause. Kambaata has five semi-finite, subordinate verbal paradigms (Treis & Vanhove forthcoming, §20.2.4.1). Of these, the perfective and imperfective converbs often express the manner in which a syntactically superordinate verbal event is carried out. Being accompanied by a specific sound is a possible manner; cf. (13) and (16).

(16) tfiil-á-se ororó=at-tán malat'-t'óo?u

infant-M/F.ACC-3F.POSS sing.lullaby.O=do-3F.IPV.CVB make.stop.crying-3F.PFV 'Singing her baby a lullaby, she made it stop crying.'

Onomatopoeic nouns are used in the same syntactic functions as other nouns in the language, i.e. as arguments, modifiers and nominal predicates.

#### 3.3 Semantics

#### 3.3.1 General

Checked against the typology of sound types developed in the introduction to this volume, mammals, birds, human voice- and body-related types are those most richly represented in Kambaata. In contrast, onomatopoeia for the domains of reptiles and amphibians as well as fish and sea creatures are lacking – which can be explained by the mountainous environment in which the Kambaata live, far from the sea, with no permanent bodies of water and only small, seasonal streams. For the sound of artefacts, only a few examples were discovered. For the sound types of musical instruments and instruments of war and destruction, we found only one example each. The relative poverty of onomatopoeia in the artefact domain is possibly explicable by the choice of sound types in the questionnaire, which may not be particularly relevant culturally. It would be interesting to investigate whether a richer inventory could be found if artefacts of traditional material culture – e.g. sounds of the mortar, sounds of cutting and chopping tools, to give but a few examples – were considered.

The relative richness of onomatopoeias for domestic animals (see Appendix) may be due to the Kambaata social and economic environment. Traditionally, a family shares their circular one-room house with their domestic animals, i.e. about half a dozen animals including cows, sheep, goats, a donkey, possibly a mule or a horse. The spatial proximity to domestic animals might have facilitated the development of onomatopoeias for them.

Noteworthy in this respect is also the differentiation between three types of chicken sounds in (17), plus the sound of a crowing rooster (Appendix no. 15).

káakk {say} 'sound of hen which is about to lay an egg'
 kutáakk {say} 'sound of chicken warning others of a predator'
 k'uk'ú {say} 'sound of hen at end of egg-laying cycle, indicating readiness to brood'

In addition to the onomatopoeias for the voice, animal body-related onomatopoeias are also attested, recall the snorting sounds in Section 3.1.1.

The size of the inventory of human-related onomatopoeias is comparable to that of mammals and birds. Apart from primary onomatopoeia for the sound of the voice and the body, some (de-)onomatopoeic verbs also fall in these two sound types, recall (1) and (11).

#### 3.3.2 Semantic relations

Relations of synonymy, antonymy and polysemy are common in the Kambaata lexicon, but lexical semantic studies are still lacking. In general, ideophones tend to be semantically narrow and to show less polysemy than, for instance, verbal lexemes. What is true of ideophones also seems true of their onomatopoeic subclass, where polysemy is not very common. However, some onomatopoeias have two clearly distinct, albeit related meanings, as in  $h\tilde{i}$ ?? $\tilde{i}$  {say/do}, which imitates, firstly, the sound of defecation and, secondly, the sound of pushing a baby out in the last phase of birth. The distinct meanings of two onomatopoeias are linked to the choice of different light verbs; see *úff* 1. {say} 'sound of sighing' vs. 2. {do} 'sound of blowing into a fire to light it, sound of blowing off a candle' and fúu 1. {say} 'sound of snorting cattle' vs. 2. {do} 'sound of strong wind'. The onomatopoeia sii-sii {say} (Appendix no. 19) reflects a semantic extension from a sound source of the natural (animal) sound type to a sound source of the artefact sound type. It was likely to be used initially for the squeaking sound of mice and rats and later extended to the repetitive, high-pitched sounds of electronic devices. The onomatopoeia  $h\tilde{a}\tilde{a}$  {say/do} 'sound of gaping mouth' is used metaphorically for a gaping deep hole or abyss. In this figurative use, the sound element, i.e. the "ah" produced by the speaker opening the mouth widely, is lost. Finally, the onomatopoeia t''uf – or more frequently due to its repetitive nature: t''uf –  $\{do\}$ 'smacking sound of clothes being washed in shallow water' has come to mean 'wash' in a general sense (18), without necessarily evoking the sound of a specific washing technique.

(18) ga?-áa oddak'k'-aammí oddíiff-at tomorrow-F.GEN wear.MID-1SG.IPFV.REL clothes-F.NOM

**tf"úf**=j-itée=da dag-im-bá?a

wash.o=say-3f.prf.rel=cond know-1sg.nipfv-neg

'I don't know whether the clothes that I will wear tomorrow are (already) washed.'

#### 4. Conclusions

To our knowledge, this chapter is the first systematic study of onomatopoeias in a Cushitic language. It has argued that Kambaata primary onomatopoeias are a subclass of its large open word class of ideophones. Onomatopoeias differ only minimally from the language's general word stock. Almost all features that make onomatopoeias different from, say, nouns and verbs are shared by the ideophonic word class of which they are a part, i.e. the lexically determined stress, the morphological invariance, the syntactic integration by light verbs, the preferred occurrence in converb clauses and the fairly high degree of semantic specialization. The only true idiosyncrasies concern their phonology: otherwise very infrequent nasal vowels are relatively frequent in onomatopoeias. In certain onomatopoeias, the glottal obstruents /h/ and /?/ are realized as geminates, which is virtually unattested elsewhere in the language.

Secondary, inflecting onomatopoeias are indistinguishable from nouns and verbs.

While the definition of onomatopoeias as imitations of sounds of extra-linguistic reality (see introduction to this volume) seems intuitively straightforward, applying it to real-world examples is not always an easy task. The boundary is fuzzy between clearly sound-imitative lexemes of the *kuukkulúukku*-type on the one end of the scale and clearly arbitrary lexemes, such as the verb *wod-ú* 'make a sound (of animals)', on the other end. In the grey middle ground, it is difficult, if not impossible, to draw the line between exclusively sound-imitative lexemes and sound-imitative lexemes that also evoke a characteristic movement or visual pattern. This is, for instance, the case with *ororó* {say/do} 'sound of lullaby', which seems inseparably linked to caressing and/or rocking the child, and *habább* {do/say} 'sound of dry leaves burning', which also evokes a high flame that quickly consumes the leaves. Judgments about what is sound-imitative are certainly also influenced by whether the linguist is a native speaker of the analysed language and, therefore, whether a lexeme evokes a sound or not. We have tried to be consistent in our choice of onomatopoeic lexemes, and when there was doubt about the sound-imitative nature of a lexeme, the native speaker had the casting vote.

As the present study is the first of its type on Kambaata, gaps will certainly be filled and analyses be refined in the future. At the current stage, data on the use of onomatopoeia in natural language, including language produced by or directed at children, is lacking. Further studies might also help document interspeaker variation across the Kambaata-speaking area and onomatopoeias as a field of linguistic creativity.

# **Abbreviations**

<>	orthographic transcription
{}	light verb with which an onomatopoeic ideophone is attested
~	alternative pronunciation
ABL	ablative
ACC	accusative
ADJ	adjectival
С	consonant
COND	conditional
COP	copula
CVB	converb
DEM	demonstrative
F	feminine
GEN	genitive
ICP	instrumental-comitative-perlative
IPFV	imperfective
LNK	linker
M	masculine
MID	middle
n	noun
NEG	negator
NIPFV	non-imperfective
NOM	nominative
OBJ	object
O	onomatopoeia
PL	plural
POSS	possessive
PRED	predicative
PRF	perfect
PROG	progressive
RED	reduplication
REL	relative
SG	singular
SGV	singulative
V	verb
V	vowel

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## References

- Alemu Banta Atara. 2016. *Kookaata: Kambaatissa-Amaarsa-Ingiliizissa laaga doonnuta* [Kambaata-Amharic-English dictionary]. Addis Ababa: Berhanena Selam Printing.
- Crass, Joachim & Ronny Meyer. 2008. Ethiopia. In Bernd Heine & Derek Nurse (eds.), *A linguistic geography of Africa*, 228–249. Cambridge: Cambridge University Press.
- Dingemanse, Mark. 2012. Advances in the cross-linguistic study of ideophones. *Language* and *Linguistics Compass* 6 (10). 654–672.
- Federal Democratic Republic of Ethiopia Census Commission. 2010. *The 2007 population and housing census of Ethiopia*. Vol. 5: *Results for country level, statistical report*. Addis Ababa: Central Statistics Agency. https://www.statsethiopia.gov.et/wp-content/uploads/2019/06/National\_Statistical.pdf (Access: 18 August 2022).
- Treis, Yvonne. 2008. A grammar of Kambaata. Part 1: Phonology, morphology, and non-verbal predication. Cologne: Rüdiger Köppe.
- Treis, Yvonne. 2011. Polysemous agent nominals in Kambaata (Cushitic). *STUF Sprachtypologie und Universalienforschung* 64(4). 369–381.
- Treis, Yvonne. 2022. Verbal derivation in Kambaata (Cushitic): With a focus on the encoding of noncausal/causal alternations. In Sebastian Dom, Leora Bar-el, Ponsiano Kanijo & Malin Petzell (eds.), *The noncausal-causal alternation in African languages* [Special issue]. *Linguistique et langues africaines* 8 (2). xxx–xxx.
- Treis, Yvonne & Martine Vanhove. Forthcoming. Converb constructions and clause-chaining in Cushitic. In Alexandra Y. Aikhenvald & Hannah S. Sarvasy (eds.), *Oxford handbook of clause chaining*. Oxford: Oxford University Press.

# **Appendix**

	Onomatopoeia	Light	Meaning	Semantic			
		verb		domain			
Nat	Natural sounds						
1	t'ulbú	do/say	sound of stone splashing into water	Water			
2	f'óp'p'(-tf'óp'p')	say/do	sound of dripping	Water			
3	k'ultf'ú-k'ultf'ú	say/do	sound of water sloshing back and	Water			
			forth (e.g. in a container when				
			carried)				
4	fúu	do/*say	sound of strong wind	Air			
5	haxáx	say/do	sound of creaking tree	Earth			
6	didí	say/do	sound of stones tumbling down a	Earth			
			slope				

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7	t'at'á	say/do	sound of big seeds (e.g. maize) being roasted on the fire	Fire
8	t'it'í	say/do	sound of small seeds (e.g. wheat, barley) being roasted on the fire	Fire
9	wúh	say	sound of barking dog	Mammals
10	náu	say	sound of meowing cat	Mammals
11	humbáa	say	sound of mooing cow	Mammals
12	báa?a	say	sound of bleating sheep	Mammals
13	mé??a	say	sound of bleating goat	Mammals
14	hấã??ã	say	sound of braying donkey	Mammals
15	kuukkulúukku	say	sound of crowing rooster	Birds
16	kuukú ~ guugú	say	sound of cooing dove	Birds
17	búu	say	sound of buzzing bee, beehive, beetle, fly	Insects
18	f'íi-f'íi	say	sound of chirping crickets, little	Insects/
	_		birds	Birds
19	hĩhĩhấ	say	sound of laughter	Human voice
20	wóo	say	sound of wailing	Human voice
21	dú??u-dú??u	say	sound of beating heart	Body
22	dúbb-dúbb	say/do	sound of footsteps, sound of pounding coffee leaves	Body/Artefact
Art	efacts			
23	k'umbú-k'umbú	do/say	sound of drum	Musical instruments
24	háann	do/say	vrooming sound	Vehicles
25	p 'íip '(-p 'íip ')	say/do	sound of (beeping) car horn	Vehicles
26	tililí	say/do	sound of phone ringing	Mechanical and electronic equipment
27	k'iríp'p'	say/do	sound of button being pressed (e.g. of camera)	Mechanical and electronic equipment
28	síit't'	say/do	beeping, high-pitched sound	Mechanical and electronic equipment
29	síi-síi	say/do	irritating, repetitive high-pitched sound; sound of squeaking mice and rats	Mechanical and electronic equipment/
30	táa	say/do	sound of gun, sound of hail hitting roof	Instruments of war and destruction/ Water
31	tíll	do/say	clanking, reverberating sound	Bells and gongs
32	fílk-fílk ~ filkí-filkí ~ kilfí-kilfí	do/say	clinking sound (of keys, coins, small bells on horse's neck)	Bells and gongs