The Phonology of Amharic Ideophones

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Abstract

The paper aims at describing the phonology of Amharic ideophones. It shows some peculiar phonological and phonetic features of ideophones in the language. The data used in this study are collected from fieldwork. Amharic ideophones use the entire 30 consonant phonemes including labiovelar phonemes: /kw/, /qw/, and /k'w/, labialized sounds such as [fw, tw, tw, dw, fw, 3w, m^w...] of the regular phonology and some click-like sounds such as Ω , !. ||, and y, which are not found in the regular phonology of the language. These clicklike sounds form ideophones like imOa adərrəg-ə 'kissed' yi- al-ə 'disapproved' ||||||||| al-a 'regretted' !u!u!u al-a 'urged the horse to trot' and lululu al-ə 'called dog'. Moreover, the phonotactic of Amharic ideophones shows a C₁VC₂C₂ syllable structure that is specific to ideophones. Furthermore, Amharic has no long vowels, but the suprasegmental of ideophones illustrates expressive vowel lengthening in the word medial and final positions. However, these long vowels are only phonetic. In the same way, ideophones also apply the word final expressive consonant lengthening to show intensity, durativity, and distance. Some of these deviations from the regular phonology are well-attested universal phonological features of ideophones (Bodomo 2006:204 and Franck2014:17).

Keywords: ideophones, phonology, click-like sounds, vowel length, and gemination

1. Introduction

Amharic is one of the South Ethio-Semitic languages spoken in the central and northern parts of Ethiopia and all towns of the country. According to the 2007 Census (CSA 2018) report, Amharic is spoken by more than 21 million people as a mother tongue and by more than 4 million people as a second language. As Derib (2017) reports, it is one of the most widely spoken languages in Ethiopia. Derib also notes that the language is spoken in some parts of the world by Ethiopians. The language is mainly spoken in America by the Ethiopians who live there and in Israel by people known as *Beta* Israel (*Felasha*) who lived in Ethiopia for centuries and are now living in Israel.

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This paper is organized into five sections. Section two provides some methodological issues. Section three gives a cross-linguistic characterization of ideophones. This section summarizes the universal phonological feature of ideophones, and the section also presents the aim of the present study. Section four provides data analysis and result discussions. Finally, section five presents the summary and conclusions of the study.

2. Methodology

In this study, a qualitative research method and a descriptive approach are used. The data were collected from 15 native speakers of the language through the elicitation method. At the same time, some data were also gathered through depicting videos that show different motions, actions, interactions, feelings, textures, shapes, emotions, sounds, light, colors, and how humans react to different tastes and smells. In addition to this, pictures (images) that compare different sizes, shapes, and numbers (abundance) were illustrated. As native speakers of the language, introspection is also used to check the correctness of the elicited data. In the study, we used purposive sampling methods to save time and get valid and genuine data from the consultants. The data collected through the above method were transcribed. The transcribed data has been glossed, described, analyzed, and interpreted. Finally, a summary and conclusions have been drawn.

3. A Cross-linguistic Characterization of Ideophones and their Phonology

In the literature, words referred to as 'ideophones' are known by different names, such as 'descriptive adverbs', 'descriptive complements', 'uninflected verbs', 'onomatopoeic vocabularies', 'adverbs', and 'substantives' (Voeltz and Kilian-Hatz 2001:1). Doke (1935:118) defines the term 'ideophone' as "[a] vivid representation of an idea in sound. A word, often onomatopoeic, which describes a predicate, qualificative, or adverb concerning manner, color, sound, smell, action, state, or intensity." Samarin (1991) and Dixon (2010) also share Doke's semantic definition of the term. However, Ameka (2001) notes that research on ideophones is affected by problems of finding a crosslinguistically valid definition for the term 'ideophone', and its development has been hindered by stressing the peripheral and the irregular nature of ideophones. Later, Dingmanse (2012) commented on Doke's definition of its restriction to the Bantu language and its lack of universality. He has also tried to define the term as marked words that depict sensory imagery. This definition suggests that ideophones have the following important features: organizational (structural), semiotic (depictive), and semantic. According to

Dingmanse (2012), ideophones are "noted for their special forms, distinct grammatical behavior, rich sensory meanings, and interactional uses related to experience and evidentially." He believes that his definition is general by design, capturing the essential cross-linguistic features of ideophones, which gives a place for details and differences to be indicated for individual languages. As the literature shows Doke's (1935) definition of the term is widely used in earlier studies. However, in recent ideophone studies, Dingmanse's (2012) definition (the sensory imagery) concept of ideophones is widely accepted.

3.1. The Phonology of Ideophones

Many scholars agree on the unique phonological features of ideophones but view them in different ways. Childs (1988), Childs (1994:196), Dixon (2012:445), and Bodomo (2006:204) note that ideophones have distinctive phonological features that distinguish them from the regular phonology of a language. Bodomo (2006:204) further claims that ideophones use similar phonological inventories with the regular words of the language, but they possess unique phonological features or processes with non-ideophone words in the language. Childs (1988:172) identifies a unique phonemic inventory in the Kisi ideophones. As Childs describes, the initial voiced labial velar sound /gb/, as in gbú-û-û 'rumbling', occurs as a phoneme in Kisi ideophone but is an allophone elsewhere in non-ideophone words. According to Childs's (1994:184) report, Kisi ideophones have the following eight unique phonological features. These are:

- 1. Raised or lowered register (pitch range)
- 2. Rapid modulation or exaggerated range of register
- 3. Phonation: breathy voice, creaky voice, voicelessness, and whisper
- 4. Duration: overly short or long
- 5. Rate: faster or slower than normal
- 6. Set off from, the rest of the sentence with a pause
- 7. Using phones not belonging to regular phonemic inventory, lacking regular phonemic oppositions
- 8. Violating phonotactic constraints of language

Franck (2014) also states that ideophones may contain strange phonemes that do not exist in the target language phonology but may exist in other languages. Lionnet's (2021) report is a good example of this. Lionnet (2021) identifies four non-phonemic click sounds in Laal, an isolate in Southern Chad. These click sounds are the dental [1], lateral [1], velar [χ], and bilabial fricated click

(chip) or (suckteeth) which do not exist in the regular phonology. He also claims that such click sounds exist in many non-click languages of the world. These click sounds, which Lionnet identifies, denote special semantic meanings cross-linguistically. Furthermore, as Bradfield (2014) and Lionnet (2021) note, click sounds are conventionally used to describe consonant speech sounds. Bradfield (2014:2) further explains, "A CLICK is made by creating a 'vacuum' within the oral cavity, part of the cavity being bounded by the back of the tongue against the soft palate, and the rest either by the sides and front part of the tongue against the hard palate, alveolar ridge or teeth, or by the lips". As Mpahnde (2017:118) summarizes, the phonology of ideophones can be characterized based on the study of tone, vowel nasality, vowel length, consonantal contrast, and other recurrent phonological features. These phonological features of ideophones are common in African languages, mainly Bantu languages. According to Mpahnde, the above-mentioned phonological features of ideophones maximize their ability to suggest the perceptual qualities of events and objects with vivid clarity and expressiveness. Sometimes reduplicated, triplicated, and even quadruplicated ideophones act as intensifiers.

As the literature shows, there have been many studies on ideophones until now, but there is no single and widely accepted methodology to apply in ideophonic research. In other words, there are several studies on ideophones, yet there is no clearly stated special theory that applies to ideophone studies. Therefore, in this descriptive study, we use Dixon's (2012) Basic Linguistic Theory to describe the phonology of Amharic ideophones. In addition to this, Childs's (1988 and 1994) Kisi phonological description approaches were also adopted. In short, the phoneme inventories, the phoneme distributions, the phonotactics, the suprasegmentals, the syllable structure, and the syllabifications of Amharic ideophones are described following Childs (1988) and Childs (1994) approaches and in the light of Dixon's (2012).

3.2. Previous Works on Amharic Regular Phonology and Ideophones

3.2.1. Some Points on the Regular Phonology of Amharic

Many studies in Amharic phonology report different consonant inventories of the language. For example, Mulugeta (2001:9) lists only 21 consonants. According to him, consonants such as /tʃ/, /dʒ/, /p/, and/tʃ²/ are derivations of other basic sounds and are not phonemes. However, Baye (2010), Leslau (1995:4), and Gragg & Hoberman (2012:160) identify 30 consonants. These are 24 pulmonic /p/, /b/, /t/, /d/, /k/, /kw/, /g/,/gw/, /?/, /m/, /n/,/p/,/f/,/s/, /z/, /ʃ/,

/3/, /h/, /tf/, /d3/,/l/, /r/, /w/, /j/, and 6 glottalic /p'/, /t'/, /tf'/, /k'', /k''', and /s'/. As the evidence from the literature shows, the above scholars viewed the phoneme /?/ in different ways. Whereas Baye (2010) incorporates the phoneme /?/ in his inventory of consonants, Leslau (1995) considers it an optional (marginal) phoneme. Unlike Baye (2010) and Leslau (1995), Gragg & and Hoberman (2012) exclude the phoneme /?/ from their Amharic consonant inventory. They argue that the phoneme /?/ was historically lost with the entire inherited pharyngeal consonants On the other hand; Leslau (1995) and Gragg & Hoberman (2012) include /hw/ as another Amharic phoneme. The assumption for this is that the language system recreates /h/ via spirantization of /k/ taking words such as kone 'be, exist' in Ge'ez and its Amharic equivalent hone 'be, exist' for granted (Gragg & Hoberman 2012:159). However, in recent studies, there is no such big difference among scholars concerning the number of vowels in the language. Mulugeta (2001) and Baye (2010) identify seven vowels while Derib (2011:150) shows new phonological systems in the language such as phonemes /9/ instead of /i/, and /3/instead of /ə/. Here we also use Mulugeta's and Baye's vowel inventories of the language. Therefore, a vowel phoneme inventory of Amharic has seven vowels. That is the high front vowel /i/, the mid-front vowel /e/, the high central vowel / i/, the mid-central vowel /ə/, the high back vowel /u/, the midback vowel /o/, and the low central vowel /a/.

3.2.2. Previous Works on Amharic Ideophones

Some works, like Leslau (1995), Taddese (1980), and Baye (1999), describe the morphosyntactic properties of Amharic ideophones in terms of composite verbs and a verb 'to say'. In their works, they note that the verb 'to say' often collocates with the invariable bound stem. Wetter (2002) shows how the Amharic verb alo 'say' losses its specific semantic meaning and becomes a carrier of ideophones. As Wetter (2002) explains the verb ale 'say' loses its semantic meaning of saying of a human being through the process of grammaticalization (metaphoric meaning expansion) to express inanimate saying, prepotency, proprioceptive of objects and expressing any action and phenomenon. Wetter (2002:1834) notes that since it loses its regular semantic meaning ('ones the metaphorical abstraction starts'), it carries ideophones as in its compound verb form ideophone plus ala. Wetter further indicates that the ideophone with pattern C₁ = C₂ C₂ = C₃ C₃ expresses attenuative and the ideophone with pattern with C₁iC₂C₂iC₃C₃ expresses intensity. He also suggests that in such a structure the vowels /ə/ and /ɨ/ have connotations with attenuative and intensive, respectively. In addition, Wetter (2003) describes

Amharic ideophones based on dictionaries, and Leslau's (1995) composite verb description (see Wetter 2003:257). He claims the existence of ideophones in Ethio-Semitic languages. In this work, he again claims that Amharic ideophones often collocate with dummy verbs /alə/ and /adərrəgə/, which mean 'he said' and 'he did', respectively. The dummy verbs in this type of construction have an auxiliary-like function of carrying only grammatical information like tense-aspect, person, and number. Also, they form transitive and intransitive ideophonic verbs, respectively. Wetter (2003:260) identifies three main patterns of ideophones in Amharic based on a sound symbolic scale of arbitrariness. These are (1) CV, e. g. Ca or C^wa like in k'a- 'snap' and q^wa-'bang' which are exclusively imitative sound symbolic; (2) C₁VC₂C₂ pattern as in k'əss-'slow' which is synesthetic sound symbolism; and (3) $C_1VC_2(C_2)VC_3C_3$ as in [əf(f)ənn-'cover' is conventional sound symbolic. Mengistu (2010) also describes Amharic ideophones in the light of complex predicate construction. Mengistu (2010:303), notes that the non-inflecting coverb plus and light verbs ala 'say' and adarraga 'do/make' are the two elements of the light verb. As Mengistu (2010:315), notes coverb (ideophone) often collocates with the light verbs ala 'say' and adarraga 'do/make' in complex predicate construction. He also notes that in the language ale 'say' and adərrəqə 'do/make' are the two proactive light verbs that combine with their many first members (coverbs) to form complex predicates. Mengistu further shows that coverb plus ala 'say' is intransitive, and coverb plus adərrəgə 'do/make' is a transitive form. Similarly, Azeb (2010:162) notes that V₁ plus V₂ in complex predicate construction, V₁ is often ideophone and V₂ is a restricted word class that has translational equivalent meanings with 'say' and 'do/make' is widely attested. She further notes that V₁ plus alə 'say' is intransitive and V₁ plus adərrəgə 'do/make' is a transitive verb form. Zelealem (2011) describes onomatopoeic ideophones in Amharic and some selected Ethiopian languages. In his study, he discusses different theories of language origins and explains the contribution of the onomatopoeic theory for language origin. He compares some selected Ethiopian languages and other foreign languages like Chinese. In this work, he shows some cross-linguistic similarities that ideophones illustrate. He also claims the existence of two types of ideophones in Amharic. These are lexicalized ideophones that are contained in dictionaries and non-lexicalized ideophones (treated in discourse) that appear as compounded verbs with dummy verbs; al- 'say' and adərrəg-'do'. Zelealem (2011) classifies Amharic onomatopoeic as ideophones imitated from sounds produced by man [+HUMAN], by animals [+ANIMATE], and by objects [-ANIMATE] and by the act of human beings on natural objects [+HUMAN] > [-ANIMATE] semantic feature. Shimelis (2014) also shows the uses of ideophones in attenuative and intensive verb constructions in Amharic and Tigrinya. He reports that in these languages the ideophones remain the same while the auxiliaries undergo inflections. Meyer identifies three ideophone types in Ethio-Semitic languages: lexical ideophones, constructed ideophones via reduplication of simple nouns, and derivative ideophones from verb roots. According to Meyer (2019:18, all Ethio-Semitic languages have lexical ideophones as in Amharic *tf'atf'a-ta* 'chattering'. He also notes that except Ge'ez, Tigre, and Dahaalic all Ethio-Semitic languages have constructed ideophone types like the Amharic tf'aw~tf'aw al-a 'taste salt'. As stated by Meyer (2019:21), cross-linguistic template variation in derived ideophones is common. Moreover, Amharic, Argobba, and Kistane display attenuative template pattern C₁VC₂VC₃ (C₃) and intensive template pattern C₁VC₂C₂VC₃C₃. On the other hand, Tigrinya has an attenuative template pattern C₁VC₂VC₃, and an intensive template pattern C₁VC₂C₂VC₃. Unlike the above two languages, Tigre and Harari have only attenuative ideophones with template pattern C₁VC₂VC₃. However, Meyer (2019:9) suggests that Amharic ideophones do not show phonological variation from regular phonology. Baye (2021) also notes that in Amharic, the physical movement of a figure from source to goal is expressed through ideophone-based compound verbs. According to Baye (2021:175), the first member in the compound manner ideophone ends with a geminate segment as in k'ass' (be) slow' and zaqq' (be) patient' and this is a general characteristic of such forms in Amharic. As noted above, ideophonic verbs contain the ideophone bound stem as their first member and the auxiliaries ala 'say' and adarraga 'do/make' as the second member of the ideophonic compound verbs. Besides, ideophones can also comprise bare nonverbal ideophones (ideophones without auxiliaries) such as the nominal ideophone fwafwate 'waterfall' Zelealem (2011:21).

As one can see from the above literature review, there are some studies on Amharic ideophones and ideophones of Ethio-Semitic languages in general. However, the descriptions mainly focus on the morphological analysis of ideophones. And the phonology of Amharic ideophones is given less attention. Even in recent studies, ideophones are considered to have the same phonological features as the regular phonology of the language. This paper makes a detailed phonological description of Amharic ideophones and shows their variations from regular phonology. In addition, it describes some phonetic properties of expressive consonants and vowel lengthening.

3.3. The Phonemes of Amharic Regular Phonology

As mentioned above, Amharic has the following 30 consonants and 7 vowels.

Table 1: The consonant phonemes of Amharic (Adopted from Derib, 2011:2)

Manner of	Airstream			I	Place	of Ar	ticul	ation		
Articulation	and	Bilabial	Alv	eolar	Pos	t-	Pal	atal	Velar	Glottal
	modification				alve	eolar				
		vl vd	vl	vd	vl	vd	vl	vd	vl vd	vl
Stop	Pul Simp	p b	t	d					k g	3
-	Pul Lab								k ^w g ^w	
	Glot Simp	p'	ť'						k'	
	Glot Lab	•							k'w	
Fricative	Pul Simp	f	S	Z	ſ	3				h
	Glot Simp				s'					
Affricate	Pul Simp				t∫	d3				
	Glot Simp				t∫"					
Nasal	Pul Simp	m	n				n			
Central	Pul Simp	W					j			
Approximant										
Lateral	Pul Simp		1							
Approximant										
Trill	Pul Simp		r							

Table 2: The Vowel phonemes of Amharic

	Front	Central	Back
High	I	i	u
Mid	e	ə	o
Low		a	

As has been discussed in the preceding sections, Amharic regular phonology has 30 or more consonants and 7 vowels in general. As the following description illustrates, Amharic ideophones use all the above regular phonemes plus several labialized sounds and 4 click-like sounds.

4. Data Analysis and Result Discussion

4.1. The Phonemic Inventory of Amharic Ideophones

Amharic ideophones use all 30 consonants and the seven vowels of the regular phonology. In addition, they use many labialized consonants, such as $[t^w, d^w, f^w, f^w, tf^w, tf^w,$

language. These click-like sounds also do not exist in the regular phonology of the Ethiopian Afro-Asiatic languages in general. As pointed out in the preceding section, the existence of such peculiar sounds in the phonology of ideophones is a common phonological feature. (See Bodomo 2006:204 and Franck 2014:15).

4.2. The Inventory of Click-like Sounds in Amharic Ideophones

In Amharic ideophone verb roots (stems) conjugate with auxiliaries 'say' and 'do/make' to form ideophone verbs. These ideophonic stems can be formed from the phonemes of the regular phonemes of the language and other non-phonemic click-like sounds, which are not parts of the regular phonemes as demonstrated in the following examples:

Table 3: Ideophone with click-like sounds

No.	Ideophones	Gloss		Free translation
a	ɨm⊙a adərrəg-ə	IDEO.kiss make.PF-3SM		'kissed with audible sound'
b	!u!u!u al-ə	IDEO.urge	say.PF-3SM	'urged the horse to trot '
c	∥u∥u∥u al-ə	IDEO.call	say.PF-3SM	'called dog'
d	li∥i∥i∥i al-ə	IDEO.regret say.PF-3SM		'regretted/ show regression'
e	γ i− al-ə	IDEO.disapprove say.PF-3SM		'disapproved'

As can be seen from the above Table 3, all the ideophones that occur before the auxiliaries *alo* 'say' and *adorrogo* 'do/make' consist of click-like sounds. Most of them are imitations of natural sounds. The ideophone in Table 3(a) shows an imitated sound produced when someone gives a strong kiss on somebody's cheek. Likewise, the ideophone verb in Table 3(b) shows the imitated sound when a horseshoe is pulled out of the mud of swampy ground, and the ideophone in Table 3(c) shows a sound produced during masticating food in the mouth. In general, these types of ideophones have an imitative sound symbolism nature. Wetter (2003:261) notes that sound-imitating ideophones function to copy the sound of the environment. On the other hand, ideophones in Table 3(d and e) are types of conventional sound symbolism. As Hinton, Nichols, and Ohala (1994:5) note, these types of ideophones are "an analogical association of certain phonemes and with certain meaning."

As Herbert (1990) notes, the southern African languages make widespread use of clicks. Khoisan languages exhibit the following five basic oral click sounds (oral gestures): the bilabial click sound /0/, the dental click sound /1/, the post-alveolar click sound /1/, the palatal-alveolar click sound /1/, and the alveolar lateral click sound /1/. The sounds that we call *clicks-like* sounds in the phonology of Amharic ideophones show some similarities with some of the

above-mentioned click sounds. They use the velaric airstream mechanism, which is not used in any of the Ethiopian languages. They also show similarities in the palace of articulation. For this reason, we use the same IPA symbols of click sounds to represent these four click-like sounds, except the nasal one. Therefore, the four click-like sounds of Amharic ideophones are the [O] bilabial click-like sound, the post-alveolar click-like sound, the [I] alveolar click-like sound [I], and the click-like nasal sound [I].

4.3. Distribution of sounds in Amharic Ideophones

This sub-section presents the distributions of all consonant and vowel phonemes and other sounds, such as click-like sounds and labialized sounds in Amharic ideophones. As pointed out in the preceding sections, ideophones show some similarities and differences with the regular phonology of the language. This can be observed from the distribution of the phonemic and non-phonemic sounds in the ideophones of the language.

4.3.1. Distribution of Consonants of the Regular Phonology in Amharic Ideophones

Almost all consonants of the regular phonology of the language are used in the ideophonic words of the language. As can be observed in the following table, almost all phonemes of the language appear in the ideophones word-initial, medial, and final positions.

С	WIP	Gloss	WMP	Gloss	WFP	Gloss
/b/	bissitt-	'penetrate'	libbiss-	'wear'	wull ibb-	'pass by'
/ d /	diblikk'-	'mix up'	bɨ d ɨgg-	'raise'	gurr idd-	'cut off'
/d 3 /	dʒɨggɨnn-	'be a hero'	f id3d3i tt-	'finish/burn'	gildzi dzdz -	'clumsy'
/f/	fillikk'-	'gush out'	tʃʾɨ ff ɨnn-	'close eyes'	gɨllɨ ff	'tempered'
/g/	gɨllɨtt'-	'open'	dɨngi zgɨzz -	'gloaming'	t'irrigg-	'clean'
/gw/	g ^w a-	'banged'	g ^w a g ^w a -	'banged'	-	-
/ h /	hɨmhɨm-	'murmur'	?u h u?u h u -	'cough'	?uh?u h -	'cough'
/ j /	j azz-	'grasp'	wu jj ibb-	'worn-out'	iffo j-	'get relief'
/ k /	kissitt-	'skinny'	s ikki tt-	'stab'	fətlə kk -	'runaway'
/k'/	k'ac'il-	'small bell'	fə k' əkk'-	'move'	k'wa k'-	'vomited'
/k'w/	k'wak'	'vomit'	?ik'wa-	'snapped'	-	-
/ I /	ləbb-	'warm'	gə l əll-	'gone away'	fink'ill-	'flinch'
/m/	m ulf i tt'-	'spoiled'	t'i mm ədd-	'yoked'	f i ggi mm-	'die out'
/n/	nɨkk'ɨtt-	'awake'	k'innitt-	'jealous'	∫iffinn-	'cover'
/ ɲ /	ր ɨրɨրɨ-	'insistence,'	?ɨŋŋɨkk-	'bolus/chew'	mut'i ŋŋ-	'clung'
/ p /	p əpəpə-	'surprise'	pə p əpə-	'surprise'	-	-
/ p '/	p'ipp'iss-	'become	k'ulp'isp'p'is-	'proud of'	p'ii p'-	'blow

		bishop'				horn'
/ r /	risriss-	'wet'	irrəbb-	'fall'	fɨnt∫tʃɨ rr -	'die, fall'
/s/	silk'itt'-	'swallow'	kɨssɨll-	'burn out'	kɨskɨss-	'crashing'
/ ʃ /	∫ink'itt'-	'slim'	kɨ ∬ ɨbb-	'break'	ɨnk'ɨ ∬-	'break'
/s'/	s'idditt-	'neat'	niss'itt-	'clearer'	k'irriss'-	'sharpen'
/t/	tinfi∬ -	'breath'	bi tti nn-	'shatter'	bitt'i tt -	'puncture'
/ t '/	t'issikk'-	'tie tightly'	k'intt'iss-	'cut'	firitt'-	'wiggle'
$/\mathbf{k}^{\mathbf{w}}/$	k ^w a-	'knock'	k ^w ak ^w a-	'knock'	-	-
/ t ʃ/	t∫ iffigg-	'profuse'	kɨr t∫t∫ɨ mm-	'closed'	nɨkkɨt ʃtʃ-	'touch'
/tʃ²/	t∫'innikk'-	'worry'	k'ur t∫t∫' imm-	'ate'	k'ɨlbɨ t∫tʃ'-	'precise'
/w /	wussidd-	'take'	kiwkiww-	'restless'	biww-	'burn'
/z /	ziffinn-	'sing'	k'izziff-	'paddle'	fizizz-	'fade'
/3/	3 ərrərr-	'gush'	k'ib ʒ ir ʒ ir-	'prattle'	b i 33-	'blurry'
/2/	? i mmərr	ʻjump'	?i ? i	'not/no'	h i ??-	'was in
						labor'

As can be observed from Table 4, except $/g^w/$, $/k^{tw}/$, and $/k^w/$, all consonant phonemes are distributed in ideophones in word-initial, medial, and final positions. However, these complex consonant phonemes appear in word-initial and medial positions in reduplicated forms, mainly. In addition, the voiceless bilabial consonant phoneme /p/ has the same distribution as the preceding complex phonemes. It is restricted to the word-initial position and appears in the word-medial position in the reduplicated form. The phonemic distribution in Amharic ideophones is almost the same as that of regular phonology. However, the phoneme /p/ only occurs in the word-initial position of ideophonic words.

4.3.2. Distribution of Click-like Consonants in Amharic Ideophones

The distribution of click-like sounds differs from that of the consonants of the regular phonology because they are restricted to word-initial and word-medial positions, as demonstrated in Table 5 below. Their occurrence in the word medial position is a result of reduplication.

Table 5: Distribution of click-like sounds in Amharic ideophones

Sound	WIP	Gloss	WMP	Gloss	WFP	Gloss
[0]	⊙a-	'kiss'	i m⊙a-	'kiss'	-	-
[K]	уi-	'disapproval'	-iĸiĸiĸ	'expressing a feeling of pain'	-	-
[]	∥i-	'show sympathy'	i i i i-	'express regression'	-	-
[!]	!a-	'urge horse'	!a!a!a-	'urge horse'	-	-

As can be observed from Table 5, these click-like sounds are mainly restricted to the initial positions in the ideophone words. From the above example, it can be seen that the bilabial click-like sound [O] occurs in the word-medial

position. The rest seem to appear in word medial positions if the reduplicated forms are considered. From the data, we understand that some click-like sounds have different meanings in the non-reduplicated and reduplicated forms. The click-like sound [4] with the vowel /i/ shows a sympathetic expression in its non-reduplicated form. However, its reduplicated form expresses the feeling of serious pain. As the description shows, the click-like sounds seem mainly to occur in word-initial positions. In general, these click-like sounds exist in Amharic ideophones. In addition to this, Amharic ideophones also use many labialized consonant sounds. Moreover, it seems that they commonly exist in ideophones of Ethiopian Afro-Asiatic languages.

4.3.3. The Distributions of Labialized Consonants in Amharic Ideophones

Amharic ideophones use several labialized sounds that are less frequent in the regular language. Like the preceding complex phonemes, these labialized sounds are restricted to the initial and medial positions of the ideophones, as the following examples illustrate.

Table 6: Labialized sounds in Amharic ideophones

Sound	WIP	Gloss	WMP	Gloss	WFP	Gloss
[dw]	dwa-	'explode'	d ^w ad ^w ata	'explosion'	-	-
$[f^w]$	fwa-	'gush'	fwafwate	'waterfall '	-	-
[ʃw]	∫ ^w a-	'rustle'	∫wa∫wate	'rustling'	-	-
[tw]	twa-	'burst'	twatwa-	'burst repeatedly'	-	-
$[3^{w}]$	ჳ ^w a−	'fall'	3 ^w a3 ^w a-	'fall repeatedly'	-	-
[tʃw]	t∫ ^w a-	'slap'	t∫ ^w at∫ ^w a-	'slap repeatedly'	-	-

As can be observed from Table 6, Amharic ideophones use many labialized sounds to express imitated sounds and movements. In general, complex phonemes, labialized sounds, and click-like sounds in ideophones express imitated sounds and motions. They also have common distributional restrictions. They appear in the ideophone word-initial and word-medial positions. As the above data illustrate, they do not appear in word-final potions.

4.3.4. Distributions of Vowel Phoneme in Amharic Ideophones

The preceding seven vowels show some distributional restrictions in Amharic ideophones. Consider the following description.

Table 7: Vowel distribution in Amharic ideophones

V	WIP	Gloss	WMP	Gloss	WFP	Gloss
/a/	ankəss-	ʻlimp'	k'wak'-	'vomit'	t ^w a−	'burst'
/e/	etʃtʃ'-	'disapprove'	hedd-	'walk'	wəffəffe-	'creasy'
/ ə /	ərə-	'sure?'	wəgəgg-	'glow'	ʒərərərə-	'stream'
/i/	-	-	d i didi-	'runaway'	tɨrkimirk i-	'rubbish'
/ i /	ibbiss-	'wipe, gone'	mintʃ'tʃ'ikk'-	'tug'	tʃʾɨtʃʾɨtʃʾ i -	'bird's chat'
/o/	oha-	'instruct oxen'	k o ∫ə∭illa	'thistle'	$dot \int t \int 0$	'chubby'
/u/	uute-	'undermine'	k u r∫imm-	'crisped'	kurur u	'dwarf'

As the data in Table 7 depict, except for the vowel /i/, all vowel phonemes occur in the initial, medial, and final positions of ideophones. The low central vowel /a/, the high-front vowel /e/, the mid-central vowel /ə/, the high central vowel /i/, the mid-back round vowel /o/, and the high back round phoneme /u/ occur in initial, medial, and final positions. On the other hand, the above data shows that the high-front vowel /i/does not occur in the initial position. The distribution of this phoneme is restricted to the medial and final positions of ideophones. Baye (2008) states that the regular phonology of Amharic back vowels does not occur in the initial position of a word. However, the above data shows that the back vowels /o/ and /u/ do appear in the initial position of ideophones. Furthermore, the recorded data does not show enough numbers of ideophones, which contain the front-mid vowel /e/ in the language. However, this vowel is predicted in ideophones of the Wollo variety. In this dialect, the alveolar stop phoneme d is typically palatalized as d > d, and this phonological process triggers another progressive assimilation. The palatalized alveolar stop sound influences the mid-central /ə/ to share its palatal feature. Thus, \sqrt{a} becomes \sqrt{e} in the environment of dj. That means $d^{j}+a > d^{j}e$ and a > 1e/di- as in diemak' 'became bright'. Likewise, the synesthetic ideophones syllable pattern C1iCC2iCC3 shows different syllable structures due to the labialized alveolar stop phoneme [di]. In this variety, usually, /i/ becomes /i/ in the environment of d^{j} . That means $i/j > i/j / d^{j}$. Therefore, $d^{j}+i > d^{j}i$ as in djikkimm 'fatigue, tired'. In general, this variety of Amharic attenuative ideophones and synesthetic ideophones show different syllable patterns on the quality of vowels because of the palatalized alveolar stop sound [di] in the Wollo variety.

4.4. Phonotactics in Amharic Ideophones

Mulugeta (2001:13) notes that the phonotactic rules of Amharic do not allow more than two consonant sequences. Even in the word-final position, the

phonotactic rule does not allow a sequence of obstruent consonants preceded by a liquid. If they appear in syllable-final position in this sequence, the epenthetic vowel <i> must be inserted between the obstruent and the liquid. In addition to this, either similar or different vowel sequences are not allowed in the language. However, as the following description shows, ideophones do not obey some of these phonotactic rules. Consider the following descriptions:

In monosyllabic ideophones, two identical consonants cannot occur except in the final position of the syllable, as in **bogg**- 'lite suddenly', **t'abb**- 'dripped', and dubb- 'fall'. From the structure, we can see that the C₁VC₂C₂ consonant sequence is only permissible in the coda position, but the sequence *C₁C₁VC₂C₂ does not exist. In addition, in disyllabic ideophonic words, either two identical or two different consonant phonemes cannot occur within a syllable except in stem-final syllables (in the boundaries of the coda of the first syllable and the onset of the second syllables), as in dib.bik'k'-'hide completely' and bir.gidd-'open wide completely'. The syllable structures of these words are $C_1VC_2.C_2VC_3C_3$ and $C_1VC_2.C_3VC_4C_4$, respectively. On the other hand, two identical consonant phonemes are permissible only in a syllable-final position, as in the above monosyllabic and disyllabic structure of ideophones. Therefore, -C₂C₂, -C₃C₃, and -C₄C₄ are permissible in the syllable structures of Amharic ideophones. Moreover, the -C₂C₃- appears in the medial position of the disyllabic quadric-radical ideophones, whereby the C₂ is the coda of the first syllable and the C₃ is the onset of the ultimate syllable. Concerning vowel phonotactics, ideophones do not show any variation from regular phonotactics. As the result of the following suprasegmental study shows, Amharic ideophones display expressive vowel and consonant lengthening.

4.5. Suprasegmentals

Suprasegmentals are features of an utterance other than the consonantal and vocalic elements, and they include such features as length, stress, tone, and intonation. However, stress, tone, and intonation are not subject to Amharic ideophones. In Amharic ideophones, suprasegmental features pertain to consonant and vowel length. Since length is one of the phonological features that is treated under suprasegmentals, we describe expressive consonant and vowel lengthening in this section. As Ko (2017:325) notes, expressive lengthening is "a universal process with language-specific variation in its semantic and phonological implementation". Nevertheless, expressive consonants and vowel lengthening in Amharic ideophones are phonetic properties. Baye (2021:175) explains the phonetic long vowel in ideophones

like *rəgaa* 'sober' and *rəga bəl* 'be sober'. A long vowel occurs when it stands alone with a warning function, as in the first case, and its counter-short form appears when the ideophones happen in a compound, as in the latter case. Baye (2021:175) also notes that phonetic vowel lengthening in such cases has only a discourse function. In both cases, the word has a similar function which is a warning or reminder function to the (self-) agent to look out for his or her paces. Likewise, Amharic ideophones employ expressive consonant and vowel lengthening as in ideophones birr al-a (fly say.FP-3SM) 'flew away' and p'i:p' adərrəg-ə blow make.PF-3SM 'blow horn for a long time'. Most Amharic ideophones employ word-final consonant and vowel lengthening even though some ideophones undergo word-medial vowel lengthening. As Beck (2008:14), reports consonant lengthening is also a common phonological feature in Upper Necaxa Totonac language ideophones. Furthermore, Derib (2017:1) reports that in Amharic geminated consonants are twice longer than a singleton. He further notes that the word-final gemination is longer than the word medial gemination in the regular phonology of the language. Derib also states that voiceless consonants are longer than voiced consonants in both singleton and geminated forms in word medial and word-final positions. This also seems true in Amharic ideophones. However, expressive lengthening in ideophones is a sound symbolic function. It shows intensity, durativity, and space. Table 8 presents consonant lengthening used for expressive purposes.

4.5.1. Expressive consonant lengthening

Table 8: Consonant lengthening

No.	Ideophone	Gloss
a.	b i rr	'flew'
b.	dɨbɨlbɨ ll	'became very fat, rounded'
c.	f i ggi mm	'die completely'
d.	dɨbbɨ nn	'die completely'
e.	t∫'isi ss	'over angry'
f.	gumz izz	'became completely sour'
g.	kum∬ i∬	'became shrunk/completely humiliated'
<u>h.</u>	wutifti ff	'nonsense, slovenly done things'

As can be observed from Table 8, trills, liquids, nasals, and fricatives play important roles in word-final expressive constant lengthening. Similarly, the word-final vowel lengthening is also observed in onomatopoeic ideophones. This expressive vowel lengthening also plays a sound-symbolic function. Consider the following descriptions:

4.5.2. Expressive Vowel Lengthening

Vowel lengthening is a process whereby two identical vowels or two or more dissimilar vowel sequences occur in the same place or as the nucleus of a syllable. Childs (1994:185) notes that in several languages, ideophones use expressive lengthening (extra-long vowels) to show 'extension in time and space,' as in Kisi ideophones síiì 'continuing for a short distance or period' and píàà 'quickly cutting through water'. In the same way, Ameka (2001:30) notes that in the Ewe ideophone's final vowel, lengthening has expressive lengthening uses. This is also true for Amharic ideophones. As we have considered earlier, Amharic does not have long vowels in its regular phonology. That means regular phonology does not allow vowel sequences (diphthongization and diphthongization). However, ideophones typically deploy vowel lengthening. Most imitative ideophones deploy vowel lengthening in the word-final position. Such ideophones contain complex consonants and simple labialized consonants before the long vowels, the following are some examples of this.

Table 9: Expressive vowel lengthening

No.	Ideophones	Free translation
a.	kwa:	'snapping sound when metals are hit, a sound made when knocking
b.	g ^w a:	'bang of a door when closed by force'
c.	k'wa:	'snap/make a click sound'
d.	twa:	'bursting sound/popping sound'
e.	dwa:	'bang sound/explode/crack'
f.	f ^w a:	'splash/rushing sound of water
g.	∫ ^w a∶	'fall in a cascade'
h.	t∫ ^w a∶	'bang/clap'
i.	t'wa:	'popping/bursting sound'
<u>j</u> .	∫ ^w a∶	'sound made when slapping'

As observed in Table 9, Amharic ideophones exhibit extra-long vowels. These long vowels often follow the phonemic complex consonants such as /kw, gw, k'w / as in Table 9(a-c), and the labialized consonants [tw, dw, fw, fw, fw, tfw, tfw, and tfw] as in Table 9(d-j). As described above, in onomatopoeic ideophones, vowel lengthening is intentional. It is done by the speaker to show the duration and intensity of the events to which the ideophones refer. In the language, the complex phonemes and the labialized consonants followed by simple vowels such as kwa 'snap,' gwa 'bang,' twa 'burst,' dwa 'explode,' fwa 'splash,' fwa 'fall in a cascade', etc. express the imitated sounds and intensity. Vowel lengthening takes place in the final positions of ideophones. In addition to this, the extralong vowels in onomatopoeic ideophones end as voiceless vowels and breathy

or creaky sounds. For example, when we produce some ideophones such as $[g^waaa...ahhh]$ and $[d^waaa...ahhh]$ for a long time, we can easily perceive the preceding breathy sounds but not the pure low central vowel /a/ at the end of the ideophone words.

4.6. The Syllable Structures of Amharic Ideophones

The syllable structure of regular phonology is governed by the phonotactics rule of the language. As we have noted in the preceding section, phonotactic rules restrict the permissible sound sequence and the syllable structure of a given language. In the regular phonology of Amharic, Alemayehu (1987), Getahun (1997), and Baye (2008) identify the V, CV, CVC, VC, CVCC, and VCC syllable types. According to Taddese (2018), the regular phonology of Amharic has a (C)V(C) (C) syllable template. From these reports, it is obvious that the language has six-syllable patterns at the underlying and surface levels. However, the following description shows that Amharic ideophones break or violate some phonotactic rules of regular phonology. These Amharic ideophones permit the use of expressive extra-long consonants and vowels. As a result of these, the number of syllables increases from six to at least eight, as in the following examples.

Table 10: Syllable structure

No.	Syllable Structure	Ideophones	Gloss
a	CV	g ^w a	'bang'
b	CVC	g i nfill	'bad-tempered, unable to control one's emotion'
c	VC	in.kitt	'break completely'
d	CVCC	bogg	'lit suddenly'
e	VCC	akk	'clear throat'
f	CV:	fwa:	'gush/cascade'
g	CV:C	p'i:p'	'blow horn'
h	CVC:	turr:	'fly away'

In addition, as we have considered in the preceding section, in ideophones there is a tendency to lengthen nasals, liquids, and fricatives. Crosslinguistically, a similar tendency has been observed in Kusaal ideophones, a Gur language that is spoken in Ghana, Upper East Region (see Abubakari 2017:47-48). Therefore, the syllable template of these ideophones becomes (CVC:), unlike the syllable template presented in Table 10(d) above, where the coda could be nasal, trill, fricative, or liquid, as in examples in Table (8) of long consonants. As can be observed from the above examples, the last three syllable structures are typical to ideophones only. Since we have seen the syllables of different types of ideophones, let us proceed to the syllabification of ideophones.

4.7. Syllabification of Amharic Ideophones

As Bartlett, Kondrak, and Cherry (2009:303) note, "Syllabification is a phonological process whereby words or phrases are divided into syllables." This section presents the syllabification of ideophones as follows. As the following data shows, Amharic ideophones can be roughly grouped into monosyllabic, disyllabic, trisyllabic, quadrisyllabic, and polysyllabic. Consider the following.

4.7.1. Monosyllabic Ideophones

Table 11: Amharic monosyllabic ideophones

No.	Monosyllabic	Ideophones	Gloss
a	CV	λŧ	'yes'
b	CV:	?i:	'show an agreement
c	VCC	ann-	'bite'
d	CVC	kw'əm-	'stop'
e	CVC:	tuss:	'fart with a hissing sound'

The data in Table 11 demonstrate that monosyllabic ideophones in Amharic have the following five syllable patterns: CV, CV:, CVC, CVCC, and CVC:. These correspond to examples (a), (b), (c), (d), and (e) in Table 11, respectively. As noted above, ideophones like those in (e) are common.

4.7.2. Disyllabic Ideophones

Table 12: Amharic disyllabic ideophones

No.	Disyllabic	Ideophones	Gloss
a	CV.CV	?ik'™a-	'snap'
b	CV.CVCC	?ik'ətʃtʃ'-	'snapped'
c	CV.CV	səka-	'pin'
d	VC.CVCC	immərr-	'hopped, crossed jumping'
e	CVC.CV	fəka-	'become bright'
f	CVC.CVCC	fək'əkk'-	'get off the beaten track

The data in Table 12 show the presence of several disyllabic ideophones in the language. These types of ideophones usually geminate the penultimate and ultimate consonants. However, at the medial position, heterogenic consonants remain single or in clusters. They also include both open and closed syllable types. Amharic disyllabic ideophones can have one of the following seven-syllable structures: CV.CV, CV.CVCC, CV.CV, VC.CVCC, CVC.CV, and CVC.CVCC. The ideophones in Table 12 (a), (b), (c), (d), (e), and (f) perfectly fit in the preceding syllable structure. In addition, consonant gemination is a

common phonological phenomenon in disyllabic ideophones. These consonants occur adjacently in the coda of the penultimate syllable and the onset of the ultimate syllable.

4.7.3. Trisyllabic Ideophones

Table 13: Amharic trisyllabic ideophones

No.	Trisyllabic	Ideophones	Gloss
a	CVC.CVC.CVCC	inkitkitt-	'break down'
b	CV.CVC.CVCC	ifissfiss-	'scooped with hand'
c	CVC.CVC.CVC	ɨmbu∫bu∫	'unfermented bear'
d	CVC.CVC.CVCC	intiftiff-	'spat on the head and blessed'
e	CVC.CVC.CVCC	dɨngɨrgirr-	'confused'
f	CV.CVC.CVCC	sibirbirr	'broken down into several parts'

As the ideophones in Table 13 depict, Amharic trisyllabic ideophones exhibit the following syllable structures: CVC.CVC.CVCC, CV.CVC.CVCC, CVC.CVCC, CVC.CVC.CVCC, CVC.CVC.CVCC, and CV.CVC.CVCC The trisyllabic ideophones analyzed in Table 13 under examples (a), (b), (c, d), (e), and (f) show the above syllabic structures. Most trisyllabic ideophones contain a light initial syllable and a heavy medial and final syllable.

4.7.3. Polysyllabic Ideophones

As the following data illustrate, Amharic polysyllabic ideophones are the results of reduplication. Consider the following descriptions:

Table 14: Amharic polysyllabic ideophones

No.	Polysyllabic	Ideophones	Gloss
a	CVC.CVC.CVCCVCC	kətkətkətt-	'crackled, lightered'
b	CVC.CVC.CVC CVC	gofgofgofgof-	'walk of old person'
c	CV.CV.CV CV	didididi-	'runaway'
d	CVC.CVCCVCC	gɨlbɨt'bɨt'bɨtt'-	'turned upside down'
e	CVC.CVCV	dəblələlə-	'rolled'

The data in Table 14 shows that Amharic ideophones constitute polysyllabic words. As observed from the above data, polysyllabic ideophones in the language are extremely long. Such types of lengthy words do not exist in non-ideophonic words. As the data illustrates, Amharic long ideophones are the result of reduplication. As described in the above table, several polysyllabic ideophones are derived from monosyllabic, disyllabic, trisyllabic, and quadrisyllabic ideophones via reduplication. The type of reduplication in polysyllabic ideophones is either full or partial. Monosyllabic words presented

in Table 14 (a-c) employ full reduplication. They repeat the first syllable fully several times and become polysyllabic words. Disyllabic words such as ideophones in Table 14 (d & e) employ partial reduplication. As the data show, in Amharic, most ideophones reduplicate the last syllable several times. In addition to this, the ideophone word in Table 14(c) **dididi...** is trisyllabic. Ideophonic words like these become polysyllabic words by reduplicating the entire syllable many times. Except for some ideophones, Amharic polysyllabic ideophones are not real polysyllabic; rather, they are the result of reduplication, and their length can be determined by the speaker. Furthermore, as the entire description illustrates, Amharic ideophones comprise open and closed syllable shapes. In the descriptions of syllable types and syllabification, we have considered that open syllable shapes include the CV, and the closed syllable shape contains the VC and CVCC structures.

5. Conclusion

The paper aims to describe the phonology of Amharic ideophones and to show some unique phonological features of the ideophones. From the foregoing discussion on Amharic ideophone words, the following conclusions can be drawn. Amharic ideophones use almost all phonemes of the regular phonology plus four click-like sounds [O, !, I], and x, which do not exist in the regular phonology. Amharic ideophones use many simple labialized consonants. All the labiovelar phonemes /kw, kw, and gw/, all the labialized consonants [fw, dw, \int_{0}^{∞} , \int_{0}^{∞} and all the above four click-like sounds do not occur in the ideophone word-final position. They often occur in the ideophone word-initial position and word-medial positions if reduplication is considered. In addition, except for /i/, almost all vowels occur in ideophone initial, medial, and final positions. The result on the phonotactics of Amharic ideophones shows that most monosyllabic ideophones end with sequence of two identical consonants. Disyllabic ideophones permit the sequences of two consonants to either be identical or different in ideophone word medial position. The syllable break often takes place between these consonant sequences. Furthermore, most disyllabic ideophones permit the sequences of two identical consonants in the coda of the ultimate syllable. The result of the suprasegmental study illustrates that Amharic ideophones employ expressive long vowels in ideophone wordmedial and final positions. However, long vowels are not predictable in regular phonology; ideophones illustrate phonetically long vowels, which express intensity, durativity, and space. Besides, expressive consonant lengthening is also observed in the ideophone's word-final positions. These phonetically very long consonants also express intensity, durativity, and space.

Amharic ideophones constitute monosyllabic, disyllabic, trisyllabic, and polysyllabic ideophone words. Finally, all syllable types constitute both open and closed syllable shapes. Thus, CV and CV: are open syllable types, and VC, VCC, CVC, CVCC, and CVC: are closed syllable types found in the ideophones of the language.

Lists of abbreviation

Pul Simp	pulmonic simple
Pul Lab	pulmonic labialized
Glot Simp	glottalic simple
Glot Lab	glottalic labialized
C	consonant
C:	extra-long consonant
CC	geminate consonant
V	vowel
V:	long vowel
WIP	word-initial position
WMP	word medial position
WFP	word-final position

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