

# Phonology Write-up of Hadara (Lute)

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## 0. Introduction

Hadara or Lute language is a Niger-Kordofanian (Heiban group) language spoken in Southern Kordofan in the Sudan. This language group lives in the area near Dalami and Kurgul. The language is spoken by about 10,000 people. The current write-up is based on linguistic studies by native speakers of the language for the purpose of deciding on a writing system for the language. This work was completed during 1997-98 in Khartoum.

## I. Consonants

The following consonants are found in Hadara (Lute):

p	t	ʈ	c	k
b	d		ʃ	g
		ɖ		
m		n	ɲ	ŋ
	f	s		h
	v	ð		
w			j	
		r	ɽ	
		l		

## Distribution

The following data show where each of the consonants can occur in Hadara.

	Beginning		Middle		End	
b	bitti	'hit'	koobo	'wing'	bub	'sound'
	buʃubuʃu	'bat'	kotombo	'ostrich'		
c	cap	'completed'	lucco	'chin'	ʈuc	'all'
			kiʃca	'beer, wine'		
ɖ	ɖòttón	'near'	ɲidri	'bull'		---
ɖ	ɖumba	'porridge'	kidan	'small, few'		---
			irda	'cow'		
f	fajfan	'dance'	ifij	'human excrement'		---
			lesfij	'small valley'		
v	vire	'stomach'	avva	'moon'	karav	'grasses'
g	go	'here'	kuðgun	'kind of tree'		---

j	jaŋ	'a certain person'	ɪlʃi	'some people'	---	---
h	hunu	'there'	only loan words from Arabic			
k	kæni	'ear'	abbalakur	'dove'	korʃək	---
l	loy	'bone'	kɔɔla	'long'	kuuðul	'forehead'
			ɪlʃi	'some people'		
m	male	'he went'	ðimani	'leg'	lurum	'chest'
			lumda	'salt'		
n	naðul	'nose'	ðəna	'path'	ŋɪn	'dog'
			lundər	'mountain'		
ɲ	ɲa	'mouth'	ŋeɛɲo	'egg'	laɾɪɲ	'back'
ŋ	ŋoy	'bones'	ðuŋur	'elephant'	yaŋ	'new'
p	---		karpapa	'foot'	cap	'completed'
			kərɪt	'k. of wild cat'		
r	riimo	'scorpion'	vɪɾe	'stomach'	rowar	'hearts'
			lɔɾɲot	'sesame'		
ɾ	---		kobaɾo	'feather'	---	---
			kɪɾca	'beer'	---	---
s	sɪddi	'proud'	kisaŋ	'sweat'	---	---
t	ʃali	'let us go'	kita	'lake'	lɔɾɲot	'sesame'
ʃ	ʃawal	'pebble'	koʃa	'kind of tree'	---	---
θ	---		kuθpu	'kind of tree'	---	---
ð	ðɪŋla	'tongue'	kuðul	'forehead'	kumuð	'kind of cat'
w	wəŋ	'buffalo'	ðowar	'heart'	ðu	'intestines'
y	yə	'fire'	ðiya	'tail'	roy	'hands'

θ only occurs before /p/ and so will be written as the voiced ð. The combination should be taught so people understand how to read it.

Minimal and pairs between consonants are shown below. B = Beginning of the word, V = between vowels, C = next to a consonant, E = End of the word.

b - p	B	buṭubuṭu	'bat'	---	
	V	rabba	'stars'	appa	'take'
	C	karbaṅ	'wall'	kerpɪt	'wild cat'
	E	bub	'sound'	kurup	'sound'
b - v	B	biti	'hit'	virəŋ	'earth'
	V	aba		avva	'moon'
	C	kiṛbuc	'flower'	kiṛva	'bird'
	E	---		kav	'rain'
f - v	B	faṅfaṅ	'kind of dance'	virəŋ	'earth'
	V	ifiṅ	'excrement'	ivil	'shadow'
	C	lesfiṅ	'small valley'	iivɪŋ	
	E	---		liṛvi	'kind of seed from tree'
d - d'	B	donaḏo	'	karav	'grass'
	V	keede	'farm'	ḏoṛeḏi	'correct'
	C	ilda	'you must buy'	keede	'coconut'
	E	---		ilda	'head'
c - ʃ	B	ciɪɪc	'full'	---	
	V	kocce	'name'	ʃɪmʃɪm	'happy'
	C	anca	'you wear him'	kuuji	'kind of tree'
	E	ʃuc	'all'	ilji	'people'
d' - ʃ	B	ḏetto	'pottery'	---	
	V	kooḏo	'kind of tree'	juuju	'kissing'
	C	ilda	'head'	kuuje	'kind of tree'
	E	---		ilji	'people'
k - g	B	koon	'kind of animal'	---	
	V	tomoko	'bottle cap'	go	'this'
	C	kokko	'name'	kigila	'green'
	E	---		hoŋgo	'there'
ḏ - ḏ'	B	ḏotton	'near'	---	
	V	keeḏe	'farm'	ḏotto	'talking'
	C	ḡumda	'salt'	keeḏe	'grain from which beer has been made'
	E	---		---	
ṭ - ṭ'	B	tale	'let us go'	liŋaḏ	'teeth'
	V	kita	'lake'	ʃiran	'boy'
	C	kəmṭe	'dry'	ḏiṛta	'dust'
	E	ḡarreṅot	'sesame'	kəmṭe	'be finished'
				---	

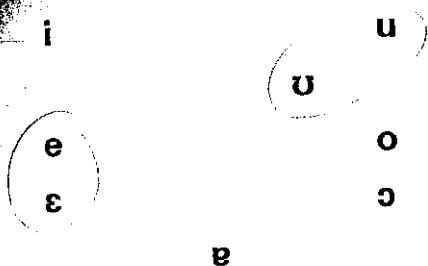
d - r	B	disra	'drop'	rula	'valleys'
	V	keede	'farm'	leere	'sky'
	C	ɲumda	'salt'	ɲamra	'nail'
	E	---		tamrar	'rocky land'
r - ɾ	B	ɾmans	'legs'	---	
	V	kirɪɲ	'kind of animal'	ɲaɾɪɲ	'backs'
	C	limro	'kind of smell'	aorɾo	'goat'
	E	kimur	'kind of tree'	---	
ɖ - ɾ	B	dòttón	'near'	---	
	V	kudan	'show'	kuɾam	'thief'
	C	limdin	'friends'	ɲaɾɾa	
	E	---		---	
j - g	B	jaɲ	'who'	go	'this'
	V	kaɟoma	'strong'	kigila	'green'
	C	ilji	'people'	diɲɲin	'mother'
	E	kolaj	'movement'	---	
n - ɲ	B	noðol	'nose'	ɲawal	'smooth stones'
	V	ðəna	'road'	ɲaɲa	'remains'
	C	kumna	'black'	kemɲa	'want'
	E	ɲon	'durra'	ɲon	'
ɲ - ŋ	B	ɲen	'dogs'	ɲen	'dog'
	V	aɲen	'sun'	aɲar	'magician'
	C	kidɲa	'salty'	kidɲa	'dirty'
	E	ɲiɾon	'die'	ðiɾaɲ	'kind of roots'
<b>note: honjo 'pretend'    hongo 'this one'.</b>					
w - y	B	waɲ	'buffalo'	yaɲ	'new'
	V	ðowar	'heart'	kiyam	'kind of tree'
	C	lorwo	'knee'	ɲomyo	'drum'
	E	ðuw	'intestines'	ðuɲ	'hand'
r - l	B	rimane	'feed'	lamne	'finger'
	V	looro	'charcoal'	koolo	'
	C	kemre	'group of Nuba tribes'	kemle	'tortoise'
	E	kimar	'kind of trees'	kawal	'stone'
ɾ - l	B	---		lay	'eye'
	V	ðiɾɪɲ	'	iilɪɲ	'foreign'
	C	aorɾo	'	abbalakur	'dove'
	E	---		kawal	'stone'

Note the following set of minimal pairs:

ɖ d ð	keede	'farm'	keede	'coconut'	keede	'grain after making beer'
ɛ a e	keɾe	'one of them'	kaɾe	'finished'		

## Vowels

The following vowels are found in Lute:



These vowels may be able to be divided into two sets according to the feature of Advanced Tongue Root. The two sets are not complete - perhaps more vowels will be found/agreed upon later. It is not clear yet if there is vowel harmony. This aspect needs to be studied further.

[-ATR-]		[+ATR]	
	ɯ	i	u
ɛ	ɔ	e	o
	a		

## Distribution:

The following data show where each of the vowels can occur in Lute.

	Beginning		Middle		End	
i	ivɪl	'shadow'	vila	'flour'	kɛɛni	'ear'
ɛ	ɛɛriŋ	'kind of insect'	kɛɛdɛ	'farm'	kɛɛdɛ	'farm'
e	endare		zɛber	'wind'	kɛmle	
a	aɑŋɪn		kalu	'fly' (n)	vila	'to go'
ɔ	ɔɛm	'ant'	kɔŋam	'neck'		
o	oɔu	'breast'	kotombu	'	koobo	'wing'
u			kuɾa	'	madalu	
u	urkuma	'three'	kudan		kuulu	

Minimal pairs between vowels are shown below. B=Beginning of the word, M=middle of the word, E=End of the word.

i - e	B	indu	'ear'	endare	
	M	siddi	'sleep'	kenva	
	E	keski	'broud'	endare	
e - ε	B	eeɔ	'cold'	εelo	'god'
	M	zeber	'wind'	kesεε	'farm'
	E	kemele	'he has gone'	teε	'let's go'
o - ɔ	B	oozu		ɔgazgaz	'kind of bird'
	M	kotambo	'ostrich'	koɔam	'neck'
	E	looɔ	'chin'	koɔɔ	
o - u	B	oðu	'breast'	udde	'pull'
	M	kotto	'cold'	kukur	
	E	oomo	'catch'	luudu	'crown'
u - ɔ	B	urkuma	'three'	uuzo	'thought it'
	M	lurum	'chest'	luru	'knee'
	E	zuuju	'kind of mouse'	madalu	'friend'
e - ee	B	ablakur	'dove'	aaram	'
	M	kalu	'fly (n)'	kaalu	'kind of vegetable'
	E	zingla			

### III. Tone

There is evidence that tone is important in this language. Below are shown some minimal pairs.

vilà	'flour'	vilá	'to go'
bítí	'hit him'	bìttì	'ghey'
zúújú	'kind of mouse'	zùùjú	'ready for milking'
zééróx	'dung'	zèèròx	'swimming' (n)
kúúrè	'he will dig'	kùùrè	'mouse'
kòtòmbó	'ostrich'	kòdòttò	'he gets lost'
kūmbàrà	'stringed musical instrument'	zùmbárá	'lion'

High and low seem to be the only tones, apart from a very rare mid tone. High is about twice as frequent as low. No contour tones have yet been found.

### IV. Syllable structure

The following syllable types are present in Lute language.

V		
CV	na	'mouth'
CVC	wεη	'buffalo'
VC	ɪlji	'some people'

### V. Orthography

As a result of our study, we have shown that these consonants and vowels need to be included in our orthography. In this section, we will suggest the symbols that the community can consider.

IPA symbol	Proposed Orthography	Example	Gloss
~ a	ǣ	ar'da	'cow'
ə	a		
b	b	bitti	'hit'
c	c	cap	'completed'
d	d	dòtton	'near'
ɖ	'd	'denggèn	'mother'
e	e	èl'dongon	'field'
ɛ	ex	exl'dà	'head'
f	f	fa'n	'dance'
g	g	go	'here'
h	h	hunnùx	'there'
i	i	ivil	'shadow'
ʃ	j	kuuje	'kind of tree'
k	k	kawrò	'hen'
l	l	lày	'eye'
m	m	male	'he went'
n	n	neenèx	'ears'
ɲ	'n	'na	'mouth'
ŋ	ng	ngoxy	'bones'
o	o	on'tam	'necks'
ɔ	ox	oxram	ánt'
p	p	karpit	'wild cat'
r	r	riimò	'scorpion'
ɾ	'r	ke'rca	'beer'
s	s	siddi	'proud'
ʈ	t	tali	'let us go'
ʈ	't	'tawal	'pebble'
u	u	urkùma	'three'
ʊ	ux	kuxba'ro	'feather'
v	v	verè	'stomach'
w	w	wang	'buffalo'
j	y	ya	'fire'
ð	z	zexngla	'tongue'
low tone	`	kàrpapa	'foot'

Long Vowels: double the first letter; e.g. aa, eex.

Tone on vowels: only on first letter of vowel: à, àa, è, èè, èx, èex, etc. (No contour tones have yet been found.)

**VI. Questions still to be answered**

Are there more vowels?