

Phonology

A sound pattern of Endangered Darma Language

Introduction

In this part we are presenting the sound pattern of Darma language, starting from phonemic inventories (Fig.1.1 inventory of vowel phoneme and figure 1.4 consonants phonemes).

The presentation of sounds of Darma language is included here as in their phonemic and phonetic inventories, along with sound patterns of syllable, suprasegmental features and prosodic words.

Among Tibeto-Burman languages, west Himalayan Darma language identifies twenty six consonants and eight vowels, as per our observation based on the data collected in the Nangling village of Dharchula. We have collected the information from people above 45 years, and got it verified by cross checking with other speakers. Approximately same sounds were produced by every speaker.

Phonology

Inventory of Vowels

	Front	central	Back
Closed	ɪ		u
	ɪ		
Mid	e	ə	o
	ɛ		
Open		a	

Minimal pairs of vowel

We have found eight vowel phonemes; it is to be rarely found at syllable initial position, most of the vowel is occurring in the syllable medial position and syllable final position.

Phoneme	Gloss in Darma	Gloss in English
<i>/a/ vs. /e/</i>	ba be pamu pemu	Father, Thread To measure To tear
<i>/o/ vs /a/</i>	so, ra lo la	Teeth, bone One hundred Language Hand
<i>/i/ vs /u/</i>	Pi Pu	Four brother
<i>/a/ vs /u/</i>	ra: ru k ^h a k ^h u	One hundred Horn Walnut Smoke
<i>/u/ vs /o/</i>	cu co tu to	Spoon Lake Chin time
<i>/ε/ vs /e/</i>	be be ge gε re re	Thread Skin Clothes You Field cow
<i>/u/ vs /e/</i>	gemu gumu	Cover To pluck

	bu be re ru	Insect Thread Field horn
/u/ vs /ε/	mu-ra:no mε	Rainy Track of animal
/e/ vs /i/ vs /u/ vs /o/	Ce ci cu co	Grass Ten Spoon Lake
/e/ vs /ε/ vs /a/	Ce cε ca	Grass March Tea
/a/ vs /o/	p ^h a p ^h o	Ash Cave
/i/ vs /e/ vs /u/	ni ne nu	Sun Medicine Milk

Figure 1.2

Vowel cluster-

Mostly the words in Darma which have vowel clusters are borrowed from Indo Aryan language.

/ua/	Kac ^h ua	tortoise
/ai/	mit ^h ai	candy
/æe/	pæeja	wheel

Minimal pairs of consonant

Phoneme	Gloss in Darma	Gloss in English
/l/ vs /r/	la	Hand

	ra	Hundred
/ŋ/ vs /j/	ʃiŋ ʃja	Timber Meat
/p/ vs /n/ vs /ʃ/	pja nja ʃja	Bird, Fish meat
/p/ vs /p ^h /	pe p ^h o	Brother Cave
/t/ vs /t ^h /	ti t ^h u	Water up
/b/ vs /h/	təbu təho	Basin pan
/k ^h / vs /g/	k ^h wi gwi	Dog Nine
/c/ vs /c ^h /	cɪm c ^h əm	Home, Hair
/k/ vs /c/	ka ca	Crow, Pillow
/k ^h / vs /d/	k ^h əŋ dəŋ	Pillow Stomach
/p/ vs /b/ vs /r/	pu bu ru	Brother, warm, shoulder
/p/ vs /b/	pola bola	Shoe thumb
/r/ vs /w/ vs /c/ vs /s/	ra wa ca sa	Tooth, Honey , tea, dust
/s/ vs /n/	sɛ nɛ	God Five
/n/ vs /m	cɛnɛ cɛmɛ	Eleven, Daughter
/m/ vs /t/ vs /c/ vs /p/	mi ti ci pi	Man Water, Ten Four

/m/ vs /n/	mu nu	Rain , Milk
/s/ vs /r/	so ro	Tooth, Skelton
/w/ vs /j/	wi ji	Wind Flour
/t/ vs /t ^h /	təŋmu t ^h əŋmu	To live To build

Figure 1.3

Consonant chart-

	Bilabial	Dental	Alveolar	Palatal	Retroflex	Velar	Glottal
Stops	U/A/A	U/A/A		U/A/A	U/A/A	U/A/A	
Voiceless	p p ^h	t t ^h		ɟ	t t ^h	k k ^h	
Voiced	b	d d ^h			ɖ	g	
Affricates							
Voiceless				c c ^h			
Voiced							
Fricatives			s	ʃ			h
Nasals	m	n				ŋ	
Laterals		l					
Trills/tap			r				
Semi-vowels	w		j				

Figure 1.4

Consonant cluster-

Consonant cluster have found in the Darma language, which is figuring below in different words.

Syllabic structure of Darma Language

There are both open and closed syllable are available in Darma.

Syllabic shape	Darma language	English Gloss
CV	[ba], [be]	Father, Thread
CCV	[nja] [pja]	Fish , Bird
CVC	[mər]	Ghee
VC	[əm] [uŋ]	Way, Stone
VCCV	[akpɛ]	Lip
VCV	[ɪjo]	Down

Figure 1.5

Suprasegmental features:

Long Vowel and Short vowel

There are five long vowels identify as - a:, i:, e, u, o. and four short vowels as describes below.

Example of long and short vowels at initial position, medial position and final position

/o:/	/mo/	cloud	/go:ga/	maize	/lo:no:/	easy
/a:/	/a:lo/	potato	/da:ɽʰɪ/	beard	/sa:/	Dust
/i:/	/i:jo/	down	/pi:ru/	square	/ni:/	sun

/u/	/uŋ/	stone	/tuŋru/	hexagona	/k ^h u/	smoke
/u:/	/u:ja/	energy	/mu: /	cloud	/pu:/	elder brother
/ə/	/əm/	way	/jər/	fever	/mlə/	goat
/ɛ/	--		/set ^h an/	holy place	/salɛ/	Garland
/e/	/eləŋ/	that much	/seno/	cold	/ge/	cloth

Tone

/ã/	/hã/	yes
/õ/	/gõd/	gum

Stress Pattern

Allophones

There are few allophones in different words I have found in Darma language, we describe it below-

/nim/	nose	/nɪm/
/ni/	sun	/nɪ/

Geminates in Darma Language

Darma Gloss	English gloss
mərr	Ghee
kaccər	Mud
c ^h ɪrr	Waist
səmmi	Moneylender
kucco	Broom
rorənno	Basket

læcco	Goats kids
nijænni	sunshine