
LANGUAGE IN INDIA

Strength for Today and Bright Hope for Tomorrow

Volume 14:6 June 2014

ISSN 1930-2940

Managing Editor: M. S. Thirumalai, Ph.D.

Editors: B. Mallikarjun, Ph.D.

Sam Mohanlal, Ph.D.

B. A. Sharada, Ph.D.

A. R. Fatihi, Ph.D.

Lakhan Gusain, Ph.D.

Jennifer Marie Bayer, Ph.D.

S. M. Ravichandran, Ph.D.

G. Baskaran, Ph.D.

L. Ramamoorthy, Ph.D.

C. Subburaman, Ph.D. (Economics)

Assistant Managing Editor: Swarna Thirumalai, M.A.

A Comparative Analysis of the Phonological Features of Bodo, Garo and Rabha

Musuka Bala Brahma, Ph.D. Scholar

Abstract

This paper attempts to analyze some of the phonological features of Bodo, Garo and Rabha. Each language has its own phonological system and features. Bodo, Garo and Rabha languages have been recognized as forming a sub-group with similarities between these languages (Grierson, 1903, Vol-III, part-II). Dissimilarities are also found between Bodo, Garo and Rabha.

1. Introduction

Language in India www.languageinindia.com ISSN 1930-2940 14:6 June 2014

Musuka Bala Brahma, Ph.D. Scholar

A Comparative Analysis of the Phonological Features of Bodo, Garo and Rabha

The Bodo are the largest community group spoken in the north-eastern Indian states of Assam, Meghalaya and in Bangladesh. North East India comprising of the states of Arunachal Pradesh, Assam, Meghalaya, Manipur, Tripura, Mizoram, Nagaland and Sikkim, was earlier referred to as Seven Sister States. It shares borders with Bangladesh, Bhutan, China, Nepal and, Myanmar. It has always been regarded as a treasure hold for researchers from different fields.

Although NE India consists only 7.9 per cent of the country's total geographical area, it is home to more than 75% of languages belonging to the four language families, viz. Indo-Aryan, Tibeto-Burman, Austro-Asiatic and Dravidian (small number of Tamil speakers in Moreh district of Manipur).

The Bodo consists of a large number of tribes including (western and eastern hill) Bodo, Rābhā, Gāro, Mech, Koch, Dhimāl, Dimasa (or Hill Kachārī), Galong (or Gallong), Hojai, Lalung, chutiya, Tippera, and Moran. These are the major languages of the Bodo group and comes under the Tibeto-Burman group of languages. The total number of speakers of Bodo group of languages in India was estimated at about 2.2 million in the late 20th century. Now the majority of them (Bodo, Garo and Rabha) live in Assam, Tripura, Garo Hills of Meghalaya and the rest straggled in West Bengal, Nepal, Bangladesh and other areas of the present Northeast India. They form the single largest population among the indigenous peoples of the North-East India.

1.1 Scope of Study

This topic attempts to compare and highlight the comparative analysis on some of the phonological features (consonant, vowel, tone, syllable etc.) of Bodo, Garo and Rabha languages spoken in North-East India. Each language has its own phonological system and its own unique phonological features.

1.1.2 Methodology

Observation and interview methods were done in this study to collect the linguistic data from the native speaker. Tape recording also applied to determine properly articulation of

Language in India www.languageinindia.com ISSN 1930-2940 14:6 June 2014

Musuka Bala Brahma, Ph.D. Scholar

A Comparative Analysis of the Phonological Features of Bodo, Garo and Rabha

phonetic data. The published materials available in the form of journal, books and articles etc. have been collected from secondary sources.

2. Phonological Features

In this topic, discussion will be made on some of the phonological features (consonant, vowel, tone syllable etc.) present in Bodo, Garo and Rabha languages where an attempt will be made on similar and dissimilar features thereby making it a unique language. In the following the consonant phonemes of the three languages are shown along with the chart :

Bodo Consonants

Manner of articulation	Place of articulation				
	Bilabial vl. vd	Alveolar vl. vd	Palatal vl. vd	Velar vl. vd	Glottal vl. vd.
Stop ^{unasp} asp	b p ^h	d t ^h		g k ^h	
Fricative		s z			h
Nasal	m	n		ŋ	
Trill		r			
Lateral		l			
Semi-vowel	w		y		

Garo Consonants

Manner of articulation	Place of articulation				
	Bilabial	Alveolar	Palatal	Velar	Glottal

	vl. vd	vl. vd	vl. vd	vl. Vd	vl. vd.
Stop ^{unasp} asp	p b	t d		k g	?
Africate			č j		
Fricative		s			h
Nasal	m	n		ŋ	
Trill		r			
Lateral		l			
Semi-vowel	w				

Rabha Consonants

Manner of articulation	Place of articulation				
	Bilabial vl. Vd	Alveolar vl. Vd	Palatal vl. Vd	Velar vl. Vd	Glottal vl. Vd.
Stop ^{unasp} asp	p b p ^h	t d t ^h		k g k ^h	
Africate			č		
Fricative		s z			h
Nasal	m	n		ŋ	
Trill		r			
Lateral		l			
Semi-	w		y		

vowel					
-------	--	--	--	--	--

2.1 Stops or Plosives

All the three languages have voiceless and voiced plosives. In Bodo three voiced plosives /b, d, g/ and three voiceless aspirated /p^h, t^h, k^h/ are present. whereas in Garo three voiced plosives /b, d, g/ and three voiceless unaspirated plosives /p, t, k/ are present. In Rabha there are three aspirated voiceless plosives /p^h, t^h, k^h/ and three unaspirated voiceless plosives /p, t, k/ and three voiced plosives /b, d, g/. In Garo aspirated voiceless plosive is not found.

2.1.2 Affricates and Fricatives

Garo has a set of two affricates / č, j/ and Rabha has only one affricate /č/ whereas Bodo does not have affricates. Bodo and Rabha have two alveolar fricative /s/ and /z/. In Bodo and Rabha /j/ is not a phoneme. All the languages have /h/ fricative.

2.1.3 Nasals

Blankenship et al. (1993) mention that both voiced and voiceless palatal nasals are present in Khonoma, Angami but is not attested in the Bodo, Garo and Rabha languages. All the three languages have two nasals /m/ and /n/. One is bilabial voiced nasal /m/ and another one is alveolar voiced nasal /n/. Both nasals can occur in medial and final positions in all the three languages.

2.1.4 Trill and Lateral

All the three (Bodo, Garo and Rabha) languages have a trill /r/ and a lateral /l/. In all the three languages these can occur in all the three positions i.e. initial, medial and final.

2.1.5 Semi-Vowels

Language in India www.languageinindia.com ISSN 1930-2940 14:6 June 2014

Musuka Bala Brahma, Ph.D. Scholar

A Comparative Analysis of the Phonological Features of Bodo, Garo and Rabha

Bodo and Rabha have one bilabial /w/ and one palatal /y/ which is a voiced semi-vowel whereas Garo has only one bilabial voiced semi vowel /w/. Bodo and Rabha semi-vowel cannot occur in initial position but Garo semivowel occurs in initial, medial and final positions.

3. Consonant Clusters

Indo-Aryan languages do not show any sign of initial consonant clusters. But TB languages do have initial consonant clusters but in the languages stated consonant clusters consist of up to two consonants. Bodo, Garo and Rabha languages also have initial and medial consonant clusters and all consonant clusters are made up of two consonants. In most of the cases, the liquids (/l/ & /r/) are the only possible second member of the cluster in Tibeto-Burman languages. In Bodo /n/ also becomes a second member with the first member of the cluster /s/. In Garo the possible second members are /r/, /l/, /n/, /p/, /t/, /k/. In Rabha second members are /r/, /l/, /t/ and /t^h/. In the following the initial and medial consonant clusters of Bodo, Garo and Rabha are shown along with the chart:

Bodo Initial Consonant Clusters

		Second member		
		r	L	n
= First member	p ^h	p ^h r	p ^h l	-
	B	br	Bl	-
	t ^h	t ^h r	t ^h l	-
	D	dr	Dl	-
	k ^h	k ^h r	k ^h l	-
	G	gr	Sl	-
	S	sr	sl	sn
	Z	zr	zl	-

Bodo Medial Consonant Clusters

		Second member		
		r	l	n
= First member	p ^h	p ^h r	p ^h l	-
	b	br	bl	-
	t ^h	t ^h r	t ^h l	-
	d	dr	dl	-
	k ^h	k ^h r	k ^h l	-
	g	gr	gl	-
	s	sr	sl	sn
		zr	zl	-

Garo Initial Consonant Clusters

		Second member					
		r	l	N	t	k	p
First member	P	Pr	-	-	-	-	-
	b	br	-	-	-	-	-
	t	tr	-	-	-	-	-
	d	dr	-	-	-	-	-
	k	kr	-	Kn	-	-	-
	g	gr	-	Gn	-	-	-
	s	sr	sl	Sn	st	sk	sp
	č	čr	-	-	-	-	-
	j	jr	-	-	-	-	-
	m	mr	-	-	-	-	-

Garo Middle Consonant Clusters

		Second member					
		r	l	N	T	k	P
First member	P	Pr	Pl	-	-	-	-
	b	br	bl	-	-	-	-
	t	tr	-	-	-	-	-
	d	dr	-	-	-	-	-
	k	kr	-	kn	-	-	-
	g	gr	gn	-	-	-	-
	s	sr	sl	sn	st	sk	sp
	č	čr	-	-	-	-	-
	j	jr	-	-	-	-	-
	m	mr	-	-	-	-	-

Rabha Initial Consonant Clusters

		Second member		
		r	l	t ^h
First member	p ^h	p ^h r	-	-
	t ^h	t ^h r	-	-
	k ^h	k ^h r	-	-
	p	pr	pl	-
	b	br	-	-
	t	tr	-	-
	d	dr	-	-
	k	kr	-	-

	g	gr	-	-	Rabha Middle Consonant Clusters
	s	sr	-	st ^h	
	č	čr	-	-	
	z	zr	-	-	
	m	mr	-	-	

		Second member			
		r	l	t	t ^h
First member	p ^h	p ^h r	p ^h l	-	-
	t ^h	t ^h r	-	-	-
	k ^h	k ^h r	k ^h l	-	-
	p	Pr	pl	-	-
	b	br	bl	-	-
	t	tr	tl	-	-
	d	dr	dl	-	-
	k	kr	kl	-	-
	g	gr	gl	-	-
	s	sr	sl	st	st ^h
	č	č r	-	-	-
	z	zr	zl	-	-
m	mr	-	-	-	

From the above chart the possible clusters formed are:

Initial Clusters and Medial Clusters

Bodo	Garo	Rabha
1.aspirated stop+liquid	1.unaspirated stop+liquid	1. aspirated stop+liquid
2.stop+liquid	2.stop+liquid	2.stop+liquid
	3.stop+stop	
3.fricative+liquid		

	3.stop+nasal	3.stop+nasal
4.fricative+nasal	4.fricative+liquid	4.fricative+liquid
	5.fricative+nasal	5.fricative+nasal
	6.fricative+stop	6.fricative+aspirated stop
	7.nasal+liquid	7.fricative+stop
		8.nasal+liquid

3.1 Vocalic Feature

All languages have six distinctive vowels and all the vowels are voiced. In all the three languages vocalic phonemes are divided according to the position of tongue, lip rounding and height of the tongue. Following are the vocalic phonemes of the three languages:

Bodo Vowels

	Front	Central	Back
High	i		ɯ u
Mid	e		o
Low		a	

Garó Vowels

	Front	Central	Back
High	i		ɯ u
Mid	e		o
Low		A	

Rabha Vowels

	Front	Central	Back
High	i		ɯ u
Mid	e		o
Low		A	

3.1.2 Front Vowels

All the three languages have two types of front vowels – (1) high front unrounded vowel /i/ and (2) high mid unrounded vowel /e/ .

Both the vowels can occur in initial, medial and final positions of the word. In all the three languages the occurrences of /e/ in initial position is less frequent than the medial and final positions.

3.1.3 Central Vowels

All the three languages have only one central vowel. It is a low central unrounded vowel /a/. In all the three languages it occurs in all the three positions i.e. initial, medial and final.

3.1.4 Back vowels

All the three languages have two back vowels – (1) rounded back and (2) unrounded back vowels.

- (1) Rounded vowels also have two types one is – a high back rounded vowel /u/ and a mid back rounded vowel /o/.

Both the vowels can occur in all the three positions of words i.e. initial, medial and final.

- (2) unrounded vowel is a high back unrounded vowel /ɯ/. It occurs in all the three positions of words in Bodo and Rabha languages but in Garo language it occurs in medial positions only.

3.1.5 Diphthongs

Language in India www.languageinindia.com ISSN 1930-2940 14:6 June 2014

Musuka Bala Brahma, Ph.D. Scholar

A Comparative Analysis of the Phonological Features of Bodo, Garo and Rabha

All the three languages have diphthongs. Bodo and Rabha have a greater number of diphthongs than Garo. Bodo has eight diphthongs and Rabha has seven whereas Garo has only four and among Garo diphthongs are rare. Burling in the “Grammar of Garo (1961:1) has stated that” the Garo vowels do not show any sign of diphthongs. Later he noted that some morphophonemic sequences hardly sound bysyllabic (Burling 1981:71) and admitted that Garo has diphthongs (/ai,ao,oi/).In the following diphthongs of Bodo, Garo and Rabha are shown:

Bodo	Garo	Rabha
/ai,ao,eo,oi,iu,ui,uui,uuu/	/ai,ao,oi,ui/	/ai,ao,eo,eu,oi,ui,uui/

The diphthong /uuu/ is present only in Bodo. Whereas diphthong /uui/ is present only in Bodo and Rabha but Garo does not have this diphthong.

4. Tone and Glottal Stop

Another most important phonological feature of the Tibeto-Burman languages are tone and glottal stop. Tone is not found in the other language families spoken in North East India, except the Tibeto-Burman language family. All TB languages of North East have tone except Garo. In the absence of Tone Garo language has glottal stop. The tone system of Tibeto Burman groups range from a two tone (Tiwa) system to a four tone system (Mao). Most of the languages in the Bodic group have two tones (Joseph & Burling 2006), majority of the Kuki-Chin languages have three tones but some of the Naga languages like Mao has 4 tones. Bodo and Rabha have three tones. Benedict (1972b) claims that a two-tone system may be reconstructed. Garo, which belongs to the Bodo-Garo group of Tibeto-Burman shows the existence of the glottal stop and functions as the substitution for tone in contrast to the cognate words in the other three Bodo-Garo (Tiwa, Boro and Rabha) languages. Joseph & Burling (2006) claims that the contrast between the presence and absence of a glottal stop in Garo is cognate to the contrast between high and non-high tones that is found in Bodo and Rabha languages.

5. Syllable

All the three languages have monosyllabic and polysyllabic (more than one syllable) words. They are described according to the sequences of phonemes in segments of vowels (v) and consonant (c). In the following the syllable structure of all the three languages can be shown by illustrating with examples.

1.V	Bodo: /a/	‘case marker’
	Garro: /a/	‘case marker’
	Rabha: /a/	‘case marker’
2.VV	Bodo: /eo/	‘to fry’
	Garro: /ia/	‘this, it’
	Rabha: /ua/	‘that’
3.CV	Bodo: /ba/	‘or’
	Garro: /ba/	‘or’
	Rabha: /ba/	‘or’
4.VCV	Bodo: /aru/	‘and’
	Garro: /aro/	‘and’
	Rabha: /aro/	‘and’
5. CVV	Bodo: /rua/	‘axe’
	Garro: /soa/	‘rotten’
	Rabha: /kia/	‘to fall down’
6. CCV	Bodo: /sni/	‘seven’
	Garro: /sni/	‘seven’
	Rabha: /pri/	‘mature’
7. CVCV	Bodo: /guusu/	‘mind’

	Garó: /joka/	‘to escape’
	Rabha: noko/	‘to escape’
8. CVCCV	Bodo: /mansí/	‘man’
	Garó: /mande/	‘man’
	Rabha: /p ^h uŋgi/	‘morning’

Closed Syllable

1.VC	Bodo: /un/	‘to sharpen’
	Garó: /ok/	‘stomack’
	Rabha: /ap/	‘mirror’
2.CVC	Bodo: /bar/	‘flower’
	Garó: /bal/	‘flower’
	Rabha: /par/	‘flower’
3.CCVC	Bodo: /sraŋ/	‘clear’
	Garó: /brak/	‘ladle’
	Rabha: brek/	‘a port made of bottle gourd’
4 . VCCVC	Bodo: /anzad/	‘exam’
	Garó: /aʔmeŋ/	‘wasp’
	Rabha: /enček /	‘this much’
5.VCCVCCVC	Bodo: /anzadpram/	‘half exam not fully’
	Garó: /aʔdaŋgram/	‘blank field’
	Rabha : /apbiŋbrap/	‘to twinkle mirror’

6. Conclusion

Although NE India consists only 7.9 per cent of the country’s total geographical area, it is home to more than 75% of languages belonging to the four language families, viz. Indo-Aryan, Tibeto-Burman, Austro-Asiatic and Dravidian (small number of Tamil speakers in Moreh district of Manipur). Among them Bodo, Garó and Rabha belong to the Bodo group which comes under the Tibeto-Burman group of languages. In this article an attempt has been made to bring out

some of the phonological features which are unique to Bodo group and also are sometimes shared by all the language families.

References

Basumatary, Phukan,(2005): An Introduction to the Boro Language. Mittal Publication, New Delhi, India.

Benedict, P. K. (1972b). The Sino-Tibetan tonal system". In Thomas, & Bernot (Eds.),

Blankenship, B., Ladefoged, P., Bhaskararao, P., & Nichumeno, C. (1992). Phonetic structures of Khonoma Angami. *Linguistics of the Tibeto-Burman Area*, 16(2), 69-88.

Boro, Madhu Ram, (2004):Assamese and Boro:A Comparative and Contrastive Study.N.L.Publication,Guwahati.

Bradley, D. (1997). Tibeto-Burman languages and classification. In D. Bradley (Ed.), *Papers in Southeast Asian Linguistics* No. 14: Tibeto-Burman Languages of the Himalayas, 14, 1-72. Pacific Linguistics, the Australian National University.

Census of India:
http://censusindia.gov.in/Census_Data_2001/Census_data_finder/A_Series/Total_population.Htm.

Holbrook,L.M.(Second Ed.2010): Ku'rondik:A;chik into English Dictionary. The Garo(A'chik) Literature Society:Tura, Meghalaya.

Jose, U.V. (2000): Rabha-English Dictionary: Khurangnal. Guwahati Assam:Don-Bosco Publications.

Joseph, U.V. & Burling, R. (2006). The comparative phonology of the Boro Garo languages. Mysore: Central Institute of Indian Languages.

Musuka Bala Brahma, Ph.D. Scholar
Department of Linguistics
Assam University
Silchar
Assam
India
bmusuka1985@gmail.com

Language in India www.languageinindia.com ISSN 1930-2940 14:6 June 2014

Musuka Bala Brahma, Ph.D. Scholar

A Comparative Analysis of the Phonological Features of Bodo, Garo and Rabha