

## Phonological System of Bangla Rahri Upobhasa (Dialect) Found in and around Kolkata Area

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### Abstract:

Rahri, a dialect of Bangla language, is considered as the standard dialect of Bangla, in the same way as we consider Khariboli for Hindi. Rahri came into literary use since the early of 20<sup>th</sup> century, and by the beginning of 21<sup>st</sup> century it had become the dominant literary language as well as the standard colloquial form of speech among the educated Bengali. Although there is a good amount of similarity between the written texts and spoken, to a very considerable degree, the spoken form of Rahri variety is quite different from the standard Bangla language. In view of that, this study, as part of a well comprehensive study, aims to establish the Consonantal and Vocalic sound system of Rahri Upobhasa.

**Keywords:** *Rahri, Phonemic Inventory, Consonantal, Vocalic, Gemination*

### Introduction:

Suniti Kumar Chatterji(1926) divided the Bangla language into four dialects: 'Rarh', 'Bongo', 'Kamrup' and 'Borendro'; later on Sukumar Sen(1939) added an extra one and divided the Bangla language into five: 'Rahri', 'Bongali', 'Kamrupi', 'Borendri' and 'Jharkhondi'. Bangla is spoken in Bangladesh and in West Bengal by 250 million speakers. West Bengal and East Bengal (Bangladesh) dialects are mutually intelligible. However, there are some dialects, for example, Bongali and Kamrupi of Bangladesh, which would not be understood by the speakers of the Rahri dialect in West Bengal. During the standardization of Bangla language in the 18<sup>th</sup> and 19<sup>th</sup> century Rahri was accepted as the standard colloquial dialect of Bangla language, generally spoken in large part of South-West part of West Bengal. This paper presents the phonemic inventory of the Bangla dialect spoken in Kolkata and its surroundings.

### **Location of the Dialect:**

Rahri is spoken in the districts of North Bengal including Pabna, Bogra, Rajshahi in Bangladesh. In West Bengal the cultural elite were mostly from the regions of Kolkata, Hooghly, Howrah, North 24 Parganas and Nadia speak the standard colloquial Bangla language, termed as Pramita and it is also derived from Rahri.

### **Methods:**

Sound recordings of native speakers of Rahri Upobhasa were made including lists of words and sentences. Data was recorded by a sound recording program and then transcribed in ELAN.

#### **2.1.1. Consonantal Phonemic Inventory:**

Rahri dialect has twenty nine oral and nasal consonants of different places and manners of articulation. With regard to place of articulation, Rahri consonants can be classified into: bilabial, alveolar, post-alveolar, retroflex, palatal, velar and glottal. For manner of articulation, Rahri consonants can be classified into plosives, nasals, falp or tap, fricatives, approximants, and lateral approximants. The following table represents the consonantal inventory of Rahri.

#### **Table 1: Consonantal Inventory of Rahri**

	Bilabial	Dental	Alveolar	Retroflex	Palatal	Velar	Post-Velar
Plosives							
Voiceless							
Unaspirated	p	t̪		ʈ	c	k	
Aspirated	p <sup>h</sup>	t̪ <sup>h</sup>		ʈ <sup>h</sup>	c <sup>h</sup>	k <sup>h</sup>	
Voiced							
Unaspirated	b	d̪		ɖ	ʃ	g	
Aspirated	b <sup>h</sup>	d̪ <sup>h</sup>		ɖ <sup>h</sup>	ʃ <sup>h</sup>	g <sup>h</sup>	
Nasal	m		n			ŋ	
Flap or Tap			r	ɽ			
Fricative/Spirants			s		f		h
Lateral			l				

### 2.2.1. Manner of Articulation:

- (I) **Plosives:** Rahri has eighteen plosives in total, eight of which manifest contrast in terms of aspiration. The tongue is positioned in four distinct areas when articulating Rahri plosives; these are: bilabial, labiodental, alveolar, post-alveolar, retroflex, palatal, velar, and glottal. The following list shows Rahri plosives with illustrative examples.

No.	Sounds	Linguistic Description	Word list	Gloss
1.	/p/	Voiceless Unaspirated Bilabial Stop	/pa:k <sup>hi</sup> /	bird
2.	/p <sup>h</sup> /	Voiceless Aspirated Bilabial Stop	/p <sup>h</sup> ul/	flower
3.	/b/	Voiced Unaspirated Bilabial Stop	/bæ <sup>t</sup> h <sup>a</sup> /	pain
4.	/b <sup>h</sup> /	Voiced Aspirated Bilabial Stop	/b <sup>h</sup> a:ri/	weighty
5.	/t̪/	Voiceless Unaspirated Dental Stop	/t̪ama/	copper
6.	/t̪ <sup>h</sup> /	Voiceless Aspirated Dental Stop	/t̪ <sup>h</sup> a:la/	plate
7.	/d̪/	Voiced Unaspirated Dental Stop	/d̪ud <sup>h</sup> /	milk
8.	/d̪ <sup>h</sup> /	Voiced Aspirated Dental Stop	/d̪ <sup>h</sup> an/	paddy
9.	/t/	Voiceless Unaspirated Alveolar Stop	/ta:ka/	money
10.	/t <sup>h</sup> /	Voiceless Aspirated Alveolar Stop	/t <sup>h</sup> ot/	lip
11.	/d/	Voiced Unaspirated Alveolar Stop	/da:l/	pulse
12.	/d <sup>h</sup> /	Voiced Aspirated Alveolar Stop	/d <sup>h</sup> a:k/	drum
13.	/c/	Voiceless Unaspirated Palatal Stop	/cosma/	spectacles
14.	/c <sup>h</sup> /	Voiceless Aspirated Palatal Stop	/c <sup>h</sup> otô/	small
15.	/k/	Voiceless Unaspirated Velar Stop	/kib <sup>h</sup> abe/	how
16.	/k <sup>h</sup> /	Voiceless Aspirated Velar Stop	/k <sup>h</sup> a:bar/	food
17.	/g/	Voiced Unaspirated Velar Stop	/ga:li/	abuse
18.	/g <sup>h</sup> /	Voiced Aspirated Velar Stop	/g <sup>h</sup> o:ṛa:/	horse

(II) **Nasal:** Rahri has three nasal consonants; a bilabial nasal, alveolar nasal and a velar nasal as shown in the following examples.

No.	Sounds	Linguistic Description	Word list	Gloss
1.	/m/	Voiced Bilabial Nasal	/mon/	Mind
2.	/n/	Voiced Alveolar Nasal	/nodi/	River

3.	/ŋ/	Voiced velar Nasal	/siŋhō/	Lion
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(III) **Flap or Tap:** There are two Flap or Tap in Rahri, both are voiced, one alveolar and one retroflex as shown in the following examples.

No.	Sounds	Linguistic Description	Word list	Gloss
1.	/ɾ/	Voiced alveolar tap	/ra:ɾ/	night
2.	/ɽ/	Voiced Retroflex tap	/paɦaɽ/	hill

(IV) **Fricative:** Rahri dialect has three fricatives and all of them are voiceless. The following list exemplifies each of them.

No.	Sounds	Linguistic Description	Word list	Gloss
1.	/s/	Voiceless alveolar fricative	/sa:ɽ/	seven
2.	/ʃ/	Voiceless palatal fricative	/ʃiʃu/	chid
3.	/h/	Voiceless post-velar fricative	/ɦaɽ/	hand

(V) **Lateral:** Rahri has one lateral sound /l/ as illustrated below:

No.	Sounds	Linguistic Description	Word list	Gloss
1.	/l/	Voiced alveolar lateral	/lal/	red

### 2.2.2. Sound Occurrence of Consonants in Rahri: Initial, Medial and Final

No.	Sound	Initial	Medial	Final
1.	/p/	/pak <sup>hi</sup> /	/kapoɾ/	/sap/
2.	/p <sup>h</sup> /	/p <sup>h</sup> ul/	/ɽop <sup>h</sup> aɽ/	/borop <sup>h</sup> /

3.	/b/	/bæṭṭhə/	/lomba/	/sob/
4.	/b <sup>h</sup> /	/b <sup>h</sup> ari/	/bib <sup>h</sup> okto/	/zib <sup>h</sup> /
5.	/ṭ/	/ṭama/	/noṭun/	/ra:ṭ/
6.	/ṭ <sup>h</sup> /	/ṭ <sup>h</sup> ala/	/maṭṭ <sup>h</sup> a/	/roṭṭ <sup>h</sup> /
7.	/ḍ/	/ḍud <sup>h</sup> /	/kaḍa/	/holuḍ/
8.	/ḍ <sup>h</sup> /	/ḍ <sup>h</sup> ən/	/gaḍḍ <sup>h</sup> a/	/oḍuḍ <sup>h</sup> /
9.	/t/	/ta:ka/	/bristi/	/pet/
10.	/t <sup>h</sup> /	/t <sup>h</sup> ot/	/cit <sup>h</sup> i/	/ka:t <sup>h</sup> /
11.	/d/	/dal/	/adda/	--
12.	/d <sup>h</sup> /	/d <sup>h</sup> ak/	/bômnadd <sup>h</sup> o/	--
13.	/c/	/cosma/	/ũcu/	/kac/
14.	/c <sup>h</sup> /	/c <sup>h</sup> oto/	/pic <sup>h</sup> one/	/mac <sup>h</sup> /
15.	/k/	/kib <sup>h</sup> abe/	/taka/	/badik/
16.	/k <sup>h</sup> /	/k <sup>h</sup> abar/	/kok <sup>h</sup> on/	/ak <sup>h</sup> /
17.	/g/	/gali/	/sugond <sup>h</sup> o/	/rag/
18.	/g <sup>h</sup> /	/g <sup>h</sup> oṭa/	/ag <sup>h</sup> aṭ/	/meg <sup>h</sup> /
19.	/m/	/mas/	/kamṛanoḍ/	/gorom/
20.	/n/	/nak/	/zana/	/agun/
21.	/ŋ/	×	/siŋho/	/eboŋ/
22.	/r/	/ra:ṭ/	/bristi/	/ṭomər/
23.	/ṛ/	×	/kamṛano/	/pahaṛ/
24.	/s/	/sa:ṭ/	/bristi/	/toktobos/
25.	/j/	/joṛ/	/doṛja/	/sobuṛ/
26.	/j <sup>h</sup> /	/j <sup>h</sup> op/	/boj <sup>h</sup> apora/	/sāj <sup>h</sup> /
27.	/h/	/haṭ/	/loha/	/bah/

28.	/ʃ/	/ʃiʃu/	/kaʃpʰul/	/bikaʃ/
29.	/l/	/lebu/	/paʃla/	/cul/

### 2.3.1. Minimal Pairs in Consonants:

Aspiration and Voicing are two distinctive features in Bengali consonants. We will look for the minimal pairs representing consonantal contrastive segments below:

- **Bilabial Plosive:**

Symbol	Sound
p	Voiceless, Unaspirated Bilabial
p <sup>h</sup>	Voiceless, Aspirated Bilabial
b	Voiced, Unaspirated Bilabial
b <sup>h</sup>	Voiced, Aspirated Bilabial

**Minimal Pairs:** p and p<sup>h</sup>: /pat/ (jute) and /p<sup>h</sup>at/ (fracture)

b and b<sup>h</sup>: /basa/ (abode) and /b<sup>h</sup>asa/ (float)

- **Palatal Plosive:**

Symbol	Sound
c	Voiceless, Unaspirated Palatal
c <sup>h</sup>	Voiceless, Aspirated Palatal
ɟ	Voiced, Unaspirated Palatal
ɟ <sup>h</sup>	Voiced, Aspirated Palatal

**Minimal Pairs:** c and c<sup>h</sup>: cal and c<sup>h</sup>hal,  
ɟ and ɟ<sup>h</sup>: jal and j<sup>h</sup>al

• **Velar Plosive:**

Symbol	Sound
k	voiceless, unaspirated velar
k <sup>h</sup>	voiceless, aspirated velar
g	voiced, unaspirated velar
g <sup>h</sup>	voiced, aspirated velar

**Minimal Pairs:** k and k<sup>h</sup>: kal and k<sup>h</sup>al, kobôr and k<sup>h</sup>obôr  
g and g<sup>h</sup>: gas and g<sup>h</sup>as, ga and g<sup>h</sup>a

**2.4. Consonant Clusters:**

Consonant clusters occur either at the initial or at the middle position of words in Rahri dialect. They never occur at the final position, whenever words end with consonant cluster will automatically followed by the inherent vowel ô.

**2.4.1. Initial clusters**

No.	Clusters	Words	Meaning
1.	/ɖr/	/ɖrirô/	firm
2.	/t̪r/	/t̪rib <sup>h</sup> uj/	triangle
3.	/kr/	/kriɟok/	farmer
4.	/ʃr/	/ʃroɖɖ <sup>h</sup> a/	reverence
5.	/ml/	/mlan/	pale



6.	/gr/	/grôṅṅ <sup>hi</sup> /	glands
7.	/st̥/	/st̥or/	layer

#### 2.4.2. Medial Clusters

No.	Clusters	Words	Meaning
8.	/ntr̥/	/ṅontr̥ô/	machine
9.	/nd̥/	/ḍonḍô/	conflict
10.	/nt̥/	/onṭor/	heart
11.	/nd̥ <sup>h</sup> /	/onḍ <sup>h</sup> ô/	blind
12.	/rk <sup>h</sup> /	/murk <sup>h</sup> ô/	fool
13.	/rd̥/	/sorḍi/	cold
14.	/rt̥/	/gorṭô/	hole

Final consonants are very much rare in Rahri dialect of Bengali. In some other dialects, for example, in some Eastern dialects, final consonant clusters including nasal and its counterpart oral stop occur frequently. The word /cand̥/ of Eastern dialect becomes /cãḍ/ in Rahri with nasalized vowel in the place of final cluster.

#### 3.1. Vocalic Phonemic Inventory:

The Rahri vocalic system has seven pure vowel phonemes. The system can be represented as follows.

**Table 2: Vocalic Inventory of Rahri:**

Vowels	Front	Central	Back
High	i		u
High-Mid	e		o
Low-Mid	æ	ɔ	
Low		a	

The following are Rahri lexical items containing Rahri vowels.

No.	Sound	Linguistic Description	Word	Gloss
1.	/i/	high front unrounded vowel	/bristi/	Rain
2.	/e/	mid front unrounded vowel	/ekti/	One
3.	/æ/	low front unrounded vowel	/bæṭṭha/	Pain
4.	/a/	low central unrounded vowel	/ḍas/	Slave
5.	/ɔ/	Low-mid central rounded vowel	/ḍɔʃ/	Ten
6.	/o/	mid back rounded vowel	/ḍoʃ/	Fault
7.	/u/	high back rounded vowel	/buri/	old woman

### Nasalization:

Each of the above oral vowels has its corresponding nasalized form, /i/-/ĩ/, /e/-/ẽ/, /æ/-/æ̃/, /a/-/ã/, /ɔ/-/õ/, /o/-/õ/ and /u/-/ũ/. In Bangla, nasalization is a distinctive feature. All vowels can be nasalized and there are many minimal pairs can be found. /a/ is considered to be the most common nasalized vowel found in Bangla.

Here are some examples for minimal pairs based on nasalization:

No.	Sound	Word	Meaning	Word	Meaning
1.	/i/-/ĩ/	/c <sup>h</sup> it̪/	printed cloth	/c <sup>h</sup> ĩt̪/	Eccentric
2.	/e/-/ẽ/	geo	singer	gẽo	Rustic
3.	/æ/-/ǣ/	/t̪ækô/	bald headed	/ t̪ǣkô/	Corner of a Sari (a kind of dress for women)
4.	/a/-/ã/	kaḍa	clay	kãḍa	Weep
5.	/ɔ/-/õ/	boti	pill	bõti	Instrument for cutting fish
6.	o/-/õ/	p <sup>h</sup> ota	bloom	p <sup>h</sup> õta	Droplets
7.	/u/-/ũ/	kuri	twenty	kũri	Bud

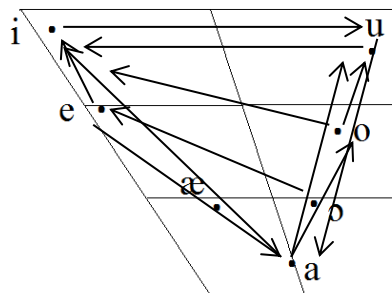
(Kostic & Das, 1972, p. 34)

### Vowel Length:

Although all the vowels of Bangla can be short or long, vowel length is not considered to be phonemic in Bangla. (Kostic & Das: 1972)

For example, /ra:t̪/ and /rat̪/ both convey the same meaning i.e. night irrespective of different vowel length.

### Diphthongs:



The exact number of Bangla Rahri diphthongs is still a matter of debate. However, in our research we have find 12 but obviously this is not exhaustive list. The vowels in Bangla

diphthongs are usually of equal length, so that each individual member of the pair is pronounced with same audibility.

	<b>Glides</b>	<b>Diphthongs</b>	<b>Word</b>	<b>Meaning</b>
1.	Towards front-close	/ai/	/ai/	come
2.	Towards central-open	/ea/	/k <sup>h</sup> ea/	boat
3.	Towards central-open	/ua/	jua	gamble
4.	Towards front-close	/ɔi/	bɔi	book
5.	Towards back-close	/ɔu/	bɔu	bride
6.	Towards back-close	/au/	k <sup>h</sup> au	eat
7.	Towards back-middle	/io/	/ɖio/	give
8.	Towards back-middle	/ao/	/ʃao/	go
9.	Towards back-close	/iu/	/ʃiuli/	a kind of flower
10.	Towards front-close	/oi	/oi/	that
11.	Towards front-close	/ei/	/nei/	hasn't
12.	Towards front-close	/ui/	/sui/	needle

### Syllable Structure:

A vowel can form a syllable of its own but consonants need vowels to form a syllable.

Single syllable can have the following sound sequences:

<b>No.</b>	<b>Word</b>	<b>Meaning</b>	<b>Syllabic Structure</b>
1.	e	this	V
2.	æk	one	VC

3.	ca	tea	CV
4.	kaɽ	work	CVC
5.	g <sup>h</sup> ran	smell	CCVC
6.	stri	wife	CCCV

Two syllable words can have the following sound sequences:

No.	Word	Meaning	Syllabic Structure
7.	/aɡun/	fire	V-CVC
8.	/ɟama/	shirt	CV-CV
9.	/nɔrom/	soft	CV-CVC
10.	/ɟoŋɡol/	jungle	CVC-CVC

There are some longer compound words found in Rahaṛi which have more than four or five syllables. Here are some examples of such words:

No.	Word	Meaning	Syllabic Structure
11.	/apaɽomostɔk/	cap-a-pie	VCV-CV-CVC-CVC
12.	/kiŋkoɽobbôbimur/	deflector	CVC-CVC-CVC-CV-CV-CVC
13.	/ɔporiborɽonioɽa/	constancy	V-CV-CV-CVC-CV-CV-V-CV
14.	/samɔŋossopurnô/	compatible	CV-CVC-CVC-CV-CVC-CV

### Discussion and Conclusion:

The major findings of the study can be summed up in the following ways. The Bangla Rahaṛi phonemic inventory is made up of thirty six speech sounds, twenty nine consonantal and seven

vocalic. Out of the twenty nine consonants eighteen are plosives, three nasals, two flaps, three fricatives and one lateral. With regard to place of articulation, there are five bilabials, four dentals, four alveolar, six retroflexes, five palatals, five velars and one post-velar. Final consonant clusters are absent in the Bangla Rahri Upobhasa. It is expected that this well comprehensive work would help to future researcher in further research in the particular dialect.

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### Reference

- Chaterji, Suniti Kumar (1926), The Origin and Development of Bengali Language, ISBN-10: 8171677843
- Halder, Gopal (2000), Languages of India, National Book Trust, India, ISBN 81-237-2936-7
- John, Beames(1891), Grammar of the Bengali Language Literary & Colloquial, Oxford Oriental Series, Oxford, Clarendon Press
- Khan, Sameer ud Dowla (2010), Bengali (Bangladeshi Standard), Journal of the International Phonetic Association, 40, pp 221-225 doi:10.1017/S0025100310000071
- Kostic, Djordje and Das, Rhea Stagner(1972). A Short Outline of Bengali Phonetics. ASIN: B007T024L2 Calcutta: Statistical Pub. Society.
- Sen, Sukumar(1939) Bangla Sahityer Itihas - Vol. 5 (Bengali), Ananda Publishers, ISBN-10: 8172159501
- Thompson, Hanne-Ruth (2012), Bengali, London Oriental and African Language Library, ISSN 1382-3485; V. 18) John Benjamins Publishing Company Amsterdam / Philadelphia

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