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Phonology of Uchai

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Abstract

Uchai is a small ethnic group of Tripura speaking a dialectical variant of Kokborok, the language of the Tippera. The paper discusses the major features of Uchai phonology. The phonetic inventory of Uchai is discussed in the first three sections. While Section 1 and Section 2 present Uchai vowels and diphthongs respectively, Section 3 deals with Uchai consonants. In each of these Sections, the phonemic inventory of Uchai is identified and a list of contrastive minimal or near minimal pairs are offered. Moreover, each of the phonemes is described while discussing the distributional pattern in detail. In Section 4, the syllable structure of Uchai, its syllabic pattern, division and syllabification is dealt with. Section 5 discusses the consonant clusters and sequences and traces out the various positional occurrences. Section 6 deals with the supra-segmental phonemes, i.e., different tones perceptible in Uchai. Finally, Section 7, while concluding the paper focuses on the salient phonological and distributional features of Uchai.

[**Keywords:** Uchai, phoneme, contrasting pairs, distribution, syllable, tone]

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The major tribal community of Tripura is variously called Tipra, Twipra and Tippera (Tipperah) with reference to the region wherein they have been settled for several centuries. The community speaks Kokborok. Kokborok, one of the Baric languages, has a number of dialects and one such dialectical variant is Uchai. The Uchai, spelt ‘Osuie’ by Thomas H. Lewin, (1869), is a small ethnic group living chiefly in the southern parts of Tripura and has a population of only 2,015 souls in the Census of 2001. Ethnically, however, Uchai is closer to Bru than to Tippera; their tradition makes Bru and Uchai brothers. Linguistically, Uchai belongs to the Bodo group of the Tibeto-Burman sub-family of Sino-Tibetan languages; they now speak a dialectical variant of Kokborok, the language of the Tippera.

The phonemic inventory of Uchai consists of thirty four phonemes – six vowels, five diphthongs, twenty one consonants and two tones – which are discussed in the following sections.

1. Vowels

Uchai distinguishes six vowel phonemes showing contrast in the tongue position – front, central and back; tongue height – high or close, high-mid or half close, mid, low-mid or half open and low or open. Back vowels of Uchai are rounded while others are unrounded. Following are the vowel phonemes in Uchai:

i	u
e	o
ə	
a	

All the vowels in Uchai are voiced and in addition to this, the six vowels mentioned above are oral vowels. However, its counterparts are also found in the form of nasalized vowels except the vowel /ə/. Apart from this, vowel length is not phonemic in Uchai.

1.1. Description

The following is the list of vowel phonemes and allophones of Uchai along with its description.

Phoneme	Allophone	Description
/i/	[i]	high front unrounded
/e/	[e]	high-mid front unrounded
/ə/	[ə]	mid central unrounded
/a/	[a]	low central unrounded
/u/	[u]	high back rounded
/o/	[o]	high-mid back rounded

1.2 Contrasting Pairs

Uchai vowel sounds are established on the basis of the following minimal pairs.

i/e	:	/siŋ/	‘sword’	/seŋ/	‘sparse’
i/ə	:	/ri/	‘cloth’	/rə/	‘here’
i/a	:	/hi/	‘wife’	/ha/	‘soil’
i/u	:	/si/	‘to know’	/su/	‘to measure’
i/o	:	/hi/	‘wife’	/ho/	‘fire’
e/ə	:	/kephe/	‘flat’	/kəphe/	‘tight’
e/a	:	/bera/	‘to keep’	/bara/	‘excess’
e/u	:	/kəphe/	‘tight’	/kəphu/	‘white’
e/o	:	/čre/	‘flat’	/čro/	‘a pair’
ə/a	:	/kəsa/	‘pain’	/kasa/	‘to climb up’
ə/u	:	/məku/	‘skin’	/muku/	‘hide’
ə/o	:	/kəto/	‘fat’	/koto/	‘big’
a/u	:	/ča/	‘eat’	/ču/	‘grandfather’
a/o	:	/baha/	‘meat’	/boha/	‘year’

u/o : /□u/ ‘wash’ /□o/ ‘pull’

1.3 Distributional Pattern

The distributional pattern of Uchai vowel phonemes is clearly distinguished – while the vowels /i/, /e/, /a/, /u/ and /o/ occur in all positions, the vowel /ə/ occurs only in word-medial and word-final positions. The following examples show the occurrence of the six vowels in various positions:

Phoneme	Word-Initial	Word-Medial	Word-Final
/i/	/imaŋ/ ‘dream’	/hin/ ‘walk’	/hati/ ‘market’
/e/	/endri/ ‘July’	/seŋ/ ‘sparse’	/kle/ ‘slow’
/a/	/abo/ ‘breast’	/ʃak/ ‘arm’	/wa/ ‘bamboo’
/ə/	- - -	/kəčũ/ ‘bright’	/rə/ ‘here’
/u/	/uklau/ ‘back’	/ruŋ/ ‘boat’	/khu/ ‘cotton’
/o/	/oŋ/ ‘to happen’	/goŋ/ ‘bear’	/thamso/ ‘chilli’

1.4 Allophonic Distribution

The allophonic distribution of Uchai vowel phonemes is discussed in detail as under:

- (i) The phoneme /e/ has two allophones – [ɛ] and [e].

- i. The low-mid front unrounded vowel [ɛ] occurs in syllables that close with the voiced velar nasal /ŋ/. Hence, it is phonologically conditioned allophone, as in –

/mækɾɛŋ/	[mækɾɛŋ]	‘bone’
/hačɛŋ/	[hačɛŋ]	‘sand’

- ii. The high-mid front unrounded vowel [e] occurs elsewhere,

/mæde/	[mæde]	‘branch’
/harpek/	[harpek]	‘clay’

- (ii) The phoneme /u/ has two allophones – [ɯ] and [u].

- i. The phoneme /u/ is realised as fairly high and slightly advanced or fairly back rounded allophone [ɯ] in closed syllables when it appears before a voiced velar nasal consonant /ŋ/, as in –

/ruŋ/	[rɯŋ]	‘boat’
/hamanuŋ/	[hamanɯŋ]	‘earth’

- ii. The high back rounded vowel [u] occurs elsewhere –

/khu/	[khu]	‘cotton’
/pun/	[pun]	‘goat’

- (iii) The phoneme /o/ has two allophones – [ɯ] and [o].

- i. The low-mid back rounded vowel [ɯ] occurs either in the word-initial or word-medial position, or, in closed syllables, as in–

/osa/	[ɯsa]	‘Durga’
/khomi/	[khɯmi]	‘crocodile’
/goŋ/	[gɯŋ]	‘bear’

- ii. The high-mid back rounded vowel [o] occurs either in the word-final position or before /i/, as in –

/abo/	[abo]	‘breast’
/thamso/	[thamso]	‘chilli’
/moi/	[moi]	‘vegetable’

1.5 Nasalised Vowels

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Uchai vowels are chiefly oral vowels. However, its counterparts are found in the form of nasalized vowels except the /ə/. In a number of words, the syllables ending in nasals /m/, /n/ and /ŋ/ have a tendency of becoming nasalized, i.e., syllable-final nasal is dropped and the vowels preceding the nasals are nasalized. Few examples of nasalized vowels are provided below:

/in/	→	/ĩ/	‘yes’
/beŋ/	→	/bẽ/	‘spider’
/muŋ/	→	/mũ/	‘name’
/□om/	→	/□õ/	‘salt’
/khum/	→	/khũ/	‘flower’
/ba-han/	→	/ba-hã/	‘meat’
/ka-ham/	→	/ka-hã/	‘honest’
/khun-ju/	→	/khũ-ju/	‘ear’
/mun-dai/	→	/mũ-dai/	‘wax’
/mu-□roŋ/	→	/mu-□rõ/	‘ant’

2. Diphthongs

Uchai exhibits no contrasts between long and short vowels, but does distinguish five diphthongs. These diphthongs are attested in a handful of Uchai words in which they have the same length as a monophthongal vowel. Thus the criterion of length provides the justification for analysing these vowel forms as diphthongs. However, no triphthong is found in Uchai.

2.1 Description

Five diphthongs available in Uchai are as follows:

/ai/	as in	/pai/	‘buy’
/ui/	as in	/tui/	‘water’

/oi/	as in	/thoi/	‘blood’
/au/	as in	/kau/	‘speech’
/ou/	as in	/nou/	‘house’

In terms of the direction of tongue glide, diphthongs are either centring or closing. Of the five Uchai diphthongs, three involve glide towards [i]; they are /ai/ /ui/ and /oi/. The other two diphthongs move towards [u] – /au/ and /ou/. In Uchai, all five diphthongs are thus closing diphthongs, while there is no centring diphthong in Uchai. In terms of prominence on constituent elements, Uchai diphthongs are all falling diphthongs as the first element has a greater prominence than the second.

2.2 Contrasting Pairs

The Uchai diphthongs, five in number, can be established on the basis of the following minimal or sub-minimal pairs. The examples given below denote a contrast between the two diphthongs.

ai/ui	:	/məthai/	‘fruit’	/məthui/	‘kill’
ai/oi	:	/mai/	‘rice’	/moi/	‘vegetable’
ai/au	:	/tai/	‘god’	/tau/	‘bird’
ai/ou	:	/phai/	‘come’	/phou/	‘bury’
ui/oi	:	/tui/	‘water’	/toi/	‘egg’
ui/au	:	/tui/	‘water’	/tau/	‘bird’
oi/ou	:	/broi/	‘woman’	/brou/	‘man’
au/ou	:	/taukha/	‘crow’	/toukhõ/	‘duck’

2.3 Distributional Pattern

All the Uchai diphthongs do not occur in all the positions. The diphthongs in Uchai chiefly occur in word medial and word final position. The occurrence of the Uchai diphthongs in word initial position is, however, very restricted. Only one of them, viz., /ai/ can occur in the initial position of a word. It is to be noted that /ai/ and

/au/ occur more frequently in Uchai than the other diphthongs. The occurrences of the five diphthongs in the three positions are illustrated below:

Phoneme	Word-Initial	Word-Medial	Word-Final
/ai/	/aiču/ 'dawn'	/thaili/ 'banana'	/sai/ 'husband'
/ui/	- - -	/tuitomo/ 'flood'	/tui/ 'water'
/oi/	- - -	/moilau/ 'gourd'	/□oi/ 'dog'
/au/	- - -	/taukha/ 'crow'	/kau/ 'speech'
/ou/	- - -	/nouba/ 'sky'	/nou/ 'house'

3. Consonants

The phonemic inventory of Uchai consists of twenty one consonantal phonemes as shown in the table given below:

Place of articulation		Bilabial	Dental	Alveolar	Palatal	Velar	Glottal
Manner of articulation		vl vd	vl vd	vl vd	vl vd	vl vd	vl vd
Plosive	Unaspirated	p b	t d			k g	
	Aspirated	ph	th			kh	
Affricate					č ĵ		
Fricative			s		□		h
Nasal		m	n			ŋ	
Trill				r			

Lateral			l			
Approximant	w			y		

3.1 Description

The following is the list of Uchai consonantal phonemes and its description:

Phoneme	Description
/p/	voiceless unaspirated bilabial stop
/b/	voiced unaspirated bilabial stop
/t/	voiceless unaspirated dental stop
/d/	voiced unaspirated dental stop
/k/	voiceless unaspirated velar stop
/g/	voiced unaspirated velar stop
/ph/	voiceless aspirated bilabial stop
/th/	voiceless aspirated dental stop
/kh/	voiceless aspirated velar stop
/m/	voiced bilabial nasal
/n/	voiced dental nasal
/ɳ/	voiced velar nasal
/č/	voiceless palatal affricate
/j/	voiced palatal affricate
/s/	voiceless dental fricative
/□/	voiceless palatal fricative
/h/	voiceless glottal fricative
/r/	voiced alveolar trill
/l/	voiced alveolar lateral
/w/	voiced bilabial approximant
/y/	voiced palatal approximant

Though voiceless dental fricative /s/ and voiceless palatal fricative /ç/ can be established as two different phonemes existing in Uchai, yet in a handful of words, /s/ and /ç/ function as phonemic free variants. For instance,

/musrõ/	~	/muçrõ/	‘ant’
/sa/	~	/ça/	‘talk’
/soi/	~	/çoi/	‘dog’

When compared to standard Kokborok, the prefixal bilabial /b-/ changes to homorganic /m-/ in Uchai. Here are few examples:

/be-kreŋ/	/mə-kreŋ/	‘bone’
/bə-thai/	/mə-thai/	‘fruit’
/bi-thi/	/mə-thi/	‘medicine’

In word-initial position, the voiced palatal approximant /y/ of standard Kokborok changes to voiced palatal affricate /j/ in Uchai, as in,

/yak/	/jak/	‘arm’
/yoŋla/	/joŋla/	‘frog’
/yakhili/	/jakhli/	‘log-ladder’

However, the negative particle /-ya/ retains the semivowel, as in,

/ča-ya/	‘wrong’
/log-ya/	‘short’
/thau-ya/	‘tasteless’

3.2 Contrasting Pairs

The consonantal sounds are established on the basis of minimal pairs and where minimal pairs are not available, sub-minimal pairs have been used for the purpose.

p/b	:	/para/	‘hamlet’	/bara/	‘excess’
t/d	:	/ta/	‘moon’	/da/	‘chopper’
k/g	:	/koŋ/	‘bow down’	/goŋ/	‘bear’
p/ph	:	/pai/	‘buy’	/phai/	‘come’
t/th	:	/mətai/	‘god’	/məthai/	‘fruit’

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k/kh	:	/ka/	‘weep’	/kha/	‘tie’
m/n	:	/mai/	‘rice’ (cooked)	/nai/	‘care for’
n/ŋ	:	/tan/	‘crisis’	/taŋ/	‘work’
m/n/ŋ	:	/ram/	‘thin’	/ran/ ‘dry’	/raŋ/ ‘rupee’
č/ĵ	:	/ča/	‘eat’	/ĵak/	‘arm’
s/□	:	/sa/	‘scatter’	/□a/	‘speak’
s/h	:	/sa/	‘scatter’	/ha/	‘soil’
□/h	:	/□u/	‘wash’	/hu/	‘clean’
r/l	:	/krau/	‘strong’	/klau/	‘long’
w/y	:	/buwa/	‘tooth’	/buya/	‘blunt’

3.3 Distributional Pattern

Most of the consonant phonemes of Uchai occur at the word initial position. Phonemes in initial position of syllables are more numerous than those found finally. However, the consonant phonemes which do not occur in word initial position are the voiced velar nasal /ŋ/ and voiced palatal approximant /y/. Rest of the consonant phonemes can occur at the word initial position. Word final consonants are fewer in number than word initial consonants. The consonant phonemes which occur at word final position are /m/, /n/ and /ŋ/. Besides the nasals, the consonants which occur at word-final position are /k/ and /r/ and that too in a very few words.

The following examples are given to show the occurrence of the consonantal phonemes in three different positions:

Phoneme	Word-Initial	Word-Medial	Word-Final
/p/	/pun/ ‘goat’	/thapa/ ‘oven’	- - -
/b/	/bo/ ‘firewood’	/abo/ ‘breast’	- - -
/t/	/tau/	/hati/	- - -

	‘bird’	‘market’	
/d/	/du/ ‘rope’	/laŋda/ ‘vulture’	- - -
/k/	/kuluma/ ‘cockroach’	/□ aka/ ‘east’	/ʃak/ ‘arm’
/g/	/goŋ/ ‘bear’	/doga/ ‘door’	- - -
/ph/	/phai/ ‘come’	/ʃapha/ ‘foot’	- - -
/th/	/thaili/ ‘banana’	/athu/ ‘shrimp’	- - -
/kh/	/khu/ ‘cotton’	/taukha/ ‘crow’	- - -
/m/	/mi□i/ ‘buffalo’	/khomi/ ‘crocodile’	/kosom/ ‘black’
/n/	/noukha/ ‘sky’	/mainouk/ ‘granary’	/thun/ ‘lime’
/ŋ/	- - -	/ʃoŋla/ ‘frog’	/ruŋ/ ‘boat’
/č/	/čubu/ ‘snake’	/thaiču/ ‘mango’	- - -
/ʃ/	/ʃakuŋ/ ‘leg’	/khũʃu/ ‘ear’	- - -
/s/	/sai/ ‘husband’	/risũ/ ‘onion’	- - -
/□/	/□ a/ ‘sun’	/mu□rõ/ ‘ant’	- - -
/h/	/hati/ ‘market’	/bahã/ ‘meat’	- - -
/r/	/ruwa/ ‘axe’	/korai/ ‘horse’	/møder/ ‘branch’

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/l/	/la/ 'take'	/taula/ 'cock'	- - -
/w/	/wa/ 'bamboo'	/buwa/ 'tooth'	- - -
/y/	- - -	/logya/ 'short'	- - -

4. Syllabic Pattern

As far as Uchai is concerned, a syllable consists of a nucleus either with an onset or with a coda. Hence, the structure of the syllable in Uchai may be defined as:

$$\pm \text{consonant} + \text{vowel} \pm \text{consonant}$$

This structure gives two main types of syllables – open and closed. Open syllable ends in a vowel while closed syllable ends in a consonant, i.e., “closed” by another consonant. The canonical form of the syllabic pattern in Uchai is: (CC)V(C) or $C_0\text{-}_2VC_{0-1}$ which means that in an Uchai syllable there can be zero to two consonants in the beginning and zero to one in the end. However, the majority of the Uchai words have the CV structure; VC pattern are of very low frequency in Uchai.

Most of the native words in Uchai are either monosyllabic or disyllabic words; though a handful of trisyllabic words can also be found in Uchai. However, Uchai has very few tetrasyllabic and pentasyllabic words and most of the words which have tetra-syllables or penta-syllables are in reality compound words. Here are few examples showing the syllabic structure of the Uchai words:

4.1 Monosyllabic Words

v	:	/a/	'fish'
cv	:	/wa/	'bamboo'
ccv	:	/blai/	'cat'

vc	:	/aŋ/	‘I’
cvc	:	/ruŋ/	‘boat’
ccvc	:	/bloŋ/	‘jungle’

4.2 Disyllabic Words

v-cv	:	/ai-ču/	‘dawn’
v-ccv	:	/ai-dro/	‘morning’
cv-cv	:	/mi-□i/	‘buffalo’
cv-ccv	:	/tha-phla/	‘ash’
v-cvc	:	/i-maŋ/	‘dream’
cv-cvc	:	/mə-khaŋ/	‘face’
cv-ccvc	:	/mə-kreŋ/	‘bone’
vc-cv	:	/aŋ-ga/	‘Tuesday’
vc-ccv	:	/en-dri/	‘July’
cvc-cv	:	/her-mai/	‘headman’
cvc-ccv	:	/khaŋ-grai/	‘crab’
ccvc-cv	:	/khraŋ-bu/	‘cricket’
vc-cvc	:	/ur-phəŋ/	‘ventilator’
cvc-cvc	:	/har-pek/	‘clay’

4.3 Trisyllabic Words

v-cv-cv	:	/a-čai-mo/	‘birth’
v-cv-ccv	:	/ai-ču-kra/	‘cockcrow’
cv-cv-cv	:	/ku-lu-ma/	‘cockroach’
cv-cv-ccv	:	/mə-□u-broi/	‘grand-daughter’
cvc-cv-cv	:	/čuŋ-hai-ri/	‘glow worm’
cv-cvc-cv	:	/mai-kon-da/	‘corn’
cv-cvc-ccv	:	/na-niŋ-gra/	‘coconut’
ccv-cvc-cv	:	/krau-san-di/	‘Thursday’
cv-cv-vc	:	/kə-ma-iŋ/	‘experienced’

cv-cv-cvc	:	/ha-ma-nəŋ/	‘world’
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4.4 Tetrasyllabic Words

cv-cv-cv-cv	:	/sa-ro-ya-mo/	‘solar eclipse’
cv-cv-cv-ccv	:	/mə-ta-ho-gra/	‘elder brother’
cv-cvc-cvc-cv	:	/tau-leŋ-siŋ-sa/	‘butterfly’
cv-cv-cv-cvc	:	/thai-li-mə-phaŋ/	‘banana plant’
cv-cvc-cv-cv	:	/ʃa-kuŋ-ʃa-soi/	‘toe’
cvc-cv-cv-cv	:	/koŋ-kho-lu-mo/	‘bow down’

4.5 Pentasyllabic Words

cv-cv-cv-cvc-cv	:	/kau-sa-gə-naŋ-ya/	‘babble’
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5. Consonant Clusters and Sequences

A large number of consonant clusters and consonant sequences are possible; but the phonotactic constraints of a particular language usually determine the possible combinations of consonants in that language. As far as Uchai is concerned, a few consonant clusters occur only in syllable initial position. However, a good number of consonant sequences can be found in the medial position. Consonant clusters are not present in syllable final position.

5.1 Initial Clusters

In Uchai, a maximum number of two consonants are allowed as clusters in syllable initial position. There are two types of initial clusters in Uchai. Primarily, the first member of the consonant cluster is a stop, while the second member being a liquid, i.e., stop + liquid. In other cases, the first member of the consonant cluster is a fricative, while the second member being a stop or a nasal or a liquid, i.e., fricative + stop / nasal / liquid. Apart from the above two, one can find in Uchai initial cluster where the first member of the consonant cluster is a stop, while the second member

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being a nasal, i.e., stop + nasal, which is, however, very rarely found and has come into existence due to the loss of vowel from the first syllable in due course of time. The tables and also the examples of a few words given below would describe the types of initial consonant clusters found in Uchai.

Type I	First Members (Stop)	Second Members (Liquid)	
		l	r
	p		✓
	b	✓	✓
	t		✓
	d		✓
	k	✓	✓
	g		✓
	ph	✓	✓
	th		✓
	kh		✓
	č		✓

Stop + Liquid:

/pr/	/pri/	‘spread out’
/bl/	/bla/	‘season’
/br/	/brou/	‘man’
/tr/	/tre/	‘more’
/dr/	/drau/	‘to save’
/kl/	/klau/	‘long’
/kr/	/kra/	‘father-in-law’
/gr/	/groiŋ/	‘beautiful’
/phl/	/phlu/	‘to show’
/phr/	/phra/	‘thunder’

/thr/	/thro/	‘a shuttle’ (of weavers)
/khr/	/khranbu/	‘cricket’
/čr/	/čri/	‘shout’

Type II	First Members (Fricative)	Second Members (Stop/Nasal/Liquid)						
		p	t	k	m	n	l	r
	s	✓	✓	✓	✓	✓	✓	✓
	□		✓	✓	✓		✓	✓

Fricative + Stop / Nasal / Liquid:

/sp/	/spuŋ/	‘fill’
/st/	/sto/	‘stretch’
/sk/	/skanbu/	‘snail’
/sm/	/smai/	‘swear’
/sn/	/sni/	‘seven’
/sl/	/slon/	‘stone’
/sr/	/srem/	‘tender’
/□t/	/□te/	‘small’
/sk/	/ja-sko/	‘elbow’
/sm/	/thai-smu/	‘cucumber’
/□l/	/□lai/	‘tongue’
/□r/	/□rau/	‘June’

Type III	First Member (Stop)	Second Members (Nasal)	
		m	n
	kh	✓	✓

Stop + Nasal :

/khm/	/mu-khmo/	‘hair’ (of body)
/khn/	/khna/	‘tomorrow’

5.2 Consonant Sequence

In Uchai, a variety of consonant sequences can be found where a maximum number of two consonants are permitted as medial sequence. However, the native root words show no geminates. The following table will explain the various combinatory possibilities of consonant sequences of two in Uchai.

First Members	Second Members																					
	p	b	t	d	k	g	ph	th	Kh	č	ĵ	s	Σ	h	m	n	ŋ	r	l	w	y	
p																						
b																						
t															+							
d																						
k				+						+		+			+						+	
g																					+	
ph																						
th																						
kh																						
č																						
ĵ																			+			
s			+																			
Σ																						
h																						
m	+	+					+					+	+								+	
n			+	+		+		+			+	+										
ŋ	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+		+	+	+	+	
r	+	+			+										+					+		
l																						
w																						
y																						

Some examples of medial consonant sequences are as follows:

Stop + Stop :

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/k/ + /d/	/kə-bauk-di/	‘to embrace’
Stop + Affricate :		
/k/ + /č/	/buk-ča/	‘empty’
Stop + Fricative :		
/k/ + /s/	/ʃak-si/	‘left’
Stop + Nasal :		
/t/ + /m/	/mot-ma/	‘gayal’
/k/ + /m/	/čak-ma/	‘pumpkin’
Stop + Approximant :		
/k/ + /y/	/ha-ʃak-ya/	‘dislike’
/g/ + /y/	/log-ya/	‘short’
Affricate + Lateral :		
/ʃ/ + /l/	/saʃ-lan/	‘Autumn’
Nasal + Stop :		
/m/ + /p/	/tham-pui/	‘mosquito’
/m/ + /b/	/mum-bati/	‘candle’
/m/ + /ph/	/sam-pha/	‘near’
/n/ + /t/	/klon-toi/	‘sweat’
/n/ + /d/	/mai-kon-da/	‘corn’
/n/ + /g/	/khan-grai/	‘crab’
/n/ + /th/	/than-tha-ma/	‘mallet’
/ɲ/ + /p/	/thaɲ-pui-ma/	‘housefly’
/ɲ/ + /b/	/khraɲ-bu/	‘cricket’
/ɲ/ + /t/	/laɲ-ta/	‘naked’
/ɲ/ + /d/	/laɲ-da/	‘vulture’
/ɲ/ + /k/	/paiɲ-kə-to-ma/	‘name of an Uchai clan’
/ɲ/ + /g/	/khaɲ-grai/	‘crab’
/ɲ/ + /ph/	/oɲ-phə/	‘yet’

/ŋ/ + /th/	/oŋ-thou/	‘let it happen’
/ŋ/ + /kh/	/naŋ-khru/	‘help’

Nasal + Affricate:

/n/ + /ʃ/	/pan-ʃi/	‘clan’
/ŋ/ + /tʃ/	/taŋ-tʃa/	‘to sustain family by working hard’
/ŋ/ + /dʒ/	/raŋ-dʒa/	‘gold’

Nasal + Fricative:

/m/ + /s/	/tham-so/	‘chilli’
/m/ + /ʃ/	/broim-ʃa/	‘girl’
/n/ + /s/	/wan-so/	‘think’
/ŋ/ + /s/	/tau-leŋ-siŋ-sa/	‘butterfly’
/ŋ/ + /h/	/čun-hai-ri/	‘glow worm’

Nasal + Nasal:

/ŋ/ + /m/	/čun-mo/	‘to enkindle’
/ŋ/ + /n/	/thaŋ-nai/	‘one who goes’

Nasal + Trill :

/ŋ/ + /r/	/oŋ-run/	‘veteran’
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Nasal + Lateral:

/ŋ/ + /l/	/čiŋ-lai/	‘chin’
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Nasal + Approximant:

/ŋ/ + /w/	/giŋ-wəmi/	‘angry’
/m/ + /y/	/ham-ya/	‘sickly’
/ŋ/ + /y/	/maŋ-yuŋ/	‘December’

Trill + Stop:

/r/ + /p/	/har-pek/	‘clay’
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/r/ + /b/	/dur-boi/	‘August’
/r/ + /k/	/mur-ku/	‘eyebrow’

Trill + Nasal:

/r/ + /m/	/her-mai/	‘headman’
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Trill + Approximant:

/r/ + /w/	/ar-wai/	‘loose’
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5.3 Final Clusters

In Uchai, consonant clusters are not present in syllable final position. No syllable final consonant cluster is found in the native words of Uchai. However, younger generations of Uchai speakers who are acquainted with the English language often use English terms in their everyday use. Thus, most of the words, where the final cluster occurs are the loan words from English. Here are a few examples of loan words used in Uchai having final consonant cluster:

/nt/	/siment/	‘cement’
/ns/	/sains/	‘science’
/st/	/post/	‘pillar’
/rk/	/klark/	‘clerk’
/lm/	/philm/	‘film’

6. Tone

Uchai shows a two way tone contrast. The average pitch which is predominant in Uchai is toneless; on the contrary, the tone which is lower than the average might be termed as low or falling tone and that which is higher than the average as high or rising tone. The low and the high tones are marked as [□] and [□] respectively.

However, the difference in tonal variation is to be understood from the context as well. A few examples showing the contrasts of tone are given below:

<u>FALLING</u>			<u>RISING</u>		
/rì/	‘to give’	:	/rí/	‘to draw a line’	
/sè/	‘migrate’	:	/sé/	‘squeeze’	
/wà/	‘bite’	:	/wá/	‘hog’	
/□ù/	‘grind’	:	/□ú/	‘sew’	
/hò/	‘send’	:	/hó/	‘fire’	

In Uchai, the final /k/ of Kokborok is often dropped, which is either replaced by a diphthong or a high tone. The final /k/ is replaced by a diphthong when preceded by the back rounded vowel /o/, as in,

/tok/	————→	/tau/	‘bird’
/kok/	————→	/kau/	‘speech’
/nok/	————→	/nou/	‘house’

In the case of all other vowels, it is replaced by a high tone as shown in the following words:

/hik/	————→	/hí/	‘wife’
/huk/	————→	/hú/	‘jum’
/wak/	————→	/wá/	‘hog’

7. Conclusion

The phonemic inventory of Uchai consists of thirty four phonemes out of which six are vowels, five diphthongs, twenty one consonants and two tones. Uchai has phonemically two front vowels - /i/ and /e/, two central vowels - /a/ and /ə/, and two back vowels - /u/ and /o/. The distributional pattern of Uchai vowel phonemes is clearly distinguished – while the vowels /i/, /e/, /a/, /u/ and /o/ occur at all positions, the vowel /ə/ occurs only in word-medial and word-final position.

The five diphthongs in Uchai, which are all closing and falling in nature, rarely or never occur in closed syllables; on the contrary they chiefly occur at syllable-final position. While the diphthong /ai/ can occur at all the positions, the other diphthongs /ui/, /oi/, /au/, and /ou/ occur only at word-medial and final position. It is also to be noted that /ai/ and /au/ occur more frequently in Uchai than the other diphthongs.

The phonemic inventory of Uchai consists of twenty one consonantal phonemes. The consonants, according to the manner of articulation, can be grouped into two broad sections – the stops and the continuants. The consonants, as a whole, include nine stops and twelve continuants. The stops show voiced-voiceless and aspirated-unaspirated contrast. Among the continuants, there are three nasals, three fricatives, two affricates, one trill, one lateral and two approximants. The nasals, the trill, the lateral and the approximants are all voiced and all the fricatives are voiceless whereas the affricates show voiced-voiceless contrasts. In terms of the place or point of articulation, Uchai consonants can be distinguished as bilabial, dental, alveolar, palatal, velar and glottal. It is evident that five of the Uchai consonants are bilabial and five are dental, two are alveolar, four palatal and four velar, and one glottal.

The syllabic pattern found in Uchai is (CC)V(C) or $C_{0-2}VC_{0-1}$ which means that in an Uchai syllable there can be zero to two consonants in the beginning and zero to one in the end. However, the majority of the Uchai words have the CV structure; VC pattern are of very low frequency in Uchai. Moreover, native Uchai words range chiefly from monosyllabic to trisyllabic; most of the tetrasyllabic and pentasyllabic words are either compound words or loan words.

Uchai has primarily two types of initial consonant clusters i.e., stop + liquid / and fricative + stop / nasal / liquid. Apart from these two types, one can find in Uchai consonant cluster consisting of stop + nasal, which is however very rarely found and which has come into existence due to elision of prefixal vowel. One can also find in Uchai a variety of consonant sequences though most of the consonant sequences comprise of nasal + stop / affricate / fricative. However, Uchai has no geminates in

native root words. Moreover, Uchai native words do not permit consonant cluster in syllable final position.

Uchai has two tones – low and high – which can occur with all the vowels, except mid central vowel /ə/. In single syllable words, the contrast between rising and falling tone is quite clear than the words with two or more syllables.

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