Consonantal System of Dukpa

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Abstract

Dukpa belongs to the Central Bodish group of Tibeto-Burman language family (Bradley 1997). The term *Dukpa* originated from the Tibetan word *Drugpa*. *Drug* means 'dragon' and *pa* means 'resident' which literally co-defined the meaning of 'the resident of the dragon land'. The total population of Dukpa is not mentioned in the Census of India. They are also one of the smaller and lesser-known tribes living in the Buxa hill forest of Alipurduar district, West Bengal with a population of 1951 according to 2011 Census of Kalchini block of Alipurdaur district, West Bengal.

The present paper is an attempt to describe the Consonantal system of Dukpa. Dukpa has twenty three/23 consonantal sounds including two semi- vowels. They are /p, pʰ, b, t, tʰ, d, c, cʰ, k, kʰ, ɡ, m, n, ŋ, ɲ, s, z, ʃ, h, r, l, w, and y/. Consonant combination in Dukpa can classified three categories these are: (i) consonant cluster (ii) consonant sequence and (iii) geminate. Dukpa has initial and medial consonant clusters that occur within the syllabic boundary. Two consonant clusters are present in the language i.e., initial and medial but final cluster remains absent. Consonantal sequences and geminates are only in medial position of a word.

Keywords: Central Bodish, consonantal system, combinations, consonant cluster, consonant sequence.

Introduction

Dukpa is name of the community as well as language. Dukpa is one of the endangered languages spoken in Buxa hill forest of Alipurduar district, West Bengal. They are living amidst of the fellow Nepalis for many years and have been able to maintain its traditional socio-cultural traits in spite of having less numerical strength. The term Dukpa have derived from the Tibetan word *Drugpa. Drug* means '*dragon*' and *pa* means '*resident';* literary meaning is *resident of the dragon land*. The language is very rich in folk literature like songs, dance, riddles, proverbs, etc. They live in a hilly terrain covered within the forest of

Buxaduar, Chunabhati, Tasigaon, Lepchakha, Lamna, Fulbari, Lalbangla, Daragaon, Khataline, Ochulum, Sogao, Dilsokha, Chetegang and Adma. According to the Dukpa people, they are also scattered in Bhutan and their language is quite different from the Indian Dukpas. According to the Census of Kalchini block 2011, the total population of Dukpa is 1951.

Objectives of the Study
The main objective of this study is to find out the consonantal phonemes and consonantal combination of Dukpa.

Methodology
 ➢ The interview and observation methods were applied to collect the primary data.
 ➢ The data for the present study was collected in several visits to the Dukpa inhibiting areas of Alipurduar District of West Bengal, mainly from Chunabathi, Lepchakha, and Adma villages.
 ➢ However, secondary materials like books, journals, thesis etc. are also used.

Consonantal system
There are twenty three (23) consonantal phonemes in the Dukpa language. Dukpa contrasts of eleven (11) stops /p, p^h, b, t, t^h, d, c, c^h, k, k^h, g/, four fricatives /s, z, ∫, h/, four nasals /m, n, ŋ, ɲ/, one lateral /l/, one trill /r/ and two semi-vowels /w, y/. The consonantal phonemes of Dukpa are illustrated below in the Table no. 1.

Place → Manner ↓		Bilabial		Alveolar		Post-Alveolar		Palatal		Velar		Glottal	
		vl	Vd	Vl	Vd	Vl	Vd	vl	vd	vl	vd	Vl	Vd
Stops	Uasp.	p	b	t	d			c		k	g		
	Asp.	p^h		t^h				c^h		k^h			
Fricatives				s	z	∫						h	
Nasals			m		n				ɲ		ŋ		
Lateral					l								
Trill					r								

Semi-vowels		w						y				

Table no. 1: Consonantal phonemes in Dukpa

From the above Table no. 1 we notice that there are eleven (11) stops in Dukpa which consist of unaspirated voiceless /p, t, c, k/ and aspirated voiceless /pʰ, tʰ, cʰ, kʰ/ and unaspirated voiced /b, d, g/.

Description of Consonants

Stops
    /p/ as in /paŋ/ voiceless bilabial stop.
    /b/ as in /bom/ voiced bilabial stop.
    /pʰ/ as in /pʰap/ voiceless bilabial stop.
    /t/ as in /ten/ voiceless alveolar stop.
    /d/ as in /dam/ voiced alveolar stop.
    /tʰ/ as in /tʰuŋ/ voiceless alveolar stop.
    /c/ as in /cum/ voiceless palatal stop.
    /cʰ/ as in /cʰim/ voiceless palatal stop.
    /k/ as in /kam/ voiceless velar stop.
    /g/ as in /gop/ voiced velar stop.
    /kʰ/ as in /kʰam/ voiceless velar stop.

Fricatives
    /s/ as in /suŋ/ voiceless alveolar fricative.
    /z/ as in /zem/ voiced alveolar fricative.
    /ʃ/ as in /ʃam/ voiceless post-alveolar fricative.
    /h/ as in /hem/ voiceless glottal fricative.

Nasals
    /m/ as in /map/ voiced bilabial nasal.
    /n/ as in /nin/ voiced alveolar nasal.
    /ɲ/ as in /ɲia/ voiced palatal nasal.
    /ŋ/ as in /ŋa/ voiced velar nasal.

Lateral
    /l/ as in /lap/ voiced alveolar lateral.

Trill
    /r/ as in /rem/ voiced alveolar trill.

Semi-vowels
    /w/ as in /waŋzu/ voiced bilabial semi-vowel.
    /y/ as in /yaŋ/ voiced palatal semi-vowel.

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Consonantal Minimal Pairs

The consonantal minimal pairs in Dukpa are schematized below:

Table no. 2: Minimal pair of bilabial stop

Bilabial stops	Minimal pair	Gloss
p	pa	'picture'
p^h	p^ha	'there'
b	ba	'to carry something on back'

Table no. 3: Minimal pair of alveolar stop

Alveolar stops	Minimal pair	Gloss
t	ta	'look'
t^h	t^ha	'blood'
d	da	'arrow'

Table no. 4: Minimal pair of palatal stop

Palatal stops	Minimal pair	Gloss
c	cap	'protect'
c^h	c^hap	'rain'

Table no. 5: Velar stop minimal pair

Velar stops	Minimal pairs	Gloss
k	ka	'wheat'
k^h	k^ha	'mouth'
g	ga	'love'

Table no. 6: Fricative minimal pair

Nasals	Minimal pairs	Gloss
m	ma	'war'

n	na	'feeling ill'
ŋ	ŋa	'I'
ɲ	ɲa	'fish'

Table no. 7: Fricative minimal pair

Fricatives	Minimal pair	Gloss
s	so	'tooth'
∫	∫o	'dice'
z	zo	'go'
h	ho	'deer noise'

Table no. 8: Minimal pairs for Alveolar

Alveolar	Minimal pair	Gloss
l	la	'god'
r	ra	'goat'

Table no. 9: Minimal pairs for Semi-vowel

Semi-vowel	Minimal pair	Gloss
w	wap	'black'
y	yap	'right'

Distribution of Consonants

All the twenty-three consonantal phonemes can occur in initial and medial positions except final positions. The distributions of consonantal phonemes in Dukpa are shown below with examples:

/p/

Initial /poe/ 'incense'

/pane/ 'betel leaf'

/pu/ 'body hair'

Medial /mukpa/ 'fog'

/apa/ 'father'

/daŋpa/ 'first'

Final /tʰap/ 'rope'

/kep/ 'waist'

	/bup/	'worm'
/b/		
Initial	/bom/	'big'
	/baŋku/	'donkey'
	/ba/	'wool'
Medial	/abu/	'hip'
	/tʰabsa/	'kitchen'
	/dobom/	'rock'
/pʰ/		
Initial	/pʰa/	'that'
	/pʰou/	'belly'
	/pʰop/	'cup'
Medial	/lapʰu/	'ridish'
	/zapʰu/	'cave'
	/mapʰapni/	'to insult'
/t/		
Initial	/to/	'rice'
	/tago/	'walnut'
	/tem/	'show'
Medial	/mite/	'flame'
	/satom/	'heat'
	/gatobeni/	'to celebrate'
/d/		
Initial	/damru/	'wight'
	/dui/	'sit'
	/duen/	'seven'
Medial	/ɢidu/	'lazy'
	/rida/	'animal'
	/endo/	'turnip'
/tʰ/		
Initial	/tʰa/	'grind'
	/tʰuŋ/	'drink'
	/tʰap/	'rope'
Medial	/gotʰal/	'ash'
	/cʰutʰra/	'decade'
	/motʰa/	'mare'

/c/

Initial	/ci/	'one'
	/cu/	'ten'
	/ca/	'grass'
Medial	/acici/	'little'
	/ice/	'trust'
	/ɢaci/	'what'

/cʰ/

Initial	/cʰʉm/	'rice'
	/cʰu/	'water'
	/cʰap/	'rain'
Medial	/hocʰa/	'shy'
	/acʰu/	'elder brother'
	/rocʰi/	'dog'

/k/

Initial	/koti/	'hoe'
	/kota/	'room
	/kep/	'waist'
Medial	/toko/	'container'
	/aku/	'uncle'
	/maŋke/	'chin'
Final	/lok/	'return'
	/tok/	'win'

/ɡ/

Initial	/ɢora/	'curtain'
	/ɢop/	'onion'
	/ɢa/	'like'
Medial	/bago/	'hut'
	/apeguta/	'papaya'
	/pʰogem/	'elder brother'

/kʰ/

Initial	/kʰuru/	'dart'
	/kʰa/	'language'
	/kʰoŋ/	'they'
Medial	/saŋkʰa/	'poor'
	/menkʰaŋ/	'hospital'
	/zaŋkʰo/	'chest'

/s/

Initial	/siu/	'carry basket'
	/sa/	'clay'
	/sip/	'astrologer'
Medial	/ɡuse/	'comb'
	/kusu/	'apple'
	/amsu/	'wife'

/z/

Initial	/zaru/	'ladle'
	/zuse/	'juice'
	/zaple/	'behind'
Medial	/suza/	'butter & salt tea'
	/kʰapze/	'biscuit'
	/damza/	'duck'

/ʃ/

Initial	/ʃa/	'meat'
	/ʃarap/	'hunter'
	/ʃiŋ/	'wood'
Medial	/nuʃin/	'plant'
	/toʃu/	'high'
	/nuʃa/	'beef'

/h/

Initial	/humpa/	'lemon'
	/hahi/	'fox'
	/hoem/	'blue'
Medial	/tohi/	'heart'
	/zaha/	'paddy'
	/taha/	'tiger'

/m/

Initial	/mo/	'she'
	/mi/	'fire'
	/miŋ/	'name'
Medial	/ema/	'chilly'
	/zamliŋ/	'world'
	/dumra/	'garden'
Final	/nim/	'day'
	/dem/	'right'

	/sum/	'three'
/n/		
Initial	/nake/	'fern'
	/naŋsel/	'forest'
	/nam/	'when'
Medial	/ane/	'aunt'
	/manza/	'peacock'
	/ina/	'sweat'
Final	/min/	'medicine'
	/zen/	'other'
	/en/	'marriage'
/ŋ/		
Initial	/ŋa/	'I'
	/ŋala/	'banana'
	/ŋosani/	'shame'
Medial	/zaŋpo/	'kind'
	/suŋku/	'small'
	/tʰuŋku/	'short'
Final	/zuŋ/	'catch'
	/paŋ/	'ground'
	/suŋ/	'story'
/l/		
Initial	/lam/	'road'
	/la/	'god'
	/laukʰa/	'ground'
Medial	/ola/	'crow'
	/zili/	'cat'
Final	/duŋel/	'grief'
	/gotʰal/	'ash'
/r/		
Initial	/ra/	'goat'
	/rep/	'frill'
	/ruto/	'bone'
Medial	/kabre/	'shawl'
	/dumra/	'garden'
	/kʰuru/	'dart'
Final	/losar/	'festival'

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	/zukar/	'planet'
	/mar/	'butter'

/y/

Initial	/yegikemi/	'postman'
	/yenta/	'education'
Medial	/ɡatʉye/	'happiness'
	/daniyam/	'equal'

/w/

Initial	/waŋzu/	'blouse'
Medial	/dawa/	'month'
	/nawa/	'tomorrow'
Final	/zow/	'sickle'
	/kʰaw/	'snowfall'

Consonant Combinations

Consonantal combinations in Dukpa were classified into three categories, viz., (i) consonant cluster (ii) consonant sequence and (iii) gemination.

(i)   Consonant Cluster

The sequence of two consonant sounds as an onset or coda in a syllable is called a consonant cluster (Brahma 2018:29). Dukpa has initial and medial consonant cluster and no final cluster is noticed in the language. Consider the following examples given below:

Initial two consonant clusters

Consonant cluster	**Example**	**Gloss**
Stop+liquid		
pl-	plaŋ	'bat'
tr-	trosem	'delight'
tʰr-	tʰrom	'town'
dr-	drim	'smell'

Medial two consonant clusters		
Stop+liquid		
-pl-	zaple	'behind'
-bl-	leble	'flat'
-kr-	kabre	'shawl'
-kl-	loklemba	'to return'

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(i) Consonant sequence

Consonant sequence refers combination of more than one consonant occurring between syllables. All the consonant sequences occur in the word medial position in Dukpa.

Consonant Sequences	Examples	Gloss
-pt-	hapta	'week'
-mn-	nimnup	'sunset'
-pn-	lapni	'to say'
-mr-	damru	'wight'
-rk^h-	serk^{h}a	'autumn'
-ŋz-	suŋzu	'examination'
-dt-	t^{h}edtoŋ	'chirpine'
-rg-	targo	'walnut'
-ŋl-	ŋaŋla	'banana'
-nd-	sindu	'pomegranate'
-nt-	centani	'fart'

(iii) Geminates

Geminates are rare in Dukpa. Gemination in Dukpa occurs only in medial position. Some geminates found in Dukpa are given below:

Geminate	Example	Gloss
-dd-	suddo	'pebble'
-mm-	lammenda	'tomato'
-nn-	dunne	'small pox'

Conclusion

- Based on the above present analysis of Consonantal system of Dukpa, following conclusions is drawn:
- Dukpa language belongs to the central Bodish group of Tibeto-Burman language family (Bradley 1997).
- Dukpa has twenty three (23) consonantal phonemes are /p, p^h, b, t, t^h, d, c, c^h, k, k^h, g, s, z, ʃ, h, m, n, ɲ, ŋ, l, r, w and y/.
- Consonantal places of articulation are divided into Bilabial, Alveolar, Post-alveolar, Palatal, Velar and Glottal.
- Manner of articulation are Stops, Fricatives, Nasals, Lateral, trill and Semi-vowels.

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- The consonantal phonemes /p, k, m, n, ŋ, l, r and w/ can occur in all the three position of a word but /pʰ, b, c, cʰ, kʰ, g, s, z, ʃ, h, ɲ and y/ cannot occur in all the three position of a word.

- Post-alveolar fricative /ʃ/ is noticed. It may be the influence of neighboring Indo-Aryan languages like Bengali and Nepali.

- Dukpa has initial and medial consonant clusters, and no final cluster is noticed in the language.

- All the consonant sequences occur in the word medial position in Dukpa.

- Geminates are rare in Dukpa and occur only in medial position.

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Bibliography

Basumatary, P. C. (2005). *An introduction to the Boro language*. Mittal Publications.

Bradley, D. (1997). Tibeto-Burman languages and classification. *Papers in southeast Asian linguistics*, *14*, 1-71.

Biswas, Hiranmoy. (2016). Introduction with Dukpa in Dooars area. *Journal of Manabik Mukh.*

Brahma, Aleendra. (2018). Bodo Phonetic Reader. Mysuru. Central Institute of Indian Languages.

Deb, Debajit. (2016). Phonology of Tibeto-Burman Languages. Chennai. Notion Press.

Drim, G.V. (1992). The Grammar of Dzongkha. Thimphu, Dzongkha Development commission of the Royal Government of Bhutan.

Roy, Subhrajit. (2016). Story of Dukpa: The Deprived Tribes of Dooars. Google.

Sethi, J. & Dhamija, P.V. (2017). A Course in Phonetics and Spoken English. Delhi. PHI Learning Private Limited.

Sastry, G.D.P. (1984). Mishmi Grammar. Mysore, Central Institute of Indian languages.

Trask, R. L. (2004). A dictionary of phonetics and phonology. Routledge.

Yallop, C., & Fletcher, J. (2007). An introduction to phonetics and phonology.

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APPENDIX

Wordlists

Dukpa	Gloss
alu	'baby'
au	'thief'
abu	'hip'
azi	'queen'

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atara	'daily'
bup	'insect'
bʉ	'snake'
baɡo	'hut'
bebsi	'guava'
bom	'big'
ci	'one'
celu	'orange'
cikʰa	'with'
ca	'grass'
catom	'heat'
culo	'mad'
chim	'house'
chap	'rain'
chum	'rice'
chu	'water'
cha	'monkey'
dep	'book'
dolom	'brinjal'
denpa	'truth'
da	'arrow'
dam	'mud'
en	'marriage'
ema	'chilly'
eni	'to knead'
ɡa	'love'
ɡo	'door'
ɡola	'cloth'
ɡotʰal	'ash'
ɡobom	'costly'
humpa	'lemon'
hani	'fox'
hoem	'blue'
heku	'latter'
iko	'neck'
ina	'sweat'
indu	'umbrella'

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iri	'twin'
koti	'hoe'
kota	'room
kep	'waist'
kalibup	'centipede'
lam	'road'
la	'god'
lama	'priest'
mo	'she'
mi	'fire'
miŋ	'name'
ma	'butter'
nake	'fern'
naŋsel	'forest'
nam	'when'
napa	'nose'
omsu	'pond'
om	'milk'
ola	'crow'
oni	'to fry'
plaŋ	'bat'
poe	'incense'
pane	'betel leaf'
pu	'body hair'
ra	'goat'
rep	'frill'
ri	'hill'
ruto	'bone'
siu	'carry basket'
sa	'clay'
sip	'astrologer'
sam	'broom'
ta	'horse'
to	'rice'
tago	'walnut'
tem	'show'
usaine	'asthma'

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umso	'socks'
uni	'to cry'
uleni	'to kiss'
waŋzu	'blouse'
yegikemi	'postman'
yenta	'education'
zaru	'ladle'
zuse	'juice'
zaple	'behind'

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