CHAPTER-II PHONOLOGY

2.0 Introduction

Phonology is one of the important branches of linguistics that studies the sound system of a language. According to David Crystal, "phonology is a branch of linguistics which studies the sound system of languages." (Crystal, 1978:268) Phonology includes two most important division viz. segmental and supra-segmental phonemes. In this chapter, focus on segmental phoneme will be made on vowel and consonant and in suprasegmental on tone and syllable. In this chapter, phonological variation between the Mech dialect and standard form will also be discussed.

2.1 Phonemic inventories

2.1.1 Vowel

Mech dialect has six distinct vowels depending on the position of tongue as found in standard form of Bodo language spoken in Assam. These are-/i, e, a, o, w, u/. Normally these vowels are voiced. During articulation of these vowels, there is neither any obstruction nor narrowing of the passage. Following table shows the vowel phonemes of this dialect.

Table 1: Vowel of Mech dialect

	Front	Central	Back
High	i		w u
Mid	e		Э
Low		a	

2.1.1.1 Definition of Minimal pair

"Minimal pairs are used in the discovery procedure in phonological studies in order to establish phonemes. Minimal pairs are formed by two words which differ only in one sound, whose presence or absence changes the meaning." (Rajimwale, 2006:141)

2.1.1.2 Contrasting minimal pairs of vowel phonemes

/i/vs./e/:	si	cloth
	se	snatch
/i/vs./a/:	mi	animal
	ma	what
/i/vs./ɔ/:	bi	to beg
	bo	spread
/i/vs./w/:	k^h i	stool
	k^h u	to fill
/i/vs./u/:	si	open
	su	stab
/e/vs./a/:	ne	wait
	na	fish
/e/vs./ɔ/:	ze	net
	cs	sit
/e/vs./w/:	se	one
	sui	insert
/e / vs. / u /:	ne	wait
	nu	see
/a / vs. / ɔ /:	dam	play

dom bend /a/vs./w/: za eat kick zw /a/vs./u/: kha bind k^h u open /*o*/*vs*./*u*/: bo spread beat bu /w/vs./u/: lui chain lu pour

2.1.1.3 Description of vowel phonemes

/i/: It is a high front unrounded vowel phoneme.

/ e /: It is a front mid unrounded phoneme.

/ a /: It is a low central unrounded vowel phoneme.

/ 3 /: It is a back mid rounded vowel phoneme.

/ u /: It is a high back rounded vowel phoneme.

/ w /: It is a high back unrounded vowel phoneme.

2.1.1.4 Occurrences of vowel phonemes

All the vowel phonemes of Mech dialect can occur in all three places i.e. initial, medial and final position in word. Following are the some examples of the occurrence of vowel phonemes.

/i/: Initial position: insu caterpillar
isin inner part
inzud wall
iyun future

Medial position:bigod seed

	lid		write
	zid		peel
	sima		dog
Final position:	gidsi		wet
	gibi		first
	siri		silent
	k ^h umsi		night
/ e /: Initial position:	enzod		rat
	emao	rice-cake	used for fermenting wine
	er		expand
	edao		tease
Medial position	:benga		deaf
	begen		bone
	gedsao		rotten
	k ^h eo		open
Final position:	de		pound
	se		snatch
	gele		to play
/ a /: Initial position	aŋ		I
	ar		and
	abuui		grand mother
	ap ^h a		father
Medial position	:k ^h ad		run
	zab		file
	k ^h ao		stole

nat^heŋ foot Final position: bla arrow rwza thick fish na lama way / o /: Initial position: osa piglet ont^hai stone to love on oma pig Medial position:bon fire wood k^h on pick up cook soŋ colour roŋ Final position: dokho a kind of bamboo basket made for laying egg sit ZϽ bo spread bak^ha take out / w /: Initial position:wŋa not uıŋk^ham rice uruip^harui here and there $\textbf{Medial position:} mut^ha\eta$ blue guidzam old guidzza red

gumu

yellow

Final position: zuu kick

bui pull

k^hui fill up

bolo force

/ u /: Initial position: un back

udui stomach

udsuŋ back yard

uk^hum roof

Medial position: duŋ warm

buŋ speak

suŋ shorten

duga proud

Final position: su stab

bu beat

lu pour

zu wrap

2.1.1.5 Diphthongs

Eight types of diphthongs are observable in Mech. These are / ai, ɔi, wi, ui, iu, ew, au, wu /. Following chart shows the formation of diphthongs.

Table 2: Diphthongs of Mech dialect

	i	e	а	ð	ш	и
i	-	-	-	-	-	iu
e	-	-	-	-	-	eu
а	ai	-	_	-	-	au

o o	oi	-	-	-	-	-
ш	wi	-	-	-	-	uru
и	ui	-	-	-	-	-

2.1.1.6 Occurrence of diphthongs

/ ai /:Initial position: aimaɔ woman

ai mother

Medial position: zaiga place

nok^hanaisi dawn

Final position: guai betel nut

bit^hai fruit

bisai husband

apt^hai to insert

aolai to destroy

/ oi /: Initial position: -----

Medial position:boibu all

boiguma owner

Final position: bit^hoi thick blood

k^hat^hoi near

/ wi /:Initial position: wi it is used for addressing

someone

Medial position: duima river

guile finished

Final position: duii water

swi	a kind of umbrella made of
	leaves
p ^h wi	come
/ ui /:Initial position:	
Medial position: duisin	smaller
Final position: rui	be soft
k ^h ui	hungry
/ iu /:Initial position:	
Medial position:	
Final position: ziu	life
miu	crying of cat
/ eu /:Initial position: eunai	frying
Medial position: meua	bamboo shoot
Final position:	
/ au /:Initial position:	
Medial position: lauthi	stick
dausari	martin
k ^h aulai	cheek
Final position: dau	bird
/ wu /:Initial position: wu	ok
Medial position: huma	male
hui	give
Final position:zuru	rice bear
guiduiu	boiling
duu	feed

2.1.2 Consonant

Mech dialect has sixteen consonants including two gliding vowels which is similar to the standard variety of Bodo. These are- $/p^h$, t^h ,

Table 3: Consonants of Mech dialect

			Place of Articulation									
			Bila	Bilabial Alveolar		eolar	Palatal		Velar		Glottal	
			vl	vd	vl	vd	vl	vd	vl	vd	vl	vd
	Stop	Unaspirated		b		d				g		
on	Stc	Aspirated	p ^h		t ^h				k ^h			
iculati		Nasal		m		n				ŋ		
Manner of Articulation		Fricative			S	Z					h	
anner		Trill				r						
Ma		Lateral				1						
	,	Semi-vowel		W				y[j]				

2.1.2.1Contrasting pairs of consonant phonemes

$$/\mathbf{p^h}/\mathbf{vs./b}/:\mathbf{p^h}$$
an sell ban carry on
$$\mathbf{p^h}$$
ao acting bao offering
$$/\mathbf{t^h}/\mathbf{vs./d}/:\mathbf{t^h}$$
am guava

t^haŋ go touch daŋ dam play $/ \mathbf{k}^{h} / \mathbf{vs.} / \mathbf{g} / \mathbf{k}^{h}$ aɔ steal gao shoot k^heo to open to open geo / **m** / **vs.** / **n** / : ma what fish na do mao boat nao / m / vs. / ŋ / : lam spread take away laŋ to carry in arms bam to expand baŋ / n / vs. / ŋ /: dan cut daŋ touch ban carry to be more baŋ /s/vs./z/: sao roast dig zaɔ se one ze net /s/vs./h/: su stab

land

hu

filter sor night hor /r/vs./l/: ru boil lu pour ra to become mature la take /w/vs./y/: gab shoot gai plant

2.1.2.2 Description of consonant phonemes

Stops: There are six stop phonemes. These are- / **b**, **d**, **g**, \mathbf{p}^h , \mathbf{t}^h , \mathbf{k}^h /. These are articulated in the place of bilabial, alveolar and velar. The phonemes / **b**, **d**, **g** / are found as unaspirated voiced and / \mathbf{p}^h , \mathbf{t}^h , \mathbf{k}^h / as aspirated voiceless.

Nasal: There are three nasal consonant phonemes. These are- / m, n, η /. Their place of articulation is bilabial, alveolar and velar. The phoneme / m / is voiceless and / n, η / are voiced.

Fricatives: There are three fricatives viz. / \mathbf{s} , \mathbf{z} , \mathbf{h} /. The phonemes / \mathbf{s} \mathbf{h} / are voiceless and / \mathbf{z} / is voiced. Their place of articulation is alveolar and glottal respectively.

Trill: The trill phoneme of this dialect is $/ \mathbf{r} / \mathbf{l}$. It is a voiced alveolar consonant phoneme.

Lateral: The lateral phoneme of this dialect is / 1 /. The place of articulation of this voiced consonant phoneme is alveolar.

Semi-vowel: There are two types of semi-vowels. These are- / **w**, **y** /. The phoneme / **w** / is voiced and / **y** / is voiceless, which are articulated in bilabial and palatal position of mouth cavity.

2.1.2.3 Occurrence of Consonant phonemes

(i) / b /: Occurrence of this phoneme is found in initial, medial and final position of word. Example-

Initial position:	banzud	chilli
	bar	wind
	bi	beg
	bemaduıŋ	cobweb
Medial position:	dumba	maize
	bibar	flower
	cdid	elder sister
	zəbra	illness
	bibu	intestines
Final position:	gab	to cry
	bərab	to angry
	gəbrab	complex
	dabcab	oven
	k ^h eb	pinch
/ d /: Occurrence of this	phoneme is found in all the places of	word. Example-

(ii) / d /: Occurrence of this phoneme is found in all the places of word. Example

Initial position:	dudu	milk
	dau	bird
	dan	cut
	daŋ	touch
	duduŋ	rope
	ircabab	girl having loose character
Medial position:	bader	garlic

	guɪdan		new
	t ^h aduŋ		arum
	randi		widow
	haduri		dust
Final position:	hadod		country
	bidod		meat
	zignad	a kind	of small chilly
	gop ^h od		white
(iii) / g /: It can occur in in	itial and medial posit	ion only. Example) -
Initial position:	gan		wear
	guri	a piece of wood	used in cutting meat
	gab		to cry
	goali		cowshed
Medial position:	agla		past
	nagsi		left hand
	nagda		hand
	ogra		pigsty
Final position:			
(iv) / p ^h /: Occurrence of	this consonant phone	eme is also found	in initial and medial
positions only as found in the	ne standard form of E	Bodo language. Ex	ample-
Initial position:	p ^h ua		fog
	p ^h uŋ		morning
	p ^h in		again
	p ^h unzi		heap of straw
	p ^h ran		to dry

Medial position:	ap ^h ed	baby nurse
	k ^h ap ^h al	forehead
	ap ^h a	father
	mup ^h ur	bear
Final position:		
(v) / t ^h /: Its occurrence is f	ound in the positions of initial and n	nedial of word as found
in the standard form of Bode	o language. Example-	
Initial position:	t ^h emai a kin	d of fishing object
	t ^h am	guava
	t ^h umul	papaya
	t ^h aŋ	go
	t ^h a	live
Medial position:	laɔt ^h ai	bottle gourd
	muut ^h aŋ	blue
	gut ^h aŋ	live
	t ^h at ^h i	fence
	hat ^h ai	teeth
Final position:		
(vi) / $\mathbf{k}^{\mathbf{h}}$ /: The occurrence o	f this consonant phoneme is found o	nly in initial and medial
positions of word as found i	n the standard form of Bodo languag	e. Example-
Initial position:	k ^h oga	mouth
	k ^h ər	head
	k ^h uıma	ear
	k ^h ao	steal
Medial position:	mək ^h ruii	curry

	nɔkʰa	rain
	nɔkʰapʰuɪr	moon
	bik ^h um	back
Final position:		
(vii) / m /: Occurrence of th	is consonant phoneme is found in al	1 the places i.e. initial,
medial and final position in v	word. Example-	
Initial position:	miya	yesterday
	izcam	cat
	man	respect
	mɔkʰra	monkey
	ma	what
	mai	paddy
Medial position:	t ^h emai a kind	l of fishing object
	sabma	bad
	duima	river
	lama	way
	zamp ^h wi	canal
Final position:	gangrim	earthquake
	bam	carry on
	t ^h am	guava
	k ^h lam	to make
	gussum	black
	lam	spread

mwk^haŋ

face

(viii) / n /: Occurrence of this phoneme is also found in initial, medial and final position in word. Example-

Initial position:	na	fish
	nə	home
	nok ^h a	rain
	nasi	finger
	nək ^h ap ^h uır	moon
	nam	name
Medial position:	ak ^h unduri	smoke
	mansi	man
	undu	sleep
	bana	flood
	simna	border
Final position:	gasin	all
	bon	firewood
	t ^h ok ^h on	stick
	sigun	vulture
	iyun	future
(ix) / η /: It cannot occur in initial position of word. Its occurrence is found only in		
medial and final position in word. Example-		
Initial position:		
Medial position:	sengra	young boy
	seŋgri	young girl

deaf

lame

beŋga

leŋgra

Final position:	buŋ	speak
	suŋ	be short
	duŋ	be hot
	duduŋ	rope
(x) / s /: The occurrence	of this phoneme is found in initial	and medial position
Example-		
Initial position:	sa	to trap
	san	day
	san	to count
	sau	to burn
Medial position:	udsuŋ	backyard
	musəuk ^h i	cowdung
	gorsi	bean
	bisər	mustard
	dausa	chick
Final position:		
(xi) / z /: Occurrence of the	nis consonant phoneme is found in a	ll the places in word
Example-		
Initial position:	calcz	hero
	za	eat
	zun	we
	zuru	be high
	csz	dig
	zerba	chest
Medial position:	guzam	old

	bazlo	dance
	bazwi	elder brother's wife
	banzud	chilli
	gezer	interval
Final position:		
(xii) / h /: The occurrence of	this consonant is found in two places	i.e. initial and medial.
Example-		
Initial position:	hu	land
	haŋ	breath
	hangar	ash
	hasiŋ	alone
	hat ^h ai	market
Medial position:	dahai	later
	gahai	short
	baha	nest
	gaham	good
	mahai	where
Final position:		
(xiii) / r /: It occurs in all the	e places of word i.e. initial, medial and	l final. Example-
Initial position:	car	language
	roza	priest
	ra	to become mature
	randi	widow
	czcr	grow
	rezeŋ	light

Medial position: lambera tomato eye brow musram muuk^hroi curry that side ori Final position: release nagar nasigur finger nail wide oar somp^hur day after tomorrow nək^hər family (xiv) / l /: Occurrence of this consonant phoneme is found in initial, medial and final position in word. Example-**Initial position:** la take laizam letter laŋ take away lam to dry in the sun lanzai tail **Medial position:** mala when t^humul papaya k^halmasi next year k^hak^hlou pumpkin k^haɔlai cheek dak^hal **Final position:** before (xv) / w /: This consonant phoneme can occur in all the position of word. Example-**Initial position:** wad bite

wa

bamboo

Medial position: lapt^hai bottle gourd

baonai forgetting

Final position: man do

zao dig

k^heo open

gao shoot

(xvi) / y /: The occurrence of this phoneme is found in the medial and final position of word. Example-

Initial position: -----

Medial position: siya tea

miya yesterday

Final position: dai offence

mai paddy

bai break

bilai leaf

gai to plant

2.1.2.4 Consonant Cluster

Consonant cluster is a combination of two or more consonants coming together in a single syllable. In this dialect, the occurrence of consonant cluster is only found in initial and medial position of word.

2.1.2.4.1Two initial consonant cluster

Mech dialect has a number of two initial consonant clusters. Their mannar of articulation is found in the form of stop + liquid, stop + trill and fricative + liquid. It is observable that maximum number of first member of consonant cluster is found stop and fricative. The second member of cluster is found frequently as liquid and trill. These

initial consonant clusters are followed by a vowel phoneme in a single syllable of word. Example-

(a) Stop + Liquid:

$$/ b + l - /$$
 bla arrow $/ k^h + l - /$ k^h lam make

make

(b) Stop + Trill:

$$/ b + r - /$$
 brui four $/ p^h + r - /$ p^hran to dry $/ g + r - /$ gran dry

(c) Fricative + Liquid:

slat^hai / s + 1 - /thunder

2.1.2.4.2 Two medial consonant clusters

A variety of two medial consonant clusters are also present in this dialect. The structure of medial consonant cluster is found in the form of stop + trill, stop + liquid, fricative + trill and fricative + liquid, which are positioned between the last vowel of first syllable and third vowel of second syllable of word. Example-

(a) Stop + Trill:

-b + r - /	habru	clay
-d + r - /	budru	drag
/-g+r-/	ogra	pigsty
	sagrema	firefly
$/-k^h + r-/$	mək ^h rwi	curry
op + Liquid:		

(b) Sto

-g + 1-/	agla	past
$-p^{h}+1-/$	t ^h op ^h la	beg

$$-k^h + l$$
 k $k^h a k^h l u u$ pumpkin

(c) Fricative + Trill:

dansran a night with the moon light

/-z + r-/ gabzri shout

(d) Fricative + Liquid:

-z + 1 bazlo dance

2.1.2.5 Consonant sequences

Mech dialect has also an extensive variety of consonant sequences. A consonant sequence usually occurs in medial position of word. In Mech, maximum number of first member of consonant sequences found often as per manner of articulation are stop, nasal and trill where fricative, lateral and semi-vowels engage as second member. In this dialect, consonants are found in the form of two and three sequences.

2.1.2.5.1 Two consonant sequences

Maximum number of two consonant sequences is found in the structure of stop + fricative, stop + liquid, nasal + stop, nasal + fricative, trill + stop, trill + nasal, liquid + stop and liquid + nasal. These sequences can be positioned in the medial place between vowels in word. Example-

(a) Stop + Fricative:

/-ds-/	udsun	backyaı	ſd

/-gs-/ nagsi left

(b) Stop + Liquid:

/-dl-/ bisadla son

bodlai change

/-t ^h l-/	sit ^h la	yard
(c) Nasal + Stop:		
/-mb-/	lambera	tomato
	dumba	maize
	dambudi	a kind of bean
/-mp ^h -/	emp ^h ou	larva
	bimp ^h aŋ	tree
	t ^h amp ^h oi	mosquito
/-nd-/	bandari	a person who serves betel
		nuts or liquor at wedding
	rənda	widower
	rəndi	widow
	p ^h enda	thigh
	dandise	just a moment
/-nk ^h -/	dank ^h əmsi	moonless night
/-nt ^h -/	gunt ^h uŋ	nose
	ont ^h ai	stone
	sint ^h a	worry
	dint ^h i	to show
	dint ^h iya	a kind of green vegetable
/-ŋd-/	rəŋdui	rice water
/ - ŋg - /	haŋgar	ash
	haduŋguɪra	leader
$/$ - $\mathfrak{yp}^{\mathrm{h}}$ - $/$	t ^h aŋp ^h in	go back

tobacco

 $/-\eta k^h-/$ $t^ha\eta k^hu$

(d) Nasal + Fricative:

/-ms-/ lumsaa to overflow

/-ns-/ hisansali a place of weaving

/-nz-/ k^hanzəŋ comb

sanza east

senza jute sticks

p^hunzi a heap of rice hay

/-nh-/ thonhod to send

/-ŋs-/ baŋsin more

ganso grass

sonsar the world

/-ŋz-/ banzud chilli

/-ŋh-/ liŋhɔd to call

(e) Trill + Stop:

/- rb-/ arbab again

zerba chest

/-rg-/ sərgə heaven

(f) Trill + Nasal:

/-rm-/ borma goat

(g)Trill + Fricative:

/-rs-/ dorsi quiet / lonely

gorsok^ha sparrow

/-rh-/ barhuk^ha storm

(h) Liquid + Stop:

/-lt^h-/ bisalt^hi sisters' husband

(i) Liquid + Nasal:

Two types of consonant sequences are also obtainable in Mech viz- (i) Homorganic consonant sequences and (ii) Geminate consonant sequences.

2.1.2.5.1.1Homorganic consonant sequences

Homorganic consonant sequences are the consonants that articulated by the speech organs in the similar place of articulation in the mouth cavity. In Mech dialect, a few examples of homorganic consonant sequences are available which the place of articulation is found stop. These types of consonant sequences can occur between the vowel phonemes of first and second syllable in word. Example-

(a) Stop + Stop:

/-bt ^h -/	nubt ^h i	site where one lives
/-gd-/	nagda	right hand
$/-k^h t^h -/$	ak ^h t ^h am	ring

2.1.2.5.1.2 Geminate consonant sequences

In Mech dialect, a few geminate or doubled consonant sounds are also obtained in the medial position of word. A number of geminate consonants are articulated in the same places of mouth cavity like bilabial and alveolar and the mannar of articulation is found frequently as stop, liquid and fricative. Like homorganic consonant sequences, geminate consonants are also can occur between the vowel phonemes of the first and second syllable. Example-

(a) Stop + Stop:

/-bb-/	gobbab	salty
/-dd-/	dudda	bachelor

duddi spinster

baddao to be surprised

(b) Liquid + Liquid:

/-ll-/ silla hawk

(b) Fricative+ Fricative:

/-ss-/ bossor year

2.1.2.4.5.2 Three consonant sequences

There are also a few consonant sequences obtained in Mech dialect which the last member of first syllable is seen uncluster and first and second member of second syllable is found cluster. In this study, such kind of arrangement of consonant is considered as three consonant sequences. Normally, this types of consonant sequences to be found in the medial position between the vowel phonemes of word. Example-

(a) Nasal + Stop + Trill:

/-mbr-/ dumbru slightly hot /-ŋdr-/ bandrai much more /**-**ŋgr**-**/ gangrim earthquake seŋgra young boy seŋgri young girl $/-\eta k^h r-/$ sank^hra male dog

female dog

(c) Nasal + Stop + Liquid:

/-mp^hl-/ səmp^hlə lungs

saŋk^hri

(d) Stop + Fricative + Trill:

/-bzr-/ gabzri to call

2.2 Tone

Tone refers to the distinctive pitch level of a syllable. (Rajimwale, 2006:228). Tone is an important trait of Tibeto-Burman languages. Bodo language is maintaining tonal characteristics from the remote past. However, in Mech dialect, one of the variations of Bodo language spoken in North Bengal, it is gradually diminishing due to the influence of neighbouring Bengali language. At present, their tonal distinction is not so evidently recognized by the speakers as found in other Bodo dialects spoken in Assam. Despite that it is assumed that they have two kind of tone system. These are high [/] and low [\]. Following are a few examples of tone with their occurrence.

Initial position:	ai	mother
	`ai	income
Medial position:	hat ^h a'i	market
	hat ^h a`i	teeth
	wa'd	bite
	wa`d	fire
	baí	to buy
	ba`i	to break
Final position:	za′	to eat
	za`	to be
	k^h á	to pluck
	k ^h a`	to bind

2.3 Syllable

Syllable is a unit of pronunciation typically larger than a single sound and smaller than a word (Crystal, 1978-342). Mono-syllabic structure is a special character of this dialect. Even a single vowel can constitute a syllable. This is one of the

mentionable features found in this dialect. Apart from monosyllabic feature, a few disyllabic, trisyllabic, tetra syllabic and penta syllabic structure is also available in this dialect. Comparatively, these traits are less than monosyllabic words.

2.3.1 Mono syllabic structure

VC	aŋ	I
	on	to love
	ar	again
CV	be	this
	ba	carry on back
	hu	land
	no	home
	la	take
	za	eat
CVV CVC	p^h oi	come
CVC	zwŋ	we
	t ^h aŋ	go
	bar	jump
	bon	firewood
	k^h ər	head
	bad	cross
	san	think
	gab	cry
	wad	bite

2.3.2 Di-syllabic structure

V-CV ɔ-ma pig

o-sa	piglet
------	--------

CV-CV du-du milk

na-si finger

no-k^ha rain

bi-sa child

si-sa puppy

si-ma dog

gu-mu yellow

mi-ya yesterday

CV-CVV bi-lai leaf

CV-CVC du-duŋ rope

bi-bar flower

bi-dod meat

bi-god grain

mo-t^han green

CVV-CV dau-k^ha crow

CVC-CV dum-ba corn

sab-ma bad

CVC-CVC ban-zud chilli

nai-gar see and go

2.3.3 Tri-syllabic structure

CV-CV-CV bi-si-gi best friend

gu-su-t^hi lips

CV-CV-CVC na-si-gur finger nail

no-k^ha-p^hor moon

		bi-na-nao	younger sister
	CV-CV-CCV	bi-sa-dla	son
		ha-t ^h ɔ-pla	ash
	CV-CVV-CV	sɔ-mai-na	beautiful
	CV-CVC-CV	bi-k ^h un-zɔ	mother-in-law
	CVC-CV-CV	gan-dɔ-la	butterfly
		lam-be-ra	tomato
		k ^h al-ma-si	next year
	CVC-CVC-CV	dan-k ^h əm-si	moonless night
	CVC-CV-CVC	zed-se-baŋ	much more
	CVC-CCVC-CV	san-pram-bo	always
2.3.4 Tetra sy	yllabic structure:		
	V-CV-CV-CV	o-ma-du-ri	mother pig
		o-ri-p ^h a-ri	surrounding
	V-CVC-CV-CV	a-bad-t ^h i-li	crop field
	CV-CV-CV	du-k ^h u-t ^h i-a	grief
		la-zi-gu-su	shy
	V-CV-CVV-CVV	a-p ^h a-dau-doi	heel
	V-CVC-CVC-CV	o-boŋ-lao-ri	God
	CV-CVV-CV-CV	sɔ-bai-bi-ma	black pea
	CVV-CV-CVC-V	gai-za-rəŋ-i	poor person
	CV-CVV-CV-CVC	go-dau-so-rao	helpless

2.3.5 Penta-syllabic structure

V-CVC-CVC-CV o-ron-dan-dal-i dense forest

2.3.6 Types of syllable

Like other languages, in Mech dialect syllable is found in two types.

- i. Open syllable
- ii. Closed syllable.

2.3.6.1Open syllable

A syllable ending with a vowel is called open syllable. Following are a few examples of open syllable. Example-

VV	ai	mother
CV	na	fish
	za	eat
	cn	home
	ma	what
	ZO	sit

2.3.6.2 Closed syllable

A syllable ending with a consonant is called closed syllable. A few examples are given below. Example-

VC	on	to love
	aŋ	I
CVC	bon	firewood
	k^h ən	pick up
	bar	wind
	k^h ad	run
	lid	write
	t ^h aŋ	go

2.4 Morphophonemics

Morphophonemics also known as morphophonology-"is the branch of linguistics that studies the interaction between morphological and phonological or

phonetic processes. Its chief focus is the sound changes that take place in morphemes (minimal meaningful units) when they combine to form words." (en.m.wikipedia.org)

2.4.1 Epenthesis

The word epenthesis comes from 'epi' (in addition to), 'en' (in) and 'thesis' (putting). That means epenthesis is addition of one or more sounds within a word. According to Yule, epenthesis "is a sound change involving the addition of a sound to a word." (Yule, 2009:241). Epenthesis is found in two types-

- (i) Excrescence or Vyanjanabhakti and
- (ii) Anaptysis or Svarabhakti.

2.4.1.1Excrescence

The addition of a consonant phoneme within a word is known as excrescence. Some examples of excrescence are available in Mech dialect, where voiced alveolar / d / is found inserted in the medial position of a word. In this dialect, the insertion of alveolar / d / is in between a vowel and an alveolar voiceless or voiced / s / and / l / respectively, forming the beginning of second syllable of disyllabic or trisyllabic word. In this insertion, / d / becomes a part of the first syllable and makes the articulation easier. Examples-

Bodo	Mech	Gloss
usuŋ	udsuŋ	courtyard
belao	bedlao	leech
mwzlai	mudzlai	a kind of insect
zesenw	zedsen	more
p ^h isala	bisadla	son
gusuŋ	gudsuŋ	short

The bilabial voiced nasal / m / is also found inserted in the medial position within the word. Its occurrence is very rare and when inserted it becomes a part of the first syllable of the word, making beginning and ending of both syllables bilabial. Examples-

Bodo	Mech	Gloss
bip ^h an	bimp ^h an	tree

2.4.1.2Anaptysis

The addition of a vowel phoneme within a word is known as anaptysis. In Mech, vowel phoneme / ɔ / is also found inserted in the medial position of word where a syllable is ending with a vowel and the other beginning with a consonant. Likewise, a vowel may be inserted between two consonant clusters in the language to make articulation easier. Both have also very rare occurrence.

Bodo	Mech	Gloss
biguma	boiguma	owner
gust ^h i	gusut ^h i	lip

Vowel phoneme / $\mathfrak w$ / is also rarely found inserted in the medial position of Mech. Example-

Bodo	Mech	Gloss
mansi	manswi	person

2.4.2 Prothesis

According to 'A first Dictionary of Linguistics and Phonetics' of David Crystal, prothesis is "a term used in phonetics and phonology to refer to a type of intrusion, where an extra sound has been inserted initially in a word." (Crystal, 1978:290) It is the addition of a sound or a syllable in the beginning of a word without changing its

structure or the meaning. A few examples of prothesis have been found in Mech dialect that can be displayed by comparing with standard form of Bodo language.

Words starting with / $\mathfrak o$ / in standard Bodo language starts with nasal consonant / n / in Mech. This prothesis occurs to make the articulation system easier. In the examples given below all words are beginning with / $\mathfrak o$ / and prothesis / n / is occurring before beginning of all the words.

Bodo	Mech	Gloss
ok ^h ap ^h uir	nək ^h ap ^h ər	moon
o-k ^h a-nai-si	nɔ-kʰa-nai-si	early morning
$\mathfrak{ok}^{h}a$	nək ^h a	rain
ok ^h raŋ	nək ^h raŋ	sky

Words starting with / a / in standard form of Bodo language, starts with nasal consonant / n / in Mech dialect. These kinds of examples are only applicable in case of body parts related to the hand. For example-

Bodo	Mech	Gloss
asi	nasi	finger
ak ^h ai	nak ^h ai	hand
ak ^h ant ^h i	nak ^h ant ^h i	arm
agda	nagda	right hand
agsi	nagsi	left hand

Words starting with vowel / $\mathfrak o$ / in standard Bodo language sometimes starts with trill consonant phoneme / r / in Mech.

Bodo	Mech	Gloss
oza	roza	priest

2.4.3 Elision

Elision refers to the omission or drop of sounds or syllables in a word or the phrase. A few examples of elision are available in Mech vocabulary, where voiced alveolar trill / r / is found deleted from the medial position of word. In standard Bodo, this / r / is almost found before the voiceless / s /. Examples-

Bodo	Mech	gloss
harsin	hasiŋ	alone
barsin	basin	jump upon
barsum	basum	jump into the water
guırlui	guılui	small
hathorkhi	hat ^h ok ^h i	star
derha	deha	win

Like deletion of medial consonant in the examples mentioned above sometimes the last vowel phoneme of a word is also found deleted and this phoneme is high back unrounded vowel phoneme / uu /. It has very rare occurrence in the dialect. For example-

Bodo	Mech	gloss
aruı	ar	and
zesenui	zedsen	more

Deletion of back mid rounded vowel / o / of Mech dialect is rarely found deleted in standard form of Bodo language. Example-

Bodo	Mech	Gloss
k ^h oro	k ^h or	head

Deletion of a syllable in the final position of a word is also found rarely in Mech dialect where diphthong / wii / is found deleted keeping the same sense of meaning.

Bodo	Mech	gloss
Dono	MECH	21033

dak ^h alwi	dak ^h al	the day before yesterday
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2.4.4 Sound shift

Sound shift is a term used in historical linguistics to describe the changes in a language's sound system over a period of time. (Crystal, 2008:442)

2.4.4.1 Changing from aspirated to unaspirated (voiceless to voiced)

 $\label{eq:bound} \mbox{Bilabial voiceless aspirated stop / p^h / of Bodo standard changes to unaspirated} \\ \mbox{voiced / b / in Mech dialect. It is notable that both are bilabial and are easily changeable.} \\ \mbox{Example-}$

Bodo	Mech	Gloss
p ^h isak ^h o	bisak ^h o	womb
p ^h it ^h ai	bit ^h ai	fruit
p ^h isa	bisa	child
p ^h isazla	bisadla	son
p ^h isazuı	bisazə	daughter
p ^h ip ^h aŋ	bimp ^h aŋ	tree
p ^h isai	bisai	husband

2.4.4.2 Changing from alveolar trill to alveolar unaspirated (voiced to voiced)

Some examples are also available where alveolar voiced trill / r / of Bodo standard corresponds to alveolar voiced / d / in the medial and final position of word in Mech dialect. It is noteworthy that both the phonemes are alveolar and voiced and are easily replaceable to each other. Example-

Bodo	Mech	Gloss
k ^h ar	k ^h ad	run
bar	bad	jump
det ^h ar	det ^h ad	to kill by hitting

zir	zid	to peel
bedor	bidod	meat
geder	geded	big
rc	wad	fire
der	ded	to become big
k ^h arson	k ^h adsən	elope

2.4.4.3 Changing from velar nasal to bilabial nasal (voiced to voiceless)

Velar voiced nasal consonant phoneme / η / of standard form of Bodo language corresponds to bilabial voiceless nasal phoneme / m / in Mech dialect. Both are also easily changeable as they are nasal and voiced. Example-

Bodo	Mech	Gloss
bik ^h uŋ	bik ^h um	back
bangrin	gaŋgrim	earthquake

2.4.4.4 Changing from mid front to high front vowel (unrounded to unrounded)

A few examples are also available where mid front unrounded vowel / e / of standard form of Bodo language corresponds to high front unrounded phoneme / i / in Mech dialect. Example-

Bodo	Mech	Gloss
bedor	bidəd	meat
begor	bigod	grain
besor	bisər	mustard

2.4.4.5 Changing from high back to mid vowel (unrounded to rounded)

Many instances are available where high back unrounded vowel / μ / of standard form of Bodo language corresponds to back mid rounded vowel / ν / phoneme in Mech dialect. For example-

Bodo	Mech	Gloss
mwk ^h ra	mɔk ^h ra	monkey
mwider	moided	elephant
k ^h uma	k ^h oma	ear
guidan	godan	new
mwk ^h aŋ	mək ^h aŋ	face
t ^h amp ^h wi	t ^h amp ^h oi	mosquito
burab	borab	angry

2.4.4.6 Changing from high back to mid back vowel (rounded to rounded)

It is also seen that high back rounded vowel / u / of standard form of Bodo language corresponds to mid back rounded vowel / o / in Mech dialect. But such kind of example is found rarely. For example-

Bodo	Mech	Gloss
k ^h uga	$k^h \mathfrak{o}ga$	mouth
gup ^h ur	gɔp ^h ɔd	white
rua	roa	axe
daut ^h u	daut ^h o	dove

2.4.4.7 Changing from high back to high front vowel (unrounded to unrounded)

Sometimes high back unrounded vowel / $u\bar{u}$ / of standard form of Bodo language corresponds to high front unrounded phoneme / i / in Mech. Example-

Bodo	Mech	Gloss
sunab	sinab	west
swima	sima	dog
zula	zila	masculine
muiya	miya	yesterday