CHAPTER-3
PHONOLOGY

3.0. Introduction

The phonology aims to demonstrate the patterns of distinctive sound found in a language, and to make as general statements as possible about the nature of sound systems in the languages of the world. Putting this in another way, phonology is concerned with the range and function of sounds in specific languages (and often therefore referred to as 'functional phonetics'), and with the rules which can be written to show the types of phonetic relationships that relate and contrast words and other linguistic units. (David Crystal, 1978)

3.1. Phonology of Somdal

The Phonology of Somdal consists of two parts: segmental and supra-segmental phonology. Consonants and vowels constitute the segmental part while supra-segmental part includes of tone, juncture, etc. Somdal has twenty-seven phonemes. Out of these, twenty-one are consonants and six are vowels. The figure showing the classification of phonemes in Somdal is shown below:-

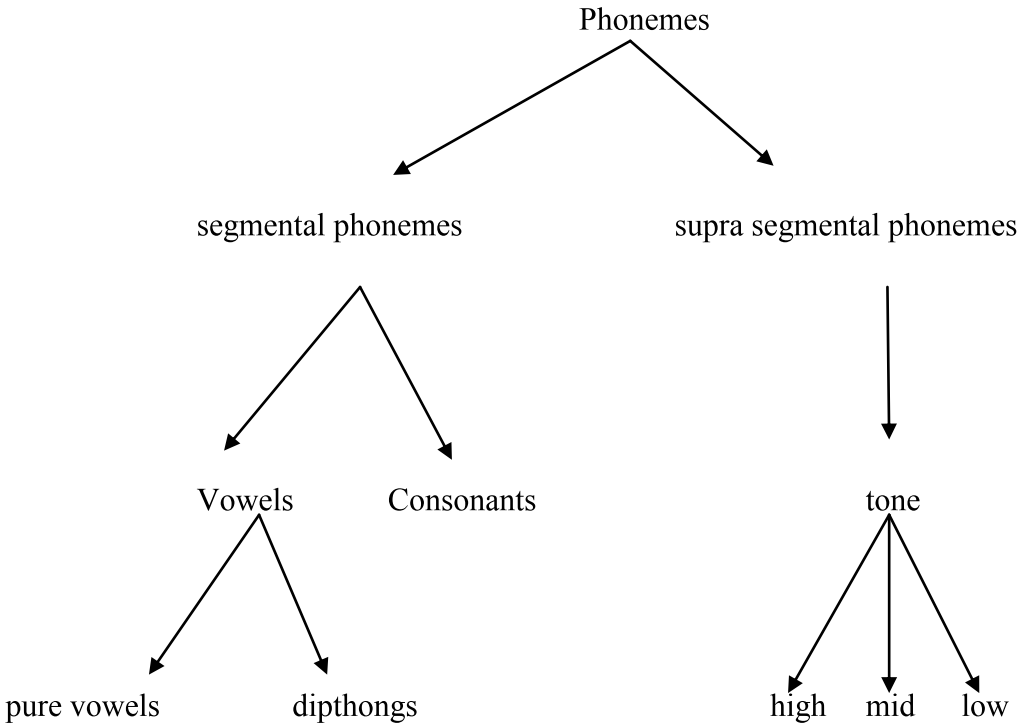

Figure No. 1: Somdal Phonemes and its classification.

3.2. Consonants

Consonants are produced by constricting the vocal tract at some point thereby diverting, impeding or completely shutting off the flow of air in the oral cavity (Sloat, Tylor and Hoard, 1978). The consonant system makes use of the distinction between aspirated and unaspirated, voiced and voiceless only in the case of stops and in other consonants make use the distinction of nasal, lateral, trill, fricative and semi-vowel. There are twenty-one consonant phonemes in Somdal, they are- *p, p^h, b, t, t^h, d, k, k^h, g, m, n, ŋ, l, r, c, v, h, s, ʃ, w,* and *j*. According to the place of articulation they may be bilabial, alveolar, palatal, velar or glottal. They may be voiced or voiceless, aspirate or unaspirate and they may be grouped as stops,

fricatives, nasals, laterals, trills and semi-vowels according to their manner of articulation.

3.2.1. Articulatory Description of Consonant Phonemes

/p/ voiceless bilabial stop

/b/ voiced bilabial stop

/t/ voiceless alveolar stop

/d/ voiced alveolar stop

/k/ voiceless velar stop

/g/ voiced velar stop

/p^h/ voiceless bilabial aspirated stop

/t^h/ voiceless alveolar aspirated stop

/k^h/ voiceless velar aspirated stop

/m/ voiced bilabial nasal

/n/ voiced alveolar nasal

/ŋ/ voiced velar nasal

/l/ voiced lateral approximant

/r/ voiced alveolar trill

/s/ voiceless alveolar fricative

/h/ voiceless glottal fricative

/ʃ/ voiceless post alveolar fricative

/v/ voiced labio-dental fricative

/c/ voiceless palatal affricate

/w/ voiced bilabial semi-vowel

/j/ voiced palatal semi-vowel

MANNER OF ARTICULATION		PLACE OF ARTICULATION											
		BILABIAL		ALVEOLAR		LABIO-DENTAL		PALATAL		VELAR		GLOTTAL	
		vl	vd	vl	vd	vl	vd	vl	vd	vl	vd	vl	vd
Stops	Unap	p	b	t	d					k	g		
	Asp	p^h		t^h						k^h			
Fricatives				s			v	ʃ				h	
Affricates								c					
Nasals			m		n					ŋ			
Laterals					l								
Trill					r								
Semi vowel			w						j				

Figure No.2: Consonant Phonemes of Somdal.

3.2.2. Consonants and their allophones

3.2.2.1. Stops

In this analysis, there are ten phonemic oral stops. The stop series occur at four distinctive places of articulation: bilabial */p, p^h, b/,* alveolar */t, t^h, d/,* velar */k, k^h, g/.* There are three aspirated stops */p^h, t^h, k^h/*. The voiced unaspirated stops found in Somdal are */b, d, g/.* Unaspirated stops /p, t, k/ are phonetically unreleased */p̚, t̚, k̚/* when they occur word finally.

3.2.2.1.1.Bilabial Stops

/p/

/p/ is a voiceless unaspirated bilabial stop. It can occur in all positions in Somdal word or syllable. In word initial and medial positions, the phoneme */p/* is a voiceless, unaspirated, bilabial stop [p].

Initial

pí	'earring'
[pi]	
pansìn	'handle'
[pansin]	

Medial

kəpa	'mad man'
[kəpa]	
raípəm	'battle field'
[raipəm]	

Word finally, the phoneme */p/* is a voiceless, unreleased, unaspirated bilabial stop [p].

Final

p^{h}ihóp	'shoe'
[p^{h}ihopˀ]	
kəpúp	'powder'
[kəpupˀ]	

/p^h/

The phoneme */p^h/* is a voiceless, aspirated bilabial stop. It can occur only in the initial and medial positions in Somdal word or syllable. In initial and medial positions, the phoneme */p^h/* is a voiceless aspirated stop [p^h].It is not attested in word or syllable final position.

Initial

p^həŋa ‘five’

[p^həŋa]

p^huhái ‘husk’

[p^huhai]

Medial

riŋp^há ‘happy’

[riŋp^ha]

əp^{h}áŋ ‘branch’

[əp^{h}aŋ]

/b/

/b/ is a voiced unaspirated, bilabial stop, which is found attestedonly in initial and final position in Somdal word or syllable. In the initial word position, the phoneme */b/* is a voiced, unaspirated, bilabial stop[b].

Initial

baiwui ‘to fly’

[baiwui]

bəthathiro	‘maize’
[bəthathiro]	

Medial

lubai	‘potato’
[lubai]	

taŋbár	‘cupboard’
[taŋbar]	

3.2.2.1.2.Alveolar Stops

/t/

/t/ is a voiceless, unaspirated alveolar stop. It can occur in all positions in Somdal word or syllable. In word initial and medial positions, the phoneme */t/* is a voiceless unaspirated alveolar stop [t].

Initial

tínphа	‘spade’
[tinpha]	

tərkhathì	‘grape’
[tərkhathi]	

Medial

kóktun	‘cuckoo’
[koktun]	

p^{h}atikom	‘coriander’
[p^{h}atikom]	

Word finally, the phoneme */t/* is a voiceless, unreleased, unaspirated alveolar stop [t].

Final

panliklat	‘wrist’
[panliklat̚]	
ək^{h}ùt	‘smell’
[ək^{h}ut]	

/t^{h}/

The phoneme */t^{h}/* is a voiceless, aspirated alveolar stop. It can occur only in the initial and medial positions in Somdal word or syllable. In initial and medial positions, the phoneme */t^{h}/* is a voiceless aspirated stop [t^{h}]

Initial

t^{h}íŋ	‘stick’
[t^{h}iŋ]	
t^{h}aomì	‘lantern’
[t^{h}aomi]	

Medial

vait^{h}um	‘they’
[vait^{h}um]	

kat^{h}áu ‘bracelet’

[kat^{h}au]

/d/

/d/ is a voiced unaspirated alveolar stop. It can occur in all positions in Somdal word or syllable. In word initial and intervocalic positions, the phoneme */d/* is a voiced unaspirated alveolar stop[d].

Initial

dosi ‘wick’

[dosi]

dù ‘sugarcane’

[du]

Medial

púŋdon ‘guava’

[puŋdon]

əʃundú ‘noon’

[əʃundu]

Word finally the phoneme */d/* is a voiced, unreleased, unaspirated bilabial stop[d].

Final

wud ‘camel’

[wud]

miwud ‘blow-pipe (use in kitchen)’

[miwud]

3.2.2.1.3.Velar stops

/k/

/k/ is a voiceless, unaspirated velar stop. It can occur in all positions in Somdal word or syllable. In word initial and intervocalic positions, the phoneme */k/* is a voiceless unaspirated velar stop[k].

Initial

kəthəgə ‘how’

[kəthəgə]

koírik ‘arm pit’

[koirik]

Medial

jasuká ‘opposite’

[jasuka]

lúmkəci ‘summer’

[lumkəci]

Word finally, the phoneme */k/* is a voiceless, unreleased, unaspirated velar stop[k].

Final

ʃáthəruk ‘six hundred’

[ʃathəruk]

ŋodluk ‘nape’

[ŋodlukˀ]

/g/

/g/ is a voiced unaspirated velar stop. It can occur only in initial and medial positions, in Somdal word or syllable. In word initial and intervocalic positions the phoneme */g/* is a voiced unaspirated velar stop[g].

Initial

goŋ ‘metal disc’

[goŋ]

Medial

sagoí ‘horse’

[sagoi]

/k^{h}/

The phoneme */k^{h}/* is a voiceless, aspirated velar stop. It can occur only in the initial and medial positions in Somdal word or syllable. In initial and medial positions, the phoneme */k^{h}/* is a voiceless aspirated stop [k^{h}]

Initial

k^{h}uí ‘village’

[k^{h}ui]

k^{h}aŋkai ‘bear’

[k^{h}aŋkái]

Medial

ək^{h}ón ‘sound’

[ək^{h}on]

t^{h}uk^{h}ui ‘pound’

[t^{h}uk^{h}ui]

3.2.2.2. Nasals

/m/

/m/ is a voiced, unaspirated bilabial nasal. It can occur in all positions in Somdal word or syllable. In word initial position and intervocalic position, the phoneme */m/* is a voiced, unaspirated bilabial nasal [m].

Initial

mujá ‘cloud’

[muja]

mori ‘sin’

[mori]

Medial

t^{h}əmpaliú ‘jhum’

[t^{h}əmpaliu]

ʃimbu ‘drum’

[ʃ́imbu]

Word finally, the phoneme */m/* is a voiced, unreleased, unaspirated bilabial nasal [m].

Final

səŋom	'bear'
[səŋom˺]	
k^hudám	'omen'
[k^hudam˺]	

/n/

/n/ is a voiced, unaspirated alveolar nasal. It can occur in all positions in Somdal word or syllable. In word initial position and intervocalic position, the phoneme */n/* is a voiced, unaspirated, alveolar nasal [n].

Initial

nənào	'your'
[nənao]	
nasìk	'eucalyptus'
[nasik]	

Medial

t^hunaní	'with whom'
[t^hunani]	
hanám	'onion'

[hanam]

Word finally,the phoneme */n/* is a voiced, unreleased, unaspirated alveolar nasal [n].

Final

koktu̍n ‘cuckoo’

[koktun̚]

kəcón ‘cloth’

[kəcon̚]

/ŋ/

/ŋ/ is a voiced unaspirated velar nasal. It can occur in all positions in Somdal word or syllable. In word initial position and intervocalic positions, the phoneme */ŋ/* is a voiced unaspirated velar nasal [ŋ].

Initial

ŋodluk ‘nape’

[ŋodluk]

ŋot^{h}uk ‘back of the head’

[ŋot^{h}uk]

Medial

əwuŋwí ‘queen’

[əwuŋwi]

nàoŋo ‘monkey’

[naoŋo]

When */ŋ/* occurs in final position of Somdal word or syllable, it is a voiced, unreleased, unaspirated velar nasal [ŋ̚]

Final

kəp^{h}uŋ ‘hill’

[kəp^{h}uŋ̚]

tú̀ŋ ‘on’

[tuŋ̚]

3.2.2.3. Laterals

/l/

/l/ is a voiced unaspirated lateral approximant. It can occur only in initial and intervocalic position in Somdal word or syllable. In word initial and intervocalic position, it is voiced, released, unaspirated, lateral approximant [l].

Initial

lìklat ‘joints’

[liklat]

lik^{h}ùr ‘cave’

[lik^{h}ur]

Medial

pànlìklat ‘wrist’

[panliklat]

mali ‘tongue’

[mali]

3.2.2.4. Trill

/r/

/r/ is a voiced unaspirated alveolar flap. It can occur in all positions in Somdal word or syllable.

Initial

riŋkúm ‘age’

[riŋkum]

rápru ‘ribs’

[rapru]

Medial

mətʰirúi ‘cane’

[mətʰirui]

əri ‘medicine’

[əri]

Final

naohár ‘lightening’

[naohar]

əp^{h}ar ‘lungs’

[əp^{h}ar]

3.2.2.5. Affricates

/c/

/c/ is a voiceless unaspirated palatal affricate. It can occur only in initial and in intervocalic positions in Somdal word or syllable. In word initial and intervocalic positions, the phoneme */c/* is a voiceless alveolar affricate [ts]. It is not attested in word or syllable final position.

Initial

cit^{h}ilaí ‘after’

[tsit^{h}ilai]

caít^{h}ui ‘tears’

[tsat^{h}ui]

Medial

tənkacíkaí ‘always’

[tənkatsika]

məcut^{h}ui ‘saliva’

[məcut^{h}ui]

3.2.2.6. Fricatives

/v/

/v/ is a voiced unaspirated labio-dental fricative. It can occur only in the initial and medial positions in Somdal word and syllable. In word initial and intervocalic positions, the phoneme */v/* is a voiced unaspirated labio-dental fricative[v].It is not attested in word or syllable final position.

Initial

vanu	'duck'
[vanu]	
vatt^{h}a	'cotton seed'
[vát^{h}a]	

Medial

sevá	'bull'
[seva]	
k^{h}əvì	'forehead'
[k^{h}əvi]	

/s/

/s/ is a voiceless unaspirated alveolar fricative. It can occur only in initial and medial position in Somdal word or syllable. In word initial and intervocalic positions, the phoneme */s/* is a voiceless unaspirated alveolar fricative [s]. It is not attested in word or syllable final position.

Initial

se	'cow'
[se]	

səha	'wool'
[səha]	

Medial

t^hisùkt^hi	'wood apple'
[t^hisukt^hi]	

hərsá	'chicken'
[hərsa]	

/ʃ/

/ʃ/ is a voiceless aspirated post alveolar fricative. It can occur only in the initial and intervocalic position in Somdal word or syllable. The phoneme */ʃ/* is a voiceless aspirated post alveolar fricative [ʃ].It is not attested in word or syllable final position.

Initial

ʃank^{h}u	'lion'
[ʃank^{h}u]	

ʃímp^{h}ùi	'broom'
ʃimp^{h}ui	

Medial

məʃù	'rat'
[məʃu]	

kʰaíʃe	‘thigh’
[kʰaiʃe]	

/h/

/h/ is a voiceless glottal fricative. It can occur only in the initial and medial position in Somdal word or syllable. In word initial and intervocalic position, the phoneme */h/* is a voiceless glottal fricative [h].It is not attested in word or syllable final position.

Initial

huinȁo	‘puppy’
[huinao]	
honpan	‘sleeve’
[honpan]	

Medial

vahoŋnao	‘widower’
[vahoŋnao]	
səhá	‘wool’
[səha]	

3.2.2.7. Semi-vowels

/w/

/w/ is a voiced unaspirated semi-vowel. It can occur only in initial and medial position in Somdal word or syllable. In word initial and intervocalic position, the

phoneme */w/* is a voiced unaspirated semi-vowel [w].It is not attested in word or syllable final position.

Initial

wəncut^{h}i ‘tomato’

[wəncut^{h}i]

wonroi ‘wreath’

[wonroi]

Medial

paowi ‘elephant’

[paowi]

k^{h}áwù ‘weed’

[k^{h}awu]

/j/

/j/ is a voiced unaspirated palatal semi-vowel. It can occur in word initial and intervocalic positions in Somdal word or syllable. It is not attested in word or syllable final position.

Initial

jao ‘sheep’

[jao]

jotpi ‘nail’

[jotpi]

Medial

k^{h}amajiŋa ‘blue’

[k^{h}amajiŋa]

kəjá ‘courtyard’

[kəja]

3.2.3. Consonant minimal pairs

Some minimal pairs and near-minimal pairs illustrating the distinctiveness of the consonant phonemes are given below:

/p/ vs. /b/

/paika/ ‘easily’

/bàika/ ‘to fly’

/p/ vs. /p^{h}/

/pi/́ ‘earring’

/p^{h}i/́ ‘leg’

/kəpa/́ ‘mad man’

/kəp^{h}a/ ‘good’

/t/ vs. /d/

/tiwui/ ‘difference’

/dìwui/ ‘painting’

/kətó/ ‘to descend’

/kədo/ ‘the end’

/k/ vs. /g/

/*sakoi/* ‘bark (cover)’

/sagoi/ ‘horse’

/t/ vs. /t^{h}/

/ətao/ ‘brother’

/ət^{h}aó/ ‘fat’

/kəte/ ‘other’

/kət^{h}e/ ‘death’

/t^{h}/ vs. /d/

/t^{h}ìwui/ ‘to die’

/dìwui/ ‘to paint’

/k/ vs. /k^{h}/

/ə̀ku/ ‘insect’

/ə̀k^{h}ú/ ‘cow’s leg’

/ko/ ‘river’

/k^{h}o/ ‘bowl’

/b/ vs. /d/

/ə̀bu/	‘wrist watch’
/ə̀du/	‘sugarcane’

`/p/ vs. /t/

/kə̀pái/	‘easy/cheap’
/kətai/	‘remainder’

/p/ vs. /k/

/əpái/	‘root pulp’
/əkái/	‘part’

/k/ vs. /t/

/əkaí/	‘part of’
/ətaí/	‘leftover’

/p^{h}/ vs. /t^{h}/

/p^{h}í/	‘le’
/t^{h}i/	‘vegetables’

/p^{h}/ vs. /k^{h}/

/əp^{h}ò́n/	‘stomach’
/ək^{h}ó́n/	‘sound’

/p^{h}/ vs. /b/

/p^{h}ərwí/	‘to open’
/bərwí/	‘grab a fist in full’

/m/ vs. /n/

/murwí/	‘to bulldoze’
/nurwí/	‘to scrub’

/m/ vs. /ŋ/

/mərka/	‘seriously’
/ŋərka/	‘snoring’

/n/ vs. /ŋ/

/k^{h}ənaí/	‘grassy hill slope (moor)’
/k^{h}əŋai/	‘nearby’

/h/ vs. /v/

/vát/	‘cotton’
/hat/	‘leach’
/var/	‘mushroom’
/har/	‘fertilizer’

/h/ vs. /ʃ/

/əʃún/	‘mid-day’
/əhún/	‘part of a length’

/k/ vs. /s/

/ka/	'room'
/sa/	'meat'

/l/ vs. /r/

/ləm/	'land'
/rə̀m/	'village'

/c/ vs. /s/

/cá/	'necklace'
/sa/	'meat'

/p^{h}/ vs. /v/

/p^{h}ái/	'good'
/vai/	'him'

/w/ vs. /j/

/k^{h}ə̀wor/	'swelling'
/k^{h}əjor/	'selling'

3.2.4. Distribution of consonant phonemes

Among the consonant phonemes found in Somdal, fifteen consonant phonemes do not occur in all the positions, they are the phonemes */b, g, p^{h}, k^{h}, t^{h}, l, c, v, s, ʃ, h, w* and *j*/ i.e. they do not occur in final position. The distribution of all the consonant phonemes are given below-

Initial		Medial		Final	
/p/					
/paowi/	‘elephant’	/*campra/*	‘lemon’	/*pʰíhoṕ*/	‘shoe’
/pántʰi/	‘arm’	*/tʰəpur/*	‘buttock’	*/ʃailip/*	‘temple’
/b/					
/baìka/	‘to fly’	*/lubai*/	‘potato’	-	
/baíkʰui/	‘shallow’	*/taŋbar/*	‘cupboard’	-	
/t/					
/tínpʰa/	‘spade’	*/koktùn/*	‘cuckoo’	*/panliklat*/	‘wrist’
/taro/	‘pine’	*/ətùŋ/*	‘north’	*/ətʰet/*	‘width’
/k/					
/*katʰaga/*	‘how’	/*lúmkaci*/	‘summer’	/*ʃáʈʰəruk/*	‘sixhundred’
/kiutok/	‘brain’	*/məki/*	‘kidney’	/*pankʰuk*/	‘elbow’
/g/					
/gulabwón/	‘rose’	*/kətʰaga*/	‘how’	-	
/gendi/	‘pickaxe’	*/mugá/*	‘silk’	-	
/pʰ/					
/pʰonruiwuí/	‘diarrhoea’	/*kəpʰəŋa*/	‘fifth’	-	

/p^{h}uhaí/ ‘husk’ */hap^{h}əŋa/* ‘fifty’ -

/t^{h}/

/t^{h}isukt^{h}i/ ‘wood apple’ */sat^{h}iniú/* ‘pepper’ -

/t^{h}iŋneirù/ ‘vein’ */ət^{h}a/* ‘seed’ -

/k^{h}/

/k^{h}aítagui/ ‘kingfisher’ */ʃaŋk^{h}u/* ‘lion’ -

/k^{h}əma/ ‘wound’ */ʃáŋk^{h}a/* ‘penis’ -

/m/

/mujá/ ‘cloud’ */k^{h}əmpaliu/* ‘jhum’ */kolom/* ‘pen’

/mirai/ ‘epilepsy’ */panməja/* ‘palm’ */k^{h}ùm/* ‘rain hat’

/n/

/nənao/ ‘your’ */t^{h}unəni/* ‘with whom’ */koktún/* ‘cuckoo’

/nit^{h}ər/ ‘nose’ */sinái/* ‘pus’ */p^{h}on/* ‘stomach’

/ŋ/

/ŋodluk/ ‘nape’ */naoŋo/* ‘monkey’ */hameŋ/* ‘sheep’

/ŋakneiwúi/ ‘protect’ */saŋkoi/* ‘sickle’ */ətiŋ/* ‘marrow’

/l/

/lìklat/	‘joints’	*/panliklat/*	‘wrist’	-	
/laŕ/	‘armlet’	*/malat^{h}iŋ/*	‘bow’	-	

/r/

/*riŋkum*/	‘age’	/*mət^{h}iruú/*	‘cane’	/*naohar*/	‘lightening’
/risəŋ/	‘hospital’	*/wənroi*/	‘garland’	*/t^{h}esir/*	‘wrap around skirt’

/c/

/cit^{h}ilaí/	‘after’	/*təmkəcikaŕ/*	‘always’	-	
/cik^{h}ur/	‘grave’	*/məcì/*	‘salt’	-	

/v/

/vanu/	‘duck’	/*seva/*	‘bull’	-	
/vanao/	‘bird’	*/varivara/*	‘god’	-	

/s/

/*se*/	‘cow’	*/t^{h}isukt^{h}ì/*	‘wood apple’	-	
/səru/	‘bone’	*/maimaśur*/	‘cheek’	-	

/ʃ/

/ʃaŋk^{h}uú/	‘lion’	/*məʃu*/	‘rat’	-	
/ʃəhi/	‘hip’	*/seʃìm/*	‘cowshed’	-	

/h/

/*huinao*/ ‘puppy’ /*vahoŋnao*/ ‘widower’ -

/*haitó*/ ‘navel’ /*saha*/ ‘wool’ -

/d/

/*dosi*/ ‘wick’ /*púŋdon*/ ‘guava’ /*wud*/ ‘camel’

/*du*/ ‘sugarcane’ /*k^{h}udop*/ ‘ring’ /*lipad*/ ‘soil’

/w/

/*wonɲut^{h}i*/ ‘tomato’ /*paowi*/ ‘elephant’ -

/*wilep*/ ‘knife’ /*panwi*/ ‘thumb’ -

/j/

/*jao*/ ‘sheep’ /*k^{h}áməjiŋa*/ ‘blue’ -

/*jám*/ ‘winnowing pan’ /*p^{h}iməjə*/ ‘sole’ -

The distribution of consonant phonemes are also shown in the table given below:

Phonemes	Initial	Medial	Final
P	+	+	+
p^{h}	+	+	-
B	+	+	-
T	+	+	+
t^{h}	+	+	-
D	+	+	+
K	+	+	+
k^{h}	+	+	-
G	+	+	-
C	+	+	-
M	+	+	+
N	+	+	+
Ŋ	+	+	+
L	+	+	-

R	+	+	+
V	+	+	-
S	+	+	-
ʃ	+	+	-
H	+	+	-
W	+	+	-
J	+	+	-

Table No.1 Distribution of Consonant Phonemes

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3.2.5. Consonant Sequence

When two or more consonants are occurred in an immediate position beyond the syllable, it is regarded as consonant sequence. Most of the consonant sequences in Somdal are found in medial position. Consonant sequence in Somdal can be divided into four types. They are given below:

3.2.5.1. Gemination

Gemination is a change or process by which consonants are doubled**.** Gemination is defined as clustering of identical consonants adjacent to one another within a phonological word. The phonetic value of germinate consonants is discerned to be very different to single consonants on the basis of clearly audible length. The consonants */r/, /n/, /t/, /p/, /k/, /m/* etc are attested to as germinate in Somdal. Examples are given below:

i.	*-rr-*	:	/*raritkʰəjor.rá*/	‘book seller’
ii.	*-nn-*	:	/*pan.naukətiəuwá*/	‘little finger’
iii.	*-tt-*	:	/*at.tamənətawù̀i*/	‘dough’
iv.	*-pp-*	:	/*kʰudop.pannao*/	‘ring finger’
v.	*-kk-*	:	/*dətkətʰik.ká*/	‘blackgram’
vi.	*-mm-*	:	/*kʰəmoikəʃem.ma*/	‘backer’

3.2.5.2. Homorganic

Homorganic are sounds which are produced at the same place of articulation, such as *k, g, kʰ* etc.

Examples:

t+k	:	*/vát̀kor/*	‘cotton shell’
t+d	:	/*pʰitduwúi/*	‘hit’
t+tʰ	:	*/vattʰà/*	‘cotton seed’
k+kʰ	:	*/lokkʰá/*	‘dhoti’
k+tʰ	:	*/kʰatʰikʰù/*	‘commit suicide’
n+t	:	/*kəcontipwúi/*	‘fold(cloth)’
n+tʰ	:	/*tʰutʰoiwùi/*	‘snatch’
m+pʰ	:	/*nəmpʰudə/*	‘compel’
m+p	:	*/kəmpor/*	‘blanket’
m+b	:	/*tʰəmbalwən/*	‘lotus’
ŋ-+kʰ	:	*/huinəkʰoŋwui/*	‘bark’
k+s	:	*/kʰəksoí/*	‘breath’
t+c	:	*/ratcikəpáikʰuwùi/*	‘grab’
k+l	:	*/liklət/*	‘joint’
t+l	:	*/hutlaməcù/*	‘grey’
n+t	:	*/kəcontipwùi/*	‘fold(cloth)’
n+tʰ	:	*/pantʰì/*	‘arm’
t+r	:	*/tʰətro/*	‘stalk’
m+pʰ	:	/*nəmpʰudə̀/*	‘compel’
m+p	:	/*kəmpor/*	‘blanket’
m+b	:	*/tʰəmbalwə́n/*	‘lotus’
ŋ+kʰ	:	*/riwùi/*	‘alive’

3.2.5.3. Contiguous

Contiguous sequence is a sequence which used adjacent parts of the same organ, with the result that the articulators cannot be man curved freely in total independence of each other (Catford, 1988).

Examples:

ŋ+n	:	/*t^{h}iŋneiru*/	‘nerve’
t+p	:	/*jotpì*/	‘nail’
t+b	:	/*vátbom*/	‘cotton fibre’
k+d	:	/*cekdiwùi*/	‘burn brick’
k+p	:	/*mikpiuwùi*/	‘blind’
t+m	:	/*satmiwúi*/	‘accompany’
n+p	:	/*panpok*/	‘banister’
t+s	:	/*datswui*/	‘to chew food’
t+ʃ	:	/*datʃìm*/	‘barn’
b+r	:	/*ribribkəbautəwùi*/	‘chant’
n+p	:	/*panpok*/	‘banister’
n+ʃ	:	/*panʃó*/	‘shoulder’
n-+r	:	/*p^{h}onrui*/	‘diarrhoa’
n+m	:	/*panməreŋ*/	‘finger’
r+t	:	/*kortam*/	‘button’
r+t^{h}	:	/*kurt^{h}a*/	‘loom’
r+s	:	/*hərsá*/	‘chicken’
c+r	:	/*tacriəuwùi*/	‘gamble’
s+p	:	/*naspəti*/	‘pear’
s+t	:	/*pastor*/	‘priest’

3.2.5.4. Heterorganic

A heterorganic sequence is one in which the articulators used in the successive sounds are quite different. It means that the articulators can be freely manipulated independently of each other. Examples are given below:

t+k^{h}	:	/*wilepwutwùi*/	‘to blow flute’
b+k^{h}	:	/*həpk^{h}əmoiwùi*/	‘hinder’
p+k^{h}	:	/*mit^{h}akəsipwùi*/	‘blink’
r+c	:	/*murcái*/	‘lip’
n+k	:	/*hənkwùi*/	‘answer’
m+k^{h}	:	/*məsámwùi*/	‘abstain’
ŋ+s	:	/*pəŋsáp*/	‘strength’
ŋ+b	:	/*təŋbar*/	‘cupboard’
ŋ+t	:	/*t^{h}aŋkiwùi*/	‘cling to’
p+s	:	/*sipsáwùi*/	‘pain’
p+c	:	/*cəpcáwùi*/	‘weeping’
t+w	:	/*hotwùi*/	‘deforest’
b+w	:	/*gulabwən*/	‘rose’
p+j	:	/*jupjupaiwui*/	‘flicker’
n+k	:	/*hənkáwùi*/	‘answer’
m+k	:	/*k^{h}umkór*/	‘back’
m+k^{h}	:	/*məsamwùi*/	‘abstain’
ŋ+b	:	/*təŋbár*/	‘cupboard’
ŋ+t	:	/*t^{h}aŋkitwùi*/	‘cling to’
ŋ+s	:	/*pəŋsáb*/	‘strength’
n+w	:	/*panwí*/	‘thumb’

ŋ+l	:	/*məŋla*/	'soul'
r+k^h	:	/*nit^{h}ark^{h}ur*/	'nostril'
r+p	:	/*net^{h}arpi*/	'nose ring'
r+h	:	/*morhá*/	'beard'

3.2.6. Consonant Cluster

A consonant cluster is a group or sequence of consonants that appear together in a syllable without a vowel between them.In Somdal, consonant clusters are rarely found and they are found only in the initial and medial position of a word whereas it is not found in the final position.Consonant clusters found in Somdal are given below:

i. Unaspirated stop +semi-vowel

/kw-/	/*kwasiwùi*/	'chew (betel)'
/pj-/	/*pjas*/	'onion'

ii. Unaspirated stop+trill

/-tr-/	/*maitren*/	'cliff'
/-pr-/	/*cəmpra*/	'lemon'
/-gr-/	/*məŋgra*/	'sweet potato'
/-dr-/	/*k^{h}ondrùm*/	'gourd'

iii. Unaspirated stop+lateral approximant

/-pl-/	/*cauplut^{h}i*/	'gooseberry'
/-dl-/	/*k^{h}oidlui*/	'honey'

iv. Aspirated stop +trill

/-k^hr-/	/*mik^{h}ri*/	'cigarette'

v. Nasal+semi-vowel

/mj-/	*/mjarnáu/*	'boy'

vi. Fricative+trill

/-sr-/	*/consrai/*	'crown princess'

3.2.7. Vowels

Vowels are speech sounds made by shaping the oral cavity while allowing free passage of air from the lungs (Sloat, Taylor and Hoard, 1978). These vowels may be classified according to the position of tongue, which is retracted or extended, the height of the tongue and the shape of lips. The six vowel phonemes */i, e, ə, a, o, u/* are classified as front, central and back in terms of their place of articulation while in accordance to their manner of articulation they are termed as high, mid and low. The vowel chart of Somdal is given below:

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

Table No. 2 Somdal Vowel Phonemes

3.2.7.1. Articulatory Description of Vowels

The articulatory description of the six vowel phonemes are as follows:

/i/ high, front unrounded vowel

/e/ mid, front unrounded vowel

/ə/ mid, central unrounded vowel

/a/ low, central unrounded vowel

/u/ high, back rounded vowel

/o/ mid, back rounded vowel

3.2.7.2. Vowel phonemes and their allophones

/i/

The phoneme */i/* is a short, unrounded, high front vowel [i] which is attested in word initial, medial and final positions as shown below:

Initial

/i/ [i] 'I'

Medial

/ʃim/ [ʃim] 'house'

Final

/məlì/ [məli] 'tongue'

/e/

The phoneme */e/* is a short, mid close, unrounded, front vowel [e] which is attested in word medial and final positions as shown below:

Medial

/p^{h}ek/ [p^{h}ek] 'mat'

Final

/se/ [se] 'cow'

/ə/

The phoneme */ə/* is a central, mid, unrounded vowel [ə] which is attested in word initial, medial and final positions as shown below:

Initial

/əp^{h}ek/ [əp^{h}ek] 'flat'

Medial

/*nəŋ/* [nəŋ] 'you'

Final

/lə/ [lə] 'wage'

/a/

The phoneme */a/* is a low, back, unrounded vowel [a] which is attested in word initial, medial and final positions as shown below:

Initial

/aho/ [aho] 'hollow'

Medial

/*caó/* [cao] 'deer'

Final

/lá/ [la] 'song'

/o/

The phoneme */o/* is a mid close, back, rounded vowel [o] which is attested in word initial, medial and final positions as shown below:

Initial

/okkət^{h}ui/ [okkət^{h}ui] 'earth'

Medial

/con/ [con] 'sister'

Final

/t^{h}iró/ [t^{h}iro] 'tree'

/u/

The phoneme */u/* is a high, back, rounded vowel [u] which is attested in word initial, medial and final positions as shown below:

Initial

/ukəʃu/ [ukəʃu] 'arrival'

Medial

/kù̀m/ [kum] 'year'

Final

/vanu/ [vanu] 'duck'

3.2.7.3. Vowel contrast

The existence of the above mentioned vowel phonemes in Somdal is established on the basis of the vowel contrast as shown below-

Examples are:

Somdal	Gloss
/i/ vs. /u/	
/əʃi/	'blood'
/əʃù/	'track'
/i/ vs. /a/	
/si/	'winter'
/sá/	'meat'
/i/ vs. /e/	
/k^həri/	'intestine'
/k^həre/	'the first'
/e/ vs. /o/	
/k^həle/	'the thief'
/k^həló/	'the buyer'
/e/ vs. /a/	
/k^həme/	'the giver'
/k^həma/	'injury'

/e/ vs. /u/

/kəʃe/	‘old’
/kəʃù/	‘scandal’

/ə/ vs. /a/

/*lə*/	‘wage’
/lá/	‘song’

/a/ vs. /o/

/ahə/	‘hair/fur’
/*ahó/*	‘hollow’

/o/ vs. /u/

/t^{h}iru/	‘seed’
/*t^{h}iró/*	‘tree’

3.2.7.4. Distribution of vowel phonemes

All the six vowels can occur in the initial, medial and final position, except the mid, front unrounded vowel /*e*/ does not occur in initial position.

The occurrence of these vowels are illustrated below-

Initial		**Medial**		**Final**	
/i/					
/iwi/	‘my mother’	*/mət^{h}irui*/	‘cane’	/*məlì*/	‘tongue’
/imə/	‘our’	*/kət^{h}iri/*	‘poison’	*/kəpì/*	‘spoon’

/e/

-		/kəʈʰemma/	‘learned’	/se/	‘cow’
-		/wilep/	‘knife’	/kʰəlime/	‘thief’

/ə/

/əpʰek/	‘flat’	/kəcək/	‘often’	/lə/	‘wage’
/əʃi̗/	‘blood’	/tərkʰatʰi̗/	‘grape’	/kajə/	‘courtyard’

/a/

/ahə/	‘fur’	/hatʰí/	‘chilli’	/kəsá/	‘heat’
/amá/	‘yoke’	/hár/	‘armlet’	/hoksá/	‘pork’

/o/

/okkətʰui/	‘earth’	/hoksá/	‘pork’	/ʈʰiró/	‘tree’
/ot/	‘work’	/pʰon/	‘belly’	/ʈʰao/	‘fat’

/u/

/ukəʃú/	‘arrival’	/lupaí/	‘potato’	/əlu/	‘stone’
/ukù̗/	‘box’	/aluŋá/	‘middle’	/ʃinù̗/	‘lime’

The table showing the distribution of vowel phonemes is given below:

Phonemes	Initial	Medial	Final
i	+	+	+
e	-	+	+
ə	+	+	+
A	+	+	+
o	+	+	+
u	+	+	+

Table no.3 Distribution of Vowel Phonemes

3.2.7.5. Sequence of vowel phonemes

Vowel sequence is the occurrence of two vowel phonemes beyond the syllable while in diphthong, vowel phonemes occur within the syllable. Most of the vowel sequences in Somdal are found in medial position. Some examples are illustrated below:

/i ə/

ʃolaǰi-əni	'banana leaf'
lowi-əra	'manner of jumping'

/u ə/

kiu-ərun	'hat'
tiumətiu-əra	'manner of speaking'

/o ə/

/k^hənó-əra/	'manner of drinking'

/a ə/

/cəmpŕa-ədlui/	'lemon juice'

3.2.8. Diphthongs

The word diphthongs comes from the Greek word 'diphthongos' which means 'having two sounds'. A diphthong is a vowel sound consisting of a deliberate, i.e. intentional glide, the organs of speech starting in the position of one vowel and immediately moving in the direction of another vowel. The diphthongs are made up of full vowel plus one of the reduced vowels (Bolinger, 1986: 38). There are six types of diphthongs found in Somdal.

Diphthongs found in Somdal are given below with examples:

/-ai/

/*raí*/	‘come’
/*k*^{h}*ai*/	‘fish’

/-ao/

/*cao*/	‘deer’
/*t*^{h}*áo*/	‘fat’

/-ei/

/*məlimnei*/	‘absent’
/*dlei*/	‘necessary’

/-eo/

/*p*^{h}*eó*/	‘wash’
/*reo*/	‘play’

/-oi/

/*roi*/	‘similar’
/*selói*/	‘buffalo’

/-ui/

/*lui*/	‘buy’
/*k*^{h}*ui*/	‘village’:

/-əu-/

/*tacriəuwùi*/	‘gamble’

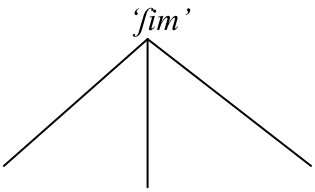
3.2.9. Syllable

A syllable is “a unit of pronunciation consisting of a vowel with one or more consonants. It is defined as a unit of pronunciation typically larger than single sound and smaller than a word” (Crystal, 1985). Madhubala (2002) observes syllable as a “unit of pronunciation produced with a single puff of air.It may consist of a single vowel with one or two consonants”. A vowel is the nucleus in a syllable. It is a sequence of phonemes with one peak of sonority. The sequence can be

divided into three parts, these three parts are referred to as (i) onset, the opening segment of the syllable is the onset, (ii) nucleus, the central segment of the syllable is the nucleus or peak, (iii) coda, the closing segment of the syllable is the coda.

Syllabic structure in Somdal can be analysed as below:

/ʃim/ which means 'house' in Somdal.



Onset	peak	coda
/ʃ/	/i/	/m/

V structures in Somdal are found to be very rare and limited; there are only a few instances of them as shown in the following examples:

V	/i/	'I'

The CV structures are found to be common in forming the word in Somdal as shown in the following examples:

CV	/mi/	'person'
	/wi/	'mother'
	/se/	'cow'
	/sá/	'animal'
	/mə/	'dream'
	/ko/	'river'
	/p^hi/	'leg'
	/lá/	'song'

The CVC structures are found to be most common type of word in Somdal as shown in the following examples.

CVC	*/paˊn/*	'hand'
	/wən/	'flower'
	/hon/	'shirt'
	/wor/	'swell'
	/woˊt/	'work'
	/ʃim/	'house'
	/luˋk/	'basket'

The CVV structures are also found to be very rare in Somdal as shown in the following examples:

CVV	*/k^hui/*	'village'
	/roi/	'similar'
	/k^hoˊi/	'bee'
	/hoi/	'skin'
	/k^haˊi/	'fish'
	/paiˊ/	'rust'
	/hui/	'dog'
	/t^haˊo/	'fat'
	/liu/	'field'

3.2.9.1. Types of syllable in Somdal

There are two types of syllable in Somdal. An open syllable as defined by David Crystal (2003: p. 448) is a syllable not closed by another consonant. And in other hand a closed, which is also called checked syllable by David Crystal (2003: p. 70), is a syllable that ends at a coda position with a consonant.

3.2.9.1.1. Open syllables

In Somdal, open syllable can be filled by either monophthongs or diphthongs as shown in examples given below.

/pì/	'earring'
/mi/	'fire'
/t^{h}aó/	'fat'
/vái/	'he/she'
/cìu/	'tall'

3.2.9.1.2. Closed syllables

In Somdal closed syllable can be taken by unaspirated stop or by nasal as shown in the example given below.

/pán/	'hand'
/p^{h}ek/	'mat'
/ʃim/	'house'
/cáŋ/	'strength'
/con/	'sister'

3.2.9.2. Syllabification

It depends on preceding and the following environment of the syllable peak. In Somdal, following syllabification, monosyllabic words, disyllabic words, trisyllabic words and polysyllabic words are found.

Examples are given below, in the examples syllabic boundary is marked by the symbol (.).

3.2.9.2.1. Monosyllabic words

CVV	*/k^{h}ái/*	'fish'

CVV	*/liu/*	‘fild’
CVC	*/pʰək/*	‘mat’
CVC	*/lár/*	‘armlet’
CV	*/cá/*	‘necklace’
CVC	*/hon/*	‘shirt’
CV	*/lá/*	‘song’
CVC	*/sə̀m/*	‘hair’

3.2.9.2.2. Disyllabic wordS

The disyllabic words are considered to be the most common type of word in Somdal. In Somdal it is interesting to note that most of the different word formation systems were observed with this disyllabic word type. The following are some of the permissible syllabic sequences in disyllabic words:

V.CV	*/əhá/*	‘hair’
V.CVC	*/ədən/*	‘bunch’
V.CVV	*/əhói/*	‘skin’

3.2.9.2.3. Trisyllabic words

In Somdal trisyllabic words are considered to be the second most commonly used words, and they include both verbs and noun. The following are some of the permissible syllabic sequencse in trisyllabic words:

CVV.CV.CV	*/liukʰəvá/*	‘farmer’
CV.CV.CVV	*/kəpʰù̀nao/*	‘hillock’
CV.CV.CV	*/kətoŋə/*	‘all’

3.2.9.2.4. Tetrasyllabic words

Tetrasyllabic words in Somdal include adjective and numeral. The following are some of the examples of tetrasyllabic words with permissible syllabic sequences.

CV.CV.CV.CV	/*məp^{h}ak^{h}əme*/	'worse'
CVV.CV.CVV.CV	/*niumit^{h}óiwù̀i*/	'youngest'
CVC.CV.CVV.CV	/*tokmit^{h}óiwù̀i*/	'biggest'

3.2.9.2.5. Pentasyllabic words

There are few words with pentasyllabic in Somdal. The following are some of the permissible syllabic sequences in pentasyllabic words:

CVC.CV.CV.CVV.CV	/*tokmikət^{h}oijá*/	'biggest of all'
CVV.CV.CV.CVV.CV	/*suimikət^{h}oijá*/	'shortest of all'

3.2.9.2.6. Hexasyllabic words

In Somdal there are few hexasyllabic words. Few examples are given below:

CVC.CVC.CV.CVV.CVC.CVV	/*ribribkəbaútətwù̀i*/	'chant'
CVC.CV.CV.CVV.CV.CVV	/*ratcikəpaík^{h}uwù̀i*/	'grab' etc.

3.3. Tone

Tone is a feature of the syllable. It is marked on the vowel of the syllable, which is its nucleus. As Peter Ladefoged defines "pitch patterns that affect the meanings of the individual words are known as tones". If syllables have rising or falling pitch in comparison to the pitch level of the normal speech they are said to have a rising (high), high low or falling (low) tones respectively. The syllables whose pitch level remains constant are said to be having level tone. The combination of the pitch levels i.e., rising-falling is possible. According to K.L.Pike, tone language is "is a language having lexically significant, contrastive but relative pitch on each syllable". In other words meaning distinction between words can be made by tone

in tonal languages. Tone occurs in Somdal. It is one of the significant features of Tibeto-Burman languages as most of the languages are tonal. Generally, meaning distinction between words is made by tones in TB languages.

The whole tone system of Somdal can be classified into three tones as high /´/, mid tone is unmarked and low/`/ as below:

Like other Tibeto-Burman languages, Somdal is also a tonal language and it has three tones i.e. rising tone, level tone and falling tone. The rising tone is marked as (´), the level tone is left unmarked and the falling tone is marked as (`).

3.3.1. Tone system in Somdal

High		Mid		Low	
kəpa´	'bamboo'	*kəpa*	'read'	*kəpa`*	'mad'
kəp^{h}a´	'good'	*kəp^{h}a*	'search'	*kəp^{h}a`*	'pluck' or 'spare time'

3.4. Juncture:

Despite the fact that the word may have its isolate form identity considerably modified by its immediate phonemic and accentual context both as regards its constituent sounds and its accentual or rhythmic pattern, phonetic features may be retained in the speech continuum which mark word or morpheme boundaries (Gimson, 1980: 295-297).

In Somdal there is a juncture phoneme. This transition from one sound to the other within the same macro segment provides contrast between two types of transition between the same successive vowels and consonants.

Examples:

1. *sək* + *kəsa´* 'cloth + make'
   səkkəsa´ 'weaver'

2. *sa* + *kəsa´* 'meat + make'
   sakəsa´ 'butcher'

It is noted that in the above examples the distinction between the two different kinds of transition between the same successive vowel and consonant phoneme is represented by an open or plus juncture /+/. As in the example '/*səkkəsa*/' there is

no break between any of the syllables i.e. close juncture. But, in the example '/*sək kəsa*/', on the other hand, there is a perceptible break between /*sək*/ and /*kəsa*/ which is marked by an open or /+/ 'plus juncture' to show the difference in transition, but in rapid speech this is often disregarded.

3.5. Morphophonemics

Morphophonemics is an alternation of phonemes within a given morpheme bridges the gap between the morphological and the phonemic levels (Robert A.Hall Jr, 1969: 138). It refers to analysis and classification of the phonological factors which affect the appearance of morphemes, or correspondingly, the grammatical factors affect the appearance of morphemes. Burquest (2001: 81) defines morphophonemics as, "when the sounds of morphemes vary as a result of being adjoined to other morphemes, the pattern is referred to as morphophonemics".

3.5.1. Consonant deletion

In Somdal two consonants of the same quality cannot occur in two consecutive syllables, in which case the second one is dropped**.** Examples are given below:

/ok/	+	*kət^{h}ui*	>	/*okət^{h}ui*/	'earth'
/p^{h}arak/	+	/*kaiwui/*	>	/*p^{h}arakaiwui/*	'throw away'

3.5.2. Morphologically conditioned changes

/*lai*/ and /*də*/ are the allomorphs of the same morpheme for the indication of recipient as well as dative case marker. But the two dative marker */lai/* and */də/* are used in different ways, */lai/* the dative marker is used or indicates in specific place or in particular area whereas the dative marker /*də/* is used in vast area.

Examples:

vai-lai	*va-lo*
him-DAT	go-ASP-
'Go to him'	

vai-nə	*i-də*	*k^{h}əmoi*	*mi-je*
She-NOM	I-DAT	bread	give-RL

'she gave me bread'

(i) Syncope

The loss of unstressed vowels or consonant in the middle position of a word is called syncope.

Examples:

/cəukri/	-	*/cəuki/*	'chair'
/elektrik/	-	*/eletrik/*	'electric'

(ii) Apocope

Apocope refers to the loss of sound or sounds at the end of a word. Thus in Somdal the last consonant of the final cluster is dropped from the borrowed words.

Examples:

/*k^{h}əmoi/*	-	*/k^{h}əmo/*	'bread'
/siment/	-	*/simen/*	'cement'

(iii) Epenthesis

Epenthesis are process or change in which successive sound are separated by an intervening segment. Thus in Somdal borrowed words are used to form an epenthesis.

Examples:

/*tebəl/*	-	*/teibəl/*	'table'
/*inc/*	-	*/inci/*	'inch'

(iv) Elision

Elision is the omission of speech between syllables or words in the connected speech.Some processes of elision are illustrated below:

Initial deletion: loss of sound from the beginning of a word is called procope.

Examples:

/əcon/	-	*/con/*	'sister'
/əva/	-	*/va/*	'father'

Middle syllable deletion: loss in the middle position of a word is called syncope.

Examples:

/nənaoʃim/	-	*/nəʃim/*	'your house'
/p^hi əcon/	-	*/p^hicon/*	'foot print'

Final syllable deletion: loss of sound from the end of the word or syllable is called apocope.

Examples:

/siment/	-	*/simen/*	'cement'
/kərent/	-	*/kəren/*	'current'

a. Insertion in Somdal

Insertion of the phonemes */i/* at the beginning of the word takes place in Somdal. The distinction is made on the basis of written and spoken aspects.

Examples:

/stri/	-	*/istri/*	'iron'