3.0. PHONOLOGY

The phonemic inventory of Dimasa consists of twenty five phonemes of which twenty two are segmentals and three are supra-segmentals. The following is the phonemic inventory of this language.

3.1. Segmentals:

3.1.1. Vowels:

Dimasa has a six vowel system showing a three way contrast of front, central and back. The vowels are distinguished at the three levels of tongue height: high, mid and low. It seems that Dimasa being a Tibeto-Burman language does follow the typological pattern of the Tibeto-Burman languages, i.e., the classification of vowels at the three levels viz, high, mid and low, is the most common pattern to almost all of the languages of the family. There are three way contrasts: front, central and back at the mid level while the front–back contrast is found at the high level. There is only one central vowel at the low level. The vocalic phonemes in Dimasa are i, u, e, o, a and ə. The front and central vowels are unrounded while the back vowels are rounded. The vowels of Dimasa are shown in the following figure.

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>UR</td>
<td>R</td>
<td>UR</td>
<td>R</td>
</tr>
<tr>
<td>High</td>
<td>i</td>
<td></td>
<td>u</td>
</tr>
<tr>
<td>Mid</td>
<td>e</td>
<td>ə</td>
<td>o</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 1
Dimasa does not have nasalized vowels. The vowels in Dimasa are oral, that is, when the vowels are produced, the soft palate is raised to close the nasal passage (the velic closure), and the air passes through the oral passage. And all the vowels are also voiced; but voicing is not a relevant feature in the case of Dimasa vowels. Vowel length is not phonemic in this language.

3.1.2. Consonants:

There is a set of sixteen consonantal phonemes in Dimasa. As far as their place of articulation is concerned, Dimasa consonants show a six-way contrast: bilabial, alveolar, post-alveolar, palatal, velar, and glottal. Similarly in terms of their manner of articulation, the consonants can be categorized into six types: stops, nasals, fricatives, lateral, trill, and semi-vowels. Aspiration is not phonemic in this language. There are three voiceless stops (p, t, k) which are aspirated syllable initially, and three voiced stops (b, d, g) which lack aspiration. The lack of voiced aspirated stops is one of the typological features of the Tibeto-Burman languages shared by Dimasa. Voicing is one of the distinctive features in the case of consonantal phonemes in Dimasa. Unaspirated voiceless stops are always unreleased in syllable final position while its unaspirated voiced counterparts are always released, and never occur in syllable final position. There are three nasal sounds viz., m, n, and ñ. Among them, there is a high frequency of the occurrence of velar nasal /ñ/, however it never occurs in word initial position. This is another typological feature of Tibeto-Burman languages found in Dimasa. The consonantal phonemes of Dimasa can be seen in the following figure.
<table>
<thead>
<tr>
<th>Bilabial</th>
<th>Alveolar</th>
<th>Post. Alv.</th>
<th>palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI.</td>
<td>p</td>
<td>t</td>
<td>k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vd.</td>
<td>b</td>
<td>d</td>
<td>g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td>η</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.</td>
<td>s</td>
<td></td>
<td>h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fricatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vd.</td>
<td>z</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trill</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-vowels</td>
<td>w</td>
<td>y</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 2**

### 3.2. Supra-segmentals:

#### 3.2.1. Tones:

Tones are the supra-segmental phonemes in Dimasa. Like many other Tibeto-Burman languages, tone plays a significant role in this language i.e., by changing the pitch of tone, the same word which indicates a difference in meaning. Tone is phonemic in this language. Dimasa has three tones, which are contrastive viz., high, low and level tone; level tone remains unmarked.

(i) Level Tone: The level tone is realized as the same pitch level of the normal speech which is found in most of the non-tonal languages.
(ii) High Tone: The high tone is realized as the pitch which is suddenly rises from that of the level tone.

(iii) Low Tone: Unlike high tone, low tone is realized as the sudden fall of pitch from the level tone.

<table>
<thead>
<tr>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>/</td>
<td>\</td>
</tr>
</tbody>
</table>

Fig. 3

Consider the following examples:

sú  'measure'
su  'wash'
sû  'beat'
thé 'say'
thí 'die'
thé ‘blood’
thú 'depth'
thur ‘sleep’
thû ‘wear’
rí ‘give’
\ri ‘cloth’
läi ‘leaf’/ ‘page’
laï ‘easy’
lài ‘together’
tâŋ ‘go’
tân ‘survive’

It is clear from the above analysis, Dimasa may be classified typologically, as tone language.

3.3. Contrasting pairs:

3.3.1. Vowels:

/a/ vs. /i/

/mi/ ‘animal’
/ma/ ‘mother’
/bar/ ‘air’
/bir/ ‘fly’
/sa/ ‘son’
/si/ ‘one’

/a/ vs. /o/

/na/ ‘fish’
/no/ ‘house’
/daŋ/ 'do'
/doi/ 'be'
/da/ 'negative imperative'
/do/ 'beat'

/e/ vs. /i/
/len/ 'slave'
/liŋ/ 'drink'
/boni/ 'his' / 'her' (GEN.)
/bone/ 'him' / 'her' (DAT.)
/nuni/ 'your' (GEN.)
/nune/ 'you' (DAT.)

/o/ vs. /u/
/no/ 'house'
/nu/ 'see'
/kon/ 'twenty'
/kun/ 'cotton'
/lon/ 'invite'
/lun/ 'drink'
/mori/ 'a kind of basket made by bamboo'
| /muri/ | ‘a kind of traditional flute’ |
| /i/  | /ri/ | ‘cloth’ |
| /u/  | /ru/ | ‘drive’ |
| /i/  | /si/ | ‘one’ |
| /u/  | /su/ | ‘wash’ |
| /i/  | /ti/ | ‘blood’ |
| /u/  | /tu/ | ‘sleep’ |
| /o/  | /zi/ | ‘eat’ |
| /i/  | /zo/ | ‘come’ (child language) |
| /o/  | /do/ | ‘beat’ |
| /i/  | /di/ | ‘water’ |
| /o/  | /glai/ | ‘fall’ |
| /i/  | /glaio/ | ‘long’ |
| /o/  | /mlao/ | ‘play’ |
| /i/  | /mlai/ | ‘other’ |
| /o/  | /baosi/ | ‘equal’ |
| /i/  | /baisi/ | ‘habit’ |
3.3.2. Consonants:

/p/ vs. /b/

/pai/ ‘come’
/bai/ ‘dance’
/pan/ ‘plant’
/ban/ ‘many’
/pri/ ‘flame’
/bri/ ‘four’

/k/ vs. /g/

/kla/ ‘do’
/glai/ ‘fall’
<table>
<thead>
<tr>
<th>English</th>
<th>Pali</th>
</tr>
</thead>
<tbody>
<tr>
<td>century</td>
<td>/kra/</td>
</tr>
<tr>
<td>cry</td>
<td>/gra/</td>
</tr>
<tr>
<td>open</td>
<td>/kuru/</td>
</tr>
<tr>
<td>sugar cane</td>
<td>/guru/</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/t/ vs. /d/</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>blood</td>
<td>/ti/</td>
</tr>
<tr>
<td>water</td>
<td>/di/</td>
</tr>
<tr>
<td>go</td>
<td>/tə/</td>
</tr>
<tr>
<td>do</td>
<td>/də/</td>
</tr>
<tr>
<td>oil (mustard)</td>
<td>/təo/</td>
</tr>
<tr>
<td>bird</td>
<td>/dəo/</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/n/ vs. /m/</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>laugh</td>
<td>/mini/</td>
</tr>
<tr>
<td>your</td>
<td>/nini/</td>
</tr>
<tr>
<td>paddy</td>
<td>/mai/</td>
</tr>
<tr>
<td>observe</td>
<td>/nai/</td>
</tr>
<tr>
<td>tiger</td>
<td>/misi/</td>
</tr>
<tr>
<td>you (pl.)</td>
<td>/ nisi/</td>
</tr>
<tr>
<td>/n/ vs. /ŋ/</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>---</td>
</tr>
<tr>
<td>/dan/</td>
<td>‘fifty’</td>
</tr>
<tr>
<td>/danŋ/</td>
<td>‘do’</td>
</tr>
<tr>
<td>/tan/</td>
<td>‘place’</td>
</tr>
<tr>
<td>/tanŋ/</td>
<td>‘go’</td>
</tr>
<tr>
<td>/konsi/</td>
<td>‘twenty one’</td>
</tr>
<tr>
<td>/gonŋsi/</td>
<td>‘one’ / ‘a’ (for long thing)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/l/ vs. /n/</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>/la/</td>
<td>‘take’</td>
<td></td>
</tr>
<tr>
<td>/na/</td>
<td>‘fish’</td>
<td></td>
</tr>
<tr>
<td>/lai/</td>
<td>‘page’</td>
<td></td>
</tr>
<tr>
<td>/nai/</td>
<td>‘observe’</td>
<td></td>
</tr>
<tr>
<td>/linŋ/</td>
<td>‘drink’</td>
<td></td>
</tr>
<tr>
<td>/nirŋ/</td>
<td>‘you’ (sg.)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/l/ vs. /r/</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>/z̟la/</td>
<td>‘male indicator’</td>
<td></td>
</tr>
<tr>
<td>/z̟ra/</td>
<td>‘fifteen’</td>
<td></td>
</tr>
<tr>
<td>/blai/</td>
<td>‘leaf’</td>
<td></td>
</tr>
<tr>
<td>/brai/</td>
<td>‘buy’</td>
<td></td>
</tr>
</tbody>
</table>
/grao/  ‘news’
/glao/  ‘long’
/lim/  ‘ill’
/rim/  ‘catch’
/muri/  ‘a kind of traditional flute’
/muli/  ‘medicine’

/s/ vs. /z/

/si/  ‘one’
/zi/  ‘eat’
/tosi/  ‘one rupee’
/tozi/  ‘ten rupees’
/suba/  ‘sew’
/zuba/  ‘high’

/s/ vs./t

/su/  ‘wash’
/tu/  ‘sleep’
/tao/  ‘oil’
/sao/  ‘body’
<table>
<thead>
<tr>
<th>Phoneme</th>
<th>Example</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/tai/</td>
<td></td>
<td>‘fruit’</td>
</tr>
<tr>
<td>/sai/</td>
<td></td>
<td>‘progressive marker’</td>
</tr>
<tr>
<td>/sa/</td>
<td></td>
<td>‘son’</td>
</tr>
<tr>
<td>/ha/</td>
<td></td>
<td>‘soil’</td>
</tr>
<tr>
<td>/nosa/</td>
<td></td>
<td>‘room’</td>
</tr>
<tr>
<td>/noha/</td>
<td></td>
<td>‘at home’</td>
</tr>
<tr>
<td>/hai/</td>
<td></td>
<td>‘sent’</td>
</tr>
<tr>
<td>/sai/</td>
<td></td>
<td>‘progressive marker’</td>
</tr>
<tr>
<td>/wai/</td>
<td></td>
<td>‘fire’</td>
</tr>
<tr>
<td>/mai/</td>
<td></td>
<td>‘paddy’</td>
</tr>
<tr>
<td>/wa/</td>
<td></td>
<td>‘bamboo’</td>
</tr>
<tr>
<td>/ya/</td>
<td></td>
<td>‘negative marker’</td>
</tr>
<tr>
<td>/wai/</td>
<td></td>
<td>‘fire’</td>
</tr>
<tr>
<td>/bai/</td>
<td></td>
<td>‘dance’</td>
</tr>
</tbody>
</table>
3.3.3. Tones:

/tí/ ‘say’
/li/ ‘die’
/tì/ ‘blood’
/maitái/ ‘year’
/maitai/ ‘crop’
/maitài/ ‘source’
/lái/ ‘page’
/lai/ ‘easy’
/lài/ ‘together’
/thú/ ‘depth’
/thu/ ‘sleep’
/thù/ ‘wear’
/táŋ/ ‘go’
/tàŋ/ ‘survive’
/rí/ ‘give’
/ùí/ ‘cloth’
3.3.4. Phonological universals and Dimasa phonology:

3.3.4.1. Vowels:

In the typological discussion of vowel systems usually a distinction between ‘peripheral’ and ‘interior’ vowels (Crothers, 1978) is made. Dimasa has five peripheral vowels and one interior vowel. Thus Dimasa has a six vowels system, i,e,o,a,u and o which can be symbolised as 6 : 1. In other words, Dimasa has a total number of six vowel including an interior vowel.

The 6 : 1 vowel system is considered the second most frequent of all vowel systems.

According to the universal (of vowel systems) no. 9:

"The number of height distinctions in a system is typically equal to or greater than the number of backness distinctions."

This is true in the case of Dimasa also as can be seen in the above diagram.

The vowel system of Dimasa conforms to the universal number no. 12 as well, which states that;

"The number of height distinctions in front vowels is equal to or greater than the number in back vowels."
Thus, we find that there are two distinctions in front vowels (i & e) and also two distinctions in back vowels (u & o).

3.3.4.2. Tones:

Let us now examine some of the universals of tone with reference to Dimasa, as proposed by Ian Maddieson (1978) and see how far Dimasa follows the universals:

Universal no. 1: A language may contrast up to five levels of tone, but no more.

Dimasa has only three tones—high, level, and low. Thus, Dimasa conforms to the above universal.

E.g. ti ‘say’
     ti ‘die’
     ti ‘blood’

Universal no. 3: Phonetically central tones are unmarked, extreme tones are highly marked.

In Dimasa, the central tone, i.e., the ‘level tone’ is unmarked while the extreme tones—‘high’ and ‘low’ are highly marked. Thus, Dimasa follows the above universal.

3.4.0. Distribution of phonemes:

3.4.1. Vowels: All the vowels except /ə & u/, can occur in all three positions. The high vowel /u/ cannot occur word initially; on the contrary, /ə/ cannot occur word finally. Hence, all the vowels can occur in word medial position.
<table>
<thead>
<tr>
<th>Initial</th>
<th>Medial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i/ iyù ‘great’</td>
<td>/mini/ ‘laugh’</td>
<td>/mi/ ‘animal’</td>
</tr>
<tr>
<td>iyao ‘hand’</td>
<td>/bir/ ‘fly’</td>
<td>/miti/ ‘know’</td>
</tr>
<tr>
<td>/e/ /ebo/ ‘this’/ ‘it’</td>
<td>/sen/ ‘sword’</td>
<td>/bere/ ‘bee’</td>
</tr>
<tr>
<td>/erōha/ ‘here’</td>
<td>/sem/ ‘salt’</td>
<td>/sere/ ‘who’</td>
</tr>
<tr>
<td>/a/ alu ‘cat’</td>
<td>/tai/ ‘fruit’</td>
<td>/ma/ ‘mother’/ ‘big’</td>
</tr>
<tr>
<td>/ani/ ‘my’</td>
<td>/tan/ ‘go’</td>
<td>/rōda/ ‘vein’</td>
</tr>
<tr>
<td>/o/ /orōha/ ‘there’</td>
<td>/lonťai/ ‘stone’</td>
<td>/no/ ‘house’</td>
</tr>
<tr>
<td>/olai/ ‘like that’</td>
<td>/son/ ‘cook’</td>
<td>/ho/ ‘belly’</td>
</tr>
<tr>
<td>/dori/ ‘be’</td>
<td>/no/ ‘belly’</td>
<td>/mozo/ ‘mouse’</td>
</tr>
<tr>
<td>/u/ /subun/ ‘man’</td>
<td>/nu/ ‘see’</td>
<td></td>
</tr>
<tr>
<td>/zubu/ ‘snake’</td>
<td>/su/ ‘wash’</td>
<td></td>
</tr>
<tr>
<td>/nu/ ‘see’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ł/ /lązani/ ‘younger sister’</td>
<td>/laizàma/ ‘letter’</td>
<td></td>
</tr>
<tr>
<td>/łmai/ ‘mother’</td>
<td>/màsainzu/ ‘woman’</td>
<td></td>
</tr>
<tr>
<td>/łansi/ ‘once’</td>
<td>/hàpsao/ ‘world’</td>
<td></td>
</tr>
</tbody>
</table>
3.4.2. Consonants:

All the consonantal phonemes of Dimasa do not occur in all positions. The phonemes /p, k, m, n, l, r/ can occur in all positions, however the remaining other phonemes /b, g, t, d, s, h, y, w, / can occur word initially and medially. Unlike other phonemes, /ŋ/ can not occur word initially. Hence all consonantal phonemes of Dimasa can occur word medially.

<table>
<thead>
<tr>
<th>Initial</th>
<th>Medial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/p/</td>
<td>/panla/ 'brinjal'</td>
<td>/gupu/ 'white'</td>
</tr>
<tr>
<td>/p/</td>
<td>/pai/ 'come'</td>
<td>/bonpar/ 'tree'</td>
</tr>
<tr>
<td>/b/</td>
<td>/bo/ 'he'/'she'</td>
<td>/subun/ 'man'</td>
</tr>
<tr>
<td>/b/</td>
<td>/burun/ 'goat'</td>
<td>/bubar/ 'flower'</td>
</tr>
<tr>
<td>/k/</td>
<td>/kusi/ 'work'</td>
<td>/gakrap/ 'blue'</td>
</tr>
<tr>
<td>/k/</td>
<td>/kura/ 'voice'</td>
<td>/muka/ 'face'</td>
</tr>
<tr>
<td>/g/</td>
<td>/gun/ 'nose'</td>
<td>/migur/ 'skin' (for animal)</td>
</tr>
<tr>
<td>/g/</td>
<td>gibin 'different'</td>
<td>/dansgu/ 'fifty nine'</td>
</tr>
<tr>
<td>/l/</td>
<td>/tui/ 'blood'</td>
<td>/mutai/ 'eye'</td>
</tr>
<tr>
<td>/l/</td>
<td>/tentri/ 'tamarind'</td>
<td>/miti/ 'know'</td>
</tr>
</tbody>
</table>
/d/  /dao/ 'bird'           /haduri/ 'dust'
       /den/ 'keep'           /hadi 'rain'
/m/   /mi/ 'animal'        /səmlai/ 'curry'       /him/ 'walk'
       /mai/ 'paddy'          /həmya/ 'bad'         /sem/ 'salt'
/n/   /na/ 'fish'          /nana/ 'child'        /karmin/ 'story'
       /nuŋ/ 'you' (sg.)      /dakna/ 'tomorrow'     /saotain/ 'muscle'
/ŋ/   /rəŋsen/ 'silver'(paisa)       /bonpan/ 'tree'
       /lontai/ 'stone'       /don/ 'be'
/l/   /la/ 'take'          /hilai/ 'gun'          /mel/ 'meeting'
       /laisi/ 'book'         /bubli/ 'time'
/r/   /run/ 'boat'         /bokro/ 'head'         /ser/ 'iron'
       /ri/ 'give'            /mabri/ 'four'         /hor/ 'night'
/s/   /sisa/ 'dog'         /dansa/ 'boy'
       /sola/ 'shirt'         /musu/ 'cattle'
/z/   /zun/ 'we'           /laizap/ 'magazine'
       /zenkəŋ/ 'waist'       /laizəma/ 'letter'
3.5.0. Description of phonemes and distribution of their positional variants:

3.5.1. Vowels:

/i/ It is a high front unrounded vowel. It has two allophones [i] and [I].

[i], the tense high front unrounded vowels occur in monosyllabic words and word-finally in other words.

/masi/ [matsi] ‘one’ (for - human, + animate)

/mi/ [mi] ‘animal’

/ri/ [ri] ‘give’

/kusi/ [khutsi] ‘work’

/laisi/ [laltsi] ‘book’

/zi/ [dzi] ‘eat’

/misi/ [mltsi] ‘tiger’

[I], the lax lower high front unrounded vowel occurs elsewhere.

/sinli/ [tslnli] ‘pulse’
/kimlĩṇ/     [khlmīl] ‘garden’
/timeŋənĩ/     [thlmŋən] ‘thirty two’
/bisilai/     [bltsllal] ‘how many’
/slikdi/     [sllkdi] ‘yellow’
/glai/     [glal] ‘fall’

/u/ It is a high back rounded vowel. It has two allophones [u] and [U].

[u], the tense high back rounded vowel occurs word finally.

/su/     [tsu] ‘wash’
/nu/     [nu] ‘see’
/yasgu/     [yasgu] ‘knee’
/waimu/     [walmu] ‘sad’.
/hembru/     [hEmbru] ‘a kind of jumping frog’

[U], the lax lower high back rounded vowel occurs elsewhere.

/bumu/     [bUmu] ‘name’
/sukrem/     [tsUkhrEm] ‘guava’.
/musu/     [mUtsu] ‘cattle’
/musranŋ/     [mUsran] ‘eyelid’
/burun/     [bUrUn] ‘goat’
/zubu/     [dzUbu] ‘snake’
/e/ It is a mid front unrounded vowel. It has two allophones [e] and [E].

[e], the mid front unrounded vowel occurs only in word final position.

/bere/ [bEre] 'bee'
/odehe/ [dEhe] 'and'
/sere/ [sEre] 'who'
/bede/ [bEde] 'how'

[E], the lower mid front unrounded vowel occurs elsewhere.

/seen/ [sEn] 'sword'
/begren/ [bEgrEn] 'bone'
/besen/ [bEsEn] 'price'
/den/ [dEn] 'keep'
/scnya/ [sEnya] 'soldier'
/zenklonmander/ [zEnkhl ðmmandEr] 'rainbow'
/zenkon/ [zEnkhðn] 'waist'

/o/ It is a higher mid back rounded vowel. It has two allophones [o] and [ð].
[o], the higher- mid back rounded vowel only occurs in word final position.

/no/ [no] ‘house’
/bo/ [bo] ‘he’/ ‘she’
/blao/ [blao] ‘forget’
/moso/ [mɔso] ‘reindeer’
/bokro/ [bɔkro] ‘head’
/grao/ [grao] ‘news’
/bondo/ [bɔndo] ‘wood’
/hɔpsao/ [hɔpsao] ‘world’

[o̞], the mean-mid back rounded vowel occurs elsewhere.

/don/ [dɔn] ‘be’
/kon/ [khɔn] ‘twenty’
/mogon/ [mɔgɔn] ‘meat’
/bon/ [bɔn] ‘forest’/ ‘tree’
/tozi/ [thɔdzi] ‘ten rupees’
/rebgon/ [rebɡɔn] ‘pen’
/hoza/ [hɔza] ‘leader’
/orɔha/ [ɔrɔha] ‘there’
/a/ has one allophone [a]. The low central unrounded vowel. It occurs everywhere.

/alu/ [alu] ‘cat’

/ma/ [ma] ‘mother’/ ‘big’

/taŋ/ [taŋ] ‘go’

/na/ [na] ‘fish’

/hadi/ [hadi] ‘rain’

/dan/ [dan] ‘fifty’

/dakna/ [dakna] ‘tomorrow’

/hoza/ [hoza] ‘leader’

/laizap/ [laizap] ‘magazine’

/magusa/ [magusa] ‘monkey’

/ə/ has one allophone [ə], the mean mid central unrounded vowel. It occurs only initially and medially in a word.

/əlanʃi/ [əlanʃi] ‘once’

/əmai/ [əmai] ‘mother’

/laizəma/ [laizəma] ‘letter’

/əzan/ [əzan] ‘younger sister’

/rəda/ [rəda] ‘vein’
3.5.2. Consonants:

Stops:

/p/ It is a voiceless unaspirated bilabial stop. It has two allophones [p], the voiceless unaspirated bilabial stop and [ph], the voiceless aspirated bilabial stop; It has been noticed that [p] occurs in all three positions (initial, medial and final) while [ph] usually occurs in initial and medial positions; and are in free variation in non-final positions.

[p]

Initial:

/pai/ [pal] ‘come’
/plao/ [plao] ‘fertile’
/pərai/ [pəral] ‘assistant’
/pantao/ [panthao] ‘brinjal’
/porɔn/ [pɔrɔn] ‘morning’
/pan/ [pan] ‘plant’

Medial:

/daopri/ [daopri] ‘pigeon’
/kampor/ [kampɔr] ‘moustache’
/sampraŋ/ [sampraŋ] ‘onion’
/tampi/ [tampi] ‘mosquito’
/gupu/ [gUpu] ‘white’
### Final:

<table>
<thead>
<tr>
<th>Phoneme</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/rep/</td>
<td>[rep] ‘write’</td>
</tr>
<tr>
<td>/laizap/</td>
<td>[laizap] ‘magazine’</td>
</tr>
<tr>
<td>/krip/</td>
<td>[khrīp] ‘all’</td>
</tr>
<tr>
<td>/rəzap/</td>
<td>[rəzap] ‘sing’</td>
</tr>
<tr>
<td>/hap/</td>
<td>[hap] ‘enter’</td>
</tr>
<tr>
<td>/bedep/</td>
<td>[bEdEp] ‘branch’</td>
</tr>
<tr>
<td>/rebgon/</td>
<td>[rEbgɔn] ‘pen’</td>
</tr>
</tbody>
</table>

### Initial:

<table>
<thead>
<tr>
<th>Phoneme</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>[phal]</td>
<td>~ [pal] ‘come’</td>
</tr>
<tr>
<td>[phlao]</td>
<td>~ [plao] ‘fertile’</td>
</tr>
<tr>
<td>[pharal]</td>
<td>~ [paral] ‘assistant’</td>
</tr>
<tr>
<td>[phanthao]</td>
<td>~ [phnthao] ‘brinjal’</td>
</tr>
<tr>
<td>[pʰɔ̃ŋŋ]</td>
<td>~ [pʰɔ̃ŋŋ] ‘morning’</td>
</tr>
</tbody>
</table>

### Medial:

<table>
<thead>
<tr>
<th>Phoneme</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>[daophri]</td>
<td>~ [daopri] ‘pigeon’</td>
</tr>
<tr>
<td>[kamphɔr]</td>
<td>~ [kampɔr] ‘moustache’</td>
</tr>
<tr>
<td>[samphran]</td>
<td>~ [sampran] ‘onion’</td>
</tr>
<tr>
<td>[gUphu]</td>
<td>~ [gUpu] ‘white’</td>
</tr>
</tbody>
</table>

- 42 -
/b/ has one allophone [b], voiced unaspirated bilabial stop. It occurs only in word initial and medial positions.

Initial :

/bai/  [bal] ‘dance’
/blao/  [blao] ‘forget’
/bri/   [bri] ‘four’
/bɔsa/  [bɔsa] ‘son’
/blam/  [blam] ‘way’

Medial :

/mɔzɑŋ/  [mɔzɑŋ] ‘beautiful’
/subun/  [tsUbUN] ‘man’
/giŋin/  [giŋin] ‘different’
/hembru/ [hEmbru] ‘a kind of jumping frog’
/gibi/   [gibi] ‘true’
/bubar/  [bUbar] ‘flower’
/daobato/ [daobatho] ‘parrot’

/t/ It is a voiceless unaspirated post-alveolar stop. It has two allophones [t], the voiceless unaspirated post-alveolar stop and [th], the voiceless aspirated post-alveolar stop. [t] occurs in all three positions while [th] occurs in word initial and medial positions and are in free variation in non-final positions. But they never occur in word final position.
<table>
<thead>
<tr>
<th>Initial</th>
<th>Medial</th>
</tr>
</thead>
<tbody>
<tr>
<td>/tən̥/</td>
<td>[tEntri] ‘tamarind’</td>
</tr>
<tr>
<td>/ti/</td>
<td>[tali] ‘fruit’</td>
</tr>
<tr>
<td>/tao/</td>
<td>[pantao] ‘brinjal’</td>
</tr>
<tr>
<td>/tai/</td>
<td>[ləntai] ‘stone’</td>
</tr>
<tr>
<td>/tiku/</td>
<td>[saotain] ‘muscle’</td>
</tr>
<tr>
<td>/mutai/</td>
<td>[mUltai] ‘eye’</td>
</tr>
<tr>
<td>/miti/</td>
<td>[mlti] ‘know’</td>
</tr>
</tbody>
</table>

### Initial:

<table>
<thead>
<tr>
<th>Initial</th>
<th>Medial</th>
</tr>
</thead>
<tbody>
<tr>
<td>[tən̥]</td>
<td>[tali] ‘fruit’</td>
</tr>
<tr>
<td>[ti]</td>
<td>[tali] ‘fruit’</td>
</tr>
<tr>
<td>[tao]</td>
<td>[saotain] ‘muscle’</td>
</tr>
<tr>
<td>[tao]</td>
<td>[mUltai] ‘eye’</td>
</tr>
<tr>
<td>[tao]</td>
<td>[mlti] ‘know’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initial</th>
<th>Medial</th>
</tr>
</thead>
<tbody>
<tr>
<td>[th]</td>
<td>[tali] ‘fruit’</td>
</tr>
<tr>
<td>[tali]</td>
<td>[tali] ‘fruit’</td>
</tr>
<tr>
<td>[tao]</td>
<td>[saotain] ‘muscle’</td>
</tr>
<tr>
<td>[tao]</td>
<td>[mUltai] ‘eye’</td>
</tr>
<tr>
<td>[tao]</td>
<td>[mlti] ‘know’</td>
</tr>
</tbody>
</table>
[thl] ~ [tal] ‘fruit’
[thlku] ~ [tlku] ‘louse’

Medial:
[thEntri] ~ [tEntri] ‘tamarind’
[phanthao] ~ [pantao] ‘brinjal’
[l∅ntal] ~ [l∅tal] ‘stone’
[saotaIn] ~ [saotaIn] ‘muscle’
[mUtal] ~ [mUtal] ‘eye’
[mIti] ~ [mIti] ‘know’

/d/ has one allophone [d], the voiced unaspirated post-alveolar stop. It occurs only in word initial and medial positions.

Initial:
/di/ [di] ‘water’
/don/ [d∅n] ‘be’
/dao/ [dao] ‘bird’
/dain/ [daIn] ‘moon’ / ‘month’

Medial:
/odehe/ [∅dEhe] ‘and’
/haduri/ [haduri] ‘dust’
/bedep/ [bEdEp] ‘branch’
/bondo/ [bʊndo] ‘wood’
/kamdlη/ [khamdln] ‘bench’
/slikdi/ [sllkdi] ‘yellow’

/k/ It is a voiceless unaspirated velar stop. It has two allophones, viz., [k], the voiceless unaspirated velar stop and [kh], the voiceless aspirated velar stop. [k] occurs in all three positions, while [kh] occurs only in word initial and medial positions and are in free variation in non-final positions.

[k]

Initial:

| /klai/ | [klal] ‘do’ |
| /kai/ | [kal] ‘run’ |
| /ku/ | [ku] ‘open’ |
| /kon/ | [kɔn] ‘twenty’ |
| /kram/ | [kram] ‘drum’ |

Medial:

| /hukir/ | [hUkhIr] ‘hungry’ |
| /kuska/ | [kuskhæ] ‘chest’ |
| /gakraŋ/ | [gakhræ] ‘blue’ |
| /mukri/ | [mUkhrl] ‘poem’ |
| /zenkol/ | [zEŋkhɔn] ‘waist’ |
| /bokro/ | [bɔkhro] ‘head’ |

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Final:

/tailik/ [thāllk] ‘banana’
/bikmi/ [blkmi] ‘sister in law’
/zik/ [dzik] ‘female indicator’
/slikdi/ [slldi] ‘yellow’
/grik/ [grik] ‘intelligent’
/glik/ [glk] ‘sink’
/dakna/ [dakna] ‘tomorrow’

[kh]

Initial:

[khlal] ~ [klal] ‘do’
[khal] ~ [kal] ‘run’
[khu] ~ [ku] ‘open’
[khɔn] ~ [kɔn] ‘twenty’
[khram] ~ [kram] ‘drum’.

Medial:

[hûtɛkhɛɾ] ~ [hûklɛɾ] ‘hungry’
[khûskha] ~ [kûskə] ‘chest’
[gakhræŋ] ~ [gakræŋ] ‘blue’
/g/ has one allophone [g], the voiced unaspirated velar stop. It occurs only in word initial and medial positions.

Initial :

\[
/\text{gra}/ \quad [\text{gra}] \text{ 'cry'} \\
/\text{glai}/ \quad [\text{glai}] \text{ 'fall'} \\
/\text{gəlao}/ \quad [\text{gəlao}] \text{ 'long'} \\
/\text{gabla}/ \quad [\text{gabla}] \text{ 'hole' (wood)}
\]

Medial :

\[
/\text{begreŋ}/ \quad [\text{bEgrEŋ}] \text{ 'bone'} \\
/\text{bugur}/ \quad [\text{bUgUr}] \text{ 'bark'} \\
/\text{bonpan}/ \quad [\text{bɔnpan}] \text{ 'tree'} \\
/\text{rebgor}/ \quad [\text{rEbgɔŋ}] \text{ 'pen'} \\
/\text{dɔrga}/ \quad [\text{dɔrga}] \text{ 'door'} \\
/\text{trogə}/ \quad [\text{trogə}] \text{ 'tortoise'} \\
/\text{lugu}/ \quad [\text{lUgu}] \text{ 'friend'}
\]
Nasals:

/m/ is realized as [m], the voiced bilabial nasal. It occurs everywhere.

Initial:

/mi/   [mi] ‘animal’
/ma/   [ma] ‘mother’ / ‘big’
/mel/   [mel] ‘meeting’
/miyəha/   [miyəha] ‘yesterday’
/mini/   [mini] ‘laugh’
/misi/   [misi] ‘tiger’

Medial:

/bumu/   [bumu] ‘name’
/karmin/   [karmin] ‘story’
/kermai/   [kermai] ‘tail’
/kamdir/   [kamdir] ‘bench’
/kimlin/   [kimlin] ‘garden’ (flower)
/əmai/   [əmai] ‘mother’

Final:

/him/   [him] ‘walk’
/həm/   [həm] ‘good’
/scm/  [sEm] ‘salt’
/slam/  [slam] ‘make’
/buplam/  [bUphlam] ‘fat’
/yam/  [yam] ‘mat’
/kudum/  [khUdUm] ‘kiss’
/kulum/  [khUlUm] ‘worship’

/n/ is realized as [n], the voiced alveolar nasal. It occurs everywhere.

Initial:

/na/  [na] ‘fish’
/nana/  [nana] ‘child’
/nunη/  [nUη] ‘you’
/no/  [no] ‘house’
/nai/  [nal] ‘observe’
/nu/  [nu] ‘see’

Medial:

/hondra/  [hɔndra] ‘orange’.
/nana/  [nana] ‘child’
/pantao/  [phanthao] ‘brinjal’
/bondo/  [bɔndo] ‘wood’
/bendi/ [bEndi] ‘forty’
/kintai/ [khInthal] ‘fearness’
/dakna/ [dakna] ‘tomorrow’

Final :
/hon/ [hɔ:n] ‘biscuit’
/kun/ [khUn] ‘thread’
/gibin/ [glbln] ‘different’
/burun/ [bUrUn] ‘goat’
/supin/ [tsUpIn] ‘flute’
/karmin/ [kharmin] ‘story’
/dan/ [dan] ‘fifty’
/rannten/ [rannten] ‘silver’

/ŋ/ is realized as [ŋ], the voiced velar nasal. It occurs only in word medial and final positions.

Medial :
/bonpan/ [bɔnpan] ‘tree’
/sinli/ [tsInli] ‘pulse’
/lonthai/ [lɔnthal] ‘stone’
/zenkon / [ZEnkhɔn] ‘waist’
/gonksi/ [gɔnksi] ‘one’ (for long thing)
/m$ηkloη/  [m$ηkhλ$η] ‘grave’

Final:

/d$η/  [d$η] ‘keep’
/b$ds$an$η/  [b$ds$an$] ‘raised platform’
/m$g$o$'n$η/  [m$g$g$η] ‘meat’
/beg$re$'n$η/  [bEgrE$η] ‘bone’
/d$o$'η/  [d$η] ‘be’
/bary$u$η/  [baryU$η] ‘cyclone’
/m$u$k$an$η/  [mUkh$an$] ‘face’

Fricatives:

/s/  It is a voiceless alveolar fricative. It has two allophones viz., [s],
the voiceless alveolar fricative and [ts], the voiceless alveo-palatal
affricate. [s] occurs elsewhere, but [ts] occurs only when it is followed
by high vowels.

[s]

Initial:

/sa$'o$/  [sao] ‘body’
/s'o$'n$η/  [s'$η] ‘cook’
/s'εm$η/  [sEm$η] ‘salt’
/s'ai$n$η/  [s$ai$n$η] ‘day’
/ser/  [sEr] ‘iron’
/sere/  [sEre] ‘who’
/sola/  [sOl] ‘shirt’

Medial:
/ʊnsa/  [ʊnsa] ‘son’
/kase/  [khase] ‘small’
/magusa/  [magUsa] ‘monkey’
/misai/  [mIsal] ‘deer’
/mɔsainzu/  [mɔsaIndzu] ‘women’
/mɔrsai/  [mɔrsal] ‘chilly’
/hɔpsao/  [hɔpsao] ‘world’

[ts]

Initial:
/sumu/  [tsUmU] ‘what’
/subunη/  [tsUbUη] ‘man’
/sisa/  [tsIsa] ‘dog’
/siditup/  [tsIdIthUp] ‘kidney’
/su/  [tsu] ‘wash’
/sukrem/  [tsUKhrEm] ‘guava’
/sinli/  [tsInli] ‘pulse’
Medial:

/misip/ [mItslp] ‘buffalo’
/tosì/ [thɔtsi] ‘one rupee’
/masì/ [matsi] ‘one’[for-human,+ animate]
/misi/ [mIsisi] ‘tiger’
/kusì/ [khUtsi] ‘work’
/laisì/ [laltsi] ‘book’
/nosìp/ [nɔtslp] ‘broom’

/z/ It is a voiced alveolar fricative. It has two allophones, viz., [z], the voiced alveolar fricative and [dz], the alveo-palatal affricate. [z] occurs elsewhere, but [dz] occurs only when it is followed by high vowels.

[z]

Initials:

/zɔlɔ/ [zɔlɔ] ‘male’
/zanɔ/ [zanɔ] ‘with’
/zoru/ [zɔru] ‘call’
/zenkɔŋ/ [zEŋkhɔŋ] ‘waist’
/zenba/ [zEnba] ‘beginning’
/zenzu/ [zEndzu] ‘prefix’
<table>
<thead>
<tr>
<th>Initial</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/zi/</td>
<td>[dzi] ‘eat’</td>
</tr>
<tr>
<td>/ziŋ/</td>
<td>[dzŋ] ‘we’</td>
</tr>
<tr>
<td>/zubu/</td>
<td>[dzUbu] ‘snake’</td>
</tr>
<tr>
<td>/zuba/</td>
<td>[dzUba] ‘high’</td>
</tr>
<tr>
<td>/zutai/</td>
<td>[dzUthai] ‘good morning’</td>
</tr>
<tr>
<td>/zu/</td>
<td>[dzu] ‘locally made beer’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medial</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/hazu/</td>
<td>[hadzu] ‘hill’</td>
</tr>
</tbody>
</table>
/tozi/  [thɔːdzi] ‘ten rupees’
/taizu/  [thaldzu] ‘mango’
/rizinə/  [rIdzInə] ‘thousand’
/hazinə/  [hadzinə] ‘sand’
/zenzu/  [zEndzu] ‘prefix’
/maizu/  [maldzu] ‘a kind of rice’
/taozu/  [thaodzu] ‘suffix’
/razirao/  [radzIrao] ‘participants’

Lateral :

/I/ is realized as [I], the voiced alveolar lateral. It occurs everywhere.

[I]

Initial :

/lim/  [ ɪm] ‘ill’
/lama/  [lama] ‘road’
/laisi/  [lai̯si] ‘book’
/la/  [la] ‘take’
/lugu/  [lUgu] ‘friend’
/linə/  [linə] ‘drink’
/lonτai/  [lɔnθai] ‘stone’ / ‘rock’
/laizðma/  [laizðma] ‘letter’
Medial:

/glai/ [glal] ‘fall’
/sola/ [sola] ‘shirt’
/səmlai/ [səmlai] ‘curry’
/sliŋ/ [sliŋ] ‘learn’
/tailik/ [thalllk] ‘banana’
/bubli/ [bUbli] ‘time’ / ‘season’
/bitlim/ [bltlim] ‘bile’

Final:

/mel/ [mEl] ‘meeting’
/koiŋðl/ [khɔiphɔl] ‘papaw’

Trill:

/r/ is realized as [r], the voiced alveolar trill. It occurs everywhere.

[r]

Initial:

/ri/ [ri] ‘give’
/rep/ [rEp] ‘write’
/ runŋ/ [runŋ] ‘boat’
/rim/ [rim] ‘catch’
/rai/  [raI] ‘cane’
/rəzap/  [rəzap] ‘sing’
/rəzaba/  [rəzaba] ‘thickness’

Medial:
/pərai/  [pəral] ‘assistant’
/krip/  [krip] ‘all’
/markhu/  [markhu] ‘small pieces of rice’
/kermal/  [kermal] ‘tail’
/marbari/  [marbari] ‘tuesday’
/pori/  [pəri] ‘read’
/krotlu/  [krotlu] ‘cap’
/bere/  [bere] ‘bee’

Final:
/hor/  [hor] ‘night’
/bir/  [bir] ‘fly’
/hukir/  [hukir] ‘hungry’
/semkor/  [semkor] ‘name of the village’
/həwar/  [həwar] ‘meadow’
/ser/  [ser] ‘iron’
/gezer/  [gEzEr] ‘middle’
/migur/  [mIgUr] ‘skin’ (for animal)

Glottal:

/h/ is realized as [h], the voiceless glottal fricative. It occurs only in word initial and medial positions.

[h]

Initial:

/hamba/  [hɔmba] ‘good’
/hor/    [hɔr] ‘night’
/hilai/  [hIlaI] ‘gun’
/himl/   {hɪml} ‘walk’
/hon/    [hɔn] ‘biscuit’
/hadi/   [hadi] ‘rain’
/hembru/ [hEmbru] ‘a kind of jumping frog’
/hoza/   [hɔza] ‘leader’

Medial:

/yahonha/ [yahɔnha] ‘behind’
/bahao/    [bahao] ‘father in law’
/bihandao/ [bIhandao] ‘sister’
/odehe/    [ɔdehe] ‘and’
/duha/  [dUha] ‘now’
/erōha/  [Erōha] ‘here’

Semi-vowels:

/w/ is realized as [w], the voiced bilabial semi-vowel. It occurs only in word initial and medial positions.

[w]

Initial:

/wa/  [wa] ‘bamboo’
/wai/  [wai] ‘fire’

Medial:

/hōwar/  [hōwar] ‘meadow’
/nowai/  [nɔwai] ‘vulture’

/y/ is realized as [y], the voiced palatal semi-vowel. It occurs only in word initial and medial positions.

Initial:

/yapɔŋ/  [yaphɔŋ] ‘thigh’
/yʊŋ/  [yʊŋ] ‘great’
/yasɡu/  [yasɡu] ‘knee’
/yapri/  [yaphri] ‘step’
/yam/  [yam] ‘mat’
Medial:

\[
\text{/miyũŋ/} \quad [\text{młyUrŋ}] \text{ ‘elephant’}
\]

\[
\text{/tuyam/} \quad [\text{thUyam}] \text{ ‘bed’}
\]

**Phonetic Charts:**

**Vowels:**

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UR</td>
<td>R</td>
<td>UR</td>
</tr>
<tr>
<td>High</td>
<td>i</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower high</td>
<td>I</td>
<td></td>
<td>U</td>
</tr>
<tr>
<td>Higher mid</td>
<td>e</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Mean mid</td>
<td></td>
<td>\partial</td>
<td></td>
</tr>
<tr>
<td>Lower mid</td>
<td>E</td>
<td></td>
<td>\partial</td>
</tr>
<tr>
<td>Higher low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

Chart: IV
Consonants:

Place of articulation

<table>
<thead>
<tr>
<th>Manner of Articulation</th>
<th>Bilabial</th>
<th>Alveolar</th>
<th>Post-alveolar</th>
<th>Alveo-Palatal</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>p ph</td>
<td>t th</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vd.</td>
<td>b</td>
<td>d</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal Vd.</td>
<td>m</td>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>η</td>
</tr>
<tr>
<td>Lateral Vd.</td>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trill Vd.</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricative</td>
<td></td>
<td>s</td>
<td></td>
<td></td>
<td></td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>Vd.</td>
<td></td>
<td>z</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affricate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ts dz y</td>
</tr>
<tr>
<td>Semi-vowel</td>
<td></td>
<td>w</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chart :V

3.6.0. Diphthongs:

There are seven diphthongs in Dimasa. Of the seven diphthongs, four involve glide [I] : /oi, ei, ai, ui /; and the other three towards [O] : / ao, ðo, eo/. These can be called falling diphthongs i.e., the first member is more prominent than the second. Except /ei/, all the diphthongs can occur in word medial positions, but they never occur in word initial position. It is to be noticed that / ai, ao/ occur more frequently than other diphthongs. The seven diphthongs are illustrated below:
Medial :

/əʊ/  həbo 'that'
/ui/  guire-guitap 'zig-zag'
/lui/  luiba 'crazy' / 'naughty'
/eo/  zeozaba 'noise'
/ao/  daono 'fowl'
/ai/  kaoklu 'guard'
/ai/  taizu 'mango'
/ai/  laisi 'book'

/oɪ/  goibi 'precious'
/oi/  boira 'stand of a kind of basket which is especially used by Dimasa'

Final :

/ao/  tao 'mustard oil'
/ai/  rai 'cane'
/ai/  nai 'observe'
/ei/  dei 'honorific particle'
/ui/  hui 'conceal'
3.7.0. Consonant clusters:

Generally Dimasa consonant clusters are syllable initially. Dimasa permits up to two consonants in an initial syllable, while no consonant cluster is allowed syllable finally. The absence of final cluster is one of the typological features preserved by the most of the Tibeto-Burman languages. Thus, Dimasa being a Tibeto-Burman Language does follow the typologically similar feature. Here, I mean the term ‘consonant cluster’, is a sequence of more than one consonant occurring together in a syllable. For example in English, /sp-/ in the word spot / spot / is a cluster because both the consonants forming the sequence belong to the same syllable, whereas /-nk-/ in the word blanket / blan̪kit / is not a cluster since /-n/ and /k-/ belong to two different syllables /-n/ is the arresting consonant of the first syllable, and /k-/ is the releasing consonant of the second.

3.7.1. Initial clusters:

The first member of the initial clusters in Dimasa can be /p, b, k, g, m, s/, while other consonants, viz., /l, r/ (liquid) occupy their positions as the second member of the clusters. Thus, the /l, r/ never occupy the first position in a cluster in Dimasa.

<table>
<thead>
<tr>
<th>First member</th>
<th>second members</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>l r * *</td>
</tr>
<tr>
<td>b</td>
<td>* *</td>
</tr>
<tr>
<td>k</td>
<td>* *</td>
</tr>
<tr>
<td>g</td>
<td>* *</td>
</tr>
<tr>
<td>m</td>
<td>* *</td>
</tr>
<tr>
<td>s</td>
<td>* *</td>
</tr>
</tbody>
</table>
However, the remaining consonant phonemes like /t, d, n, η, z, h, w, y/ do not contribute themselves as both members of the clusters. Given below is a list of words for illustrating the initial occurrence of C₁ C₂ clusters in Dimasa.

**Stop + Liquid**

<table>
<thead>
<tr>
<th>Consonant clusters</th>
<th>Examples</th>
<th>Glosses</th>
</tr>
</thead>
<tbody>
<tr>
<td>/kl-/</td>
<td>klai</td>
<td>‘do’</td>
</tr>
<tr>
<td>/gl-/</td>
<td>glai</td>
<td>‘fall’</td>
</tr>
<tr>
<td>/pl-/</td>
<td>pluŋ</td>
<td>‘no fixing’ / ‘all sides’</td>
</tr>
<tr>
<td>/pr-/</td>
<td>prik</td>
<td>‘silent’</td>
</tr>
<tr>
<td>/bl-/</td>
<td>blao</td>
<td>‘forget’</td>
</tr>
<tr>
<td>/br-/</td>
<td>brðha</td>
<td>‘where’</td>
</tr>
<tr>
<td>/kr-/</td>
<td>krası</td>
<td>‘one century’</td>
</tr>
</tbody>
</table>

**Nasal + Liquid**

<table>
<thead>
<tr>
<th>Consonant clusters</th>
<th>Examples</th>
<th>Glosses</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ml-/</td>
<td>mlao</td>
<td>‘play’</td>
</tr>
<tr>
<td></td>
<td>mlai</td>
<td>‘other’</td>
</tr>
</tbody>
</table>

**Fricative + Liquid**

<table>
<thead>
<tr>
<th>Consonant clusters</th>
<th>Examples</th>
<th>Glosses</th>
</tr>
</thead>
<tbody>
<tr>
<td>/sl-/</td>
<td>slam</td>
<td>‘make’</td>
</tr>
<tr>
<td></td>
<td>slikdi</td>
<td>‘yellow’</td>
</tr>
<tr>
<td>/sr-/</td>
<td>sranba</td>
<td>‘freeness’</td>
</tr>
</tbody>
</table>
From the above analysis, it has been found that Dimasa does partially favour the observation made by Benedict (1972), which states that "Tibeto-Burman consonant clusters, found only in root initial position, are of two types: (a) stop or nasal + liquid (r~l) (b) consonant (or cluster of foregoing type) + semi-vowel (w~y)."

Let us now confirm how far the examples of Dimasa consonant clusters substantiate the argument of universals suggested by J. H. Greenberg.

3.7.2. Phonological universals and Dimasa consonant clusters:

Universal No. 33: "In initial systems the existence of at least one cluster consisting of nasal + liquid implies the existence of at least one cluster consisting of obstruent + liquid."

Consider the following examples in favour of the above universal.

/mlao/ ‘play’       /klai/ ‘do’
/mlai/ ‘other’       /glai/ ‘fall’

3.7.3. Medial clusters:

Like initial consonant clusters, the first member of the clusters are mainly occupied by obstruents (voiceless and voiced), whereas, The liquid /l, r/ only participates as second member of the clusters. The various combinatory possibilities of medial two consonant clusters in Dimasa are illustrated in table No. 2
The following examples are the varieties of –cc- structure which are found in Dimasa:

**Voiceless obstruent + Liquid**

<table>
<thead>
<tr>
<th>Consonant clusters</th>
<th>Examples</th>
<th>Glosses</th>
</tr>
</thead>
<tbody>
<tr>
<td>/-p1-/</td>
<td>taipluŋ</td>
<td>‘Jackfruit’</td>
</tr>
<tr>
<td>/-k1-/</td>
<td>kaoklu</td>
<td>‘guard’</td>
</tr>
<tr>
<td>/-pr-/</td>
<td>daopri</td>
<td>‘pigeon’</td>
</tr>
<tr>
<td>/-kr-/</td>
<td>sukrem</td>
<td>‘guava’</td>
</tr>
<tr>
<td>/-tr-/</td>
<td>tentri</td>
<td>‘tamarind’</td>
</tr>
</tbody>
</table>
### Voiced Obstruent + Liquid

<table>
<thead>
<tr>
<th>Sound</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/-gr-/</td>
<td>bcgrɛ</td>
<td>‘bone’</td>
</tr>
<tr>
<td>/-br-/</td>
<td>dibra</td>
<td>‘bifurcation of the river’</td>
</tr>
<tr>
<td>/-dr-/</td>
<td>nodran</td>
<td>‘bachelor’s dormitory’</td>
</tr>
<tr>
<td>/-bl-/</td>
<td>gabla</td>
<td>‘hole’ (wood)</td>
</tr>
<tr>
<td></td>
<td>bubli</td>
<td>‘time’</td>
</tr>
<tr>
<td>/-gl-/</td>
<td>məŋglai</td>
<td>‘maize’</td>
</tr>
</tbody>
</table>

### Fricative + Liquid

<table>
<thead>
<tr>
<th>Sound</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/-sl-/</td>
<td>pəŋsla</td>
<td>‘a collection of fuels’</td>
</tr>
<tr>
<td>/-sr-/</td>
<td>musraŋ</td>
<td>‘eyelid’</td>
</tr>
<tr>
<td></td>
<td>məŋsri</td>
<td>‘honourable’ / ‘sir’</td>
</tr>
<tr>
<td>/-zr-/</td>
<td>sainzro</td>
<td>‘west’</td>
</tr>
</tbody>
</table>

### 3.8. Syllable:

A syllable is a unit of pronunciation uttered without any interruption. It is made up of one or more than one phoneme. The vowel element is essential to the structure of a syllable, that is, a syllable is not possible without the vowel element. The vowel obviously is the obligatory element in a syllable and is called its ‘nucleus’ or ‘peak’. On the other hand, the consonant which begins a syllable is called ‘onset’, and that which occurs at the end of a syllable is called the ‘coda’. When a coda is absent in a syllable, it is called ‘open’ syllable and when a coda is present in a syllable is called ‘closed’ syllable.
Dimasa syllable consists of a nucleus which always occurs with an onset or a coda. The nucleus of the syllable may be a vowel or a diphthong. Dimasa syllable never consists of only a peak or a nucleus. However, all vowels in Dimasa make the nucleus of the syllable, i.e., there is no non-syllabic vowel in this language. Given below are the different types of syllable that we have in Dimasa.

**Mono-syllabic words:**

Like many other Tibeto-Burman languages, Dimasa roots are generally mono-syllabic. This is one of the typological features commonly found in Tibeto-Burman language family. Root patterns in Dimasa are of the following types. Here the symbols V and C represent vowel and consonant respectively.

**Open syllable:**

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Example</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV</td>
<td>mi</td>
<td>'animal'</td>
</tr>
<tr>
<td>CV</td>
<td>wa</td>
<td>'bamboo'</td>
</tr>
<tr>
<td>CVV</td>
<td>yao</td>
<td>'hand'</td>
</tr>
<tr>
<td>CCV</td>
<td>gra</td>
<td>'cry'</td>
</tr>
<tr>
<td>CCVV</td>
<td>blai</td>
<td>'leaf'</td>
</tr>
<tr>
<td>CCVV</td>
<td>glai</td>
<td>'fall'</td>
</tr>
</tbody>
</table>

**Closed syllable:**

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Example</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC</td>
<td>ṇη</td>
<td>'I'</td>
</tr>
<tr>
<td>CVC</td>
<td>yam</td>
<td>'mat'</td>
</tr>
<tr>
<td>CVC</td>
<td>nunη</td>
<td>'you'</td>
</tr>
</tbody>
</table>
It is clear from the above examples, the majority of the mono-syllabic words have the CV pattern, but the mono-syllabic words having VC pattern have extremely low frequency of occurrence.

Disyllabic words:

Second syllable is open - $C^2_o V(V) C_i^2 V(V)$

- CVVC: sain 'sun'
- CCVC: plun 'all side'/ 'no fixing'
- CCVC: prik 'silent'
- CVVC: dain 'moon'/ 'month'

VCV: alu 'cat'
VCCV: ḏnsa 'boy'
VCVV: ḏlai 'such'
CVCV: yasi 'toe'
CVCCV: mātla 'girl'
CVVCV: laisi 'book'
CVCCVV: loṇtai 'rock' / 'stone'
CVCVV: pārai 'assistant'
CVVCCV: daopri 'pigeon'
CCVCCV: graņsi 'one' (for rectangular thing)
CVCCVV: derpnai 'mirror'
Second syllable is closed \(-C^1_0 V(V)C^1_1 V C^1_1\)

<table>
<thead>
<tr>
<th>VCVC</th>
<th>ぢざん</th>
<th>'younger sister'</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVCVC</td>
<td>ぐだろ</td>
<td>'throat'</td>
</tr>
<tr>
<td>CVCVC</td>
<td>すぶん</td>
<td>'man'</td>
</tr>
<tr>
<td>CVCCVC</td>
<td>れびご</td>
<td>'pen'</td>
</tr>
<tr>
<td>CVCVC</td>
<td>みゆん</td>
<td>'elephant'</td>
</tr>
<tr>
<td>CVVCVC</td>
<td>らいざ</td>
<td>'magazine'</td>
</tr>
</tbody>
</table>

**Trisyllabic words:**

Third syllable is open \(-C^2_0 V(V)C^1_1 V C^2_1 V(V)\)

<table>
<thead>
<tr>
<th>VCVCV</th>
<th>へろは</th>
<th>'here'</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVCCCVV</td>
<td>ムンシュ</td>
<td>'milk'</td>
</tr>
<tr>
<td>CVCCVVC</td>
<td>マルバリ</td>
<td>'tuesday'</td>
</tr>
<tr>
<td>CVVCVVV</td>
<td>リジンシ</td>
<td>'one thousand'</td>
</tr>
<tr>
<td>CVCVC</td>
<td>ミジリ</td>
<td>'curtain'</td>
</tr>
</tbody>
</table>

Third syllable is closed \(-C^1_0 V C^2_1 V C^1_1 V(V)C^1_1\)

<table>
<thead>
<tr>
<th>CVVCVVC</th>
<th>ちきみん</th>
<th>'spelling'</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVVCVCCVVC</td>
<td>リザンパン</td>
<td>'the cloth specially worn by woman on the upper portion of the body'</td>
</tr>
</tbody>
</table>
VCVCCVC  ṭlantam  ‘thrice’
CVCCVCCVC  ḡmsinuŋ  ‘very good’

**Tetra syllabic words:**

Fourth syllable is open – $C_1^1 V C_1^3 V(V) C_1^2 V C_1^3 V(V)$

CVCCVVCVCV  serdaoyasa  ‘blacksmith’
CVVCVCVCCCVC  bisatambri  ‘sixtyfour’
CVVCVCVCCVC  bisatamsi  ‘sixty one’
CVVCVCVCCVC  bisatamdo  ‘sixty six’
CVVCVCVCCCVV  bisatamzai  ‘sixty eight’
CVCCCVCCVCCVC  samprāṇgupu  ‘garlic’
CVVCVCVCCVCVC  tiluŋziyaba  ‘chameleon’
CVCCVVCVCVC  zenɡailuma  ‘firefly’

Fourth syllable is closed – $C_1^1 V C_1^3 V C_2^2 V C_1^2 V C_1^1$

CVCCCVCCVCCVC  zenkloŋmander  ‘rainbow’
CVVCVCVCCVC  bisabritam  ‘eighty three’

**Pentasyllabic words:**

Fifth syllable is open- $C_1^1 V C_1^1 V C_1^2 V C_1^2 V C_1^2 V(V)$

CVVCVCVCCVCCV  bisatamzisgm  ‘seventy nine’
Fifth syllable is closed - $C_1^1VC_1^1VC_1^2VC_1^1VC_1^1$

**CVCVCVCCVCVC** bisatammatam ‘sixty three’

**CVCVCCVCVCVC** bisabrizitam ‘ninety three’

**Hexasyllabic words**:  

Sixth syllable is open - $C_1^1VC_1^1VC_1^2VC_1^2VC_1^1VCV$

**CVCVCVCCVCVCV** bisatamziboya ‘seventy three’

**CVCVCCVCVCVCV** bisabriziboya ‘ninety five’

**3.8.1. Syllable Initial**:  

So far as the syllable initial sounds are concerned with the exception of /r/, all the consonantal phonemes can begin a word-initial syllable. These are listed below along with examples.

- /p/ pororo ‘morning’
- /b/ bumu ‘name’
- /t/ tampi ‘mosquito’
- /d/ dakna ‘tomorrow’
3.8.2. Syllable final:

The voiceless stops, nasals and liquids can occur in syllable final position. These are listed below with examples.

/k/ kusi ‘work’
/g/ gupu ‘white’
/m/ mòkam ‘rice’ (food)
/n/ nana ‘child’
/r/ risa ‘towel’
/l/ laisi ‘book’
/z/ zubu ‘snake’
/s/ supin ‘flute’
/h/ hilai ‘gun’
/y/ yaosi ‘toe’
/w/ waimu ‘sad’

/p/ rep ‘write’
/k/ zik ‘female indicator’
/t/ mätla ‘maid’
/m/ sem ‘salt’
/n/ hon ‘biscuit’
/n/ dani ‘do’
3.9.0. Morphophonemics:

3.9.1. Phonologically Conditioned Changes:

(i) Vocalisation or Voicing Assimilation: The voiceless stops become voiced if they are followed by a morpheme beginning with a voiced consonant.

\[
\begin{align*}
\text{C} & \quad \text{-sonorant} \\
& \quad \text{-delayed release} \\
& \quad \text{-continuant} \\
& \quad \text{-voiced}
\end{align*}
\rightarrow [+ voiced] / — — — + [C + voiced]
\]

E.g., rep ‘write’ + ba (verbal N.M.) \rightarrow rebba ‘writing’

krip ‘all’ + bo ‘also’ \rightarrow kribbo ‘including all’

grik ‘intelligent + dao (Com. M.) \rightarrow grig dao more intelligent’

tailik ‘banana’ + butu ‘pl’. \rightarrow tailig butu ‘bananas’

(ii) Only unreleased consonants can occur in the final position of a syllable, morpheme or word. Absence of release in this position is phonetic in Dimasa.

\[
\begin{align*}
[p] & \quad [r\text{̄}\text{̄}z\text{̄}p]\text{̄} \\
[b\text{̄}d\text{̄}Ep] & \quad \text{‘branch’} \\
[h\text{̄}ps\text{̄}o]\text{̄} & \quad \text{‘world’}
\end{align*}
\]
3.9.2. Morphologically conditioned changes:

1. Syncope:

(a) Consonant deletion: When the morphemes of personal pronouns are combined with the genitive marker ni to form possessive pronouns, the final velar nasals of the personal pronouns are dropped.

\[
\begin{align*}
\text{C} & \quad \text{C} \\
+ \text{nasal} & \quad + \text{nasal} \\
+ \text{high} & \\
+ \text{back} & \\
\end{align*}
\]

E.g.,

\[
\begin{align*}
\partial \eta \ 'I' + \text{ni} \ 'genitive' & \rightarrow \text{ani} \ 'my' \\
\text{ni} \eta \ 'you' + \text{ni} \ 'genitive' & \rightarrow \text{nini} \ 'your' \\
\text{zi} \eta \ 'we' + \text{ni} \ 'genitive' & \rightarrow \text{zini} \ 'our'
\end{align*}
\]
(b) **Vowel deletion:**

(i) The vowel of the morpheme **ni** (genitive) is dropped if the following morpheme contains a syllable with the vowel /i/.

\[ \text{V} \quad +\text{high} \quad -\text{back} \quad -\text{round} \rightarrow \phi / - + \text{C1} \]

\[ \text{V} \quad +\text{high} \quad -\text{back} \quad -\text{round} \]

E.g.,

bere 'bee' + ni 'genitive' + di 'egg' → berendi 'honey'

musu 'cattle + ni 'genitive'+ di 'egg' → musundi 'milk'

bo 'he' / 'she' + ni 'genitive' + si 'pl.' → bonsi 'they'

(ii) The central unrounded mid vowel is dropped when it is preceded by the same vowel i.e., \( \partial \) in the consecutive syllables.

E.g.,

s\( \partial \)t\( \partial \)rai > s\( \partial \)trai

m\( \partial \)t\( \partial \)la > m\( \partial \)t\( \partial \)la

\[ \text{+ syll} \quad -\text{cons.} \quad -\text{high} \quad -\text{low} \quad +\text{central} \rightarrow \phi / \text{c} \]

\[ \text{+ syll} \quad -\text{cons.} \quad -\text{high} \quad -\text{low} \quad +\text{central} \]
2. **Haplology**

A few instances of haplology are found in Dimasa. When the two words contain similar or identical syllables, one of them is dropped.

E.g.

- rebgon+ gon si → rebgon-si
- pen one (long thing) ‘one pen’
- bonpan + paŋsi → bonpan-si
- tree one(for plant) tree-one ‘one tree’
- subun + saosi → subun-si
- man one(for human) man-one ‘one man’