CHAPTER 6
A TYPOLOGICAL SKETCH OF THADOU PHONOLOGY

The present chapter discusses the typological features of Thadou in the domain of phonology and also examines how far Thadou conforms to the typology of Tibeto-Burman languages under the following parameters.

6.1 Vocalic Phonemes:

6.1.1 Classification:

In the typological discussion of vowel systems usually a distinction between 'peripheral' and 'interior' vowel (Crothers, 1978) is made.

Thadou has seven vocalic phonemes consisting of seven peripheral /i, ɛ, a, ɔ, o, &u/ and one interior /ə/ vowels. According to the tongue height, they can be classified into three levels: high, mid and low. Thadou 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 found in almost all the languages of the family. Thadou has a total of seven vowels including the interior vowel which can be symbolized in the Fig15.
Let us now examine some of the universals of vowel with reference to Thadou, as proposed by John Crothers and see how far Thadou conforms the universals

**Universal no. 1:** All languages have /i a u/.

Thadou has seven vowels which include /i a u/. Thus, the vocalic system of Thadou conforms to this universal.

**Universal no. 2:** All languages with four or more vowels have /i/ or /e/.

The vowel system of Thadou conforms to the universal number 2 as well.

Thadou vowel system allows /e/ but not /i/.

**Universal no. 3:** Languages with five or more vowels have /e/ and /o/. They generally also have /a/. This is true in the case of Thadou vowel system which has both /e/ and /o/.

**Universal no. 4:** Languages with six or more vowels have /o/ and also either /i/ or /e/. This is not true in the case of Thadou vowel system which has /o/ but not /i/ or /e/.

**Universal no. 5:** Languages with seven or more vowels have /o/ and /o/, or /i/ and /e/. The vowel system of Thadou does not conforms to the universal number 5. Thus, we find that Thadou has /o/ and /o/, but not /o/ and /i/.
Universal no. 6: Languages with eight or more vowels have /e/. Thadou has seven vowels and does not have /e/. Thus, the vowel system of Thadou does not conform to the universal number 6.

Universal no. 9: The number of height distinctions in a system is typically equal to or greater than the number of backness distinctions. This is not true in the case of Thadou as can be seen in Fig. 15. Thadou has two front vowels /i and /ɛ/ and three back vowels /u, o and /ɔ/.

Universal no. 11: The number of vowels in a column of interior vowels cannot exceed the number in the front or back column (low vowels excluded). The vowel system of Thadou conforms to the universal number 11 as well, this can be seen in the diagram above, where Thadou has only one central vowel.

Universal no. 12: The number of height distinctions in the front vowels is equal to or greater than the number in the back vowels.

The vowel system of Thadou does not conform to the universal number 12. Thus, we find that there are two distinctions in front vowels (i & /ɛ/) and three distinctions in the back vowels (u, o, & /ɔ/).

6.1.2 Nasalised vowel: Linguists have long recognized that the mere physical presence of nasality is not itself sufficient to define what have
traditionally been called nasal vowels. It is well known that the vowels adjacent to nasal consonants are often at least partially nasalised. For example, English 'man' is phonetically [mæn]. The vowel of [mæn] is phonetically conditioned by the surrounding segments and is still an oral vowel.

The term nasal vowel has been reserved for vowels that (i) show marked nasalization and (ii) contrast phonetically with the corresponding oral vowel. The vowel [æ] of man is not a nasal vowel according these criteria because condition (ii) is not satisfied.

Ferguson (1966) and Greenberg (1966a) have devoted a considerable attention to the status of nasalised vowels in languages. Some languages have a distinctive contrast between oral and nasalised vowels. Thus, the Desano word [wai] 'name' and [wai] 'fish' differ in that the first has a feature specification [+nasal] and the second has a feature specification [-nasal]. Thus, the presence of nasalized vowels implies the presence of oral vowels in a language, but not the reverse. In Thadou vowels adjacent to nasal consonants are nasalised. Thus nasalisation in Thadou is not phonemic but phonetically conditioned. All the vocalic phonemes of Thadou are oral, i.e., Thadou does not have nasalised vowels.

6.1.3 Length contrast:

Like many other Tibeto-Burman languages, Thadou vocalic phonemes do not show the length contrast: long vs. short. Length is not phonemic in the
case of Thadou vowels. This is yet another typological feature of Tibeto-
Burman languages exhibited by Thadou.

6. 2. Consonant Phonemes:

6.2.1 Stops:
In Thadou, there are three voiceless stops /p, t, k/ which are aspirated syllables initially and medially. There are also three voiced stops /b, d, g/ which lack aspiration. The unaspirated voiceless stops are always unreleased in word final positions while their unaspirated voiced counterparts are always released. Thus the presence of three series of stops and absence of voiced aspirated stops are the most common features of Tibeto-Burman languages shared by Thadou.

6.2.2 Nasals: Thadou has three nasal sounds, viz., /m, n, ə/. All the nasal sounds occur in all positions. The predominance of nasal sounds and their occurrence in all positions are typological features of the Tibeto-Burman family.

6.2.3. Continuants:
Like many other Tibeto-Burman languages, Thadou has five continuant sounds /v, s, z, l, h/. But the occurrence of alveolar fricatives /v, s, z/ and glottal fricative /h/ in the syllable or word final position is totally missing in the language. This is another Tibeto-Burman feature shared by Thadou.
6.2.4 Glottalisation:

The presence of glottalisation is one of the major phonological features of Kuki-Chin sub-group of the Tibeto-Burman family. Thus the presence of glottalisation is one of the typological features of Thadou in the above sub-group of languages.

6.3 Tone:

Many of the Tibeto-Burman languages are tonal. Thadou being a Tibeto-Burman language thus conforms to the typological feature of the family and shows three ways tone contrast: high, level and low. Tone plays a significant role in this language, i.e. by changing the pitch of a vowel difference in meaning may be created, as in ṇá 'five,' ṇa 'fish' and ṇà 'wait'.

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

**Universal no.1:** A language may contrast up to five levels of tone, but not more.

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

\[\text{ŋá} \quad \text{‘fish’}\]

**Example:**

\[\text{ŋa} \quad \text{‘five’}\]

\[\text{ŋà} \quad \text{‘wait’}\]
Universal no 3: Phonetically central tones are unmarked, extreme tones are highly marked.

In Thadou, the central tone, i.e., the 'level' tone is unmarked while the extreme tones - 'high' and 'low' are highly marked. Thus, Thadou follows the above universal.

6.4 Voicing:
Voicing is not a remarkable feature in the case of Thadou vowels, i.e., Thadou doesn't have voiceless vowels. But it is one of the relevant features in case of consonantal phonemes, i.e., Thadou shows the voiced-voiceless contrast of obstruent sounds like /p/ vs. /b/, /t/ vs. /d/, /k/ vs. /g/, and /s/ vs. /z/. The lack of voiceless vowels and presence of voiced-voiceless contrast in certain classes of consonantal phonemes are the typological features exhibited by most of the Tibeto-Burman languages. Thus, Thadou exhibits the typological feature of the family.

6.5 Aspiration:
Most of the South Asian languages in general and Tibeto-Burman languages in particular are unique among the world's languages in having contrast between aspirated and unaspirated plosives both voiced and voiceless. Like most of the above languages, Thadou shows contrast between unaspirated voiceless plosives and aspirated voiceless stops. Thadou being a Kuki-Chin language does follow the typological feature of the South Asian languages and makes contrast between [p] and [pʰ], and [t] and [tʰ]. The lack of voiced aspirated stops is one of the typological features of Tibeto-Burman
languages shared by Thadou. Unaspirated voiceless stops are always unreleased in syllable final position while their aspirated voiced counterparts are always released, and never occur in syllable final position. This is another typological feature of Tibeto-Burman languages found in Thadou.

6.6 Cluster Formation:

For finding out consonant clusters generally mono syllabic words are taken into consideration. But since Thadou does not have consonant clusters in the initial and final positions, consonant clusters in Thadou are examined by taking bi-syllabic words, so as to find out the occurrence of consonant cluster in the medial position or in between morpheme boundary.

6.6.1 Consonant clusters:

Greenberg, in "Universals of Human Language," Vol. 2: Phonology excludes medial consonant clusters. The study of medial clusters also raises some theoretical problems not present in the case of initial and final clusters. For example, in languages with syllabic initial and final single consonants or clusters, except with possible word-sandhi phenomena, the medial clusters produced at word boundaries in general are predictable from initial and final combinations. Such clusters should evidently be distinguished from those which are word-internal and which may or may not be present in the language independently of the question as to whether word-boundary clusters exist. Again morpheme boundary and morpheme internal clusters should be distinguished among word internal clusters.
Generally Thadou does not have word-initial and word-final consonant clusters; however the word-medial consonant clusters are available in the language. Word-medially, sequences of only two consonants are possible and hence there is no possibility of having word-medial sequences of three consonants. Two-consonant sequences of the type /p, t, k, m, n, h/ can occur as the member in C1 position. The presence of initial clusters and absence of final clusters are typologically marked features of most of the Tibeto-Burman languages. Thadou does not conform to this feature of the family. However, there are initial and final clusters in loan words.

Let us now look into some of the relevant universals suggested by Greenberg and see how far examples from Thadou substantiate the argument.

Universal no 33: In the 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. Thadou loan words also allow the obstruent + liquid but not nasal + liquid.

Consider the following examples from Thadou in support of the universal:

/krista/ 'Christ'
/klas/ 'class'
/glas/ 'glass'

Universal no 37: In the initial systems, the existence of at least one cluster consisting of obstruent+nasal implies the existence of at least one cluster consisting of obstruent+liquid. Thadou loan words also allow obstruent +
liquid but not obstruent + nasal. Consider the same examples given above in support of the universal.

The above analysis indicates that trill /r/ and liquid /l/ are the most common sounds to occupy the second member position of initial consonant clusters in Thadou loan words.

6.6.2 Vowel sequence:
Unlike many other Tibeto-Burman languages, Thadou does not have vowel sequences, i.e., there are some TB languages like Manipuri, Hmar, Karbi, Lotha, Mishing etc. which have Vowel sequences. Thus Thadou does not exhibit the typologically similar feature of the family.

6.7 Syllabicity:
Mono-syllabicity is one of the prominent typological features of Tibeto-Burman languages i.e., the majority of all words in Tibeto-Burman languages are of single syllable. Thadou, thus, conforms to the feature of the family, i.e., Thadou roots are generally mono-syllabic, however, few bi-syllabic and trisyllabic roots are also found in the language as in minu ‘mother’, gilpi ‘big intestine’, ḍbonin ‘whole, all’ boŋćiŋmi ‘cow herd’, and so on.

Infixation and suffixation are most common ways by which words are formed in most of the Tibeto-Burman Languages. Thus a word derived by affixation changes the phonological shape of Thadou. This is yet another typological feature of Tibeto-Burman languages shared by Thadou.
6.8 Phonological Inventories:

Certain sounds are found in more languages than others. Cross-linguistic comparisons have been made on the basis of both phonetic and phonological inventories. Thus the phonological segment /s/, for instance, is more frequent in the world's languages than is /θ/. The presence of certain segments in a language often implies the presence of other segments. If a language has /θ/, it can be assumed that it also has /s/. The reverse is not true, since there are languages which have /s/ but do not have /θ/. Such implicational universal has been discussed by Jacobson (1941) and Greenberg (1966a). In an implicational universal, X implies Y but Y does not imply X. Thus, to take an example, the presence of consonant /d/ implies the presence of consonant /t/, but /t/ does not imply /d/. Thus Thadou has both /d/ and /t/. This is a common typological feature of Tibeto-Burman shared by Thadou.

6.9 Syllabic Consonants:

In some languages, consonants function as syllabic. The syllabic [r] and [l] were recognized by Indian Grammarians, although their phonetic nature was not clearly expounded (Allen 1963). Most languages exhibit three basic types of syllables namely, vowels, resonants and obstruents. Among consonants, obstruents are more disfavoured than resonants. The relative preference of the three main types of syllables is nicely expressed in major class feature 'sonorant' and 'consonantal.' Sonorant syllabic are preferred to nonsonorant ones (i.e. obstruents are disfavoured); nonconsonantal are preferred to consonantal sonorant syllables (i.e. vowels are favoured over
nasals and liquids). Like most of the Tibeto-Burman languages only vowels function as syllabic in Thadou.