A PRELIMINARY STUDY OF THE BISU LANGUAGE - A LANGUAGE OF NORTHERN THAILAND, RECENTLY DISCOVERED BY US

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From September 1964 to February 1965, I investigated several languages belonging to the Burmese-Lolo group in Chiang Rai Province and Tak Province, Northern Thailand.\(^1\)

Some languages of this group are found in this region, especially in the mountainous area, along with various dialects of the Thai language.\(^2\) Therefore, the region was very important for our investigations.

In Chiang Rai and Tak Province, the languages of Akha, Lahu Shi, Lahu Na, Lahu Ni and Lisu are spoken in many villages, and there are some variants of the same language from one village to another. These languages are considerably different, of course, from those of the tribes of Lahu, Lisu and Akha in the Shan States and Kachin States in Burma, and also quite different from the languages of the same tribes scattered in Yunnan Province in China.

During the investigation, I was able to study the languages of Akha, Lahu Na, Lahu Shi and Lisu out of the group mentioned above. It was in the last stage of the investigation that I encountered the Bisu language, which is the subject of this paper.\(^3\)

DISTRIBUTION OF BISU LANGUAGE

1. To the best of my knowledge, the existence of the Bisu tribe and Bisu language has never been reported. At least, so far as the name is concerned, it would not be an error to say that the language and tribe are new discoveries. Naming the language as the Bisu language and the tribe as the Bisu tribe, must be proper, too, because that is the way they call themselves.
The Bisu language, which I am going to take up in this paper, is spoken at Ban Lua village, situated 10 kilometres west of Ban Huai San, which lies 23 kilometres south of Chiang Rai City in Chiang Rai Province. I shall call it the Ban Lua Bisu language of Ban Huai San, and for short, the Ban Lua Bisu language.

According to a report from Mr Mitani,¹ a similar language, though it is almost dead as a spoken language, is remembered by old villagers at Ban Tha Ko, situated 45 kilometres southwest of Ban Huai San. I shall call this the Bisu language of Ban Tha Ko.

There was some information on some forms of the same language being spoken in another place, but it has not been verified yet. It is quite possible that the Bisu language is still spoken in some other villages in Thailand, but this must be left to further investigation.

The Bisu tribe is called the "Lawa tribe" (Lua in the Thai language) by neighbouring Thai tribes, but the reason for it is not clear. It is, I assume, probably because the Bisu tribe was originally of the Lawa tribe and through the process of time came to speak a Burmese-Lolo language, or probably because they were originally a Burmese-Lolo tribe and yet came to identify themselves as the Lawa tribe for one reason or another. There is no basis for making a conclusion. Of the Lawa tribe itself, for that matter, no details have been discovered yet. What is almost certain about the tribe is that they used to be an influential group of people in some parts of Thailand and Burma. It is conceivable that some of the people, called the Lawa tribe in Thailand, still speak a language of the Burmese-Lolo group.

2. It is certain that the Ban Lua Bisu language has never been reported before, but languages similar to it have been reported as the language group of the Lawa in Thailand,⁵ under the name of the Phunoi language in Laos,⁶ and the Pyen or Pyin language in Kengtung, Shan State, in Burma.⁷

The Phunoi and Pyen languages are the closest to the Bisu language; however, the available data for these languages are so poor that it will hardly make any sense if one tries to compare them with the Bisu language.

But the Bisu, the Pyen and Phunoi languages are undoubtedly closely related sister languages, and as a group they are in an intermediate position between the Burmese language and the Akha language. Therefore, I may be right to treat the Bisu language as a representative language of this new group which is composed of the Bisu, Pyen and Phunoi languages. The subject of the system of the Bisu shall be dealt with in another paper.⁸
3. The following account is based on the data obtained from an informant, Mr X, who lived in Ban Lua in February 1965. No details of his personal history are available, but he has not been outside Ban Lua and Chiang Rai City. He understood and spoke the Northern Thai language as well as the Bisu language, and was a good informant.

The investigation was made through the Thai language. The Bisu tribe has many contacts with the Thai people, but surprisingly the informant scarcely replaced Bisu words with Thai words from my questions.

This paper is intended as a preliminary study of the Bisu language. The final report will be published with the studies of the languages of Akha, Lahu and Lisu, by the Center for Southeast Asian Studies, Kyoto University, by the end of 1968.

PHONEMIC SYSTEM OF BAN LUA BISU LANGUAGE

The following is a rough sketch of the phonemic system of Ban Lua Bisu. A morpheme of Ban Lua Bisu in most cases is a single monosyllable, and monosyllables have either CV# or CVC forms (C stands for consonant and V for vowel) accompanied by a toneme.

4. TONEME

The tonemes of Bisu are in a register tone system, based on high, mid and low level type tones. The basic identity of these can be seen from the following examples.

- [hja:53]  rice field  [ʔqɔ̌ː3ʔ ʔyː53]  gut
- [h̪jgː33]  foul  [hjaː33 ʔyː33]  egg
- [hjaː11 ŋɛfi]  to itah  [ʔuː22 ʰlɔ̌ː21]  pot

From this data, we can recognise the existence in Bisu of three tonemes based on the opposition of high-level 55, mid-level 33, and low-level 11, which are given the following signs:

1) high level tone: ě; 2) mid level tone: a; 3) low level tone ā.

Tonemes of the form shown in the example above are inscribed as in:

hjá: hja: hjà, ě; u: ė.

In a syllable with mid level tone, the vowel has the distinctive feature of being sounded with laryngeal tension (laryngeal-tensed vowels are written as ȩ, ỹ, ę). The same phenomenon is observed in the falling tone of Burmese in which the vowel has laryngeal tenseness. These three kinds of tone occur in the syllable form CVC (nasal), in addition to CV#. In syllables of the CVC (stop) type, only high and low level tones are found; the mid level tone is missing.

In syllables of the CVC (stop) type, a high level type tone is
uttered slightly lower [ɔː]-[ɔː], and is distinguished from mid level by the laryngeal tenseness of vowels.

\[
\begin{align*}
[bi_{11} \ khit'\ddag] & \quad \text{'match'} & [ha_{33} \ mit'\ddag] & \quad \text{'bamboo sprout'} \\
[tu_{22} \ kap'\ddag] & \quad \text{'a cover'} & [tok'\ddag \ to_{21}] & \quad \text{'house lizard'} \\
[\ddag\ddag] & \quad \text{'few'} & [\ddag\ddag] & \quad \text{'sky'}
\end{align*}
\]

Syllables of CVC (stop) type are chiefly found in words borrowed from the Thai language. The low level tone [11] sometimes is freely replaced by the falling tone [21] in Bisu, for example, [ia_{11}11] does not contrast with [ia_{21}11] 'earring', and [mu_{11}11] does not contrast with [mu_{21}1] 'sky'.

This falling tone appears in a syllable preceding pause; and a syllable affixed with the morpheme -ŋe takes the falling tone in many cases.

\[
\begin{align*}
[\ddag\ddag \ ke_{21}1] & \quad \text{'hard'} & [ke_{21}1 \ ŋe_{11}] & \quad \text{'to be hard'} \\
[\ddag\ddag \ vγ_{21}1] & \quad \text{'far'} & [vγ_{21}1 \ ŋe_{11}] & \quad \text{'to be far'} \\
[\ddag\ddag \ \ddag \ dw_{21}1] & \quad \text{'near'} & [\ddag \ dw_{21}1 \ ŋe_{11}] & \quad \text{'to be near'}
\end{align*}
\]

These words are not pronounced [ke_{11}1] [vγ_{11}1] [vγ_{21}1] [vγ_{11}1], but always in the falling tone. However, since in addition to the fact that [11] is freely replaced by [21], [11. 11] and [21. 21] do not appear as contrastive continuant morphemes. The falling tone may be regarded as a variation of the low level tone.

Besides three basic tones, i.e. high, mid, low level tones, a rising tone is observed in Bisu as gliding sounds, and in numerals and in the twelve zodiacal signs, borrowed from Thai.

1) [na_{11}1] [swgil] [han_{55}] 'hole of the ear' is an example of the gliding tone. Comparing this rising tone with [na_{11}1] [swgil] 'ear', we can see that it is a variation of the low level tone which appeared next to the high level tone [11. 11] + [11. 11. 11, 55].

2) Such numerals as [sa_{11}1] 'three', [sλgil] 'two' and such zodiacal signs as [si_{55}] 'dragon (cycle of year)', [sa_{11}1] 'monkey (cycle of year)' are examples of borrowed words with rising tones. Since they do not especially contrast with the high level tone [55], we can regard them as a variation of the high level tone.

Usual pronunciation and careful pronunciation

Subordinate morphemes following another syllable have a specific tone when they are pronounced carefully, but in normal pronunciation, so-called weak utterances are observed. For example, 'boiled rice' is [haq_{11}1 tsal_{55}] in careful pronunciation, but usually it is uttered [haq_{11}1 tsal_{55}]; 'to be salty' is uttered [jaq_{55} tsal_{55}] in careful pronunciation, but usually is [jaq_{55} tsal_{55}]; and 'heard' is uttered
[ʔaŋ33 tu:21], but usually is [ʔaŋ33 tu:21].

Modulation phenomena of Bisu

This sort of variation of tones is most apparent when the main syllable is followed by a bound morpheme, especially /-ŋɛ/.

<table>
<thead>
<tr>
<th>careful pronunciation</th>
<th>usual pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV#-ŋɛ</td>
<td>[ju:55 ŋɛ:55]</td>
</tr>
<tr>
<td>CV(Stop)-ŋɛ</td>
<td>[ŋ deŋ33-ŋɛ:55]</td>
</tr>
<tr>
<td>CV#-ŋɛ</td>
<td>[ga:33-ŋɛ:55]</td>
</tr>
<tr>
<td>CV#-ŋɛ</td>
<td>[je:11-ŋɛ:55]</td>
</tr>
<tr>
<td>CV#-ŋɛ</td>
<td>[ju:21-ŋɛ:55]</td>
</tr>
<tr>
<td>CV(Stop)-ŋɛ</td>
<td>[khit'11-ŋɛ:55]</td>
</tr>
</tbody>
</table>

In the case of longer utterances, e.g. main syllable + secondary syllable (/la, le, lu, kha/ etc.) + the bound morpheme /ŋɛ/, the following modulate phenomena are observed.

[ʔaŋ55 la:55 ŋɛ:55] + [ʔaŋ55 la:44 ŋɛ:43] 'to enter'
[haŋ55 la:55 ŋɛ:55] + [haŋ55 la:44 ŋɛ:43] 'to bring'
[ðaŋ55 la:55 ŋɛ:55] + [ðaŋ55 laŋ43 ŋɛ:43] 'to rise up'
[ʔaŋ22 la:55 ŋɛ:55] + [ʔaŋ22 la:22 ŋɛ:22] 'to wake up'
[ʔaŋ22 ŋɛ:55] + [ʔaŋ22 ŋɛ:44] 'to convey'

When a main syllable is followed by another main syllable, similar modulate phenomena occur as an influence of the tone of the following morpheme.

1) high level [55] + high level [55] change to [44. 55]
   'leg'       [ póŋ55 tu:55] + [ póŋ44 tu:55]
   'nicket'    [ ph公路 ту:55] + [ ph公路 ту:44]

2) mid level [33] + low level [21] change to [22. 33]
   'granary'   [k公路 ч公路21] + [k公路 ч公路22]

   'saliva'    [kха11 laŋ55] + [kха22 laŋ55]
   'horse saddle' [ʔа11 мо11 таŋ55] + [ʔа11 мо22 таŋ55]

   'eye'       [me:11 хэ11 33] + [me:22 хэ11 33]
   'grave'     [kам11 ту:1] + [kам22 ту:1]

'garlic' [la:11 phiː21] + [la:22 phiː21]
'tongue' [men11 hlaː11] + [men22 hlaː11]

5. CONSONANTS

The inventory of the consonantal phonemes of Bisu comprises thirty-one kinds of segmental phonemes and nine kinds of consonantal combinations.

The segmental phonemes can be grouped in the following way.

\[
\begin{array}{cccccc}
\text{stops} & \text{affricates} & \text{fricatives} & \text{nasals} & \text{laterals} \\
\text{velar} & k & kh & g & ? & h & η & hη \\
\text{bilabial} & p & ph & b & & f & w & m & hm \\
\text{dental} & t & th & d & ts & tsh & s & n & hn & l & hl \\
& & tʃ & tʃh & s & j & hj & ŋ & hŋ \\
\end{array}
\]

The consonantal phonemic system, which is composed of the segments listed in the table, has one prominent feature. The contrast voiceless: voiced occurs under "stop" and "nasal" for the velar, bilabial and dental positions.

But for dental affricates, there is no dz contrasting with /ts tʃh/, or dʒ contrasting with /tʃ tʃh/, or zʒ in contrast with /s s/. On the other hand, /hl/ contrasts with /l/, /hj/ with /j/, and /f/ with /w/. Therefore, the main features of the consonantal system in Bisu are three principal contrasts - stop: nasal: affricate: fricative: lateral; unaspirated: aspirated, and voiceless: voiced. These contrasts occur mostly in the position C- of the syllable CVC; and in the position of final -C only the contrast of stop: nasal: fricative (friction does not occur, in practice), that is to say, only the contrast /-k, -t, -p/ : /-ŋ, -n, -m/ : /-j, -w/ is functional.

Now about the character of sound for each phoneme.

1) Voiceless unaspirated stop /k/ /t/ /p/
/k/ /t/ /p/ are uttered [k] [t] [p], with complete stop and explosion, when they are in the initial position of syllables, but they are uttered [k'] [t'] [p'], with complete stop, but without explosion, in the final position of syllables.

[kuː11 ɡɛ55] 'to sew' [ŋuː33 ?γ·k' 44] 'breast'
[toː55 ɬɔ' 33] 'butterfly' [lʊo11 pɛ·t' 44] 'breast of woman'
[paː11 paː55] 'cheek' [kɛp' 44] 'shoe'

A voiceless unaspirated stop also occurs in the glottis. /?/ has
only weak explosion, and this is observed distinctly when the syllable
is uttered with a tense vowel on the mid level tone. In a syllable
which has a tone other than the mid level tone, the vowel is apt to be
uttered tensely when /ʔ/ is in the initial position of that syllable.

[ʔəŋ 33 tuː ʔ 21] 'head'  [ʔəŋ 55 əɛː 55] 'to cry'
[ʔəŋ 55 əɛː 55] 'to laugh'  [ʔəɡ 11] 'excrement'

2) Voiceless aspirated stop /kʰ/ /tʰ/ /pʰ/
/kʰ/ /tʰ/ /pʰ/ are uttered [kʰ] [tʰ] [pʰ], with complete stop, but
not so strong explosion. These phonemes do not occur in the final posi-
tion of syllables.

[kʰəŋ 55] 'thread'  [tʰəɡ 33] 'that'
[pʰə 33 əɛː 55] 'Buddha'

3) Voiced unaspirated stop /ɡ/ /d/ /b/
/ɡ/ /d/ /b/ are uttered in two ways, that is, [ɡ] [d] [b] with com-
plete stop and explosion, and [n̩ɡ] [n̩d] [n̩b] with weak, voiceless and
non-nasal glide. When they are attached to another syllable, or follow
pause, [ɡ] [d] [b] are observed if they are uttered carefully.

[ɡə 33]-[n̩ɡə 33] 'I'  [ʔəɡ ɡə ʔ 21] 'bone'
[dəŋ 55 əɛː 55]-[n̩dəŋ 55 əɛː 55] 'to
[blː 11 suː 11]-[n̩biː 11 suː 11]
sit'
[n̩biː 11] 'Bisu'

[loŋ 55 ɓəː 21 əɛː 11] 'to be thirsty'

Therefore, [ɡ] : [n̩ɡ], [d] : [n̩d], [b] : [n̩b] are regarded as
freely varying phones without contrast of features.

4) Voiceless fricative /ts, tʃ, tʃʰ, tʃʰ/
The palatal alveolars [ts] [tʃʰ], and [tʃ] [tʃʰ], which are articu-
lated in the alveolar-palatal region, are observed in the following ex-
amples.

[tsəː 11 ɛː 21] 'sait'  [ʔəŋ 33 tʃəː 21] 'waist'
[tʃə 11 əɛː 55] 'to cough'  [ʔəɡ 33 tʃə ʔ 55] 'sweet'

For the former, we write the phonemes /ts/ /tʃʰ/, and for the lat-
ter, /tʃ/ /tʃʰ/. The contrast of these two lines is obvious; however,
among these, [tʃʰ-] turns freely into [kʃ-].

[tʃəː 11 əɛː 55]-[kʃəː 11 əɛː 55]  [tʃiː 11 əɛː 55]-[kʃiː 11 əɛː 55] 'to
'to suck'  [ʔəŋ 33 tʃəː 21]-[ʔəɡ 33 kʃəː 21]
'speak'

The informant preferred [kʃ-] to [tʃ]. In some morphemes, only [kʃ-]
occurs and [tʃ-] does not occur; for example, [kʃəː 11 əɛː 55] 'to hear'.
Conversely, in some other morphemes, only [tʃ-] occurs, for example,
[tɛ an33 bɛn33] 'dish'. Therefore [tɛ] and [kj] do not always freely replace each other. Besides, the aspirated sounds [tɛh] and [khj] which correspond to [tɛ] and [kj], clearly contrast with each other. Thus, for the former [kj] I will claim the consonantal phonemic cluster /kj/, which shall be described later on, and regard it as a unit in contrast with the phoneme /tɛ/.  

/tɛ/ /kj- /tɛh- /khj-  

[tɛ] (in some cases freely replaced by [kj])  

[kj]  

[tɛh]  

[khj].

5) Fricative /s/ /sh/ /h/ /j/ /hj/ /f/ /w/  
In the line of fricatives, we observe the following:  
1) voiceless [s] which is articulated as palatal alveolar; 2) alveopalatal voiceless [ɕ]; 3) glottal voiceless [h]; 4) weak voiced on-glide [j] and voiceless on-glide [jj]; 5) labiodental voiceless [f] and voiced [v]; 6) bilabial [w].  
I shall posit the phonemes which correspond to them as follows:  

<table>
<thead>
<tr>
<th>[s]</th>
<th>[ɕ]</th>
<th>[h]</th>
<th>[j]</th>
<th>[jj]</th>
<th>[f]</th>
<th>[v]</th>
<th>[w]</th>
</tr>
</thead>
<tbody>
<tr>
<td>/s/</td>
<td>/ɕ/</td>
<td>/h/</td>
<td>/j/</td>
<td>/hj/</td>
<td>/f/</td>
<td>/w/</td>
<td></td>
</tr>
</tbody>
</table>

[saːː11 phjeːɔ1] 'tooth'  
[saːː11 ˈtʰjːɔ] 'priest'  
[ɕaːː5s ɕemːs] 'to seek'  
[ˈtʰaqːɔ ɕumːs] 'shade'  
[hjːːɔ saːː11] 'bird'  
[haːɡːɔ mɑːsɔ] 'wind'  
[jjøːːɔ bəːːɔ] 'hen'  
[ˈtʰjɑːɡːɔ bəːːɔ] 'elephant'  
[kaːɡːɔ feːːɔ] 'coffee'  
[maːʃ1 siːːɔ ˈfɑːn21] 'toothbrush'  

This [f] occurs only in words borrowed from Thai. I have recorded only the two words mentioned above.  

[waːːɔ1] 'pig'  
[ʔɔːː11 waːːɔ] 'bear'  
[vaːːɔ1] 'chisel'  
[ʔɡːɔːɔ ˈvɛːɔ] 'flower'  
[ˈwːjs ɡɛːɔː] 'to buy'  
[ˈvːjs ˈwːjs ɡɛːɔː] 'to abandon'  

The distribution of the [w] and [v] shows that they complement each other. [w] occurs in front of [a]; [v] occurs before all other vowels. For this distribution, I use the phoneme /w/. However, in case of words which are clearly recognised as borrowed from Thai, [w] also occurs in words like [pjaːɡːɔs wiːːɔ] 'fan', [wɛnːɔ] 'mirror'.

6) Nasal /ŋ/ /m/ /n/ /ŋː /hŋ/ /hm/ /hn/ /hŋ/  
In this group, besides [ŋ], [m], [n], and [ŋ], there are [hŋ] [hɛ] [h], which have voiceless on-glides. I write /ŋ/ /m/ /n/ /ŋː/ for the former, and /hŋ/ /hm/ /hn/ /hŋ/ for the latter. There are examples following for these contrasts.
7) Lateral /l/ /hl/

We find a voiced alveolar lateral [l] and voiceless on-glide [l].

[lum55 ne:55] 'to be warm'
[lum55 ne:55] 'to warm'
[lans5] 'axe'
[?aŋ55 lans5] 'grandson'

This contrast of two phonemes is expressed as /l/ : /hl/.

8) Combinations of phonemes

The only combinations of phonemes observed in Bisu are [pj] [phj] [bj] [mj] [kj] [khj], combinations with non-fricative glide [j], and [pl] [phl] [bl] [kl] [kh], combinations with voiced lateral [l]; there are no other combinations. Nucleus consonants are limited to bilabials and palatals. In combinations with [j], the nucleus stop and nasal are palatalised. [l] combined with a stop is usually shortened and is apt to become voiceless. [kl] + [kj] [kh] + [kh], [bl] + [bj].

[pja:21] 'bee'
[so:21 phje:21] 'tooth'
[?aŋ33 bja:21] 'many'
[?mja:21 thang5] 'knife'
[kja:11 ne:55] 'to wash'

Herewith, I give the following combinations of phonemes:

/pj, phj, bj, hmj: kj, khj/ /pl, phi, bl: kl, kh/, but /phj/ is very rare.

6. VOWELS

The inventory of vowels of Bisu shows a well regulated nine vowel system which is composed of four front tense unrounded vowels /i e e a/, three back rounded vowels /u o o/ and two back tense vowels /w y/. There are contrasts of [i] [u] [w] [e] [o] [y] [e] [o] [a] in Bisu, which can be observed in the following examples.

![Vowel Diagram]
[pe:11 kha:21] 'kidney' [le:ğ5 1e:21] 'to go' /e/
[nem:33 pûo:33] 'bucket' [lûo:33] 'shovel' /o/

In open syllables with mid level tone, when initial in the utterance, and in such limited environments as preceding [p] or [m], [e] occurs.

[ne:ğ3 2y:33] 'tomorrow' [tu:11 këp'ãe] 'a cover'
[ke:ğ3 kju:21] 'valley'

This [e] can be regarded in this environment as a variation of [a]. Therefore, I deduce nine phonemes /l, e, ɛ, a, w, ɣ, u, o, ɔ/ for these vowels. The phonemes /e/ and /o/ also occur in the form [-e̞n], [-ö̞n] in CVC syllables.


On the whole, the functional contrast of long vowels and short vowels is not observed. But vowels have a tendency to be lengthened in syllables which finish with unreleased [-p'] [-t'] [-k']. On the other hand, vowels of syllables which end with nasals, are tense and shorter than in the former form.

When syllables which are open are uttered with high or low tone, a long vowel occurs, but when they are uttered with mid tone, the vowel is tense and shortened.

[la:ğ5 ãe:ğ5] 'to come' CVC# (high level)
[le:ğ3 tw:21] 'rope' CVC# (mid level)
[lôo:ğ5] 'water' CVC (nasal)
[ke:ğ3 la:1t'ãe] 'paper' CVC (stop)

The ascending diphthong vowels in Bisu are observed in the following examples.

[aY] [ma:11 øe:11] 'to bend' [ɔY] [ʔa:ğ3 ɡe:11] 'curved'
[yY] [my:ğ5] 'fog'
[a本钱] [ʔa:ğ3 ɡa:21] 'bone' [eU] [ke:ğ3] 'glass'
[çU] [ʔa:ğ3 ãe:11] 'a row' [oU] [ʔa:ğ khe:ğ3] 'green'

If we regard auxiliary sounds [Y] [Ç] as the equivalent units of
consonantal phonemes /j / /w/ which occur in the final position of syllables, it is possible to posit the continuants /aj / /əj / /γj / /aw / /əw / /ew / /əw/. But these diphthong vowels do not have identical distribution with the initial sounds of syllables, and are limited in such a way that [eu] comes only after [k] and [εu] comes only after [θ]; therefore, I will unite them as /ew/, rather than deal with them as contrastive units of /ew/ / /ew/. The words in which such units occur are mostly words borrowed from Thai. According to my data, the distributional relations between vowel phonemes and final consonants in Bisu are as follows:

-η -m -n -k -p -t -j -w
a aη am an ak ap at aj aw
i iη x iη x it x x
e eη em en ek x et x x
e eη em en x ep et x εw
w wη x wn x x wt x x
γ γη γm γη γk γp γt γj x
u uη um un uk up ut x x
o oη x on ok op ot x x
o oη cm on ok x ot oj ow

7. JUNCTURE PHONEME /o/.

When the nucleus morpheme is in close juncture relation with the auxiliary morpheme /-e/, the juncture morpheme /o/ occurs occasionally between these two morphemes. For example, the construction of /dap/ and /pe/ becomes [θ̂ depaŋ əs s əς:əs] 'to count'. This phenomenon occurs regardless of the phonemic composition of the nucleus morpheme, but it is observed more frequently in the forms ending with stops and forms having mid level tone.

/pyk/+ /o/ : [pyk’44 əs s əς:əs] 'to jump'
/tlt/+ /o/ : [tl’t’44 əs s əς:əs] 'to fix'
/phoŋ/+ /o/ : [phɔŋ’43 əs s əς:əs] 'to open'
/tshan/+ /o/ : [tʃhɔn’43 əs s əς:əs] 'to throw'

When the phoneme structure of the nucleus morpheme is CV#, the phoneme /o/ which comes as the juncture, sometimes combines with that syllable and becomes CVo.

/la:+ /o/ : [la:s s ə] /la:n s ə], /le:+ /o/ : [le:s s ə] /le:n s ə]
/θɛ/+ /o/ : [θɛ:s s ə] /θɛ:n s ə], /ɪw:+ /o/ : [ɪw:s s ə] /ɪw:n s ə]

Thus, CV# and CVo are free variations, but it can be said that the
morphemes {iə} {iɛ} consist of two different morphemes [Ed. allomorphs?] such as /iə/ and /iəŋ/, /iɛ/ and /iɛŋ/. In usual utterances, the latter is used more often.

GRAMMATICAL SYSTEM OF BISU

At present, I do not have enough data to describe the grammar of Bisu satisfactorily. I can only outline it.

8. WORD-UNITS OF BISU consist of combinations of one, two or more morphemes. One of the morphemes of the word-units which consist of two or more morphemes, is usually an auxiliary morpheme qaŋ- or -ŋɛ.

/qaŋ-khjl/ 'debt' /khjl-ŋɛ/ 'to lend'
/qaŋ-hjå/ 'itch' /hjå-ŋɛ/ 'to itch'
/qaŋ-də/ 'soft' /də-ŋɛ/ 'to be soft'

As is clear from the examples mentioned above, when qaŋ combines with a morpheme, it becomes a noun expression and when -ŋɛ combines with the same morpheme, it becomes a verb expression. This process is the basic prominent feature of word structure in Bisu. It is possible, of course, to make a word-unit by a construction of two or more morphemes without qaŋ- or -ŋɛ.

tù tshɔŋ 'hat' + qaŋ-tù 'head' and tshɔŋ-ŋɛ 'put in'
khù tshɔŋ 'trousers' + iə-khù 'leg' and tshɔŋ-ŋɛ 'put in'
mà piəw phə 'leaf of the palm' + mà-piəw 'palm' and qaŋ-phə 'Leaf'

The constructions on the left side must be treated as word-units. Therefore, we can regard the existence of qaŋ- as a unit which shows the breaking point [Ed. constituent boundaries] of words. For instance, 'fruit' /tɔŋ-tɔŋ tɔŋ sə/ is a word-unit made up of the construction of three morphemes; however, 'nut' /tɔŋ-tɔŋ qaŋ- sə/ is a construction of two word-units each formed by single morphemes. 'egg' /hja-ŋu/ is a word-unit made up of two morphemes, but 'sword' /hɔŋja qaŋ-ə/ is a construction of two word-units, one of which is a single morpheme and the other is two morphemes. And also 'hilt of the sword' /hɔŋja qaŋ-phə/ should be dealt with as a construction of two word-units.

9. SENTENCES OF BISU can be grouped roughly into the equational type and narrative type. These types have different negatives and are distinguished by the following points. The equational type is composed of two noun expressions, and when it is pronounced carefully there is a pause between the two noun expressions. The narrative type is composed of a verb expression ending with the morpheme -ŋɛ, or with an auxiliary
morpheme which can take its place, and a noun expression preceding the verb expression. When it is pronounced carefully, there is also a pause between the noun expression and verb expression (# shows pause).

Equational type:

\[
\text{ga\# noun expression } # 'I am...' \quad \text{ga\# bî-sù 'I am a Bisu'}
\]

\[
\text{ga\# noun expression ma-?a\# 'I am not...'} \quad \text{ga\# bî-sù ma-?a 'I am not a Bisu'}
\]

Narrative type:

\[
\text{ga\# verb expression } (-\eta\varepsilon)\# 'I do...'} \quad \text{ga\# ?e-\eta\varepsilon 'I go (to the south)'}
\]

\[
\text{ga\# } ma-\text{ verb expression } # 'I do not...'} \quad \text{ga\# ma-?e 'I do not go (to the south)'}
\]

Morphemes which can occur in the environment of the noun expression are called morphemes of Group S, and morphemes which can occur in the environment of verb expression are called morphemes of Group V. Morphemes which can take the place of ga are put in Group S. I cannot find any other morphemes which can take the place of ma-. But there are several morphemes which can take the place of -\eta\varepsilon. These morphemes, ma-, -\eta\varepsilon and the following ones, are put in Group E. The morphemes of Bisu can be divided roughly into these three groups: Group S, Group V, and Group E.

10. In Bisu, the relation of nominative (subject) and accusative (object) usually is not expressed by special morphemes. This function is fulfilled only by order.

\[
\text{ga to-\varepsilon wap-\eta\varepsilon} \quad 'I (s) take a butterfly (o)'
\]

\[
\text{ga tsháŋ lê-khâw thu-\eta\varepsilon} \quad 'I (s) arrest a thief (o)'
\]

On the other hand, '...by, with, etc.', '...to, at, etc.', '...from', 'with', and '...more...than... (comparative)' are expressed by special morphemes, and the narrative type is enlarged as can be seen from the following.

1. ga S-na V-\eta\varepsilon I ... to ... do
2. ga S-kô V-\eta\varepsilon I ... from ... do
3. ga S-\dot{s}âj V-\eta\varepsilon I ... from ... do
4. ga S-\varepsilon V-\eta\varepsilon I ... with ... do
5. ga S-?â V-\eta\varepsilon I ... with ... do
6. ga S-Î-dâ-pâ V-\eta\varepsilon I ... than ... am
1. ga naŋ-na niŋ pl-ŋe
   'I give this to you.'

11. ga naŋ-kóŋ niŋ kj-ŋe
    'I borrow this from you.'

111. ga tšáŋ-háŋ-tsáŋ iá-ŋe
     'I have come from Chiang Rai.'

iv. ga naŋ-ne ?é-ŋe
    'I go with you.'

v. ga nu-ŋγ dúŋ-ŋe
   'I sit here.'

vi. ga naŋ-ló bá pá hmön-ŋe
     'I am taller than you (are).' 

In addition, the -na is used in the following cases:

  ga naŋ-na kht-ŋe
     'I am afraid of you.'

  ga naŋ-na mý-ŋe
     'I dislike you.'

The relation between the subject and the object which the subject is
afraid of or dislikes is expressed by an equivalent of the Japanese ni
but not o in Bisu.

The auxiliary morphemes such as -na, are: dative na; comitative kóŋ
(person), tšáŋ (place); accompaniment ne; locative ?γ. I put all these
morphemes into Group E, alongside the abovementioned ma- and -ŋe.

'I go to Chiang Rai.'

'I sit on a chair.'

The relation (of ni in Japanese) 'to', 'on' in English in the above
sentences is not expressed by a special morpheme in Bisu.

11. Among the morphemes of Group S, personal pronouns which can be re-
placed by ga have the following system. In addition to singular and
plural forms, there is a dual form - 'we two' and 'you two'.

  lsg. ga     pl. gu     du. gaj
  2sg. na-naŋ  pl. nōŋ  du. njaj
  3sg. ja-jaŋ  pl. jōŋ  du. x

In the singular form, there are two variant forms Ca and Caŋ for the
second person and third person. But for the first person, there is no
Caŋ form as opposed to a Ca form. The second person and third person
show an alteration of vowels such as singular Caŋ, plural Caŋ. In the
dual form, the first person and second person have Caŋ in contrast to
the singular Ca form. /ga ?é-ŋe/ 'I go' can change to /ga-láŋ ?é-ŋe/
'I go myself'. For the second person and third person, this ga-láŋ 'my-
self' has the following forms:

  1. ga-láŋ (?é-ŋe)  2. naŋ-láŋ (?é-ŋe)  3. jaŋ-láŋ (?é-ŋe)

A basic sentence pattern of the equational type jaŋ# tšáŋ ?aŋ-hmén
'He is a good man' is jaŋ# hmén-ŋe 'He is good' in the narrative type.
This can change further to jaŋ-hú# hmén-ŋe 'He is good'.

The forms correlating with jaŋ-hú are as follows:
ga-hú hmen-ŋe 'Mine is good.'
jan# tsháŋ ?aŋ-hmen

naŋ-hú hmen-ŋe 'Yours is good.'
jan# hmen-ŋe

jan-hú hmen-ŋe 'His is good.'
jan-hú# hmen-ŋe

niŋ# naŋ-sú ?aŋ-hmen 'This is a good book' of the equational type is
ni-nán-sú# hmen-ŋe 'This book is good' in the narrative type. The
demonstratives in contrast with niŋ have the following system.

(1) ni-niŋ (object near the speaker); (2) the ~ thẹŋ (object far from
the speaker); (3) he ~ haŋ (object further from the speaker); (4) hjo
(object even further from the speaker); (5) hɔk hjɔ (object furthest
from the speaker). The CV# and CVŋ forms which occur in (1)-(3) can
freely replace each other, but it is obscure where (4)-(5) are disting-
guished or whether they have any obvious distinction.

niŋ# nán-sú 'This is a book' can change to ni-ма# nán-sú 'This thing
is a book'. The forms of other demonstratives in contrast with this
ni-ma are as follows.
ni +ni-ma; the +thẹ-ma 'that thing';
hji +hji-ma 'that thing over
there';
hɔk-hji +hɔk-hji-ma 'that thing far
over there'.

These locatives can come before the locative -?ŋ mentioned above.
Here are examples.

ga nu-?ŋ důŋ-ŋe 'I sit here.'

gang-the-?ŋ důŋ-ŋe 'I sit here.'

gang he-?ŋ důŋ-ŋe 'I sit over there.'

gang hjo-?ŋ důŋ-ŋe 'I sit far from here.'

gang hɔk-hjo-?ŋ důŋ-ŋe 'I sit further from here.'

Among these examples, only the demonstrative (object near the speaker)
does not correspond with the system mentioned above.

It is necessary to describe here the variation of 'this' niŋ. It has
been pointed out that the form niŋ is freely interchangeable with ni;
besides that there are also nu- and nɛ- distributed in the following
way.

nu-?ŋ/ 'here' {nu-} /ne-hia/ 'this month' {nɛ-}

Since 'that' the and 'there' he have the same form before -?ŋ and
any other environment, we treat {nu-} and {nɛ-} as variations of
{ni ~ niŋ}.
The demonstrative 'this' consists of the free variation of {n1 - n1g} and three variations of {nu-, ne-}.

Questions of person, thing, time, place and number are expressed in the following forms:

person: ?a-sâγ-γy 'who'  
thing: ma-tśγ-γy 'what'  
time: ?a-śâ hmuw-γy 'when'  
place: kyγ-γy 'where'  
number: ?a-śa-γy 'how'

All of them occur with -γy. I assume that they are the same morpheme as the locative -γy mentioned above. In short, all representative forms of questions are expressed by the locative in Bisu.

If we translate word by word ?a-sâγ-γy lā-ŋe 'Who comes?', it will be 'In whom does it come?', ma-tśγ-γy tsâ-ŋe 'What do you eat?' will be 'In what do you eat?' and ?a-śa-γy tša-ŋe 'How much do you have?' will be 'In how much do you have?'.

12. In addition to personal nouns, demonstratives and interrogatives mentioned in Section 11, words which can be put in Group S, may be grouped into seven classes by their forms:

1) Forms without prefix.
2) Forms with prefix ?aŋ-.
3) Forms with prefix ?a-.
4) Forms with prefix jγ-.
5) Forms with prefix ka-.
6) Forms with prefix ?tγ-.
7) Forms with suffix -ba.

The following is an outline of each case.

1) Forms without prefix -

1. Words of a single morpheme  
lāγ 'water', khūγ 'year'.

11. Words which consist of two morphemes  
mē-hmu γ 'eye', hńγ-khōγ 'nose'.

111. Words which consist of three morphemes  
lā-tshū-toŋ 'elbow', lām-tōŋ-hńγ 'dragonfly'.

A great number of loanwords from Thai consist of three syllables, but we cannot regard them in Bisu as words which consist of three morphemes:

māj si fān 'a toothbrush', n1 lī kā 'a watch'.

2) Forms with prefix ?aŋ-. This prefix signifies 'matters or names of objects'. ?aŋ-hōγ 'room', ?a -tāγ 'floor', ?aŋ-phā 'leaf', ?aŋ-khō
'bark of tree'.

The majority of words with ?aŋ- can be put into the frame of the equational type, ni-ma# ... 'This is ...', but several words with ?aŋ- cannot be put into this environment, for instance, *ni-ma ?aŋ-tha, *ni-ma ?aŋ-thú, *ni-ma ?aŋ-hú, *ni-ma ?aŋ-lá. These words were originally in Group V; tha-ŋe 'keen', thú-ŋe 'thick', hú-ŋe 'big' and lá-ŋe 'come' as words with -ŋe, and after prefixing ?aŋ joined Group S. This is the difference between words which are originally Group S and words which can be assigned to Group S from Group V after derivation with ?aŋ. The latter has the same potential as the former with respect to -ŋe in a narrative type.

ni-ma # hú-ŋe 'This is big.' ni-ma # thú-ŋe 'This is thick.'
?aŋ-hú # hú-ŋe 'The big one is good.' ?aŋ-thú # hú-ŋe 'The thick one is good.'
?aŋ-lá # hú-ŋe 'The room is good.' ?aŋ-lá # hú-ŋe 'The floor is good.'

3) Forms with prefix ?a-. These forms occur in some consanguineous nouns and some names of animals.

?a-hú 'grandfather' ?a-phé 'younger brother'
?a-phí 'grandmother' ?a-méŋ 'aunt'
?a-tsí 'elder sister' ?a-hmjáŋ 'cow'
?a-pó 'younger sister' ?a-méŋ 'horse'
?a-?áj 'elder brother' ?a-káw 'duck'

4) Forms with prefix jí-. I have recorded only two words of this type. Both are connected with fluid.

jí-tshú 'sneeze' + ga jí-tshú tshú-ŋe 'I have a sneeze'
jí-ší 'urine' + ga jí-ší ší-ŋe 'I urinate'

5) Forms with prefix ka-. There are many loanwords from Northern Thai in this form.

ka-táj 'rabbit' < N. Thai ká-tāaj; ka-páw 'soak' < N. Thai ká-páw; ka-póng 'tin' < N. Thai ká-póng; ka-sýj 'monkey' < N. Thai ?; and ka-kyū 'valley' < N. Thai ?.

6) Forms with prefix ?ú-. I have recorded only the following three words. It is possible that ?ú- is a morpheme which is connected with rounded objects.

?ú-hía 'moon', ?ú-kú 'star', ?ú-hlíŋ 'jar'.

When ?ú-hía is modified by another morpheme and makes another word, the prefix ?ú- does not occur.
7) **Forms with suffix -ba.** Three types of the suffix -ba are possible:
   i. -ba₁ means 'big'. lá-ba 'thumb', tsáŋ-ba 'eagle'.
   ii. -ba₂ means 'female'. khá-ba 'wife', ʔw-ba 'aunt'.
   iii. -ba₃ - it is obscure what this -ba means.
      mûn-ba 'mind', khôn-ba 'village', kẹn-ba 'road', lą-ba 'stone',
      pôn-ba 'abdomen'.

13. Among the words of Group S, numerals have an obvious system. All numerals in Bisu are loanwords from Northern Thai.

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<tr>
<th>1</th>
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<tbody>
<tr>
<td>nûn</td>
<td>sôŋ</td>
<td>sâm</td>
<td>sî</td>
<td>há</td>
<td>hâk</td>
<td>kjît</td>
<td>pêt</td>
<td>kâw</td>
<td>sîp</td>
<td>sîp-ʔét</td>
<td>sâw</td>
<td>sâw-ʔét</td>
<td>tûj</td>
</tr>
</tbody>
</table>

For 'one', as in Thai, two morphemes nûn and -ʔét are found. Besides this, tû is used instead of nûn,ʔét in the following environments: 'one person' tšâng tû mâŋ, 'one month' tû hîa, 'one year' tû pi, 'half' tû khôn. Therefore, in the case of 'one', three morphemes are used, and they supplement each other.

   For 'two', nî is used alongside sôŋ as in nî hîa 'two months', nî kha-'two days'. Therefore, in the case of 'two', sôŋ and nî supplement each other.

   For classifiers which follow numerals, I have recorded only one word which concerns human beings, mân (as in the abovementioned 'one person' and já-kha tû mâŋ 'one friend'), but we can expect to find various kinds of classifiers.

14. The basic form of verb expression for constructing the narrative type is Group V + -η.  -η can be replaced by the following forms (2)-13).

1) **Basic Form V-η:** The negative form is ma-V mentioned above.
   - ga # kjâ-η 'I hear' + ga # ma kjâ 'I do not hear'
   - ga # ?ê-η 'I go' + ga # ma ?ê 'I do not go'

2) **V-ga-η:** This form shows "possibility" of the basic form V-η; the negative of it is ma-V-ga.
   - ga # ?ê-η 'I go' + ga # -ʔê-ga-η 'I can go'
   - ga # ma-ʔê 'I do not go' + ga # ma-ʔê-ga 'I cannot go'
3) \(\text{v-tša-ŋe}\): This form shows "progressiveness" of the basic form \(\text{v-ŋe}\); there is no negative for this form.

\[
\begin{align*}
\text{ga} \# \text{bì-sù t̂əŋ k̄j̄-ŋe} & \quad \text{"I speak the Bisu language"} + \\
\text{ga} \# \text{bì-sù t̂əŋ k̄j̄-tša-ŋe} & \quad \text{"I am speaking the Bisu language"}
\end{align*}
\]

This t̂əŋ-ŋe is a morpheme which means 'have', 'be'. Therefore, it is quite possible that the word was derived by analogical influence of the word -jù in Thai (original meaning is 'have').

4) \(\text{v-ka-ŋe}\): This form shows "mutualness" of the basic form \(\text{v-ŋe}\). ('to do reciprocally').

\[
\begin{align*}
\text{ga} \# \text{k̄j̄-ŋe} & \quad \text{"I speak"} + \text{ga} \# \text{k̄j̄-ka-ŋe} \quad \text{"We two speak to each other"} \\
\text{ga} \# \text{s̄-t̄yŋ-ka-ŋe} & \quad \text{"We two struggle with (each other)"}
\end{align*}
\]

This form can be regarded as a borrowed -kan from Thai.

5) \(\text{v-là}\): This form expresses "question" for the basic form \(\text{v-ŋe}\).

\[
\begin{align*}
\text{naŋ} \# \text{t̂e-ŋe} & \quad \text{"You go"} + \text{naŋ} \# \text{t̂e-là} \quad \text{"Do you go?"} \\
\text{naŋ} \# \text{ts̄a-ŋe} & \quad \text{"You eat"} + \text{naŋ} \# \text{ts̄a-là} \quad \text{"Do you eat?"}
\end{align*}
\]

6) \(\text{v-t̄sh̄i}\): This form shows "causation" for the basic form \(\text{v-ŋe}\).

\[
\begin{align*}
\text{naŋ} \# \text{t̂e-ŋe} & \quad \text{"You go"} + \text{naŋ} \# \text{t̂e-t̄sh̄i} \quad \text{"You make one go"} \\
\text{naŋ} \# \text{k̄j̄-ŋe} & \quad \text{"You hear"} + \text{naŋ} \# \text{k̄j̄-t̄sh̄i} \quad \text{"You make one hear"}
\end{align*}
\]

7) \(\text{v-s̄l-kh̄ə}\): This form shows "desire" in the basic form \(\text{v-ŋe}\).

\[
\begin{align*}
\text{ga} \# \text{t̂e-ŋe} & \quad \text{"I go"} + \text{ga} \# \text{t̂e-s̄l-kh̄ə} \quad \text{"I want to go"} \\
\text{ga} \# \text{ts̄a-ŋe} & \quad \text{"I eat"} + \text{ga} \# \text{ts̄a-s̄l-kh̄ə} \quad \text{"I want to eat"}
\end{align*}
\]

8) \(\text{ma-vn-s̄u}\): This form expresses (Mizenkel, "near negative") 'not yet', etc. in the basic form \(\text{v-ŋe}\).

\[
\begin{align*}
\text{ga} \# \text{k̄j̄-ŋe} & \quad \text{"I hear"} + \text{ga} \# \text{ma-k̄j̄an-s̄u} \quad \text{"I did not hear yet"} \\
\text{ga} \# \text{w̄-ŋe} & \quad \text{"I make"} + \text{ga} \# \text{ma-w̄an-s̄u} \quad \text{"I did not make yet"} \\
\text{ga} \# \text{t̂e-ŋe} & \quad \text{"I go"} + \text{ga} \# \text{ma-t̄én-s̄u} \quad \text{"I did not go yet"}
\end{align*}
\]

9) \(\text{v-kan-s̄u}\): This form shows "experience of the past" in the basic form \(\text{v-ŋe}\); the negative of it is \(\text{ma-vkan-s̄u}\).

\[
\begin{align*}
\text{ga} \# \text{l̄-ŋe} & \quad \text{"I came"} + \text{ga} \# \text{l̄-k̄an-s̄u} \quad \text{"I have come"} + \\
\text{ga} \# \text{ma-l̄-k̄an-s̄u} & \quad \text{"I have not come"}
\end{align*}
\]

10) \(\text{v-t̄sh̄á}\): This form expresses the perfect tense of the basic form \(\text{v-ŋe}\); as alternatives, \(\text{v-na-tshá}\) and \(\text{v-kha-tshá}\) are found.

\[
\begin{align*}
\text{ts̄ł̄-tsw̄n̄ # h̄j̄òng-ŋe} & \quad \text{"The tree dies"} + \text{ts̄ł̄-tsw̄n̄ # hj̄òng tshá} \quad \text{"The tree has died"}
\end{align*}
\]
mọn-mọn # hmin-ŋe 'The mango becomes ripe' + mọn-mọn # hmin-tshá 'The mango has become ripe'
ni-ma # hū-ŋe 'This is big' + ni-ma # hū-na-tshá 'This has become big'
gá # khō-ŋe 'I got tired' + gá # khō-kha-tshá 'I have got tired'

11) V-ŋē: This form expresses the imperative of the basic form V-ŋē.
lā-ŋē 'to come' + lā-ŋē 'Come!' ?ē-ŋē 'to go' + ?ē-ŋē 'Go!'

12) ma-ŋē (high level falling tone and lengthened vowel): This form indicates negative imperative of the basic form V-ŋē.
kjā-ŋē 'hear' + ma-kjā [me3 kjå: 441] 'Don't hear!' sā-ŋē 'eat' + ma-sā [me3 sa: 441] 'Don't eat!' ?ē-ŋē 'go' + ma-?= [me3 ?e: 441] 'Don't go!'

13) V-jā (high level falling tone): This form forms exclamations with the basic form V-ŋē.
mēn kha-ŋē 'to thank' + mēn kha-jā [441] 'Thanks!' kā-tsā-ŋē 'to win' + kā-tsā-jā 'Won!' kan-lān-ŋē 'to be defeated' + kan-lān-jā 'I am defeated!' wā-kho-ŋē 'to finish the work' + wā-kho-jā 'I have finished the work!'

This jā is used particularly in negative expressions:
ma-hmā-jā 'True!' (translated word for word, it means 'Not a lie!'); ma-ʔa-ja 'Lie!' (translated word for word, it means 'Not the truth!'); however, I have not heard #hma-ŋē, #ʔa-ŋē.

15. INTERLOCKING SYSTEM

Sequences of one word from Group V plus another one from the same group sometimes express two continuing actions, or the trend of the action defined by the main word. As in the examples in the section on the phonemic system [Ed., p.59], the form of this construction is limited to the following four forms which mean 'to go', 'to come'.

V-lā-ŋē ' (downward) ... come to do' V-lē-ŋē ' (upward) ... go to do' V-lū-ŋē ' (from below upward) ... go to do' V-ʔē-ŋē ' (downward) go to do' For example, tsā-ŋē 'to eat' + tsā-lā-ŋē 'come to eat' + tsā-ʔē-ŋē 'go to eat'. 
Forms such as V-ľ- agréable, show in a single form expressions correlating
to
shang lai - hsia lai - shang chü - hsia chü
(上來)(下來)(上去)(下去)
in Chinese.

The contrasts of 'bring' hľ-ľ- agréable, 'take away' hľ-ľ- agréable, 'fetch'
ľ-ľ- agréable and 'carry away' šľ-ľ- agréable are expressed in the differences of
the attached part. Of course, the attached parts are defined by the
character of the words of Group V. tha- agréable 'stand up' as opposed to
tha-ľ- agréable 'rise' is possible. But *tha-ľ- agréable is impossible. One can
make khľ-ľ- jà 'arrive' become + khľ-ľ- agréable 'come' + khľ-ľ- jà 'Oh, I
have arrived!', but other forms are impossible.

The eminent feature of this interlocking system is that V-V- agréable
exists side by side with V- agréable which is not interlocking.

16. In Bisu, there are also words formed by Group V plus Group V. But
only of the V₁-V₂- agréable type; there is no V₁- agréable type.

ľšľ-ľ- agréable 'remember', ššš-šš- agréable 'remember'. These are not, e.g.
*šš- agréable + šš-šš- agréable; only the latter sequence is possible. This
šš- agréable in its origin is the same word as 'eat' šš- agréable, and 'remember'
is expressed as 'to eat memory'; 'win' is expressed as 'to eat a win'.
There are similar coinages in spoken Tibetan. 9

17. The distinguishing of the intransitive form from the transitive
form in a word of Group V is rarely accomplished by two morphemes which
have a [minimal: Ed.] contrast in part of their phonemic structure, but
in many cases it is shown clearly by two morphemes which have unrelated
phonemic structures. For example,

ľšľ-ššgš hľšľ- agréable 'A tree falls down'
ľšľ-ššgš hľšľ- agréable 'I fell a tree' down'

But in the following cases, the partial contrast of phonemes in two
morphemes indicates the function of intransitive or transitive.

ľšľ-ššgš kľšľ- agréable 'I fall down from the back of a horse' + kľšľ- agréable
'to fall'
"I drop something from the back of a horse" + "to drop"
"The water becomes warm" + "to warm"
"I warm up water" + "to warm up"
Examples such as the above are very small in number. In addition, the following contrasts are found.

- "to make a hole" + "A hole is made"
- "to tear" + "to be torn"

This V-tšh form is regarded as the form of the causative mentioned above, therefore, 'A hole is made', 'to be torn' may be expressed in passive form; however, I am not sure this is actually so.

18. There is a verb expression which is constructed by the concatenation of a word of Group S with a word of Group V in Bisu. For example,

- "to sneeze" + "to dream of"
- "to have a straw hat on"
- "There is a flash of lightning"

In these constructions it is possible to place pause, for example, between jì-tšhù and tšhù-ŋe. The negative of it is not *ma-jì-tšhw tšhù but jì-tšhù ma-tšhù or mè-bùn ma-bùn. Thus, these should be regarded as the constructions of words of Group S and Group V which consist of two morphemes in each.

19. DETERMINATIVE

When a word of Group S is modified by a word of Group V, these are ordered in the form S-V. Transformations to noun phrases from the verbal construction S + V are as follows:

- "The man is tall" + "a tall man"
- "to warm up water" + "warm water"
- "to boil water" + "boiled water"
- "The tiger has a striped pattern"

20. LOAN WORDS

I have reported the basic points of the phonemic system and
grammatical system of Ban Lua Bisu briefly in this paper. There is much left to be desired; I wish to re-examine the data and investigate further.

Lastly, I wish to discuss loan words from Thai.

Bisu vocabulary contains a considerable number of loan words from Thai. In 850 words recorded this time, approximately 150 words were from Thai. Those loan words were borrowed in several stratum under various forms. Considering the whole of Bisu vocabulary, first, it is considered that some came with new things; that is to say, they are new words added to the original vocabulary of Bisu. Secondly, similar to the numerals 'three' and following, mentioned above, there are words which took the place of original words of Bisu. Thirdly, though most borrowings took the place of original Bisu words such as the numerals 'one, two', some of them are used in complementary distribution. For example, there are two morphemes which mean 'year'. The distribution of them is as follows:

<table>
<thead>
<tr>
<th>one year</th>
<th>two years</th>
<th>this year</th>
<th>last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>těw pl</td>
<td>nî pl</td>
<td>mi hnu</td>
<td>mi hnu ŝy</td>
</tr>
</tbody>
</table>

In the cases of 'one year', 'two years', pl which was borrowed from Thai is used. But in the case of 'this year', 'last year', the original Bisu hnu occurs.

As to the times of the borrowing, roughly three strata can be distinguished. As to the loan words of the oldest stratum, these came when the Bisu tribe lived in Burma or Yûn-nan. All of the words which have different phonemic features from Northern Thai and Standard Thai, for example, 'six' ?aŋ-hmj (13th century Thai hmaj); 'oil' nam hman (13th century Thai nam man (hman?)); 'north' hûg hny (13th century Thai hûg); 'to be easy' høj-ńe (13th century Thai ēj (højaj)); 'blacksmith' tšaŋ hlek (13th century Thai dzsoh hlek); 'to be pointed' hím-ńe (13th century Thai hîm), which all contain h-, hy-, h̄-, h̄-, are quite within the bounds of possibility as loan words which preserve the phonemic system of antiquated Thai. The twelve zodiacal signs might be borrowed at that stratum. The twelve zodiacal signs are the most similar to the Thai Lû language of Yûn-nan Province.11

As the second stratum, it is conjecturable that Bisu has borrowed a large number of words from Northern Thai after coming to the northern region of Thailand. The loan words of this stratum comprise the largest number of loan words, for example, the ŭ of 'to dye' hûm-ńe (N. Th. hûm), 'age of person' ?aŋ-śu (N. Th. a-śu) is an eminent syllable-initial phoneme of Northern Thai; and 'umbrella' tšoŋ (N. Th. cûn), 'clothes iron' tâu ŭit (N. Th. tawnilit), 'market' kât (N. Th. kâat), 'priest' sà-tu (N. Th. satu), and 'body' ?aŋ-to (N. Th. tua) are unique
word forms of Northern Thai; there are no such forms in Standard Thai. As the third stratum, there are fresh loan words which are considered as having been borrowed from Standard Thai recently: 'toothbrush' ฆ่าตสีฟัน (Thai: ฆ่าตสีฟัน); 'to read' ผานง (Thai: ผานง), and 'dish' จานเบ่น (Thai: จานเบ่น). The forms of these words are different from Northern Thai, but correlate with Standard Thai.

In terms of form, loan words of these three stratum are grouped according to the following three types:

1) Words which have retained the original structural features of Thai, such as 'umbrella', 'market', 'clothes iron', 'toothbrush' mentioned above.

2) Words which have taken the appearance of Bisu, such as the words 'to dye', 'age', 'to read', 'to draw a line' mentioned above.

   These have taken the same form as original Bisu by attaching ง-ง which are the prominent features of words of Group V and Group V.

3) New word types have been made by loan words combined with original morphemes of Bisu.

   For example, ฆ่า-ฆ่าตสี 'hoof' was constructed by the combination of a loan word from Thai ตสี (Standard Thai and Northern Thai is ตสี) and a word of Bisu ฆ่า-ฆ่าต 'horse'. And also ฆ่าต 'match' was constructed from ฆ่าต Bisu for 'fire' and ฆ่าต from Thai ฆ่าต 'match' (Standard Thai). Several other words look like the same construction type; however, the part which is native Bisu is not clear; for instance, the final parts ง-ง, ง which are borrowings from Thai: ง, ง. But it is obscure whether the initial parts ง and ง are native Bisu or not.

   Since the abovementioned word 'match' has an obvious element of Standard Thai, this construction type is not always loan words of the old stratum. In addition, there are several words which resemble Thai in form; but it is difficult to decide if they are, or are forms of original Bisu.

   'goods' ผานเจ้า : Thai = ไว้เจ้า 'voice' ผานเส้า : Thai = ไว้เจ้า
   'to get drunk' ผานเจ้า : Thai = ผานเจ้า 'bed' เเบง : Thai = ไว้เจ้า

It is a very interesting problem to me to study the correlations of loan words in Bisu and the origins of these words as a whole. I wish to refer to that problem in another paper, in connection with the additional facts of languages of other mountain tribes.

ADDITIONAL NOTE

I will note briefly here the phonemic system of loan words.
It is clear that 'to count' dép-ŋɛ is a loan word from Thai nɛb, and it is quite possible to think that this word was borrowed at a very old stage.

In accordance with my report (Tōnan Ajia Kenkyū Vol.3, No.3, p.128), at some stage (probably when the Bisu tribe lived in the northern part of Burma or Yün-nan Province), the part of forms in Bisu which begin with voiced nasal was replaced by a voiced stop such as *ŋ + ŋɛ + g, *n + nd + d, *m + mb + b.

nap, which was originally a Thai word, was already borrowed when that change occurred. Therefore, it was changed *náp + ndáp + dép like native Bisu words; for example, *ʔaŋ-ná 'pain' → *ʔaŋ-dá. On the other hand, nà, which means 'rice field', was borrowed from Thai na, but it was not changed to dá, because this word was borrowed after the change of *n + nd + d. In graphic form those words are as follows:

<table>
<thead>
<tr>
<th>Bisu word</th>
<th>loan word</th>
<th>loan word</th>
</tr>
</thead>
<tbody>
<tr>
<td>'pain'</td>
<td>'to count'</td>
<td>'rice field'</td>
</tr>
</tbody>
</table>

Earlier stage: *ʔaŋ-ná  náp-ŋɛ < Thai nɛb  x
               ?aŋ-ndá  ndáp-ŋɛ  x

Later stage:  ?aŋ-dá  dép-ŋɛ  nà < Thai na

Bisu is closest to Funoi in Lao and Pyen in Shan State; I think that these three are contained in a subgroup separate from, and parallel to, the Maru-Lashi-Atsi group, Akha group, Lahu group and Lisu group, within the Burmese-Lolo branch.


BIBLIOGRAPHICAL REFERENCE

NISHIDA, Tatsuo

NOTES

1. This survey has been carried out as one item of the First Five Years Plan of the Center for Southeast Asian Studies, Kyoto University. The linguistic group was comprised of members such as Yasuyuki Mitani, Makio Katsura and myself.

We express our thanks to the members of the National Science Council of Thailand and the members of the Ministry of Home Affairs for their generous support during the investigation.

2. The so-called Khammyaŋ (Northern Thai language) is spoken in this region, with such dialects as Chiangrai, Chiengmai, Lampang and Lampoon, with further variants among these dialects, cf. Herbert C. Purnell, A short Northern Thai - English dictionary. Chiengmai, 1963.


5. Dr A.F.G. Kerr, "Two Lawa Vocabularies", Journal of the Siam Society, 21, 1927. He speaks of two Lawa languages; one of them is spoken in Ban Luang village, situated southwest of Chiengmai City of Chiengmai Province, and the other is used by the Lawa tribe in Kanburi Province. Dr Kerr reported 48 words of the former, recorded when he visited the place in 1922, and 86 words of the Lawa language of Kwēyai and 34 words of Kwēnoi; however, he thought that they do not resemble Lawa of Ban Luang, but rather resemble one of the language group of Tibetan-Burmese languages which is close to Lisu and Akha. The description of the words is not clear, and no record of tonemes is presented.
6. Henri Roux, "Deux tribus de la région de Phong Saly (Laos Septen-
tional)", BEFEO 24, 1924, pp.489-500. Mr Roux reported 542 words of the
P'u-Noi language. He did not know how this language, as well as the
Akha language which he reported in the same paper, should be classified.
R. Shafer marked it as a language situated between Burmese and Lolo,
cf. R. Shafer, "The link between Burmese and Lolo", Sino-Tibetica, No.2,
1938; "Phunoi and Akha tones", Sino-Tibetica, No.4, 1938.

7. G. George Scott, Gazetteer of Upper Burma and the Shan States, pt.1,
Vol.I, Rangoon, 1900, pp.717-19. "Vocabulary of Pyen (or Pin) tribe,
Kengtung, Southern Shan States" (by G.C.B. Stirling). 246 words of Pyen
are recorded in this paper. There is no record of tonemes, but its form
is closest to the Bisu language.

8. I wish to advocate that there is a new group represented by the Bisu,
Pyen and Phunoi languages which have few differences, and I would make a
guess that several languages belonging to this language group are still
spoken at some places scattered over Laos, Thailand and Burma (Shan
State). I will prove that this group is intermediate between Akha, which
is spoken (along with Bisu) in Laos, Thailand and Burma (Shan State), and
Burmese, which is spoken over in Burma. Please refer to "Bisu go no
keito (A comparative study of the Bisu, Akha and Burmese languages)",
Tôna Ajia Kenkyû (Southeast Asian Studies), Vol.4, No.2 (to be published
as Vol.4, No.3, 1966). And for Akha, please refer to "Akha go no onso
taikei; Tai kokú hokubu ni okeru sanchimin Akha zoku no gengo no kizyu-
tsuteki kenkyû (Phonemic system of the Akha language; descriptive studies
on the language of the Akha hill tribe in Northern Thailand)", Studia

9. For instance, there are coinages in the oral language of Central
Tibet: sôr sà-we 'to eat a horn = to say in a roundabout way'; khôn-t̪sh̪o
sà-wa 'to eat anger = angry'; ı́shik-po sà-we 'to eat a burning thing =
angry'.

There are other compound types in Bisu which have -tso as in the
following verbs: 'to learn' hîn ı́sh̪-ı̊n; 'to write' tìm ı́sh̪-ı̊n; 'to
read' ı̊n n̪ı̊s̪-ı̊n. The common feature of these three examples is that
they are all loan words from Thai and have the same meaning of "letter";
therefore, they seem to be structural patterns of Thai.

10. For another feature, the contrast of tones shows contrast of mean-
ing. phù-ı̊n 'unbind' phù-ı̊n 'combine': -phî-ı̊n 'make a fire' phî-ı̊n
'close'.


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