

TIBETAN TONEMES.

Correct intonation is a very essential element in Tibetan.

The modern dialects of Central Tibet (Lhasa or dbÜs-skad; Shigatse dialect or gTsang-skad; the several dialects of Khams or Eastern Tibet with a number of intermediary dialects ~~or parts~~) have developed a distinct system of tonemes,

*and
sub-dialects*

closely related to that of ancient Chinese (~~the~~ by ancient Chinese I mean the language of the VI -th century AD.) and the Burmese, which has preserved an archaic form of ~~tone~~ system. The difficulties of carrying out detailed phonetic observations on Tibetan territory have long deprived scholars of the necessary data on the different systems of tonemes in the dialects spoken in the Highlands of Tibet. Thanks to the rich material brought together in the monumental Linguistic Survey of India (Vol.I, part.I and 2, and Vol.III) we know that the Central Tibetan dialects (from Spiti on the SW border of the country to the very border of China / Ssü-ch'uan /) possess a developed system of tonemes, whereas in some of the dialects of the borderland, such as Ladakī, Baltī and Purik, the system of tonemes is absent. My own researches among the Hor-pa tribesmen of the North, have convinced me that the Hor dialect, as well as that of the Nya-rong-was, belong to this second ~~class~~ ^{group} of Tibetan dialects, characterized by ^{an} ~~the~~ apparent absence of a tone system. The true cause of this wide gulf between the two ~~classes~~ ^{groups} of Tibetan dialects, remains yet to be solved, though I believe, that the dialects of the second ^{group} class are not altogether " tone-less ". The dialects of these second group

→ The theory that tones are often due to the disappearance of prefixes was first outlined by Lepsius (AKAW, Berlin, 1860, pp. 449 and ff) and afterwards supported by Conrady.

are indeed more archaic in their morphological and phonetic aspects, and their toneme systems may be less pronounced. Further researches are necessary to elucidate the relation of the " tone-less " dialects of the Tibetan borderland, to those of Central Tibet, characterized by a developed tone system. A thorough study of the West Tibetan dialects from the point of view of their phonology, will no doubt clear up many points and facilitate the reconstruction of the toneme system of the Ancient Tibetan.

The first discovery of a system of tonemes in spoken Tibetan is due to Rev. Jäschke, of the Moravian Mission in Indian Tibet. The learned missionary distinguished between two tonemes, the high and the deep one (low). The latter, he stated, was found in words beginning with uncompound soft consonants in the literary language. The former in words beginning with soft consonants preceded by a prefix or beginning with a hard consonant. Rev. Jäschke 's discovery only relates to the two main divisions of the Tibetan system of tonemes : the high - and low-pitched tonemes.

Dr. A. H. Francke's investigations have convincingly demonstrated the existence of a high tone or mo-skad (" woman's voice ") and of a low tone or pho-skad (" man' voice ") in modern Tibetan. (Francke, ZDMG, Bd. 57, 1903).

> August Conrady was the first to take up the question of the Tibetan tone system in the light of a comparative study of other Indo-Chinese or Sinitic languages. In his

pioneer work " Eine indochinesische Causativ-Denominativ-Bildung und ihr Zusammenhang mit den Tonaccenten " (Leipzig, 1896) he outlined the two main varieties of high - and low-pitched tonemes, corresponding to the nature of initial consonants.

A further step in the study of Tibetan tonemes was made by the Rev. Graham Sandberg in his Handbook of Colloquial Tibetan, (Calcutta, 1894, pp. 13-16). According to Rev. Sandberg, the modern Tibetan has properly three tones, and that " the Tibetan tone depends altogether upon the particular letter which happen to occur in the original spelling as the two or three initial letters of any word. Though the letters, particularly the first consonant, may be silent in pronunciation, their presence or absence in the Tibetan spelling regulates the tone and is thus really felt " (Sandberg, *ibid.*, p. 14).

The three tones according to Rev. Sandberg are as follows

Toneme 1 - High pitched

Toneme 2 - Low Resonant

Toneme 3 - Medial voice.

The High pitched tone, according to Rev. Sandberg, is rendered by an " elevated treble or feminine style of voice ", continuously sustained at one pitch. The Medial is scarcely lower. The Low Resonant tone is guttural and low pitched.

Rev. E. Amundsen (Primer of Standard Tibetan, Darjeeling, 1903) distinguishes already six tonemes, which, number can be , however, reduced to four tonemes, as in two cases the difference lies only in the length of the tone, and not on its musical accent. *pitch*

Toneme I High-pitched, often nasal, and short as if butted against something.

Toneme II High like Toneme I, but long.

Toneme 3 Medium pitch and short like Toneme I

Toneme 4 Medium pitch and long.

Toneme 5 Curved toneme; deep but gradually raised to medium pitch.

Toneme VI Descending long toneme.

Sir Charles Bell in his Grammar of Colloquial Tibetan (Calcutta, 1919, 2 ed., p.18) distinguishes three tonemes ~~mer~~ apparently Their use being governed by the initial consonant.

Toneme I - High tone used in word beginning with a prefix except when the initial letter is འ་ག་ཁ་ཅེ་ཐ་ད་ མ་འ་ཚ་ སེ་ཏ་ ། . Also used with the following initials: ཀ་ཁ་ག་པ་ཅ་ཉ་མ་ཏ་

Toneme 2 - Medium tone, used in words beginning with འ་ཁ་ཐ་ མ་ ། as initials with or without prefixes.

Toneme 3 - Low tone, used in words beginning with any of the following initials ཀ་ང་ཅ་ཉ་ད་མ་ཏ་ ས་ལ་འ་ཡ་འ་ ། and in words in which a prefix precedes the initials: ཀ་ང་ད་འ་ཏ་

All the above systems of tonemes^{nes} seem to stress the existence of the two main divisions of the Tibetan tone system, the high- and low-pitched tonemes^S.

Rev. Amundsen's system seems to indicate the existence of four musical tones inherent in the syllable, but in its^{his system in it} present form is phonetically unacceptable. The late Dr. A. H. Francke thus summarized the present position of the question : " This much seems to be certain : syllables beginning with a media have a low tone; syllables beginning with a tenuis have a high tone, especially, if the tenuis is furnished with a preceding s or r; syllables beginning with tenuis aspirata have a medium tone " (Addenda to the latest edition of Jaschke's Tibetan Grammar, Berlin, 1929, p. 110).

The honour of establishing the four fundamental tonemes of Central Tibetan from the mass of highly contradicting material so far published, belongs to Sir George A. Grierson. Sir George Grierson in Vol. I, part 2, p. 24 of his Linguistic Survey of India, gives a list of four tonemes, which almost coincides with our list of Tibetan tonemes, to be described below. Sir George Grierson's list is a great improvement on all the previously proposed systems of Tibetan tonemes. Sir George Grierson says : From the works of Amundsen, of Henderson, and of Bell, we gather that there are four real tones, viz.:-

- (1) A mid-rising (Amundsen's 2th)
 (2) A mid-level (Amundsen's 4th)
 (3) A falling-~~rising~~^{rising} (Amundsen's 5th)
 (4) A mid-falling (Amundsen's 6th) "

It is generally admitted that the tone of a word largely depends on its initial consonant and that tones are often due to the disappearance of the prefixes. Tones³ began to develop as a result of the phonetic desintegration of the language. Moreover, it was observed that words preceded by a prefix were pronounced with a higher tone, than those without prefixes (" Die präfixhaften und die allen stimmlosen Anlaute haben höhern Ton als die präfixlosen stimmhaften Anlaute", according to Conrady, ibid. p.91-103)

It is as yet difficult to establish the date of this phonetic desintegration of the ancient Tibetan language. Recent researches have shown that the prefixes were already mute in the first half of the ninth century AD, and the important grammatical treatises² ~~edited~~^{and translated} recently by Prof. Jacques Bacot, seem^s to indicate that the prefixes remained silent already in the time of Thonmi Sambhota or in the VII-th century AD (Cf Bacot, Clokas Grammaticaux, Paris, 1928, p.55, note (2)). It seems, therefore that already in the VII-th century AD, from which century dates the first recording of the Tibetan language, we find ourselves in the presence of a highly evolved dialect with silent prefixes, ~~but~~ still retaining the sonant pronunciation of initial and final consonants.

There cannot be any doubt as to the fact that the ancient Tibetan (the language of the VII-th - X-th centuries AD) possessed high and low pitched tones, similar to Ancient Chinese and other languages of the Sinitic ~~family/of/languages/~~ group.

Comparative phonetic studies, which the author of the present note conducted during his stay in Tibet Proper and the Himalayan ~~Borderland~~ of Tibet, have convinced him that besides the two main divisions of high and low-pitched ~~tones~~ ^{Tones}, the modern Tibetan dialects of Central Tibet possess a distinct system, ^{of tonemes,} similar to that of Ancient Chinese and that of the Burmese. ~~The~~ ^{Learned} Investigations, conducted with several intelligent Tibetans, both lamas and laymen, showed that the Tibetan language, as spoken in the Central ~~Provinces~~ ^{Provinces} of Tibet, possesses a definite system of five tonemes. The different dialects and sub-dialects spoken in the ^{this part region} ~~Central~~ ^{Provinces} of Tibet seem to agree on the main ^{and} ~~points~~ of the system, the only difference noticed lies in the distribution of high and low pitch among the four fundamental tonemes of the system.

The five tonemes of the tone system of Modern Central Tibetan are as follows:-

- | | | |
|----------|--|------------|
| Toneme 1 | High rising toneme, graphically marked | <u> /</u> |
| Toneme 2 | High even toneme, graphically marked | <u> —</u> |
| Toneme 3 | Low even toneme, marked | <u> —</u> |
| Toneme 4 | High falling toneme, marked | <u> \</u> |
| Toneme 5 | ^{Low abrupt} Abrupt falling toneme, marked | <u> </u> |

For example the words ལུག , lug, sheep; ལྷུ , glu, song; ལྷུག་པ། blug-(pa), to fill; ལྷུ klu, dragon, and ལུགས lugs, manner, fashion, are all pronounced in modern Tibetan - lu / the prefixes are ~~dropped~~ mute and the final consonants are dropped /. These words can be distinguished among themselves only by the toneme or musical tone, which is inherent in each syllable-word. The above five words can be arranged according to our table of tonemes, as follows :-

Toneme 1	high rising	ལུག	, lug, sheep, pron. 'lu
Toneme 2	high even	ལྷུ	, glu, song, pron. -lu
Toneme 3	low even	ལྷུག	, blug, to fill, pron. -lu
Toneme 4	high falling tone	ལྷུ	, klu, dragon, pron. 'lu. ལྷུ (Cf. Pelliot, JA, 1912, p. 589)
Toneme 5	low abrupt	ལུགས	, lugs, manner, pron. 'lu.

The words ལྷེ , sne, extremity; གནས gnas, place; ལྷས , nas barley; གནད gnad, essence; ལྷད nad, illness, are all pronounced in Colloquial Tibetan - ne , and are distinguished only by their tonemes.

Toneme 1	High rising	ལྷེ	sne, extremity, pron. 'ne
Toneme 2	High even	གནས	, gnas, place, pron. -ne
Toneme 3	High even	ལྷས	, nas, barley, pron. -ne
Toneme 4	High falling tone	གནད	, gnad, essence, pron. 'ne
Toneme 5	Low abrupt	ལྷད	, nad, illness, pron. 'ne.

It will be observed that words ending with ^a the ~~sonant~~
^{a labial (b > p in modern Tibetan)}
 dental belong to the falling and abrupt tonemes of the
 system. Cf. ^{anc} Chinese ju-sheng with endings -p, -t, -k)

(d > t in modern Tibetan)

The words རྟག rtag, continuous; རྟགས rtags, sign;
 རྟ rta, horse; ད da, pron.ta, now, are all pronounced
 ta in Modern Tibetan.

- Toneme 1 high rising རྟག , rtag, rpron. ˈta
- Toneme 2 high even རྟགས , rtags, rpron. ˉta
- Toneme 4 high falling རྟ , rta, rpron. ˋta
- Toneme 5 low abrupt ད , da, rpron. ˑta

Words like ser-po, yellow; sras, son; zer, says; gser, gold;
 sed, file, are all pronounced se and are distinguished only
 by their musical accent.

- Toneme 1 high rising སེའུ་པོ་ , ser-(po), rpron. ˈse
- Toneme 2 high even སྲས་ , sras, rpron. ˉse
- Toneme 3 low even ཟེར་ , zer, rpron. ˉˉse
- Toneme 4 high falling གསེར་ , gser, rpron. ˋse
- Toneme 5 low abrupt སེད་ , sed, rpron. ˑse.

The words འོས་, bos, "away, off"; ལྷོས་ spos, incense, and
 འོད་, Bod, Tibet, are all pronounced pō and are distinguished
 by their tonemes.

bos "away" is pron. ˈpō with the high rising toneme, as in the
 sentence བོ་འོས་ཕྱིན་པ་འདྲེན་ , kho. bos.phyin.pa.red, "he went
 away", rpron. ˈk'o ˈpō ˋciim ˋpa ˋre.

ལྷོས་ , spos, incense, is pronounced ˉpō with the high even
 toneme, and འོད་ , Bod, Tibet, is pronounced ˑpō with the
 low abrupt tone.

It will be observed from the above that the present system of tonemes in Colloquial Tibetan ^{must be} is a contracted form of a system which consisted of two main divisions, the high-pitched and the low pitched tonemes, and which is a common heritage of all the Indo-chinese languages. ^{must have} The ancient Tibetan possessed the following system of tonemes:-

High ^{pitch} tones	Low ^{pitch} tones .
1. rising ^{tone}	rising ^{tone}
2. even ^{tone}	even ^{tone}
3. falling tone ^{tone}	falling ^{tone}
4. abrupt ^{tone}	abrupt ^{tone}

The above system of tonemes corresponds to that of Ancient Chinese ~~which is here inserted~~

High pitch	Low pitch
1. shang p'ing sheng	hsia p'ing sheng
2. shang shang sheng	hsia shang sheng
3. shang ch'ü sheng	hsia ch'ü sheng
4. shang ju sheng	hsia ju sheng.

(Cf. Karlgren: Etudes sur la Phonologie Chinoise / Archives d'Etudes Orientales, vol. XV, 3, 1919, pp 581-597)

The Modern Central Tibetan has preserved the high rising toneme, the high and low even tonemes, the high falling and the low abrupt tonemes. The low falling and high abrupt have disappeared from the language and it remains to be seen ^{they are} whether ~~some dialects~~ ^{still to} be observed in some of the dialects.

Burmese.

Modern Burmese presents a slightly different picture which in its chief characteristics agrees well with ~~the~~ ~~paper~~ our table of Tibetan tonemes.

In Burmese there are four tonemes, each containing subsidiary members, *with high and low pitch*

Toneme 1. The tone of a syllable is high and has a slight fall.

Toneme 2 The tone of a syllable is level. A syllable pronounced with any member of toneme II is never terminated by a Δ closure of the glottis, but has a gradual ending. The vowel of the syllable is always long.

Toneme 3 The tone of a syllable is falling.

Toneme 4 is a neutral tone. Syllables pronounced with this tone are unstressed and extremely short.

~~Each of the above tonemes contains high and low pitched members~~

Cf. L.E. Armstrong and Pe Maung Tin: Burmese Phadetic Reader, pp. 19-26, London, 1925.

As in Ancient Chinese, all syllables with an initial surd must have been generally pronounced with a high-pitched tone, and all syllables with an initial sonant with a low-pitched tone. This peculiariry remains in the present ^{spoken language} Central Tibetan

and words beginning with a surd, or preceded by a prefix, ~~invariably~~ belong to the high pitch ^{ed} ~~division~~, and those beginning with a sonant to that of the low pitch. ^{x)} In other words the morphological structure of the word affects only the pitch of the word. It will be easily seen from the above, that the musical accent or tone, inherent in each word, is not affected by the nature of the initial ~~or final consonant~~, or the presence of a prefix. The tone is an inherent part of the Tibetan word and is not governed by its morphological structure.

This conclusion ^{is} fully justified by the words of the eminent Sinologist, Professor Paul Pelliot:- A mon sens, les tons existaient autrefois tout come les préfixes, mais ils ont survécu a la chute de ces derniers, et nous demeurent ainsi comme des temoins qu'on n'a d' ailleurs a peine commence d'interroger " (Pelliot, Quelques transcriptions Chinoises de nom Tibétains, T'oung Pao, 1915, p.29).

To transcribe modern Tibetan phonetically without indicating the tones would render the language utterly unintelligible. It remains to be seen whether with the change of sonants to surds in modern Central Tibetan, there did not take place a shift of high ^{pitch} and low-pitched ^{ed} tones, with the result that ancient high pitched syllables with sonant initial became in the modern language high-pitched ^{ed} syllables.

x) There seem to exist some exceptions from this more or less general rule, as for example blug-(p)a to fill very the low even tone.

On the pitch of the syllable depends the tone. The influence of phonetic structure on the pitch of the syllable depends on the structure of the syllable.

and pitch

Central Tibetan

spoken language

ed x)

Tables of the names and accents of the words.

x)

of the words

Comparative studies of Sino-Tibetan phonology will, no doubt, show us to what extent we can reconstruct the phonetic and morphological aspects of the proto-Tibetan, that is the language spoken prior to the VII-th century AD.

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