

# THE LEPCHA SCRIPT

BY

ERIK HAARH<sup>1</sup>

The script employed by the Rong or Lepcha population of the Sikkim State in Himalaya is generally assumed to be a derivative of some cursive Tibetan script<sup>2</sup>. This assumption is based on what Albert Grünwedel wrote in 1896:

“Sie (die Leptschaschrift) ist thatsächlich nichts weiter, als der Versuch, die Leptschasprache mit cursivem Tibetisch zu schreiben, welcher nicht besonders gelungen ist, da die Sprache offenbar nicht recht zur Schrift passt”<sup>3</sup>.

<sup>1</sup> Abbreviations used:

- Csoma : A. Csoma de Kőrös, *A Grammar of the Tibetan Language in English*, Calcutta 1834, Syllabic Scheme of the Tibetan Language.  
Diringer : D. Diringer, *The Alphabet*, London (1947).  
Gorer : G. Gorer, *Himalayan Village. An Account of the Lepchas of Sikkim*, London 1938.  
Grünwedel : A. Grünwedel, “Ein Kapitel des Tă-še-suñ”, *Festschrift für A. Bastian*, Berlin 1896.  
Jensen : H. Jensen, *Die Schrift*, 2. Aufl., Berlin 1958.  
*L.S.I.* : *Linguistic Survey of India*, Vol. III, Part I, Calcutta 1909.  
Mainwaring : G. B. Mainwaring, *A Grammar of the Róng (Lepcha) Language, As Grammar It Exists in the Dorjoling and Sikkim Hills*, Calcutta 1876.  
Mainwaring : *Dictionary of the Lepcha Language*, compiled by G. B. Mainwaring, *Dict.* revised and completed by A. Grünwedel, Berlin 1898.

References to the accompanying five tables are made in the following ways:

- II : table II.  
II, B : table II, column B.  
II, B, 3 : table II, column B, line 3.  
II, 3 : table II, line 3.

<sup>2</sup> Grünwedel's introduction to Mainwaring, *Dict.*, IX. Gorer, 38. *L.S.I.*, 234. Diringer, 356. Jensen, 363.

<sup>3</sup> Grünwedel, 464: “Actually, it is nothing else but an endeavour to write the Lepcha language with a cursive Tibetan script. It is not a real success because the language quite obviously does not fit the script.”

But until now nobody has shown that this assumption is correct. Serious doubt arises because the Lepcha script possesses signs for final consonants (III, B—D), placed in a way not known from the other Indo-Tibeto-Burman scripts, a fact pointed out by Gorer, Diringer, and Jensen<sup>1</sup>. Furthermore, there still remains the problem of the printed Lepcha characters (I—V, D) which were introduced by Mainwaring in his Grammar. They were cut by the Baptist Mission Press in Calcutta especially for this grammar and later on used for the subsequent Biblical editions in Lepcha<sup>2</sup>. In many respects they are different from the manuscript letters (I—V, B—C), and they have even been said to be a pure invention of Mainwaring<sup>3</sup>, a statement without any foundation in realities. The characters of Mainwaring are, in fact, modifications of those employed in the Lepcha manuscripts. The sole invention which can be ascribed to Mainwaring is a dot placed below certain loanwords from Tibetan, which are distinguished by an infix r<sup>4</sup>.

According to the Lepcha tradition, the present form of the Rong-Lepcha script was introduced by a Sikkim Raja of the Tibetan dynasty, named Phyag-rdor-rnam-rgyal (born 1686)<sup>5</sup>. Most sources date this introduction to the beginning of the 18th century A. D., one single source to the year 1720 A. D.<sup>6</sup>.

As to the further development of the script we know nothing beyond the fact that Mainwaring has influenced it very much by establishing more or less fixed rules of spelling<sup>7</sup>. Even to-day the spelling is a very difficult problem of the Lepcha language on account of its most indistinct and changing pronunciation of the vowels. This can be ascertained by looking through Mainwaring's Dictionary, and by reading the short essays written by Gorer<sup>8</sup>.

<sup>1</sup> *Loc. cit.*

<sup>2</sup> Mainwaring, *Dict.*, IX. Gorer, 38 and 41. Jensen, 364. *L.S.I.*, 233.

<sup>3</sup> Mainwaring, *Dict.*, XI. Gorer, 45.

<sup>4</sup> Mainwaring, *Grammar*, 11.

<sup>5</sup> Mainwaring, *Dict.*, IX. Grünwedel, 464. *L.S.I.*, 233, 234. Gorer, 38, 189. Diringer, 356. Jensen, 363. Risley, *Gazetteer of Sikkim*, Calcutta 1894, 13. Śri Kumar Das, *JBTS*, IV, 1, 1898, Appendix II, 1.

<sup>6</sup> Jensen, 363.

<sup>7</sup> Mainwaring, *Grammar*, 123. Gorer, 39—40.

<sup>8</sup> Gorer, Appendices.

When studying the Lepcha script, as we know it to-day, and comparing it with the maingroups within the Indo-Tibeto-Burman scripts, all of which are related, we can state:

- 1, that the signs of consonants are related, but changed in forms (I),
- 2, that the vowel signs are related, but their position changed (II),
- 3, that the infix signs are related, but their position changed (IV),

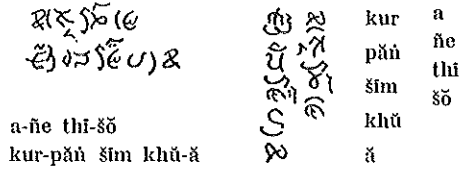


Figure 1.

- 4, that the signs for final consonants (III)<sup>1</sup>, and
- 5, the signs for consonantal clusters with infix l (V) are unknown from the other scripts,
- 6, that the direction of the script line is the same, and
- 7, that the order of the letters in the alphabet is parallel to that of the Tibeto-Burman one.

As an illustration of these items we may take the left part of fig. 1, which gives an example of two lines of modern Lepcha with transcription below<sup>2</sup>.

If we analyse these two lines with regard to the mutual position of the signs within each word, and compare it with that of the other, related Indo-Tibeto-Burman systems of writing, we get the following points to consider:

- a. The final consonants in Lepcha are on top of the basic consonant, in the other scripts to the right.

<sup>1</sup> With the exception of the Limbu script, which to my opinion is a derivative from Lepcha. See: A Campbell, "Note on the Limboo Alphabet of the Sikkim Himalaya", *JASB*, XXIV, 1855, 202—203, plate XIV. Mainwaring, *Grammar*, X. R. K. Sprigg, "Limbu books in the Kiranti script", *Akten des XXIV. Internationalen Orientalisten-Kongresses, München 1957*, Wiesbaden 1959, 590—592.

<sup>2</sup> These two lines are taken from Mainwaring, *Grammar*, 146.

- b. The infix consonants are to the right of the basic consonant, in the other scripts below.
- c. The vowel signs placed to the left of the basic consonant, are placed on top in the other scripts.
- d. The vowel signs placed to the right of the basic consonant, are placed below in the other scripts.

In these four characteristic features of the Lepcha script, we find the clue to all the problems of this particular script. We find the clue to explain all variations from the other Indo-Tibeto-Burman systems of script, and obtain new material for the understanding of what was done by Phyag-rdor-rnam-rgyal, when he introduced the present form of the Lepcha script.

*If we turn a Lepcha book (with horizontal lines), MS as well as print, 90° in the negative direction (i. e. clock-wise), the signs of final consonants, infix consonants, and vowels within each single word take a position which is the same as that which is used in the other Indo-Tibeto-Burman scripts. This is illustrated in the right part of fig. 1.*

This means that when the words are turned 90° clock-wise, we get a picture of the Lepcha script in which *the position of the single signs or characters of a word follows the rules of the Indo-Tibeto-Burman scripts.* Moreover, the horizontal lines of words become vertical columns with the words running from top to bottom, while the columns themselves follow one another from the right to the left.

Beside the formal correspondance with regard to position of the signs and characters, thus obtained by turning the present script 90° clock-wise, we state that *the greater part of the signs and characters in their new upright appearance are derivatives from the common stock of signs and characters within the Indo-Tibeto-Burman scripts, as we are going to show in detail, later in this paper.* Taken altogether, these facts mean that *the old Lepcha script was written in vertical columns, in Chinese style from the right to the left, while the single word was written in the Indo-Tibeto-Burman style, in the normal horizontal direction.*

Therefore, *the old Lepcha script must have adopted the alphabet and the rules governing the positions of the signs in its words from*

	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q
1	kã	ᱫ	ᱬ	ᱭ	ᱮ			ᱯ	ᱰ	ᱱ	ᱲ	ᱳ				
2	khã	ᱫᱱ		ᱬ	ᱮ			ᱯ	ᱰ	ᱱ	ᱲ	ᱳ				
3	gã	ᱪ	ᱫ	ᱬ			ᱭ				ᱮ	ᱯ	ᱰ	ᱱ		
4	ñã	ᱮ	ᱯ	ᱰ	ᱱ		ᱲ	ᱳ	ᱴ	ᱵ	ᱶ	ᱷ		ᱸ		
5	cã	ᱹ	ᱺ	ᱻ	ᱼ			ᱽ	᱾	᱿	᱀	᱁				
6	chã	ᱹᱱ	ᱹᱲ	ᱹᱳ	ᱹᱴ			ᱹᱵ	ᱹᱶ	ᱹᱷ	ᱹᱸ	ᱹᱹ				
7	jä	ᱺ	ᱻ	ᱼ			ᱽ	᱾	᱿	᱀	᱁	᱂		᱃		
8	ñö	ᱮ		ᱰ	ᱱ			ᱳ	ᱴ	ᱵ	ᱷ	ᱸ				
9	tã	ᱴ	ᱵ	ᱶ	ᱷ			ᱸ	ᱹ	ᱺ	ᱻ	ᱼ	ᱽ	᱾		
10	thã	ᱴᱱ	ᱴᱲ	ᱴᱳ	ᱴᱴ			ᱴᱵ	ᱴᱶ	ᱴᱷ	ᱴᱸ	ᱴᱹ	ᱴᱺ	ᱴᱻ		
11	dã	ᱺ	ᱻ	ᱼ	ᱽ			᱾	᱿	᱀	᱁	᱂	᱃	᱄	᱅	
12	nã	ᱺ	ᱻ	ᱼ	ᱽ			᱾	᱿	᱀	᱁	᱂	᱃			
13	pã	ᱺ	ᱻ	ᱼ	ᱽ			᱾	᱿	᱀	᱁	᱂	᱃			
14	phã	ᱺᱱ		ᱼᱱ	ᱽᱱ			᱾ᱱ	᱿ᱱ	᱀ᱱ	᱁ᱱ	᱂ᱱ	᱃ᱱ			
15	᱆	᱇	᱈	᱉											᱊	
16	᱋	᱌	ᱍ	ᱎ	ᱏ			᱐	᱑	᱒	᱓	᱔	᱕	᱖		
17	mã	ᱎ	ᱏ	᱐	᱑			᱒	᱓	᱔	᱕	᱖	᱗			
18	teã	ᱴ	ᱵ	ᱶ	ᱷ			ᱸ	ᱹ	ᱺ						
19	tihã	ᱴᱱᱰ		ᱴᱱᱰ											ᱴᱱᱰ	ᱴᱱᱰ
20	zã	ᱦ	ᱧ	ᱨ	ᱩ			ᱪ	ᱫ	ᱬ						
21	yã	ᱦ	ᱧ	ᱨ		ᱩ		ᱪ	ᱫ	ᱬ	ᱭ	ᱮ				
22	rã	ᱮ	ᱯ	ᱰ	ᱱ	ᱲ		ᱳ	ᱴ	ᱵ	ᱶ	ᱷ				
23	lã	ᱮ	ᱯ	ᱰ	ᱱ		ᱲ	ᱳ	ᱴ	ᱵ	ᱶ	ᱷ				
24	hã	ᱮ	ᱯ	ᱰ	ᱱ			ᱳ	ᱴ	ᱵ	ᱶ	ᱷ		ᱸ	ᱹ	
25	vã	ᱮ	ᱯ	ᱰ									ᱸ		ᱹ	
26	sã	ᱮ	ᱯ	ᱰ											ᱸ	ᱹ
27	šã	ᱮ	ᱯ	ᱰ	ᱱ			ᱳ	ᱴ	ᱵ						
28	wã	ᱮ	ᱯ	ᱰ	ᱱ			ᱳ	ᱴ	ᱵ						
29	ã	ᱮ	ᱯ	ᱰ	ᱱ			ᱳ	ᱴ	ᱵ	ᱶ	ᱷ				

Table I.

we can only make conjectures as to the form and the date of the prototype or the variants of the prototype which constitute the base of the later national scripts. I do not intend to discuss this unsolved question here.

With regard to the change of form of these scripts the following circumstances have been considered. Two kinds of cursive Tibetan script (H and I) and the common capital script (K) are used. These Tibetan scripts have not changed very much during the last millenium. Therefore, no effort has been made to copy out older forms<sup>1</sup>. Just the opposite is the case with the Burmese script (L and M), where we find a considerable change in the script from the eleventh century until to-day. Therefore, I have chosen an example of the Mon script of the eleventh century A.D. (L) together with a modern print and manuscript form (M). The latter is fundamentally the same script which has been used during the last centuries for Burmese palmleaf manuscripts.

These scripts, as well as the other Indian ones used in the tables, were known both before and in the 18th century A.D., at the time when Phyang-rdor-rnam-rgyal is said to have revised or introduced the present Lepcha script.

The single signs of the Rong-Lepcha script are arranged in the tables, in the following manner:

Table I: The signs for consonants.

Table II: The vowel signs.

Table III: The signs for final consonants.

Table IV: The infix signs.

Table V: The signs for consonants with infix l.

Within each table (I—V), each Lepcha sign has its particular, arabic reference-number. The vertical columns of the tables are referred to with Latin letters in the following way:

A. Transliteration of the Lepcha signs and characters.

B. Manuscript form of the Lepcha signs and characters from Mainwaring, *Dict.*, X.

---

<sup>1</sup> The difference between the cursive (dBu-med) and the capital (dBu-can) script in Tibetan is the absence of the upper horizontal stroke of the capital letters in the cursive writing. The same difference we find in the Indian scripts.

- C. Manuscript form of the Lepcha signs and characters from the so-called MS Ehrenreich of the Tă-še-suñ, reproduced in Mainwaring, *Dict.*, XII, and in Grünwedel, 464, fig. 2.
- D. Printed form of the Lepcha script from Mainwaring, *Grammar*, and *L.S.I.*, 234—235. (The syllables kar and káng on page 235 are printed wrongly as ká and kǎñr. The latter combination is impossible in Lepcha).
- E. The Lepcha characters turned 90° clock-wise from their present position.
- F. The Lepcha characters turned 90° anti-clock-wise from their present position.
- G. The Lepcha characters kept in their present position.
- H. Cursive form of the Tibetan characters, dPe-yig, from Csoma.
- I. Cursive form of the Tibetan characters, 'Khyug-yig, from Csoma.
- K. Capital form of the Tibetan characters, dBu-can, from Csoma, and from H. A. Jaeschke, *Dictionary of the Tibetan Language*, Reprint, London 1949, VIII—IX.
- L. Characters from the Mon inscription of the Shwezigôn Pagoda, Pagan (XIIth century A.D.). See: *Epigraphia Birmanica*, Vol. I, Part II, No. 1 A—H, Rangoon 1920, and *Report of the Director, Archaeological Survey, Burma, for the Year Ending 30th Sept. 1956*, Rangoon 1958, p. 36 + table, column V.
- M. Present form of the Burmese script. See for inst. *Epigraphia Birmanica*, Vol. I, Part I, Rangoon 1919, 6—15.
- N. Kuṣṭha type (992 A.D.) of the Devanāgarī script from Diringer, fig. 153, column 7.
- O. The Bengālī script from Diringer fig. 153, column 14.
- P. The additional Lepcha signs and characters derived from other Lepcha signs and characters. The original forms are traced with dotted lines, the derivative or additional lines are traced with full lines.
- Q. The derivative Lepcha characters I, 19 and I, 26. The basic element of derivation comes from I, 27 and is traced with full lines. The parts of I, 27 which are not included in the derivation of I, 19 and I, 26 are traced with dotted lines.

- I, 18 tsă: turned 90° clock-wise (I, E, 18) it is a derivative of Tibetan tsa (I, H—K, 18), especially of the cursive form (I, K, 18).
- I, 19 tshă: is a special sign of the Lepcha script derived from Lepcha šă (I, 26). As shown in I, Q, 19 it is derived by adding an extra curl to the right of the letter šă.
- I, 20 ză: turned 90° clock-wise (I, E, 20) it is a derivative of Tibetan za (I, H—K, 20).
- I, 21 yă: turned 90° anti-clock-wise (I, F, 21) it is a derivative of Tibeto-Burman ya (I, H—M, 21). The reason why the sign of yă is written in a position 180° anti-clock-wise in comparison with the other Lepcha signs of Tibetan origin is perhaps explained by the fact that if the sign of yă was written in the same position as the other letters a confusion might appear in the new, turned writing, between the letters yă and ñă (I, 8).
- I, 22 ră: turned 90° anti-clock-wise (I, F, 22) it is a derivative of Tibeto-Burman ra (I, H—L, 22). Like the sign of yă (I, 21) it is written in a position 180° anti-clock-wise in comparison with the other Lepcha signs of Tibetan origin to exclude confusion of signs. In this case, to exclude confusion between the signs of ră and ñă (I, 4).
- I, 23 lă: both in its present position and turned 90° clock-wise it is a derivative of Tibeto-Burman la (I, H—M, 23).
- I, 24 hă: is a special Lepcha sign derived from the Lepcha sign of khă (I, 2) to which is added an extra stroke as shown in I, P, 24. It is also possible that this Lepcha hă is related to the Indo-Tibeto-Burman ha (I, H—M, 24) when it is turned 90° clock-wise, but the relation is not convincing.
- I, 25 vă: is derived from the Lepcha letter bă (I, 16) by an additional stroke as shown in I, P, 25. This procedure

of derivation is parallel to that used in the Indian scripts to distinguish between *va* (I, N, 16) and *ba* (I, N, 25).

- I, 26 *să*: like *tshă* (I, 19) it is a derivative from Lepcha *šă* (I, 27). An extra curve is added to the right of the letter *šă* as shown in I, P, 26.
- I, 27 *šă*: both in its present position and turned 90° clock-wise (I, E, 27) it is a derivative of Tibetan *ža* (I, H—K, 27).
- I, 28 *wă*: turned 90° clock-wise (I, E, 28) it is a derivative of Tibetan *wa* (I, H—I, 28).
- I, 29 *ă*: turned 90° clock-wise (I, E, 29) it is related to Tibetan *a* (I, H—K, 29).
- II, 1 *a*: turned 90° clock-wise (II, E, 1) it is a derivative of Tibetan 'a (*a-chuñ*) (II, H—K, 1) used in this position in the Tibetan script to express a long vowel in Sanskrit transliteration.
- II, 2 *i*: turned 90° clock-wise (II, E, 2) it is a derivative of Tibetan *i* (II, H—K, 2).
- II, 3 *ŭ*: turned 90° clock-wise (II, E, 3) it is a derivative of Tibeto-Burman *u* (II, H—M and O, 3).
- II, 4 *u*: turned 90° clock-wise (II, E, 4) it is the Tibetan *u* with an added extra curl. It is related to Indo-Burman *ū* (II, L—M and O, 4).
- II, 5 *e*: turned 90° clock-wise it is a derivative of Burmese and Bengālī *e* (II, L—M and O, 5).
- II, 6 *ö*: turned 90° clock-wise (II, E, 6) it is a derivative of Tibetan *o* (II, H—K, 6).
- II, 7 *o*: is the Lepcha *ö* (II, 6) with the sign of long vowel (II, 8) added.

II, 8 -: is the sign of long vowel. Turned 90° clock-wise it is identical with the sign of the same function in Indo-Burmese (II, L—M and O, 8).

III, 1—9: the nine signs of final consonants in Lepcha are divided into three groups when they are turned 90° clock-wise.

The first group is constituted by the signs of the final consonants t (III, B—D, 4), n (III, B—D, 5), p (III, B—D, 6), and r (III, B—D, 8). Turned 90° clock-wise they are identical with the Lepcha letters dă (I, C, 11), nă (I, 12), bă (I, 16), and ră (I, 22) respectively.

The second group comprises the two forms of final ñ (III, 2 and 3). III, 2 is identical with Tibetan ṃ (III, H—K, 2) when it is turned 90° clock-wise. It is nothing else but the Indian anusvāra. This Lepcha ñ (III, 2) is used when the vowel is ä. In all the other cases where a vowel sign is added, the Lepcha script uses the short form of one stroke, III, 3. III, 2 is used to exclude confusion with the vowel sign ǒ (II, 6).

The third group comprises the three signs of the final consonants k (III, 1), m (III, 7), and l (III, 9). In Lepcha they are called *one*, *two*, and *three dots*, respectively, with reference to their actual appearance. Obviously, they are later additions to the old system of final consonants. All the other signs of this group are derivatives from the corresponding consonant letters. Probably, the dots were added when the Lepcha script was revised, and placed in the same position as the other final consonants.

IV, 1—3: the infix consonants y (IV, 1) and r (IV, 2) are identical with the same signs in the Tibeto-Burman scripts (IV, H—M, 1 and IV, H—M, 2 respectively), when they are turned 90° clock-wise. IV, 3 ry is a combina-

lion of IV, 1 and IV, 2. It is a sign unknown in the Tibeto-Burman scripts.

- V, 1—7: these signs of consonants with infix l are not known in the other Indo-Tibeto-Burman scripts. They are signs invented especially for the Lepcha script. Most probably they were introduced when the Lepcha script was revised.
- V, 1 klă: as shown in V, P, 1, it is a kă (I, 1) with a stroke removed and a new stroke added.
- V, 2 glă: as shown in V, P, 2, it is a gă (I, 3) with an added stroke.
- V, 3 plă: is a pă (I, 13) turned around both the horizontal and the vertical axis.
- V, 4 flă: is a lă (I, 23) with an added curve, as shown in V, P, 4.
- V, 5 blă: as shown in V, P, 5, it is a bă (I, 16) with a section cut off and a new stroke added.
- V, 6 mlă: is a mă (I, 17) turned around the vertical axis.
- V, 7 hlă: I am not able to explain.

In addition to what has already been stated about the Lepcha script before this analysis, we get the following results:

The old Lepcha script was a derivative of the same system of writings from which both Tibetan and Burmese developed. Taking into account the disfigurements of the Lepcha script caused by turning the script 90° anti-clock-wise, we state that the *Lepcha script is a derivative of the Tibetan script, probably of the cursive script.*

The old Lepcha script comprised the 22 consonants in I, E and F. After the script was turned 90° the 6 consonants in I, G and P were added.

The old Lepcha script comprised the 4 vowel signs II, 1, 2, 3, and 6. To these were added the 4 new signs II, 4, 5, 7, and 8.

The old Lepcha script comprised the 6 final consonants III, 2, 3, 4, 5, 6, and 8. To these were added the three signs III, 1, 7, and 9.

The old Lepcha script comprised the two infix letters IV, 1 and 2. Later IV, 3 was added.

A new series of signs were the consonants with infix 1 (V, 1—7), which were unknown in the old Lepcha script.

Excluding all the new signs which are derivatives of other Lepcha signs, we find that the remaining ones are derivatives of Burmese.