

Preliminary Analysis of the Old Zhangzhung Language and Manuscripts

メタデータ	言語: eng 出版者: 公開日: 2009-04-28 キーワード (Ja): キーワード (En): 作成者: 武内, 紹人, 長野, 泰彦, 上田, 澄江 メールアドレス: 所属:
URL	https://doi.org/10.15021/00002142

Preliminary Analysis of the Old Zhangzhung Language and Manuscripts

Tsuguhito TAKEUCHI
Kobe City University of Foreign Studies,

Yasuhiko NAGANO
National Museum of Ethnology,
and

Sumie UEDA
Institute of Statistical Mathematics

1. Purpose

The purpose of our research project is linguistic analysis of the oldest written records of possibly the Zhangzhung language (or Old Zhangzhung): to decipher the texts and reconstruct the linguistic forms behind them in comparison with the Zhangzhung language corpus found in the later texts (or New Zhangzhung) and other Tibeto-Burman languages. This preliminary report presents our working methods and some observations obtained during the early stage of our research.

2. Sources

Before going into Old Zhangzhung texts, let us briefly look at the other materials regarding Zhangzhung.

A. Modern Tibeto-Burman languages

a) Zhangzhung is considered to be a dead language, in other words, no direct descendant seems to exist. However, there may be languages closely affiliated with Zhangzhung among the modern Tibeto-Burman languages, especially of Western Himalayan branch, such as Kanauri, Rangpa, Bunan, and Byangsi. Comparison with Eastern Tibeto-Burman languages, such as Gyarong, Minyag, and Newari, should be considered as well. For more details, see the articles of Nishi and Nagano, Matisoff, and van Driem in the present volume.

b) Several Tibetan dialects along the Tibet-Nepal border contain many Zhangzhung loan-words according to Bstan-'dzin gnam-dag (in personal communication). Although they have not been systematically studied yet, they will certainly comprise important data.

B. New Zhangzhung

In the 1960s, Tibetan Bonpo scholars published a Tibetan-Zhangzhung dictionary,¹⁾ and a bilingual text *Mdzod-phug*.²⁾ The former is studied and reproduced in Haarh (1968). A more extensive computer database was compiled by

Dan Martin (1998). Namgyal Nyima also compiled a new Zhangzhung dictionary from other Bon sources. Although Mdzod-phug is ascribed to a 8th c. Bonpo scholar, the text seems to have been written later, and the Zhangzhung language described is significantly different from that found in the Old Zhangzhung manuscripts. We thus call it New Zhangzhung (NZ) here.

There have been discussions concerning the nature of New Zhangzhung, including whether it is a real natural language or it is an artificial make-up. We will discuss the issue in §8 regarding its relation with Old Zhangzhung.

Now let us look at Old Zhangzhung.

C. Old Zhangzhung

Three manuscripts in Tibetan script were previously identified or alleged to bear the Zhangzhung language. Here we call them OZ (= Old Zhangzhung Texts) 1, 2 and 3. OZ 1 and OZ 2 are in the Stein Collection and now preserved in the Oriental and India Office Collections of the British Library. OZ 3 is in the Pelliot Collection at the Bibliothèque Nationale in Paris.

In 1999 while examining manuscripts bearing unknown languages in Tibetan script at the Bibliothèque Nationale, Takeuchi found two more manuscripts that are likely to bear the same linguistic corpus. We call them OZ 4 and OZ 5.

Thus, we have five OZ texts. All were found from the famous Dunhuang cave. They are written on the back of scrolls with Chinese Buddhist texts on the other side. All of them seem to be medical texts. In spite of these common features, they are apparently different texts, namely, they are not pieces of the same text.

The basic palaeographical features and approximate size of each text are given below. OZ 1 and OZ 2 contain similar amount of text. OZ 3 is the most extensive. OZ 4 and OZ 5 are much smaller. Although palaeographical evidences indicate that the Zhangzhung texts were written after the Chinese texts, the Zhangzhung sides are designated as recto in the following descriptions.

1) OZ 1: VP 755 (Ch. Fragment 43)

The text is catalogued by de la Vallée Poussin under the catalogue number 755. It bears the site number Ch. (= Ch'ien-fo-tung) Fragment 43. The text is written on the back side of a scroll which has a Chinese vinaya text on the other side. It lacks the beginning due to paper damage. The remaining part measures 187 x 25 cm and contains 126 lines, where we count 578 different syllables, and in total c. 2,000 syllables (Plates 1-4).

2) OZ 2: Or 8212 / 188

This text is found among the group of texts with the requisition number Or. (= Oriental Manuscript) 8212, in which it bears the number 188 together with another totally independent manuscript. The text is written on the back of a scroll with the

Chinese Buddha-nāma sūtra. It lacks both the beginning and the end. The remaining part measures 115 x 26.3 cm and contains 86 lines. Eight more lines are written on the Chinese side; probably a continuation from the recto. Thus, there are in total 94 lines, with 593 different syllables, in total c. 2,200 syllables (Plates 5-8).

3) OZ 3: P 1251

The text lacks the beginning (the top edge is torn off). The remaining part measures 285 x 25.5 cm and contains 293 lines, with a total of c. 6,300 syllables (Plates 9-14).

4) OZ 4: P 1247

The text lacks the beginning (the top edge is torn off). The remaining part measures 72 x 25.5 cm, and contains 50 lines of most probably OZ, in total c. 790 syllables (Plates 15-16).

5) OZ 5: P 1252

Written on the back of the Chinese sutra Guang-yin-jing. Although the bottom edge is torn off, the text is complete with 47 lines of most probably OZ, in total c. 850 syllables. Two more lines are written on the Chinese side, but their relation to the recto text is not clear (Plates 17-18).

A transliterated text of OZ 1 was published by F.W. Thomas (1967). Takeuchi checked Thomas' transliteration against the original manuscript and revised the reading, then databased it. Thomas also made an unpublished transliteration of OZ 2, which was found among his unpublished drafts preserved in the Collection of European Manuscripts of the Oriental and India Office Collections. In 1999 Takeuchi checked Thomas' transliteration against the original manuscript and revised his reading. Takeuchi also examined and databased OZ 4 and OZ 5. As a result, the readings of OZ 1, 2, 4, and 5 have been databased, but OZ 3 has not really been touched. Though we quickly went through it, it will take some time to database it.

3. Script and Palaeography

(1) The texts are written in Tibetan script in a style peculiar to the Old Tibetan texts in the 8th to 9th c. (see Plates). For example, a bilabial nasal *m*- is palatalized with *-y-* when followed by the front vowel *i*, as in *myig dog ci*, but a variant form *mig* without *-y-* also exists (OZ 1: 102); *min* is usually written without *-y-*. An inverted *gi-gu* or vowel *i* sign (transcribed as *ɿ*) is used. The palaeography conforms to that of the Old Tibetan texts from the late 8th c. to early 9th c. These

palaeographic features and the provenance of the manuscripts lead us to date the manuscripts to the period from the late 8th c. to the first half of the 9th c.

(2) Spellings mostly conform to Tibetan orthographic rules, but some deviations exist. For example, several consonant clusters which are not used in Old Tibetan texts are found (e.g., *rngv-*, *rva-*, *ry-*, *rhy-*, *ghy-*, *ryv-*, and *-ngg*). Syllable boundaries are sometimes not explicitly marked: for example, *rhyasang*, *rhyelse*, and *khlangg* are written without *tsheg*. Consequently, it is difficult to decide whether *rhyasang* should read *rhyasang*, *rhyasng*, or *rhyasang*. Though we are relatively familiar with Old Tibetan orthography, since the language is not Tibetan, it is difficult to specify the most appropriate readings from the contexts. These leave us with many uncertainties and result in ambiguous and dubious readings. For example, *lvang* / *wang* (OZ 1: 16, 17), *rva* / *rba* (OZ 1: 31), and *khṭ* / *wṭ* (OZ 1: 79) are difficult to decide. *mna* and *mni* turned out to be variant spellings for *man* and *min*.

As we have gradually understood the syllable structures and some morphological constructions, as will be shown in the following chapters, many of these dubious points have been solved. Nevertheless, the readings still need to be gradually revised as we proceed.

4. Statistic Analyses

Faced with these difficulties (along with a shortage of time and brain), Nagano and Takeuchi decided to seek help from an expert in computer and statistics, Sumie Ueda of the Institute of Statistical Mathematics. Upon our request, Ueda made the following analyses.

(1) A list of all syllables occurring in the texts. They are arranged in frequency order as well as in alphabetical order. List 1 shows the first page of the list.

(2) A list of sequences of two to six syllables occurring more than twice. List 2 gives lists of four to six syllable sequences in alphabetical order. These provide parallel passages (syntactic units) as well as possible words (morphological units).

(3) Minimal pairs of three to seven syllable sequences; the two sequences of each pair are differentiated from each other by having only one different syllable. See List 3, where the different syllables are listed in the right-hand three columns. These different syllables occurring in the same contexts are paradigmatically interchangeable and may belong to the same lexical classes. They may also be variant spellings and due to wrong readings.

(4) The sentence boundaries of OZ 1 are exceptionally clear cut. List 4-L gives the syllables occurring in sentence final position, while List 4-B shows the syllables preceding the final syllables. They will be discussed in §6.

(5) A list of key syllables in context was made by the staff of the National Museum of Ethnology.

The data of OZ 1 and OZ 2 were statistically analyzed first. OZ 4 and OZ 5 are now in the process of statistical analysis. OZ 3 is yet halfway done. It will take some more time to read and database it. Consequently, the following linguistic analysis will be based on the data of OZ 1 and OZ 2.

With the help of these data we have tried to analyze the language of OZ 1 and OZ 2. The first step is to cut the text into smaller units or constituents. The clear units we have are syllables and sentences.

5. Phonology

5.1 Syllable Structure

We may tentatively propose the following canonical syllable structure. Initial consonant clusters $C_1 C_i$, a glide R, and a vowel V, followed by a final consonant C_2 or consonant clusters $C_2 C_3$. Of these, C_1 , R, $C_2 C_3$ are optional, while C_i and V are obligatory and are core constituents of the syllable structure.

$C_1 C_i R V C_2 C_3$ (e.g., skrigs)

C_1 r- : rng-, my-, rb-, rc-, rk-, rky-, rg-, rl-, rm-, rn-, rp-, rt-, rth-, rts-
rh- (rha, rhi, rho) = C_i ?
 s- : sb- (sbib), sd- (sdom), sk-, sg-, sl-, sm-, sn-, sp-, sr-, st-
 g- : gt-, gth-, gd- (gtog, gthag, gdang)
 l- : lng- (lnga)
 'l- : 'ng-, 'p- ('ngag, 'pab)

C_i p t k ? ts c s sh h
 (ph th kh) (tsh ch)
 b d g dz j z zh '(=fi)
 m n ny ng l r rh w y

t / d vs. t / th / d ; rh (= voiceless r?)

R -r- : pra, prog, bra, bri, tri, dra, dri, gra, khrag, sran
 -l- : gla, glod, glum, khlog, sli
 -y- : **ryag, rhye**, lyag, byi, cyul, skyi, ryum
 -v- : shve, chva, gva, khva, rngva, gvi, rva, lvi, zva (-v=-w-)
yved, gyvad, slye, ryvi, ryvege

V i, e, a, o, u, (ɚ)

C ₂	b, d, g, s, l, r, m, n, ng
	' : pha', rta'
	y : gyaye
C ₃	--s : -bs, -gs, -ms, -ngs
	- ns (shans), - ls (rhyelse), - rs (tsars)
	--d : -nd, -ld, -rd
	--b : - mb (khumb, lhyumb)
	--g : - ngg (khlangg, shingg)

Tonal or atonal ?

In C₁ or prefixal consonant position, *r*- and *s*- occur frequently. *g*- appears only before a dental stop. *l*- and *'*- are found in OZ 2, but very limited in number. The presence of pre-consonantal *r*- and *s*- is similar to Amdo and some Western archaic dialects of Tibetan. The bold-faced *rh*- is rare in Tibetan but very common in OZ. It is likely to be not a cluster but a single consonant, i.e., a voiceless *r*.

As for initial consonants (C₁), one major problem is: whether we should propose a binary contrast (e.g., *t* / *d*) or a tripartite set (*t* / *th* / *d*) for stops and affricates. Alternations of voiceless non-aspirates and aspirates seem to point to the binary system without a contrast in terms of aspiration (e.g., *thum* = *tum*, *khyero* = *kyero*), as in Old Tibetan. There are no voiceless nasals.

R stands for resonants, glides or semivowel type sounds in post-consonantal position. *r*, *v*, *y*, and *l* are listed. *v* may be better represented phonetically by *w*, but we use *v* to avoid confusion with *w* in initial position. Note that *ry*-, *rhy*-, and *yv*- combinations are very common in OZ.

As for vowels, besides five ordinary vowels (*i*, *e*, *a*, *o*, *u*), an inverted *i* (transliterated in *ɨ*) is used. However, it does not seem to reflect a different sound from *i*, as shown in variant spellings *gvɨ* / *gvi* (OZ 1: 39) and *skrɨgs* / *skrigs* (OZ 1: 73). No long vowels or geminate vowels are found.

For C₂, we find stops (*b*, *d*, *g*), a fricative (*s*), liquids (*l* and *r*), and nasals (*m*, *n*, *ng*). The voiced stops, which accord with Tibetan orthography, are likely to reflect voiceless unreleased stops, though we still have to hold the possibility that they are voiced released stops as in Kanauri (cf. Takahashi's paper in this volume).

--*s* and --*d* stand in C₃ position, as in Old Tibetan; but unlike Old Tibetan both --*s* and --*d* appear after *-n*, *-l*, and *-r*, thus --*s* and --*d* do not make complementary distribution. --*b* and --*g* occur after homorganic nasals.

Is the language tonal or atonal? It is no doubt monosyllabic and includes many homophonic syllables; in other words, it is a typologically tone-prone type. Nevertheless, there is no sign to indicate the tonal contrasts.

5.2 Syllable Concatenation or Sandhi Phenomena

There is nothing much that can be said about this for the time being.

6. Grammar

6.1 Sentence Structure

One great advantage of choosing OZ 1 as the first target is that sentence boundaries are exceptionally clear-cut. As shown in Plates 1-4, there is a line-break at the end of each sentence and a new sentence begins the next line. Besides line-breaks there is another important clue to mark the end of the sentence. In the <sample sentences> below, we have listed a few examples. The ending part of each sentence is in bold-face. ⌘ marks a sentence boundary.

<sample sentences>

- (line no.)
- ⌘ rma ^ag blan cang sku drul **sa shid-do** ⌘ (11)
- ⌘ mang ga ya [dI=rI] ^in sig [shvid] cho **min stung-ngo** ⌘ (05)
- ⌘ lang nad **ga nve'o** ⌘ (79)
- ⌘ ko ko yag // kar ka na // nu skyu tse // sum med tog mar kul thum **ca kyer-o** ⌘ (86)
- ⌘ . . . // did na gu ram ti kar ca **khyere** // yar . . . **ca rhyvis-o** ⌘ (15)

Each sentence ends with the vowel -o with sometimes the final consonant of the preceding syllable being repeated (e.g., *shid-do*, but *kyer-o* also exists). This practice is so familiar to everyone who knows Old Tibetan or Classical Tibetan that it even makes us think of "Tibetanization." In fact we always have to keep in mind the possibility of "Tibetanization or Tibetanism." Nevertheless, it is clear that a vowel -o is used in OZ 1 to mark the sentence final (S-final) boundary. It is used in OZ 2 as well, but much less frequently.

Accordingly, the syllables preceding the S-final -o may be considered to belong to one and the same category or lexical class. They are listed under the heading V.

V: predicator (verb/noun/adjective): lexical words

chans	ci	gyil
khlogs	khyer	khyerd
lo	lod	lyang
nve	rhyug	rhyvis
rtog	run	rung
sdung	shans	shid

shved	skug	skyo
slang	slig	spral
spurd	spya	stung
tshag	tund	tung

Class V comprises relatively long syllables. We assume that they are verbs, nouns and adjectives, and constitute the core of the predicates. Here, we conventionally label them V (meaning verb-like elements). Among them, *khyer*, *lod*, *shid*, *stung* etc. seem to be verbs; *nve* and *lo* may be nouns; *rung* and *tshag* might be adjectives. Needless to say, these identifications are very hypothetical.

Part: (particles in pre-verbal position): functional words

ca, ce, cang, chud, tsa
ga, ge, gan
gun, kun
na, nig
dug, dog, tog
min, myin (= negation)

Now the second syllables from the S-final are listed above under the heading Part. They are mostly short syllables. We assume them to be grammatical particles, including the negative (*min*).

Going back to the last example in <sample sentences>, we find the underlined form *khyere*, which is apparently the same *kyer* in the S-final position, but is in this case followed by a vowel *-e* and a double *shad* (slashes). A few more similar occurrences of *-e* are found, which may lead us to infer that *-e* functions as a conjunctive and marks the end of the subordinate clause, just like Tibetan conjunctives *ste*, *te*, and *de*.

Based on these speculations, we tentatively propose a sentence structure scheme as follows: Sentence consists of subordinate clause(s) which end with V + *-e*; the main clause or sentence ends with S-final form, Part-V-o.

S --> [[-- V-e] Cl -- Part -- V-o] S
S-final = Part (/ Neg) + V-o

6.2 Morpho-syntactic Analyses: Trials and Errors

Now how can we make sense out of these sentences? In order to identify the meanings of words or morphemes, we need lexical comparisons with other Tibeto-Burman languages and the later Zhangzhung texts. Thomas (1933) already tried to identify many words by comparing them with Tibetan, Kanauri, and Rangpa. Some

of his identifications seem to be acceptable. Let us then try to combine them with the formal analysis given above.

We have listed below short parallel sentences, all ending with *ga nve'o*.

⌘ // *rab this ga nve'o* // ⌘
 ⌘ // *lang nad ga nve'o* // ⌘
 ⌘ // *rye tshod ga nve'o* // ⌘
 ⌘ // *^ang ryod ga nve'o* // ⌘

Following Thomas, we may consider *nve* to be a noun meaning "disease, illness" comparable to Tibetan *na* / *nad*. *ga* may be considered to be a genitive particle comparable to Tibetan *kyi* / *gyi*.

<i>nve</i>	disease	(T) <i>na, nyes</i>
<i>ga / ge</i>	genitive	(T) <i>kyi, gyi</i>

Then, the sentences would mean "[It] is the diseases of *rab-this* (*/lang-nad, rye-tshod, ^ang-ryod*)."
rab-this, *lang-nad*, *rye-tshod*, and *^ang-ryod* seem to be the names of disease.

The genitive particle *ga* seems to have a variant form *ge*. The following phrases all contain *ge* and again *nve* "disease."

<i>rhim ge nve'o</i>	
<i>nve ge rmin</i>	
<i>nve ge rmin ne</i>	
<i>nve ge rmine</i>	"by the development of disease"

The last two sentences with *rmin ne* and *rmine* are apparently variant spellings. *rmin* may be compared to Tibetan *smin-(pa)* meaning "ripe, maturity." Then, *nve ge rmin* may mean "ripe or development of disease." Then, what about *rmine* with *-e*? We have inferred that *-e* functions as a connective or conjunctive when suffixed to a verb. But when it is suffixed to a noun we may consider it to function as an instrumental marker, following Thomas' suggestion.

-e connective (V_) / instrumental (N_)

This *ga / ge* variation or alternation suggests other possible alternations. In the list of Part (particles) above, we find groups of syllables, such as *ca / ce / cang*, *gun / kun*, and *dug / dog / tog*. Since they occur in similar or same contexts, members of each group may be considered variants or alternations.

6.3 Other morpho-syntactic possibilities

What else can we speculate or guess on the morpho-syntax of Old Zhangzhung?

(1) Among the alleged verbs, we find a pair *khyer* / *khyerd*, the latter with the post-consonantal *-d*. A comparison with Old Tibetan verb morphology would lead us to think that this *-d* may be a perfective stem marker; also *-d* in *spurd*, *tund*, *buld*, *lend*, and *byund*. *-s* in *chans*, *shans*, *byabs*, *lings*, *khlogs*, and *khrgs* may possibly have the same function. Note, however, that unlike Old Tibetan *--d* and *--s* do not make complementary distribution in OZ.

(2) A pair *tung* / *stung* may suggest *s--* to be a causative marker; also *s--* in *skug* and *spral*.

(3) No post-verbal Aux / Person markers exist except for the S-final marker *-o*.

(4) Verbs seem to be preceded by grammatical particles (e.g., *ca*, *ce*, *ga*, *ge*, *gun*, *kun*). No pronominal affixes or person markers seem to exist either in pre-verbal and post-verbal position. Absence of person markers may result from the nature of the extant texts (i.e., they are all medical texts where first and second person subject or object are not likely to appear). Nevertheless, as far as our OZ texts are concerned, there is no trace of a verbal (pronominal) agreement system, contrary to the assumption by Thomas and Haahr to consider Zhangzhung to be among the complex pronominalized languages of Western Himalayan group.

6.4 Lexical Classes and Word forms

Statistical data (e.g., Lists 2-4) provide sequences of one to seven syllables in paradigmatic relations. They are candidates for various lexical classes and syntactic units. Though it is not yet clear how to distinguish words or morphological units from syntactic units, we may tentatively assume the following word constructions.

Words seem to be primarily monosyllabic, but disyllabic words also exist: e.g., *mu-sa*, *lvi-shi*, *dro-tsa*, *lyam-tsha*, *shi-shi*, and *sa-sa*. Trisyllabic words may exist, but they are not so numerous.

Variations of word-final forms (e.g., *-#* / *-s* / *-g*) suggest the presence of affixation as shown below.

<i>-#</i> / <i>-s</i> / <i>-g</i>	<i>nve</i> / <i>nveg</i> / <i>nves</i>	<i>lyam-tsha</i> / <i>lyam-tshas</i>
	<i>tse</i> / <i>tseg</i> / <i>tses</i>	<i>lang</i> / <i>langs</i>
<i>-#</i> / <i>-e</i>	<i>lang</i> / <i>lange</i>	<i>skrigs</i> / <i>skrigse</i> <i>skyus</i> / <i>skyuse</i>
	<i>wam skrigs nug min</i> / <i>wam skrigse nug min</i>	

7. Lexicon

We have not yet done an extensive work on lexical comparisons. The items listed below with possible glosses are mostly proposed by Thomas (1933) and accepted by us. Comparable NZ (New Zhangzhung), OT (Old Tibetan), K (Kanauri), R (Rangpa), and other possible languages in the West Himalayan branch (e.g., By for Byangsi, Bun for Bunan, Tin for Tinan, Th for Thebor) are added.

En	Numerals					
	OZ	NZ	OT	K	R	W. H.
1	ta / tha	tig	gcig	id	tig	(Tin, M) itsa
2	nis	ni	gnyis	nish	nhi:s	
3	sum	sum	gsum	shum	sum	(Tin, M) şum
4	pi	bing	bzhi	py / pə:	pi	(Tin, M, Bu) pi
5	nga	nga	lnga	nga	ngE	(Tin, M) nga
6	trug ?	drug	drug	trug	truk	
7	stes ?	snis	bdun	stish	nhisi	(M) nhidži
8	gyvad ?	gyad	brgyad	rai	gyad	
9	gvi ?	gu-dug	dgu	sgui	gvi	(Bu) gu, (Th) gwi
10	sa ?	cu	bcu	sa, sai		(Tin, M) sa

The OZ forms of the higher numbers (6-10) have not been firmly identified, while the lower numbers (1-5) are better attested. OZ and NZ show basic correspondences, but numbers 'one, four, seven, and ten' reveal minor differences. The NZ form *bing* for 'four' has the addition of *-ng*, which is characteristic to NZ. The OZ form for 'ten' finds cognates in W. H. languages, while the NZ form *cu* is closer to the OT form. Number 'seven' also gives significant correspondences between OZ, NZ, and W. H. languages. Examples of some other lexical correspondences are shown below.

En	OZ	NZ	OT	W.H.
arrow	ma	wer	mda'	(K) mo
autumn	tog-kha	dun-tshogs	ston-kha	
bring, give	khyer		skyel	(R) kyă-
cold	glang / khläng	ti-gra	grang	
count, medicine	tsis	rtsi	rtsi	(K, M) soi
die	shid	gyag / gyog	shi	(K, M) ši-
disease	nve		na / nyes	
dry	skams	tša-ga	skams-pa	(K) skams
eye	myig / mig	mig / yig	dmyig / mig	
face	ngo		ngos	(K) ngo
fever	tshad	tsag	tshad	
fire	pu	ne	me	(Bu) pa

genitive	ga / ge	gi / ti / ni / pi etc	kyi, gyi, gi	
hand	la	khri-tse, tsa-rang	lag	(K, Th) la
head	go	pu, dbu-tsam	mgo	(K) go, (B) puśa
man	mi	ni	myi	(K, Bu) mi
mouth	ag	khag, ag-sho	ag-tshom	
pl. marker	nam?	nam, rngi	rnam	
plague	rhim		rims	
red	mar	mang, ra-ga	dmar	(R) mangd
ripe, maturity	rmin		smin	(M) min
salt	lyam-tsha		lan-tshva	
say	lod ?		lab / glon ?	(K, B) lo-
stomach	rgvil	khog-tse	grod-pa / lto-ba	
tail	ting		rting / gting	(Th) mekon
to be right	ran		ran	(K) ran
urine-disease	rabs-this		rabs-	
vitality	na		na	
water	ti	ting, ti	chu	(K, M, R) ti
wind, moist?	lang	li / le	rlung	(M, B) lan
winter	gun-kha	shi-bi	dgun-kha	
wound	rma	rma	rma	

8. Comparisons with Other Material: OZ and NZ

Several attempts at comparing Zhangzhung with other Tibeto-Burman languages, such as Kanauri, Rangpa, Tsangla, Byangsi, and Gyarong, have been made, but they have mostly been based on a small number of lexical items and the New Zhangzhung forms (e.g., Haarh 1968, Hoffmann 1967 and 1972, Kvaerne 1995: 14). However, as shown in the above examples, the NZ forms are often different from the OZ forms. As will be discussed below, the latter represents the colloquial Zhangzhung language before extinction better than the former. We thus need to use the OZ forms and compare not only words but also morpho-syntactic structures with modern Tibeto-Burman languages using more updated data (e.g., the description of Kanauri by Takahashi in the present volume).

A comparison of OZ and NZ, using the NZ data recently made available by Martin (1998), is another important task. A rough comparison suggests that the difference between OZ and NZ is greater than what can be explained as a result of natural historical change. For example,

(1) NZ has prefixal consonants (*d-*, *b-*, *bs-*) which are not found in OZ. We suspect this is a result of Tibetanization.

(2) NZ has voiced aspirated stops (*gha*, *bha*, and *dha*) which are not found in OZ. This may be a result of Sanskritization.

(3) NZ grammatical particles (e.g. *dang*) are much closer to the Tibetan ones than OZ. --possibly another Tibetanization.

(4) Many OZ lexical items are replaced in NZ.

These transformations may be the results of Bonpo priests' attempts to make the NZ forms look more authentic and similar to Tibetan or Sanskrit forms. In other words, the New Zhangzhung language developed as a result of Tibetan Bonpos combining their knowledge of OZ with that of Tibetan and Sanskrit.

If NZ has such artificial elements, then how natural is OZ? Before going into this topic, we need to touch on the identification of the OZ manuscripts.

9. Identification of the language

Identification of the language of the manuscripts is a problem not yet completely settled. Thomas (1933) poses several reasons for identifying the language as Zhangzhung, none of which is definitive. Nevertheless, its affinity with the Tibeto-Burman languages of the West Himalayan region seems acceptable. And the only language of this region which is mentioned in contemporaneous Old Tibetan texts is Zhangzhung. Other languages which are known to have been included into the Tibetan Empire, namely, Sum-pa, Rgya-rong, Nam, and Mi-nyag, are located in the eastern region of the Empire. The manuscript with Nam was identified and published by Thomas (1948). Titles in Sum-pa, Mi-nyag, and possibly Rgya-rong are included in the titles of Bon texts side by side with titles in Zhangzhung;³⁾ so they were considered to be different languages at least by Bonpos. The New Zhangzhung language claimed to be Zhangzhung by later Bonpos is, as we have seen, not identical with Old Zhangzhung, but shares significant linguistic features. These considerations leave us little doubt that Zhangzhung is the most probable candidate for the language of our manuscripts.

10. Sociolinguistic Background

Provided that the language written in our Dunhuang manuscripts is Zhangzhung, a question may be raised as to what sociolinguistic milieu the Zhangzhung texts were written in or brought into Dunhuang in the 9th c. Zhangzhung is known to have been conquered and incorporated into the expanding Tibetan Empire in the 7th c. After that, Zhangzhung troops were drafted by the Tibetan great minister in 662-663 (Dog year in the *Old Tibetan Annals*) for his campaign to conquer 'A-zha (Beckwith 1987: 29). Thus, Zhangzhung soldiers went to Kokonor already in the mid 7th c. When the Tibetan Empire occupied Dunhuang and the Gansu Corridor in the late 8th c., the Tibetan army stationed there was made up of various ethnic groups, including Sum-pas, Turks, Khotanese, and Mthongkhyabs, who had been subjugated and incorporated into the military system of the

Tibetan Empire. There is little doubt that Zhangzhung men also moved to Dunhuang; possibly some of them wrote down our Zhangzhung texts.

But the questions of why the remaining texts are all medical texts, and whether they were translated from any language(s) remain enigmatic.

If the texts were written by Zhangzhung natives, to what extent they reflect colloquial Zhangzhung forms of the day without Tibetan constraint? When a language without an established writing system has borrowed a script, it is apt to be heavily influenced by the orthography and linguistic forms of the donor language as well. The recipient language usually goes through transitional stages before it is written down in the new script: firstly, speakers of the language learn to write a donor language and script (e.g., speakers of the Balti Tibetan dialect have no knowledge of writing Tibetan in Tibetan script; when they need to write, they use Urdu in Arabic script.) Afterwards, they start writing a few passages of their own in the newly acquired script, often inserting them within a text in the donor language, thus resulting in a text with frequent code-switching or language-mixing. Uighur-Sogdian bilingual texts may be a contemporaneous case-in-point (Sims-Williams and Hamilton 1990; Yoshida forthcoming).

Our Old Zhangzhung texts are no doubt one of the earliest attempts at writing Zhangzhung. The writers, possibly Zhangzhung native speakers, must have been well versed in Tibetan as well. When they tried to write Zhangzhung in Tibetan script, they were more or less constrained by Tibetan orthography and grammatical rules. The above-mentioned S-final *-o* might be a result of such Tibetan influence, because it is much less frequently found in other OZ texts than OZ 1. However, compared to the above-mentioned Uighur-Sogdian texts, Tibetan and Zhangzhung elements are more difficult to distinguish because the two languages are genetically related.

To what extent the Tibetan influence may figure, our Zhangzhung texts show clearly different linguistic constructions from Tibetan. Also, the degree of Tibetan influence seems to vary from text to text. Thus, by analyzing and comparing these five texts, we believe that we can eventually ferret out the basic constructions of the Old Zhangzhung language.

For the time being, we may make the following tentative propositions regarding the nature of the Old Zhangzhung and New Zhangzhung.

(1) OZ reflects the 9th c. Zhangzhung linguistic forms, constrained by Tibetan orthography and grammatical rules.

(2) NZ developed as a result of Tibetan Bonpos combining their knowledge of Zhangzhung with that of Tibetan and Sanskrit.

Notes

- 1) Nyi-ma grags-pa compl., *Sgra yi don sdeb snang gsal sgron ma*, New Delhi: Bonpo Foundation, 1965.
- 2) Bstan-'dzin gnam-dag ed., *Srid pa'i mdzod-phug*, Delhi, 1966. It is ascribed to Dran-pa nam-kha' in 8 c.
- 3) E.g., *Klu gnyan sa bdag gi spang skong phan yon dgos 'dod kun 'byung rgyas pa bzhugso* (Or. Mss. Tib. I. 1-4). *Klu 'bum nag mo zhes bya ba'i g.yung drung theg pa chen pa'i mdo* (C. I. 2.: Box i/29/2). *Bon rin po che 'phrul ngog bden pa'i mdo las gtsang ma: Klu 'bum dkar mo* (C. I. 3.: Box 1/29/3). *Klu'i spang bkong bzhugs so* (Tib. Mss. I. 185-210: Lhasa Collection). All are preserved in the British Library.

References

BECKWITH, C.

1987 *The Tibetan Empire in Central Asia*. Princeton: Princeton University Press.

CHANG, K.

1960 "On Zhang Zhung." *Bulletin of the Institute of History and Philology, Academia Sinica*, extra volume no. 4 (= Studies Presented to Tung Tso Pin on His Sixty-fifth Birthday), pt. 1: 137-154.

HAARH, E.

1968 "The Zhang-zhung Language." *Acta Jutlandica*, vol. 40, no. 1: 7-43.

HOFFMANN, H.

1967 "żań-żuń; the Holy Language of the Tibetan Bonpo." *ZDMG*, vol. 117, no. 2: 376-381.

1972 "Several żań-żuń Etymologies." *Oriens Extremus*, vol. 19, nos. 1-2: 193-201.

HUMMEL, S.

1974-83 "Materialien zu einem Wörterbuch der żań-żuń-Sprache." *Monumenta Serica* 31 (1974-5) 488-520; 32(1976) 320-336; 35 (1981-3) 305-308.

1986 "Der Ursprung der Sprache von Zhang-zhung." *J. of the Tibet Society*, vol. 6: 3-16.

1995 "Neues Material zur Sprache von Zhang-zhung." *Acta Orientalia*, vol. 59: 162-168.

KVAERNE, P.

1995 *The Bon Religion of Tibet*. London: Serindia Publications.

LALOU, M.

1939 *Inventaire de Manuscrits tibétains de Touen-houang*, 3 vols. Paris.

MARTIN, D.

1998 "Zhang-zhung" a computer version.

1999 "Zhang-zhung Encodement and Calque Translations." Paper presented at the Symposium New Horizons in Bon Studies.

NISHIDA, T.

- 1982 *Ajia no Mikaidoku-moji (Undeciphered Writings of Asia)*. Tokyo.
- OROFINO, G.
 1990 "The State of the Art in the Study on the Zhang chung Language." *Annali Instituto Universitario Orientale*, vol. 50, fasc 1: 83-85.
- SIMS-WILLIAMS, N. and J. HAMILTON
 1990 *Documents turco-sogdiens du IX^e-X^e siècle de Touen-houen (Corpus inscriptionum iranicarum, Part 1, Vol. III / 3)*. London: School of Oriental and African Studies.
- de la VALLÉE POUSSIN, L.
 1962 *Catalogue of the Tibetan Manuscripts from Tun-huang in the India Office Library*. London: Oxford University Press.
- STEIN, R.A.
 1971 "La langue žaň-žun du Bon organisé" *BEFEO*, vol. 58: 231-254.
- THOMAS, Frederic William
 1926 "Two languages from Central Asia." *JRAS*: 505-507.
 1933 "The Zhang chung Language." *JRAS*: 405-410.
 1948 *Nam: an Ancient Language of the Sino-Tibetan Borderland*. London: Oxford University Press.
 1967 "The Zhang chung Language." *Asia Major*, vol. 13: 211-217.
- YOSHIDA, Y.
 forthcoming "Sogdian." In G. Windfuhr (ed.) *The Iranian Languages*. London: Curzon Press.

List 1

sylfrequency:syllables 588

frequency order

No.	freq	overlap	leng	syllable	
1.	64		(3)	SHi	
2.	60		(2)	ci	
3.	43	2 0	(2)	na	(ra=na/da=na)
4.	38		(3)	min	
5.	35		(2)	sa	
6.	30	1 0	(2)	ca	(ca=ra)
7.	28		(4)	tiNG	
8.	27		(2)	ma	
9.	26		(2)	bu	
10.	23		(3)	sum	
11.	23	1 0	(3)	tsa	(tsa=rca)
12.	22		(2)	ga	
13.	21		(3)	mar	
14.	21		(4)	maNG	
15.	21		(5)	nve'o	
16.	20		(3)	tog	
17.	18		(2)	mu	
18.	18	1 0	(2)	ru	(ru=du)
19.	17		(4)	ruNG	
20.	16		(2)	ti	
21.	16		(4)	laNG	
22.	16		(4)	tsha	
23.	16		(6)	khyero	
24.	15		(2)	ce	
25.	14		(2)	ku	
26.	14		(2)	se	
27.	14		(3)	gun	
28.	13		(2)	do	
29.	13		(2)	qe	
30.	13		(3)	kha	
31.	13		(3)	lvi	
32.	12		(2)	da	
33.	12		(3)	kul	
34.	12		(3)	tse	
35.	12		(4)	raNG	
36.	12		(5)	SHiNG	
37.	12	1 0	(4)	SHvi	(wi=SHvi)
38.	11		(4)	lyam	
39.	11	1 0	(2)	la	(lab=la)
40.	10		(2)	ba	
41.	10		(3)	rma	
42.	10		(4)	SHer	
43.	9		(2)	ne	
44.	9		(2)	pu	
45.	9		(3)	dro	
46.	9		(3)	nis	
47.	9	1 0	(4)	thum	(khum=thum)
48.	8		(2)	go	
49.	8		(2)	ra	
50.	8		(3)	SHa	
51.	8		(3)	SHe	
52.	8		(3)	ken	
53.	8		(3)	lag	
54.	8		(3)	na'	
55.	8		(4)	luNG	
56.	8		(4)	rNGa	
57.	8	7 0	(7)	tur=rur	(tar=tur)
58.	7		(2)	gu	
59.	7		(3)	lod	
60.	7		(3)	nve	
61.	7		(3)	ram	
62.	7	1 0	(3)	kun	(kun=kur)

List 2

4 syllables (syllable order)

No.	freq	leng	4-syllables
1.	2	(2)	^e (2) ru (5) ra=na (3) kha
2.	2	(2)	ci (3) mar (4) skar (4) tiNG
3.	2	(2)	da (3) cho (3) min (6) slaNGo
4.	3	(3)	did (2) na (3) mar (3) kul
5.	2	(2)	ga (3) por (3) lvi (3) SHi
6.	2	(4)	khug (2) ma (2) ci (3) tsa
7.	2	(5)	lvaNG (2) mo (2) ca (7) rhyviso
8.	2	(4)	lyam (11) tshas=tsham (3) tri (3) min
9.	2	(5)	lyuNG (5) ru=du (2) ci (5) da=na
10.	3	(3)	mar (3) kul (3) tum (2) ca
11.	7	(3)	mar (3) kul (4) thum (2) ca
12.	2	(3)	mar (3) kul (9) khum=thum (2) ce
13.	2	(3)	min (3) mar (3) kul (4) thum
14.	2	(2)	na (3) lod (2) do (4) lyam
15.	2	(3)	nug (3) min (3) mar (3) kul
16.	2	(2)	pu (5) khumb (4) rNGa (2) pu
17.	2	(3)	rab (4) this (2) ga (5) nve'o
18.	2	(7)	rus=zus (2) ma (3) tar (4) raNG
19.	3	(3)	SHi (2) mu (2) sa (4) tiNG
20.	4	(3)	SHi (3) SHi (2) mu (2) sa
21.	4	(5)	SHiNG (3) gun (3) SHi (3) dag
22.	2	(3)	tog (3) mar (3) kul (9) khum=thum
23.	2	(4)	ZHag (5) du=cu (2) ci (3) tsa

5 syllables (syllable order)

No.	freq	leng	5-syllables
1.	2	(2)	ce (4) maNG (4) tsha (4) tsha (3) min
2.	2	(2)	ce (3) sum (3) ken (3) tog (6) khyero
3.	2	(2)	ci (3) na' (4) slye (2) ci (3) na'
4.	2	(3)	kha (2) ci (2) na (2) ti (2) ce
5.	2	(3)	lvi (3) SHi (3) dro (3) tsa (3) SHi
6.	3	(3)	lvi (3) SHi (3) SHi (2) mu (2) sa
7.	5	(3)	mar (3) kul (4) thum (2) ca (6) khyero
8.	2	(3)	mar (3) kul (3) tum (2) ca (6) khyero
9.	2	(2)	mu (2) sa (3) dro (3) tsa (3) SHi
10.	2	(4)	SHer (4) thun (2) da (4) gral (3) min
11.	2	(3)	sum (3) ken (3) tog (3) mar (3) kul
12.	2	(5)	waNGs (2) ga (2) ra (2) ci (4) ruNG

6 syllables (syllable order)

No.	freq	leng	6-syllables
1.	2	(3)	did (2) na (3) mar (3) kul (4) thum (2) ca
2.	2	(3)	SHi (2) mu (2) sa (4) tiNG (2) mu (2) sa
3.	2	(4)	tiNG (3) sag (5) skyus (2) ci (3) sum (2) sa
4.	2	(4)	tsha (3) mar (3) kul (4) thum (2) ca (6) khyero

List 3

[FRAGMENT 43: VP no 755] 7-3 syllables

Order (frequency)

length	No.	frequency	syllables	first	middle	last
7	1	2	skar tiNG sag skyus ci sum sa bin tiNG sag skyus ci sum sa	skar bin		
	2	2	tiNG sag skyus ci sum sa ma tiNG sag skyus ci sum sa khug			ma khug
	3	2	kum tsha mar kul thum ca khyero lyam tsha mar kul thum ca khyero	kum lyam		
	4	2	tsha mar kul thum ca khyero ci tsha mar kul thum ca khyero snis			ci snis
	5	2	tsha' did na mar kul thum ca ZHil=ZHis did na mar kul thum ca	tsha' ZHil=ZHis		
	6	2	did na mar kul thum ca SHer did na mar kul thum ca khyero			SHer khyero
	7	2	did na mar kul tum ca khyero did na mar kul thum ca khyero		tum thum	
	8	2	ru ra=na kha ci na ti ce ru tsha kha ci na ti ce		ra=na tsha	
	9	2	chago SHi mu sa tiNG mu sa SHi SHi mu sa tiNG mu sa	chago SHi		
	10	2	SHi mu sa tiNG mu sa lyam SHi mu sa tiNG mu sa con			lyam con
6	1	5	tsha mar kul thum ca khyero (ci) tsha mar kul thum ca khyero (snis) na mar kul thum ca khyero skar mar kul thum ca khyero min mar kul thum ca khyero	tsha tsha na skar min		
	2	3	did na mar kul thum ca (SHer) did na mar kul thum ca (khyero) did na mar kul tum ca		thum thum tum	
	3	3	na mar kul tum ca khyero na mar kul thum ca khyero tog mar kul tum ca khyero	na na tog	tum thum tum	
	4	3	SHi mu sa mar mu sa SHi mu sa tiNG mu sa SHi mu sa tiNG mu sa		mar tiNG tiNG	
	5	3	do lvi SHi SHi mu sa por lvi SHi SHi mu sa nve'o lvi SHi SHi mu sa	do por nve'o		
	6	3	lvi SHi SHi mu sa maNG lvi SHi SHi mu sa kha lvi SHi SHi mu sa dro			maNG kha dro
	7	2	tsha ce maNG tsha tsha min lvi ce maNG tsha tsha min	tsha lvi		
	8	2	ce maNG tsha tsha min SHi ce maNG tsha tsha min tiNG			SHi tiNG

List 4-L

last syllable

No.	frequency order		syllable order		backward order	
	frequency	syllable	frequency	syllable	frequency	syllable
1	9	khyero	1	chaNGo	1	khyere
2	5	do	1	ci'o	1	spral
3	2	go	5	do	1	ci'o
4	2	NGo	2	go	2	NGo
5	2	SHido	1	khyer	1	chaNGo
6	1	chaNGo	1	khyerdo	1	ruNGo
7	1	ci'o	1	khyere	1	sduNGo
8	1	khyer	9	khyero	1	slaNGo
9	1	khyerdo	1	kyero	1	stuNGo
10	1	khyere	1	lodo	1	tuNGo
11	1	kyero	2	NGo	5	do
12	1	lodo	1	rhyugo	2	SHido
13	1	rhyugo	1	rhyviso	1	lodo
14	1	rhyviso	1	ruNGo	1	khyerdo
15	1	ruNGo	1	sduNGo	1	spurdo
16	1	sduNGo	1	SHanso	2	go
17	1	SHanso	2	SHido	1	tshago
18	1	skugo	1	skugo	1	rhyugo
19	1	slaNGo	1	slaNGo	1	skugo
20	1	spral	1	spral	9	khyero
21	1	spurdo	1	spurdo	1	kyero
22	1	stuNGo	1	stuNGo	1	rhyviso
23	1	tshago	1	tshago	1	SHanso
24	1	tuNGo	1	tuNGo	1	khyer

List 4-B

booby syllable

No.	frequency order		syllable order	
	frequency	syllable	frequency	syllable
1	6	ca	1	ba
2	4	tog	6	ca
3	3	ce	3	ce
4	3	SHid	1	chud
5	2	min	1	ci
6	1	ba	1	dis
7	1	chud	1	kun
8	1	ci	1	lod
9	1	dis	2	min
10	1	kun	1	myin
11	1	lod	1	na
12	1	myin	1	NGir
13	1	na	1	nves
14	1	NGir	1	rho
15	1	nves	1	rtog
16	1	rho	1	ru
17	1	rtog	1	ryum
18	1	ru	1	sa
19	1	ryum	1	sdu
20	1	sa	1	sduNGi
21	1	sdu	3	SHid
22	1	sduNGi	1	stuNG
23	1	stuNG	1	sum
24	1	sum	1	tiNG
25	1	tiNG	4	tog
26	1	tsag	1	tsag

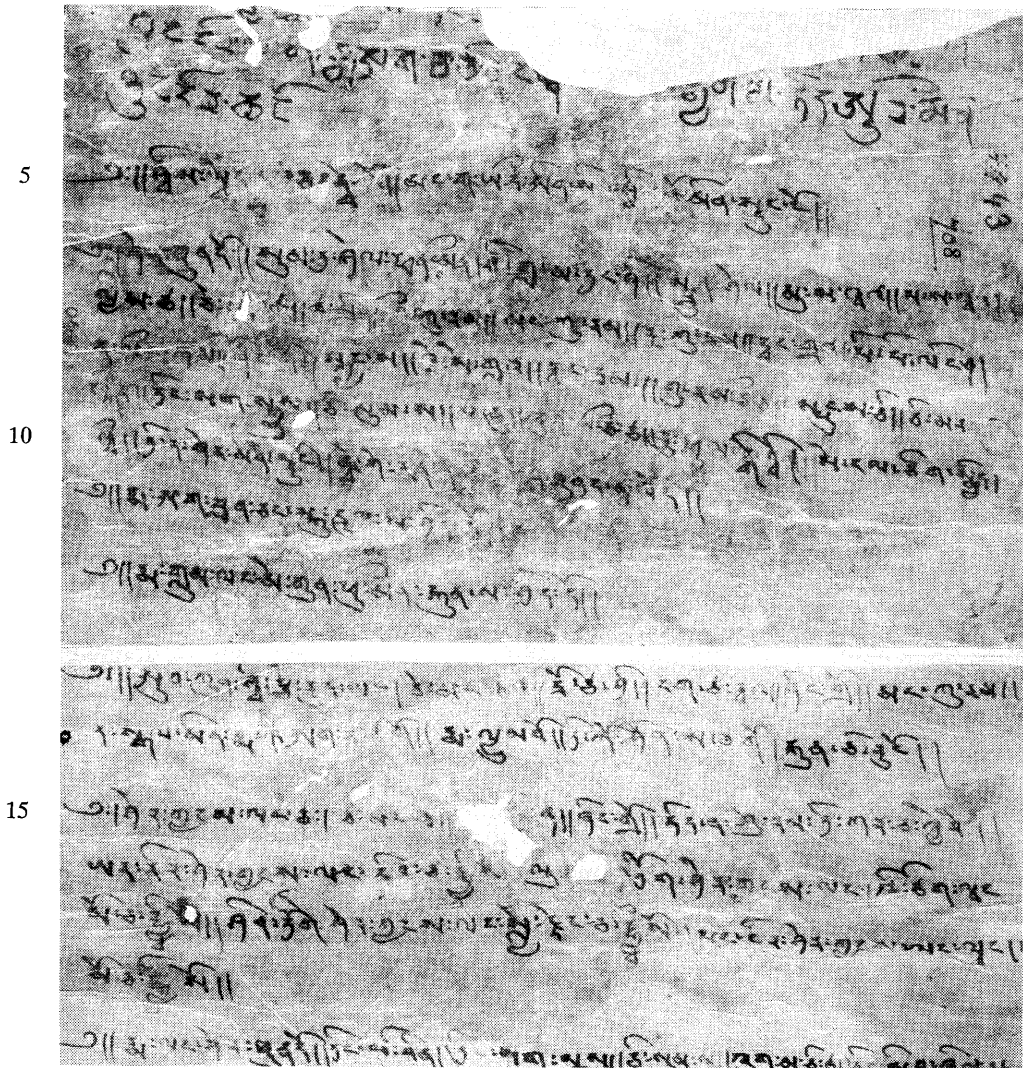


Plate 1

Handwritten text in Devanagari script, likely a continuation from the previous page. The text is dense and covers the top portion of the page.

Handwritten text in Devanagari script, continuing the narrative or list. The lines are closely spaced.

20

Handwritten text in Devanagari script, starting with a large initial character. The text is written in a clear, consistent hand.

30

Handwritten text in Devanagari script, continuing the text from the previous page. The script is well-defined.

40

Handwritten text in Devanagari script, featuring several lines of text with some larger characters.

50

Handwritten text in Devanagari script, concluding the text on this page. The lines are neatly aligned.

Plate 2

Handwritten text in Devanagari script, likely a continuation from the previous page. The text is dense and appears to be a form of Sanskrit or Prakrit.

50

Handwritten text in Devanagari script, continuing the text from page 50. It includes several lines of text with some larger characters or symbols interspersed.

60

Handwritten text in Devanagari script, continuing the text from page 60. The text is dense and appears to be a form of Sanskrit or Prakrit.

70

Handwritten text in Devanagari script, continuing the text from page 70. It includes several lines of text with some larger characters or symbols interspersed.

80

Handwritten text in Devanagari script, continuing the text from page 80. It includes several lines of text with some larger characters or symbols interspersed.

Handwritten text in a script, likely Tamil, spanning across four pages (80, 90, 100, 110, 120). The text is arranged in vertical columns, reading from right to left. The script is dense and appears to be a form of classical or religious literature. The pages are numbered at the bottom: 80, 90, 100, 110, and 120.

Handwritten text in an ancient script, likely Sanskrit or a related language, covering the entire page. The text is arranged in approximately 25 horizontal lines. The script is highly stylized and dense. There are some larger characters or symbols interspersed throughout the text, possibly indicating the start of new sections or specific markers. The paper shows signs of age, with some discoloration and wear at the edges.

Handwritten text in Devanagari script, spanning four pages (40, 50, 60, 70). The text is dense and appears to be a religious or philosophical treatise. The script is written in black ink on aged paper. The pages are numbered 40, 50, 60, and 70 at the bottom. The text is arranged in horizontal lines across each page.

Handwritten text in Devanagari script, covering the top portion of the manuscript page. The text is dense and appears to be a continuation of a philosophical or religious treatise.

Handwritten text in Devanagari script, covering the bottom portion of the manuscript page. The text continues the discourse from the previous page.

南无初教心佛 南无无量眼佛

南无燃燈上佛 南无普光眼佛

南无照光明佛 南无帝相佛

南无一切國佛主一切衆生不斷樂說佛

南无阿樓那奮迅佛 南无无迹奮迅佛

南无東北方所一切憂惚如來為上首

南无離憂佛 南无樂成就切德佛

南无无畏王佛 南无勝彌留佛

南无香山佛 南无狗隣佛

南无大體勝佛 南无寶蓮華勝佛

南无華成就佛 南无吼眼佛

南无勝衆佛 南无无邊光明佛

南无月勝光明稱佛 南无星宿王衆增上佛

南无无邊光明佛 南无香高山佛

南无无畏佛 南无成就勝无畏佛

南无无邊光照光明佛

南无香 弥留佛

南无離驚怖成就勝佛

南无无量切德月成就佛

南无一切切德莊嚴佛

南无不可勝幢佛 南无增上護光明佛

南无華勝王佛 南无无邊成就行佛

南无一切殊勝佛

南无虚空輪清淨王佛

Pelliot tibétain
Youen-houang 1251

Handwritten Tibetan script on a long, narrow strip of paper, showing approximately 50 lines of text. The script is dense and fills most of the strip's width. There are some irregularities and gaps in the text, particularly at the top and bottom edges, suggesting the strip is a fragment from a larger document.

10

20

30

40

50

Handwritten text in an ancient script, likely Tamil, covering the entire page. The text is arranged in approximately 15 horizontal lines. The script is dense and appears to be a form of classical or medieval Tamil. The ink is dark, and the background is a light, textured surface, possibly parchment or paper. The text is oriented vertically on the page.

40

50

60

70

80

90

Handwritten text in Devanagari script, likely a portion of a religious or philosophical text. The script is dense and fills the page.

Handwritten text in Devanagari script, continuing from the previous page. The text is written in a consistent, cursive style.

Handwritten text in Devanagari script, showing further progression of the text. The lines are closely packed.

Handwritten text in Devanagari script, with some variations in line spacing. The text appears to be a continuous flow.

Handwritten text in Devanagari script, maintaining the same style and density as the previous pages.

Handwritten text in Devanagari script, showing the continuation of the manuscript's content.

Handwritten text in Devanagari script, concluding the visible portion of the manuscript on this page.

Plate 11

Handwritten text in an ancient script, likely Pahlavi, covering the entire page. The text is arranged in approximately 20 horizontal lines. The script is dense and cursive, with some characters appearing to be in a different script or dialect than the main body of text. The overall appearance is that of a historical manuscript or document.

130

140

150

160

170

180

190

Handwritten text in an ancient script, likely Sanskrit, covering the entire page area. The text is organized into approximately 15 horizontal lines. The script is dense and appears to be a form of Devanagari or a related ancient script. The ink is dark, and the background is a light, textured paper. The text is written in a consistent, flowing style across the entire page.

180

190

200

210

220

230

240

Handwritten text in an ancient script, likely Tamil, covering the first page of the manuscript. The text is densely packed and spans the entire width of the page.

240

250

260

270

280

290

Handwritten text in an ancient script, likely Tamil, covering the second page of the manuscript. The text is densely packed and spans the entire width of the page.

30
 40
 50

[The text in this image is extremely faint and largely illegible due to heavy ink bleed-through from the reverse side of the page. It appears to be a list of items or names, possibly in a classical or historical context, with some characters resembling '30', '40', and '50' on the left margin.]

Plate 16

30
 40

[The text in this section is extremely faint and largely illegible due to heavy ink bleed-through from the reverse side of the page. It appears to be a continuous block of handwritten text in an Indic script, possibly Sanskrit or Pali, with some characters and words being discernible through the noise.]

Plate 18