The otibet-package Writing tibetan text for Ω

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1 Introduction

This package should ease the pain when writing tibetan text for the typesetting system Ω , a Unicode-capable descendent of TeX. This package makes heavy use of Ω translation process, known as Ω TP. Included in the package there are the necessary Ω TP-files to type tibetan text in a certain transcription and after processing the file with Ω getting the tibetan glyphs.

Together with this package comes a font tibetan.mf for METAFONT, which has to be used (cf. sec. 8).

This package is capable of rendering all the basic tibetan compound glyphs (as rka) in their usual form. Complex Hindi consonant stacks are made up from the basic characters by stacking them one above the other.

2 Input Encoding, Transcription

Two transcriptions for reading the input are supported, the "Wylie's Transcription" and the one used in the Unicode standard (cf. [1]). These two only differ in how to write the inverted characters. For these characters there will be a double entry under transcription in the following table, standing for "Wylie/Unicode". Each one of this input encodings can be selected as an option (see chap. 9).

Transl.	Tib.	txa/tta	ج.	pha	젇.
		thxa/ttha	₿.	ba	4.
ka	Щ.	dxa/dda	7.	ma	श्र.
kha	N.	dxha/ddha	₹.	tsa	ર્જ.
ga	বা	nxa/nna	چُ.	tsha	డ .
nga	۲.	ta	5.	dza	Ę.
ca	₹.	tha	뒥.	wa	H .
cha	æ .	da	5.	zha	পূ.
ja	Ĕ.	na	ठ.	za	∄.
nya	3.	pa	۲۱.	'a	લ.

ya	М.	sha	~ 9.	ha	5 7.
ta	5.	shxa/ssa	Pr.	a	% 1.
la	ત્ય.	sa	হা.	/	•
				.,	•

For the distinction between practiced 'g' and main 'g', as in g.yag, use ' $\{g\}$ ' (' $\{g\}$ yag' gives \P W \P while 'gyag' gives \P \P).

3 Special characters

Some special characters are accessible by the use of control-sequences:

\om	0F00	
\endsym,\gtertsheg	0F14	
\anusvara	0F71	$^{\circ}$
\hrih		
\dme		
\hung		
\swasti		

4 Unicode characters not implemented

The following Unicode characters are at the moment not implemented:

\	0F73	~~~	\	OFOO	/**\
\vowelii	0173		\nyizlanaada	0F82	
\voweluu	0F75	()	\snaldan	0F83	
\vowelr	0F76	Ō	\halanta	0F84	Ō
\vowelrr	0F77	Ŏ	\paluta	0F85	Ō
\vowell	0F78	Ŏ	\lcirtags	0F86	Ŏ
\vowell1	0F79	Ŏ	\yangrtags	0F87	Ŏ
\vowelee	OF7B	Ŏ	\lcetsacan	0F88	Ŏ
\voweloo	OF7D	Ŏ	\mchucan	0F89	Ŏ
\rnambcad	OF7F	Ŏ	\grucanrgyings	OF8A	Ŏ
\reversedi	0F80	Ŏ	\grumedrgyings	OF8B	Ŏ
\reversedii	0F81	Ă			~

5 Output Encoding

The package otibet internally uses the Unicode encoding of the tibetan glyphs (U+0F00--U+0FBF), although not every glyph can (at the moment) be rendered (depending on the font). The internal processing is done in Unicode and finally the output is recoded to the (very) special arrangement of the characters in the font tibetan (cf. sec. 8).

6 Specialities

A tsheg is automatically inserted at a space and deleted at nonsense places. This option can be turned of with the option "notsheg" (not implemented yet!).

7 Consonant Clusters

All the basic tibetan glyphs are rendered in there usual form. If a cluster of consonants cannot be rendered, the basic glyphs are just stacked one over the other. So you get

- from "rgyo" a "\(\frac{\frac{1}{2}}{2}\)"
- from "ltsr" a "A".

8 The font tibetan

The font tibetan is based on Sirlins fonts gtib and gtibsp, which in turn is based on pk-files named tib.300pk and tibsp.300pk. A few contributions of the author should fill the gaps to a font covering all Unicode characters.

9 Options to the package

There are some options which control the behaviour of the package:

- wylie-input, unicode-input: These two options select the input encoding, the transcription. See chap. 2 for details. The wylie-input is the default.
- tibetan-output, latin-output: These two options select the output encoding and the used font.
- notsheg: Inhibits the putting of a tsheg after syllabes. Not implemented yet.
- realunicode: Maybe in the future a text will come in Unicode, not in ASCII, so you can select it. Not implemented yet.

10 System Requirements

You need Ω and a large buff_size;-).

References

[1] The Unicode Consortium. The Unicode Standard, Version 2.0. Addison-Wesley, 1996