

# Instruction manual for the Burmese L<sup>A</sup>T<sub>E</sub>X-package

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This package provides basic support for writing Burmese. All it can do is produce the correct characters out of an quite intuitive translation scheme. The Burmese tones are transcribed: with no sign for the first tone, with a doubled vowel for the second tone, with an “h” for the third tone, and with an ’-sign for the fourth one. You need **Perl** and **dvips** in order to use it, as the package consists of a preprocessor written in Perl and uses Type1-fonts — with **pdf<sub>l</sub>atex** it works, too, however: edit the `texmf/pdftex/config/psfonts.map`-file.

Installation is easy. You put the preprocessor script into a directory where you can find it, e. g. into your working directory, and run `perl birm.pl <FILE>` (without extension) on it. Files to be input into the preprocessor *must* have the extension `*.bir`; the preprocessor then produces a T<sub>E</sub>X-file (`*.tex`), leaving everything outside a Burmese environment untouched, and inserting the right input for the Burmese script. A Burmese environment is surrounded by `{\birm ...}`. The T<sub>E</sub>X-file can be run through L<sup>A</sup>T<sub>E</sub>X and **dvips**. The other files provided are `birm.sty`, `ubirm.fd`, which according to TDS are due into the `texmf/tex/latex/-`directory, `burm.pfb` into the `texmf/fonts/type1-`directory, `burm.tfm` into the `texmf/fonts/tfm-`directory (perhaps a `texhash` run will be necessary). You will have to change your `psfonts.map`: Add the following line:

```
burm Burma <burm.pfb
```

Currently not all Burmese characters are available, but (almost) all needed for producing native Burmese words. The work is in progress yet, and I’m not a master in Burmese script yet. I took the fonts from a `*.ttf`-font freely available on the Internet, and converted them into Type1 by using the `ttf2pt1` program provided by Mark Heath.

Burmese script can be divided into syllables. Any syllable has got a consonantic onset and a vocalic coda; sometimes a semivowel intervenes between the two. When writing Burmese in L<sup>A</sup>T<sub>E</sub>X, we should stick to this scheme and separate the syllables by a space (unless, I can’t guarantee for anything). Some of the vowels are written before the consonant character, though, of course, pronounced after them. In this implementation for Burmese, we need not bother with this problem. Vowel characters are produced with the “consonant” for

syllables without an onset, which is `ə`. This “consonant” will be substituted during parsing by the correct consonant character if the syllable has got an onset. The package provides punctuation signs for “.” (`u`) and “,” (`ı`), which can be inserted by their Latin equivalent just given.

Only scriptsize can be changed at this time; no different script styles like bold are supported; trying to use them will yield incorrect results. Don't use commands with arguments either inside a Burmese environment.

The vowels and semivowels are inserted like this:

<code>aaN</code>	အမ်	<code>ai´</code>	အိုက်	<code>ou</code>	အိုဝ်
<code>ahN</code>	အမ်း	<code>ei´</code>	အိုင်	<code>oou</code>	အိုဝ်း
<code>aN</code>	အမ့်	<code>ou´</code>	အုပ်	<code>ouh</code>	အိုး
<code>aaıN</code>	အိုင်	<code>au´</code>	အောက်	<code>o</code>	အော
<code>aihN</code>	အိုင်း	<code>eei</code>	အေ	<code>uu</code>	အူ
<code>aiN</code>	အိုင့်	<code>eih</code>	အေး	<code>uh</code>	အူး
<code>eeıN</code>	အိမ်	<code>ei</code>	အေ့	<code>u´</code>	အိုင်
<code>eihN</code>	အိမ်း	<code>ee</code>	အယ်	<code>u</code>	အု
<code>eiN</code>	အိမ့်	<code>eh</code>	အဲ	<code>I</code>	အိ
<code>iiN</code>	အိုင်	<code>e´</code>	အက်	<code>I2</code>	အိ
<code>ihN</code>	အိုင်း	<code>ii</code>	အီ	<code>II</code>	အိ
<code>iN</code>	အိုင့်	<code>ih</code>	အီး	<code>EI´</code>	အိ
<code>oouN</code>	အုပ်	<code>i´</code>	အစ်	<code>OO</code>	အို
<code>ouhN</code>	အုပ်း	<code>i</code>	အိ	<code>Oh</code>	အို
<code>ouN</code>	အုပ့်	<code>e</code>	အဲ့	<code>O</code>	အို
<code>aaıN</code>	အောင်	<code>aa</code>	အာ	<code>UU</code>	အူ
<code>auhN</code>	အောင်း	<code>ah</code>	အား	<code>Uh</code>	အူး
<code>auN</code>	အောင့်	<code>a´</code>	အပ်	<code>U</code>	အု
<code>uuN</code>	အွမ်	<code>a</code>	အ	<code>w</code>	အွ
<code>uhN</code>	အွမ်း	<code>oo</code>	အေ	<code>y</code>	အျ
<code>uN</code>	အွမ့်	<code>oh</code>	အေ		

The consonants are inserted like this:

y	ယ	th	ထ	ch	ချ
w	ဝ	t	တ	c	ကျ
hw	ဟု	d	ဓ	j	ဂျ
hl	လှ	kh	ခ	m	မ
hng	ငှ	k	က	ny	ည
hny	ညှ	g	ဂ	ng	င
hn	န	T	သ	n	န
hm	မှ	sh	ဆ	l	လ
h	ဟ	s	စ	g2	ဃ
ph	ဖ	z	ဇ	n2	ဏ
p	ပ	Sw	ရွ	ny2	ဥ
b	ဗ	S	ရ		

Happy T<sub>E</sub>X-ing! Bug-reports or other comments to [reese@linguist.de](mailto:reese@linguist.de)