

cjhebrew*

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1 Overview

cjhebrew is a package which allows the typesetting of Hebrew text in \LaTeX documents. Hebrew text can be vocalised, also a few accents are available. cjhebrew makes it easy to insert Hebrew words, sentences or paragraphs into non-Hebrew text; so cjhebrew is quite appropriate e. g. for theological papers.

When running \LaTeX , cjhebrew uses the extensions of $\epsilon\text{-TeX}$ in order to typeset Hebrew text from right to left. Most modern \TeX systems use $\epsilon\text{-LaTeX}$ by default when you run \LaTeX , so there should be nothing special you have to do (unless, of course, you fiddled with your system). This version of cjhebrew can also be used with lualaTeX .

2 Installation

cjhebrew is part of most modern \TeX distributions. Please, use your distribution's package manager to install cjhebrew. If no package manager is available, then have a look at your distribution's documentation, as it should tell you how to install packages manually.

3 Usage

To use cjhebrew simply put `\usepackage{cjhebrew}` in the preamble of your document.

cjhebrew provides the text font command `\textcjheb` which switches to the hebrew font, but does not change the direction of typesetting. Thus, if you type `\textcjheb{'bgd}`, the result will be אבגד, which is in most cases not what you want. Instead you will normally use the command `\cjRL`, that also switches to the right direction of typesetting. The input `\cjRL{'bgd}` will have as result the output אבגד. There is also an even shorter form: `\<>`; so, you can type `\<'bgd>` instead of `\cjRL{'bgd}`.

If you want to typeset a complete passage of Hebrew text, you ought to use the cjhebrew environment.

*cjhebrew is subject to the \LaTeX Project Public License. The most recent version of this license can be found at www.latex-project.org/lppl.txt.

א	ב	ג	ד	ה	ו	ז	ח	ט	י	כ	ך	ל	מ	ם
'	b	g	d	h	w	z	.h	.t	y	k	K	l	m	M
נ	ן	ס	ע	פ	ף	צ	ץ	ק	ר	ש	ש	ש	ת	
n	N	s	'	p	P	.s	.S	q	r	/s	,s	+s	t	

Note: ' = semicolon, ' = grave accent

Table 1: Coding of the consonants

יְ	יֵ	יִ	יֶ	יָ	אֵ	אֶ	אִ	אֲ	וּ	וֵ	וִ	וֶ	וֹ	וַ	וֹ	וּ
i	e	E	E:	a	/a	a:	A	A:	o	u	*	:	O / wo	U / w*		
:	-	◌														
;	--	\dottedcircle														

Table 2: Coding of the vowels, accents and symbols

Finally, `cjhebrew` provides also the `\cjLR` command, which switches (inside a Hebrew piece of text) back to the “normal” direction of typesetting. Be careful: this command does not switch to a non-Hebrew font!

3.1 The consonants

How the Hebrew consonants are coded in your input file, is shown in table 1. Normally the final letters are used automatically; `\<m>lk` will become מֶלֶךְ. Sometimes it is necessary to use final letters in places where they will not be set automatically, e. g. in the middle of a word. To do this you either use the coding according to table 1 or you put an exclamation mark (!) after the consonant; alternatively you can use the `\endofword` command. For example, a *final mem* could be achieved by typing `\<M>`, `\<m!>` or `\<m\endofword>`.

On the other hand, sometimes you will not want this automatic replacement. In these cases you put | after the consonant or use the `\zeronojoin` command. Both `\<m|>` and `\<m\zeronojoin>` will give you a normal *mem*.

3.2 The vowels

How to code the vowels in your input file is shown in table 2. The vowels have to be typed *after* the consonant they belong to (for example אֱלֹהִים is coded as `\<'E:lohiym>`). The only exception is the *pataḥ furtivum* as in רוּחַ (`\<rU/a.h>`). Always use * for *dageš*; `cjhebrew` does not distinguish between *dageš lene* and *dageš forte*. The *dageš* has to follow its consonant *immediately* (`\<b:*>` becomes בֶּ), otherwise you will get a wrong result (`\<b:*>` becomes בְּ).

3.3 More accents and symbols

There are some more accents and symbols available, as shown in table 2. I hope to add some more in the future.

4 An example

Here is the beginning of the Bible:

בְּרֵאשִׁית בָּרָא אֱלֹהִים אֶת הַשָּׁמַיִם וְאֶת הָאָרֶץ: וְהָאָרֶץ הָיְתָה תֹהוּ וָבֹהוּ וְחֹשֶׁךְ עַל־פְּנֵי תְהוֹם וְרוּחַ
אֱלֹהִים מְרַחֶפֶת עַל־פְּנֵי הַמַּיִם:

```
\begin{cjhebrew}
b*:re'+siyt b*ArA' 'E:lohiym 'et ha+s*Amayim w:'et hA'ArE.s; w:hA'ArE.s
hAy:tAh tohU wAbohU w:.ho+sEk: 'al--p*:ney t:hOm w:rU/a.h 'E:lohiym
m:ra.hEpEt 'al--p*:ney ham*Ayim;
\end{cjhebrew}
```

5 What is new in this version?

v0.2a

- Fixed a stupid typo which created a warning.

v 0.2

- `cjhebrew` can now be used with `luaLATEX`. The necessary code was provided by Axel Kielhorn.

v 0.1a

- A typo in `cjhebrew.sty` was corrected. It would cause trouble if you used a Hebrew font in 7pt size or smaller.

v 0.1

- You can use `cjhebrew` now, even if ϵ -L^AT_EX is not available (but the Hebrew text will be typeset in the “wrong” direction, i. e. from left to right).¹
- The documentation was rewritten. Instead of a German and an English documentation there is now only this English manual.
- Some bugs in `cjhebrew.sty` are fixed.²
- A problem with the letter “qof” is fixed (קֹף does not look *that* good ... קֹף is much better).
- There are also some changes regarding the font names and the encoding. If you use an older version of `cjhebrew` make sure that all old files are removed before you install the new version!

Probably, some new bugs have crept into any new version. Please do report them as you discover them!

¹This feature was suggested by Malte Rosenau.

²Thanks to Walter Schmidt.

6 Finally

The version number of cjhebrew is 0.2a, it is far from being finished. Especially the fonts still need a lot of work; many letters look rather imperfect. If you have any ideas how to improve cjhebrew, please do send me an email.