Hebrew within TEX and LaTeX.

25 October 1998

In order to use Hebrew within TeX and/or LaTeX, you have to use a TeX program
with right-to-left capabilities. Such is eTeX (Extended TeX),
versions of which exist both for Unix and for Windows.

Details and data pertaining to installation of eTeX on various systems are available
from ftp.cc.huji.ac.il/tex via ftp or via Netscape.

```
In UNIX tex, you type
     for oldcode           \input heb_macros
     for newcode           \input heb_macros_newcode
In DOS PC tex, you type
                           \input heb_pc
In the old latex (2.09) on UNIX, you typed
     for oldcode           \documentstyle[hebrew,hebcal...]{style..}
     for newcode           \documentstyle[hebrew_newcode,hebcal_newcode...]{style..}
In the old latex (2.09) on DOS PC, you typed
                           \documentstyle[hebrew_p,hebcal_p...]{style..}
In the new latex (2e) you use the same keywords for all systems.
The only thing that changes between systems is a parameter on the
\usepackage{inputenc} line.
On Unix (using new code, 8 bits) you type for latex2e
                       \documentclass[12pt,twoside]{class..}
                       \usepackage[8859-8]{inputenc}
                       \usepackage[hebrew,english,russian,...]{babel}
                       \usepackage{hebfont}
You substitute 8859-8 by si960 if you work in old code (7-bit hebrew encoding)
You substitute 8859-8 by cp862 if you work in pc code (Hebrew under DOS)
You substitute 8859-8 by cp1255 if you work with Windows' Hebrew.
```

Hebrew font names:

In tex and in latex 2.09, those have been the main fonts used:

UNIX	UNIX Newcode	DOS PC	Font looks like this
Jerusalem	Jerusalem_newcode	Jer_pc	אבגד
TelAviv	TelAviv_newcode	Tel_pc	אבגד
DeadSea	DeadSea_newcode	Dead_pc	אבגד
OldJaffa	OldJaffa_newcode	Old_pc	אבגד

With latex2e, we use one set of fonts for all systems.
Those fonts' names are jerus10, telav10, deads10 and oldjaf10 .

Various other Hebrew fonts are available.
Hebrew fonts can be found on ftp.cc.huji.ac.il

Control Sequences:

\sethebrew	Enter hebrew mode
\unsethebrew	Go out of Hebrew mode
\hebrewpar	Starting one hebrew paragraph with indentation
\hebrewlines	Starting one hebrew paragraph without indentation
\L{...string...}	English string within a Hebrew environment
\R{...סידרית...}	Hebrew string within an English environment

\הדגש{...} or \hadgesh{...}	Making bold letters - Poor man's bold --- The TeXbook, page 386	
\מקףגדול or \makafgadol	Like the regular -- producing -- , which doesn't work in Hebrew	
\מקףענק or \makafanak	Like the regular --- producing --- , which doesn't work in Hebrew	
\גרש or \geresh	Like the regular ‘ , which doesn't work in Hebrew	
\פתחגרש or \opengeresh	’	
\סגורגרש or \closegeresh	‘	
\פתחציטוט or \openquote	Like the regular ’’, which doesn't work in Hebrew	
\סגורציטוט or \closequote	Like the regular ‘‘, which doesn't work in Hebrew	
\פיסקה or \piska	Like the regular \item, modified for Hebrew	Not relevant to latex.
\פיסקהפיסקה or \piskapiska	Like the regular \itemitem, modified for Hebrew	Not relevant to latex.
\היום or \hebday	Today's regular date in Hebrew	
\Hebrewtoday	Hebrew date in Hebrew	Included in hebcal.sty
\Hebrewdate (*)	Converting a Georgian date to a Hebrew date	Included in hebcal.sty
\קפיצהגדולה	Like the regular \bigskip	
\קפיצהבינונית	Like the regular \medskip	
\קפיצהקטנה	Like the regular \smallskip	
\שורהימין	Like the regular \rightline	
\שורהשמאל	Like the regular \leftline	
\מרכז	Like the regular \centerline	
\undertext{text טקסט}	Produces <u>text טקסט</u>	

Note -- Keywords written in Hebrew letters might not be available.
If possible, use the English version of keywords.

A more detailed explanation of Hebrew usage in latex2e is contained in
hebrew_latex2e_usage.txt
available from ftp.cc.huji.ac.il/tex/tex_guides

(*)

Usage:

```
\newcount\day    \newcount\month    \newcount\year
\day=12      \month=10      \year=1884
\Hebrewdate{\day}{\month}{\year}
```

Result:

כ״ג בתשרי, תרמ״ה