

# The Latvian style for babel

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April 27, 2024

## 1 The Latvian Language

The file `latvian.ldf`<sup>1</sup> defines the language definition macros for the Latvian language. It is heavily based on the work by Andris Lasis, and this file just cleans the code up and adapts it to babel 3.9.

Since the T1 encoding doesn't contain all the characters required for Latvian, you should use L7x instead (note the lowercase x). The `dfu` file (ie, `utf8` for `fontenc`) for this encoding is included in Lithuanian. Unfortunately, not many fonts come in this encoding. Of course, you can use either `luatex` or `xetex`, too, because Unicode strings are also defined.

Actually, you can use the T1 encoding, but hyphenation will not be correct, and oddly it doesn't work with `inputenc` and `utf8` (future releases will fix this issue), except if you request the L7x encoding before T1 (this is, of course, just a trick, which may not work; note some fonts render macron-i with the dot, because `l7xenc.def` defines it as `\=i`). If T1 is used, you must load `fontenc` before `babel` and set the modifier `t1composite` (because it redefines some 'composite commands' which may affect other languages). A complete example is:

```
\documentclass{article}
\usepackage[utf8]{inputenc}
\usepackage[L7x,T1]{fontenc}
\usepackage{combelow} % Optional, see below
\usepackage[latvian.t1composite]{babel}
\usepackage{fourier}

\begin{document}
Aa, Āā, Bb, Cc, Čč, Dd, Ee, Ēē, Ff, Gg, Ģģ, Hh, Ii, Īī, Jj, Kk, Ķķ,
Ll, Ļļ, Mm, Nn, Ņņ, Oo, Pp, Rr, Ss, Šš, Tt, Uu, Ūū, Vv, Zz, Žž
\end{document}
```

By loading also the package `combelow` you get much better results (it is detected automatically), but you should use T1 only as a last resort and only for small chunks of Latvian text. OT1 is not directly supported.

There are two commands for the date: `\datumaa` (locative) and `\datums` (nominative); `\today` is defined as `\datumaa`, but you can change it with `\renewcommand{\latviantoday}{\datums}`. By default `g.` is used, but you can change it with, say, `\renewcommand\latviangada{gada}`.

`\alph` and `\Alph` exclude the letter `q`.

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<sup>1</sup>The file described in this section has version number 2.0c and was last revised on 2024/03/27.

## The code

```
1 (*code)
2 \LdfInit{latvian}\captionslatvian
3 \ifx\l@latvian\@undefined
4 \nopatterns{Latvian}
5 \adddialect\l@latvian0
6 \fi

Captions and date.
7 \StartBabelCommands*{latvian}{captions}
8 [unicode, charset=utf8, fontenc=EU1 EU2]
9
10 \SetString\prefacename{Priekšvārds}
11 \SetString\refname{Literatūra}
12 \SetString\abstractname{Anotācija}
13 \SetString\bibname{Bibliogrāfija}
14 \SetString\chaptername{nodaļa}
15 \SetString\listfigurename{Attēlu rādītājs}
16 \SetString\listtablename{Tabulu rādītājs}
17 \SetString\indexname{Priekšmetu rādītājs}
18 \SetString\figurename{zīm.\@}
19 \SetString\partname{daļa}
20 \SetString\enclname{Pielikumā}
21 \SetString\alsoname{skat.\@ arī}
22
23 \StartBabelCommands*{latvian}{date}
24 [unicode, charset=utf8, fontenc=EU1 EU2]
25
26 \SetStringLoop{month#1name}{janvārī,februārī,martā,aprīlī,maijā,%
27 jūnijā,jūlijā,augustā,septembrī,oktobrī,novembrī,decembrī}
28 \SetStringLoop{nommonth#1name}{janvāris,februāris,marts,aprīlis,maijs,%
29 jūnijs,jūlijs,augusts,septembris,oktobris,novembris,decembris}
30
31 \StartBabelCommands*{latvian}{captions}
32
33 \SetString\prefacename{Priek\v sv\=ards}%
34 \SetString\refname{Literat\=ura}
35 \SetString\abstractname{Anot\=acija}
36 \SetString\bibname{Bibliogr\=afija}
37 \SetString\chaptername{noda\c la}
38 \SetString\appendixname{Pielikums}
39 \SetString\contentsname{Saturš}
40 \SetString\listfigurename{Att\=elu r\=ad\={\i}t\=ajs}
41 \SetString\listtablename{Tabulu r\=ad\={\i}t\=ajs}
42 \SetString\indexname{Priek\v smetu r\=ad\={\i}t\=ajs}
43 \SetString\figurename{z\={\i}m.\@}
44 \SetString\tablename{tabula}
45 \SetString\partname{da\c la}
46 \SetString\enclname{Pielikum\=a}
47 \SetString\ccname{Kopija(s)}
48 \SetString\headtoname{}
49 \SetString\pagename{lpp.\@}
50 \SetString\seename{skat.\@}
51 \SetString\alsoname{skat.\@ ar\={\i}}
```

```

52
53 \StartBabelCommands*{latvian}{date}
54
55 \SetStringLoop{month#1name}{janv\=ar\={\i},febru\=ar\={\i},mart\=a,%
56 apr\={\i}l\={\i},maij\=a,j\=unij\=a,j\=ulij\=a,august\=a,%
57 septembr\={\i},oktobr\={\i},novembr\={\i},decembr\={\i}}
58 \SetStringLoop{nommonth#1name}{janv\=aris,febru\=aris,marts,%
59 apr\={\i}lis,maijs,j\=unijs,j\=ulijs,augusts,septembris,%
60 oktobris,novembris,decembris}
61
62 \SetString\datumaa{\number\year.\~\latviangada\ \number\day.\~%
63 \curname month\romannumeral\month name\endcsname}
64 \SetString\datums{\number\year.\~\latviangada\ \number\day.\~%
65 \curname nommonth\romannumeral\month name\endcsname}
66
67 \SetString\today{\datumaa}
68
69 \AfterBabelCommands{\newcommand\latviangada{g.}}
70
71 \EndBabelCommands

Section numbering.
72 \gdef\the@chapter{%
73 \ifx\c@chapter\@undefined\else
74 \ifnum\c@chapter>\z@\thechapter\fi
75 \fi}
76 \def\thechapter{%
77 \ifx\c@chapter\@undefined\else
78 \arabic{chapter}.\%
79 \fi}
80 \def\thesection{\the@chapter\arabic{section}.}
81 \def\thesubsection{\thesection\arabic{subsection}.}
82 \def\thesubsubsection{\thesubsection\arabic{subsubsection}.}
83 \def\theparagraph{\thesubsubsection\arabic{paragraph}.}
84 \def\thesubparagraph{\theparagraph\arabic{subparagraph}.}

Part numbering
85 \def\depth@{\ifx\chapter\undefined\m@ne\else-2\relax\fi}
86 \def\@part[#1]#2{%
87 \relax
88 \ifnum\c@secnumdepth>\depth@
89 \refstepcounter{part}
90 \addcontentsline{toc}{part}{\thepart\hspace{1em}#1}%
91 \else
92 \addcontentsline{toc}{part}{#1}\fi
93 \ifx\chapter\undefined
94 \bgroup\parindent\z@\raggedright
95 \else
96 \markboth{}{\}\bgroup\centering
97 \fi
98 \interlinepenalty\@M
99 \ifnum\c@secnumdepth>\depth@
100 \normalfont\bfseries\thepart~\partname % adapted to Latvian order
101 \par
102 \ifx\chapter\undefined\nobreak\else\vskip 20\p@\fi

```

```

103 \fi
104 \ifx\chapter\undefined\huge\else\Huge\fi\normalfont\bfseries#2%
105 \ifx\chapter\undefined\markboth{}{}\fi
106 \par\egroup
107 \ifx\chapter\undefined\nobreak
108 \vskip3ex \@afterheading\else\endpart
109 \fi}

```

Chapter head

```

110 \def\@makechapterhead#1{%
111 \vspace*{50pt}%
112 {\parindent 0pt \raggedright
113 \ifnum\c@secnumdepth>\m@ne
114 \huge\normalfont\bfseries\thechapter\space\@chapapp{}}%
115 \par
116 \vskip20pt
117 \fi
118 \Huge\normalfont\bfseries#1\par\nobreak\vskip40pt }}

```

First paragraph indent (of the text following a heading).

```

119 \let\@aifORI\@afterindentfalse
120 \def\bbl@latvianindent{%
121 \let\@afterindentfalse\@afterindenttrue
122 \@afterindenttrue}
123 \def\bbl@nonlatvianindent{%
124 \let\@afterindentfalse\@aifORI
125 \@afterindentfalse}
126 \addto\extraslatvian{\bbl@latvianindent}
127 \addto\noextraslatvian{\bbl@nonlatvianindent}

```

Float numbering.

```

128 \def\thefigure{\the@chapter\@arabic\c@figure.}
129 \def\thetable{\the@chapter\@arabic\c@table.}
130 \def\fnun@figure{\thefigure~\figurename}
131 \def\fnun@table{\thetable~\tablename}
132 \long\def\@makecaption#1#2{%
133 \vskip10\p@
134 \sbox\@tempboxa{#1\if\empty#2\else: #2\fi}%
135 \ifdim\wd\@tempboxa>\hsize
136 #1: #2\par
137 \else
138 \hbox to\hsize{\hfil\box\@tempboxa\hfil}%
139 \fi}

```

Theorems

```

140 \def\@thmcountersep{}
141 \gdef\@makethmnumber#1#2{%
142 \ifx\thmno@left0{#1\ #2}\else {#2. #1}\fi}
143 \def\@begintheorem#1#2{%
144 \normalfont\itshape\trivlist
145 \item[\hskip\labelsep
146 \hskip\parindent\normalfont\bfseries
147 {\@makethmnumber{#1}{#2}}.]}
148 \def\@opargbegintheorem#1#2#3{%
149 \normalfont\itshape\trivlist
150 \item[\hskip\labelsep \hskip\parindent\normalfont\bfseries

```

```

151     {\@makethmnumber{#1}{#2} (#3).}}
152 \gdef\thmnoleft{\let\thmno@left=1}
153 \gdef\thmnoright{\let\thmno@left=0}
154 \thmnoleft

Equations
155 \def\theequation{\the@chapter\arabic{equation}}

Marks.
156 \ifx\@chapapp\undefined
157   \if@twoside
158     \def\sectionmark#1{%
159       \markboth
160       {\uppercase{\ifnum\c@secnumdepth>\z@ne\thesection\hskip1em\relax\fi#1}}%
161       {}}
162     \def\subsectionmark#1{%
163       \markright
164       {\uppercase{\ifnum\c@secnumdepth>\@ne\thesubsection\ \fi#1}}}
165   \else
166     \def\sectionmark#1{%
167       \markright
168       {\uppercase{\ifnum\c@secnumdepth>\z@0\thesection\hskip1em\relax\fi#1}}}
169     \fi%
170   \else
171     \def\chaptermark#1{%
172       \markboth
173       {\uppercase{\ifnum\c@secnumdepth>\m@ne\thechapter~\@chapapp: \fi#1}}%
174       {}}
175     \def\sectionmark#1{%
176       \markright{\uppercase{\ifnum\c@secnumdepth>\z@0\thesection\ \fi#1}}}
177     \fi

Counters. Only locally.
178 \addto\extraslatvian{%
179   \babel@save\@alph
180   \def\@alph#1{%
181     \ifcase#1\or a\or b\or c\or d\or e\or f\or g\or h\or i\or j\or k\or
182     l\or m\or n\or o\or p\or r\or s\or t\or u\or v\or
183     z\else\@ctrerr\fi}%
184   \babel@save\@Alph
185   \def\@Alph#1{%
186     \ifcase#1\or A\or B\or C\or D\or E\or F\or G\or H\or I\or J\or K\or
187     L\or M\or N\or O\or P\or R\or S\or T\or U\or V\or Z\else\@ctrerr\fi}}

Hyphenmins and shorthands.
188 \def\latvianhyphenmins{\tw@\tw@}
189 \initiate@active@char{"}
190 \addto\extraslatvian{\languageshorthands{latvian}}
191 \addto\extraslatvian{\bbl@activate{}}
192
193 \DeclareTextCompositeCommand{=} {OT1} {i} {\@tabacckludge={i}}
194 \DeclareTextCompositeCommand{=} {T1} {i} {\@tabacckludge={i}}
195
196 \@expandtwoargs\in@{,t1composite,}{,BabelModifiers,}
197 \ifin@
198

```

```

199 \DeclareTextCommand{\lv@cb}{T1}[1]% same as \c
200   {\leavevmode
201     \setbox\z@\hbox{#1}%
202     \ifdim\ht\z@=1ex\accent11 #1%
203     \else\oalign{\unhbox\z@\crr\hidewidth\char11\hidewidth}}%
204     \fi}
205 \let\lv@cbg\lv@cb
206
207 \DeclareTextCompositeCommand{\c}{T1}{g}{\lv@cbg{g}}
208 \DeclareTextCompositeCommand{\c}{T1}{G}{\lv@cb{G}}
209 \DeclareTextCompositeCommand{\c}{T1}{r}{\lv@cb{r}}
210 \DeclareTextCompositeCommand{\c}{T1}{R}{\lv@cb{R}}
211 \DeclareTextCompositeCommand{\c}{T1}{k}{\lv@cb{k}}
212 \DeclareTextCompositeCommand{\c}{T1}{K}{\lv@cb{K}}
213 \DeclareTextCompositeCommand{\c}{T1}{l}{\lv@cb{l}}
214 \DeclareTextCompositeCommand{\c}{T1}{L}{\lv@cb{L}}
215 \DeclareTextCompositeCommand{\c}{T1}{n}{\lv@cb{n}}
216 \DeclareTextCompositeCommand{\c}{T1}{N}{\lv@cb{N}}
217
218 \def\lv@ifcombelow{\@ifpackageloaded{combelow}}
219 \AtBeginDocument{% because \@ifpackageloaded is 'only preamble'
220   \@ifpackageloaded{combelow}%
221     {\let\lv@ifcombelow\@firstoftwo}%
222     {\let\lv@ifcombelow\@secondoftwo}}
223
224 \addto\extraslatvian{%
225   \babel@save\lv@cbg
226   \lv@ifcombelow
227     {\babel@save\lv@cb
228       \let\lv@cb\cb
229       \let\lv@cbg\cb}%
230   {\let\lv@cbg\v}}
231
232 \fi
233
234 \declare@shorthand{latvian}{"a}{\textormath{\={a}}{\=a}}
235 \declare@shorthand{latvian}{"e}{\textormath{\=e}}{\=e}}
236 \declare@shorthand{latvian}{"u}{\textormath{\=u}}{\=u}}
237 \declare@shorthand{latvian}{"i}{\textormath{\=i}}{\=i}}
238 \declare@shorthand{latvian}{"o}{\textormath{\=o}}{\=o}}
239
240 \declare@shorthand{latvian}{"A}{\textormath{\=A}}{\=A}}
241 \declare@shorthand{latvian}{"E}{\textormath{\=E}}{\=E}}
242 \declare@shorthand{latvian}{"U}{\textormath{\=U}}{\=U}}
243 \declare@shorthand{latvian}{"I}{\textormath{\=I}}{\=I}}
244 \declare@shorthand{latvian}{"O}{\textormath{\=O}}{\=O}}
245
246 \declare@shorthand{latvian}{"r}{\textormath{\c{r}}{\c r}}
247 \declare@shorthand{latvian}{"s}{\textormath{\v{s}}{\v s}}
248 \declare@shorthand{latvian}{"g}{\textormath{\c{g}}{\c g}}
249 \declare@shorthand{latvian}{"k}{\textormath{\c{k}}{\c k}}
250 \declare@shorthand{latvian}{"l}{\textormath{\c{l}}{\c l}}
251 \declare@shorthand{latvian}{"z}{\textormath{\v{z}}{\v z}}
252 \declare@shorthand{latvian}{"c}{\textormath{\v{c}}{\v c}}

```

```

253 \declare@shorthand{latvian}{"n}{\textormath{\c{n}}{\c n}}
254
255 \declare@shorthand{latvian}{"R}{\textormath{\c{R}}{\c R}}
256 \declare@shorthand{latvian}{"S}{\textormath{\v{S}}{\v S}}
257 \declare@shorthand{latvian}{"G}{\textormath{\c{G}}{\c G}}
258 \declare@shorthand{latvian}{"K}{\textormath{\c{K}}{\c K}}
259 \declare@shorthand{latvian}{"L}{\textormath{\c{L}}{\c L}}
260 \declare@shorthand{latvian}{"Z}{\textormath{\v{Z}}{\v Z}}
261 \declare@shorthand{latvian}{"C}{\textormath{\v{C}}{\v C}}
262 \declare@shorthand{latvian}{"N}{\textormath{\c{N}}{\c N}}
263
264 \declare@shorthand{latvian}{"-}{\nobreak\-\bbl@allowhyphens}
265 \declare@shorthand{latvian}{"|}{%
266   \textormath{\penalty\@M\discretionary{-}{-}{\kern.03em}%
267     \allowhyphens}{}}
268 \declare@shorthand{latvian}{""}{\hskip\z@skip}
269 \declare@shorthand{latvian}{"~}{\textormath{\leavevmode\hbox{-}}{-}}
270 \declare@shorthand{latvian}{"=}{\penalty\@M-\hskip\z@skip}
271
272 \ldf@finish{latvian}
273 \code

```