The Latvian style for babel

Andris Lasis, Javier Bezos

February 19, 2018

1 The Latvian Language

The file latvian.ldf[1] 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 chuncks 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

---

[1] The file described in this section has version number 2.0a and was last revised on 2018/02/19.

\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.*

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{Saturs}
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   \csname month\romannumeral\month name\endcsname}
64 \SetString\datums{\number\year.~\latviangada\ \number\day.~%
65   \csname 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\chapter\undefined\relax\else
74   \ifnum\c@chapter>\z@\thechapter\fi\fi}
75 \def\thechapter{%
76   \ifx\chapter\undefined\relax\else
77   \arabic{chapter}.\fi}
78 \def\thesection{\the@chapter\arabic{section}.}
79 \def\thesubsection{\thesection\arabic{subsection}.}
80 \def\thesubsubsection{\thesubsection\arabic{subsubsection}.}
81 \def\theparagraph{\thesubsubsection\arabic{paragraph}.}
82 \def\thesubparagraph{\theparagraph\arabic{subparagraph}.}
```

Part numbering
```
83 \def\depth@{\ifx\chapter\undefined\m@ne\else-2\relax\fi}
84 \def\@part[#1]#2{%
85   \relax
86   \ifnum\c@secnumdepth>\depth@
87     \refstepcounter{part}
88     \addcontentsline{toc}{part}{\thepart\hspace{1em}#1}%
89   \else
```

```
90      \addcontentsline{toc}{part}{#1}\fi
91      \ifx\chapter\undefined
92        \bgroup\parindent\z@\raggedright
93      \else
94        \markboth{}{}\bgroup\centering
95      \fi
96      \interlinepenalty\@M
97      \ifnum\c@secnumdepth>\depth@
98        \normalfont\bfseries\thepart~\partname  %  adapted to Latvian order
99        \par
100       \ifx\chapter\undefined\nobreak\else\vskip 20\p@\fi
101     \fi
102     \ifx\chapter\undefined\huge\else\Huge\fi\normalfont\bfseries#2%
103     \ifx\chapter\undefined\markboth{}{}\fi
104     \par\egroup
105     \ifx\chapter\undefined\nobreak
106     \vskip3ex \@afterheading\else\@endpart
107   \fi}
```

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

First paragraph indent (of the text following a heading).
```
117 \let\@aifORI\@afterindentfalse
118 \def\bbl@latvianindent{%
119   \let\@afterindentfalse\@afterindenttrue
120   \@afterindenttrue}
121 \def\bbl@nonlatvianindent{%
122   \let\@afterindentfalse\@aifORI
123   \@afterindentfalse}
124 \addto\extraslatvian{\bbl@latvianindent}
125 \addto\noextraslatvian{\bbl@nonlatvianindent}
```

Float numbering.
```
126 \def\thefigure{\the@chapter\@arabic\c@figure.}
127 \def\thetable{\the@chapter\@arabic\c@table.}
128 \def\fnum@figure{\thefigure~\figurename}
129 \def\fnum@table{\thetable~\tablename}
130 \long\def\@makecaption#1#2{%
131   \vskip10\p@
132   \sbox\@tempboxa{#1\if\empty#2\else: #2\fi}%
133   \ifdim\wd\@tempboxa>\hsize
134     #1: #2\par
```

```
135   \else
136     \hbox to\hsize{\hfil\box\@tempboxa\hfil}%
137   \fi}
```

Theorems

```
138 \def\@thmcountersep{}
139 \gdef\@makethmnumber#1#2{%
140   \ifx\thmno@left0{#1\ #2}\else {#2. #1}\fi}
141 \def\@begintheorem#1#2{%
142   \normalfont\itshape\trivlist
143   \item[\hskip\labelsep
144     \hskip\parindent\normalfont\bfseries
145     {\@makethmnumber{#1}{#2}}.]]
146 \def\@opargbegintheorem#1#2#3{%
147   \normalfont\itshape\trivlist
148   \item[\hskip\labelsep \hskip\parindent\normalfont\bfseries
149     {\@makethmnumber{#1}{#2} (#3).}]]
150 \gdef\thmnoleft{\let\thmno@left=1}
151 \gdef\thmnoright{\let\thmno@left=0}
152 \thmnoleft
```

Equations

```
153 \def\theequation{\the@chapter\arabic{equation}}
```

Marks.

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

Counters. Only locally.

```
176 \addto\extraslatvian{%
177   \babel@save\@alph
178   \def\@alph#1{%
```

```
179     \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
180     l\or m\or n\or o\or p\or r\or s\or t\or u\or v\or
181     z\else\@ctrerr\fi}%
182   \babel@save\@Alph
183   \def\@Alph#1{%
184     \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
185     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.

```
186 \def\latvianhyphenmins{\tw@\tw@}
187 \initiate@active@char{"}
188 \addto\extraslatvian{\languageshorthands{latvian}}
189 \addto\extraslatvian{\bbl@activate{"}}
190
191 \DeclareTextCompositeCommand{\=}{OT1}{i}{\@tabacckludge={\i}}
192 \DeclareTextCompositeCommand{\=}{T1}{i}{\@tabacckludge={\i}}
193
194 \@expandtwoargs\in@{,t1composite,}{,\BabelModifiers,}
195 \ifin@
196
197   \DeclareTextCommand{\lv@cb}{T1}[1]%  same as \c
198    {\leavevmode
199     \setbox\z@\hbox{#1}%
200     \ifdim\ht\z@=1ex\accent11 #1%
201     \else{\ooalign{\unhbox\z@\crcr\hidewidth\char11\hidewidth}}%
202     \fi}
203   \let\lv@cbg\lv@cb
204
205   \DeclareTextCompositeCommand{\c}{T1}{g}{\lv@cbg{g}}
206   \DeclareTextCompositeCommand{\c}{T1}{G}{\lv@cb{G}}
207   \DeclareTextCompositeCommand{\c}{T1}{r}{\lv@cb{r}}
208   \DeclareTextCompositeCommand{\c}{T1}{R}{\lv@cb{R}}
209   \DeclareTextCompositeCommand{\c}{T1}{k}{\lv@cb{k}}
210   \DeclareTextCompositeCommand{\c}{T1}{K}{\lv@cb{K}}
211   \DeclareTextCompositeCommand{\c}{T1}{l}{\lv@cb{l}}
212   \DeclareTextCompositeCommand{\c}{T1}{L}{\lv@cb{L}}
213   \DeclareTextCompositeCommand{\c}{T1}{n}{\lv@cb{n}}
214   \DeclareTextCompositeCommand{\c}{T1}{N}{\lv@cb{N}}
215
216   \def\lv@ifcombelow{\@ifpackageloaded{combelow}}
217   \AtBeginDocument{%  because \@ifpackageloaded is 'only preamble'
218     \@ifpackageloaded{combelow}%
219       {\let\lv@ifcombelow\@firstoftwo}%
220       {\let\lv@ifcombelow\@secondoftwo}}
221
222   \addto\extraslatvian{%
223     \babel@save\lv@cbg
224     \lv@ifcombelow
225       {\babel@save\lv@cb
226        \let\lv@cb\cb
```

```
227      \let\lv@cbg\cb}%
228      {\let\lv@cbg\v}}
229
230 \fi
231
232 \declare@shorthand{latvian}{"a}{\textormath{\={a}}{\=a}}
233 \declare@shorthand{latvian}{"e}{\textormath{\={e}}{\=e}}
234 \declare@shorthand{latvian}{"u}{\textormath{\={u}}{\=u}}
235 \declare@shorthand{latvian}{"i}{\textormath{\={\i}}{\=\i}}
236 \declare@shorthand{latvian}{"o}{\textormath{\={o}}{\=o}}
237
238 \declare@shorthand{latvian}{"A}{\textormath{\={A}}{\=A}}
239 \declare@shorthand{latvian}{"E}{\textormath{\={E}}{\=E}}
240 \declare@shorthand{latvian}{"U}{\textormath{\={U}}{\=U}}
241 \declare@shorthand{latvian}{"I}{\textormath{\={I}}{\=I}}
242 \declare@shorthand{latvian}{"O}{\textormath{\={O}}{\=O}}
243
244 \declare@shorthand{latvian}{"r}{\textormath{\c{r}}{\c r}}
245 \declare@shorthand{latvian}{"s}{\textormath{\v{s}}{\v s}}
246 \declare@shorthand{latvian}{"g}{\textormath{\c{g}}{\c g}}
247 \declare@shorthand{latvian}{"k}{\textormath{\c{k}}{\c k}}
248 \declare@shorthand{latvian}{"l}{\textormath{\c{l}}{\c l}}
249 \declare@shorthand{latvian}{"z}{\textormath{\v{z}}{\v z}}
250 \declare@shorthand{latvian}{"c}{\textormath{\v{c}}{\v c}}
251 \declare@shorthand{latvian}{"n}{\textormath{\c{n}}{\c n}}
252
253 \declare@shorthand{latvian}{"R}{\textormath{\c{R}}{\c R}}
254 \declare@shorthand{latvian}{"S}{\textormath{\v{S}}{\v S}}
255 \declare@shorthand{latvian}{"G}{\textormath{\c{G}}{\c G}}
256 \declare@shorthand{latvian}{"K}{\textormath{\c{K}}{\c K}}
257 \declare@shorthand{latvian}{"L}{\textormath{\c{L}}{\c L}}
258 \declare@shorthand{latvian}{"Z}{\textormath{\v{Z}}{\v Z}}
259 \declare@shorthand{latvian}{"C}{\textormath{\v{C}}{\v C}}
260 \declare@shorthand{latvian}{"N}{\textormath{\c{N}}{\c N}}
261
262 \declare@shorthand{latvian}{"-}{\nobreak\-\bbl@allowhyphens}
263 \declare@shorthand{latvian}{"|}{%
264  \textormath{\penalty\@M\discretionary{-}{}{\kern.03em}%
265            \allowhyphens}{}}
266 \declare@shorthand{latvian}{""}{\hskip\z@skip}
267 \declare@shorthand{latvian}{"~}{\textormath{\leavevmode\hbox{-}}{-}}
268 \declare@shorthand{latvian}{"=}{\penalty\@M-\hskip\z@skip}
269
270 \ldf@finish{latvian}
271 ⟨/code⟩
```